Literature Search

Search strategy CAB Abstracts on the OVID interface	Database: CAB Abstracts <2000 to 2020 Week 46> Search Strategy: --- 1 ('covid 19' or 'novel coronavirus' or 'sars-cov-2').mp. (2704) 2 1 and 202010*.up. (530) ********** [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]
Date of coverage	October 2020

Search results

	Date searched	**No of items found**
CAB Abstracts	24/11/2020	530

References from CAB Abstracts

<1>

Accession Number

20203473903

Author

Leung, T. I.; Biskup, E.; Dewitt, D.

Title

Facilitating credentialing and engagement of international physician-migrants during the COVID-19 crisis and beyond.

Source

Rural and Remote Health; 2020. 20(3)21 ref.

Publisher

Deakin University, Department of Human Services, Rural Health Division

Location of Publisher

Victoria

Country of Publication

Australia

Abstract

Context: Physicians who migrate globally face a daunting series of time-consuming, labor- and resource-intensive procedures to prove their clinical competency before being allowed to practice medicine in a new country. Issues: In this commentary, we describe licensing barriers faced by physician-migrants based on the authors' experiences, and reflect also on rapidly implemented measures to address COVID-19 pandemic related workforce shortages. We offer recommendations for potential reductions in bureaucratic regulatory barriers that prohibit mobilization of international medical graduate talent. Lessons learned: Licensing boards and authorities should strive for standardized, competency-based basic professional recognition. Professional medical societies are well-positioned to guide such competency-based recognition as a more organized, international collaborative effort across specialties. The COVID-19 pandemic facilitated cross-state and international licensing in some regions, highlighting a key opportunity: streamlining professional recognition requirements is achievable.

Publication Type

Journal article.

<2>

Accession Number

20203470813

Author

Hanif, S.; Ali, S. N.; M. Hassanein; Khunti, K.; Hanif, W.

Title

Managing people with diabetes fasting for ramadan during the COVID-19 pandemic: a south Asian health foundation update.

Source

Diabetic Medicine; 2020. 37(7):1094-1102. 27 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The month of Ramadan forms one of the five pillars of the Muslim faith. Adult Muslims are obligated to keep daily fasts from dawn to sunset, with exceptions. This year Ramadan is due to begin on 23 April 2020 and the longest fast in the UK will be approximately 18 hours in length. In addition, due to the often high-calorie meals eaten to break the fast, Ramadan should be seen as a cycle of fasting and feasting. Ramadan fasting can impact those with diabetes, increasing the risk of hypoglycaemia, hyperglycaemia and dehydration. This year, Ramadan will occur during the global COVID-19 pandemic. Reports show that diabetes appears to be a risk factor for more severe disease with COVID-19. In addition, the UK experience has shown diabetes and COVID-19 is associated with dehydration, starvation ketosis, diabetic ketoacidosis and hyperosmolar hyperglycaemic state. This makes fasting in Ramadan particularly challenging for those Muslims with diabetes. Here, we discuss the implications of fasting in Ramadan during the COVID-19 pandemic and make recommendations for those with diabetes who wish to fast.

Publication Type

Journal article.

<3>

Accession Number

20203454169

Author

Pranab Chatterjee; Tanu Anand; Singh, Kh. J.; Reeta Rasaily; Ravinder Singh; Santasabuj Das; Harpreet Singh; Ira Praharaj; Gangakhedkar, R. R.; Balram Bhargava; Samiran Panda

Title

Healthcare workers & SARS-CoV-2 infection in India: a case-control investigation in the time of COVID-19.

Source

Indian Journal of Medical Research; 2020. 151(5):459-467. 38 ref.

Publisher

Indian Council of Medical Research

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Background & objectives: Healthcare workers (HCWs) are at an elevated risk of contracting COVID-19. While intense occupational exposure associated with aerosol-generating procedures underlines the necessity of using personal protective equipment (PPE) by HCWs, high-transmission efficiency of the causative agent [severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)] could also lead to infections beyond such settings. Hydroxychloroquine (HCQ), a repurposed antimalarial drug, was empirically recommended as prophylaxis by the National COVID-19 Task Force in India to cover such added risk. Against this background, the current investigation was carried out to identify the factors associated with SARS-CoV-2 infection among HCWs in the country. Methods: A case-control design was adopted and participants were randomly drawn from the countrywide COVID-19 testing data portal maintained by the ICMR. The test results and contact details of HCWs, diagnosed as positive (cases) or negative (controls) for SARS-CoV-2 using real-time reverse transcription-polymerase chain reaction (qRT-PCR), were available from this database. A 20-item brief-questionnaire elicited information on place of work, procedures conducted and use of PPE. Results: Compared to controls, cases were slightly older (34.7 vs. 33.5 yr) and had more males (58 vs. 50%). In multivariate analyses, HCWs performing endotracheal intubation had higher odds of being SARS-CoV-2 infected [adjusted odds ratio (AOR): 4.33, 95% confidence interval (CI): 1.16-16.07]. Consumption of four or more maintenance doses of HCQ was associated with a significant decline in the odds of getting infected (AOR: 0.44; 95% CI: 0.22-0.88); a dose-response relationship existed between frequency of exposure to HCQ and such reductions (chi[2] for trend=48.88; P < 0.001). In addition, the use of PPE was independently associated with the reduction in odds of getting infected with SARS-CoV-2. Interpretations & conclusions: Until results of clinical trials for HCQ prophylaxis become available, this study provides actionable information for policymakers to protect HCWs at the forefront of COVID-19 response. The public health message of sustained intake of HCQ prophylaxis as well as appropriate PPE use need to be considered in conjunction with risk homoeostasis operating at individual levels.

Publication Type

Journal article.

<4>

Accession Number

20203482621

Author

Kieliszek, M.; Lipinski, B.

Title

Selenium supplementation in the prevention of coronavirus infections (COVID-19).

Source

Medical Hypotheses; 2020. 14325 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Selenium (Se) is a ubiquitous element akin to sulfur (S) existing in the Earth crust in various organic and inorganic forms. Selenium concentration varies greatly depending on the geographic area. Consequently, the content of selenium in food products is also variable. It is known that low Se is associated with increased incidence of cancer and heart diseases. Therefore, it is advisable to supplement diet with this element albeit in a proper form. Although blood increased concentrations of Se can be achieved with various pharmacological preparations, only one chemical form (sodium selenite) can offer a true protection. Sodium selenite, but not selenate, can oxidize thiol groups in the virus protein disulfide isomerase rendering it unable to penetrate the healthy cell membrane. In this way selenite inhibits the entrance of viruses into the healthy cells and abolish their infectivity. Therefore, this simple chemical compound can potentially be used in the recent battle against coronavirus epidemic.

Publication Type

Journal article.

<5>

Accession Number

20203483852

Author

Calabrese, F.; Pezzuto, F.; Fortarezza, F.; Hofman, P.; Izidor Kern; Panizo, A.; Thusen, J. von der; Sergei Timofeev; Gorkiewicz, G.; Lunardi, F.

Title

Pulmonary pathology and COVID-19: lessons from autopsy. The experience of European Pulmonary Pathologists.

Source

Virchows Archiv; 2020. 477(3):359-372. 75 ref.

Publisher

Springer Berlin

Location of Publisher

Heidelberg

Country of Publication

Germany

Abstract

Since its initial recognition in December 2019, Coronavirus disease 19 (COVID-19) has quickly spread to a pandemic infectious disease. The causative agent has been recognized as a novel coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), primarily affecting the respiratory tract. To date, no vaccines are available nor any specific treatment. To limit the number of infections, strict directives have been issued by governments that have been translated into equally rigorous guidelines notably for post-mortem examinations by international and national scientific societies. The recommendations for biosafety control required during specimen collection and handling have strongly limited the practice of autopsies of the COVID-19 patients to a few adequate laboratories. A full pathological examination has always been considered an important tool to better understand the pathophysiology of diseases, especially when the knowledge of an emerging disorder is limited and the impact on the healthcare system is significant. The first evidence of diffuse alveolar damage in the context of an acute respiratory distress syndrome has now been joined by the latest findings that report a more complex scenario in COVID-19, including a vascular involvement and a wide spectrum of associated pathologies. Ancillary tools such as electron microscopy and molecular biology used on autoptic tissue samples from autopsy are also significantly contributing to confirm and/or identify new aspects useful for a deeper knowledge of the pathogenetic mechanisms. This article will review and summarize the pathological findings described in COVID-19 until now, chiefly focusing on the respiratory tract, highlighting the importance of autopsy towards a better knowledge of this disease.

Publication Type

Journal article.

<6>

Accession Number

20203480718

Author

Kong WeiFang; Wang YuTing; Hu JinLiang; Chughtai, A.; Pu Hong

Title

Comparison of clinical and epidemiological characteristics of asymptomatic and symptomatic SARS-CoV-2 infection: a multi-center study in Sichuan Province, China.

Source

Travel Medicine and Infectious Disease; 2020. 3721 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: Asymptomatic infection of SARS-CoV-2 has become a concern worldwide. This study aims to compare the epidemiology and the clinical characteristics of SARS-CoV-2 infection in asymptomatic and symptomatic individuals. Methods: A total of 511 confirmed SARS-CoV-2 infection cases, including 100 asymptomatic (by the time of the pathogenic tests) and 411 symptomatic individuals were consecutively enrolled from January 25 to February 20, 2020 from hospitals in 21 cities and 47 counties or districts in Sichuan Province. Epidemiological and clinical characteristics were compared. Results: Compared to the symptomatic patients, the asymptomatic cases were younger (P < 0.001), had similar co-morbidity percentages (P = 0.609), and came from higher altitude areas with lower population mobility (P < 0.001) with better defined epidemiological history (P < 0.001). 27.4% of well-documented asymptomatic cases developed delayed symptoms after the pathogenic diagnosis. 60% of asymptomatic cases demonstrated findings of pneumonia on the initial chest CT, including well-recognized features of coronavirus disease-19. None of the asymptomatic individuals died. Two elderly individuals with initially asymptomatic infection developed severe symptoms during hospitalization. One case of possible virus transmission by a patient during the incubation period was highly suspected. Conclusions: The epidemiological and clinical findings highlight the significance of asymptomatic infection with SARS-CoV-2. Inspecting the epidemiological history would facilitate the identification of asymptomatic cases. Evidence supports the chest CT scans for confirmed asymptomatic cases to evaluate the extent of lung involvement.

Publication Type

Journal article.

<7>

Accession Number

20203480701

Author

Gendrot, M.; Andreani, J.; Boxberger, M.; Jardot, P.; Fonta, I.; Bideau, M. le; Duflot, I.; Mosnier, J.; Rolland, C.; Bogreau, H.; Hutter, S.; Scola, B. la; Pradines, B.

Title

Antimalarial drugs inhibit the replication of SARS-CoV-2: an in vitro evaluation.

Source

Travel Medicine and Infectious Disease; 2020. 3768 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

In December 2019, a new severe acute respiratory syndrome coronavirus (SARS-CoV-2) causing coronavirus diseases 2019 (COVID-19) emerged in Wuhan, China. African countries see slower dynamic of COVID-19 cases and deaths. One of the assumptions that may explain this later emergence in Africa, and more particularly in malaria endemic areas, would be the use of antimalarial drugs. We investigated the in vitro antiviral activity against SARS-CoV-2 of several antimalarial drugs. Chloroquine (EC50 = 2.1 muM and EC90 = 3.8 muM), hydroxychloroquine (EC50 = 1.5 muM and EC90 = 3.0 muM), ferroquine (EC50 = 1.5 muM and EC90 = 2.4 muM), desethylamodiaquine (EC50 = 0.52 muM and EC90 = 1.9 muM), mefloquine (EC50 = 1.8 muM and EC90 = 8.1 muM), pyronaridine (EC50 = 0.72 muM and EC90 = 0.75 muM) and quinine (EC50 = 10.7 muM and EC90 = 38.8 muM) showed in vitro antiviral effective activity with IC50 and IC90 compatible with drug oral uptake at doses commonly administered in malaria treatment. The ratio Clung/EC90 ranged from 5 to 59. Lumefantrine, piperaquine and dihydroartemisinin had IC50 and IC90 too high to be compatible with expected plasma concentrations (ratio Cmax/EC90 < 0.05). Based on our results, we would expect that countries which commonly use artesunate-amodiaquine or artesunate-mefloquine report fewer cases and deaths than those using artemether-lumefantrine or dihydroartemisinin-piperaquine. It could be necessary now to compare the antimalarial use and the dynamics of COVID-19 country by country to confirm this hypothesis.

Publication Type

Journal article.

<8>

Accession Number

20203467156

Author

Dervas, E.; Hepojoki, J.; Smura, T.; Prahauser, B.; Windbichler, K.; Blumich, S.; Ramis, A.; Hetzel, U.; Kipar, A.

Title

Serpentoviruses: more than respiratory pathogens.

Source

Journal of Virology; 2020. 94(18)

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

In recent years, nidoviruses have emerged as important respiratory pathogens of reptiles, affecting captive python populations. In pythons, nidovirus (recently reclassified as serpentovirus) infection induces an inflammation of the upper respiratory and alimentary tract which can develop into a severe, often fatal proliferative pneumonia. We observed pyogranulomatous and fibrinonecrotic lesions in organ systems other than the respiratory tract during full postmortem examinations on 30 serpentovirus reverse transcription-PCR (RT-PCR)-positive pythons of varying species originating from Switzerland and Spain. The observations prompted us to study whether this not yet reported wider distribution of lesions is associated with previously unknown serpentoviruses or changes in the serpentovirus genome. RT-PCR and inoculation of Morelia viridis cell cultures served to recruit the cases and obtain virus isolates. Immunohistochemistry and immunofluorescence staining against serpentovirus nucleoprotein demonstrated that the virus infects not only a broad spectrum of epithelia (respiratory and alimentary epithelium, hepatocytes, renal tubules, pancreatic ducts, etc.), but also intravascular monocytes, intralesional macrophages, and endothelial cells. With next-generation sequencing we obtained a full-length genome for a novel serpentovirus species circulating in Switzerland. Analysis of viral genomes recovered from pythons showing serpentovirus infection-associated respiratory or systemic disease did not reveal sequence association to phenotypes; however, functional studies with different strains are needed to confirm this observation. The results indicate that serpentoviruses have a broad cell and tissue tropism, further suggesting that the course of infection could vary and involve lesions in a broad spectrum of tissues and organ systems as a consequence of monocyte-mediated viral systemic spread. IMPORTANCE: During the last years, python nidoviruses (now reclassified as serpentoviruses) have become a primary cause of fatal disease in pythons. Serpentoviruses represent a threat to captive snake collections, as they spread rapidly and can be associated with high morbidity and mortality. Our study indicates that, different from previous evidence, the viruses do not only affect the respiratory tract, but can spread in the entire body with blood monocytes, have a broad spectrum of target cells, and can induce a variety of lesions. Nidovirales is an order of animal and human viruses that comprises important zoonotic pathogens such as Middle East respiratory syndrome coronavirus (MERS-CoV), severe acute respiratory syndrome coronavirus (SARS-CoV), and SARS-CoV-2. Serpentoviruses belong to the same order as the above-mentioned human viruses and show similar characteristics (rapid spread, respiratory and gastrointestinal tropism, etc.). The present study confirms the relevance of natural animal diseases to better understand the complexity of viruses of the order Nidovirales.

Publication Type

Journal article.

<9>

Accession Number

20203464000

Author

Yaya, S.; Otu, A.; Labonte, R.

Title

Globalisation in the time of COVID-19: repositioning Africa to meet the immediate and remote challenges.

Source

Globalization and Health; 2020. 16(51):(24 June 2020). 38 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The COVID-19 pandemic has ushered in a new climate of uncertainty which is fuelling protectionism and playing into nationalist narratives. Globalisation is under significant threat as governments scramble to reduce their vulnerability to the virus by limiting global trade and flows of people. With the imposition of border closures and strict migration measures, there have been major disruptions in Africa's global supply chains with adverse impacts on employment and poverty. The African economies overly reliant on single export-orientated industries, such as oil and gas, are expected to be severely hit. This situation is further aggravated by tumbling oil prices and a lowered global demand for African non-oil products. The agricultural sector, which should buffer these shocks, is also being affected by the enforcement of lockdowns which threaten people's livelihoods and food security. Lockdowns may not be the answer in Africa and the issue of public health pandemic response will need to be addressed by enacting context-specific policies which should be implemented in a humane way. In addressing the socioeconomic impact of COVID-19 on African nations, we argue that governments should prioritize social protection programmes to provide people with resources to maintain economic productivity while limiting job losses. International funders are committing assistance to Africa for this purpose, but generally as loans (adding to debt burdens) rather than as grants. G20 agreement so suspend debt payments for a year will help, but is insufficient to fiscal need. Maintaining cross-border trade and cooperation to continue generating public revenues is desirable. New strategies for diversifying African economies and limiting their dependence on external funding by promoting trade with a more regionalised (continental) focus as promoted by the African Continental Free Trade Agreement, while not without limitations, should be explored. While it is premature to judge the final economic and death toll of COVID-19, African leaders' response to the pandemic, and the support they receive from wealthier nations, will determine its eventual outcomes.

Publication Type

Journal article.

<10>

Accession Number

20203469546

Author

Schmitt, C. A.; Bergey, C. M.; Jasinska, A. J.; Ramensky, V.; Burt, F.; Svardal, H.; Jorgensen, M. J.; Freimer, N. B.; Grobler, J. P.; Turner, T. R.

Title

ACE2 and TMPRSS2 variation in savanna monkeys (Chlorocebus spp.): potential risk for zoonotic/anthroponotic transmission of SARS-CoV-2 and a potential model for functional studies.

Source

PLoS ONE; 2020. 15(6)many ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

The COVID-19 pandemic, caused by the coronavirus SARS-CoV-2, has devastated health infrastructure around the world. Both ACE2 (an entry receptor) and TMPRSS2 (used by the virus for spike protein priming) are key proteins to SARS-CoV-2 cell entry, enabling progression to COVID-19 in humans. Comparative genomic research into critical ACE2 binding sites, associated with the spike receptor binding domain, has suggested that African and Asian primates may also be susceptible to disease from SARS-CoV-2 infection. Savanna monkeys (Chlorocebus spp.) are a widespread non-human primate with well-established potential as a bi-directional zoonotic/anthroponotic agent due to high levels of human interaction throughout their range in sub-Saharan Africa and the Caribbean. To characterize potential functional variation in savanna monkey ACE2 and TMPRSS2, we inspected recently published genomic data from 245 savanna monkeys, including 163 wild monkeys from Africa and the Caribbean and 82 captive monkeys from the Vervet Research Colony (VRC). We found several missense variants. One missense variant in ACE2 (X:14,077,550; Asp30Gly), common in Ch. sabaeus, causes a change in amino acid residue that has been inferred to reduce binding efficiency of SARS-CoV-2, suggesting potentially reduced susceptibility. The remaining populations appear as susceptible as humans, based on these criteria for receptor usage. All missense variants observed in wild Ch. sabaeus populations are also present in the VRC, along with two splice acceptor variants (at X:14,065,076) not observed in the wild sample that are potentially disruptive to ACE2 function. The presence of these variants in the VRC suggests a promising model for SARS-CoV-2 infection and vaccine and therapy development. In keeping with a One Health approach, characterizing actual susceptibility and potential for bi-directional zoonotic/anthroponotic transfer in savanna monkey populations may be an important consideration for controlling COVID-19 epidemics in communities with frequent human/non-human primate interactions that, in many cases, may have limited health infrastructure.

Publication Type

Journal article.

<11>

Accession Number

20203468813

Author

Yanez, J. A.; Jahanshahi, A. A.; Alvarez-Risco, A.; Li JiZhen; Zhang, S. X.

Title

Anxiety, distress, and turnover intention of healthcare workers in Peru by their distance to the epicenter during the COVID-19 crisis.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(4):1614-1620. 59 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

We conducted a cross-sectional survey to assess the anxiety, distress, and turnover intention (likelihood to leave their current job) of healthcare workers in Peru during the COVID-19 pandemic. Our results reported that 21.7% healthcare workers in Peru experienced severe anxiety, whereas 26.1% of them experienced severe mental distress. A higher level of education related with a lower level of anxiety. Younger workers had a higher level of turnover intention than their older colleagues did. Healthcare workers in the private sector had a higher turnover intention than those in the public sector. Most importantly, people who were geographically far from Lima, the epicenter in Peru, during the outbreak experienced less anxiety and mental distress, corroborating the ripple effect and disconfirming the typhoon eye theory. However, the direction of these relationships can change depending on the type of institutions (public versus private) and the type of employees' contract (full time versus part time). Our research helps provide insights for clinical professionals in identifying the vulnerable groups to mental disorders in Peru. This is the first study to assess anxiety, mental distress, and turnover intention in healthcare workers in Peru during the COVID-19 pandemic.

Publication Type

Journal article.

<12>

Accession Number

20203468812

Author

Wong, J.; Chaw LiLing; Koh WeeChian; Alikhan, M. F.; Jamaludin, S. A.; Poh, W. W. P.; Naing, L.

Title

Epidemiological investigation of the first 135 COVID-19 cases in Brunei: implications for surveillance, control, and travel restrictions.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(4):1608-1613. 32 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

Studies on the early introduction of SARS-CoV-2 in a naive population have important epidemic control implications. We report findings from the epidemiological investigation of the initial 135 COVID-19 cases in Brunei and describe the impact of control measures and travel restrictions. Epidemiological and clinical information was obtained for all confirmed COVID-19 cases, whose symptom onset was from March 9 to April 5, 2020. The basic reproduction number (R0), incubation period, and serial interval (SI) were calculated. Time-varying R was estimated to assess the effectiveness of control measures. Of the 135 cases detected, 53 (39.3%) were imported. The median age was 36 (range = 0.5-72) years. Forty-one (30.4%) and 13 (9.6%) were presymptomatic and asymptomatic cases, respectively. The median incubation period was 5 days (interquartile range [IQR] = 5, range = 1-11), and the mean SI was 5.4 days (SD = 4.5; 95% CI: 4.3, 6.5). The reproduction number was between 3.9 and 6.0, and the doubling time was 1.3 days. The time-varying reproduction number (Rt) was below one (Rt = 0.91; 95% credible interval: 0.62, 1.32) by the 13th day of the epidemic. Epidemic control was achieved through a combination of public health measures, with emphasis on a test-isolate-trace approach supplemented by travel restrictions and moderate physical distancing measures but no actual lockdown. Regular and ongoing testing of high-risk groups to supplement the existing surveillance program and a phased easing of physical distancing measures has helped maintain suppression of the COVID-19 outbreak in Brunei, as evidenced by the identification of only six additional cases from April 5 to August 5, 2020.

Publication Type

Journal article.

<13>

Accession Number

20203468807

Author

Lier, A. J.; Tuan, J. J.; Davis, M. W.; Paulson, N.; McManus, D.; Campbell, S.; Peaper, D. R.; Topal, J. E.

Title

Disseminated strongyloidiasis in a patient with COVID-19.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(4):1590-1592. 13 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

The SARS-CoV-2 virus has emerged and rapidly evolved into a current global pandemic. Although bacterial and fungal coinfections have been associated with COVID-19, little is known about parasitic infection. We report a case of a COVID-19 patient who developed disseminated strongyloidiasis following treatment with high-dose corticosteroids and tocilizumab. Screening for Strongyloides infection should be pursued in individuals with COVID-19 who originate from endemic regions before initiating immunosuppressive therapy.

Publication Type

Journal article.

<14>

Accession Number

20203466916

Author

Li ZhongJie; Chen QiuLan; Feng LuZhao; Rodewald, L.; Xia YinYin; Yu HaiLiang; Zhang RuoChen; An ZhiJie; Yin WenWu; Chen Wei; Qin Ying; Peng ZhiBin; Zhang Ting; Ni DaXin; Cui JinZhao; Wang Qing; Yang XiaoKun; Zhang MuLi; Ren Xiang; Wu Dan; Sun XiaoJin; Li YuanQiu; Zhou Lei; Qi XiaoPeng; Song Tie; et al.

Title

Active case finding with case management: the key to tackling the COVID-19 pandemic.

Source

Lancet (British edition); 2020. 396(10243):63-70. 62 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

COVID-19 was declared a pandemic by WHO on March 11, 2020, the first non-influenza pandemic, affecting more than 200 countries and areas, with more than 5.9 million cases by May 31, 2020. Countries have developed strategies to deal with the COVID-19 pandemic that fit their epidemiological situations, capacities, and values. We describe China's strategies for prevention and control of COVID-19 (containment and suppression) and their application, from the perspective of the COVID-19 experience to date in China. Although China has contained severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and nearly stopped indigenous transmission, a strong suppression effort must continue to prevent re-establishment of community transmission from importation-related cases. We believe that case finding and management, with identification and quarantine of close contacts, are vitally important containment measures and are essential in China's pathway forward. We describe the next steps planned in China that follow the containment effort. We believe that sharing countries' experiences will help the global community manage the COVID-19 pandemic by identifying what works in the struggle against SARS-CoV-2.

Publication Type

Journal article.

<15>

Accession Number

20203461939

Author

Ngwewondo, A.; Nkengazong, L.; Ambe, L. A.; Ebogo, J. T.; Mba, F. M.; Goni, H. O.; Nyunai, N.; Ngonde, M. C.; Oyono, J. L. E.

Title

Knowledge, attitudes, practices of/towards COVID 19 preventive measures and symptoms: a cross-sectional study during the exponential rise of the outbreak in Cameroon.

Source

PLoS Neglected Tropical Diseases; 2020. 14(9)15 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Severe Acute Respiratory Syndrome Coronavirus 2 (COVID 19) has plagued the world with about 7,8 million confirmed cases and over 430,000 deaths as of June 13th, 2020. The knowledge, attitude, and practices (KAP) people hold towards this new disease could play a major role in the way they accept measures put in place to curb its spread and their willingness to seek and adhere to care. We sought to understand if: (a) demographic variables of Cameroonian residents could influence KAP and symptomatology, and (b) KAP could influence the risk of having COVID19.A cross-sectional KAP/symptomatology online survey was conducted between April 20 to May 20. All analyses were performed using SPSS version 23. Of all respondents (1006), 53.1% were female, 26.6% were students, 26.9% interacted face to face and 62.8% were residents in Yaounde with a median age of 33. The overall high score was 84.19% for knowledge, 69% for attitude, and 60.8% for practice towards COVID 19. Age > 20 years was associated with a high knowledge of COVID 19. Women had lower practice scores compared to men (OR = 0.72; 95%CI 0.56-0.92). 41 respondents had >=3 symptoms and only 9 (22.95%) of them had called 1510 (emergency number). There was no significant difference between KAP and symptomatology. The presence of >= 3 symptoms in 4% of respondents (with 56% of them having co-morbidities) supports the current trend in the number of confirmed cases (8681) in Cameroon. The continuous increase in the number of cases and the overall good KAP warrants further investigation to assess the effectiveness of the measures put in place to curb the spread of the disease. Sensitization is paramount to preclude negative health-seeking behaviors and encourage positive preventive and therapeutic practices, for fear of an increase in mortality.

Publication Type

Journal article.

<16>

Accession Number

20203441992

Author

Oliveira, T. C.; Abranches, M. V.; Coelho, T. M. C.

Title

The account does not close: impacts of the SARS-CoV-2 pandemic on the collective food sector. [Portuguese]

Source

Revista Higiene Alimentar; 2020. 34(290):113-117. 19 ref.

Publisher

Higiene Alimentar

Location of Publisher

São

Country of Publication

Brazil

Abstract

COVID-19 has impacted daily human activities, including food services. This manuscript systematizes issues that link the role of professionals who act as consultants on sanitation and hygiene management in food service.

Publication Type

Journal article.

<17>

Accession Number

20203470189

Author

Adewole, O. O.

Title

Impact of COVID-19 on TB care: experiences of a treatment centre in Nigeria.

Source

International Journal of Tuberculosis and Lung Disease; 2020. 24(9):981-982.

Publisher

International Union Against Tuberculosis and Lung Disease

Location of Publisher

Paris

Country of Publication

France

Publication Type

Correspondence.

<18>

Accession Number

20203478700

Author

Nemati, M.; Ebrahimi, B.; Nemati, F.

Title

Assessment of Iranian nurses' knowledge and anxiety toward COVID-19 during the current outbreak in Iran.

Source

Archives of Clinical Infectious Diseases; 2020. 15(Covid-19)15 ref.

Publisher

Kowsar Medical Publishing

Location of Publisher

Heerlen

Country of Publication

Netherlands

Abstract

Background: The world is affected by the Corona Virus Disease 2019 (COVID-19). Because of their direct contact with patients, health workers, especially nurses, play critical roles in the prevention of the COVID-19 outbreak through proper care and preventive procedures. Objectives: This study aimed to measure the awareness level of nurses in Shiraz, Iran, during the current COVID-19 outbreak. Methods: A self-administered questionnaire containing knowledge questions was distributed to 85 participants to complete. Results: More than half of the nurses (56.5%) had good knowledge about sources, transmission, symptoms, signs, prognosis, treatment, and mortality rate of COVID-19. The sources of information for the nurses were the World Health Organization and the Ministry of Health (55.29%), social applications (48.23%), and media (42.35%). Conclusions: Nurses had almost good knowledge of COVID-19. However, the WHO and the Ministry of Health still must provide more information for the medical staff for better control of the infectious disease.

Publication Type

Journal article.

<19>

Accession Number

20203472544

Author

Gilbert, R. M.; Donzanti, M. J.; Minahan, D. J.; Shirazi, J.; Hatem, C. L.; Hayward-Piatkovskyi, B.; Dang, A. M.; Nelson, K. M.; Bothi, K. L.; Gleghorn, J. P.

Title

Mask reuse in the COVID-19 pandemic: creating an inexpensive and scalable ultraviolet system for filtering facepiece respirator decontamination.

Source

Global Health: Science and Practice; 2020. 8(3):582-595. 43 ref.

Publisher

Johns Hopkins Center for Communication Programs

Location of Publisher

Baltimore

Country of Publication

USA

Abstract

As the current COVID-19 pandemic illustrates, not all hospitals and other patient care facilities are equipped with enough personal protective equipment to meet the demand in a crisis. Health care workers around the world use filtering facepiece respirators to protect themselves and their patients, yet during this global pandemic they are forced to reuse what are intended to be single-use masks. This poses a significant risk to these health care workers along with the people they are trying to protect. Ultraviolet germicidal irradiation (UVGI) has been validated previously as a method to effectively decontaminate these masks between use. However, not all facilities have access to the expensive commercial ultraviolet type C (UV-C) lamp decontamination equipment required for UVGI. UV-C bulbs are sitting idle in biosafety cabinets at universities and research facilities around the world that have been shuttered to slow the spread of COVID-19. These bulbs may also be available in existing medical centers where infectious diseases are commonly treated. We developed a method to modify existing light fixtures or create custom light fixtures that are compatible with new or existing UV-C bulbs. This system is scalable; can be created for less than US$50, on site and at the point of need; and leverages resources that are currently untapped and sitting unused in public and private research facilities during the pandemic. The freely accessible design can be easily modified for use around the world. Health care facilities can obtain this potentially lifesaving UVGI resource with minimal funds by collaborating with research facilities to obtain the UV-C meters and UV-C bulbs if they are unavailable from other sources. Although mask reuse is not ideal, we must do what we can in emergency situations to protect our health care workers responding to the pandemic and the communities they serve.

Publication Type

Journal article.

<20>

Accession Number

20203472531

Author

Lewis, J.; LeBan, K.; Roma Solomon; Filimona Bisrat; Usman, S.; Arale, A.

Title

The critical role and evaluation of community mobilizers in polio eradication in remote settings in Africa and Asia.

Source

Global Health: Science and Practice; 2020. 8(3):396-412. 27 ref.

Publisher

Johns Hopkins Center for Communication Programs

Location of Publisher

Baltimore

Country of Publication

USA

Abstract

This article assesses the CORE Group Polio Project (CGPP) experience over a 20-year period in 5 countries. It examines how a program designed to provide social mobilization to eradicate one disease, and which did so effectively, functioned within the general framework of community health workers (CHWs). Vertical health programs often have limited impact on broader community health. CGPP has a 20-year history of social mobilization and effective program interventions. This history provided an opportunity to assess how CGPP community mobilizers (CMs) functioned in polio and maternal and child health. The Updated Program Functionality Matrix for Optimizing Community Health Programs tool of the CHW Assessment and Improvement Matrix (AIM) was used to examine CGPP CM roles across different contexts. The analysis determined that CGPP CMs met the basic level of functioning (level 3) for 6 of the 10 components of the AIM tool. This cross-country descriptive analysis of the CGPP demonstrates the importance of embracing the full range of CHW AIM components, even in a vertical program. Use of data, community involvement, local adaptation, and linkage with the health system are especially critical for success. This general lesson could be applied to other community mobilization and disease/epidemic control initiatives, especially as we face the issues of the COVID-19 pandemic.

Publication Type

Journal article.

<21>

Accession Number

20203473777

Author

Hibbett, E.

Title

Adapting to threats: initial responses of grassroots clean air advocacy groups to COVID-19.

Source

Environmental Politics; 2020. 29(6):1105-1111. 5 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Publication Type

Journal article.

<22>

Accession Number

20203470660

Author

Hansen, D. S.

Title

Identifying barriers to career progression for women in science: is COVID-19 creating new challenges?

Source

Trends in Parasitology; 2020. 36(10):799-802. 13 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This article summarizes discussions at a Gender Equity Workshop run during the Molecular Approaches to Malaria Conference in February 2020. Barriers to career progression in science for women and minority groups, along with suggestions to overcome ongoing roadblocks, are discussed. The emerging challenges that coronavirus disease 2019 (COVID-19) is bringing to this sector are also considered.

Publication Type

Journal article.

<23>

Accession Number

20203470629

Author

Massad, I.; Al-Taher, R.; Massad, F.; Al-Sabbagh, M. Q.; Haddad, M.; Abufaraj, M.

Title

The impact of the COVID-19 pandemic on mental health: early quarantine-related anxiety and its correlates among jordanians.

Source

Eastern Mediterranean Health Journal; 2020. 26(10):1165-1172. 34 ref.

Publisher

World Health Organization, Regional Office for the Eastern Mediterranean

Location of Publisher

Cairo

Country of Publication

Egypt

Abstract

Background: Jordan implemented a nationwide lockdown and recommended self-quarantine in response to the COVID-19 pandemic. Such measures are expected to have consequences on mental health. Aims: In this study, we aimed to estimate the prevalence of quarantine-related anxiety and its socioeconomic correlates. Methods: An online questionnaire was utilized to collect information about quarantine-related anxiety and related factors from a non-representative sample of Jordanian population in March 2020. The Beck Anxiety Inventory (BAI) was used to ascertain the level of stress. Using STATA 16, multivariable ordinal logistic regression was done to estimate beta-coefficient (beta) and corresponding 95% CI of the anxiety level. Results: Overall, 5274 participants returned the survey. The prevalence of mild, moderate, and severe anxiety was 21.5%, 10.9%, and 6%, respectively. Female gender (beta= 0.47, 95% CI: 0.34 to 0.59) and more members of the household (beta= 0.04, 95% CI: 0.00 to 0.07) were correlated with a higher degree of anxiety, while older age (beta= -0.27, 95% CI: -0.33 to -0.20), having larger social network (beta= -0.17, 95% CI -0.22 to -0.13), social support (beta= -0.28, 95% CI: -0.32 to -0.23), and higher income (>2000 Jordanian Dinars vs reference, beta= -0.52, 95% CI: -0.71 to -0.33) were correlated with lower BAI scores. Conclusion: Our findings showed that approximately four out of every ten participants experienced quarantine-related anxiety. Younger participants, women, and people with poor social support were more likely to experience quarantine-related anxiety. These findings highlight the importance of targeting these groups to mitigate the consequence of home quarantine on public health.

Publication Type

Journal article.

<24>

Accession Number

20203470628

Author

Youssef, N.; Mostafa, A.; Ezzat, R.; Yosef, M.; El-Kassas, M.

Title

Mental health status of health-care professionals working in quarantine and non-quarantine Egyptian hospitals during the COVID-19 pandemic.

Source

Eastern Mediterranean Health Journal; 2020. 26(10):1155-1164. 28 ref.

Publisher

World Health Organization, Regional Office for the Eastern Mediterranean

Location of Publisher

Cairo

Country of Publication

Egypt

Abstract

Background: Variable models of care have been adopted in different countries in response to the COVID-19 pandemic. Egypt has assigned certain hospitals specifically for the quarantine of COVID-19 patients, where operational medical teams work continuously for 14 days, after which they are released for self-isolation at home for a similar period. Aims: The study aimed to evaluate and compare perceived adverse psychological symptoms (stress, anxiety, depression), and insomnia by health-care professionals working in quarantine and non-quarantine hospitals during the COVID-19 pandemic in Egypt, and to explore associated factors with adverse psychological symptoms and insomnia. Methods: An online cross-sectional survey was performed in April 2020, using a snowball sampling method. Sociodemographic information perceived general health, healthy lifestyle, insomnia (using Insomnia Severity Index), adverse psychological symptoms (using the Depression, Anxiety and Stress Scale-21), worries and concerns about COVID-19, future perspective about COVID-19, and coping strategies were collected. Results: Five hundred and forty health-care professionals participated; 10.2% (n=55) worked in quarantine hospitals. Younger age (ORa=0.96, 95% CI:0.93-0.99, ORa=0.95; 95% CI:0.92-0.97; ORa=0.96 CI:0.93-0.99), being not ready/sure of readiness to work in quarantine hospital (ORa=1.91, 95% CI:1.22-3.00; ORa=2.01, 95% CI:1.28-3.15; ORa=1.91, 95% CI:1.22- 2.98), and insomnia (ORa=5.22, 95% CI:3.38-8.05; ORa=7.58, 95% CI:4.91-11.68; ORa=6.38 95% CI:4.19-9.73) significantly predicted stress, depression and anxiety, respectively. Being female (ORa=1.59, 95% CI:1.04-2.42; ORa=2.09, 95% CI:1.38- 3.16) could also significantly predict stress and anxiety. Conclusion: Female and younger age health care professionals were more prone to report adverse

psychological symptoms. More and earlier screening for health-care professionals dealing with COVID-19, in addition to providing psychological support, is highly encouraged.

Publication Type

Journal article.

<25>

Accession Number

20203457588

Author

Aloi, A.; Alonso, B.; Benavente, J.; Cordera, R.; Echaniz, E.; Gonzalez, F.; Ladisa, C.; Lezama-Romanelli, R.; Lopez-Parra, A.; Mazzei, V.; Perrucci, L.; Prieto-Quintana, D.; Rodriguez, A.; Sanudo, R.

Title

Effects of the COVID-19 lockdown on urban mobility: empirical evidence from the city of Santander (Spain).

Source

Sustainability; 2020. 12(9)53 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

This article analyses the impact that the confinement measures or quarantine imposed in Spain on 15 March 2020 had on urban mobility in the northern city of Santander. Data have been collected from traffic counters, public transport ITS, and recordings from traffic control cameras and environmental sensors to make comparisons between journey flows and times before and during the confinement. This data has been used to re-estimate Origin-Destination trip matrices to obtain an initial diagnostic of how daily mobility has been reduced and how the modal distribution and journey purposes have changed. The impact on externalities such as NO2 emissions and traffic accidents have also been quantified. The analysis revealed an overall mobility fall of 76%, being less important in the case of the private car. Public transport users dropped by up to 93%, NO2 emissions were reduced by up to 60%, and traffic accidents were reduced by up to 67% in relative terms.

Publication Type

Journal article.

<26>

Accession Number

20203454408

Author

Lingala, S.; Bajoria, M.; Olson, R.

Title

Using cutting-edge technology to end malnutrition.

Source

UNSCN News; 2020. (45):92-95. 8 ref.

Publisher

United Nations System Standing Committee on Nutrition (SCN), c/o Food and Agriculture Organization

Location of Publisher

Rome

Country of Publication

Italy

Abstract

The world is facing a malnutrition crisis. One billion people are hungry, at least 3 billion do not receive sufficient nutrients and more than 2.5 billion consume unhealthy diets (UNICEF, WHO and World Bank, 2018). In addition to its immediate impact on health and society, the COVID-19 pandemic will cause significant short- and long-term disruptions to food systems. This will reduce the availability of nutritious foods, particularly for poor and vulnerable populations, and fuel the prevalence of all forms of malnutrition. Malnutrition results in the intergenerational transmission of inequity, poverty and poor health and poses a significant barrier to equitable and sustainable social and economic development. The data-collection step in the value chain is, perhaps, the most important and requires the establishment of high-quality national and subnational systems to collect reliable information. Yet, many nutrition issues still lack dependable data. This is the case for micronutrient deficiencies, which are still poorly understood in most countries due to vast data gaps.

Publication Type

Journal article.

<27>

Accession Number

20203481228

Author

Clifton, M.; Johnstone, W. M., III; Kolasa, K. M.

Title

Feeding a person with advanced Alzheimer's disease: an update.

Source

Nutrition Today; 2020. 55(5):202-210. 56 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

We update our 2011 discussion of feeding the person with late-stage or advanced Alzheimer's disease (advanced AD). We present a case of a 92-year-old woman diagnosed with AD, from our family medicine practice who was brought to the emergency department with fever and a change in mental status. Previously, neither she nor her family had received counseling about the typical trajectory of AD, nor had she made end-of-life plans. We present a discussion of the typical trajectory of AD, involuntary weight loss, advance care planning related to nutrition, and hydration and alternatives to tube feeding. We added a note describing the initial impact of COVID-19 on care.

Publication Type

Journal article.

<28>

Accession Number

20203482471

Author

Rajnish Joshi; Shubham Atal; Zeenat Fatima; Sadasivam Balakrishnan; Swati Sharma; Ankur Joshi

Title

Diabetes care during COVID-19 lockdown at a tertiary care centre in India.

Source

Diabetes Research and Clinical Practice; 2020. 16611 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Providing scheduled consultations to persons with diabetes during the COVID-19 induced lockdowns posed a major challenge. With the clinicians occupied in COVID management, a strategy of using telemedicine and engaging a team of para-clinical doctors was devised. Telephonic follow up consults were given and diabetes care was efficiently delivered.

Publication Type

Journal article.

<29>

Accession Number

20203482467

Author

Abdi, A.; Jalilian, M.; Sarbarzeh, P. A.; Vlaisavljevic, Z.

Title

Diabetes and COVID-19: a systematic review on the current evidences. (Special issue on diabetes and COVID-19: the IDF perspective.)

Source

Diabetes Research and Clinical Practice; 2020. 16667 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: COVID-19 pneumonia is a newly recognized illness that is spreading rapidly around the world and causes many disability and deaths. Some diseases, for instance diabetes, is continuously suggested as a risk factor which contributes to the severity and mortality of COVID-19. However, to date, there are no comprehensive studies aiming to explain the exact relationship between diabetes and COVID-19. Thus, this study aims to summarize the evidence about diabetes and COVID-19 outbreak through a systematic review and meta-analysis approach. Method: A literature review was implemented within databases of Scopus, PubMed, Science direct, and Web of science. Observational reviews, case-report, and case-series studies that assessed the diabetes in COVID-19 patients, were included. Data extraction and assessment were guided by PRISMA checklist. Findings: Some studies suggest that there were no significant differences in symptoms between patients who suffered from both diabetes and COVID-19 and those who only suffered COVID-19. In the subsequent meta-analysis 14.5% of the subjects were diabetic patient. These clients have poor ARDS prognosis, severe symptoms, and the death rate is higher among COVID-19 patients. In addition, it is suggested the diabetic patients will be treated with antibiotics, antivirals, and HCQ. Conclusion: The results of this study show that diabetes is a risk factor - and contributes to the severity and mortality of patients with COVID-19. This paper also provides recommendations and guidelines for which could be useful for prevention and treatment of diabetic patients affected by COVID-19.

Publication Type

Journal article.

<30>

Accession Number

20203483634

Author

Lai YuJu; Chang ChiaMing; Lin ChiKung; Yang YiPing; Chien, C. S.; Wang PengHui; Chang ChengChang

Title

Severe acute respiratory syndrome coronavirus-2 and the deduction effect of angiotensin-converting enzyme 2 in pregnancy.

Source

Journal of the Chinese Medical Association; 2020. 83(9):812-816. 68 ref.

Publisher

Wolters Kluwer Health

Location of Publisher

Riverwoods

Country of Publication

USA

Abstract

The 2019 novel coronavirus (2019-nCoV, later named SARS-CoV-2) is a pandemic disease worldwide. The spread of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) is continuing at a rapid speed. Till May 4, 2020, there have been 3,407,747 confirmed cases and 238,198 deaths globally. The common symptoms in pregnant women are fever, cough, and dyspnea. Angiotensin-converting enzyme 2 (ACE2) has transient overexpression and increased activity during pregnancy, which is now confirmed as the receptor of SARS-CoV-2 and plays essential roles in human infection and transmission. There is no evidence that pregnant women are more susceptible to SARS-CoV-2. To date, there is no valid medication or vaccination. The immune suppression or modulation during pregnancy increases the risk of severe pneumonia. Remdesivir is an antiviral medication targeting ribonucleic acid (RNA) synthesis that has clinical improvement in the treatment of SARS-CoV-2. Chloroquine is controversial in its effectiveness and safety to treat SARS-CoV-2. Remdesivir is safe in pregnancy. Chloroquine has not been formally assigned to a pregnancy category by the Food and Drug Administration (FDA). The management strategy includes monitoring fetal heart rate and uterine contractions; early oxygenation if O2 saturation is less than 95%; empiric antibiotics for prevention of secondary infection; corticosteroid to treat maternal SARS-CoV-2 disease routinely is not suggested, only for fetal lung maturation in selected cases; and consideration of delivery is according to the obstetric indication, gestational age, and severity of the disease. During epidemics, delivery at 32-34 weeks is considered. The indication for the Cesarean section should be flexible to minimize the risk of infection during the delivery. The newborn should be in isolation ward immediately after birth; breastfeeding is not contraindicated but should avoid direct transmission infection.

Publication Type

Journal article.

<31>

Accession Number

20203481764

Author

Jahangiry, L.; Bakhtari, F.; Sohrabi, Z.; Reihani, P.; Samei, S.; Ponnet, K.; Montazeri, A.

Title

Risk perception related to COVID-19 among the Iranian general population: an application of the extended parallel process model.

Source

BMC Public Health; 2020. 20(1571):(19 October 2020). 22 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The novel coronavirus disease 2019 (COVID-19) has emerged as a major global public health challenge. This study aimed to investigate on how people perceive the COVID-19 outbreak using the components of the Extended Parallel Process Model (EPPM) and to find out how this might contribute to possible behavioral responses to the prevention and control of the disease. Methods: This cross-sectional study was conducted in Iran during March and April 2020. Participants were recruited via online applications using a number of platforms such as Telegram, WhatsApp, and Instagram asking people to take part in the study. To collect data an electronic self-designed questionnaire based on the EPPM was used in order to measure the risk perception (efficacy, defensive responses, perceived treat) related to the COVID-19. Descriptive statistics, chi-square, t-test and analysis of variance (ANOVA), were used to explore the data. Results: A total of 3727 individuals with a mean age (SD) of 37.0 (11.1) years participated in the study. The results revealed significant differences in efficacy, defensive responses and perceived treat among different population groups particularly among those aged 60 and over. Women had significantly higher scores than men on some aspects such as self-efficacy, reactance, and avoidance but men had higher perceived susceptibility scores compared to women. Overall 56.4% of participants were engaged in danger control (preventive behavior) while the remaining 43.6% were engaged in fear control (non-preventive behavior) process. Conclusion: More than half of all participants motivated by danger control. This indicated that more than half of participants had high perceived efficacy (i.e., self-efficacy and response efficacy). Self-efficacy scores were significantly higher among participants who were older, female, single, lived in rural areas, and had good economic status. The results suggest that socioeconomic and demographic factors are the main determinants of the COVID-19 risk perception. Indeed, targeted interventions are essential for controlling the pandemic.

Publication Type

Journal article.

<32>

Accession Number

20203468189

Author

Liu LiWen; Chen XiQuan; Li XiaoYun; Zeng Yan; Zhang ChunYing

Title

Online teaching practice under the epidemic situation of novel coronavirus pneumonia.

Source

Asian Agricultural Research; 2020. 12(8):78-82. 8 ref.

Publisher

Journal Board of Asian Agricultural Research

Location of Publisher

Cranston

Country of Publication

USA

Abstract

In the context of preventing and controlling novel coronavirus pneumonia, how to ensure the quality of higher education has become a hot issue of social concern in China. In this article, the problems and challenges are analyzed from teacher, student and technology levels, the teaching pattern of "re-flipped classroom" and the teaching model of "SPOC + MOOC + live broadcast" are proposed, the three teaching methods of PBL, OBE and mind mapping are integrated, the teaching evaluation is introduced to teaching design, and finally, the implementation suggestions are put forward to ensure the quality of teaching.

Publication Type

Journal article.

<33>

Accession Number

20203468170

Author

Yuan FangYao; Yang Ping; Xu Feng; Han TongKai

Title

Impatt of COVID-19 epidemic on the international food supply chain and countermeasures of Shandong Province.

Source

Asian Agricultural Research; 2020. 12(8):1-5, 16. 21 ref.

Publisher

Journal Board of Asian Agricultural Research

Location of Publisher

Cranston

Country of Publication

USA

Abstract

The COVID-19 epidemic has exerted an impact on the global food supply chain, and also has contributed to the tendency of food hoarding and short supply; strong food demand has led to a rapid rise in international food prices, which has put enormous pressure on China's food import, and domestic food price showed a rise trend accordingly. In order to ensure sufficient and stable supply of China's food market, it is necessary to adhere to the food security strategy of "food self-sufficiency" for a long term. In the spring agricultural production, Shandong Province has taken effective measures to stabilize food

production and achieved goad results. It has not been greatly affected by the COVID-19 epidemic; however, under the continuous spread of foreign epidemics, we must adhere to the dual hard core operation of epidemic prevention and production, and explore the establishment of technical specifications for agricultural production under normal conditions for epidemic prevention and control to ensure the food security.

Publication Type

Journal article.

<34>

Accession Number

20203469397

Author

Cruz, C. J. P.; Ganly, R.; Li ZiLin; Gietel-Basten, S.

Title

Exploring the young demographic profile of COVID-19 cases in Hong Kong: evidence from migration and travel history data.

Source

PLoS ONE; 2020. 15(6)45 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

This paper investigates the profile of COVID-19 cases in Hong Kong, highlighting the unique age structure of confirmed cases compared to other territories. While the majority of cases in most territories around the world have fitted an older age profile, our analysis shows that positive cases in Hong Kong have been concentrated among younger age groups, with the largest incidence of cases reported in the 15-24 age group. This is despite the population's rapidly aging structure and extremely high levels of population density. Using detailed case data from Hong Kong's Centre for Health Department and Immigration Department, we analyze the sex and age distribution of the confirmed cases along with their recent travel histories and immigration flows for the period January to April 2020. Our analysis highlights Hong Kong's high proportion of imported cases and large overseas student population in developing COVID-19 hotspot areas such as the United Kingdom. Combined with community action and targeted and aggressive early policy measures taken to contain the virus, these factors may have contributed to the uniquely younger age structure of COVID-19 cases in the city. Consequently, this young profile of confirmed cases may have

prevented fatalities in the territory. Recent research has highlighted the importance of a demographic approach to understanding COVID-19 transmission and fatality rates. The experience in Hong Kong shows that while an older population age structure may be important for understanding COVID-19 fatality, it is not a given. From a social science perspective at least, there is 'no easy answer' to why one area should experience COVID-19 differently from another.

Publication Type

Journal article.

<35>

Accession Number

20203469383

Author

Kamara, F. M.; Mokuwa, E. Y.; Richards, P.

Title

How villagers in central Sierra Leone understand infection risks under threat of COVID-19.

Source

PLoS ONE; 2020. 15(6)8 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Background: Concern has been expressed over how well Africa is prepared to cope with the pandemic of Covid-19. Will rural populations with low levels of education know how to apply community-based infection control? We undertook fieldwork in two villages in central Sierra Leone to gain insight into how rural people faced with Covid-19 assess epidemic infection risks. Methods: Two communities were selected based on prior contrasted exposure to Ebola Virus Disease-one with substantial number of cases and the other having resisted infection through strong community sequestration measures. We assessed understanding of infection risks via an experimental game. This asked players to express a preference for one of two diseases, one resembling Ebola with lower risk of infection and the other resembling Covid-19 with lower risk of death. Players were not told the identity of the diseases. Results: In total 107 adult villagers played the game (58% women). Half (52%) preferred the disease model with lower risk of infection, 29% preferred the model with lower risk of death, while 21% saw the combined risk of infection and death as being equivalent. Differences in reactions between the two locations were small despite different experiences of Ebola. Asked to explain their choices 48% of players cited information on infection

risks modelled by the game and 31% stated that their choices reflected awareness of the need for personal action and respect for local regulations. We concluded that villagers thoughtfully assess disease risks and that some are good intuitive statisticians. Conclusions: Results suggest rural people in Sierra Leone retain the lessons of experience from the Ebola outbreak of 2014-15 and will be able to apply these lessons to a new infectious disease for which have no prior practical experience. Our expectation is that rural populations will understand Covid-19 control measures, thus reducing need for draconian enforcement.

Publication Type

Journal article.

<36>

Accession Number

20203469380

Author

Sedov, L.; Krasnochub, A.; Polishchuk, V.

Title

Modeling quarantine during epidemics and mass-testing using drones.

Source

PLoS ONE; 2020. 15(6)55 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

We extend the classical SIR epidemic spread model by introducing the "quarantined" compartment. We solve (numerically) the differential equations that govern the extended model and quantify how quarantining "flattens the curve" for the proportion of infected population over time. Furthermore, we explore the potential of using drones to deliver tests, enabling mass-testing for the infection; we give a method to estimate the drone fleet needed to deliver the tests in a metropolitan area. Application of our models to COVID-19 spread in Sweden shows how the proposed methods could substantially decrease the peak number of infected people, almost without increasing the duration of the epidemic.

Publication Type

Journal article.

<37>

Accession Number

20203469375

Author

Luo, G.; McHenry, M. L.; Letterio, J. J.

Title

Estimating the prevalence and risk of COVID-19 among international travelers and evacuees of Wuhan through modeling and case reports.

Source

PLoS ONE; 2020. 15(6)28 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19) started in Wuhan, China and has spread through other provinces and countries through infected travelers. On January 23rd, 2020, China issued a quarantine and travel ban on Wuhan because travelers from Wuhan were thought to account for the majority of exported COVID-19 cases to other countries. Additionally, countries evacuated their citizens from Wuhan after institution of the travel ban. Together, these two populations account for the vast majority of the "total cases with travel history to China" as designated by the World Health Organization (WHO). The current study aims to assess the prevalence and risk of COVID-19 among international travelers and evacuees of Wuhan. We first used case reports from Japan, Singapore, and Korea to investigate the date of flights of infected travelers. We then used airline traveler data and the number of infected exported cases to correlate the cases with the number of travelers for multiple countries. Our findings suggest that the risk of COVID-19 infection is highest among Wuhan travelers between January 19th and 22nd, 2020, with an approximate infection rate of up to 1.3% among international travelers. We also observed that evacuee infection rates varied heavily between countries and propose that the timing of the evacuation and COVID-19 testing of asymptomatic evacuees played significant roles in the infection rates among evacuees. These findings suggest COVID-19 cases and infectivity are much higher than previous estimates, including numbers from the WHO and the literature, and that some estimates of the infectivity of COVID-19 may need re-assessment.

Publication Type

Journal article.

<38>

Accession Number

20203466294

Author

Hancer, A. T.; Yilmaz, P.; Yilmaza, M.

Title

New coronavirus (2019-NCOV/COVID-19) and vitamin C.

Source

Turkiye Klinikleri tip Bilimleri Dergisi; 2020. 40(2):260-264. 24 ref.

Publisher

Ortadogu Reklam Tanitum Yayincilik Turizm

Location of Publisher

Balgat

Country of Publication

Turkey

Abstract

For the first time in December 2019, a case of pneumonia of unknown etiology was reported in Wuhan, China. Then, in addition to China and on the basis of increasing incidence and mortality rates in other international countries, the global emergency health status was declared by the World Health Organization Emergency Committee, and a new coronavirus was reported. Due to the very high contagion rate of the new Coronavirus (COVID-19), it has affected and continues to affect quite a lot of people from all age groups in the world. General clinical signs of COVID-19 are high fever, cough, nasal congestion, dyspnea, myalgia, fatigue, upper and lower respiratory tract infection and diarrhea. The most important and fatal clinical sign of the virus has been described as pneumonia. Unfortunately, no vaccine or special antiviral drug has been developed against COVID-19 yet. Therefore, the purpose of this review is to examine whether intravenous vitamin C administration is a promising method for the COVID-19 pandemic in accordance with the most recent evidence. Using vitamin C to prevent or treat diseases is often classified in complementary and alternative medicine. For this reason, it should never prevent the actual treatment. Studies have found that high doses of vitamin C reduce lung damage in COVID-19 and other flu infections. Therefore, intravenous vitamin C administration may be useful in addition to COVID-19 treatment. There is a need for high-level clinical studies on the effect of Vitamin C administration on COVID-19.

Publication Type

Journal article.

<39>

Accession Number

20203466290

Author

Insiat Islam Rabby; Farzad Hossain; Israt Jahan Akhi; Amin, S. A. M. S.; Ayman Khan

Title

Understanding of general people about COVID-19: a cross-sectional online survey and qualitative presentation.

Source

Turkiye Klinikleri tip Bilimleri Dergisi; 2020. 40(2):203-219. 14 ref.

Publisher

Ortadogu Reklam Tanitum Yayincilik Turizm

Location of Publisher

Balgat

Country of Publication

Turkey

Abstract

Objective: To identify general people's actual knowledge, awareness, and perception about COVID-19 and to facilitate healthcare organizations, responsible authority, and general people. Material and Methods: Cross sectional online survey. Necessary data have been collected from the responses of questionnaires and the questionnaires have been developed utilizing Google form. The study covered 50 participants from various countries from the author's network. We considered a systematic flow diagram from March 25 to March 31, 2020 including demographic information of participants. Results: Almost 74% of the participants clearly describe and explain all the questions and still, 26% of the participants are not clear about their idea regarding COVID-19 disease. Moreover, the perceptions provided by the participants are also close to the guidelines of WHO and National Health Commission of the People's Republic of China regarding COVID-19. Only few participants' understandings are not fully completed compared to their guidelines. The current mental status was also analyzed in this study wherein 51% participants stated that they are suffering from mental stress and depression due to this virus. Conclusion: It is necessary to identify and improve the actual knowledge, awareness, and perception to control the spread of COVID-19. More awareness activities from responsible authority are required. Moreover, this survey will facilitate healthcare organizations and responsible authority to design their awareness activities in this critical moment. Additionally, general people will get benefited and prepared themselves to read the perceptions of the individual participator.

Publication Type

Journal article.

<40>

Accession Number

20203469336

Author

Ping WeiWei; Zheng JianZhong; Niu XiaoHong; Guo ChongZheng; Zhang JinFang; Yang Hui; Shi Yan

Title

Evaluation of health-related quality of life using EQ-5D in China during the COVID-19 pandemic.

Source

PLoS ONE; 2020. 15(6)39 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Objective: Since December 2019, an increasing number of cases of the 2019 novel coronavirus disease (COVID-19) infected by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) have been identified in Wuhan, Hubei Province, China. Now, more cases have been reported in 200 other countries and regions. The pandemic disease not only affects physical health who suffered it, but also affects the mental health of the general population. This study aims to know about the impact of the COVID-19 epidemic on the health-related quality of life (HRQOL) of living using EQ-5D in general population in China. Methods: An online-based survey was developed and participants were recruited via social media. The questionnaires included demographic and socioeconomic data, health status, the condition epidemic situation and EQ-5D scale. The relationships of all factors and the scores of EQ-5D were analyzed. Logistic regression model were used to the five health dimensions. Results: The respondents obtained a mean EQ-5D index score of 0.949 and a mean VAS score of 85.52. The most frequently reported problem were pain/discomfort (19.0%) and anxiety/depression (17.6%). Logistic regression models showed that the risk of pain/discomfort and anxiety/depression among people with aging, with chronic disease, lower income, epidemic effects, worry about get COVID-19 raised significantly. Conclusion: The article provides important evidence on HRQOL during the COVID-19 pandemic. The risk of pain/discomfort and anxiety/depression in general population in China raised significantly with aging, with chronic disease, lower income, epidemic effects, worried about get COVID-19 during the COVID-19 pandemic. The results from each categorical data can be used for future healthcare measures among general population.

Publication Type

Journal article.

<41>

Accession Number

20203466248

Author

Wang ChenXing; Wu HeMing; Ding Xu; Ji Huan; Jiao PengFei; Song HaiYang; Li Sheng; Du HongMing

Title

Does infection of 2019 novel coronavirus cause acute and/or chronic sialadenitis?

Source

Medical Hypotheses; 2020. 14030 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

2019 novel coronavirus (2019-nCoV) is widespread in China and other countries. The target of 2019-nCoV and severe acute respiratory syndrome coronavirus (SARS-CoV) is angiotensin-converting enzyme 2 (ACE2) positive cells. ACE2 is present in the salivary gland duct epithelium, and thus it could be the target of 2019-nCoV and SARS-CoV. SARS-CoV-related animal model experiments show that it can infect the epithelial cells on the salivary gland duct in Chinese rhesus macaques by targeting ACE2. Clinical studies confirmed that 2019-nCoV and SARS-CoV could be detected in saliva of human patients. We hypothesize that the infection of 2019-nCoV and SARS-CoV will lead to inflammatory pathological lesions in patients' target organs, and possibly inflammatory lesions in salivary glands. 2019-nCoV may cause acute sialoadenitis in the acute phase of infection. After the acute phase, chronic sialoadenitis may be caused by fibrosis repairment. Although there was no direct evidence to prove this, the available indirect evidence indicates a high probability of our hypothesis.

Publication Type

Journal article.

<42>

Accession Number

20203466247

Author

Mani Mishra, P.; Uversky, V. N.; Nandi, C. K.

Title

Serum albumin-mediated strategy for the effective targeting of SARS-CoV-2.

Source

Medical Hypotheses; 2020. 14031 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Novel coronavirus (NCoV-19), also known as SARS CoV-2, is a pathogen causing an emerging infection that rapidly increases in incidence and geographic range, is associated with the ever-increasing morbidity and mortality rates, and shows sever economic impact worldwide. The WHO declares the NCoV-19 infection disease (COVID-19) a Public Health Emergency of International Concern on 30 January 2020 and subsequently, on March 11, 2020, declared it a Global Pandemic. Although some people infected with SARS CoV-2 have no symptoms, the spectrum of symptomatic infection ranges from mild to critical, with most COVID-19 infections being not severe. The common mild symptoms include body aches, dry cough, fatigue, low-grade fever, nasal congestion, and sore throat. More severe COVID-19 symptoms are typical of pneumonia, and upon progression, the patient's condition can worsen with severe respiratory and cardiac problems. Currently, there is no drug or vaccine for curing patients. It has been observed that people with challenged immunity are highly prone to SARS CoV-2 infection and least likely to recover. Also, older adults and people of any age with serious underlying medical conditions might be at higher risk for severe forms of COVID-19. We are suggesting here a strategy for the COVID-19 treatment that could be effective in curing the patients in the current scenario when no efficient medicine or Vaccine is currently available, and Clinicians solely depend upon the performing trials with drugs with known antiviral activities. Our proposed strategy is based on the compilation of published scientific research and concepts. The different published research indicates the success of a similar strategy in different physiological conditions, and such a strategy is widely studied at the cellular level and in animal models.

Publication Type

Journal article.

<43>

Accession Number

20203466242

Author

Geier, M. R.; Geier, D. A.

Title

Respiratory conditions in coronavirus disease 2019 (COVID-19): important considerations regarding novel treatment strategies to reduce mortality.

Source

Medical Hypotheses; 2020. 14038 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

A novel virus named 2019 novel coronavirus (2019-nCoV/SARS-CoV-2) causes symptoms that are classified as coronavirus disease (COVID-19). Respiratory conditions are extensively described among more serious cases of COVID-19, and the onset of acute respiratory distress syndrome (ARDS) is one of the hallmark features of critical COVID-19 cases. ARDS can be directly life-threatening because it is associated with low blood oxygenation levels and can result in organ failure. There are no generally recognized effective treatments for COVID-19, but treatments are urgently needed. Anti-viral medications and vaccines are in the early developmental stages and may take many months or even years to fully develop. At present, management of COVID-19 with respiratory and ventilator support are standard therapeutic treatments, but unfortunately such treatments are associated with high mortality rates. Therefore, it is imperative to consider novel new therapeutic interventions to treat/ameliorate respiratory conditions associated with COVID-19. Alternate treatment strategies utilizing clinically available treatments such as hyperbaric oxygen therapy (HBOT), packed red blood cell (pRBC) transfusions, or erthropoiesis-stimulating agent (ESA) therapy were hypothesized to increase oxygenation of tissues by alternative means than standard respiratory and ventilator treatments. It was also revealed that alternative treatments currently being considered for COVID-19 such as chloroquine and hydroxychloroquine by increasing hemoglobin production and increasing hemoglobin availability for oxygen binding and acetazolamine (for the treatment of altitude sickness) by causing hyperventilation with associated increasing levels of oxygen and decreasing levels of carbon dioxide in the blood may significantly ameliorate COVID-19 respiratory symptoms. In conclusion, is recommend, given HBOT, pRBC, and ESA therapies are currently available and routinely utilized in the treatment of other conditions, that such therapies be tried among COVID-19 patients with serious respiratory conditions and that future controlled-clinical trials explore the potential usefulness of such treatments among COVID-19 patients with respiratory conditions.

Publication Type

Journal article.

<44>

Accession Number

20203461203

Author

Wu YuJen; Tsai ChiungTzu [Tsai, L. C. T.]

Title

A reflection on leisure industries during the COVID-19 pandemic in Taiwan.

Source

International Leisure Review; 2020. 9(1):66-72.

Publisher

Taiwan Leisure Association

Location of Publisher

New Taipei City

Country of Publication

Taiwan

Abstract

Taiwan, with a population of around 24 million people, has recorded 443 cases of Covid-19 and seven deaths from the coronavirus. By June 3rd, 2020, no new cases had been reported for several weeks. Taiwan has managed the situation without implementing severe restrictions, like lockdowns, or school and nursery closures. People feel more comfortable going out now that Taiwan has had no new domestic Covid-19 cases for 50 consecutive days. Therefore, Taiwan was scheduled to ease Covid-19 restrictions on June 7th, 2020 (Taipei Times, 2020). The country is, however, expected to face a slew of economic challenges in the leisure industries, including airlines, hotels and restaurants, theme parks, tour operators, travel agencies, etc. Major hotels in Taiwan are offering cutthroat discounts for their lodging and dining facilities as the government plans to launch stimulus coupons in July, 2020 (Taipei Times, 2020). To maximize the vouchers' effectiveness, the government is going to expand their use and allow them to be used to pay for almost everything from snacks at night markets, coffee at convenience stores, to travel and entertainment.

Publication Type

Journal article.

<45>

Accession Number

20203469898

Author

Suneela Garg; Navya Gangadharan; Nidhi Bhatnagar; Singh, M. M.; Raina, S. K.; Sagar Galwankar

Title

Telemedicine: embracing virtual care during COVID-19 pandemic.

Source

Journal of Family Medicine and Primary Care; 2020. 9(9):4516-4520.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Telemedicine and related e-health facilities facilitate care from a distance through electronic information systems. COVID-19 pandemic is establishing telemedicine in the health care delivery system of countries. Telehealth is contributing significantly in health care delivery during the COVID-19 crisis. For mild-to-moderate symptoms of COVID-19 or any illness, telehealth services might represent a better, efficient way to receive initial care and perform triaging. Telemedicine also has a significant role in screening for COVID-19 symptoms and delivering routine needs and follow-up care. The large-scale adoption of telemedicine in public health care delivery is still not visible in low- and middle-income countries like India. Adoption by patients and healthcare professionals is limited and their concerns need to be addressed to ensure its utilization in future of the care continuum. In the current paper, we aim to review recent measures of Telemedicine adopted during the course of pandemic and its impact on public health in lower-middle income countries like India.

Publication Type

Journal article.

<46>

Accession Number

20203469889

Author

Jaffe, E.; Lyerly, A. D.; Goldfarb, I. T.

Title

Pregnant women's perceptions of risks and benefits when considering participation in vaccine trials.

Source

Vaccine; 2020. 38(44):6922-6929. 43 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Introduction: Despite historical exclusion, there has been recent recognition of the need to address the health of pregnant women in research on vaccines against emerging pathogens. However, pregnant women's views and decision-making processes about vaccine research participation during infectious disease outbreaks remain underexplored. This study aims to examine women's decision-making processes around vaccine research participation during infectious disease outbreaks. Methods: We conducted qualitative semi-structured in-depth interviews with pregnant and recently pregnant women (n = 13), eliciting their views on four hypothetical Zika Virus vaccine research scenarios and probing their decision-making processes around participation. After recorded interviews were transcribed, thematic analysis was conducted based on a priori and emergent themes. Results: Most women interviewed were accepting of vaccine research scenarios. Three broad themes-evidence, risk, and trust-characterized women's decision-making processes. Women varied in how different types and levels of evidence impacted their considerations, which risks were most salient to their decision-making processes, and from whom they trusted recommendations about vaccine research participation. Exemplary quotes from each theme are presented, and lessons for vaccine development during the current COVID-19 pandemic and future outbreaks are discussed. Conclusion: Some pregnant women are accepting of participation in vaccine research during infectious disease outbreaks. Incorporating their priorities into trial design may facilitate their participation and generation of evidence for this important population.

Publication Type

Journal article.

<47>

Accession Number

20203469824

Author

Amir Siraj; Alemayehu Worku; Kiros Berhane; Maru Aregawi; Munir Eshetu; Alemnesh Mirkuzie; Yemane Berhane; Dawd Siraj

Title

Early estimates of COVID-19 infections in small, medium and large population clusters.

Source

BMJ Global Health; 2020. 5(9)41 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Introduction: Since its emergence in late December 2019, COVID-19 has rapidly developed into a pandemic in mid of March with many countries suffering heavy human loss and declaring emergency conditions to contain its spread. The impact of the disease, while it has been relatively low in the sub-Saharan Africa (SSA) as of May 2020, is feared to be potentially devastating given the less developed and fragmented healthcare system in the continent. In addition, most emergency measures practised may not be effective due to their limited affordability as well as the communal way people in SSA live in relative isolation in clusters of large as well as smaller population centres. Methods: To address the acute need for estimates of the potential impacts of the disease once it sweeps through the African region, we developed a process-based model with key parameters obtained from recent studies, taking local context into consideration. We further used the model to estimate the number of infections within a year of sustained local transmissions under scenarios that cover different population sizes, urban status, effectiveness and coverage of social distancing, contact tracing and usage of cloth face mask. Results: We showed that when implemented early, 50% coverage of contact tracing and face mask, with 33% effective social distancing policies can bringing the epidemic to a manageable level for all population sizes and settings we assessed. Relaxing of social distancing in urban settings from 33% to 25% could be matched by introduction and maintenance of face mask use at 43%. Conclusions: In SSA countries with limited healthcare workforce, hospital resources and intensive care units, a robust system of social distancing, contact tracing and face mask use could yield in outcomes that prevent several millions of infections and thousands of deaths across the continent.

Publication Type

Journal article.

<48>

Accession Number

20203469802

Author

Ghisolfi, S.; Almas, I.; Sandefur, J. C.; Carnap, T. von; Heitner, J.; Bold, T.

Title

Predicted COVID-19 fatality rates based on age, sex, comorbidities and health system capacity.

Source

BMJ Global Health; 2020. 5(9)25 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Early reports suggest the fatality rate from COVID-19 varies greatly across countries, but non-random testing and incomplete vital registration systems render it impossible to directly estimate the infection fatality rate (IFR) in many low- and middle-income countries. To fill this gap, we estimate the adjustments required to extrapolate estimates of the IFR from high-income to lower-income regions. Accounting for differences in the distribution of age, sex and relevant comorbidities yields substantial differences in the predicted IFR across 21 world regions, ranging from 0.11% in Western Sub-Saharan Africa to 1.07% for high-income Asia Pacific. However, these predictions must be treated as lower bounds in low- and middle-income countries as they are grounded in fatality rates from countries with advanced health systems. To adjust for health system capacity, we incorporate regional differences in the relative odds of infection fatality from childhood respiratory syncytial virus. This adjustment greatly diminishes but does not entirely erase the demography-based advantage predicted in the lowest income settings, with regional estimates of the predicted COVID-19 IFR ranging from 0.37% in Western Sub-Saharan Africa to 1.45% for Eastern Europe.

Publication Type

Journal article.

<49>

Accession Number

20203476197

Author

Zhang Qiang; Zhang HuaJun; Gao JinDong; Huang Kun; Yang Yong; Hui XianFeng; He XingLin; Li ChengFei; Gong WenXiao; Zhang YuFei; Zhao Ya; Peng Cheng; Gao XiaoXiao; Chen HuanChun; Zou Zhong; Shi ZhengLi; Jin MeiLin

Title

A serological survey of SARS-CoV-2 in cat in Wuhan.

Source

Emerging Microbes and Infections; 2020. 9(2013-2019):2013-2019. 24 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

COVID-19 is a new respiratory illness caused by SARS-CoV-2, and has constituted a global public health emergency. Cat is susceptible to SARS-CoV-2. However, the prevalence of SARS-CoV-2 in cats remains largely unknown. Here, we investigated the infection of SARS-CoV-2 in cats during COVID-19 outbreak in Wuhan by serological detection methods. A cohort of serum samples were collected from cats in Wuhan, including 102 sampled after COVID-19 outbreak, and 39 prior to the outbreak. Fifteen sera collected after the outbreak were positive for the receptor binding domain (RBD) of SARS-CoV-2 by indirect enzyme linked immunosorbent assay (ELISA). Among them, 11 had SARS-CoV-2 neutralizing antibodies with a titer ranging from 1/20 to 1/1080. No serological cross-reactivity was detected between SARS-CoV-2 and type I or II feline infectious peritonitis virus (FIPV). In addition, we continuously monitored serum antibody dynamics of two positive cats every 10 days over 130 days. Their serum antibodies reached the peak at 10 days after first sampling, and declined to the limit of detection within 110 days. Our data demonstrated that SARS-CoV-2 has infected cats in Wuhan during the outbreak and described serum antibody dynamics in cats, providing an important reference for clinical treatment and prevention of COVID-19.

Publication Type

Journal article.

<50>

Accession Number

20203476189

Author

Khalid Munir; Shoaib Ashraf; Munir, I.; Khalid, H.; Muneer, M. A.; Mukhtar, N.; Amin, S.; Sohaib Ashraf; Imran, M. A.; Umer Chaudhry; Zaheer, M. U.; Maria Arshad; Munir, R.; Ahmad, A.; Zhao, X.

Title

Zoonotic and reverse zoonotic events of SARS-CoV-2 and their impact on global health.

Source

Emerging Microbes and Infections; 2020. 9(2222-2235):2222-2235. 80 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Coronaviruses (CoVs) are enveloped, positive sense, single-stranded RNA viruses. The viruses have adapted to infect a large number of animal species, ranging from bats to camels. At present, seven CoVs infect humans, of which Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) is responsible for causing the Coronavirus Disease 2019 (COVID-19) in humans. Since its emergence in late 2019, SARS-CoV-2 has spread rapidly across the globe. Healthcare systems around the globe have been stretched beyond their limits posing new challenges to emergency healthcare services and critical care. The outbreak continues to jeopardize human health, social life and economy. All known human CoVs have zoonotic origins. Recent detection of SARS-CoV-2 in pet, zoo and certain farm animals has highlighted its potential for reverse zoonosis. This scenario is particularly alarming, since these animals could be potential reservoirs for secondary zoonotic infections. In this article, we highlight interspecies SARS-CoV-2 infections and focus on the reverse zoonotic potential of this virus. We also emphasize the importance of potential secondary zoonotic events and the One-Health and One-World approach to tackle such future pandemics.

Publication Type

Journal article.

<51>

Accession Number

20203476182

Author

Xiong HuaLong; Wu YangTao; Cao JiaLi; Yang Ren; Liu YingXia; Ma Jian; Qiao XiaoYang; Yao XiangYang; Zhang BaoHui; Zhang YaLi; Hou WangHeng; Shi Yang; Xu JingJing; Zhang Liang; Wang ShaoJuan; Fu BaoRong; Yang Ting; Ge ShengXiang; Zhang Jun; Yuan Quan; Huang BaoYing; Li ZhiYong; Zhang TianYing; Xia NingShao

Title

Robust neutralization assay based on SARS-CoV-2 S-protein-bearing vesicular stomatitis virus (VSV) pseudovirus and ACE2-overexpressing BHK2121 cells.

Source

Emerging Microbes and Infections; 2020. 9(2105-2113):2105-2113. 16 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The global pandemic of coronavirus disease 2019 (COVID-19) is a disaster for human society. A convenient and reliable neutralization assay is very important for the development of vaccines and novel drugs. In this

study, a G protein-deficient vesicular stomatitis virus (VSVdG) bearing a truncated spike protein (S with C-terminal 18 amino acid truncation) was compared to that bearing the full-length spike protein of SARS-CoV-2 and showed much higher efficiency. A neutralization assay was established based on VSV-SARS-CoV-2-Sdel18 pseudovirus and hACE2-overexpressing BHK21 cells (BHK21-hACE2 cells). The experimental results can be obtained by automatically counting the number of EGFP-positive cells at 12 h after infection, making the assay convenient and high-throughput. The serum neutralizing titer measured by the VSV-SARS-CoV-2-Sdel18 pseudovirus assay has a good correlation with that measured by the wild type SARS-CoV-2 assay. Seven neutralizing monoclonal antibodies targeting the receptor binding domain (RBD) of the SARS-CoV-2 S protein were obtained. This efficient and reliable pseudovirus assay model could facilitate the development of new drugs and vaccines.

Publication Type

Journal article.

<52>

Accession Number

20203476166

Author

Li TingTing; Zheng QingBing; Yu Hai; Wu DingHui; Xue WenHui; Xiong HuaLong; Huang XiaoFen; Nie MeiFeng; Yue Mingxi; Rong Rui; Zhang SiBo; Zhang YuYun; Wu YangTao; Wang ShaoJuan; Zha ZhengHui; Chen TingTing; Deng TingTing; Wang YingBin; Zhang TianYing; Chen YiXin; Yuan Quan; Zhao QinJian; Zhang Jun; Gu Ying; Li ShaoWei; et al.

Title

SARS-CoV-2 spike produced in insect cells elicits high neutralization titres in non-human primates.

Source

Emerging Microbes and Infections; 2020. 9(2076-2090):2076-2090. 55 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The current coronavirus disease 2019 (COVID-19) pandemic was the result of the rapid transmission of a highly pathogenic coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), for which there is no efficacious vaccine or therapeutic. Toward the development of a vaccine, here we expressed and evaluated as potential candidates four versions of the spike (S) protein using an insect cell expression system: receptor binding domain (RBD), S1 subunit, the wild-type S ectodomain (S-WT), and the prefusion

trimer-stabilized form (S-2P). We showed that RBD appears as a monomer in solution, whereas S1, S-WT, and S-2P associate as homotrimers with substantial glycosylation. Cryo-electron microscopy analyses suggested that S-2P assumes an identical trimer conformation as the similarly engineered S protein expressed in 293 mammalian cells but with reduced glycosylation. Overall, the four proteins confer excellent antigenicity with convalescent COVID-19 patient sera in enzyme-linked immunosorbent assay (ELISA), yet show distinct reactivities in immunoblotting. RBD, S-WT and S-2P, but not S1, induce high neutralization titres (> 3-log) in mice after a three-round immunization regimen. The high immunogenicity of S-2P could be maintained at the lowest dose (1 mug) with the inclusion of an aluminium adjuvant. Higher doses (20 mug) of S-2P can elicit high neutralization titres in non-human primates that exceed 40-times the mean titres measured in convalescent COVID-19 subjects. Our results suggest that the prefusion trimer-stabilized SARS-CoV-2 S-protein from insect cells may offer a potential candidate strategy for the development of a recombinant COVID-19 vaccine.

Publication Type

Journal article.

<53>

Accession Number

20203476156

Author

Zhang HaoCheng; Zhang Yi; Wu Jing; Li Yang; Zhou Xian; Li Xin; Chen HaiLi; Guo MingQuan; Chen Shu; Sun Feng; Mao RiCheng; Qiu Chao; Zhu ZhaoQin; Ai JingWen; Zhang WenHong

Title

Risks and features of secondary infections in severe and critical ill COVID-19 patients.

Source

Emerging Microbes and Infections; 2020. 9(1958-1964):1958-1964. 19 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Objectives: Severe or critical COVID-19 is associated with intensive care unit admission, increased secondary infection rate, and would lead to significant worsened prognosis. Risks and characteristics relating to secondary infections in severe COVID-19 have not been described. Methods: Severe and critical COVID-19 patients from Shanghai were included. We collected lower respiratory, urine, catheters, and blood samples according to clinical necessity and culture and mNGS were performed. Clinical and

laboratory data were archived. Results: We found 57.89% (22/38) patients developed secondary infections. The patient receiving invasive mechanical ventilation or in critical state has a higher chance of secondary infections (P < 0.0001). The most common infections were respiratory, blood-stream and urinary infections, and in respiratory infections, the most detected pathogens were gram-negative bacteria (26, 50.00%), following by gram-positive bacteria (14, 26.92%), virus (6, 11.54%), fungi (4, 7.69%), and others (2, 3.85%). Respiratory Infection rate post high flow, tracheal intubation, and tracheotomy were 12.90% (4/31), 30.43% (7/23), and 92.31% (12/13) respectively. Secondary infections would lead to lower discharge rate and higher mortality rate. Conclusion: Our study originally illustrated secondary infection proportion in severe and critical COVID-19 patients. Culture accompanied with metagenomics sequencing increased pathogen diagnostic rate. Secondary infections risks increased after receiving invasive respiratory ventilations and intravascular devices, and would lead to a lower discharge rate and a higher mortality rate.

Publication Type

Journal article.

<54>

Accession Number

20203476138

Author

Rijal, S.; Adhikari, S.; Shrestha, A.

Title

Guiding documents for disaster risk reduction and management in health care system of Nepal.

Source

JNMA, Journal of the Nepal Medical Association; 2020. 58(230):831-833. 13 ref.

Publisher

Nepal Medical Association

Location of Publisher

Kathmandu

Country of Publication

Nepal

Abstract

The incidence of disaster events has increased over the years. Nepal is vulnerable to various kinds of natural disasters especially earthquakes and floods and infectious disease outbreaks like Dengue and Covid-19 pneumonia. So, it is important to review and know our existing disaster risk reduction and management plans, rules, and regulations of our country to improve disaster risk management for resilience and enhancing disaster preparedness for effective response and to "Build Back Better: in recovery rehabilitation and reconstruction". Nepal has sufficient guiding documents to guide disaster management.

Publication Type

Journal article.

<55>

Accession Number

20203476135

Author

Bhandari, A.; Bhatta, N.

Title

Psychological effects of COVID-19 and its measures in Nepalese medical students.

Source

JNMA, Journal of the Nepal Medical Association; 2020. 58(230):820-822. 10 ref.

Publisher

Nepal Medical Association

Location of Publisher

Kathmandu

Country of Publication

Nepal

Abstract

Having to listen to the devastating daily news brought by COVID-19 since the first case was reported on 23rd January 2020 in Nepal, it has pushed the country into various crises. The issue of psychological health has been overlooked during this crisis. COVID-19 has sabotaged the psychological health of general people and more importantly medical students. It has disrupted the academics and clinical rotations of medical education. The prospect of being the future health care personnel without adequate training has destroyed the confidence and aspiration andin addition, joining the frontline against this type of deadly virus with little preparedness has instilled fear and uncertainty among them. So, concerning the context, this article focuses on the psychological effects faced by medical students and some ways to overcome this issue.

Publication Type

Journal article.

<56>

Accession Number

20203476124

Author

Chapagain, K.; Rauniyar, G. P.; Pokharel, R.; Bhattarai, A.

Title

Information about COVID-19 among selected population of eastern Nepal: a descriptive cross-sectional study.

Source

JNMA, Journal of the Nepal Medical Association; 2020. 58(230):770-774. 13 ref.

Publisher

Nepal Medical Association

Location of Publisher

Kathmandu

Country of Publication

Nepal

Abstract

Introduction: Rapid spread of COVID-19 has become a major concern worldwide. Strong adherence to preventive measures can help to break the chain of the spread of coronavirus. We conducted this study to find out the extent of information general people of Eastern Nepal have regarding COVID-19 and their attitude and practice towards preventing its spread. Methods: A descriptive cross-sectional online study was done among the people of Eastern Nepal on knowledge, attitude, and practice related to COVID-19 from May 1st to May 15th after obtaining ethical clearance from the ethical review board (ERB) (ref no. 319/2020 P). A 20 item survey instrument was adapted using WHO course materials on an emerging COVID-19. A convenience sample method was used. Data were collected and entered in Statistical Packages for Social Services version 11.5. Point estimate at 95% Confidence Interval was calculated along with frequency and proportion for binary data. Results: Among 1069 respondents, the correct answer on the COVID-19 related knowledge questionnaire was 958 (89.61%), 487 (93.11%) were health professionals, and 471 (86.26%) non-health professionals. Preventive measures were strictly followed by 1044 (97.66%) participants. A wrong perception about the disease was present in 390 (36.48%). Health ministry website 356 (33.30%) followed by news media 309 (29%) was the major source of information among the people. Conclusions: Knowledge regarding COVID-19 among people the selected population of eastern is satisfactory which was similar to other studies done. However, people still have misperceptions regarding the disease and do not strictly follow the preventive measures.

Publication Type

Journal article.

<57>

Accession Number

20203476123

Author

Humagain, M.; Humagain, R.; Rokaya, D.

Title

Dental practice during COVID-19 in Nepal: a descriptive cross-sectional study.

Source

JNMA, Journal of the Nepal Medical Association; 2020. 58(230):764-769. 18 ref.

Publisher

Nepal Medical Association

Location of Publisher

Kathmandu

Country of Publication

Nepal

Abstract

Introduction: Currently, coronavirus disease (COVID-19) has become pandemic and spread globally. In Nepal, the number of COVID-19 is increasing day-by-day. This research was done to find out the impact of COVID-19 on dentists, patients, and dental practice in Nepal. Methods: This study is a cross-sectional study conducted using an online survey from May 10 to17, 2020. A questionnaire was designed and uploaded in Freeonlinesurveys.com. Following ethical approval, the questionnaire was distributed among 500 dentists, and 406 dentists participated in the study. The survey link was dispersed to the Nepali dentists through social media and e-mail, and the results of the responses were received online. The questionnaire consisted of a total of 34 closed-ended questions containing three parts; demographic details, knowledge of dentists on COVID-19, and the impact of COVID-19 on dentists, patients, and dental treatments. Results: It showed that majority of the participants were females 243 (60%) of the age group 25-29 years with the clinic as the workplace. Patients receive dental treatments only from 40 (10%) of the dentist. A high number of dentists: 284 (70%) were severely affected by the financial burden and were not receiving a salary during this lockdown. About 349(86%) of the dentist think they should do regular dental treatments, but only 101 (25%) think the dentist should do only dental emergency treatments for COVID-19 infected cases. Conclusions: Dentists, patients, and dental practice are severely affected by the COVID-19. The majority of the dentists have faced financial burdens. The dental treatments should be done with high standards of care and infection control following proper recommendations.

Publication Type

Journal article.

<58>

Accession Number

20203476121

Author

Ghimire, C.; Sajan Acharya; Shrestha, C.; Prabhat, K. C.; Swarndeep Singh; Pawan Sharma

Title

Interpersonal violence during the COVID-19 lockdown period in Nepal: a descriptive cross-sectional study.

Source

JNMA, Journal of the Nepal Medical Association; 2020. 58(230):751-757. 21 ref.

Publisher

Nepal Medical Association

Location of Publisher

Kathmandu

Country of Publication

Nepal

Abstract

Introduction: The government issued a country-wide lockdown in Nepal as a measure to curb the spread of COVID-19 pandemic. This has resulted in various difficult experiences which includes financial loss, separation from loved ones, grief, uncertainty over disease status and loss of freedom. During these stressful situations, interpersonal violence is likely to be aggravated. To avoid the occurrence of adverse events such as impulsive acts, homicide, or suicide, it is important to identify high-risk individuals. Methods: This is a descriptive cross-sectional, questionnaire-based, online survey by convenience sampling. The prevalence of different types of interpersonal violence with socio-demographic factors, substance use, and overall mental wellbeing was assessed by using descriptive statistical tests. Results: Out of total 556 participants included in the analysis, 50.9% (283) were male and 48.7% (271) were female. There were 100 (18.0%) participants who reported being a victim of interpersonal violence and 101 (18.2%) participants who reported being a perpetrator during the lockdown. The victims of violence were more likely to be living with their spouse alone. The victims and perpetrators were also more likely to have increased alcohol and tobacco use. More number of victims and perpetrators had lower mental wellbeing scores on the WHO wellbeing index. Conclusions: There was prevalence of interpersonal violence during the COVID-19 lockdown. In addition to the fear regarding pandemic, victims have to face domestic violence placing them at a double injustice. Identification of vulnerable groups and proper management of survivors must be prioritized given the unanimous consensus on the rise of interpersonal violence during periods of heightened stress.

Publication Type

Journal article.

<59>

Accession Number

20203476120

Author

Shrestha, C.; Ghimire, C.; Sajan Acharya; Prabhat, K. C.; Swarndeep Singh; Pawan Sharma

Title

Mental wellbeing during the lockdown period following the COVID-19 pandemic in Nepal: a descriptive cross-sectional study.

Source

JNMA, Journal of the Nepal Medical Association; 2020. 58(230):744-750. 33 ref.

Publisher

Nepal Medical Association

Location of Publisher

Kathmandu

Country of Publication

Nepal

Abstract

Introduction: COVID-19 pandemic has profoundly affected all aspects of society, including mental and physical health. Often missed is the fact that the pandemic is occurring against the backdrop of a very high prevalence of mental health issues. Protecting the mental health of people and healthcare workers is important for long-term positive health outcomes and proper control of the outbreak. Methods: This is a descriptive cross-sectional, questionnaire-based, online survey by convenience sampling. Ethical approval was obtained from the institutional review committee of Nepal Health Research Council (reference no. 2467). Open access, pre-validated questionnaires were used. Participants with significantly poor Mental wellbeing were identified using the WHO well-being index threshold score. Descriptive statistical analysis was carried out. Results: Five hundred and fifty-six participants were included in the analysis. Forty percent of the participants reported a WHO well-being index score of below 13, indicative of poor mental wellbeing and a need for further assessment for depression. Poor Mental wellbeing was more prevalent among participants less than 30 years of age, female gender, never married, diagnosed mental disorder, living alone and those using informal sources for COVID-19 related information. More participants with lower sleep quality score and higher perceived stress score reported poor Mental wellbeing. Conclusions: Combating this challenge requires integration across disciplines. One potential part of the solution is psychological intervention teams. An emerging positive connotation to the pandemic is that it needs to be harnessed as a tool for improving health facilities, community participation, and fighting misinformation.

Publication Type

Journal article.

<60>

Accession Number

20203476692

Author

Pizzini, A.; Aichner, M.; Sahanic, S.; Bohm, A.; Egger, A.; Hoermann, G.; Kurz, K.; Widmann, G.; Bellmann-Weiler, R.; Weiss, G.; Tancevski, I.; Sonnweber, T.; Loffler-Ragg, J.

Title

Impact of vitamin D deficiency on COVID-19 - a prospective analysis from the CovILD registry.

Source

Nutrients; 2020. 12(9)35 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The novel Coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus type 2 (SARS-CoV-2) is a global health concern. Vitamin D (VITD) deficiency has been suggested to alter SARS-CoV-2 susceptibility and the course of disease. Thus, we aimed to investigate associations of VITD status to disease presentation within the CovILD registry. This prospective, multicenter, observational study on long-term sequelae includes patients with COVID-19 after hospitalization or outpatients with persistent symptoms. Eight weeks after PCR confirmed diagnosis, a detailed questionnaire, a clinical examination, and laboratory testing, including VITD status, were evaluated. Furthermore, available laboratory specimens close to hospital admission were used to retrospectively analyze 25-hydroxyvitamin D levels at disease onset. A total of 109 patients were included in the analysis (60% males, 40% females), aged 58 +/- 14 years. Eight weeks after the onset of COVID-19, a high proportion of patients presented with impaired VITD metabolism and elevated parathyroid hormone (PTH) levels. PTH concentrations were increased in patients who needed intensive care unit (ICU) treatment, while VITD levels were not significantly different between disease severity groups. Low VITD levels at disease onset or at eight-week follow-up were not related to persistent symptom burden, lung function impairment, ongoing inflammation, or more severe CT abnormalities. VITD deficiency is frequent among COVID-19 patients but not associated with disease outcomes. However, individuals with severe disease display a disturbed parathyroid-vitamin-D axis within their recovery phase. The proposed significance of VITD supplementation in the clinical management of COVID-19 remains elusive.

Publication Type

Journal article.

<61>

Accession Number

20203476674

Author

Radujkovic, A.; Hippchen, T.; Tiwari-Heckler, S.; Dreher, S.; Boxberger, M.; Merle, U.

Title

Vitamin D deficiency and outcome of COVID-19 patients.

Source

Nutrients; 2020. 12(9)24 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Infection with the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) poses an enormous challenge to health care systems throughout the world. Without causal treatment, identification of modifiable prognostic factors may help to improve outcomes. To explore possible associations of vitamin D (VitD) status with disease severity and survival, we studied 185 patients diagnosed with coronavirus disease 2019 (COVID-19) and treated at our center. VitD status at first presentation was assessed retrospectively using accredited laboratory methods. VitD deficiency was defined as serum total 25-hydroxyvitamin D level < 12 ng/mL (< 30 nM). Primary endpoint was severe course of disease (i.e., need for invasive mechanical ventilation and/or death, IMV/D). Within a median observation period of 66 days (range 2-92), 23 patients required IMV. A total of 28 patients had IMV/D, including 16 deaths. Ninety-three (50%) patients required hospitalization (inpatient subgroup). A total of 41 (22%) patients were VitD deficient. When adjusted for age, gender, and comorbidities, VitD deficiency was associated with higher risk of IMV/D and death (HR 6.12, 95% CI 2.79-13.42, p < 0.001 and HR 14.73, 95% CI 4.16-52.19, p < 0.001, respectively). Similar correlations were observed in the inpatient subgroup. Our study demonstrates an association between VitD deficiency and severity/mortality of COVID-19, highlighting the need for interventional studies on VitD supplementation in SARS-CoV-2 infected individuals.

Publication Type

Journal article.

<62>

Accession Number

20203476655

Author

Galmes, S.; Serra, F.; Palou, A.

Title

Current state of evidence: influence of nutritional and nutrigenetic factors on immunity in the COVID-19 pandemic framework.

Source

Nutrients; 2020. 12(9)165 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The pandemic caused by the new coronavirus has caused shock waves in many countries, producing a global health crisis worldwide. Lack of knowledge of the biological mechanisms of viruses, plus the absence of effective treatments against the disease (COVID-19) and/or vaccines have pulled factors that can compromise the proper functioning of the immune system to fight against infectious diseases into the spotlight. The optimal status of specific nutrients is considered crucial to keeping immune components within their normal activity, helping to avoid and overcome infections. Specifically, the European Food Safety Authority (EFSA) evaluated and deems six vitamins (D, A, C, Folate, B6, B12) and four minerals (zinc, iron, copper and selenium) to be essential for the normal functioning of the immune system, due to the scientific evidence collected so far. In this report, an update on the evidence of the contribution of nutritional factors as immune-enhancing aspects, factors that could reduce their bioavailability, and the role of the optimal status of these nutrients within the COVID-19 pandemic context was carried out. First, a non-systematic review of the current state of knowledge regarding the impact of an optimal nutritional status of these nutrients on the proper functioning of the immune system as well as their potential role in COVID-19 prevention/treatment was carried out by searching for available scientific evidence in PubMed and LitCovid databases. Second, a compilation from published sources and an analysis of nutritional data from 10 European countries was performed, and the relationship between country nutritional status and epidemiological COVID-19 data (available in the Worldometers database) was evaluated following an ecological study design. Furthermore, the potential effect of genetics was considered through the selection of genetic variants previously identified in Genome-Wide Association studies (GWAs) as influencing the nutritional status of these 10 considered nutrients. Therefore, access to genetic information in accessible databases (1000genomes, by Ensembl) of individuals from European populations enabled an approximation that countries might present a greater risk of suboptimal status of the nutrients studied. Results from the review approach show the importance of maintaining a correct nutritional status of these 10 nutrients analyzed for the health of the immune system, highlighting the importance of Vitamin D and iron in the context of COVID-19. Besides, the ecological study demonstrates that intake levels of relevant micronutrients - especially Vitamins D, C, B12, and iron - are inversely associated with higher COVID-19 incidence and/or mortality, particularly in populations genetically predisposed to show lower micronutrient status. In conclusion, nutrigenetic data provided by joint assessment of 10 essential nutrients for the functioning of the immune system and of the genetic factors that can limit their bioavailability can be a fundamental tool to help strengthen the immune system of individuals and prepare populations to fight against infectious diseases such as COVID-19.

Publication Type

Journal article.

<63>

Accession Number

20203476631

Author

Shen Wan; Long, L. M.; Shih ChiaHao; Ludy, M. J.

Title

A humanities-based explanation for the effects of emotional eating and perceived stress on food choice motives during the COVID-19 pandemic.

Source

Nutrients; 2020. 12(9)137 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Perceived stress affects emotional eating and food choices. However, the extent to which stress associates with food choice motives is not completely understood. This study assessed whether emotional eating mediates the associations between perceived stress levels and food choice motives (i.e., health, mood, convenience, natural content, price, sensory appeal, familiarities, weight control, and ethical concerns) during the Coronavirus Disease 2019 pandemic. A total of 800 respondents were surveyed in the United States in June 2020. Their perceived stress, emotional eating, and food choice motives were assessed by the Perceived Stress Scale, Dutch Eating Behavior Questionnaire, and Food Choice Questionnaire, respectively. Moderate to high levels of perceived stress were experienced by the majority (73.6%) of respondents. Perceived stress was significantly correlated with emotional eating (r = 0.26) as well as five out of nine food choice motives: mood (r = 0.32), convenience (r = 0.28), natural content (r = -0.14), price (r = 0.27), and familiarity (r = 0.15). Emotional eating was significantly correlated with four out of nine food choice motives: mood (r = 0.27), convenience (r = 0.23), price (r = 0.16), and familiarity (r = 0.16). The mediation analyses showed that emotional eating mediates the associations between perceived stress and five food choices motives: mood, convenience, sensory appeal, price, and familiarity. Findings were interpreted using theories and concepts from the humanities, specifically, folklore studies, ritual studies, and symbolic anthropology.

Publication Type

Journal article.

<64>

Accession Number

20203473516

Author

Ghosh, S. M.; Qadeer, I.

Title

Evaluating health systems response to COVID-19: public good perspective of public health.

Source

Economic and Political Weekly; 2020. 55(36)

Publisher

Sameeksha Trust

Location of Publisher

Mumbai

Country of Publication

India

Abstract

India's response to the COVID-19 pandemic is linked to its abandonment of the welfare state, marginalisation of public good principle and collapse and fragmentation of the public health system. As COVID-19 cases surge, many states could barely treat patients needing medical support due to bed shortages and poor infrastructural facilities. The overwhelmed system disrupted routine and emergency non-COVID services as well. The interstate differences in coping with COVID-19 are rooted in the public sector health infrastructure, investment in rural services and disease control programmes. A comprehensive healthcare system is needed as COVID-19 is not the end of the problem of the globalisation of epidemics.

Publication Type

Journal article.

<65>

Accession Number

20203470437

Author

Gross, R.; Conzelmann, C.; Muller, J. A.; Stenger, S.; Steinhart, K.; Kirchhoff, F.; Munch, J.

Title

Detection of SARS-CoV-2 in human breastmilk.

Source

Lancet (British edition); 2020. 395(10239):1757-1758.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Publication Type

Journal article.

<66>

Accession Number

20203458098

Author

Arumugam Kathiresan; Nagai, T.; Haneishi, Y.

Title

Policy options for galvanizing Africa's rice sector against impacts of COVID-19. (Special Section: Pandemics and sustainability.)

Source

World Development (Oxford); 2020. 13614 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Demand for rice consumption in Africa has outstripped the current local production capacities. As a result, African markets have become heavily dependent on importation, especially from Asia. During the COVID-19 pandemic, rice production in both Asia and Africa is likely to be reduced. It is also likely that the major Asian rice exporting countries will resort to stockpiling of their local production, and restrict volumes of (or ban) rice exportation. Such measures could affect demand-supply dynamics and trigger a price crisis in African rice markets. Based on the lessons learnt from the Ebola and Severe Acute Respiratory Syndrome (SARS) epidemics and the 2007-08 food price crisis, African nations need to moderate the impact of such a crisis through appropriate policy actions.

Publication Type

Journal article.

<67>

Accession Number

20203458097

Author

Klassen, S.; Murphy, S.

Title

Equity as both a means and an end: lessons for resilient food systems from COVID-19. (Special Section: Pandemics and sustainability.)

Source

World Development (Oxford); 2020. 13640 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Food systems are important sites of economic stress, political response and adaptation. Access to food is also an important marker of how well a society distributes its wealth, reflecting the state of political accountability, economic redistribution, and the society's level of commitment to uphold the right to food.

The COVID-19 pandemic has exposed the interconnected weaknesses of our food, social and economic systems and offers lessons for building more just and resilient food systems. We focus on three lessons learned anew in the pandemic: (1) food insecurity both reflects and reinforces inequity, (2) food workers are essential yet treated as sacrificial, and (3) racialized migrant food workers face unique forms of inequity. These lessons - chosen for their ethical salience, global relevance, and political urgency - show how interconnected inequities revealed by the pandemic are undermining resilience. We conclude with specific policy recommendations for redress, both within and beyond food systems. This will not be the final global pandemic, nor is it the only shock that regions are currently experiencing. COVID-19 is an opening to think about how societies might center justice and equity in efforts to build back better. Governments should take this opportunity to invest in structural changes to reduce persistent inequities in food access due to poverty, health outcomes, decent work and overall wellbeing, especially for racialized communities and migrants.

Publication Type

Journal article.

<68>

Accession Number

20203481043

Author

Ortega-Rubio, A.; Murillo-Amador, B.; Diaz-Castro, S.; Castro-Iglesias, C.; Blazquez, M. C.

Title

COVID-19: adjustments for in the scientific research work in Mexico. [Spanish]

Source

Terra Latinoamericana; 2020. 38(4):917-930. 20 ref.

Publisher

Sociedad Mexicana de la Ciencia del Suelo A.C.

Location of Publisher

Chapingo

Country of Publication

Mexico

Abstract

In the immediate future and the medium term, activities of Scientific and Technological Research, Human Resource Training, and Linkage and Social Appropriation of Knowledge will suffer the hardships of the new restrictions imposed by the new reality of the COVID-19 Pandemic. Societies, economies, Research and Higher Education Institutions that manage to adapt faster to these new challenges and have the structural capacities to make their processes flexible, will have a better chance to fastly overcome this global contingency. In Mexico, un-der the perspective of social transfer of knowledge, far from being a disruptive

phenomenon, the evolution that this transfer has followed seems to find -from the confinement and impact of the COVID 19 pandemic- real possibilities of increasing interest for science topics and the opportunity of accessing them through the use of information technologies (ICTs). This is the case of actions for the social transfer of knowledge in a public research center, Centro de Investigaciones Biologicas del Noroeste, S.C. (CIBNOR), in which digital platforms have been consolidated to positively face the times. In this work, detailed, concrete and specific recom-mendations are provided so that the public institutions of research and Higher Education in Mexico can adapt to the new reality imposed by the pandemic as efficiently and functionally as possible in terms of scientific, humanistic and technological research, the training of human resources, and in the linkage and social appropriation of knowledge.

Publication Type

Journal article.

<69>

Accession Number

20203482245

Author

Yao Tao; Gao Yan; Cui Qin; Peng Bo; Chen Yan; Li JianSheng; Huang Chao; He ChunPing; Pu Jie; Wei JiaJun; Zhan YanQiang; Yan Jie; Tian JingHua; Zhang ZhaoHui; Liu ZhiChao

Title

Clinical characteristics of a group of deaths with COVID-19 pneumonia in Wuhan, China: a retrospective case series.

Source

BMC Infectious Diseases; 2020. 20(695):(22 September 2020). 31 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: With the widespread outbreak of novel coronavirus diseases 2019(COVID-19), more and more death cases were reported, however, limited data are available for the patients who died. We aimed to explore the clinical characteristics of deaths with COVID-19 pneumonia. Methods: We abstracted and analyzed epidemiological, demographic, clinical, and laboratory data from 83 death cases with COVID-19 pneumonia in East Hospital of Wuhan University Renmin Hospital, between January 26, 2020, and February 28, 2020. Results: Of the 83 deaths, none was the medical staff. The mean age was 71.8 years (SD 13.2; range, 34-97 years) and 53(63.9%) were male. The median from onset to admission was 10 days (IQR 7-14:

range, 2-43 days), to death was 17 days (IQR 14-21: range, 6-54 days). Most deaths (66[80%]) had underlying comorbid diseases, the most of which was hypertension [47(57%)]. The main initial symptoms of these 83 deaths were shortness of breath(98.8%), fever(94%), and myalgia or fatigue(90.4%). Laboratory analyses showed the lymphocytopenia in 69(83%) deaths, hypoalbuminemia in 77(93%) deaths, the elevation of lactate dehydrogenase in 79(95%) deaths, procalcitonin in 69(83%) deaths and C-reactive protein in 79(95%) deaths. All 83 patients received antiviral treatment, 81(97.6%) deaths received antibiotic therapy, 54(65.1%) deaths received glucocorticoid therapy, and 20(24.1%) patients received invasive mechanical ventilation. Conclusion: Most of the deaths with COVID-19 pneumonia were elderly patients with underlying comorbid diseases, especially those over 70 years of age. The time of death after the onset of the disease was mostly 15-21 days. More care should be given to the elderly in further prevention and control strategies of COVID-19.

Publication Type

Journal article.

<70>

Accession Number

20203467252

Author

Iwasaka, S.; Shono, Y.; Tokuda, K.; Nakashima, K.; Yamamoto, Y.; Maki, J.; Nagasaki, Y.; Shimono, N.; Akahoshi, T.; Taguchi, T.

Title

Clinical improvement in a patient with severe coronavirus disease 2019 after administration of hydroxychloroquine and continuous hemodiafiltlation with nafamostat mesylate.

Source

Journal of Infection and Chemotherapy; 2020. 26(12):1319-1323.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The number of people infected with severe acute respiratory syndrome coronavirus 2 is increasing globally, and some patients have a fatal clinical course. In light of this situation, the World Health Organization (WHO) declared coronavirus disease 2019 (COVID-19) a pandemic on March 11, 2020. While clinical studies and basic research on a treatment for COVID-19 are ongoing around the world, no treatment has yet been proven to be effective. Several clinical studies have demonstrated the efficacy of

chloroquine phosphate and nafamostat mesylate with COVID-19. Here, we report the case of a Japanese patient with COVID-19 with severe respiratory failure who improved following the administration of hydroxychloroquine and continuous hemodiafiltlation with nafamostat mesylate. Hence, hydroxychloroquine with nafamostat mesylate might be a treatment option for severe COVID-19.

Publication Type

Journal article.

<71>

Accession Number

20203467227

Author

Sagar S. Maddani; Hunasaghatta Chandrappa Deepa; Shwethapriya Rao; Souvik Chaudhuri

Title

A multicenter cross-sectional questionnaire-based study to know the practices and strategies of ventilatory management of COVID-19 patients among the treating physicians.

Source

Indian Journal of Critical Care Medicine; 2020. 24(8):643-648. 20 ref.

Publisher

Jaypee Brothers Medical Publishers Pvt. Ltd.

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Introduction: COVID-19 has been declared a pandemic by the World Health Organization (WHO). Many of the COVID-19 patients develop acute respiratory distress syndrome (ARDS) and require ventilatory support based on their severity for which conventional strategies are being used along with few newer strategies. We conducted this multicenter survey to know the physician's current ventilation strategies adopted for the care of COVID-19 patients. Materials and methods: The survey was conducted after taking the ethical committee clearance. The web-based multicenter, cross-sectional questionnaire study was sent to physicians, who were involved in the management of COVID-19 patients. The questionnaire was segregated into three parts: part one consisted of general information and consent form, part two was concerned regarding demographic characteristics, and part three was concerned about their practices and strategies for ventilation of COVID-19 patients. Results: A total of 223 responders replied for the questionnaire; 190 participated in the study saying that they are involved in the management of COVID-19 patients. The answers to the questionnaires were expressed as a percentage of total responses. 86% of the respondents said they have a designated intensive care unit (ICU) and 89% of the responders said they have an

intubation/extubation protocol for suspect/confirmed COVID-19 patients. The responses of junior residents (JRs), senior residents (SRs), assistant professors/junior consultants, and professors/consultants were analyzed separately, and a few significant differences were observed. 39% of JRs were aware of prone ventilation as the most effective rescue ventilation strategy compared to 69% of consultants/professors. Extracorporeal membranous oxygenation (ECMO) strategy was also more significant in consultants/professors (40%) vs JRs (12%). The responders were also diverged based on medical college and corporate hospitals, and their responses were noted. Most commonly, responders in the corporate hospitals had a facility to ventilate COVID-19 patients in a negative pressure isolation facility compared to a nonnegative pressure room isolation facility in medical colleges. Conclusion: Most of the responders were practicing ventilation strategies in a standard manner. JRs need to undergo further training in a few aspects of the ventilatory management, and also, they need to update themselves with newer treatment modalities as they keep evolving. Medical colleges are providing at par facility compared to corporate hospitals except for few advance care facilities. Clinical significance: This study highlights the current practice of ventilatory management of COVID-19 patients, which is satisfactory. The survey can be used to develop study tools, to educate resident doctors, to further improve quality of care of critical COVID-19 patients.

Publication Type

Journal article.

<72>

Accession Number

20203469699

Author

Wang KaiLu; Wong LaiYi [Wong, L. Y. E.]; Ho KinFai; Cheung WaiLing [Cheung, W. L. A.]; Chan YingYang [Chan, Y. Y. E.]; Yeoh EngKiong; Wong YeungShan [Wong, Y. S. S.]

Title

Intention of nurses to accept coronavirus disease 2019 vaccination and change of intention to accept seasonal influenza vaccination during the coronavirus disease 2019 pandemic: a cross-sectional survey.

Source

Vaccine; 2020. 38(45):7049-7056. 39 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Maintaining health of healthcare workers with vaccination is a major component of pandemic preparedness and acceptance of vaccinations is essential to its success. This study aimed to examine impact of the coronavirus disease 2019 (COVID-19) pandemic on change of influenza vaccination acceptance and identify factors associated with acceptance of potential COVID-19 vaccination. Method: A cross-sectional self-administered anonymous questionnaire survey was conducted among nurses in Hong Kong, China during 26 February and 31 March 2020. Their previous acceptance of influenza vaccination and intentions to accept influenza and COVID-19 vaccination were collected. Their relationship with work-related and other factors were examined using multiple multinomial logistic regressions. Results: Responses from 806 participants were retrieved. More nurses changed from vaccination refusal to hesitancy or acceptance than those changed from acceptance to vaccination hesitancy or refusal (15.5% vs 6.8% among all participants, P < 0.001). 40.0% participants intended to accept COVID-19 vaccination, and those in private sector (OR: 1.67, 95%CI: 1.11-2.51), with chronic conditions (OR: 1.83, 95%CI: 1.22-2.77), encountering with suspected or confirmed COVID-19 patients (OR: 1.63, 95%CI: 1.14-2.33), accepted influenza vaccination in 2019 (OR: 2.03, 95%CI: 1.47-2.81) had higher intentions to accept it. Reasons for refusal and hesitation for COVID-19 vaccination included "suspicion on efficacy, effectiveness and safety", "believing it unnecessary", and "no time to take it". Conclusion: With a low level of COVID-19 acceptance intentions and high proportion of hesitation in both influenza and COVID-19 vaccination, evidence-based planning are needed to improve the uptake of both vaccinations in advance of their implementation. Future studies are needed to explore reasons of change of influenza vaccination acceptance, look for actual behaviour patterns of COVID-19 vaccination acceptance and examine effectiveness of promotion strategies.

Publication Type

Journal article.

<73>

Accession Number

20203460358

Author

Azuma, K.; Kagi, N.; Kim, H.; Hayashi, M.

Title

Impact of climate and ambient air pollution on the epidemic growth during COVID-19 outbreak in Japan.

Source

Environmental Research; 2020. 190many ref.

Publisher

Elsevier Inc

Location of Publisher

Orlando

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19) rapidly spread worldwide in the first quarter of 2020 and resulted in a global crisis. Investigation of the potential association of the spread of the COVID-19 infection with climate or ambient air pollution could lead to the development of preventive strategies for disease control. To examine this association, we conducted a longitudinal cohort study of 28 geographical areas of Japan with documented outbreaks of COVID-19. We analyzed data obtained from March 13 to April 6, 2020, before the Japanese government declared a state of emergency. The results revealed that the epidemic growth of COVID-19 was significantly associated with increase in daily temperature or sunshine hours. This suggests that an increase in person-to-person contact due to increased outing activities on a warm and/or sunny day might promote the transmission of COVID-19. Our results also suggested that short-term exposure to suspended particles might influence respiratory infections caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Further research by well-designed or well-controlled study models is required to ascertain this effect. Our findings suggest that weather has an indirect role in the transmission of COVID-19 and that daily adequate preventive behavior decreases the transmission.

Publication Type

Journal article.

<74>

Accession Number

20203460352

Author

Manoj, M. G.; Kumar, M. K. S.; Valsaraj, K. T.; Sivan, C.; Vijayan, S. K.

Title

Potential link between compromised air quality and transmission of the novel corona virus (SARS-CoV-2) in affected areas.

Source

Environmental Research; 2020. 190many ref.

Publisher

Elsevier Inc

Location of Publisher

Orlando

Country of Publication

USA

Abstract

The emergence of a novel human corona virus disease (COVID-19) has been declared as a pandemic by the World Health Organization. One of the mechanisms of airborne transmission of the severe acute

respiratory syndrome - corona virus (SARS-CoV-2) amid humans is through direct ejection of droplets via sneezing, coughing and vocalizing. Nevertheless, there are ample evidences of the persistence of infectious viruses on inanimate surfaces for several hours to a few days. Through a critical review of the current literature and a preliminary analysis of the link between SARS-CoV-2 transmission and air pollution in the affected regions, we offer a perspective that polluted environment could enhance the transmission rate of such deadly viruses under moderate-to-high humidity conditions. The aqueous atmospheric aerosols offer a conducive surface for adsorption/absorption of organic molecules and viruses onto them, facilitating a pathway for higher rate of transmission under favourable environmental conditions. This mechanism partially explains the role of polluted air besides the exacerbation of chronic respiratory diseases in the rapid transmission of the virus amongst the public. Hence, it is stressed that more ambitious policies towards a cleaner environment are required globally to nip in the bud what could be the seeds of a fatal outbreak such as COVID-19.

Publication Type

Journal article.

<75>

Accession Number

20203463982

Author

Chen JiaJia; Xiong MaoXiang; He ZongLing; Shi Wen; Yue YuChuan; He ManXi

Title

The enclosed ward management strategies in psychiatric hospitals during COVID-19 outbreak.

Source

Globalization and Health; 2020. 16(53):(24 June 2020). 5 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

During the COVID-19 pandemic, as a large city located in Southwest China, Chengdu was mainly affected by imported cases. For a psychiatric hospital, the enclosed management model, the crowded wards and the uncooperative patients are the risk factors of nosocomial infection. Admitting new patients while preventing the COVID-19 outbreak within the institutions was a crucial challenge. The Mental Health Centre of Chengdu proposed a series of effective management strategies to deal with the rapidly evolving situation

during the COVID-19 pandemic which included regulation for the inpatients, their families and staff, and achieved Zero infection in our hospital.

Publication Type

Journal article.

<76>

Accession Number

20203463936

Author

Nandini Garikipati

Title

Odisha's management of the COVID-19 pandemic.

Source

Economic and Political Weekly; 2020. 55(40):15-18. 12 ref.

Publisher

Sameeksha Trust

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Odisha, in spite of a poor public health system, did well in managing the pandemic in the initial month. This is on account of three reasons. It drew from its now globally recognised swift disaster preparedness and management aimed at zero casualty. It adopted a proactive, as against reactive, course, which in itself is a difficult proposition in such an uncertain and dynamic scenario. It took lessons from success stories and challenges based on happenings elsewhere.

Publication Type

Journal article.

<77>

Accession Number

20203288622

Author

Silva, R. G. L. da; Chammas, R.; Plonski, G. A.; Goldbaum, M.; Souza Ferreira, L. C. de; Novaes, H. M. D.

Title

University participation in the production of molecular diagnostic tests for the novel coronavirus in Brazil: the response to health challenges. (Thematic Section: Covid-19.)

Source

Cadernos de Saude Publica; 2020. 36(6)11 ref.

Publisher

Escola Nacional de Saude Publica

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The current study proposes to identify and reflect briefly on the rapid implementation of an initiative by the Brazilian scientific community in Molecular Biology to perform COVID-19 molecular testing. Specifically, as an example, the article addresses the University Network for COVID-19 Diagnosis as a response to the emergency demand for the production and distribution of these tests in the state of Sao Paulo, the epidemic's epicenter in Brazil. The experience with the University Network in Sao Paulo showed clearly that the implementation of the following key stages is crucial for such a translational process to be successful: (1) A university biomedical research platform based on integration between Biomedical and Health Sciences with Biochemistry, Immunology, Infectious Diseases, and Epidemiology: the science park should be equipped to adequately receive, handle, and process biological material, meeting international quality and safety standards; (2) Standardization and adequate conditions for collecting samples in the health services, with logistic support for transporting the material from the collection points to the laboratories: this process should guarantee rapid, sustained, and precise turnaround of the test results to the health services 9; (3) Automation of the genetic material's extraction and amplification for RT-qPCR testing, as well as standardization of the tests' scientific and clinical validation processes 4: these are fundamental tools for efficacy and efficiency in monitoring the infection's evolution; (4) Material consolidation and human resources for maintaining a permanent national biotechnology park and/or improvement of conditions for access to the tests supplied by the international market: implementation of partnerships for production and purchasing processes for inputs with criteria according to the needs and proper use of public resources; (5) Guaranteed economic sustainability of the design and implementation of legal measures to support public programs or policies for industrial development in heath, with clear regulatory definitions: this stage, downstream from an arrangement stemming from the research community and health services, should mobilize other actors in the Health Economic and Industrial Complex to ensure continuous access to the necessary inputs for this system's proper development.

Publication Type

Journal article.

<78>

Accession Number

20203479036

Author

Yin Duo; Gao Quan; Zhu Hong; Li Jie

Title

Public perception of urban companion animals during the COVID-19 outbreak in China.

Source

Health and Place; 2020. 65many ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

This paper responds to the increasing concern regarding the role of non-human life in shaping urban space by exploring the public perception of urban companion animals during the coronavirus disease 2019 (COVID-19) outbreak in China. We argue that the public's perception of urban companion animals during emerging infectious disease outbreaks is related to medical and life science issues and reflects the political, economic, and emotional struggles involved in human-animal multispecies cohabitation. We find that the public has mainly followed and reconstructed medical discourses about the risk of companion animal-to-human transmission and discussed sustainable ethical animal practices in urban public health emergency management during the COVID-19 outbreak. Concerns regarding the risk of companion animal-related infection reflect the increasing prominence of more-than-human families, the pet industry, and multispecies leisure conflicts in public space in Chinese cities. The public's attention to animal ethics has prompted Chinese policy makers to adopt a more morally acceptable model for urban public health emergency management that can be sustained and supported by responsible non-governmental organizations and ethical urban residents.

Publication Type

Journal article.

<79>

Accession Number

20203479029

Author

Zhao PengJun; Li ShengXiao; Liu Di

Title

Unequable spatial accessibility to hospitals in developing megacities: new evidence from Beijing.

Source

Health and Place; 2020. 65many ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

The increasing inequality in spatial accessibility to hospitals in developing countries has been attracting attention from researchers and politicians. The situation seems to be worse in growing megacities where more than 10 million people live and rapid urban sprawl has caused serious problems with the supply of health and public transport services. The recent global COVID-19 pandemic calls for particular attention to be afforded to the matter of equal access to basic medical facilities and services for people across different neighborhoods. Although some studies have already been undertaken into the subject of health-focused inequality in the cities of developing countries, the spatial inequity in hospital accessibility has rarely been discussed to date. In this paper, I aim to provide new evidence by considering Beijing as a case study. With the results of my analysis, I show that low-income neighborhoods have experienced lower levels of accessibility not only to high-tier hospitals (secondary and tertiary hospitals) but also to primary healthcare services (primary hospital and neighborhood clinics). The rate at which high-income neighborhoods access secondary and tertiary hospitals is approximately 4 times and 1.5 times as high as that of low-income neighborhoods. Low-income face nearly twice the travel time of those from high-income neighborhoods to reach the nearest primary hospital or neighborhood clinics. Suburban neighborhoods have less access to medical services than neighborhoods that are located in the central urban areas. It seems that the rapid urban sprawl has been worsening spatial inequality in the context of access to medical services in the growing megacity of Beijing. Equal access to healthcare services should be prioritized in future policy discussions, especially in relation to the urban growth management of megacities in developing countries in order to ensure that fair and inclusive urbanization processes are undertaken. Equal access to healthcare services would also be widely beneficial in the context of managing the COVID-19 pandemic.

Publication Type

Journal article.

<80>

Accession Number

20203474062

Author

Hamadani, J. D.; Hasan, M. I.; Baldi, A. J.; Hossain, S. J.; Shamima Shiraji; Bhuiyan, M. S. A.; Mehrin, S. F.; Fisher, J.; Tofail, F.; Tipu, S. M. M. U.; Grantham-Mcgregor, S.; Biggs, B. A.; Braat, S.; Pasricha, S. R.

Title

Immediate impact of stay-at-home orders to control COVID-19 transmission on socioeconomic conditions, food insecurity, mental health, and intimate partner violence in Bangladeshi women and their families: an interrupted time series.

Source

Lancet Global Health; 2020. 8(11):e1380-e1389. 43 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Stay-at-home orders (lockdowns) have been deployed globally to control COVID-19 transmission, and might impair economic conditions and mental health, and exacerbate risk of food insecurity and intimate partner violence. The effect of lockdowns in low-income and middle-income countries must be understood to ensure safe deployment of these interventions in less affluent settings. We aimed to determine the immediate impact of COVID-19 lockdown orders on women and their families in rural Bangladesh. Methods: An interrupted time series was used to compare data collected from families in Rupganj upazila, rural Bangladesh (randomly selected from participants in a randomised controlled trial), on income, food security, and mental health a median of 1 year and 2 years before the COVID-19 pandemic to data collected during the lockdown. We also assessed women's experiences of intimate partner violence during the pandemic. Results: Between May 19 and June 18, 2020, we randomly selected and invited the mothers of 3016 children to participate in the study, 2424 of whom provided consent. 2414 (99.9%, 95% CI 99.6-99.9) of 2417 mothers were aware of, and adhering to, the stay-at-home advice. 2321 (96.0%, 95.2-96.7) of 2417 mothers reported a reduction in paid work for the family. Median monthly family income fell from US$212 at baseline to $59 during lockdown, and the proportion of families earning less than $1.90 per day rose from five (0.2%, 0.0-0.5) of 2422 to 992 (47.3%, 45.2-49.5) of 2096 (p<0.0001 comparing baseline with lockdown period). Before the pandemic, 136 (5.6%, 4.7-6.6) of 2420 and 65 (2.7%, 2.1-3.4) of 2420 families experienced moderate and severe food insecurity, respectively. This increased to 881 (36.5%, 34.5-38.4) of 2417 and 371 (15.3%, 13.9-16.8) of 2417 during the lockdown; the number of families experiencing any level of food insecurity increased by 51.7% (48.1-55.4; p<0.0001). Mothers' depression and anxiety symptoms increased during the lockdown. Among women experiencing emotional or moderate physical violence, over half reported it had increased since the lockdown. Interpretation: COVID-19 lockdowns present significant economic, psychosocial, and physical risks to the wellbeing of women and their families across economic strata in rural Bangladesh. Beyond supporting only the most socioeconomically deprived,

support is needed for all affected families. Funding: National Health and Medical Research Council, Australia.

Publication Type

Journal article.

<81>

Accession Number

20203472189

Author

Saraswathi, S.; Mukhopadhyay, A.; Shah, H.; Ranganath, T. S.

Title

Social network analysis of COVID-19 transmission in Karnataka, India.

Source

Epidemiology and Infection; 2020. 148(e230)40 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

We used social network analysis (SNA) to study the novel coronavirus (COVID-19) outbreak in Karnataka, India, and to assess the potential of SNA as a tool for outbreak monitoring and control. We analysed contact tracing data of 1147 COVID-19 positive cases (mean age 34.91 years, 61.99% aged 11-40, 742 males), anonymised and made public by the Karnataka government. Software tools, Cytoscape and Gephi, were used to create SNA graphics and determine network attributes of nodes (cases) and edges (directed links from source to target patients). Outdegree was 1-47 for 199 (17.35%) nodes, and betweenness, 0.5-87 for 89 (7.76%) nodes. Men had higher mean outdegree and women, higher mean betweenness. Delhi was the exogenous source of 17.44% cases. Bangalore city had the highest caseload in the state (229, 20%), but comparatively low cluster formation. Thirty-four (2.96%) 'super-spreaders' (outdegree >= 5) caused 60% of the transmissions. Real-time social network visualisation can allow healthcare administrators to flag evolving hotspots and pinpoint key actors in transmission. Prioritising these areas and individuals for rigorous containment could help minimise resource outlay and potentially achieve a significant reduction in COVID-19 transmission.

Publication Type

Journal article.

<82>

Accession Number

20203472159

Author

Castagnino, A. M.; Diaz, K. E.; Rosini, M. B.; Garcia Franco, A.; Martino, B. di; Amendolara, P.

Title

Trends in regional consumption of vegetables in times of COVID-19 pandemic. [Spanish]

Source

Horticultura Argentina; 2020. 39(99):43-75. many ref.

Publisher

Asociacion Argentina de Horticultura

Location of Publisher

La Consulta

Country of Publication

Argentina

Abstract

Healthy food that includes a diet rich in vegetables is essential for the population's health and well-being since it strengthens the immune system in order to reduce the risk of illnesses and allows for better life quality. Surveys that reflect trends in diets, mainly quantity and quality of vegetables and the dissemination of their results may represent an incentive for families, producers, institutions and the population in general to become aware of the multiple benefits of an optimal diet based on healthy and diversified food rich in vegetables of safe and known origin that increase immunity, reduce vulnerability to illnesses and contribute to a good physical state of the population. In this context, with the aim of obtaining an updated panorama of the population's vegetable consumption and production preferences and habits and the feeding changes produced in the global Covid-19 pandemic, a survey was carried out by the horticulture team (CRESCA-Centro Regional de Estudio de Cadenas Agroalimentarias) at Facultad de Agronomia (UNCPBA) within its projects and bonds. This survey will motivate actions to make the population aware of the need for adequate quantity, quality and variety of vegetable consumption which benefits its life quality, improves its well being and reduces the risk of developing illnesses as from the present global scenario.

Publication Type

Journal article.

<83>

Accession Number

20203476485

Author

Kleszczynski, K.; Slominski, A. T.; Steinbrink, K.; Reiter, R. J.

Title

Clinical trials for use of melatonin to fight against COVID-19 are urgently needed.

Source

Nutrients; 2020. 12(9)88 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The recent pandemic of COVID-19 has already infected millions of individuals and has resulted in the death of hundreds of thousands worldwide. Based on clinical features, pathology, and the pathogenesis of respiratory disorders induced by this and other highly homogenous coronaviruses, the evidence suggests that excessive inflammation, oxidation, and an exaggerated immune response contribute to COVID-19 pathology; these are caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). This leads to a cytokine storm and subsequent progression triggering acute lung injury (ALI)/acute respiratory distress syndrome (ARDS), and often death. We and others have reported melatonin to be an anti-inflammatory and anti-oxidative molecule with a high safety profile. It is effective in critical care patients by reducing their vascular permeability and anxiety, inducing sedation, and improving their quality of sleep. As melatonin shows no harmful adverse effects in humans, it is imperative to introduce this indoleamine into clinical trials where it might be beneficial for better clinical outcomes as an adjuvant treatment of COVID-19-infected patients. Herein, we strongly encourage health care professionals to test the potential of melatonin for targeting the COVID-19 pandemic. This is urgent, since there is no reliable treatment for this devastating disease.

Publication Type

Journal article.

<84>

Accession Number

20203476475

Author

Jovic, T. H.; Ali, S. R.; Ibrahim, N.; Jessop, Z. M.; Tarassoli, S. P.; Dobbs, T. D.; Holford, P.; Thornton, C. A.; Whitaker, I. S.

Title

Could vitamins help in the fight against COVID-19?

Source

Nutrients; 2020. 12(9)227 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

There are limited proven therapeutic options for the prevention and treatment of COVID-19. The role of vitamin and mineral supplementation or "immunonutrition" has previously been explored in a number of clinical trials in intensive care settings, and there are several hypotheses to support their routine use. The aim of this narrative review was to investigate whether vitamin supplementation is beneficial in COVID-19. A systematic search strategy with a narrative literature summary was designed, using the Medline, EMBASE, Cochrane Trials Register, WHO International Clinical Trial Registry, and Nexis media databases. The immune-mediating, antioxidant and antimicrobial roles of vitamins A to E were explored and their potential role in the fight against COVID-19 was evaluated. The major topics extracted for narrative synthesis were physiological and immunological roles of each vitamin, their role in respiratory infections, acute respiratory distress syndrome (ARDS), and COVID-19. Vitamins A to E highlighted potentially beneficial roles in the fight against COVID-19 via antioxidant effects, immunomodulation, enhancing natural barriers, and local paracrine signaling. Level 1 and 2 evidence supports the use of thiamine, vitamin C, and vitamin D in COVID-like respiratory diseases, ARDS, and sepsis. Although there are currently no published clinical trials due to the novelty of SARS-CoV-2 infection, there is pathophysiologic rationale for exploring the use of vitamins in this global pandemic, supported by early anecdotal reports from international groups. The final outcomes of ongoing trials of vitamin supplementation are awaited with interest.

Publication Type

Journal article.

<85>

Accession Number

20203473394

Author

Alrubaiee, G. G.; Al-Qalah, T. A. H.; Al-Aawar, M. S. A.

Title

Knowledge, attitudes, anxiety, and preventive behaviours towards COVID-19 among health care providers in Yemen: an online cross-sectional survey.

Source

BMC Public Health; 2020. 20(1541):(13 October 2020). 34 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The growing incidence of coronavirus (COVID-19) continues to cause fear, anxiety, and panic amongst the community, especially for healthcare providers (HCPs), as the most vulnerable group at risk of contracting this new SARS-CoV-2 infection. To protect and enhance the ability of HCPs to perform their role in responding to COVID-19, healthcare authorities must help to alleviate the level of stress and anxiety amongst HCPs and the community. This will improve the knowledge, attitude and practice towards COVID-19, especially for HCPs. In addition, authorities need to comply in treating this virus by implementing control measures and other precautions. This study explores the knowledge, attitude, anxiety, and preventive behaviours among Yemeni HCPs towards COVID-19. Methods: A descriptive, web-based-cross-sectional study was conducted among 1231 Yemeni HCPs. The COVID-19 related questionnaire was designed using Google forms where the responses were coded and analysed using the Statistical Package for the Social Sciences software package (IBM SPSS), version 22.0. Descriptive statistics and Pearson's correlation coefficient test were also employed in this study. A p-value of < 0.05 with a 95% confidence interval was considered as statistically significant. The data collection phase commenced on 22nd April 2020, at 6 pm and finished on 26th April 2020 at 11 am. Results: The results indicated that from the 1231 HCPs participating in this study, 61.6% were male, and 67% were aged between 20 and 30 years with a mean age of 29.29 +/- 6.75. Most (86%) held a bachelor's degree or above having at least 10 years of work experience or less (88.1%). However, while 57.1% of the respondents obtained their information via social networks and news media, a further 60.0% had never attended lectures/discussions about COVID-19. The results further revealed that the majority of respondents had adequate knowledge, optimistic attitude, moderate level of anxiety, and high-performance in preventive behaviours, 69.8, 85.10%, 51.0 and 87.70%, respectively, towards COVID-19. Conclusion: Although the Yemeni HCPs exhibited an adequate level of knowledge, optimistic attitude, moderate level of anxiety, and high-performance in preventive behaviours toward COVID-19, the results highlighted gaps, particularly in their knowledge and attitude towards COVID-19.

Publication Type

Journal article.

<86>

Accession Number

20203479506

Author

Hecel, A.; Ostrowska, M.; Stokowa-Soltys, K.; Waatly, J.; Dudek, D.; Miller, A.; Potocki, S.; Matera-Witkiewicz, A.; Dominguez-Martin, A.; Kozlowski, H.; Rowinska-Zyrek, M.

Title

Zinc(II) - the overlooked eminence grise of chloroquine's fight against COVID-19?

Source

Pharmaceuticals; 2020. 13(9)200 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Zn(II) is an inhibitor of SARS-CoV-2's RNA-dependent RNA polymerase, and chloroquine and hydroxychloroquine are Zn(II) ionophores-this statement gives a curious mind a lot to think about. We show results of the first clinical trials on chloroquine (CQ) and hydroxychloroquine (HCQ) in the treatment of COVID-19, as well as earlier reports on the anticoronaviral properties of these two compounds and of Zn(II) itself. Other FDA-approved Zn(II) ionophores are given a decent amount of attention and are thought of as possible COVID-19 therapeutics.

Publication Type

Journal article.

<87>

Accession Number

20203471428

Author

Liu XiangLei; Drelich, A.; Li, W.; Chen Chuan; Sun ZeHua; Shi, M.; Adams, C.; Mellors, J. W.; Tseng ChienTe; Dimitrov, D. S.

Title

Enhanced elicitation of potent neutralizing antibodies by the SARS-CoV-2 spike receptor binding domain Fc fusion protein in mice.

Source

Vaccine; 2020. 38(46):7205-7212. 29 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The development of an effective vaccine against SARS-CoV-2 is urgently needed. We generated SARSCoV-2 RBD-Fc fusion protein and evaluated its potency to elicit neutralizing antibody response in mice. RBD-Fc elicited a higher neutralizing antibodies titer than RBD as evaluated by a pseudovirus neutralization assay and a live virus based microneutralization assay. Furthermore, RBD-Fc immunized sera better inhibited cell-cell fusion, as evaluated by a quantitative cell-cell fusion assay. The cell-cell fusion assay results correlated well with the virus neutralization potency and could be used for high-throughput screening of large panels of anti-SARS-CoV-2 antibodies and vaccines without the requirement of live virus infection in BSL3 containment. Moreover, the anti-RBD sera did not enhance the pseudotyped SARS-CoV-2 infection of K562 cells. These results demonstrate that Fc fusion can significantly improve the humoral immune response to recombinant RBD immunogen, and suggest that RBD-Fc could serve as a useful component of effective vaccines against SARS-CoV-2.

Publication Type

Journal article.

<88>

Accession Number

20203475727

Author

Samikshya Kandel; Mahesh Lamsal; Yadav, S. A.; Dipak Bhandari; Ganesh Adhikari; Sagar Poudel; Pawan Sharma; Swotantra Gautam

Title

Lifestyle, behavior, perception and practices of Nepalese during lock-down due to COVID-19 pandemic.

Source

JNMA, Journal of the Nepal Medical Association; 2020. 58(229):690-695. 22 ref.

Publisher

Nepal Medical Association

Location of Publisher

Kathmandu

Country of Publication

Nepal

Abstract

Introduction: COVID-19 infection is caused by a new strain of SARS CoV-2 virus, which transmits directly from person-to-person and has become a pandemic. To counteract this, actions related to mass quarantines or stay-at-home orders have been used termed as lockdown. This study aims to study lifestyle, behaviour, perception and practice of people regarding during the lockdown. Methods: An online survey was conducted with structured questionnaire in Google forms after ethical approval from Nepal Health Research Council (Ref-2631). The attributes of knowledge, attitude and practices were explored using multiple-choice questions and results were statistically analysed using Microsoft excel. Results: Five hundred fifty-five respondents completed the survey with 280 (50.5%) males and 275 (49.5%) female. The knowledge regarding viral pandemic was increased in 496 (89.3%) respondents. 424 (76.4%) people developed stress due to pandemic. Three hundred fifty three (63.6%) were adversely affected by professional works or suffered economic loss in business. More than 42% participants are using their time for study in personal development, online classes etc. Conclusions: The knowledge of viral pandemic as well as personal hygiene habits have improved in majority of people but many also developed stress. They were convinced that lockdown lowered transmission of infection which in turn affected lifestyle behaviour and practices. Practicing social distancing becomes too difficult for the poor in the absence of proper social security system and government support. E-Learning has become more acceptable due to lockdown. Further studies with in-person interviews are warranted.

Publication Type

Journal article.

<89>

Accession Number

20203475724

Author

Garg, D.; Deepika Kapoor

Title

Perception of dental students of COMS-TH regarding future of dentistry in Nepal amid COVID-19 pandemic.

Source

JNMA, Journal of the Nepal Medical Association; 2020. 58(229):677-680. 11 ref.

Publisher

Nepal Medical Association

Location of Publisher

Kathmandu

Country of Publication

Nepal

Abstract

Introduction: There is a global crisis which has been led by COVID-19. The patients undergoingdental procedures and dental professionals are at higher risk of contracting this disease owing toaerosols generated and a lot of face to face contact during the procedures. The aim of this study was to know the perceptions of dental students of COMS-TH regarding future of dentistry in Nepal amidCOVID-19 pandemic. Methods: The present cross-sectional descriptive study was conducted at COMS-TH, Bharatpur by sending an online e-survey questionnaire to 146 dental students out of which 99 responded. The e-survey questionnaire consisted of three parts which consisted of questions about demographics, knowledge about COVID-19 and their perceptions about future of dentistry. Results: The results of the study depicted that most of the students thought dentistry is good and noble profession and will recommend it to young medical aspirants. Most of them wanted to pursue post graduation courses in future giving preference to Oral and Maxillofacial Surgery. Conclusions: The study concluded that most of the dental students were satisfied with dentistry as their profession and wanted National Dental Association to fix the minimum charges of each dental procedure. Also there is a need to start more post graduation courses in existing institutions providing dental education as most of the students want to pursue it in future.

Publication Type

Journal article.

<90>

Accession Number

20203470753

Author

Alanagreh, L.; Alzoughool, F.; Atoum, M.

Title

Risk of using hydroxychloroquine as a treatment of COVID-19.

Source

International Journal of Risk & Safety in Medicine; 2020. 31(3):111-116. 39 ref.

Publisher

IOS Press

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

The emerging COVID-19 pandemic poses a threat to the global health care system. Given the lack of antiviral therapies or vaccines for the disease, the antimalarial drug hydroxychloroquine (HCQ) obtained much attention as a treatment for COVID-19. However, there are limited and uncertain clinical data to support the beneficial effect of this drug in COVID-19 treatment. HCQ has several side effects and warnings, including blindness, heart failure, and renal toxicity, even with recommended doses. For severe cases of COVID-19 or in patients with preexisting conditions, administering such a drug could be fatal, particularly when taken at high doses or in combination with other antibiotics. However, further well-designed studies that would address the optimal dose, duration of treatment, possible side effects, and long-term usage outcomes are needed to make the final decision. In this paper, we aim to discuss the risk of using HCQ in treating COVID-19 patients, including its possible side effects.

Publication Type

Journal article.

<91>

Accession Number

20203471983

Author

Goka, K.

Title

Ecological approach for zoonosis-consideration of infectious disease risk from the view point of biological diversity. [Japanese]

Source

Medical Entomology and Zoology; 2020. 71(3):161-170. 69 ref.

Publisher

Japan Society of Medical Entomology and Zoology

Location of Publisher

Tochigi

Country of Publication

Japan

Abstract

Pathogenic microorganisms and virus are components of ecosystems, constructing endemic inter-relationships with each specific host species thorough the co-evolutional history. The spill-over of the pathogens from natural habitats into other area will cause encounters between the pathogen and new hosts which have never evolved the immunity or resistance, and will result in rapid spread of "emerging infectious disease (EID)". In the midst of accelerating globalization, human and societies have come to be the targets of the infectious disease caused by pathogens spilled over from the nature. At this very moment, the newest EID, SARS-CoV-2, has spread over the world causing serious damages on the human health and economy. During the social interest is growing for the pandemic risks of EID, it has been discussed that the destruction of biodiversity and environmental change is deeply related the EID pandemic. In the present paper, I would like to review the outline of EID problem as an interface between wildlife and human society.

Publication Type

Journal article.

<92>

Accession Number

20203471929

Author

Zhang Ling; Yao BenXian; Zhang XiaoDan; Xu Hao

Title

Effects of irritability of the youth on subjective well-being: mediating effect of coping styles.

Source

Iranian Journal of Public Health; 2020. 49(10):1848-1856. 29 ref.

Publisher

School of Public Health and Institute of Public Health Research, Tehran University of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

Background: The global COVID-19 pandemic caused great impacts and influences to human psychology. As a result, youths who are kept at home for a long time easily develop irritability and problematic behaviors. However, relatively little attention has been paid to the relations among irritability, coping style, and subjective well-being of the youth. Methods: Overall, 1,033 youth respondents (aged 18-30 yr) from seven provinces in China were investigated in 2020 using the irritability, depression, and anxiety scale, coping

style scale, and well-being index scale. Results: Among the dimensions of irritability of the youth, anxiety received the highest score, followed by introversion irritability, extroversion irritability, and depression. Irritability had significant regional differences. The total score of irritability among rural youth was significantly higher than that of urban youth ($P < 0.05$). The irritability level of youths with parents' emotional status was harmonious and good relations with family members and peers was far lower than those of youths who have poor relations between parents, family members, and peers ($P < 0.05$). The irritability level of youths with a lower monthly household income was higher ($P < 0.05$). Irritability of the youth had significantly negative correlations with positive response and SWB, and it had a significantly positive correlative with negative response. Coping style can mediate the relationship between irritability and SWB of the youth to some extent. Conclusion: Significant correlations exist among irritability, coping style, and SWB of the youth. Irritability can be used to predict SWB indirectly through positive response.

Publication Type

Journal article.

<93>

Accession Number

20203457653

Author

Ramaci, T.; Barattucci, M.; Ledda, C.; Rapisarda, V.

Title

Social stigma during COVID-19 and its impact on HCWs outcomes.

Source

Sustainability; 2020. 12(9)96 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 emergency has significantly transformed the working environment and job demands. Providing care was emotionally difficult for healthcare workers. Uncertainty, stigmatisation, and potentially exposing their families to infection were prominent themes for healthcare workers (HCWs) during the crisis, which first broke out in China at the end of 2019, and then in Italy in early 2020. This study examined the effects of stigma, job demands, and self-esteem, and the consequences of working as a "frontline care provider" with patients infected with the coronavirus (COVID-19). A correlational design study involved 260 healthcare workers (HCWs) working in a large hospital in southern Italy. The following questionnaires were

administered: (1) the Job Content Questionnaire (JCQ), for assessing psychological and physical demands; (2) the Professional Quality of Life Scale (ProQOL) to measure the quality individuals feel in relation to their work as "frontline care providers", through three dimensions: compassion fatigue (CF), burnout (BO), and compassion satisfaction (CS); (3) the Rosenberg Self-Esteem Scale, for evaluating individual self-esteem; (4) a self-administered multiple-choice questionnaire developed by See et al. about attitudes of discrimination, acceptance, and fear towards HCWs exposed to COVID-19. The findings suggest that stigma has a high impact on workers' outcomes. Stigma may influence worker compliance and can guide management communication strategies relating to pandemic risk for HCWs.

Publication Type

Journal article.

<94>

Accession Number

20203481347

Author

Li JianBin; Yang An; Dou Kai; Wang LinXin; Zhang MingChen; Lin XiaoQi

Title

Chinese public's knowledge, perceived severity, and perceived controllability of COVID-19 and their associations with emotional and behavioural reactions, social participation, and precautionary behaviour: a national survey.

Source

BMC Public Health; 2020. 20(1589):(21 October 2020). 40 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The outbreak of the coronavirus disease-19 (COVID-19) has caused enormous stress among the public in China. Intellectual input from various aspects is needed to fight against COVID-19, including understanding of the public's emotion and behaviour and their antecedents from the psychological perspectives. Drawing upon the cognitive appraisal theory, this study examined three cognitive appraisals (i.e., perceived severity, perceived controllability, and knowledge of COVID-19) and their associations with a wide range of emotional and behavioural outcomes among the Chinese public. Methods: Participants were 4607 citizens (age range: 17-90 years, Mage = 23.71 years) from 31 provinces in China and they took part in a cross-sectional survey online. Results: The results showed that the public's emotional and behavioural

reactions were slightly affected by the outbreak of COVID-19. Moreover, the public had limited participation in the events regarding COVID-19 but actively engaged in precautionary behaviour. In addition, results of structural equation model with latent variables revealed that the three appraisals were differentially related to the outcome variables (i.e., negative emotion, positive emotion, sleep problems, aggression, substance use, mobile phone use, social participation, and precautionary behaviour). Conclusions: The findings highlight the utility of cognitive appraisal, as a core process of coping stress, in explaining the public's emotion and behaviour in the encounter of public health concern. Practically, the findings facilitate the government and practitioners to design and deliver targeted intervention programs to the public.

Publication Type

Journal article.

<95>

Accession Number

20203482577

Author

Abeygunasekera, A.; Jayasinghe, S.

Title

Is the anti-filarial drug diethylcarbamazine useful to treat COVID-19?

Source

Medical Hypotheses; 2020. 14320 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

SARS-CoV-2 virus has caused a pandemic with approximately 414,179 persons affected in 196 countries and 18,440 deaths within a short period of several weeks [1]. The virus is a single-stranded RNA virus belonging to the Coronaviridae family, members of which cause mild infections. However, the epidemics caused by Middle East respiratory syndrome coronavirus (MERS-CoV) and severe acute respiratory syndrome coronavirus (SARS-CoV) resulted in alarming morbidity and mortality. COVID-19 caused by SARS-CoV-2 appears to surpass both these in severity. Given the urgency of the outbreak, there is growing interest in repurposing existing agents which have been approved already or to develop novel drugs that can improve the clinical outcome of affected patients.

Publication Type

Journal article.

<96>

Accession Number

20203482569

Author

Balevic, S. J.; Hornik, C. P.; Green, T. P.; Clowse, M. E. B.; Gonzalez, D.; Maharaj, A. R.; Schanberg, L. E.; Eudy, A. M.; Swamy, G. K.; Hughes, B. L.; Cohen-Wolkowiez, M.

Title

Hydroxychloroquine in patients with rheumatic disease complicated by COVID-19: clarifying target exposures and the need for clinical trials.

Source

Journal of Rheumatology; 2020. 47(9):1424-1430. 24 ref.

Publisher

Journal of Rheumatology Publishing Co Ltd

Location of Publisher

Toronto

Country of Publication

Canada

Abstract

Objective: To characterize hydroxychloroquine (HCQ) exposure in patients with rheumatic disease receiving longterm HCQ compared to target concentrations with reported antiviral activity against the coronavirus disease 2019 caused by SARS-CoV-2 (COVID-19). Method: We evaluated total HCQ concentrations in serum and plasma from published literature values, frozen serum samples from a pediatric systemic lupus erythematosus trial, and simulated concentrations using a published pharmacokinetic model during pregnancy. For each source, we compared observed or predicted HCQ concentrations to target concentrations with reported antiviral activity against SARS-CoV-2. Results: The average total serum/plasma HCQ concentrations were below the lowest SARS-CoV-2 target of 0.48 mg/l in all studies. Assuming the highest antiviral target exposure (total plasma concentration of 4.1 mg/l), all studies had about one-tenth the necessary concentration for in vitro viral inhibition. Pharmacokinetic model simulations confirmed that pregnant adults receiving common dosing for rheumatic diseases did not achieve target exposures; however, the models predict that a dosage of 600 mg once a day during pregnancy would obtain the lowest median target exposure for most patients after the first dose. Conclusion: We found that the average patient receiving treatment with HCQ for rheumatic diseases, including children and non-pregnant/pregnant adults, are unlikely to achieve total serum or plasma concentrations shown to inhibit SARS-CoV-2 in vitro. Nevertheless, patients receiving HCQ long term may have tissue concentrations far exceeding that of serum/plasma. Because the therapeutic window for HCQ

in the setting of SARS-CoV-2 is unknown, well-designed clinical trials that include patients with rheumatic disease are urgently needed to characterize the efficacy, safety, and target exposures for HCQ.

Publication Type

Journal article.

<97>

Accession Number

20203467081

Author

Kumar Saurabh; Shilpi Ranjan

Title

Compliance and psychological impact of quarantine in children and adolescents due to COVID-19 pandemic.

Source

Indian Journal of Pediatrics; 2020. 87(7):532-536. 19 ref.

Publisher

Springer (India) Private Limited

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Objectives: To examine a cohort of children and adolescents quarantined during Coronavirus disease 2019 outbreak in India and to describe their understanding of, compliance with and the psychological impact of quarantine experience. Methods: One hundred twenty one children and adolescents along with their parents were interviewed regarding their compliance and psychological distress during the quarantine period. A comparable data was also obtained from 131 children and adolescents who were not quarantined. Results: Most of the children and adolescents were non-compliant as compliance with all requirements was low (7.43%), though compliance with community protective measures (17.35%) was better than compliance with household protective measures (10.71%). Quarantined children and adolescents experienced greater psychological distress than non-quarantined children and adolescents (p <0.001). Worry (68.59%), helplessness (66.11%) and fear (61.98%) were the most common feelings experienced under quarantine. Conclusions: The low compliance with quarantine requirements as seen in this study raises a serious concern about the effectiveness of quarantine as a preventive measure of disease transmission. Compliance and mental health problems can be improved by providing adequate financial support and enhanced knowledge about pandemic planning.

Publication Type

Journal article.

<98>

Accession Number

20203467076

Author

Points, J.; Manning, L.

Title

Facing up to food fraud in a pandemic.

Source

Food Science & Technology; 2020. 34(3):16-20. 8 ref.

Publisher

Institute of Food Science & Technology

Location of Publisher

London

Country of Publication

UK

Abstract

This article assess the evidence for an increase in food fraud as a result of the COVID-19 pandemic. The most basic harm to the industry and consumers of fraud is economic. You are not getting what you believed you paid for. Lower grade materials will affect the quality of your finished product, or the food on your menu, and can lead to customer complaints and refunds. There can also be reputational and brand damage. If it emerges that your product is not what it is claimed to be then this will undermine customer loyalty, particularly if your brand is based around the quality or provenance of your ingredients. The global disruption caused by COVID-19 has, and will continue to have, a generic impact on the likelihood of many food fraud risks. It is important that food businesses keep their vulnerability assessments and risk management plans under continual review in light of 'COVID-effects' to assess whether they apply to their own supply chain. These effects are layered onto existing macroeconomic trends, such as the increase in plant-based foods, direct online sales and supply shortages due to conflict or climatic events. It is very difficult to obtain objective evidence of the incidence of food fraud in a specific sector, or to determine objective trends. Evidence based on reported incidence is fraught with caveats and needs to be interpreted with care. These caveats notwithstanding, there is no evidence within the Horizonscan database that COVID-19 has yet led to an increase in food fraud.

Publication Type

Journal article.

<99>

Accession Number

20203467026

Author

Aghababaeian, H.; Hamdanieh, L.; Ostadtaghizadeh, A.

Title

Alcohol intake in an attempt to fight COVID-19: a medical myth in Iran.

Source

Alcohol; 2020. 88:29-32. many ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

The coronavirus disease 2019 (COVID-19) spread rapidly worldwide and led to the deaths of thousands of people. To date, there is not any vaccine or specific antiviral medicine that can prevent or treat this virus. This caused panic among people who try their best to prevent being infected. In Iran, methanol poisoning was reported and led to the death of hundreds of people in several provinces. The incident occurred after a rumor circulated in the country that drinking alcohol (ethanol) can cure or prevent being infected by COVID-19.

Publication Type

Journal article.

<100>

Accession Number

20203469999

Author

Shyamala Anand; Radhika Mamidi; Pritha Biswas

Title

Early impact of COVID-19: observations from an integrated WASH and NTD project in two south-eastern states in India.

Source

Leprosy Review; 2020. 91(3):295-298. 6 ref.

Publisher

LEPRA

Location of Publisher

Colchester

Country of Publication

UK

Abstract

The COVID-19 pandemic in India has impacted all segments of the population but it has been particularly detrimental to the most vulnerable and has also impacted implementation of health and development projects among these populations. This report describes the early impact (March-August 2020) of the COVID-19 pandemic on people affected by leprosy and lymphatic filariasis (LF) and their households in an integrated WASH and NTD project in two south-eastern states in India.

Publication Type

Journal article.

<101>

Accession Number

20203469988

Author

Kuldeep Dhama; Sharun Khan; Ruchi Tiwari; Shubhankar Sircar; Sudipta Bhat; Malik, Y. S.; Singh, K. P.; Chaicumpa, W.; Bonilla-Aldana, D. K.; Rodriguez-Morales, A. J.

Title

Coronavirus disease 2019-COVID-19.

Source

Clinical Microbiology Reviews; 2020. 33(4)367 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

In recent decades, several new diseases have emerged in different geographical areas, with pathogens including Ebola virus, Zika virus, Nipah virus, and coronaviruses (CoVs). Recently, a new type of viral infection emerged in Wuhan City, China, and initial genomic sequencing data of this virus do not match with previously sequenced CoVs, suggesting a novel CoV strain (2019-nCoV), which has now been termed severe acute respiratory syndrome CoV-2 (SARS-CoV-2). Although coronavirus disease 2019 (COVID-19) is suspected to originate from an animal host (zoonotic origin) followed by human-to-human transmission, the possibility of other routes should not be ruled out. Compared to diseases caused by previously known human CoVs, COVID-19 shows less severe pathogenesis but higher transmission competence, as is evident from the continuously increasing number of confirmed cases globally. Compared to other emerging viruses, such as Ebola virus, avian H7N9, SARS-CoV, and Middle East respiratory syndrome coronavirus (MERS-CoV), SARS-CoV-2 has shown relatively low pathogenicity and moderate transmissibility. Codon usage studies suggest that this novel virus has been transferred from an animal source, such as bats. Early diagnosis by real-time PCR and next-generation sequencing has facilitated the identification of the pathogen at an early stage. Since no antiviral drug or vaccine exists to treat or prevent SARS-CoV-2, potential therapeutic strategies that are currently being evaluated predominantly stem from previous experience with treating SARS-CoV, MERS-CoV, and other emerging viral diseases. In this review, we address epidemiological, diagnostic, clinical, and therapeutic aspects, including perspectives of vaccines and preventive measures that have already been globally recommended to counter this pandemic virus.

Publication Type

Journal article.

<102>

Accession Number

20203469964

Author

Alzaid, E. H.; Alsaad, S. S.; Nariman Alshakhis; Doaa Albagshi; Rania Albesher; Mahdi Aloqaili

Title

Prevalence of COVID-19-related anxiety among healthcare workers: a cross-sectional study.

Source

Journal of Family Medicine and Primary Care; 2020. 9(9):4904-4910. 15 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

COVID-19 was labeled as a pandemic in March 2020. Healthcare workers (HCW) are confronting great mental stressors in coping with the crisis. In Saudi Arabia, research on the psychological effect of COVID-19 on HCW is lacking. Aim: To evaluate COVID-19 psychological impact on HCW and determine anxiety predictors to identify high-risk individuals. Materials and Methods: A descriptive cross-sectional study was conducted on HCW in First Health Cluster Institutes in Eastern Province. An English self-administered questionnaire was adopted from similar research done in China. The original questionnaires were modified to meet the objectives of our study and suit Saudi sociodemographic differences. Generalized anxiety disorder-7 scale was incorporated to be the main tool for assessing the psychological impact. Results: One-third of HCW were classified as having anxiety disorder. In univariate analyses, the age group in years (P = 0.026), gender (P = 0.001), nationality (P = 0.033), and living with family (P = 0.007) significantly influenced anxiety disorder. However, in the multivariate regression model, gender (P = 0.004), living with family (P = 0.021), family history of COVID-19 (P = 0.022), and been suspected or confirmed with COVID-19 infection (P = 0.018) remained statistically significant when compared to anxiety disorder. Conclusion: During early COVID-19 pandemic, anxiety disorder among HCW was noticeable. Being a female, living with family members, and having a family history of COVID-19 increased the risk for anxiety disorder.

Publication Type

Journal article.

<103>

Accession Number

20203469949

Author

Hussein, N. R.; Naqid, I. A.; Jacksi, K.; Abdi, B. A.

Title

Assessment of knowledge, attitudes, and practices toward COVID-19 virus among university students in Kurdistan region, Iraq: online cross-sectional study.

Source

Journal of Family Medicine and Primary Care; 2020. 9(9):4809-4814. 17 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background and Aim: The World Health Organization (WHO) declared the novel coronavirus infection COVID-19 as a pandemic on March 11, 2020. Adherence to infection control measures is potentially influenced by people's knowledge, attitudes, and practices (KAP) about the infection. This project was performed to assess the KAP toward COVID-19 of university students in Kurdistan Region, Iraq. Materials and Methods: An online cross-sectional study was performed in April 2020 to evaluate KAP about coronavirus infection among university students in Kurdistan Region, Iraq. A total of 1959 students were recruited in this study and ages ranged from 18 to 55 years old. Results: Among the respondents, 55.03% were female, 93.8% were from Duhok province, and the majority of participants (93.4%) were undergraduate students. The overall correct answer rate of the knowledge questions toward COVID-19 was 75.8% with an average score of 9.1 +/- 2.1 SD out of 12. Participants showed better knowledge of infection prevention with around 86.2% correct answers, while the lowermost subscale scores were (67.7%) for questions toward the mode of the transmission of the infection. We found a significant difference in knowledge scores across genders, marital status, program of study, and among different colleges/institutes ($P < 0.001$). The majority of participants agreed that the local authority will control the infection successfully (69.8%) and showed confidence that the battle against the virus will be won by Kurdistan Regional Government (86.7%). The majority of the recruited sample (93.0%) had not been in any area with crowd and 57.3% used facemasks when leaving out, recently. Conclusion: Students demonstrated good knowledge, appropriate practice, and positive attitude about the infection. These findings indicated that local health education plans to improve people's knowledge about the infection are valuable in protecting the community. The results may be helpful in tailoring an educational program for better containment of the infection and halting the spread of the virus.

Publication Type

Journal article.

<104>

Accession Number

20203469941

Author

Preeti Gupta; Anshi Gupta; Sumeet Dixit; Hemant Kumar

Title

Knowledge, attitude, and practices regarding COVID-19: a cross-sectional study among rural population in a northern Indian district.

Source

Journal of Family Medicine and Primary Care; 2020. 9(9):4769-4773. 14 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: First case of COVID-19 was reported in December 2019 and within a timespan of few months, it has become a pandemic. It has created havoc globally and India is no exception. Globally, it is emphasized that preventive measures play an important role in controlling the rapid spread of COVID-19. In India, 68% of population is rural and this population is going to play a crucial role in the containment of the pandemic. Realizing the key position of rural population in COVID control, this study was conducted to assess the knowledge, attitude, and practices of rural population about the disease. Method and Material: A cross-sectional questionnaire-based study was conducted on patients and their relatives from 1st April, 2020 to 31st May, 2020. A total of 372 participants hailing from rural areas were enrolled. Results: Most common source of information for the participants was through television (54.8%) and radio (49.2%). Only 77% claimed that they were using face mask and 72% claimed to be following social distancing. A large (60%) proportion of the participants did not know that COVID-19 could spread from asymptomatic patients. Education of participants was a key determinant for use of social distancing and face mask as a preventive tool. With increasing age, the practice of social distancing and the use of face mask were decreasing in our study. Conclusion: Television/Radio channels form an important source of information and need to be used more effectively to educate the people about the disease and create awareness about effective preventive measures. People need to be educated about the role of asymptomatic carriers in spreading the disease.

Publication Type

Journal article.

<105>

Accession Number

20203469939

Author

Limalemla Jamir; Shaista Najeeb; Rajeev Aravindakshan

Title

COVID-19 preparedness among public and healthcare providers in the initial days of nationwide lockdown in India: a rapid electronic survey.

Source

Journal of Family Medicine and Primary Care; 2020. 9(9):4756-4760.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background and Aims: The COVID-19 Pandemic has been raging across continents in recent months. Public health measures are crucial in preventing COVID-19. The Government of India declared a nationwide lockdown on 24 March, 2020. The objective of this study is to assess preparedness among general public and healthcare providers against COVID-19 by way of adopting public health measures at the very beginning of the nationwide lockdown in India. Settings and Design: A rapid cross sectional electronic survey was conducted across the country between 25 and 27 March, 2020. Methods and Materials: Participants were general public and healthcare providers. Online questionnaire was generated in Google Forms. This included precautionary measures such as staying home, hand hygiene, wearing masks, cough hygiene and advisory against face touching. The web link to the form was shared through WhatsApp. Statistical Analysis Used: Descriptive data analysis was done using Epi Info software (version-7). Results: A total of 226 persons (general public = 183; healthcare providers [HCPs] = 43) participated in the study. During the lockdown, HCPs spent more time outside than the general public ($p = 0.009$). Only 47% of the participants claimed to practise frequent hand washing and majority (72%; n = 163) did not wear masks while outdoors. Almost a half (45%) of the participants touched their face frequently and very few (8%) participants covered their mouth or nose while coughing or sneezing. There was no significant difference between HCPs and general public in frequent hand washing ($p = 0.456$), wearing masks ($p = 0.255$), face touching ($p = 0.632$) or covering mouth/nose while coughing or sneezing ($p = 0.428$). Conclusion: There is lack of preparedness among general public and healthcare providers against COVID-19 at the beginning of the nationwide lockdown in India.

Publication Type

Journal article.

<106>

Accession Number

20203463775

Author

Chatterjee, K.; Kaushik Chatterjee; Arun Kumar; Subramanian Shankar

Title

Healthcare impact of COVID-19 epidemic in India: a stochastic mathematical model. (Special Issue: COVID-19 collection.)

Source

Medical Journal Armed Forces India; 2020. 76(2):147-155.

Publisher

Elsevier

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Background: In India, the SARS-CoV-2 COVID-19 epidemic has grown to 1251 cases and 32 deaths as on 30 Mar 2020. The healthcare impact of the epidemic in India was studied using a stochastic mathematical model. Methods: A compartmental SEIR model was developed, in which the flow of individuals through compartments is modeled using a set of differential equations. Different scenarios were modeled with 1000 runs of Monte Carlo simulation each using MATLAB. Hospitalization, intensive care unit (ICU) requirements, and deaths were modeled on SimVoi software. The impact of nonpharmacological interventions (NPIs) including social distancing and lockdown on checking the epidemic was estimated. Results: Uninterrupted epidemic in India would have resulted in more than 364 million cases and 1.56 million deaths with peak by mid-July. As per the model, at current growth rate of 1.15, India is likely to reach approximately 3 million cases by 25 May, implying 125,455 (+/-18,034) hospitalizations, 26,130 (+/-3298) ICU admissions, and 13,447 (+/-1819) deaths. This would overwhelm India's healthcare system. The model shows that with immediate institution of NPIs, the epidemic might still be checked by mid-April 2020. It would then result in 241,974 (+/-33,735) total infections, 10,214 (+/-1649) hospitalizations, 2121 (+/-334) ICU admissions, and 1081 (+/-169) deaths. Conclusion: At the current growth rate of epidemic, India's healthcare resources will be overwhelmed by the end of May. With the immediate institution of NPIs, total cases, hospitalizations, ICU requirements, and deaths can be reduced by almost 90%.

Publication Type

Journal article.

<107>

Accession Number

20203469906

Author

Satish Kumar; Sonkar, S. K.; Isha Atam; Harish Gupta; Parmar, K. S.; Verma, S. K.; Virendra Atam

Title

Socio-economic impact of first 21 days nationwide lockdown- 1 on the spread of SARS-CoV-2 in India in relation to health.

Source

Journal of Family Medicine and Primary Care; 2020. 9(9):4557-4562. 34 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

On March 11, 2020 World Health Organization (WHO) declared corona virus disease (COVID-19) to be a pandemic disease, which is caused by a novel coronavirus "severe acute respiratory syndrome coronavirus-2 (SARS CoV- 2)" and till now it has affected about 213 countries. A nationwide lockdown was announced by the Honorable Prime Minister of India on 24th March 2020 for 21 days to prevent the spread of the COVID-19. Our nation, being a developing nation and emerging market, there was a vast socio-economic consequence of this lockdown. Our health care services were at the war front. Due to this step, there was a reduction in the rate of the spread of COVID- 19. Other health hazards due to pollution, road traffic accidents, crimes including robberies, rapes, murders, thefts, etc., were decreased substantially. People learned good hygiene and family bonding, which was further strengthened. Negatively affected sectors were trading companies, schools, and education, economy, stock markets, ongoing events in sports, politics, entertainment industry, transportation, and activities related to religious places, tourists, and hotels. Due to starvation, poor people were worst affected as they were daily bread earners though, the government tried to provide money and food. Finally, it was the primary care physician, termed "corona warriors," who suffered socially, economically, mentally, and physically. Despite all these hardships, the primary care physician learned the innovative way to help patients and ease their suffering with proper advice and awareness.

Publication Type

Journal article.

<108>

Accession Number

20203478174

Author

Abolfotouh, M. A.; Almutairi, A. F.; Banimustafa, A. A.; Hussein, M. A.

Title

Perception and attitude of healthcare workers in Saudi Arabia with regard to COVID-19 pandemic and potential associated predictors.

Source

BMC Infectious Diseases; 2020. 20(719):(29 September 2020). 28 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Healthcare workers (HCWs) face considerable mental and physical stress caring for patients with Covid-19. They are at higher risk of acquiring and transmitting this virus. This study aims to assess perception and attitude of HCWs in Saudi Arabia with regard to Covid-19, and to identify potential associated predictors. Methods: In a cross-sectional study, HCWs at three tertiary hospitals in Saudi Arabia were surveyed via email with an anonymous link, by a concern scale about Covid-19 pandemic during 15-30 April, 2020. Concerns of disease severity, governmental efforts to contain it and disease outcomes were assessed using 32 concern statements in five distinct domains. Multiple regression analysis was used to identify predictors of high concern scores. Results: A total of 844 HCW responded to the survey. Their average age was 40.4 +/- 9.5 years, 40.3% were nurses, 58.2% had direct patient contact, and 77.3% were living with others. The majority of participants (72.1%) had overall concern scores of 55 or less out of a maximum score of 96 points, with an overall mean score of 48.5 +/- 12.8 reflecting moderate level of concern. Three-fourth of respondents felt at risk of contracting Covid-19 infection at work, 69.1% felt threatened if a colleague contracted Covid-19, 69.9% felt obliged to care for patients infected with Covid-19 while 27.7% did not feel safe at work using the standard precautions available. Nearly all HCWs believed that the government should isolate patients with Covid-19 in specialized hospitals (92.9%), agreed with travel restriction to and/or from areas affected by Covid-19 (94.7%) and felt safe the government implemented curfew and movement restriction periods (93.6%). Predictors of high concern scores were; HCWs of Saudi nationality ($p < 0.001$), younger age ($p = 0.003$), undergraduate education ($p = 0.044$), living with others ($p = 0.003$) working in the western region ($p = 0.003$) and direct contact with patients ($p = 0.018$). Conclusions: This study highlights the high concern among HCWs about Covid-19 and identifies the predictors of those with highest concern levels. To minimize the potential negative impact of those concerns on the performance of HCWs during pandemics, measures are necessary to enhance their protection and to minimize the psychological effect of the perceived risk of infection.

Publication Type

Journal article.

<109>

Accession Number

20203475095

Author

Murillo-Zamora, E.; Trujillo, X.; Huerta, M.; Rios-Silva, M.; Mendoza-Cano, O.

Title

Male gender and kidney illness are associated with an increased risk of severe laboratory-confirmed coronavirus disease.

Source

BMC Infectious Diseases; 2020. 20(674):(16 September 2020). 26 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: To identify factors predicting severe coronavirus disease 2019 (COVID-19) in adolescent and adult patients with laboratory-positive (quantitative reverse-transcription polymerase chain reaction) infection. Method: A retrospective cohort study took place, and data from 740 subjects, from all 32 states of Mexico, were analyzed. The association between the studied factors and severe (dyspnea requiring hospital admission) COVID-19 was evaluated through risk ratios (RRs) and 95% confidence intervals (CIs). Results: Severe illness was documented in 28% of participants. In multiple analysis, male gender (RR = 1.13, 95% CI 1.06-1.20), advanced age ([reference: 15-29 years old] 30-44, RR = 1.02, 95% CI 0.94-1.11; 45-59, RR = 1.26, 95% CI 1.15-1.38; 60 years or older, RR = 1.44, 95% CI 1.29-1.60), chronic kidney disease (RR = 1.31, 95% CI 1.04-1.64) and thoracic pain (RR = 1.16, 95% CI 1.10-1.24) were associated with an increased risk of severe disease. Conclusions: To the best of our knowledge, this is the first study evaluating predictors of COVID-19 severity in a large subset of the Latin-American population. Male gender and kidney illness were independently associated with the risk of severe COVID-19. These results may be useful for health care protocols for the early detection and management of patients that may benefit from opportune and specialized supportive medical treatment.

Publication Type

Journal article.

<110>

Accession Number

20203478698

Author

Asadi, L.; Tabatabaei, R. S.; Safinejad, H.; Mohammadi, M.

Title

New corona virus (COVID-19) management in pregnancy and childbirth.

Source

Archives of Clinical Infectious Diseases; 2020. 15(Covid-19)55 ref.

Publisher

Kowsar Medical Publishing

Location of Publisher

Heerlen

Country of Publication

Netherlands

Abstract

Context: Coronavirus disease 2019 (COVID-19) is an emerging disease that has been associated with a rapid increase in afflicted cases and deaths since its first introduction in Wuhan, China, in December 2019. The emerging infection can have a significant impact on pregnant women and the fetus. The purpose of this study was to review and summarize the latest research on the management and treatment of women in pregnancy and childbirth in the world and management protocols available in Iran and other countries. Evidence Acquisition: In this review study, we examined Persian and English studies by searching the Pubmed, Web of Science, UpToDate, SID, Scopus, Google Scholar, and medRxiv databases with keywords pregnant, pregnancy, gravidity, coronavirus, infection, COVID-19, and their Persian equivalents. Articles and reviews were on humans. After reviewing and removing duplicate and non-eligible articles, 12 articles and 11 guidelines and recommendations were obtained. Results: The results of the review study were categorized as follows: clinical course of COVID-19 in pregnancy, perinatal outcomes, neonatal outcomes, vertical transmission potential, management of COVID-19 in pregnancy, labor, and delivery in women, postpartum stage in women with COVID-19, breastfeeding, and care for a infant born to a mother with COVID-19. The general principles of caring for women in pregnancy and childbirth included early separation, using aggressive infection control methods, non-administration of corticosteroids repeatedly, oxygen therapy, preventing from fluid overload, using empirical antibiotics (due to the risk of secondary bacterial infection), co-infection testing of other infections, avoiding breastfeeding in mothers with definitive positive tests, and being cautious in suspicious cases. Conclusions: Given the limited information on the complications and outcomes of the virus in pregnancy and childbirth and the increasing number of studies, the provision of up-to-date care according to global and regional processes and guidelines is recommended for mothers affected and suspected with COVID-19.

Publication Type

Journal article.

<111>

Accession Number

20203478660

Author

Moracanin, S. V.; Dzonlaga, S.; Memisi, N.; Dukic, D.; Ostojic, Z.

Title

Cleaning and disinfection procedures in the dairy industry during COVID-19.

Source

Acta Agriculturae Serbica; 2020. 25(49):71-76. 22 ref.

Publisher

University of Kragujevac

Location of Publisher

Čačak

Country of Publication

Serbia

Abstract

The pandemic caused by the coronavirus (SARS-CoV-2) spread to Serbia in March 2020, causing a large-scale outbreak of infection in humans and more than 200 human deaths in two months. Although data on the epidemiology, virology, clinical features, treatment and prevention of this severe respiratory syndrome (COVID-19) are still incomplete, it is certain that the main mode of transmission of the virus is from person to person, through respiratory droplets as the primary transmission route. To date, the World Health Organization has no evidence to suggest that the virus can be transmitted through food, but human infection due to direct contact with contaminated surfaces, tools, equipment and other objects cannot be excluded. The application of good hygiene and manufacturing practices is the most important control measure against this causative agent, primarily involving appropriate employee protection, continuous monitoring of movement and entry restrictions for people and means of transport, and proper targeted sanitation. The choice and use of disinfectants, mostly peroxide, ethanol and hypochlorite based compounds, ensure proper protection of people and an undisturbed production cycle in the food industry in general, and in the dairy industry in particular.

Publication Type

Journal article.

<112>

Accession Number

20203475526

Author

Wicaksono, A.; Silva, J. A. T. da

Title

Is COVID-19 impacting plant science, and is plant science impacting COVID-19?

Source

Notulae Scientia Biologicae; 2020. 12(3):769-772. 19 ref.

Publisher

AcademicPres

Location of Publisher

Cluj-Napoca

Country of Publication

Romania

Abstract

COVID-19 changed 2020 massively after becoming a worldwide pandemic. Many countries affected by the disease witnessed disruptions in the agricultural, farming, industry, production and distribution sectors, causing a loss of crops due to reduced consumer demand. Sales of cut flowers, potted plants and seasonal crops that are sensitive to specific seasons or dates were affected, as were fertilizer and food security. Academics, including plant scientists, with limited work or research conditions during the pandemic, alleviated their work through alternative approaches, e.g., in silico research, or made more time to writing research papers, while student education has largely been placed on hold or held online by lecturers. Most COVID-19 research has focused primarily on medical and social aspects while some plant science-related research has been conducted on the use of traditional medicinal plants as possible alleviating agents, but not cures, to COVID-19 patients. The integrity of science and publishing, including research related to plants, is being tested as cases of superficial research, lax or superficial peer review, and misinformation abound. COVID-19 has thus had limited impact on plant science, and vice versa, thus far, even though it is likely that most plant scientists were affected.

Publication Type

Journal article.

<113>

Accession Number

20203475505

Author

Sharma, A. D.; Inderjeet Kaur

Title

Molecular docking and pharmacokinetic screening of eucalyptol (1,8 cineole) from eucalyptus essential oil against SARS-CoV-2.

Source

Notulae Scientia Biologicae; 2020. 12(3):536-545. 12 ref.

Publisher

AcademicPres

Location of Publisher

Cluj-Napoca

Country of Publication

Romania

Abstract

SARS-CoV-2 (COVID-19), member of corona virus family, is a positive single stranded RNA virus. Due to lack of drugs it is spreading its tentacles across the world. Being associated with cough, fever, and respiratory distress, this disease caused more than 15% mortality worldwide. Mpro/3CLpro has recently been regarded as a suitable target for drug design due to its vital role in virus replication. The current study focused on the inhibitory activity of eucalyptol (1,8 cineole), an essential oil component from eucalyptus oil, against Mpro/3CLpro from SARS-CoV-2. Till date there is no work is undertaken on in-silico analysis of this compound against Mpro/3CLpro of SARS-CoV-2. Molecular docking studies were conducted by using 1-click dock tool and Patchdock analysis. In-silico absorpt ion, distribution, metabolism, excretion and toxicity (ADMET) profile were also studied. The calculated parameters such as docking score indicated effective binding of eucalyptol to COVID-19 Mpro protein. Active site prediction revealed the involvement of active site residues in ligand binding. Interactions results indicated that, Mpro/3CLpro/eucalyptol complexes forms hydrophobic interactions. ADMET studies provided guidelines and mechanistic scope for identification of potent anti-COVID 19 drug. Therefore, eucalyptol may represent potential herbal treatment to act as COVID-19 Mpro/3CLpro inhibitor, a finding which must be validated in vivo.

Publication Type

Journal article.

<114>

Accession Number

20203476795

Author

Siddiqui, M.; Manansala, J. S.; Abdulrahman, H. A.; Nasrallah, G. K.; Smatti, M. K.; Younes, N.; Althani, A. A.; Yassine, H. M.

Title

Immune modulatory effects of vitamin D on viral infections.

Source

Nutrients; 2020. 12(9)many ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Viral infections have been a cause of mortality for several centuries and continue to endanger the lives of many, specifically of the younger population. Vitamin D has long been recognized as a crucial element to the skeletal system in the human body. Recent evidence has indicated that vitamin D also plays an essential role in the immune response against viral infections and suggested that vitamin D deficiency increases susceptibility to viral infections as well as the risk of recurrent infections. For instance, low serum vitamin D levels were linked to increased occurrence of high burdens viral diseases such as hepatitis, influenza, Covid-19, and AIDS. As immune cells in infected patients are responsive to the ameliorative effects of vitamin D, the beneficial effects of supplementing vitamin D-deficient individuals with an infectious disease may extend beyond the impact on bone and calcium homeostasis. Even though numerous studies have highlighted the effect of vitamin D on the immune cells, vitamin D's antiviral mechanism has not been fully established. This paper reviews the recent mechanisms by which vitamin D regulates the immune system, both innate and adaptive systems, and reflects on the link between serum vitamin D levels and viral infections.

Publication Type

Journal article.

<115>

Accession Number

20203476768

Author

Jezewska-Zychowicz, M.; Plichta, M.; Krolak, M.

Title

Consumers' fears regarding food availability and purchasing behaviors during the COVID-19 pandemic: the importance of trust and perceived stress.

Source

Nutrients; 2020. 12(9)70 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The present study aimed to investigate whether trust in circulating information and perceived stress are predictors of consumers' fear of limited access to food as well as predictors of food purchase behaviors during the COVID-19 pandemic. The computer-assisted web interviewing (CAWI) technique was used to collect data from 1033 Polish adults in March 2020. Logistic regression was used to estimate the likelihood

of fear of limited access to food and the likelihood of purchase of larger amounts of food than usual. The likelihood of experiencing fear of limited access to food increased by 16% with higher perceived stress, by 50% with higher trust in "Mass media and friends", and by 219% with perceived changes in food availability in the previous month. Trust in "Polish government institutions" decreased the chance of experiencing such fears by 22%. The likelihood of purchasing larger quantities of food than usual increased by 9% with higher perceived stress, by 46% with higher trust in "Mass media and friends", by 81% with perceived changes in food availability in the last month, and by 130% with fears of limited access to food as the pandemic spreads. Government institutions may have difficulty in disseminating pandemic-related recommendations through media, not only due to relatively low trust people have in media organizations but also due to the increasing likelihood of the occurrence of both fears regarding food availability and panic-stricken food-buying behaviors with increase in trust in this source of information. Therefore, it is necessary to develop interventions that will reduce perceived stress and improve the trust in information from reputable sources.

Publication Type

Journal article.

<116>

Accession Number

20203476743

Author

Sanchez-Sanchez, E.; Ramirez-Vargas, G.; Avellaneda-Lopez, Y.; Orellana-Pecino, J. I.; Garcia-Marin, E.; Diaz-Jimenez, J.

Title

Eating habits and physical activity of the Spanish population during the COVID-19 pandemic period.

Source

Nutrients; 2020. 12(9)25 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Due to the pandemic situation caused by the COVID-19 infection, some governments have implemented house confinement measures. The objective of our study is to learn the dietary patterns, consumption, and physical activity of the Spanish population before and during the period of confinement by COVID-19. A cross-sectional descriptive study based on a questionnaire during May 2020, coinciding with the period of

confinement and the step forward into Phase 1, is carried out. During confinement, the adherence to the Mediterranean Diet increases (8.0% versus 4.7%; p < 0.001). No socio-demographic variables show statistical significance (p < 0.05) regarding good adherence to the Mediterranean Diet (MD) before and during confinement. During confinement, consumption of homemade baking shows a higher increase (0.28% versus 4.60%; p = 0.004). During confinement, the number of subjects that practice exercise decreases (29.4% versus 28.8%; p = 0.004), as well as the time spent exercising (more than an hour, 26.6% versus 14.7%, p = 0.001). Mediterranean Diet adherence slightly increases during confinement, although consumption of 'unhealthy' food also increases. Moreover, the number of subjects that practice physical activity, as well as the time spent on it weekly, decreases.

Publication Type

Journal article.

<117>

Accession Number

20203470582

Author

Dashash, M.; Almasri, B.; Takaleh, E.; Halawah, A. A.; Sahyouni, A.

Title

Educational perspective for the identification of essential competencies required for approaching patients with COVID-19.

Source

Eastern Mediterranean Health Journal; 2020. 26(9):1011-1017. 33 ref.

Publisher

World Health Organization, Regional Office for the Eastern Mediterranean

Location of Publisher

Cairo

Country of Publication

Egypt

Abstract

Background: Health professionals are at the frontline of the COVID-19 pandemic and are directly exposed to infection hazards. Therefore, they should have the essential competencies for approaching patients. Aims: The study aimed to identify essential competencies required for approaching patients with COVID-19. Methods: All postgraduate health professionals at the Syrian Virtual University SVU (n=28) were invited to participate in the study during the Covid-19 lockdown in 2020, resulting in 20 postgraduates accepting. The Delphi technique was adopted for identifying competencies in medical education and a virtual meeting was undertaken through the University Management System in order to provide instruction and create a list of competencies. Competency domains were divided into 'knowledge', 'skills', and 'attitudes' and were

classified into four categories: etiology, assessment and diagnosis, management, and prognosis. Results: Fifty-two essential competencies were identified; 7 competencies on etiology, 7 related to assessment and diagnosis, 34 related to management, and 4 related to prognosis Conclusion: It is hoped that the identified competencies would help health professionals to deliver the best health care for COVI-19 patients, as well as help policy-makers to support comprehensive training programmes that can equip health professionals with the required competencies to fight the pandemic.

Publication Type

Journal article.

<118>

Accession Number

20203471721

Author

Noara Alhusseini; Abdulrahman Alqahtani

Title

COVID-19 pandemic's impact on eating habits in Saudi Arabia.

Source

Journal of Public Health Research; 2020. 9(3):354-360. 47 ref.

Publisher

PAGEPress Publications

Location of Publisher

Pavia

Country of Publication

Italy

Abstract

Background: COVID-19 virus has been reported as a pandemic in March 2020 by the WHO. Having a balanced and healthy diet routine can help boost the immune system, which is essential in fighting viruses. Public Health officials enforced lockdown for residents resulting in dietary habits change to combat sudden changes. Design and Methods: A cross-sectional study was conducted through an online survey to describe the impact of the COVID-19 pandemic on the eating habits, quality and quantity of food intake among adults in Saudi Arabia. SPSS version 24 was used to analyze the data. Comparison between general dietary habits before and during COVID-19 for ordinal variables was performed by Wilcoxon Signed Rank test, while McNemar test was performed for nominal variables. The paired samples t-test was used to compare the total scores for food quality and quantity before and during COVID-19 periods. Results: 2706 adults residing in Riyadh completed the survey. The majority (85.6%) of the respondents reported eating home-cooked meals on a daily basis during COVID-19 as compared to 35.6% before ($p<0.001$). The mean score for the quality of food intake was slightly higher ($p=0.002$) before the COVID-19 period (16.46+/-2.84) as compared

to the during period (16.39+/-2.79). The quantity of food mean score was higher (p<0.001) during the COVID-19 period (15.70+/-2.66) as compared to the before period (14.62+/-2.71). Conclusion: Dietary habits have changed significantly during the COVID-19 pandemic among Riyadh residents. Although some good habits increased, the quality and the quantity of the food was compromised. Public Health officials must focus on increased awareness on healthy eating during pandemics to avoid negative consequences. Future research is recommended to better understand the change in dietary habits during pandemics using a detailed food frequency questionnaire.

Publication Type

Journal article.

<119>

Accession Number

20203471720

Author

Amani Alhazmi; Ali, M. H. M.; Ali Mohieldin; Farah Aziz; Osman, O. B.; Waled A. M. Ahmed

Title

Knowledge, attitudes and practices among people in Saudi Arabia regarding COVID-19: a cross-sectional study.

Source

Journal of Public Health Research; 2020. 9(3):345-353. 32 ref.

Publisher

PAGEPress Publications

Location of Publisher

Pavia

Country of Publication

Italy

Abstract

Background: The general population's compliance with preventive measures and legislation is mainly influenced by their knowledge level, attitude, and practices. This study assessed the knowledge, attitude, and practices of public residents towards corona virus disease-2019 preventive measures in Saudi Arabia. Design and Methods: This is a cross-sectional study; it used a validated cross-sectional online survey that received responses from 13 Saudi administrative regions. Results: There were 1513 participants who completed the study (55% females; 77.7%, university education). Knowledge level, attitude, and practices towards corona virus disease-2019 were 81.3%, 86.6%, and 81.9%, respectively. The knowledge subscales showed that 1496 (98.9%) participants knew the system targeted by the virus, 96.2% and 97.3% knew the causative agent and symptoms, 783 (52.2%) participants knew the transmission modes, and 696 (46.0%) participants knew about the complications. The attitude subscales included 1465 (96.5%) participants who

had dealt with an infected person, 1451 (95.9%) participants who isolated in a health facility, 1195 (97.0%) participants who knew about hand washing, and 1387 (91.7%) participants who thought the virus spread through home delivery. The practice subscales included 1505 (99.5%) participants who properly disposed of gloves and tissues and 1347 (89.0%) participants who reported safe practices when coughing or sneezing. Conclusions: This study showed satisfactory knowledge, attitude, and practice towards corona virus disease-2019 in Saudi Arabia. The educational level is a dominant influencing factor for knowledge, attitude, and practice.

Publication Type

Journal article.

<120>

Accession Number

20203471707

Author

Meenakshi Sinha; Babita Pande; Ramanjan Sinha

Title

Impact of COVID-19 lockdown on sleep-wake schedule and associated lifestyle related behavior: a national survey.

Source

Journal of Public Health Research; 2020. 9(3):239-245. 29 ref.

Publisher

PAGEPress Publications

Location of Publisher

Pavia

Country of Publication

Italy

Abstract

Background: Lockdowns to prevent the community transmission of COVID-19 pandemic has confined the people at home and imposed social restrictions, which is expected to cause alterations in circadian driven sleep-wake schedule and its associated lifestyle behaviors. Design and Methods: An online questionnaire-based survey was conducted to assess the impact of lockdown on the sleep-wake pattern, meal timings and digital media exposure time on the Indian population during lockdown. Responses of 1511 participants (age >=18 years) were analyzed to assess the effect of gender and age on these parameters before and during lockdown. Results: The sleep onset-wakeup times and meals' time was significantly delayed during lockdown, which was more pronounced in younger subjects. However, young individuals reported increased sleep duration at this time. Increased digital media duration was evident in all age groups, mainly in males. However, females reported more delay in sleep onset-waking time and first meal timing with

longer sleep duration during lockdown. Conclusions: Discord with social and natural cues due to complete lockdown during COVID-19 pandemic leads to a state of social jetlag with delayed sleep-wake, meal timings and excessive digital media exposure among Indians, which has differential impact on males and females as well as across different age groups. These findings have applied implications in sleep health and related behavior during longer social isolation conditions such as current COVID-19 or similar situations and may help to prepare better for any such future events.

Publication Type

Journal article.

<121>

Accession Number

20203458106

Author

Andam, K. S.; Edeh, H.; Oboh, V.; Pauw, K.; Thurlow, J.

Title

Estimating the economic costs of COVID-19 in Nigeria.

Source

NSSP Working Paper - Nigeria Strategy Support Program; 2020. (63):iii + 19 pp. 31 ref.

Publisher

International Food Policy Research Institute (IFPRI)

Location of Publisher

Washington D.C.

Country of Publication

USA

Abstract

In this paper we analyze the economic impacts of the COVID-19 pandemic and the policies adopted to curtail the spread of the disease in Nigeria. We carry out simulations using a multiplier model based on the 2018 Social Accounting Matrix (SAM) for Nigeria, which includes supply-use tables for 284 goods and services. The pandemic's global reach and impact on the global economy combined with the response policies in Nigeria represent a large, sudden shock to the country's economy. The SAM multiplier model is well-suited for measuring the short-term direct and indirect results of this type of shock because the SAM represents both the structure of the economy and the interactions among economic actors via commodity and factor markets. Our analysis focuses on the five-week lockdown implemented by the federal government across the Federal Capital Territory of Abuja and Lagos and Ogun states from late March to early May 2020, the federal lockdown for Kano from mid-April, and the state-level lockdowns that were implemented from mid-April for around seven weeks in Akwa Ibom, Borno, Ekiti, Kwara, Osun, Rivers, and Taraba states. We estimate that during the lockdown periods Nigeria's GDP suffered a 34.1 percent loss

due to COVID-19, amounting to USD 16 billion, with two-thirds of the losses coming from the services sector. The agriculture sector, which serves as the primary means of livelihood for most Nigerians, suffered a 13.1 percent loss in output (USD 1.2 billion). Although primary agricultural activities were excluded from the direct restrictions on economic activities imposed in the lockdown zones, the broader agri-food system was affected indirectly because of its linkages with the rest of the economy. We estimate that households lost on average 33 percent of their incomes during the period, with the heaviest losses occurring for rural non-farm and for urban households. The economic impacts of COVID-19 include a 14-percentage point temporary increase in the poverty headcount rate for Nigeria, implying that 27 million additional people fell below the poverty line during lockdown. Lastly, we consider economic recovery scenarios as the COVID-19 policies are being relaxed during the latter part of 2020. Our findings have implications for understanding the direct and indirect impacts of COVID-19, for policy design during the recovery period, and for planning future disease prevention measures while protecting livelihoods and maintaining economic growth.

Publication Type

Bulletin.

<122>

Accession Number

20203457473

Author

Tashiro, A.; Shaw, R.

Title

COVID-19 pandemic response in Japan: what is behind the initial flattening of the curve?

Source

Sustainability; 2020. 12(13)50 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The new coronavirus disease (COVID-19) emerged in December 2019 and became a global pandemic in March 2020. The unprecedented speed of SARS-CoV2 spread, the high infection rate among the aged population, and the collapse of healthcare systems in several countries have made COVID-19 the worst "modern" pandemic. Despite its proximity to China, a large aged population, and a high urban density, Japan has mitigated successfully the initial catastrophic impacts of COVID-19. This paper analyzed the key policy measures undertaken in Japan and suggests that Japan's culture, healthcare system, sanitation,

immunity, and food habits, along with citizens' behavior, are the possible reasons for the successful flattening of the curve. Although additional disease peaks may occur, and a consequent increase in the number of affected individuals, a combination of policy, good governance, a healthy society, and good citizen behaviors' should be sufficient to provide enough time for the health care system to cope with them. Cluster approach, science-based decision making, and scenario planning were some of the key policy decisions taken by the government. Based on the lessons from Japan, this paper suggests the importance of an ecosystem-based lifestyle as a potential way to cope with pandemic events.

Publication Type

Journal article.

<123>

Accession Number

20203457407

Author

Wang Fang; Xue Tao; Wang Ting; Wu BiHu

Title

The mechanism of tourism risk perception in severe epidemic - the antecedent effect of place image depicted in anti-epidemic music videos and the moderating effect of visiting history.

Source

Sustainability; 2020. 12(13)57 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Tourism risk perception is proven to have significant influence on tourists' decision-making behaviors, however, the impact of the place image depicted in the cultural media of destinations on it needs to be further studied. The study explores the mechanism of potential tourists' risk perception in severe COVID-19 epidemics with the antecedent effects of the place image depicted in anti-epidemic music videos, and the impact of risk perception on potential tourists' place attachment and travel intention, based on the risk perception theory. This study also explores the moderating effect of the visiting history on balancing risk perception, place attachment, and travel intention. With empirical research, the study result indicates that in severe epidemics: (1) the place image depicted in anti-epidemic music videos has a significant negative effect on tourism risk perception, tourism risk perception has a significant negative effect on potential tourists' place attachment and travel intention; (2) the tourism risk perception mediates between the place

image depicted in the music videos and potential tourists' place attachment and travel intention; (3) visiting history modulates the influence of tourism risk perception, potential tourists' place attachment, and travel intention. This research would be helpful if it enriches the theoretical content of risk perception, expands the theoretical foundation of tourists' decision making, promotes the application of music videos in tourism research, and proposes empirical risk management countermeasures of tourism destination.

Publication Type

Journal article.

<124>

Accession Number

20203454313

Author

Costa, I. P. de A.; Maeda, S. M. do N.; Teixeira, L. F. de S. de B.; Gomes, C. F. S.; Santos, M. dos

Title

Choosing a hospital assistance ship to fight the covid-19 pandemic.

Source

Revista de Saude Publica; 2020. 54(79)30 ref.

Publisher

Universidade de Sao Paulo, Faculdade de Saude Publica

Location of Publisher

São Paulo

Country of Publication

Brazil

Abstract

OBJECTIVE: To apply the THOR 2 multi-criteria support system to select the Brazilian navy's most suitable hospital care vessel (NAsH) to support the fight against the covid-19 pandemic. METHODS: We used the first three stages of the Soft Systems Methodology for structuring and modeling of the problem. For the evaluation and ordering of alternatives, we used the Thor 2 multi-criteria support system, comparing four classes of NAsH in the light of their operational and hospital criteria: "Dr. Montenegro", "Soares Meirelles", "Oswaldo Cruz" and "Tenente Maximiano". The chosen ship would support the amazon hospital system, which has an increasing number of cases of covid-19. RESULTS: After the application of the methods, we analyzed three distinct scenarios of ordering the alternatives, which allowed a robust sensitivity analysis, conferring greater transparency and reliability to the decision-making process. The NAsH "Oswaldo Cruz" was selected to be used in the fight against the pandemic. CONCLUSIONS: This study brings valuable contribution to academia and society, since it represents the application of a multi-criteria decision-aid method in the state of the art to contribute to the solution of a real problem that affects millions of people in Brazil and worldwide.

Publication Type

Journal article.

<125>

Accession Number

20203458615

Author

Jambor, A.; Czine, P.; Balogh, P.

Title

The impact of the coronavirus on agriculture: first evidence based on global newspapers.

Source

Sustainability; 2020. 12(11)27 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Since late 2019, an outbreak of the coronavirus disease 2019 (COVID-19) has rapidly spread all over the world, challenging the sustainability of global agri-food markets. Although its full impact on agricultural and food markets is not yet evident, we have some early evidence on the different impacts. The aim of this article is to summarize the early evidence by screening global newspaper articles and sites written on the topic until 10 April 2020. The most read English-based newspaper articles were downloaded and accessed together with a Google search on specific keywords in order to have a complete picture of the topic. Results suggest that agriculture-related pandemic effects can be grouped into supply, demand, labour, food security, food safety, trade and other effects. It is also evident that the first impacts are not one-sided: what helped some hurt others. This article can serve as a basis for future research on the topic by identifying and highlighting the key topics as well as summarizing the earliest evidence available.

Publication Type

Journal article.

<126>

Accession Number

20203482383

Author

Charlier, P.; Varison, L.

Title

Is COVID-19 being used as a weapon against indigenous peoples in Brazil?

Source

Lancet (British edition); 2020. 396(10257):1069-1070. 4 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Publication Type

Journal article.

<127>

Accession Number

20203482370

Author

Reifel, K. M.; Swan, B. K.; Jellison, E. R.; Ambrozak, D.; Baijer, J.; Nguyen, R.; Monard, S.; Geoffrey Lyon; Fontes, B.; Perfetto, S. P.

Title

Procedures for flow cytometry-based sorting of unfixed severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infected cells and other infectious agents.

Source

Cytometry A; 2020. 97(7):674-680. 25 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

In response to the recent COVID-19 pandemic, many laboratories are involved in research supporting SARS-CoV-2 vaccine development and clinical trials. Flow cytometry laboratories will be responsible for a large part of this effort by sorting unfixed antigen-specific lymphocytes. Therefore, it is critical and timely that we have an understanding of risk assessment and established procedures of infectious cell sorting. Here we present procedures covering the biosafety aspects of sorting unfixed SARS-CoV-2-infected cells and other infectious agents of similar risk level. These procedures follow the ISAC Biosafety Committee guidelines and were recently approved by the National Institutes of Health Institutional Biosafety Committee for sorting SARS-CoV-2-infected cells.

Publication Type

Journal article.

<128>

Accession Number

20203482369

Author

Cossarizza, A.; Gibellini, L.; Biasi, S. de; Tartaro, D. lo; Mattioli, M.; Paolini, A.; Fidanza, L.; Bellinazzi, C.; Borella, R.; Castaniere, I.; Meschiari, M.; Sita, M.; Manco, G.; Clini, E.; Gelmini, R.; Girardis, M.; Guaraldi, G.; Mussini, C.

Title

Handling and processing of blood specimens from patients with COVID-19 for safe studies on cell phenotype and cytokine storm.

Source

Cytometry A; 2020. 97(7):668-673. 19 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The pandemic caused by severe acute respiratory syndrome coronavirus 2 heavily involves all those working in a laboratory. Samples from known infected patients or donors who are considered healthy can arrive, and a colleague might be asymptomatic but able to transmit the virus. Working in a clinical laboratory is posing several safety challenges. Few years ago, International Society for Advancement of Cytometry published guidelines to safely analyze and sort human samples that were revised in these days. We describe the procedures that we have been following since the first patient appeared in Italy, which have only slightly modified our standard one, being all human samples associated with risks.

Publication Type

Journal article.

<129>

Accession Number

20203482368

Author

Ulrich, H.; Pillat, M. M.; Tarnok, A.

Title

Dengue fever, COVID-19 (SARS-CoV-2), and antibody-dependent enhancement (ADE): a perspective.

Source

Cytometry A; 2020. 97(7):662-667. 61 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

SARS-CoV-2 pandemic and recurrent dengue epidemics in tropical countries have turned into a global health threat. While both virus-caused infections may only reveal light symptoms, they can also cause severe diseases. Here, we review the possible antibody-dependent enhancement (ADE) occurrence, known for dengue infections, when there is a second infection with a different virus strain. Consequently, preexisting antibodies do not neutralize infection, but enhance it, possibly by triggering Fcgamma receptor-mediated virus uptake. No clinical data exist indicating such mechanism for SARS-CoV-2, but previous coronavirus infections or infection of SARS-CoV-2 convalescent with different SARS-CoV-2 strains could promote ADE, as experimentally shown for antibodies against the MERS-CoV or SARS-CoV spike S protein.

Publication Type

Journal article.

<130>

Accession Number

20203481624

Author

Adesanya, O. A.

Title

COVID-19 outbreak in Africa: lessons and insights from the west African Ebola virus disease epidemics.

Source

International Journal of Travel Medicine and Global Health; 2020. 8(3):96-99. 21 ref.

Publisher

International Travel Medicine Center of Iran

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

Over the years, the African continent has had to battle several outbreaks of infectious diseases in different countries. Some of the most deadly were the Ebola virus disease (EVD) outbreaks that occurred in West Africa between 2014 and 2016 affecting Guinea, Liberia, and Sierra Leone and, more recently, from 2018 to 2020 in the Democratic Republic of Congo (DRC). In the era of the COVID-19 pandemic, it is important that as a continent, we draw lessons and insights from our past experiences to guide outbreak response strategies being deployed to curb the latest onslaught. The Ebola outbreaks have shown that disease outbreaks should not be seen only as medical emergencies, but as full blown humanitarian crises, because oftentimes, their socio-economic impacts are more devastating than the more obvious cost to life. In this mini-review, we explore the possible humanitarian costs of the COVID-19 pandemic on the African continent by looking through the lens of our past experiences with the EVD outbreaks, highlighting how the current pandemic could significantly affect the African economy, food security, and vulnerable demographics, like children and the sexual and reproductive health and rights of women and girls. We then proffer recommendations that could be instrumental in preventing a double tragedy involving the devastating health consequences of the virus itself and the deadly fallout from its multi-sectoral knock-on effects in African countries.

Publication Type

Journal article.

<131>

Accession Number

20203464277

Author

Pang, D. S. J.; Pang, J. M.; Payne, O. J.; Clement, F. M.; Faber, T.

Title

Teleconsulting in the time of a global pandemic: application to anesthesia and technological considerations.

Source

Canadian Veterinary Journal; 2020. 61(10):1092-1100.

Publisher

Canadian Veterinary Medical Association

Location of Publisher

Ottawa

Country of Publication

Canada

Abstract

As a result of the various restrictions associated with the current COVID-19 pandemic, the practice of veterinary telehealth is likely to grow substantially. One area in which high quality care can be maintained while respecting physical distancing is teleconsulting, which describes the relationship between an attending and off-site consulting veterinarian. This guide uses a dentistry case to illustrate the provision of real-time anesthesia consulting, with a focus on the technological considerations central to facilitating live, 2-way video-communication. Case selection, teamwork, and patient safety are also discussed.

Publication Type

Journal article.

<132>

Accession Number

20203469798

Author

Khan, M. S.; Dar, O.; Erondu, N. A.; Rahman-Shepherd, A.; Hollmann, L.; Ihekweazu, C.; Ukandu, O.; Agogo, E.; Ikram, A.; Rathore, T. R.; Okereke, E.; Squires, N.

Title

Using critical information to strengthen pandemic preparedness: the role of national public health agencies.

Source

BMJ Global Health; 2020. 5(9)31 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

COVID-19 has demonstrated that most countries' public health systems and capacities are insufficiently prepared to prevent a localised infectious disease outbreak from spreading. Strengthening national preparedness requires National Public Health Institutes (NPHIs), or their equivalent, to overcome practical challenges affecting timely access to, and use of, data that is critical to preparedness. Our situational analysis in collaboration with NPHIs in three countries - Ethiopia, Nigeria and Pakistan - characterises these challenges. Our findings indicate that NPHIs' role necessitates collection and analysis of data from multiple sources that do not routinely share data with public health authorities. Since initiating requests for access to new data sources can be a lengthy process, it is essential that NPHIs are routinely monitoring a broad set of priority indicators that are selected to reflect the country-specific context. NPHIs must also have the authority to be able to request rapid sharing of data from public and private sector organisations during health emergencies and to access additional human and financial resources during disease outbreaks. Finally, timely, transparent and informative communication of synthesised data from NPHIs will facilitate sustained data sharing with NPHIs from external organisations. These actions identified by our analysis will support the availability of robust information systems that allow relevant data to be collected, shared and analysed by NPHIs sufficiently rapidly to inform a timely local response to infectious disease outbreaks in the future.

Publication Type

Journal article.

<133>

Accession Number

20203464796

Author

Mehta, N.; Mazer-Amirshahi, M.; Alkindi, N.; Pourmand, A.

Title

Pharmacotherapy in COVID-19; a narrative review for emergency providers.

Source

American Journal of Emergency Medicine; 2020. 38(7):1488-1493.

Publisher

Elsevier Inc.

Location of Publisher

St. Louis

Country of Publication

USA

Abstract

Introduction: The COVID-19 pandemic has been particularly challenging due to a lack of established therapies and treatment guidelines. With the rapid transmission of disease, even the off-label use of available therapies has been impeded by limited availability. Several antivirals, antimalarials, and biologics are being considered for treatment at this time. The purpose of this literature review is to synthesize the available information regarding treatment options for COVID-19 and serve as a resource for health care professionals. Objectives: This narrative review was conducted to summarize the effectiveness of current therapy options for COVID-19 and address the controversial use of non-steroidal anti-inflammatory drugs (NSAIDs), angiotensin converting enzyme (ACE) inhibitors, and angiotensin receptor blockers (ARBs). PubMed and SCOPUS were queried using a combination of the keywords "COVID 19," "SARS-CoV-2," and "treatment." All types of studies were evaluated including systematic reviews, case-studies, and clinical guidelines. Discussion: There are currently no therapeutic drugs available that are directly active against SARS-CoV-2; however, several antivirals (remdesivir, favipiravir) and antimalarials (chloroquine, hydroxychloroquine) have emerged as potential therapies. Current guidelines recommend combination treatment with hydroxychloroquine/azithromycin or chloroquine, if hydroxychloroquine is unavailable, in patients with moderate disease, although these recommendations are based on limited evidence. Remdesivir and convalescent plasma may be considered in critical patients with respiratory failure; however, access to these therapies may be limited. Interleukin-6 (IL-6) antagonists may be used in patients who develop evidence of cytokine release syndrome (CRS). Corticosteroids should be avoided unless there is evidence of refractory septic shock, acute respiratory distress syndrome (ARDS), or another compelling indication for their use. ACE inhibitors and ARBs should not be discontinued at this time and ibuprofen may be used for fever. Conclusion: There are several ongoing clinical trials that are testing the efficacy of single and combination treatments with the drugs mentioned in this review and new agents are under development. Until the results of these trials become available, we must use the best available evidence for the prevention and treatment of COVID-19. Additionally, we can learn from the experiences of healthcare providers around the world to combat this pandemic.

Publication Type

Journal article.

<134>

Accession Number

20203467865

Author

Chen JinFeng; Lei ZhongYi; Liu ChaoFeng; Fan Hong; Lei Peng; Wu XuePing; Yu XiaoYong; Zhou YanFen; Hou JieJun

Title

Discussion on the selection of ACEI and ARB for the patients with COVID-19 and hypertension from ACE2.

Source

Medicinal Plant; 2020. 11(4):81-84, 87. 36 ref.

Publisher

The Journal Board of Medicinal Plant

Location of Publisher

Cranston

Country of Publication

USA

Abstract

With the wide spread of COVID-19, some studies have confirmed that novel coronavirus enters the cell through the binding of spike protein and ACE2 protein, which has the risk of causing the virus to enter the cell to accelerate its transmission. ACEI and ARB are the key drugs for the treatment of hypertension and are widely used in clinic. They are good for ventricular and vascular remodeling in patients with hypertension, coronary heart disease and heart failure. ACEI and ARB drugs may increase the expression of ACE2 in lung tissue and increase the risk of aggravation of the disease. According to the advice of hypertension experts: for mild ordinary COVID-19 patients with hypertension, we stopped immediately. During the discontinuation period, temporary replacement therepy with diuretics, dipine and vasodilation hypotensive drugs can be considered.

Publication Type

Journal article.

<135>

Accession Number

20203461612

Author

Ramagole, D. A.; Rensburg, D. C. J. van; Pillay, L.; Viviers, P.; Zondi, P.; Patricios, J.

Title

Implications of COVID-19 for resumption of sport in South Africa: a South African Sports Medicine Association (SASMA) position statement.

Source

South African Journal of Sports Medicine; 2020. 32(26):article 26-unpaginated. 29 ref.

Publisher

South African Sports Medicine Association

Location of Publisher

Cape Town

Country of Publication

South Africa

Abstract

The significant impact of the coronavirus disease 2019 (COVID- 19) pandemic has extended to sport with the cessation of nearly all professional and non-professional events globally. Recreational parks and fitness centres have also closed. A challenge remains to get athletes back to participation in the safest way, balancing the protection of their health while curbing the societal transmission of the virus. With this Position Statement, the South African Sports Medicine Association (SASMA) aims to guide return-to-sport as safely as possible, in an evidence-based manner, given that COVID-19 is a new illness and new information from experts in various fields continues to emerge. Clinical considerations are briefly described, focusing on a return-to-sport strategy, including education, preparation of the environment, risk stratification of sports and participants, and the practical implementation of these guidelines. The management of the potentially exposed or infected athlete is further highlighted. It is important that persons charged with managing athletes' return-to-sport in any environment must be up-to-date with local and international trends, transmission rates, regulations and sport-specific rule changes that might develop as sport resumes. Additionally, such information should be applied in a sports-specific manner, considering individual athlete's and team needs and be consistent with national legislation.

Publication Type

Journal article.

<136>

Accession Number

20203444285

Author

Liu, I. Q.

Title

The impact of COVID-19 pandemic on high performance secondary school student-athletes.

Source

The Sport Journal; 2020. 23(32):32-unpaginated. 10 ref.

Publisher

United States Sports Academy

Location of Publisher

Alabama

Country of Publication

USA

Abstract

Purpose: The COVID-19 pandemic has led to a worldwide disruption of the sporting industry. Secondary school student-athletes, as a distinct population, are facing unique social and academic challenges. It is important to identify some of the unique challenges this population currently faces, and understand where our student-athletes are at mentally and physically. This is in order to ensure their needs are addressed, and the health and wellbeing of this population is protected. This study aimed to assess the impact of the COVID-19 pandemic on Canadian high performance secondary school student-athletes. Methods: On April 29, 2020, six weeks after a lockdown was imposed in Ontario, Canada, a Google Forms online survey was sent out to local secondary school students participating in high performance sports to collect data on the impact of the COVID-19 pandemic on their sports and themselves. Results: In 24 hours, 115 surveys were completed. The median age of respondents was 16/17, with 66 (57.4%) females and 49 (42.6%) males. 93% of respondents had at least one cancellation or postponement of important competitions or meets due to the COVID-19 outbreak. The athletes reported negative psychological impacts from the pandemic, with 90.5% expressing feelings of isolation and disconnection and 79.1% having feelings of anxiety, depression, and frustration. 86.1% of the respondents identified a worry for a loss of fitness during this time, with 91.3% concerned about the impact of the COVID-19 pandemic on their next season. Nonetheless, 84.3% of the respondents still plan to return to training once the pandemic is over, and 74.8% believe they can catch up to their previous strength/technical level after the pandemic. Conclusions: Findings of this study suggests that more attention should be paid to secondary school student-athletes, as they are young and tackling both academic and athletic challenges. Student-athletes should be provided additional mental health support during this maelstrom of changes. Specific in-home virtual training during COVID-19 outbreak may be further strengthened and improved to protect the mental health of the athletes, especially to reduce the risk of anxiety and depression.

Publication Type

Journal article.

<137>

Accession Number

20203476563

Author

Glaabska, D.; Skolmowska, D.; Guzek, D.

Title

Population-based study of the changes in the food choice determinants of secondary school students: Polish adolescents' COVID-19 experience (PLACE-19) study.

Source

Nutrients; 2020. 12(9)49 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

During the outbreak of Coronavirus Disease 2019 (COVID-19) pandemic and the lockdown, various changes of dietary habits are observed, including both positive and negative ones. However, the food choice determinants in this period were not studied so far for children and adolescents. The study aimed to analyze the changes in the food choice determinants of secondary school students in a national sample of Polish adolescents within the Polish Adolescents' COVID-19 Experience (PLACE-19) Study population. The study was conducted in May 2020, based on the random quota sampling of schools (for voivodeships and counties) and a number of 2448 students from all the regions of Poland participated. The Food Choice Questionnaire (FCQ) (36 items) was applied twice - to analyze separately current choices (during the period of COVID-19 pandemic) and general choices (when there was no COVID-19 pandemic). For both the period before and during the COVID-19 pandemic, sensory appeal and price were indicated as the most important factors (with the highest scores). However, differences were observed between the scores of specific factors, while health ($p < 0.0001$) and weight control ($p < 0.0001$) were declared as more important during the period of COVID-19 pandemic, compared with the period before, but mood ($p < 0.0001$) and sensory appeal ($p < 0.0001$) as less important. The observations were confirmed for sub-groups, while female and male respondents were analyzed separately. It can be concluded that the COVID-19 pandemic may have changed the food choice determinants of Polish adolescents, as it may have increased the importance of health and weight control, but reduced the role of mood and sensory appeal. This may be interpreted as positive changes promoting the uptake of a better diet than in the period before the pandemic.

Publication Type

Journal article.

<138>

Accession Number

20203476556

Author

Alkhatib, A.

Title

Antiviral functional foods and exercise lifestyle prevention of coronavirus.

Source

Nutrients; 2020. 12(9)102 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Novel coronavirus (COVID-19) is causing global mortality and lockdown burdens. A compromised immune system is a known risk factor for all viral influenza infections. Functional foods optimize the immune system capacity to prevent and control pathogenic viral infections, while physical activity augments such protective benefits. Exercise enhances innate and adaptive immune systems through acute, transient, and long-term adaptations to physical activity in a dose-response relationship. Functional foods prevention of non-communicable disease can be translated into protecting against respiratory viral infections and COVID-19. Functional foods and nutraceuticals within popular diets contain immune-boosting nutraceuticals, polyphenols, terpenoids, flavonoids, alkaloids, sterols, pigments, unsaturated fatty-acids, micronutrient vitamins and minerals, including vitamin A, B6, B12, C, D, E, and folate, and trace elements, including zinc, iron, selenium, magnesium, and copper. Foods with antiviral properties include fruits, vegetables, fermented foods and probiotics, olive oil, fish, nuts and seeds, herbs, roots, fungi, amino acids, peptides, and cyclotides. Regular moderate exercise may contribute to reduce viral risk and enhance sleep quality during quarantine, in combination with appropriate dietary habits and functional foods. Lifestyle and appropriate nutrition with functional compounds may offer further antiviral approaches for public health.

Publication Type

Journal article.

<139>

Accession Number

20203470380

Author

Nepomnyashchiy, L.; Dahn, B.; Rachel Saykpah; Raghavan, M.

Title

COVID-19: Africa needs unprecedented attention to strengthen community health systems.

Source

Lancet (British edition); 2020. 396(10245):150-152. 25 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Publication Type

Journal article.

<140>

Accession Number

20203471539

Author

Jhuma Sankar; Nitin Dhochak; Kabra, S. K.; Rakesh Lodha

Title

COVID-19 in children: clinical approach and management.

Source

Indian Journal of Pediatrics; 2020. 87(6):433-442. 33 ref.

Publisher

Springer (India) Private Limited

Location of Publisher

New Delhi

Country of Publication

India

Abstract

COVID-19 pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a major public health crisis threatening humanity at this point in time. Transmission of the infection occurs by inhalation of infected droplets or direct contact with soiled surfaces and fomites. It should be suspected in all symptomatic children who have undertaken international travel in the last 14 d, all hospitalized children with severe acute respiratory illness, and asymptomatic direct and high-risk contacts of a confirmed case. Clinical symptoms are similar to any acute respiratory viral infection with less pronounced nasal symptoms.

Disease seems to be milder in children, but situation appears to be changing. Infants and young children had relatively more severe illness than older children. The case fatality rate is low in children. Diagnosis can be confirmed by Reverse transcriptase - Polymerase chain reaction (RT-PCR) on respiratory specimen (commonly nasopharyngeal and oropharyngeal swab). Rapid progress is being made to develop rapid diagnostic tests, which will help ramp up the capacity to test and also reduce the time to getting test results. Management is mainly supportive care. In severe pneumonia and critically ill children, trial of hydroxychloroquine or lopinavir/ritonavir should be considered. As per current policy, children with mild disease also need to be hospitalized; if this is not feasible, these children may be managed on ambulatory basis with strict home isolation. Pneumonia, severe disease and critical illness require admission and aggressive management for acute lung injury and shock and/or multiorgan dysfunction, if present. An early intubation is preferred over non-invasive ventilation or heated, humidified, high flow nasal cannula oxygen, as these may generate aerosols increasing the risk of infection in health care personnel. To prevent post discharge dissemination of infection, home isolation for 1-2 wk may be advised. As of now, no vaccine or specific chemotherapeutic agents are approved for children.

Publication Type

Journal article.

<141>

Accession Number

20203473972

Author

Liu SuYu

Title

Food supply pressure in France and Germany during COVID-19: causes from manufacturing. [Portuguese]

Source

Revista Verde de Agroecologia e Desenvolvimento Sustentavel; 2020. 15(2):139-145. 30 ref.

Publisher

Grupo Verde de Agroecologia e Abelhas (GVAA)

Location of Publisher

Pombal

Country of Publication

Brazil

Abstract

The food supply has been disrupted by COVID-19. Shopping in supermarkets and grocery stores in the pandemic may not be a pleasant experience, as it can often lead to disappointment and anxiety since a lot of food items are not available or out of stock. The pandemic's impact on the food supply has attracted attention from scholars and practitioners alike, and there have been many studies based on evidence from

developing countries (e.g., Zurayk, 2020). However, there is still a lack of research based on the experiences of more developed and industrialized economies such as France and Germany. This is an important knowledge gap to be bridged, as people in developed countries tend to consume more food than those in developing countries (Delgado, 2003). Developed countries are also usually in the center of global food supply chains due to their stronger influence in trade.

Publication Type

Journal article.

<142>

Accession Number

20203454172

Author

Sreelekshmy Mohandas; Rajlaxmi Jain; Yadav, P. D.; Anita Shete-aich; Prasad Sarkale; Manoj Kadam; Abhimanyu Kumar; Gururaj Deshpande; Shreekant Baradkar; Savita Patil; Gajanan Sapkal; Deepak Mali; Malvika Salve; Dilip Patil; Triparna Majumdar; Annasaheb Suryawanshi; Himanshu Kaushal; Rajen Lakra; Hitesh Dighe; Nivedita Gupta; Priya Abraham; Gangakhedkar, R. R.

Title

Evaluation of the susceptibility of mice & hamsters to SARS-CoV-2 infection.

Source

Indian Journal of Medical Research; 2020. 151(5):479-482. 17 ref.

Publisher

Indian Council of Medical Research

Location of Publisher

New Delhi

Country of Publication

India

Abstract

This article studied the susceptibility of rodent models such as BALB/c mice, C57BL/6 mice and golden Syrian hamsters to the SARS-CoV-2 infection. No apparent clinical signs or mortality was observed in BALB/c mice, C57BL/6 mice and Syrian hamsters inoculated with the virus. The body weights of hamsters reduced post virus inoculation. Progressive weight loss following SARS-CoV-2 infection in hamsters has been reported. The weight loss ranged from 1.4 to 6.7 per cent on day 2 (n=18), which reached to a maximum on day 6 ranging from 5.1 to 13.4 per cent (n=12). Thereafter, a gradual weight gain was observed in hamsters on the subsequent days. Viraemia was absent in both mice and Syrian hamsters. Viral RNA could be detected only in the lung samples collected on day 1 post inoculation in BALB/c and C57BL/6 mice, and the lung samples collected on subsequent days and rest of the organ samples from mice were found negative. The viral RNA detected in the lungs could be the residual RNA from the virus inoculums. The BALB/c and

C57BL/6 mice were found negative for anti-SARS-CoV-2 IgG antibodies by direct ELISA on day 21, indicating that these adult inbred mice were not susceptible to SARS-CoV-2. The animal models studied showed the similar findings of absence of virus in blood samples as reported in COVID-19-positive patient. To assess the risk of transmission, virus isolation was attempted from the lung and nasal turbinates samples collected from hamsters on days 3, 5, 7 and 14 post inoculations. The cytopathic effect in Vero CCL81cells could be observed only on days 3 and 5 for both lung and nasal turbinate samples. This finding supported a report on human COVID-19 cases which indicated that the transmission might occur early during the course of infection[14]. The serum samples of hamsters showed neutralizing antibody from day 5 onwards with rising titre till day 21. Serum IgG levels also showed a similar trend from day 7. The findings indicated the susceptibility of a readily available hamster model to SARS-CoV-2 infection. Golden Syrian hamsters showed high viral loads in the upper and lower respiratory tracts, virus shedding through the nasal cavity and mounting of humoral immune response by the first week, similar to human COVID-19 cases.

Publication Type

Correspondence.

<143>

Accession Number

20203454171

Author

Hina Singh; Jasdeep Singh; Mohd Khubaib; Salma Jamal; Sheikh, J. A.; Sunil Kohli; Hasnain, S. E.; Rahman, S. A.

Title

Mapping the genomic landscape & diversity of COVID-19 based on >3950 clinical isolates of SARS-CoV-2: likely origin & transmission dynamics of isolates sequenced in India.

Source

Indian Journal of Medical Research; 2020. 151(5):474-478. 14 ref.

Publisher

Indian Council of Medical Research

Location of Publisher

New Delhi

Country of Publication

India

Abstract

In the present study, machine learning-based t-SNE analysis of global clinical isolates has been utilized to segregate the clinical isolates into clusters while accommodating the outliers. The initial cases reported from India had a travel history to China, which explained its position in a Chinese cluster. The travel ban from China to India, in early February 2020, has prevented the large-scale spill-over directly from China to

the Indian Sub-continent. However, various isolates transmitted from other South-East Asian countries might fall in the same cluster. The overlap of Indian samples majorly with European samples reiterated the fact that the delayed travel restriction from the European hotspot regions affected not just India but also many countries. Evolutionary divergence, corroborated by epidemiological data, is a valuable tool to implement appropriate measures against this pandemic. The population density of India and the presence of functionally distinct isolates in the Indian population raise concerns and warrant an urgent need for higher sampling rate for better assessment of the evolution of SARS-CoV-2 in India. The situation is further confounded by the fact that many of these Indian isolates submitted in databanks include those of Indians living in Iran, Italian tourists visiting India, and also contains samples cultured in vitro. In conclusion, a whole-genome diversity analysis of 3968 global clinical isolates, including 25 isolates sequenced in India, of SARS-CoV-2 was done. The variations in different open reading frames (ORFs) of SARS-CoV-2, which drives the formation of distinct Indian clusters and functional heterogeneity, were highlighted. Five ORFs corresponding to envelope protein, membrane glycoprotein, ORF6, ORF7b and ORF10 were found to be highly conserved, while a number of mutations were observed in ORF1a, ORF1b, spike protein, ORF3a, ORF7a, ORF8 and nucleocapsid phosphoprotein. Generating diverse genomic datasets will provide insight into the propagation dynamics of COVID-19, leading to a better understanding of pathogenesis and evolution of SARS-CoV-2, which will eventually lead to better intervention methods.

Publication Type

Correspondence.

<144>

Accession Number

20203454170

Author

Abhinav Bassi; Sumaiya Arfin; Oommen John; Vivekanand Jha

Title

An overview of mobile applications (apps) to support the coronavirus disease 2019 response in India.

Source

Indian Journal of Medical Research; 2020. 151(5):468-473. 27 ref.

Publisher

Indian Council of Medical Research

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Background & objectives: The potential benefits of mobile health (mHealth) initiatives to manage the coronavirus disease 2019 (COVID-19) pandemic have been explored. The Government of India, State governments, and healthcare organizations have developed various mobile apps for the containment of COVID-19. This study was aimed to systematically review COVID-19 related mobile apps and highlight gaps to inform the development of future mHealth initiatives. Methods: Google Play and the Apple app stores were searched using the terms 'COVID-19', 'coronavirus', 'pandemic', and 'epidemic' in the first week of April 2020. A list of COVID-19-specific functions was compiled based on the review of the selected apps, the literature on epidemic surveillance, and national and international media reports. The World Health Organization guideline on Digital Health Interventions was used to classify the app functions under the categories of the general public, health workers, health system managers, and data services. Results: The search yielded 346 potential COVID-19 apps, of which 50 met the inclusion criteria. Dissemination of untargeted COVID-19-related information on preventative strategies and monitoring the movements of quarantined individuals was the function of 27 (54%) and 19 (32%) apps, respectively. Eight (16%) apps had a contact tracing and hotspot identification function. Interpretation & conclusions: Our study highlights the current emphasis on the development of self-testing, quarantine monitoring, and contact tracing apps. India's response to COVID-19 can be strengthened by developing comprehensive mHealth solutions for frontline healthcare workers, rapid response teams and public health authorities. Among this unprecedented global health emergency, the Governments must ensure the necessary but least intrusive measures for disease surveillance.

Publication Type

Journal article.

<145>

Accession Number

20203454165

Title

Laboratory surveillance for SARS-CoV-2 in India: performance of testing & descriptive epidemiology of detected COVID-19, January 22 - April 30, 2020.

Source

Indian Journal of Medical Research; 2020. 151(5):424-437. 18 ref.

Publisher

Indian Council of Medical Research

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Background & objectives: India has been reporting the cases of coronavirus disease 2019 (COVID-19) since January 30, 2020. The Indian Council of Medical Research (ICMR) formulated and established laboratory surveillance for COVID-19. In this study, an analysis of the surveillance data was done to describe the testing performance and descriptive epidemiology of COVID-19 cases by time, place and person. Methods: The data were extracted from January 22 to April 30, 2020. The frequencies of testing performance were described over time and by place. We described cases by time (epidemic curve by date of specimen collection; seven-day moving average), place (area map) and person (attack rate by age, sex and contact status), and trends were represented along with public health measures and events. Results: Between January 22 and April 30, 2020, a total of 1,021,518 individuals were tested for severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2). Testing increased from about 250 individuals per day in the beginning of March to 50,000 specimens per day by the end of April 2020. Overall, 40,184 (3.9%) tests were reported positive. The proportion of positive cases was highest among symptomatic and asymptomatic contacts, 2-3-fold higher than among those with severe acute respiratory infection, or those with an international travel history or healthcare workers. The attack rate (per million) by age was highest among those aged 50-69 yr (63.3) and was lowest among those under 10 yr (6.1). The attack rate was higher among males (41.6) than females (24.3). The secondary attack rate was 6.0 per cent. Overall, 99.0 per cent of 736 districts reported testing and 71.1 per cent reported COVID-19 cases. Interpretation & conclusions: The coverage and frequency of ICMR's laboratory surveillance for SARS-CoV-2 improved over time. COVID-19 was reported from most parts of India, and the attack rate was more among men and the elderly and common among close contacts. Analysis of the data indicates that for further insight, additional surveillance tools and strategies at the national and sub-national levels are needed.

Publication Type

Journal article.

<146>

Accession Number

20203454164

Author

Gupta, P. C.; Kumar, M. P.; Jagat Ram

Title

COVID-19 pandemic from an ophthalmology point of view.

Source

Indian Journal of Medical Research; 2020. 151(5):411-418. 64 ref.

Publisher

Indian Council of Medical Research

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Coronavirus disease 2019 (COVID-19) is caused by a highly contagious RNA virus termed as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Ophthalmologists are at high-risk due to their proximity and short working distance at the time of slit-lamp examination. Eye care professionals can be caught unaware because conjunctivitis may be one of the first signs of COVID-19 at presentation, even precluding the emergence of additional symptoms such as dry cough and anosmia. Breath and eye shields as well as N95 masks, should be worn while examining patients with fever, breathlessness, or any history of international travel or travel from any hotspot besides maintaining hand hygiene. All elective surgeries need to be deferred. Adults or children with sudden-onset painful or painless visual loss, or sudden-onset squint, or sudden-onset floaters or severe lid oedema need a referral for urgent care. Patients should be told to discontinue contact lens wear if they have any symptoms of COVID-19. Cornea retrieval should be avoided in confirmed cases and suspects, and long-term preservation medium for storage of corneas should be encouraged. Retinal screening is unnecessary for coronavirus patients taking chloroquine or hydroxychloroquine as the probability of toxic damage to the retina is less due to short-duration of drug therapy. Tele-ophthalmology and artificial intelligence should be preferred for increasing doctor-patient interaction.

Publication Type

Journal article.

<147>

Accession Number

20203456530

Author

Ashish Kc; Rejina Gurung; Kinney, M. V.; Sunny, A. K.; Md Moinuddin; Omkar Basnet; Prajwal Paudel; Pratiksha Bhattarai; Kalpana Subedi; Shrestha, M. P.; Lawn, J. E.; Malqvist, M.

Title

Effect of the COVID-19 pandemic response on intrapartum care, stillbirth, and neonatal mortality outcomes in Nepal: a prospective observational study.

Source

Lancet Global Health; 2020. 8(10):e1273-e1281. 30 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: The COVID-19 pandemic response is affecting maternal and neonatal health services all over the world. We aimed to assess the number of institutional births, their outcomes (institutional stillbirth and neonatal mortality rate), and quality of intrapartum care before and during the national COVID-19 lockdown in Nepal. Methods: In this prospective observational study, we collected participant-level data for pregnant women enrolled in the SUSTAIN and REFINE studies between Jan 1 and May 30, 2020, from nine hospitals in Nepal. This period included 12.5 weeks before the national lockdown and 9.5 weeks during the lockdown. Women were eligible for inclusion if they had a gestational age of 22 weeks or more, a fetal heart sound at time of admission, and consented to inclusion. Women who had multiple births and their babies were excluded. We collected information on demographic and obstetric characteristics via extraction from case notes and health worker performance via direct observation by independent clinical researchers. We used regression analyses to assess changes in the number of institutional births, quality of care, and mortality before lockdown versus during lockdown. Findings: Of 22 907 eligible women, 21 763 women were enrolled and 20 354 gave birth, and health worker performance was recorded for 10 543 births. From the beginning to the end of the study period, the mean weekly number of births decreased from 1261.1 births (SE 66.1) before lockdown to 651.4 births (49.9) during lockdown-a reduction of 52.4%. The institutional stillbirth rate increased from 14 per 1000 total births before lockdown to 21 per 1000 total births during lockdown (p=0.0002), and institutional neonatal mortality increased from 13 per 1000 livebirths to 40 per 1000 livebirths (p=0.0022). In terms of quality of care, intrapartum fetal heart rate monitoring decreased by 13.4% (-15.4 to -11.3; p<0.0001), and breastfeeding within 1 h of birth decreased by 3.5% (-4.6 to -2.6; p=0.0032). The immediate newborn care practice of placing the baby skin-to-skin with their mother increased by 13.2% (12.1 to 14.5; p<0.0001), and health workers' hand hygiene practices during childbirth increased by 12.9% (11.8 to 13.9) during lockdown (p<0.0001). Interpretation: Institutional childbirth reduced by more than half during lockdown, with increases in institutional stillbirth rate and neonatal mortality, and decreases in quality of care. Some behaviours improved, notably hand hygiene and keeping the baby skin-to-skin with their mother. An urgent need exists to protect access to high quality intrapartum care and prevent excess deaths for the most vulnerable health system users during this pandemic period.

Publication Type

Journal article.

<148>

Accession Number

20203456529

Author

Abbas, K.; Procter, S. R.; Zandvoort, K. van; Clark, A.; Funk, S.; Mengistu, T.; Hogan, D.; Dansereau, E.; Jit, M.; Flasche, S.

Title

Routine childhood immunisation during the COVID-19 pandemic in Africa: a benefit-risk analysis of health benefits versus excess risk of SARS-CoV-2 infection.

Source

Lancet Global Health; 2020. 8(10):e1264-e1272. 31 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: National immunisation programmes globally are at risk of suspension due to the severe health system constraints and physical distancing measures in place to mitigate the ongoing COVID-19 pandemic. We aimed to compare the health benefits of sustaining routine childhood immunisation in Africa with the risk of acquiring severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection through visiting routine vaccination service delivery points. Methods: We considered a high-impact scenario and a low-impact scenario to approximate the child deaths that could be caused by immunisation coverage reductions during COVID-19 outbreaks. In the high-impact scenario, we used previously reported country-specific child mortality impact estimates of childhood immunisation for diphtheria, tetanus, pertussis, hepatitis B, Haemophilus influenzae type b, Streptococcus pneumoniae, rotavirus, measles, meningitis A, rubella, and yellow fever to approximate the future deaths averted before 5 years of age by routine childhood vaccination during a 6-month COVID-19 risk period without catch-up campaigns. In the low-impact scenario, we approximated the health benefits of sustaining routine childhood immunisation on only the child deaths averted from measles outbreaks during the COVID-19 risk period. We assumed that contact-reducing interventions flattened the outbreak curve during the COVID-19 risk period, that 60% of the population will have been infected by the end of that period, that children can be infected by either vaccinators or during transport, and that upon child infection the whole household will be infected. Country-specific household age structure estimates and age-dependent infection-fatality rates were applied to calculate the number of deaths attributable to the vaccination clinic visits. We present benefit-risk ratios for routine childhood immunisation, with 95% uncertainty intervals (UIs) from a probabilistic sensitivity analysis. Findings: In the high-impact scenario, for every one excess COVID-19 death attributable to SARS-CoV-2 infections acquired during routine vaccination clinic visits, 84 (95% UI 14-267) deaths in children could be prevented by sustaining routine childhood immunisation in Africa. The benefit-risk ratio for the vaccinated children is 85 000 (4900-546 000), for their siblings (< 20 years) is 75 000 (4400-483 000), for their parents or adult carers (aged 20-60 years) is 769 (148-2700), and for older adults (>60 years) is 96 (14-307). In the low-impact scenario that approximates the health benefits to only the child deaths averted from measles outbreaks, the benefit-risk ratio to the households of vaccinated children is 3 (0.5-10); if the risk to only the vaccinated children is considered, the benefit-risk ratio is 3000 (182-21 000). Interpretation: The deaths prevented by sustaining routine childhood immunisation in Africa outweigh the excess risk of COVID-19 deaths associated with vaccination clinic visits, especially for the vaccinated children. Routine childhood immunisation should be sustained in Africa as much as possible, while considering other factors such as logistical constraints, staff shortages, and reallocation of resources during the COVID-19 pandemic.

Publication Type

Journal article.

<149>

Accession Number

20203451595

Author

Stecher, S. S.; Stemmler, H. J.; Eichenauer, D.; Kochanek, M.; Shimabukuro-Vornhagen, A.; Bergwelt-Baildon, M. von; Boll, B.

Title

COVID-19: the intensive care point-of-view. [German]

Source

Deutsche Medizinische Wochenschrift; 2020. 145(15):1057-1062. 22 ref.

Publisher

Georg Thieme Verlag

Location of Publisher

Stuttgart

Country of Publication

Germany

Abstract

Approx. 93% of COVID-19 infections are mild, and not all severely ill patients are transferred to the intensive care unit. But the Corona crisis implies high demands on intensive care medicine. Many treatment modalities of COVID patients are "best practice", but some aspects remain unclear at present. This article deals with diagnostics, monitoring and therapy with COVID-19 patients in intensive care units and with a suitable hygiene concepts. A hygiene concept is obligatory and must ensure - in addition to general measures - the training of employees and the hygienic discharge of material. Ideally, a cohort isolation is implemented. Monitoring of patients with COVID-19 is not different from other intensive care patients and should be adapted to the clinical situation of the individual patient. In laboratory analysis the typical abnormality of COVID-19 patients should be taken into account. In case of increasing inflammatory parameters, fungal infections should be tested. Due to the formation of aerosols, disconnection of the respiratory system must be avoided in invasive ventilation. If a disconnection from the respirator is necessary, the tube should be disconnected. After extubation, an intermittent NIV treatment for atelectase prophylaxis can be performed.

Publication Type

Journal article.

<150>

Accession Number

20203451585

Author

Tandale, A. B.; Khade, S. S.; Karishma Krishnakumar

Title

Dental clinical practice changes needed during the COVID-19 pandemic: the 'new normal'.

Source

Journal of the Indian Medical Association; 2020. 118(8):29-35. 32 ref.

Publisher

Indian Medical Association (IMA)

Location of Publisher

Kolkata

Country of Publication

India

Abstract

In December 2019, a novel coronavirus (2019-nCOV) emerged in Wuhan, China. It has affected the entire globe causing the ongoing pandemic. The SARS-CoV-2 infection could be asymptomatic or mildly symptomatic in most cases of COVID-19. Therefore, there is a difficulty in diagnosis of SARS-Cov-2 infection based only on the clinical findings and hence requires the confirmatory laboratory testing. In dental clinical practice, there is a very high risk of transmission of SARS-Cov-2 infection. Therefore, there is an urgent need to assess and minimize the risk in dental care settings. Each patient in dental clinical practice needs to be considered as the potentially infectious and managed accordingly with the use of appropriate infection prevention and control measures. The approaches and measures for risk alleviation need to be emphasized and practiced appropriately to prevent the infection. This review presents the important changes needed in routine and emergency dental practice in the current pandemic.

Publication Type

Journal article.

<151>

Accession Number

20203451584

Author

Kaushik Bhattacharya; Neela Bhattacharya

Title

Health care workers facing social ostracism during COVID-19.

Source

Journal of the Indian Medical Association; 2020. 118(8):22-24. 4 ref.

Publisher

Indian Medical Association (IMA)

Location of Publisher

Kolkata

Country of Publication

India

Abstract

Ever since the World Health Organisation (WHO) declared on March 11th 2020, Coronavirus Disease 2019 (COVID-19) a 'pandemic' due to alarming level of spread of the Corona virus infection, doctors and the health care workers are facing discrimination and are socially ostracised. Stigma associated with COVID-19 poses a serious threat to the physical and mental wellbeing of health care workers. This article while highlighting the problems also suggests measures the doctors and health care workers should take so that they can address this stigma efficiently.

Publication Type

Journal article.

<152>

Accession Number

20203454608

Author

Dikensoy, O.; Ozkok, S.; Murrja, E.; Yesil, A.; Tuzuner, F.; Karsdag, T.

Title

Struggle against pandemic in a private hospital: what we have learnt from pandemic?

Source

Turkish Thoracic Journal; 2020. 21(5):357-360. 4 ref.

Publisher

AVES Publishing

Location of Publisher

Istanbul

Country of Publication

Turkey

Abstract

Corona Virus disease 2019 (COVID-19), which is one of the biggest outbreaks in the last century and is caused by a kind of coronavirus, spread to many countries in a short time after being first seen in the Wuhan region of China in December 2019. The COVID-19 outbreak, which spread rapidly and caused many deaths, was declared as a pandemic by the World Health Organization on March 11, 2020. The first COVID-19 case in Turkey, coincidentally, was seen on the same day. In this article, the story of the pandemic struggle successfully carried out in a private hospital and the teachings of the process are provided.

Publication Type

Journal article.

<153>

Accession Number

20203451527

Author

Alegre, X. E.; Stanton-Geddes, Z.; Aliyev, S.; Bun, V.

Title

Analyzing flooding impacts on rural access to hospitals and other critical services in rural Cambodia using geo-spatial information and network analysis.

Source

Policy Research Working Paper - World Bank; 2020. (9262):23 pp.

Publisher

World Bank

Location of Publisher

Washington

Country of Publication

USA

Abstract

Transport connectivity in Cambodia is challenged by its geography and exposure to recurrent flooding. Flood events create severe disruptions in segments of the transport network that undermine access to health, education, and work opportunities as well as create barriers to economic growth. Rural accessibility to emergency health facilities and delivery of medicines and basic food supplies is particularly critical in times of major health crises, such as the ongoing COVID-19 outbreak. This paper provides a method to quantify the impact of flooding on hospital access and other critical facilities, aiming to support governments on setting up health emergency mitigation plans for rural transport in an environment with high flood risk. The method was piloted in three provinces in rural Cambodia, estimating that for 37 percent of the people on those provinces, it takes more than 60 minutes to reach an emergency health facility. During floods, 27 percent lose all access and 18 percent experience an increase of 30 minutes in travel time. In conclusion, this method introduces transparency and evidence-based support for prioritization of

rural transport investment, identifies the social benefits (health and education) of rural infrastructure investments, and supports policy dialogue on rural development and resilience.

Publication Type

Bulletin.

<154>

Accession Number

20203453922

Author

Hamesh Patel; Talbot, N.; Salmond, J.; Dirks, K.; Xie ShanJu; Davy, P.

Title

Implications for air quality management of changes in air quality during lockdown in Auckland (New Zealand) in response to the 2020 SARS-CoV-2 epidemic.

Source

Science of the Total Environment; 2020. 74640 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The current changes in vehicle movement due to 'lockdown' conditions (imposed in cities worldwide in response to the COVID-19 epidemic) provide opportunities to quantify the local impact of 'controlled interventions' on air quality and establish baseline pollution concentrations in cities. Here, we present a case study from Auckland, New Zealand, an isolated Southern Hemisphere city, which is largely unaffected by long-range pollution transport or industrial sources of air pollution. In this city, traffic flows reduced by 60-80% as a result of a government-led initiative to contain the virus by limiting all transport to only essential services. In this paper, ambient pollutant concentrations of NO2, O3, BC, PM2.5, and PM10 are compared between the lockdown period and comparable periods in the historical air pollution record, while taking into account changes in the local meteorology. We show that this 'natural experiment' in source emission reductions had significant but non-linear impacts on air quality. While emission inventories and receptor modelling approaches confirm the dominance of traffic sources for NOx (86%), and BC (72%) across the city, observations suggest a consequent reduction in NO2 of only 34-57% and a reduction in BC of 55-75%. The observed reductions in PM2.5 (still likely to be dominated by traffic emissions), and PM10 (dominated by sea salt, traffic emissions to a lesser extent, and affected by seasonality) were found to be significantly less (8-17% for PM2.5 and 7-20% for PM10). The impact of this unplanned controlled

intervention shows the importance of establishing accurate, local-scale emission inventories, and the potential of the local atmospheric chemistry and meteorology in limiting their accuracy.

Publication Type

Journal article.

<155>

Accession Number

20203453920

Author

Sunday, M. O.; Sakugawa Hiroshi

Title

A simple, inexpensive method for gas-phase singlet oxygen generation from sensitizer-impregnated filters: potential application to bacteria/virus inactivation and pollutant degradation.

Source

Science of the Total Environment; 2020. 74642 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Airborne infectious diseases such as the newCoronavirus 2019 (COVID-19) pose serious threat to human health. Indoor air pollution is a problem of global environmental concern as well. Singlet oxygen (1O2) is a reactive oxygen species that plays important role in bacteria/virus inactivation and pollutant degradation. In this study, we found that commercially available filters typically deployed in air purifier and air conditioning units, when impregnated with Rose Bengal (RB) as a 1O2 sensitizer, can be used for heterogeneous gas-phase generation of 1O2. It was confirmed that irradiation of the RB filter under oxygen gas stream produced 1O2, which was measured using furfuryl alcohol trapping method followed by HPLC analysis. It was also observed that the amount of 1O2 generated increases as the light intensity increased. Similarly, the sensitizer loading also positively influenced the 1O2 generation. The heterogeneous gas-phase generation of 1O2 can find potential applications in air purifier and air conditioning units for the purpose of bacteria/virus inactivation and/or pollutant degradation thereby improving indoor air quality.

Publication Type

Journal article.

<156>

Accession Number

20203453910

Author

Wang QiAng; Wang ShaSha

Title

Preventing carbon emission retaliatory rebound post-COVID-19 requires expanding free trade and improving energy efficiency.

Source

Science of the Total Environment; 2020. 746many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Existing studies have shown that the COVID-19 pandemic caused a sharp drop in carbon emissions in 2020. A recent example of the impact of sudden extreme events on carbon emissions occurred in the 2008 global financial crisis, in which carbon emissions droped in 2009, but jumped in 2010. This study is aimed to discuss how to prevent the retaliatory growth of carbon emissions post COVID-19 through learning the lessons from analysis of short-term and long-term drivers of carbon emissions. This study explored the short-term (annual) effects (population scale. affluence level, carbon intensity, energy intensity) of changes in carbon emissions by decomposing carbon emissions in the world, different income groups and selected countries before and after the 2008 financial crisis using LMDI technique. In addition, this study explored the long-term effects (energy consumption per capita, energy structure, energy intensity, foreign direct investment, and trade openness) of changes in carbon emissions by decomposing carbon emission in the world and different income groups from 1990 to 2014 using VAR technique. The decomposition results of short-term drivers of carbon emission uncovered that the deterioration in energy efficiency (increase in energy intensity) was the main reason for the retaliatory rebound in carbon emissions post-2008 financial crisis, especially in high-income countries. The decomposition results of long-term drivers of carbon emission uncovered that trade openness contributed to reduce carbon emission in the world and the incomes groups in the long term, although trade openness led to increase in carbon emission in developing countries in the short term. To prevent retaliatory rebound of carbon emissions, what we should learn two lessons from the decomposition of carbon emission: improving energy efficiency, and expanding trade openness. Unfortunately, energy efficiency has been neglected in the economic recovery plans to respond to COVID-19 of various countries, especially developed countries, and worse, trade protectionism is on the

rise, especially in developed countries. Therefore, we are pessimistic about preventing a retaliatory rebound in carbon emissions post-COVID-19 for now.

Publication Type

Journal article.

<157>

Accession Number

20203453909

Author

Kargar, S.; Pourmehdi, M.; Paydar, M. M.

Title

Reverse logistics network design for medical waste management in the epidemic outbreak of the novel coronavirus (COVID-19).

Source

Science of the Total Environment; 2020. 74635 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The recent pandemic triggered by the outbreak of the novel coronavirus boosted the demand for medical services and protective equipment, causing the generation rate of infectious medical waste (IMW) to increase rapidly. Designing an efficient and reliable IMW reverse logistics network in this situation can help to control the spread of the virus. Studies on this issue are limited, and minimization of costs and the risks associated with the operations of this network consisting of different types of medical waste generation centers (MWGC) are rarely considered. In this research, a linear programming model with three objective functions is developed to minimize the total costs, the risk associated with the transportation and treatment of IMW, and the maximum amount of uncollected waste in MWGCs. Also, multiple functions that calculate the amount of generated waste according to the parameters of the current epidemic outbreak are proposed. Revised Multi-Choice Goal Programming method is employed to solve the multi-objective model, and a real case study from Iran is examined to illustrate the validation of the proposed model. The final results show that the model can create a balance between three considered objectives by determining the flow between centers, deciding to install two new temporary treatment centers, and allowing the network to only have uncollected waste in the first two periods in some MWGCs. Also,

managerial insights for health organization authorities extracted from the final results and sensitivity analyses are presented for adequately handling the IMW network.

Publication Type

Journal article.

<158>

Accession Number

20203467158

Author

Gois-Santos, V. T. de; Santos, V. S.; Souza, C. D. F. de; Tavares, C. S. S.; Gurgel, R. Q.; Martins-Filho, P. R.

Title

Primary Health Care in Brasil in the times of COVID-19: changes, challenges and perspectives.

Source

Revista da Associacao Medica Brasileira; 2020. 66(7):876-879. 11 ref.

Publisher

Associacao Medica Brasileira

Location of Publisher

São Paulo

Country of Publication

Brazil

Abstract

The pandemic of Coronavirus Disease 2019 (COVID-19) has put pressure on countries' health systems. Although attention is mostly directed at the hospital sector, since many critically ill people will need intensive care, Primary Health Care (PHC) has also been disrupted. In Brasil, a universal and free health system has existed since the 1988 Constitution, which re-organized the PHC to attend the population. However, like other countries, the Brazilian health system is being overloaded with the increase in the large number of COVID-19 cases. It is worth reflecting on the changes and challenges in PHC during the COVID-19 pandemic in Brasil.

Publication Type

Journal article.

<159>

Accession Number

20203467150

Author

Zhao XueSen; Chen DanYing; Szabla, R.; Zheng Mei; Li GuoLi; Du PengCheng; Zheng ShuangLi; Li XingLin; Song Chuan; Li Rui; Guo JuTao; Junop, M.; Zeng Hui; Lin HanXin

Title

Broad and differential animal angiotensin-converting enzyme 2 receptor usage by SARS-CoV-2.

Source

Journal of Virology; 2020. 94(18)63 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

The COVID-19 pandemic has caused an unprecedented global public health and economic crisis. The origin and emergence of its causal agent, SARS-CoV-2, in the human population remains mysterious, although bat and pangolin were proposed to be the natural reservoirs. Strikingly, unlike the SARS-CoV-2-like coronaviruses (CoVs) identified in bats and pangolins, SARS-CoV-2 harbors a polybasic furin cleavage site in its spike (S) glycoprotein. SARS-CoV-2 uses human angiotensin-converting enzyme 2 (ACE2) as its receptor to infect cells. Receptor recognition by the S protein is the major determinant of host range, tissue tropism, and pathogenesis of coronaviruses. In an effort to search for the potential intermediate or amplifying animal hosts of SARS-CoV-2, we examined receptor activity of ACE2 from 14 mammal species and found that ACE2s from multiple species can support the infectious entry of lentiviral particles pseudotyped with the wild-type or furin cleavage site-deficient S protein of SARS-CoV-2. ACE2 of human/rhesus monkey and rat/mouse exhibited the highest and lowest receptor activities, respectively. Among the remaining species, ACE2s from rabbit and pangolin strongly bound to the S1 subunit of SARS-CoV-2 S protein and efficiently supported the pseudotyped virus infection. These findings have important implications for understanding potential natural reservoirs, zoonotic transmission, human-to-animal transmission, and use of animal models. IMPORTANCE: SARS-CoV-2 uses human ACE2 as a primary receptor for host cell entry. Viral entry mediated by the interaction of ACE2 with spike protein largely determines host range and is the major constraint to interspecies transmission. We examined the receptor activity of 14 ACE2 orthologs and found that wild-type and mutant SARS-CoV-2 lacking the furin cleavage site in S protein could utilize ACE2 from a broad range of animal species to enter host cells. These results have important implications in the natural hosts, interspecies transmission, animal models, and molecular basis of receptor binding for SARS-CoV-2.

Publication Type

Journal article.

<160>

Accession Number

20203462198

Author

Vizcaino, G.; Esparza, J.

Title

Ethical conflicts in COVID-19 times.

Source

Journal of Infection in Developing Countries; 2020. 14(9):968-970. 14 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

The COVID-19 pandemic has created new challenges on multiple fronts including a few ethical concerns. Timely and appropriate access to health services and the need to protect vulnerable people are some of them. An important aspect to consider, at the global level, is the frailty of health systems in many developing countries and the constant threat of these collapsing due to shortage of resources and medical supply. Special attention should be placed towards protecting the health of care workers who are highly exposed to SARS-CoV-2 infection. Research and clinical trials involving COVID-19 patients and healthy human volunteers must be done in strict adherence to the fundamental principles of bioethics, even if finding a solution is an urgent need. Shared responsibility must be assumed as we collectively face a common problem and ethical conflicts must be resolved using, as reference, the guidelines developed by the World Health Organization and other relevant international and national organizations. This would allow responsible action in the face of the pandemic without harming human rights, the individual and collective well-being.

Publication Type

Journal article.

<161>

Accession Number

20203462194

Author

Mbachu, C. N. P.; Azubuike, C. M. C.; Mbachu, I. I.; Ndukwu, C. I.; Ezeuko, A. Y. A.; Udigwe, I. B.; Nnamani, C. P.; Umeh, U. M.; Ezeagwuna, D. A.; Onah, S. K.; Eze, H. O.; Okereke, U. C.; Orji-Ifeanyi, E. N.

Title

COVID-19 infection: knowledge, attitude, practices, and impact among healthcare workers in a south-eastern Nigerian state.

Source

Journal of Infection in Developing Countries; 2020. 14(9):943-952. 33 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

Introduction: The coronavirus disease (COVID-19) infection rate and mortality among Nigerian health care workers appear to be on the increase. This study determined the level of knowledge, attitude, practices, and impact of COVID-19 infection on healthcare workers (HCWs) working in a South-Eastern Nigerian state. Methodology: This was a web-based, cross-sectional study conducted among healthcare workers in South-eastern, Nigeria during the lockdown period. Socio-demographic profile, knowledge of COVID-19, fears and impact concerning COVID-19, attitude of health workers to work, preventive practices during this pandemic period were obtained. Data were analysed using STATA 16.0. Chi-square and Fisher's exact tests of association were used to determine the association between variables, with the significance level set at $p < 0.05$. Results: A total of 403 health care workers participated in the study. Majority of participants (n=357, 88.59%) had good knowledge and good preventive practices (n=328, 81.39%) of COVID-19. A significant proportion of respondents had a poor attitude to work (n=101, 25.06%) and an attitude of indifference (n=233, 57.82%). Almost half (48.64%) of participants had been negatively affected by COVID-19. Knowledge significantly influenced practice (p=0.029). Lack of Personal protective equipment, fear of dying and going to common places, had a significant impact on the attitude of workers. Conclusion: Good knowledge which influenced practice, high use of preventive practices, with associated poor and indifferent attitude was noted among healthcare workers. Fear of death and lack of personal protective equipment had a strong impact on attitude. Female HCWs had poorer attitude to work than males.

Publication Type

Journal article.

<162>

Accession Number

20203461452

Author

Osunde, N. R.; Olorunfemi, O.; Chukwuka, L.; Oyewole, O. M.; Olawale, M. O.

Title

Quality of nursing care assessment in the context of coronavirus disease (COVID-19) pandemic in the university of Benin teaching hospital, Benin-city, Nigeria: patients' perspectives.

Source

Nigerian Journal of Basic and Clinical Sciences; 2020. 17(2):84-90. 36 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Context: Quality of nursing care is the extent to which nursing health-care services provide an improved desired health outcome. Thus, using patients' perception as a proxy in measuring the quality of nursing care is highly recommended. Aims: The aim is to assess the quality of nursing care in the context of Coronavirus diseases (COVID-19) pandemic in the University of Benin Teaching Hospital (UBTH) from patients' perspectives. Materials and Methods: A cross-sectional descriptive study on the quality of nursing care: patients' perspective. Self-administered questionnaires were distributed to selected patients who had been on admission for not <2 weeks from the onset of the pandemic. A multistage sampling technique was used to select the sample size of 200 patients. Data collected were analysed using tables, percentages, means, standard deviation and Chi-square test; at 0.05 level of significance, through the Statistical Package for the Social Science software. Results: The findings revealed that patients had poor perception in some areas of nursing practice, and this is attributed to the shortage of nurses on the wards for patients' care. It also showed that nurse-patient relationship, and nurse-patient communication were significantly related to patients' perception of quality of nursing care (chi2 = 3.84, P <= 0.001) and (chi2 = 17.61, P = 0.003), respectively. Conclusion: The patient's perception of nursing care in UBTH was not perfect and this they attributed to the shortage of nurses on the wards for patients 'care, therefore the hospital management and the government should ensure more nurses are employed in the hospital so that the nurses can implement the standard ratio of nurse-patient relationship.

Publication Type

Journal article.

<163>

Accession Number

20203464515

Author

Azizi, M. H.; Azizi, F.

Title

Fatal infectious epidemics in Iran in the last two centuries; what lessons can we learn from preceding outbreaks? A brief historical review.

Source

Archives of Iranian Medicine; 2020. 23(8):578-581.

Publisher

Academy of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

In the past two centuries, several fatal infectious outbreaks have arisen in Iran. Presented here is a brief historical account of four fatal epidemics including cholera, plague, Spanish influenza of 1918 and smallpox between 1796 and 1979. The lessons from these outbreaks could be helpful for better combatting other deadly epidemics including the present-day disastrous COVID-19 pandemic.

Publication Type

Journal article.

<164>

Accession Number

20203464514

Author

Malek, M.; Hosseinpanah, F.; Meybodi, H. R. A.; Jahed, S. A.; Hadaegh, F.; Sharghi, S.; Esteghamati, A.; Khamseh, M. E.

Title

Diabetes management during the COVID-19 pandemic: an Iranian expert opinion statement.

Source

Archives of Iranian Medicine; 2020. 23(8):564-567. 16 ref.

Publisher

Academy of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

The coronavirus infection is an evolving pandemic with high morbidity and mortality, especially in people with comorbidities. The case fatality rate (CFR) is 9.2% in the presence of diabetes, while it is 1.4% in those without any comorbidity. Diabetes is a prevalent disease globally; hence, healthcare professionals are highly concerned about severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic progression. Current evidence does not support higher incidence of coronavirus disease 2019 (COVID-19) in people with diabetes (PWD). However, people with diabetes are considered high risk for developing complications. Optimal metabolic control is a challenging concept, especially in the presence of an acute and severe respiratory viral infection. In this consensus, we considered the challenging issues in management of patients with diabetes during the COVID-19 pandemic. The consensus covers various aspects of outpatient as well as inpatient care based on the current evidence.

Publication Type

Journal article.

<165>

Accession Number

20203468817

Author

Shamsrizi, P.; Jochum, J.; Kreuels, B.; Ramharter, M.

Title

Traveling into the abyss: risk perception of German travelers at the onset of the COVID-19 pandemic.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(4):1640-1641. 3 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

The emergence and international spread of SARS-CoV-2 led to unprecedented challenges for international travelers including health-related concerns and international travel restrictions. Remarkably, overseas travelers consulted at our travel clinic during the first quarter of 2020 were apparently not disconcerted by the evolving pandemic with a continuously high rate of consultations at our center; 85% of travelers did not actively inquire about COVID-19 during the pretravel consultation including individuals with clinically significant immunosuppression constituting a high-risk group for COVID-19-related adverse health outcome. This experience demonstrates the societal responsibility of travel medicine practitioners to proactively provide unbiased information about the health-related and travel-related impact of newly emerging infections.

Publication Type

Journal article.

<166>

Accession Number

20203468816

Author

Abd-Elsalam, S.; Esmail, E. S.; Khalaf, M.; Abdo, E. F.; Medhat, M. A.; El-Ghafar, M. S. A.; Ahmed, O. A.; Soliman, S.; Serangawy, G. N.; Alboraie, M.

Title

Hydroxychloroquine in the treatment of COVID-19: a multicenter randomized controlled study.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(4):1635-1639. 29 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

The COVID-19 pandemic is showing an exponential growth, mandating an urgent need to develop an effective treatment. Indeed, to date, a well-established therapy is still lacking. We aimed to evaluate the safety and efficacy of hydroxychloroquine (HCQ) added to standard care in patients with COVID-19. This

was a multicenter, randomized controlled trial conducted at three major university hospitals in Egypt. One hundred ninety-four patients with confirmed diagnosis of COVID-19 were included in the study after signing informed consent. They were equally randomized into two arms: 97 patients administrated HCQ plus standard care (HCQ group) and 97 patients administered only standard care as a control arm (control group). The primary endpoints were recovery within 28 days, need for mechanical ventilation, or death. The two groups were matched for age and gender. There was no significant difference between them regarding any of the baseline characteristics or laboratory parameters. Four patients (4.1%) in the HCQ group and 5 (5.2%) patients in the control group needed mechanical ventilation (P = 0.75). The overall mortality did not differ between the two groups, as six patients (6.2%) died in the HCQ group and 5 (5.2%) died in the control group (P = 0.77). Univariate logistic regression analysis showed that HCQ treatment was not significantly associated with decreased mortality in COVID-19 patients. So, adding HCQ to standard care did not add significant benefit, did not decrease the need for ventilation, and did not reduce mortality rates in COVID-19 patients.

Publication Type

Journal article.

<167>

Accession Number

20203460750

Author

Liu ZiHan; Zhao YanJie; Feng Yuan; Zhang QinGe; Zhong BaoLiang; Cheung Teris; Hall, B. J.; Xiang YuTao

Title

Migrant workers in China need emergency psychological interventions during the COVID-19 outbreak.

Source

Globalization and Health; 2020. 16(75):(19 August 2020). 19 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The 2019 novel coronavirus disease (COVID-19) has been found in more than 200 countries worldwide since December, 2019. In China, a major reason for the rapid transmission of the COVID-19 in early stage of the outbreak is the huge numbers of passengers boarding their "last train home" to meet family members during the Spring Festival. Most of these travelers were internal migrant workers. In order to reduce the risk of the COVID-19 transmission, public transportation networks were suspended, and many migrant

workers who returned to their hometowns needed to be quarantined for 2 weeks, which led to the delay of returning back to cities to work. Many businesses have temporarily closed because of the risk of COVID-19 transmission, leading to unemployment of many workers. Sudden loss of income and further quarantine enforcement in cities can exacerbate existing mental health problems or trigger new mental disorders among affected migrant workers. However, to date no specific guidelines or strategies about mental health services of migrant workers have been released. Health authorities and professionals should pay more attention to this vulnerable group and provide timely mental health service support for those in need.

Publication Type

Journal article.

<168>

Accession Number

20203460707

Author

Akinyemi, K. O.; Fakorede, C. O.; Anjorin, A. A. A.; Abegunrin, R. O.; Adunmo, O.; Ajoseh, S. O.; Akinkunmi, F. M.

Title

Intrigues and challenges associated with COVID-19 pandemic in Nigeria.

Source

Health; 2020. 12(8):954-971. 47 ref.

Publisher

Scientific Research Publishing

Location of Publisher

Irvine

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19) pandemic has emerged as a global health crisis, with 3,855,788 infected persons and 256,862 deaths worldwide as of May 9, 2020. In Nigeria, the first case of the pandemic was reported by the Nigerian Centre for Disease Control on February 27, 2020. Between the dates when the index case was reported and May 9, 2020, the nation has recorded a total of 4151 confirmed COVID-19 cases from 25,951 samples screened and 745 (18%) cases discharged with 128 deaths indicating a case fatality rate of 3.1%. Thirty-four (34) States and the Federal Capital Territory have recorded coronavirus disease. The most affected States in Nigeria is Lagos (epicentre of COVID-19) with 1764 cases, followed by 576 cases in Kano states and only one COVID-19 case in Anambra State 42 days since the last report of index case. Demographically, a total of 2828 male subjects have been infected representing 68% and 1323 female subjects representing 32%. The age group 31 - 40 years is mostly

affected accounting for 24%. The number of people with travel history is 210 (5%), 947 (23%) contacts, 2618 (63%) without epidemiological link and 376 (9%) with an incomplete information. Nigeria is currently witnessing community transmission of COVID-19. Some observed issues aiding community transmission of COVID-19 in Nigeria are: the distrust of some Nigeria citizens towards government on COVID-19 management, poverty, religious beliefs, ignorance on face mask sharing, low level of informed populace, misconceptions, stigmatization of infected individuals, poor health facilities, inadequate testing Centre, shortage of health workers, poor treatment among others. Effective people's health preventive behaviour and community-based health policy and strategies to mitigate these challenges are therein suggested.

Publication Type

Journal article.

<169>

Accession Number

20203448858

Author

Nutbeam, D.

Title

Special Issue: COVID-19: lessons for public health. (Special Issue: COVID-19: lessons for public health.)

Source

Public Health Research & Practice; 2020. 30(2):unpaginated.

Publisher

Sax Institute

Location of Publisher

Ultimo

Country of Publication

Australia

Abstract

This special issue contains 12 articles that reflects important perspectives to the response to COVID-19 in Australia and elsewhere. These articles provide examples of the profound and continuing impact of the global COVID-19 pandemic on the physical, social and mental health of our communities. Maintaining the fragile consensus between governments, their scientific advisers, and their citizens is critical to the successful control of the epidemic. This consensus will be sustained by mutual trust built on effective communication - between scientists and policy makers, and between governments and their populations.

Publication Type

Journal issue.

<170>

Accession Number

20203445751

Author

Wang XiuQiang; Lei SiMan; Le ShengLong; Yang YanXiang; Zhang BoYi; Yao Wu; Gao Zan; Cheng SuLin

Title

Bidirectional influence of the COVID-19 pandemic lockdowns on health behaviors and quality of life among Chinese adults.

Source

International Journal of Environmental Research and Public Health; 2020. 17(15)46 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Background: The coronavirus disease 2019 (COVID-19) pandemic has created challenges that have caused profound changes in health behaviors. This study aimed to explore how COVID-19 is affecting the health-related quality of life (QoL) among Chinese adults. Methods: The data of health-related behaviors and QoL were collected via online surveys from 2289 adults (mean age = 27.8 +/- 12 years) who had been isolated at home for an average of 77 days. Results: More than 50% of the respondents reported that their time engaged in daily physical activity (PA) decreased, while sedentary behavior (SB) time increased compared with that before the lockdown. Only 20% of the respondents reported engaging in moderate-to-vigorous PA, 23% of adults reported changed their diets to be healthier, and 30% reported consuming more vegetables, fruits, and milk products than before home-isolation. During home-isolation, 75.2% of the adults rated their sleep quality as very good, and 65% reported that they were satisfied with their QoL. Sleep quality mediated the relationship between PA and QoL. Conclusion: The two-to-three-month home-isolation has had mixed effects on adult health behaviors in China. The participants were found to have focused more on their eating quality and patterns, which had a positive influence on their QoL. However, people should be encouraged to exercise at home with limited space to maintain a generally healthy lifestyle during a prolonged quarantine.

Publication Type

Journal article.

<171>

Accession Number

20203457063

Author

Yang GuangDong

Title

H2S as a potential defense against COVID-19?

Source

American Journal of Physiology - Cell Physiology; 2020. 319(2):C244-C249. 73 ref.

Publisher

American Physiological Society

Location of Publisher

Bethesda

Country of Publication

USA

Abstract

The outbreak of COVID-19 pneumonia caused by a new coronavirus (severe acute respiratory syndrome coronavirus 2, SARS-CoV-2) is posing a global health emergency and has led to more than 380,000 deaths worldwide. The cell entry of SARS-CoV-2 depends on two host proteins angiotensin-converting enzyme 2 (ACE2) and transmembrane protease serine 2 (TMPRSS2). There is currently no vaccine available and also no effective drug for the treatment of COVID-19. Hydrogen sulfide (H2S) as a novel gasotransmitter has been shown to protect against lung damage via its anti-inflammation, antioxidative stress, antiviral, prosurvival, and antiaging effects. In light of the research advances on H2S signaling in biology and medicine, this review proposed H2S as a potential defense against COVID-19. It is suggested that H2S may block SARS-CoV-2 entry into host cells by interfering with ACE2 and TMPRSS2, inhibit SARS-CoV-2 replication by attenuating virus assembly/release, and protect SARS-CoV-2-induced lung damage by suppressing immune response and inflammation development. Preclinical studies and clinical trials with slow-releasing H2S donor(s) or the activators of endogenous H2S-generating enzymes should be considered as a preventative treatment or therapy for COVID-19.

Publication Type

Journal article.

<172>

Accession Number

20203457054

Author

Prachi Priya; Sherkhane, M. S.

Title

Awareness of coronavirus disease (COVID-19) pandemic among interns of a tertiary care hospital.

Source

International Journal of Medical Science and Public Health; 2020. 9(6):375-381. 23 ref.

Publisher

International Journal of Medical Science and Public Health

Location of Publisher

Surat

Country of Publication

India

Abstract

Background: Coronavirus disease officially called as COVID-19, which was noticed during December 2019 (Wuhan) China, later became a major public health problem leading to pandemic affecting worldwide and causing morbidity and mortality, despite various control measures. This research was undertaken to assess the level of awareness of coronavirus disease (COVID-19) among interns of a tertiary care hospital. Background: The objective of the study was to assess awareness of coronavirus (COVID-19) among interns of a tertiary care hospital. Materials and Methods: A cross-sectional observational study was conducted among 97 interns of a tertiary care hospital in Dharwad district, Karnataka, India. An online pre-designed and pre-tested questionnaire was developed using Google forms, with a consent form attached to it for voluntary participation, through which data were collected and the distributions of responses were presented as frequencies and percentages. Results: Awareness regarding coronavirus among 97 interns were assessed. Of which 41 (42.3%) were male and 56 (57.7%) were female. Newspaper and television were the primary reliable source of information about coronavirus. Cough (95.87%) and fever (90.72%) were the most common symptoms. The majority of the interns (90%) agreed that coronavirus could lead to pneumonia, respiratory failure, and renal failure. About 90% considered that it can be prevented by handwashing, wearing masks, and by maintaining distance. However, with respect to curability of the disease, the awareness was on a dismal note. Conclusion: Awareness of acquiring and transmitting coronavirus was found to be adequate, except for the curability aspects. Thus, it is the need of the hour to have timely updates about the disease and newer guidelines to restraint the ongoing pandemic of COVID-19.

Publication Type

Journal article.

<173>

Accession Number

20203458282

Author

Ekzayez, A.; Al-Khalil, M.; Jasiem, M.; Saleh, R. A.; Alzoubi, Z.; Meagher, K.; Patel, P.

Title

COVID-19 response in northwest Syria: innovation and community engagement in a complex conflict.

Source

Journal of Public Health; 2020. 42(3):504-509. 29 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Despite lacking capacity and resources, the health system in the northwest Syria is using innovative approaches for the containment of COVID-19. Lessons drawn from previous outbreaks in the region, such as the polio outbreak in 2013 and the annual seasonal influenza, have enabled the Early Warning and Response Network, a surveillance system to develop mechanisms of predicting risk and strengthening surveillance for the new pandemic. Social media tools such as WhatsApp are effectively collecting health information and communicating health messaging about COVID-19. Community engagement has also been scaled up, mobilizing local resources and encouraging thousands of volunteers to join the 'Volunteers against Corona' campaign. Bottom-up local governance technical entities, such as Idleb Health Directorate and the White Helmets, have played key leadership role in the response. These efforts need to be scaled up to prevent the transmission of COVID-19 in a region chronically affected by a complex armed conflict.

Publication Type

Journal article.

<174>

Accession Number

20203458281

Author

Nagaraja, B. S.; Ramesh, K. N.; Debjyoti Dhar; Mondal, M. S.; Treshita Dey; Subhrakamal Saha; Khan, M. A.; Rutul, S. D.; Kishore Pratik; Jayaram Manjula; Sangeeth, T. A.; Vikram Singh

Title

Hype study: hydroxychloroquine prophylaxis-related adverse events' analysis among healthcare workers during COVID-19 pandemic: a rising public health concern.

Source

Journal of Public Health; 2020. 42(3):493-503. 31 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: The rising burden of Coronavirus disease (COVID-19) has led to the mass use of hydroxychloroquine by healthcare workers (HCWs). Adverse event profile of this drug when used as prophylaxis is not well known in the literature. Methods: A retrospective, cross-sectional study was conducted across the country using semi-structured web-based questionnaire among COVID-19 negative and asymptomatic healthcare workers, taking hydroxychloroquine prophylaxis. Descriptive and multivariate logistic-regression models were applied for analysis. Results: Of the 166 participants, at least one adverse event was experienced by 37.9% participants, gastrointestinal being the most common (30.7%). Risk was higher in participants < 40 years age (odd's ratio (OR): 2.44, 95% confidence interval (CI): 1.18-5.05) and after first dose of hydroxychloroquine (51.2%, OR: 2.38, 95%CI: 1.17-4.84). Hydroxychloroquine prophylaxis was initiated without electrocardiography by 80.1% of HCWs. Only 21.6% of those with cardiovascular disease could get prior ECG. Conclusions: A higher incidence of adverse events was observed when results were compared with studies involving patients on long-term hydroxychloroquine therapy. Younger age and first dose were associated with greater incidence of adverse events though all were self-limiting. Monitoring prior and during prophylaxis was inadequate even among those with cardiovascular disease and risk-factors. However, no serious cardiovascular events were reported.

Publication Type

Journal article.

<175>

Accession Number

20203458279

Author

Hamaguchi, R.; Nematollahi, S.; Minter, D. J.

Title

Picture of a pandemic: visual aids in the COVID-19 crisis.

Source

Journal of Public Health; 2020. 42(3):483-485. 6 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

As a global crisis, COVID-19 has underscored the challenge of disseminating evidence-based public health recommendations amidst a rapidly evolving, often uncensored information ecosystem-one fueled in part by an unprecedented degree of connected afforded through social media. In this piece, we explore an underdiscussed intersection between the visual arts and public health, focusing on the use of validated infographics and other forms of visual communication to rapidly disseminate accurate public health information during the COVID-19 pandemic. We illustrate our arguments through our own experience in creating a validated infographic for patients, now disseminated through social media and other outlets across the world in nearly 20 translations. Visual communication offers a creative and practical medium to bridge critical health literacy gaps, empower diverse patient communities through evidence-based information and facilitate public health advocacy during this pandemic and the 'new normal' that lies ahead.

Publication Type

Journal article.

<176>

Accession Number

20203458278

Author

Harvey, J.

Title

Perspectives COVID-19 and PPE in context: an interview with China.

Source

Journal of Public Health; 2020. 42(3):480-482. 5 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The author aims to depict the current COVID-19 pandemic and personal protective equipment (PPE) crisis in the UK. The current situation is put into context exploring the history of global outbreaks of infectious disease and what has been learnt. These lessons are then applied and weighed against the recent response to coronavirus. An in depth interview with a UK biomedical SME based in Shanghai, China is reported in order to inform future procurement of PPE. It is hoped that an appreciation of the dynamic nature of the market will allow adaptations to be made in order to secure reliable supply chains moving forwards.

Publication Type

Journal article.

<177>

Accession Number

20203455114

Author

Ibekwe, T. S.; Fasunla, A. J.

Title

Telemedicine in otorhinolaryngological practice during COVID-19 pandemic.

Source

Nigerian Medical Journal; 2020. 61(3):111-113. 18 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Coronavirus-19 pandemic has impacted significantly on global social, economic, financial, and health institutions. Otolaryngologic (ORL) practice has also been affected by the scourge with the need for

modification of practice. The risks of contracting COVID-19 with the regular "patient-doctor physical contact" method of management of cases in ORL practice are high, given the routine examination of nose and throat. The desirability of telemedicine in the handling of most patients is appealing despite the limitations in the technology, especially in the developing countries like Africa. Therefore, otorhinolaryngologists in sub-Saharan Africa, within limits of applicability, should leverage on telemedicine in their clinical practice during this COVID-19 pandemic and beyond. COVID-19, being a disease of second chance, has provided us with the opportunity to harness this technologically driven method of supportive care in our clime.

Publication Type

Journal article.

<178>

Accession Number

20203456370

Author

Doroshow, D.; Podolsky, S.; Barr, J.

Title

Biomedical research in times of emergency: lessons from history.

Source

Annals of Internal Medicine; 2020. 173(4):297-299. 17 ref.

Publisher

American College of Physicians

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19) has sickened millions, killed hundreds of thousands, and utterly disrupted the daily lives of billions of people around the world. In an effort to ameliorate this devastation, the biomedical research complex has allocated billions of dollars and scientists have initiated hundreds of clinical trials in an expedited effort to understand, prevent, and treat this disease. National emergencies can stimulate significant investment of financial, physical, and intellectual resources that catalyze impressive scientific accomplishments, as evident with the Manhattan Project, penicillin, and the polio vaccines in the 20th century. However, pressurized research has also led to false promises, disastrous consequences, and breaches in ethics. Antiserum in the 1918 flu epidemic, contaminated yellow fever vaccines in World War II, and unethical human experimentation with mustard gas offer just a few cautionary exemplars. It is critical to continue biomedical research efforts to address this pandemic, and it

is appropriate that they receive priority in both attention and funding. But history also demonstrates the importance of treating early results - such as those associated with hydroxychloroquine - with caution as we only begin to understand the biology, epidemiology, and potential target points of COVID-19.

Publication Type

Journal article.

<179>

Accession Number

20203456369

Author

Hernandez, A. V.; Roman YuaniM.; Vinay Pasupuleti; Barboza, J. J.; White, C. M.

Title

Hydroxychloroquine or chloroquine for treatment or prophylaxis of COVID-19: a living systematic review.

Source

Annals of Internal Medicine; 2020. 173(4):287-296. 28 ref.

Publisher

American College of Physicians

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

Background: Hydroxychloroquine and chloroquine have antiviral effects in vitro against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Purpose: To summarize evidence about the benefits and harms of hydroxychloroquine or chloroquine for the treatment or prophylaxis of coronavirus disease 2019 (COVID-19). Data Sources: PubMed (via MEDLINE), EMBASE (via Ovid), Scopus, Web of Science, Cochrane Library, bioRxiv, Preprints, ClinicalTrials.gov, World Health Organization International Clinical Trials Registry Platform, and the Chinese Clinical Trials Registry from 1 December 2019 until 8 May 2020. Study Selection: Studies in any language reporting efficacy or safety outcomes from hydroxychloroquine or chloroquine use in any setting in adults or children with suspected COVID-19 or at risk for SARS-CoV-2 infection. Data Extraction: Independent, dually performed data extraction and quality assessments. Data Synthesis: Four randomized controlled trials, 10 cohort studies, and 9 case series assessed treatment effects of the medications, but no studies evaluated prophylaxis. Evidence was conflicting and insufficient regarding the effect of hydroxychloroquine on such outcomes as all-cause mortality, progression to severe disease, clinical symptoms, and upper respiratory virologic clearance with antigen testing. Several studies found that patients receiving hydroxychloroquine developed a QTc interval of 500 ms or greater, but the proportion of patients with this finding varied among the studies. Two studies assessed the efficacy of chloroquine; 1

trial, which compared higher-dose (600 mg twice daily for 10 days) with lower-dose (450 mg twice daily on day 1 and once daily for 4 days) therapy, was stopped owing to concern that the higher dose therapy increased lethality and QTc interval prolongation. An observational study that compared adults with COVID-19 receiving chloroquine phosphate, 500 mg once or twice daily, with patients not receiving chloroquine found minor fever resolution and virologic clearance benefits with chloroquine. Limitation: There were few controlled studies, and control for confounding was inadequate in observational studies. Conclusion: Evidence on the benefits and harms of using hydroxychloroquine or chloroquine to treat COVID-19 is very weak and conflicting.

Publication Type

Journal article.

<180>

Accession Number

20203453267

Author

Zhang NaNa; Li XiaoFeng; Deng YongQiang; Zhao Hui; Huang YiJiao; Yang Guan; Huang WeiJin; Gao Peng; Zhou Chao; Zhang RongRong; Guo Yan; Sun ShiHui; Fan Hang; Zu ShuLong; Chen Qi; He Qi; Cao TianShu; Huang XingYao; Qiu HongYing; Nie JianHui; Jiang YuHang; Yan HuaYuan; Ye Qing; Zhong Xia; Xue XiaLin; et al.

Title

A thermostable mRNA vaccine against COVID-19.

Source

Cell (Cambridge); 2020. 182(5):1271-1283.e16.

Publisher

Cell Press

Location of Publisher

Cambridge

Country of Publication

USA

Abstract

There is an urgent need for vaccines against coronavirus disease 2019 (COVID-19) because of the ongoing SARS-CoV-2 pandemic. Among all approaches, a messenger RNA (mRNA)-based vaccine has emerged as a rapid and versatile platform to quickly respond to this challenge. Here, we developed a lipid nanoparticle-encapsulated mRNA (mRNA-LNP) encoding the receptor binding domain (RBD) of SARS-CoV-2 as a vaccine candidate (called ARCoV). Intramuscular immunization of ARCoV mRNA-LNP elicited robust neutralizing antibodies against SARS-CoV-2 as well as a Th1-biased cellular response in mice and non-human primates. Two doses of ARCoV immunization in mice conferred complete protection against the challenge of a SARS-

CoV-2 mouse-adapted strain. Additionally, ARCoV is manufactured as a liquid formulation and can be stored at room temperature for at least 1 week. ARCoV is currently being evaluated in phase 1 clinical trials.

Publication Type

Journal article.

<181>

Accession Number

20203457535

Author

Prashant Nagpal; Sabarish Narayanasamy; Aditi Vidholia; Guo JunFeng; Shin KyungMin; Lee ChangHyun; Hoffman, E. A.

Title

Imaging of COVID-19 pneumonia: patterns, pathogenesis, and advances.

Source

British Journal of Radiology; 2020. 93(1113)81 ref.

Publisher

British Institute of Radiology

Location of Publisher

London

Country of Publication

UK

Abstract

COVID-19 pneumonia is a newly recognized lung infection. Initially, CT imaging was demonstrated to be one of the most sensitive tests for the detection of infection. Currently, with broader availability of polymerase chain reaction for disease diagnosis, CT is mainly used for the identification of complications and other defined clinical indications in hospitalized patients. Nonetheless, radiologists are interpreting lung imaging in unsuspected patients as well as in suspected patients with imaging obtained to rule out other relevant clinical indications. The knowledge of pathological findings is also crucial for imagers to better interpret various imaging findings. Identification of the imaging findings that are commonly seen with the disease is important to diagnose and suggest confirmatory testing in unsuspected cases. Proper precautionary measures will be important in such unsuspected patients to prevent further spread. In addition to understanding the imaging findings for the diagnosis of the disease, it is important to understand the growing set of tools provided by artificial intelligence. The goal of this review is to highlight common imaging findings using illustrative examples, describe the evolution of disease over time, discuss differences in imaging appearance of adult and pediatric patients and review the available literature on quantitative CT for COVID-19. We briefly address the known pathological findings of the COVID-19 lung

disease that may help better understand the imaging appearance, and we provide a demonstration of novel display methodologies and artificial intelligence applications serving to support clinical observations.

Publication Type

Journal article.

<182>

Accession Number

20203457518

Author

Ellison, B.; McFadden, B.; Rickard, B. J.; Wilson, N.

Title

Examining food purchase behavior and food values during the COVID-19 pandemic.

Source

Working Paper - The Charles H. Dyson School of Applied Economics and Management, Cornell University; 2020. (WP 2020-08):i + 27 pp. 27 ref.

Publisher

The Charles H. Dyson School of Applied Economics and Management, Cornell University

Location of Publisher

Ithaca

Country of Publication

USA

Abstract

The COVID-19 pandemic has fundamentally altered what is "normal" across the globe, and food purchasing and acquisition decisions are no different. In this paper, we surveyed a panel of 1,370 U.S. households at four different points during the COVID-19 pandemic from mid-March to late April 2020. The rapid panel design uniquely positions us to observe changes in households' food expenditures, shopping behaviors, and food values as the pandemic evolved in the U.S. Our results reveal significant reductions in food-away-from-home expenditures and increases in online grocery shopping. Food values appear to be fairly stable in the early stages of the pandemic; however, decreases in the importance of price and nutrition reveal tradeoffs households may be willing to make in times of scarcity.

Publication Type

Bulletin.

<183>

Accession Number

20203454432

Author

Barros, A. J. D.; Victora, C. G.; Menezes, A. M. B.; Horta, B. L.; Hartwig, F.; Victora, G.; Pellanda, L. C.; Dellagostin, O. A.; Struchiner, C. J.; Burattini, M. N.; Goncalves, M. R.; Possuelo, L. G.; Weber, L. P.; Estima, S. L.; Jacques, N.; Harter, J.; Silva, S. G.; Frizzo, M.; Lima, R. C.; Barros, F. C.; Silveira, M. F.; Hallal, P. C.

Title

Social distancing patterns in nine municipalities of Rio Grande do Sul, Brazil: the epicovid19/RS study.

Source

Revista de Saude Publica; 2020. 54(75)12 ref.

Publisher

Universidade de Sao Paulo, Faculdade de Saude Publica

Location of Publisher

São Paulo

Country of Publication

Brazil

Abstract

OBJECTIVE: To describe social distancing practices in nine municipalities of the state of Rio Grande do Sul, Brazil, stratified by gender, age, and educational attainment. METHODS: Two sequential cross-sectional studies were conducted in the municipalities of Canoas, Caxias do Sul, Ijui, Passo Fundo, Pelotas, Porto Alegre, Santa Cruz do Sul, Santa Maria, and Uruguaiana to estimate the population prevalence of COVID-19. The study was designed to be representative of the urban population of these municipalities. A questionnaire including three questions about social distancing was also administered to the participants. Here, we present descriptive analyses of social distancing practices by subgroups and use chi-square tests for comparisons. RESULTS: In terms of degree of social distancing, 25.8% of the interviewees reported being essentially isolated and 41.1% reported being quite isolated. 20.1% of respondents reported staying at home all the time, while 44.5% left only for essential activities. More than half of households reported receiving no visits from non-residents. Adults aged 20 to 59 reported the least social distancing, while more than 80% of participants aged 60 years or older reported being essentially isolated or quite isolated. Women reported more stringent distancing than men. Groups with higher educational attainment reported going out for daily activities more frequently. CONCLUSIONS: The extremes of age are more protected by social distancing, but some groups remain highly exposed. This can be an important limiting factor in controlling progression of the COVID-19 pandemic.

Publication Type

Journal article.

<184>

Accession Number

20203458704

Author

Napierala, T.; Lesniewska-Napierala, K.; Burski, R.

Title

Impact of geographic distribution of COVID-19 cases on hotels' performances: case of Polish cities.

Source

Sustainability; 2020. 12(11)97 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The main goal of the article is to describe the short-term impacts of reported new cases and deaths of the COVID-19 disease on hotels' performances in the nine major Polish urban hotel markets: Krakow, Warszawa, Poznan, Wroclaw, Gdansk, Lublin, Lodz, Katowice, and Sopot. Time range of the analysis covers the period from January 5, 2020 (the beginning of the very first week when the COVID-19 cases were evidenced) to March 14, 2020 (the initial phase of lockdown was introduced by the Polish government). Various geographical contexts of the COVID-19 impacts are considered: national, European, and global. Generalized method of moments was applied to investigate the influence of reported COVID-19 cases (deaths) on both occupancy and revenue per available room. The results show that the most significant, negative impact of the pandemic on hotel performances is confirmed at the European level of the COVID-19 outbreak. Moreover, the negative influence of national cases of COVID-19 is more significant in less internationalized (or less-populated) urban destinations. Thus, the hotel industry (especially in the most internationalized, biggest Polish cities) might be recovered only when issues of the COVID-19 epidemic will be solved at the European level.

Publication Type

Journal article.

<185>

Accession Number

20203459975

Author

Abou-Abbas, L.; Nasser, Z.; Fares, Y.; Chahrour, M.; El-Haidari, R.; Atoui, R.

Title

Knowledge and practice of physicians during COVID-19 pandemic: a cross-sectional study in Lebanon.

Source

BMC Public Health; 2020. 20(1474):(29 September 2020). 18 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: As the Coronavirus disease 2019 (COVID-19) pandemic continues to evolve, physicians must be equipped with adequate knowledge, skills on the prevention measures, and confidence in diagnosing and treating COVID-19 patients. Therefore, it is of great interest to assess the knowledge and practices of Physicians to identify existing gaps and improve occupational safety and viral surveillance. Methods: A cross-sectional study was conducted in Lebanon between 28th March and 11th April 2020. Data was collected through an online survey that included information on socio-demographic characteristics, knowledge, practice, physicians fear towards COVID-19 as well as their perceptions regarding actions/policies implemented by the Ministry of Public Health (MOPH) and their health care facilities. Multivariable logistic regression analyses were carried out to identify the factors associated with good knowledge of COVID-19 and good practice toward its prevention. Adjusted odds ratio and their 95% confidence intervals were reported. Results: Our survey revealed that the majority of Lebanese physicians had good knowledge about the disease (89.5%) while approximately half of the respondents adopted good preventive practices (49.7%). The odds of having good knowledge was 2.16 times higher among physicians aged 40 and above (adjusted OR = 2.16 with a 95% confidence interval (CI) of 1.08 to 4.34) compared to their counterparts aged less than 40 years old. Our results also showed that the odds of good practice was 2 times higher among frontline compared to the second line workers (adjusted OR = 2.01 with 95% CI of 1.21 to 3.34). Physicians with an experience of 10 years and above were 3.35 times more likely to have good practice compared to their counterparts (adjusted OR = 3.35 with 95% CI of 1.60 to 7.02). Finally, participants with good knowledge of COVID-19 were 2.04 times more likely to have a good practice (OR = 2.04 with 95% CI of 1.01 to 4.12). Conclusion: Lebanese physicians revealed a good level of knowledge; however, they had limited comprehension of the precautionary measures that protect them from this virus. Our findings have important implications for the development of strategies suitable for improving the level of practice among physicians and enhance prevention programs.

Publication Type

Journal article.

<186>

Accession Number

20203450616

Author

Mohammad Hassan Shakil; Munim, Z. H.; Tasnia, M.; Sarowar, S.

Title

COVID-19 and the environment: a critical review and research agenda.

Source

Science of the Total Environment; 2020. 74535 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The current Coronavirus infection (COVID-19) outbreak has had a substantial impact on many aspects of general life. Although a number of studies have been published on the topic already, there has not been a critical review of studies on the impacts of COVID-19 by and on environmental factors. The current study fills this gap by presenting a critical analysis of 57 studies on the nexus between COVID-19 and the environment, published in nine journals up to May 2020. Majority of the studies in our sample are published in Science of the Total Environment (74%), and studies used mostly descriptive statistics and regression as research methods. We identified four underlying research clusters based on a systematic content analysis of the studies. The clusters are: (1) COVID-19 and environmental degradation, (2) COVID-19 and air pollution, (3) COVID-19 and climate/metrological factors and (4) COVID-19 and temperature. Besides a critical analysis of the studies in each cluster, we propose research questions to guide future research on the relationship between COVID-19 and the environment.

Publication Type

Journal article.

<187>

Accession Number

20203454928

Author

Shrestha, S. L.

Title

Prevalence of psychological effect of COVID-19 on medical professionals in a tertiary care center.

Source

JNMA, Journal of the Nepal Medical Association; 2020. 58(228):550-553. 13 ref.

Publisher

Nepal Medical Association

Location of Publisher

Kathmandu

Country of Publication

Nepal

Abstract

Introduction: COVID-19 is a pandemic disease first detected in Wuhan, China on last December 2019. Many doctors and nurses, were infected and lost their life by COVID-19 around the world. Therefore COVID-19 brought unbearable psychological pressure on doctors, and nurses. The objective of this study is to find the prevalence of anxiety among medical doctors and nurses. Methods: This is a descriptive cross-sectional study of 101 doctors and nurses carried out in a tertiary care center. Convenience sampling was done with the study period from April to May 2020. Ethical approval was taken from the institutional review board of NAMS (IRB reference no. 1076). The collected data stored and analyzed with statistical software (SPSS version 26.0). Point estimate at 95% Confidence Interval was calculated along with frequency and proportion for binary data. Results: Out of 101 participants prevalence of anxiety was found to be 74 (73.3%) (64.68-81.33 at 95% Confidence Interval). Among them, 9 (8.9%) of participants experienced sever types of generalized anxiety disorder, 23 (22.8%) moderate, and 42 (41.6%) mild type. Similarly, 18 (17.8%) and 10 (9.9%) of participants felt very difficult and extreme difficulty at the workplace and home respectively. Conclusions: The mental health of medical doctors and nurses is significantly affected during the COVID-19 pandemic. Hospital administration should conduct psychological preparedness training to the medical profession before posting on duty to provide quality health services to the patients.

Publication Type

Journal article.

<188>

Accession Number

20203454918

Author

Guzik, T. J.; Mohiddin, S. A.; Dimarco, A.; Vimal Patel; Savvatis, K.; Marelli-Berg, F. M.; Madhur, M. S.; Tomaszewski, M.; Maffia, P.; D'Acquisto, F.; Nicklin, S. A.; Marian, A. J.; Nosalski, R.; Murray, E. C.; Guzik, B.; Berry, C.; Touyz, R. M.; Kreutz, R.; Wang DaoWen; Bhella, D.; Sagliocco, O.; Crea, F.; Thomson, E. C.; McInnes, I. B.

Title

COVID-19 and the cardiovascular system: implications for risk assessment, diagnosis, and treatment options.

Source

Cardiovascular Research; 2020. 116(10):1666-1687. 167 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The novel coronavirus disease (COVID-19) outbreak, caused by SARS-CoV-2, represents the greatest medical challenge in decades. We provide a comprehensive review of the clinical course of COVID-19, its comorbidities, and mechanistic considerations for future therapies. While COVID-19 primarily affects the lungs, causing interstitial pneumonitis and severe acute respiratory distress syndrome (ARDS), it also affects multiple organs, particularly the cardiovascular system. Risk of severe infection and mortality increase with advancing age and male sex. Mortality is increased by comorbidities: cardiovascular disease, hypertension, diabetes, chronic pulmonary disease, and cancer. The most common complications include arrhythmia (atrial fibrillation, ventricular tachyarrhythmia, and ventricular fibrillation), cardiac injury [elevated highly sensitive troponin I (hs-cTnI) and creatine kinase (CK) levels], fulminant myocarditis, heart failure, pulmonary embolism, and disseminated intravascular coagulation (DIC). Mechanistically, SARS-CoV-2, following proteolytic cleavage of its S protein by a serine protease, binds to the transmembrane angiotensin-converting enzyme 2 (ACE2) - a homologue of ACE - to enter type 2 pneumocytes, macrophages, perivascular pericytes, and cardiomyocytes. This may lead to myocardial dysfunction and damage, endothelial dysfunction, microvascular dysfunction, plaque instability, and myocardial infarction (MI). While ACE2 is essential for viral invasion, there is no evidence that ACE inhibitors or angiotensin receptor blockers (ARBs) worsen prognosis. Hence, patients should not discontinue their use. Moreover, renin-angiotensin-aldosterone system (RAAS) inhibitors might be beneficial in COVID-19. Initial immune and inflammatory responses induce a severe cytokine storm [interleukin (IL)-6, IL-7, IL-22, IL-17, etc.] during the rapid progression phase of COVID-19. Early evaluation and continued monitoring of cardiac damage (cTnI and NT-proBNP) and coagulation (D-dimer) after hospitalization may identify patients with cardiac injury and predict COVID-19 complications. Preventive measures (social distancing and social isolation) also increase cardiovascular risk. Cardiovascular considerations of therapies currently used, including remdesivir, chloroquine, hydroxychloroquine, tocilizumab, ribavirin, interferons, and lopinavir/ritonavir, as well as experimental therapies, such as human recombinant ACE2 (rhACE2), are discussed.

Publication Type

Journal article.

<189>

Accession Number

20203466299

Author

Ceulemans, M.; Cuppers, B.; Vries, L. de; Karel Allegaert, J. J.; Puijenbroek, E. P. van

Title

COVID-19 during pregnancy and lactation: what do we already know? [Dutch]

Source

Nederlands Tijdschrift voor Geneeskunde; 2020. 164(28)29 ref.

Publisher

Bohn Stafleu Van Loghum

Location of Publisher

Houten

Country of Publication

Netherlands

Abstract

SARS-CoV-2 has rapidly spread worldwide since December 2019. Obviously, pregnant and lactating women will also be infected with SARS-CoV-2. Pregnant women, however, are a risk population for developing severe respiratory infections. Currently, the knowledge on potential risks and consequences of COVID-19 during pregnancy and lactation is limited. Available data show that pregnant women suffer from similar symptoms compared to non-pregnant patients. There is no evidence as yet that COVID-19 has a more serious course during pregnancy. Although pregnant women might suffer from a wide variety of symptoms, most of them are asymptomatic. Maternal SARS-CoV-2 infection might lead to adverse neonatal outcomes, such as prematurity or respiratory symptoms. There is currently no conclusive evidence of absence of intrauterine transmission of the virus; the virus has not been detected in breastmilk in most studies, although passage into breastmilk cannot be completely excluded.

Publication Type

Journal article.

<190>

Accession Number

20203466292

Author

Toluk, O.; C&tail;akmak, B. D.; Ercan, I.; Uncu, Y.

Title

Analysis from statistical perspective of 2019 novel coronavirus cases in turkey: how are the things going on?

Source

Turkiye Klinikleri tip Bilimleri Dergisi; 2020. 40(2):228-235. 23 ref.

Publisher

Ortadogu Reklam Tanitum Yayincilik Turizm

Location of Publisher

Balgat

Country of Publication

Turkey

Abstract

Objective: There is only limited data about 2019-novel coronavirus (2019-nCov) outbreak from Turkey. Here, we aimed to analyse 2019-nCov cases in Turkey from statistical perspective. Material and Methods: Data were obtained from Republic of Turkey Ministery of Health website. The statistical modeling was performed for tests between 27 March and 18 April. The ratios were computed for according to test numbers, number of cases, number of patients in intensive care care, deaths for statistical analysis. An association between related ratios and time was analyzed by using curve estimation approach. Curves were drawn with 95% confidence interval. Results: The ratio of number of cases/number of tests were increased until 7 April and then decreased while the ratio of daily recovered cases/number of daily cases were decreased until that date and then increased. The ratio of deaths/number of cases were increased rapidly initially whereas it later increased more slowly. Although the ratio of number of intubated cases/number of cases and the ratio of number of cases in intensive care unit/number of cases have tendency to decrease in same rate, the ratio of number of deaths/number of cases in intensive care unit has tendency to increase from the beginning of pandemia until this date. Conclusion: The increasing trend of recovered cases, decreasing of deaths, requirement of intensive care unit and intubation are the main satisfactions for Turkey. The statistical modeling used here could shed some light on the control of process. While more cases than modeling estimate can show uncontrolled process, less cases could indicate well-controlled process.

Publication Type

Journal article.

<191>

Accession Number

20203466246

Author

Aranda Abreu, G. E.; Hernandez Aguilar, M. E.; Herrera Covarrubias, D.; Rojas Duran, F.

Title

Amantadine as a drug to mitigate the effects of COVID-19.

Source

Medical Hypotheses; 2020. 14010 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The SARS-CoV-2 virus has spread around the world. At this time, there is no vaccine that can help people prevent the spread of coronavirus. We are proposing amantadine as a drug that can be used to mitigate the effects of the virus. It is demonstrated by docking models how amantadine can exert its action on Coronavirus viroporin E.

Publication Type

Journal article.

<192>

Accession Number

20203466241

Author

Ahmed Yaqinuddin; Junaid Kashir

Title

Innate immunity in COVID-19 patients mediated by NKG2A receptors, and potential treatment using Monalizumab, Cholroquine, and antiviral agents.

Source

Medical Hypotheses; 2020. 14027 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Following the outbreak of a novel coronavirus (SARS-CoV-2), studies suggest that the resultant disease (COVID-19) is more severe in individuals with a weakened immune system. Cytotoxic T-cells (CTLs) and Natural Killer (NK) cells are required to generate an effective immune response against viruses, functional exhaustion of which enables disease progression. Patients with severe COVID-19 present significantly lower lymphocyte, and higher neutrophil, counts in blood. Specifically, CD8+ lymphocytes and NK cells were significantly reduced in cases of severe infection compared to patients with mild infection and healthy individuals. The NK group 2 member A (NKG2A) receptor transduces inhibitory signalling, suppressing NK cytokine secretion and cytotoxicity. Overexpression of NKG2A has been observed on CD8+ and NK cells of COVID-19 infected patients compared to healthy controls, while NKG2A overexpression also functionally exhausts CD8+ cells and NK cells, resulting in a severely compromised innate immune response. Blocking NKG2A on CD8+ cells and NK cells in cancers modulated tumor growth, restoring CD8+ T and NK cell function. A recently proposed mechanism via which SARS-CoV-2 overrides innate immune response of the host is by over-expressing NKG2A on CD+ T and NK cells, culminating in functional exhaustion of the immune response against the viral pathogen. Monalizumab is an inhibiting antibody against NKG2A which can restore the function of CD8 + T and NK cells in cancers, successfully ceasing tumor progression with no significant side effects in Phase 2 clinical trials. We hypothesize that patients with severe COVID-19 have a severely compromised innate immune response and could be treated via the use of Monalizumab, interferon a, chloroquine, and other antiviral agents.

Publication Type

Journal article.

<193>

Accession Number

20203466239

Author

Pindiprolu, S. K. S. S.; Pindiprolu, S. H.

Title

Plausible mechanisms of niclosamide as an antiviral agent against COVID-19.

Source

Medical Hypotheses; 2020. 14018 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Corona virus disease 2019 (COVID-19) pandemic caused 18 440 deaths world wide as of 25 March 2020 and posing a serious threat to public health. There is a need, therefore, for effective therapeutic strategies to cure this disease. However, high attrition rates, substantial costs and slow pace are the major limitations of novel drug discovery. Drug repurposing, by employing 'old' drugs to treat 'new' diseases is an attractive approach in drug discovery. Niclosamide (NIC) is an approved anti-helminthic drug with diverse antiviral mechanisms. In this work we hypothesize, the potential antiviral mechanisms of NIC against COVID-19.

Publication Type

Journal article.

<194>

Accession Number

20203464398

Author

Feitosa, E. L.; S S Junior, F. T. dos; Nery Neto, J. A. de O.; Matos, L. F. L.; Moura, M. H. de S.; Rosales, T. O.; Freitas, G. B. L. de

Title

COVID-19: rational discovery of the therapeutic potential of melatonin as a SARS-CoV-2 main protease inhibitor.

Source

International Journal of Medical Sciences (Sydney); 2020. 17(14):2133-2146. 97 ref.

Publisher

Ivyspring International Publisher Pty Ltd

Location of Publisher

Sydney

Country of Publication

Australia

Abstract

The SARS-CoV-2 spread quickly across the globe. The World Health Organization (WHO) on March 11 declared COVID-19 a pandemic. The mortality rate, hospital disorders and incalculable economic and social damages, besides the unproven efficacy of the treatments evaluated against COVID-19, raised the need for immediate control of this disease. Therefore, the current study employed in silico tools to rationally identify new possible SARS-CoV-2 main protease (Mpro) inhibitors. That is an enzyme conserved among the coronavirus species; hence, the identification of an Mpro inhibitor is to make it a broad-spectrum drug. Molecular docking studies described the binding sites and the interaction energies of 74 Mpro-ligand complexes deposited in the Protein Data Bank (PDB). A structural similarity screening was carried out in order to identify possible Mpro ligands that show additional pharmacological properties against COVID-19. We identified 59 hit compounds and among them, melatonin stood out due to its prominent immunomodulatory and anti-inflammatory activities; it can reduce oxidative stress, defence cell mobility and efficiently combat the cytokine storm and sepsis. In addition, melatonin is an inhibitor of calmodulin, an essential intracellular component to maintain angiotensin-converting enzyme 2 (ACE-2) on the cell surface. Interestingly, one of the most promising hits in our docking study was melatonin. It revealed better interaction energy with Mpro compared to ligands in complexes from PDB. Consequently, melatonin can have response potential in early stages for its possible effects on ACE-2 and Mpro, although it is also promising in more severe stages of the disease for its action against hyper-inflammation. These results definitely do not confirm antiviral activity, but can rather be used as a basis for further preclinical and clinical trials.

Publication Type

Journal article.

<195>

Accession Number

20203468692

Author

Liu YuE; Zhai ZhongChang; Han YanHong; Liu YiLan; Liu FengPing; Hu DeYing

Title

Experiences of front-line nurses combating coronavirus disease-2019 in China: a qualitative analysis.

Source

Public Health Nursing; 2020. 37(5):757-763. 26 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Objective: To explore the experiences of front-line nurses combating the coronavirus disease-2019 epidemic. Design and Sample: Fifteen front-line nurses caring for COVID-19 patients were recruited from two hospitals in Wuhan, China from January 26 to February 5, 2020. Data were collected through semi-structured individual interviews and analyzed using standard qualitative methods. Results: Four theme categories emerged from the data analysis: (a) "Facing tremendous new challenges and danger"; (b) "Strong pressure because of fear of infection, exhaustion by heavy workloads and stress of nursing seriously ill COVID-19 patients"; (c) "Strong sense of duty and identity as a healthcare provider"; (d) "Rational understanding of the epidemic-the nurses believed that the epidemic would soon be overcome and would like to receive disaster rescue training". Conclusions: Although the intensive rescue work drained front-line nurses, both physically and emotionally, they showed a spirit of dedication and felt a responsibility to overcome this epidemic. Their experiences provide useful insights into implementing a safer public health emergency rescue system in preparation for future outbreaks of infectious diseases. Specifically, psychological support and humanistic care should be provided to front-line nurses to maintain their well-being, and nationwide emergency rescue training and disaster education should be implemented.

Publication Type

Journal article.

<196>

Accession Number

20203469899

Author

Alqahtani, M. A.; Aldajani, S. M.

Title

A systemic review of vertical transmission possibility in pregnant women with coronavirus disease 2019-positive status.

Source

Journal of Family Medicine and Primary Care; 2020. 9(9):4521-4525. 32 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

An unknown pneumonia outbreak has been reported by hospitals in Wuhan, China, in late December 2019. A public health emergency of international concern announced by the World Health Organization

(WHO) on the January 31, 2020. The virus named by the WHO as coronavirus disease 2019 (COVID-19). The cases reached (266,073 cases) and deaths (11,184 deaths) globally by the end of March 21, 2020, and considered as a pandemic. By a systemic review, articles and case reports revealed 74 pregnant women for the possibility of vertical transmission of the virus from COVID-19-infected mother to infant. Review also showed that there is no difference between pregnant and nonpregnant regarding clinical manifestations. Concerning the vertical transmission, none of the positive mothers had a positive infant with COVID-19 except 1 case report that showed the infant had positive COVID-19 by the throat swab, yet negative cord blood, placenta, and mother's breast milk.

Publication Type

Journal article.

<197>

Accession Number

20203466797

Author

Xie HongLing; Cheng XiaoLin; Song XinYu; Wu Wen; Chen Jun; Xi ZuYang; Shou KangQuan

Title

Investigation of the psychological disorders in the healthcare nurses during a coronavirus disease 2019 outbreak in China.

Source

Medicine (Baltimore); 2020. 99(34)28 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

The first case of atypical pneumonia caused by coronavirus disease 2019 (COVID-19) was reported in Wuhan, China in December 2019. Since then, cases of novel coronavirus-infected pneumonia (NCIP) have been reported throughout China as well as in 25 other countries. With the rapid growth of this global outbreak, psychological disorders or impact among the healthcare nurses caused by the COVID-19 pandemic is of great importance and worth to be evaluated. Here, we aimed to determine the levels of stress and psychological disorders of nurses who provided nursing care during the COVID-19 outbreak. A total of 159 nurses who provided healthcare work for COVID-19 patients were enrolled in our study. The psychological disorders and stress level were assessed via a questionnaire implemented by the mobile app. The results showed that the nurses who worked in the non-critical care ward (general ward in which the

invasive medical procedure such as mechanical ventilation is absent) scored significantly higher on the traumatization condition (P < .05) and stress level (P < .01) as well as the impact of event scale -revised level (P < .01) compared with those worked in the critical care ward. In contrast to the previous report, our findings revealed that the future intervention for preventing the mental crisis among the healthcare nurses needs to be focusing on the individuals in the non-critical care ward instead of those in the critical care ward under the spreading of COVID-19.

Publication Type

Journal article.

<198>

Accession Number

20203460510

Author

Ekumah, B.; Armah, F. A.; Yawson, D. O.; Quansah, R.; Nyieku, F. E.; Owusu, S. A.; Odoi, J. O.; Afitiri, A. R.

Title

Disparate on-site access to water, sanitation, and food storage heighten the risk of COVID-19 spread in sub-Saharan Africa.

Source

Environmental Research; 2020. 18932 ref.

Publisher

Elsevier Inc

Location of Publisher

Orlando

Country of Publication

USA

Abstract

COVID-19 is an active pandemic that likely poses an existential threat to humanity. Frequent handwashing, social distancing, and partial or total lockdowns are among the suite of measures prescribed by the World Health Organization (WHO) and being implemented across the world to contain the pandemic. However, existing inequalities in access to certain basic necessities of life (water, sanitation facility, and food storage) create layered vulnerabilities to COVID-19 and can render the preventive measures ineffective or simply counterproductive. We hypothesized that individuals in households without any of the named basic necessities of life are more likely to violate the preventive (especially lockdown) measures and thereby increase the risk of infection or aid the spread of COVID-19. Based on nationally-representative data for 25 sub-Saharan African (SSA) countries, multivariate statistical and geospatial analyses were used to investigate whether, and to what extent, household family structure is associated with in-house access to basic needs which, in turn, could reflect on a higher risk of COVID-19 infection. The results indicate that

approximately 46% of the sampled households in these countries (except South Africa) did not have in-house access to any of the three basic needs and about 8% had access to all the three basic needs. Five countries had less than 2% of their households with in-house access to all three basic needs. Ten countries had over 50% of their households with no in-house access to all the three basic needs. There is a social gradient in in-house access between the rich and the poor, urban and rural richest, male- and female-headed households, among others. We conclude that SSA governments would need to infuse innovative gender- and age-sensitive support services (such as water supply, portable sanitation) to augment the preventive measures prescribed by the WHO. Short-, medium- and long-term interventions within and across countries should necessarily address the upstream, midstream and downstream determinants of in-house access and the full spectrum of layers of inequalities including individual, interpersonal, institutional, and population levels.

Publication Type

Journal article.

<199>

Accession Number

20203460509

Author

Ma QingXin; Qi Yu; Shan QiuLi; Liu SiJin; He Hong

Title

Understanding the knowledge gaps between air pollution controls and health impacts including pathogen epidemic.

Source

Environmental Research; 2020. 18944 ref.

Publisher

Elsevier Inc

Location of Publisher

Orlando

Country of Publication

USA

Abstract

Sustainable development calls for a blue sky with quality air. Encouragingly, the current mass reduction-oriented pollution control is making substantial achievements, as the data from Chinese Environmental Monitoring Stations show a significant drop in the annual average concentrations of particulate matters (i.e., PM10 and PM2.5) and SO2. But many challenges and knowledge gaps are still confronted nowadays. On one hand, long-term health impacts of fine air particles have to be closely probed through both epidemiological and laboratory studies, and the toxic effects owing to the interactions between particles

and associated chemical pollutants should be differentially teased out. On the other hand, due to sole mass control, there are significant changes of overall pollutant fingerprint, such as the increase of ground-level ozone concentration, which should be taken into account for altered health effects relative to the past. Moreover, the interplays with air pollutants and air-borne pathogens should be scrutinized in more details. In other words, it is worth investigating likely spread of pathogens (even for SARS-CoV-2) with aid of aerosols. Here, we recapitulate the current knowledge gaps between air pollution controls and health impacts including pathogen epidemic, and we also propose future research directions to support policy making in balance mass control and health impacts.

Publication Type

Journal article.

<200>

Accession Number

20203464845

Author

Zhai, M. Z.; Lye, C. T.; Kesselheim, A. S.

Title

Need for transparency and reliable evidence in emergency use authorizations for coronavirus disease 2019 (COVID-19) therapies.

Source

JAMA Internal Medicine; 2020. 180(9):1145-1146.

Publisher

American Medical Association

Location of Publisher

Chicago

Country of Publication

USA

Abstract

On March 28, 2020, the US Food and Drug Administration (FDA) issued an emergency use authorization (EUA) for the use of hydroxychloroquine and chloroquine for certain hospitalized patients diagnosed with coronavirus disease 2019 (COVID-19). Hydroxychloroquine and chloroquine have long been approved for the prophylaxis and treatment of malaria, with the former also used in the treatment of systemic lupus erythematosus and rheumatoid arthritis. Although these drugs appear to inhibit coronavirus replication in vitro, at the time of the EUA, there was no reliable clinical evidence to support the use of these drugs to treat COVID-19 in patients.

Publication Type

Journal article.

<201>

Accession Number

20203461762

Author

Duran, P.; Berman, S.; Niermeyer, S.; Jaenisch, T.; Forster, T.; Leon, R. G. P. de; Mucio, B. de; Serruya, S.

Title

COVID-19 and newborn health: systematic review.

Source

Revista Panamericana de Salud Publica/Pan American Journal of Public Health; 2020. 44(e54)31 ref.

Publisher

Pan American Health Organization

Location of Publisher

Washington

Country of Publication

USA

Abstract

Objective. To describe perinatal and neonatal outcomes in newborns exposed to SARS-CoV-2. Methods. A systematic review was conducted by searching PubMed Central, LILACS, and Google Scholar using the keywords 'covid ' AND 'newborn' OR 'child' OR 'infant,' on 18 March 2020, and again on 17 April 2020. One researcher conducted the search and extracted data on demographics, maternal outcomes, diagnostic tests, imaging, and neonatal outcomes. Results. Of 256 publications identified, 20 met inclusion criteria and comprised neonatal outcome data for 222 newborns whose mothers were suspected or confirmed to be SARS-CoV-2 positive perinatally (17 studies) or of newborns referred to hospital with infection/pneumonia (3 studies). Most (12 studies) were case-series reports; all were from China, except three (Australia, Iran, and Spain). Of the 222 newborns, 13 were reported as positive for SARS-CoV-2; most of the studies reported no or mild symptoms and no adverse perinatal outcomes. Two papers among those from newborns who tested positive reported moderate or severe clinical characteristics. Five studies using data on umbilical cord blood, placenta, and/or amniotic fluid reported no positive results. Nine studies reported radiographic imaging, including 5 with images of pneumonia, increased lung marking, thickened texture, or high-density nodular shadow. Minor, non-specific changes in biochemical variables were reported. Studies that tested breast milk reported negative SARS-CoV-2 results. Conclusions. Given the paucity of studies at this time, vertical transmission cannot be confirmed or denied. Current literature does not support abstaining from breastfeeding nor separating mothers and newborns. Further evidence and data collection networks, particularly in the Americas, are needed for establishing definitive guidelines and recommendations.

Publication Type

Journal article.

<202>

Accession Number

20203462934

Author

Silva, F. R. da; Lancha Junior, A. H.; Brant, V. M.; Lobo, I. L. B.; Lancha, L. O. P.; Silva, A.; Mello, M. T. de

Title

The effects of COVID-19 quarantine on eating and sleeping behaviors.

Source

Nutrire; 2020. 45(25):(29 September 2020). 46 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Since the beginning of the pandemic, the population has been exposed to a substantial period of social isolation, which leads to anxiety, fear, and metabolic and immune impairments. Purpose: Considering that sleep restriction influences eating behavior, we highlight that changes in it may occur during the COVID-19 quarantine. Alterations in feeding time can uncouple the body clocks, leading to circadian misalignment and consequently to a disruption in homeostasis and disturbances in many metabolic functions. Method: Narrative review. Results: Do not apply. Conclusion: The increase of body weight is related to increased food intake in response to mental stress and more time spent at home, increased opportunity to feed, and increased visual and olfactory stimulation to eat, which represents a potential risk of overfeeding nowadays. In this article, we postulate that the unusual lifestyle imposed by the COVID-19 quarantine may induce a circadian misalignment, which is capable to induce alterations on eating and sleep behaviors.

Publication Type

Journal article.

<203>

Accession Number

20203462915

Author

Martins-Filho, P. R.; Santos, V. S.; Santos, H. P., Jr.

Title

To breastfeed or not to breastfeed? Lack of evidence on the presence of SARS-CoV-2 in breastmilk of pregnant women with COVID-19.

Source

Revista Panamericana de Salud Publica/Pan American Journal of Public Health; 2020. 44(e59)21 ref.

Publisher

Pan American Health Organization

Location of Publisher

Washington

Country of Publication

USA

Abstract

A rapid systematic review was carried out to evaluate the current evidence related to the presence of SARSCoV-2 in breast milk from pregnant women with COVID-19. Eight studies analyzing the presence of SARS-CoV-2 RNA in the breast milk of 24 pregnant women with COVID-19 during the third trimester of pregnancy were found. All patients had fever and/or symptoms of acute respiratory illness and chest computed tomography images indicative of COVID-19 pneumonia. Most pregnant women had cesarean delivery (91.7%) and two neonates had low birthweight (< 2 500 g). Biological samples collected immediately after birth from upper respiratory tract (throat or nasopharyngeal) of neonates and placental tissues showed negative results for the presence SARS-CoV-2 by RT-PCR test. No breast milk samples were positive for SARS-CoV-2 and, to date, there is no evidence on the presence of SARS-CoV-2 in breast milk of pregnant women with COVID-19. However, data are still limited and breastfeeding of women with COVID-19 remains a controversial issue. There are no restrictions on the use of milk from a human breast milk bank.

Publication Type

Journal article.

<204>

Accession Number

20203462914

Author

Palaniappan, A.; Dave, U.; Gosine, B.

Title

Comparing South Korea and Italy's healthcare systems and initiatives to combat COVID-19.

Source

Revista Panamericana de Salud Publica/Pan American Journal of Public Health; 2020. 44(e53)25 ref.

Publisher

Pan American Health Organization

Location of Publisher

Washington

Country of Publication

USA

Abstract

Italy and South Korea have two distinctly different healthcare systems, causing them to respond to public health crises such as the COVID-19 pandemic in markedly different ways. Differences exist in medical education for both countries, allowing South Korean medical graduates to have a more holistic education in comparison to their Italian counterparts, who specialize in medical education earlier on. Additionally, there are fewer South Korean physicians per 1000 people in South Korea compared to Italian physicians per 1000 people in Italy. However, both countries have a national healthcare system with universal healthcare coverage. Despite this underlying similarity, the two countries addressed COVID-19 in nearly opposite manners. South Korea employed technology and the holistic education of its physician community, despite having a smaller proportion of physicians in society, to its advantage by implementing efficacious drive-through centers that test suspected individuals rapidly and with little to no contact with healthcare staff, decreasing the possibility of transmission of COVID-19. Conversely, Italy is presently considered the epicenter of the outbreak in Europe and has recorded the highest death toll of any country outside of mainland China. This is partially due to the reactionary nature of Italy's public health measures compared to South Korea's proactive response. The different healthcare responses of South Korea and Italy can inform decisions made by public health bodies in other countries, especially in countries across the Americas, which can selectively adopt policies that have worked in curtailing the spread of COVID-19 and learn from mistakes made by both countries.

Publication Type

Journal article.

<205>

Accession Number

20203449357

Author

Kidaka, T.; Lokupathirage, S. M. W.; Muthusinghe, B. D. S.; Pongombo, B. L.; Wastika, C. E.; Wei ZhouXing; Yoshioka, S.; Ishizuka, M.; Sakoda, Y.; Kariwa, H.; Isoda, N.

Title

Review on counter measures to coronavirus disease 2019 (COVID-19) pandemic, May 2020.

Source

Japanese Journal of Veterinary Research; 2020. 68(3):133-150. 19 ref.

Publisher

Graduate School of Veterinary Medicine, Hokkaido University

Location of Publisher

Sapporo

Country of Publication

Japan

Abstract

An outbreak of novel coronavirus infection occurred in China at the end of 2019, which was designated as coronavirus disease 2019 (COVID-19), and spread to regions across Asia and ultimately all over the world. As of 21 May 2020, a total of more than 5 million cases with more than 350 thousand deaths were reported worldwide. Evaluation of the pathogenicity of the disease and determining the efficacy of control measures are essential for rapid containment of the disease. However, the world is facing difficulties in controlling COVID-19 at both of the national and global levels due to variations in pathogenicity of infection by severe acute respiratory syndrome coronavirus 2, the causal agent of COVID-19, and to diverse measures applied in each country based on their control capacities and policies. In the present review, we summarize the basic information and findings related to the COVID-19 pandemic, including pathogen agent, epidemiology, disease transmission, and clinical manifestations. Diagnosis, treatment, and preventive measures applied or under development all over the world are also reviewed to provide the opportunity to establish a more effective scenario for disease containment. Humanity has progressed by developing countless great technologies and immense scientific theories, however it may be a fact that we cannot conquer all risks to humanity. New findings and challenges for the unprecedented pandemic at the global level, such as COVID-19, should also contribute to preparedness for unknown diseases in future, similar to the lessons learnt from severe acute respiratory syndrome and the pandemic A(H1N1)pdm09 influenza.

Publication Type

Journal article.

<206>

Accession Number

20203443166

Author

Tung Hoang; Tho Tran Thi Anh

Title

Treatment options for Severe Acute Respiratory Syndrome, Middle East Respiratory Syndrome, and Coronavirus Disease 2019: a review of clinical evidence.

Source

Infection and Chemotherapy; 2020. 52(3):317-334. 100 ref.

Publisher

Korean Society of Infectious Diseases and Korean Society of Chemotherapy

Location of Publisher

Seoul

Country of Publication

Korea Republic

Abstract

Coronaviruses have caused serious Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), and Coronavirus Disease 2019 (COVID-19) outbreaks, and only remdesivir has been recently indicated for the treatment of COVID-19. In the line of therapeutic options for SARS and MERS, this study aims to summarize the current clinical evidence of treatment options for COVID-19. In general, the combination of antibiotics, ribavirin, and corticosteroids was considered as a standard treatment for patients with SARS. The addition of this conventional treatment with lopinavir/ritonavir, interferon, and convalescent plasma showed potential clinical improvement. For patients with MERS, ribavirin, lopinavir/ritonavir, interferon, and convalescent plasma were continuously recommended. However, a high-dose of corticosteroid was suggested for severe cases only. The use of lopinavir/ritonavir and convalescent plasma was commonly reported. There was limited evidence for the effect of corticosteroids, other antiviral drugs like ribavirin, and favipiravir. Monoclonal antibody of tocilizumab and antimalarial agents of chloroquine and hydroxychloroquine were also introduced. Among antibiotics for infection therapy, azithromycin was suggested. In conclusion, this study showed the up-to-date evidence of treatment options for COVID-19 that is helpful for the therapy selection and the development of further guidelines and recommendations. Updates of on-going clinical trials and observational studies may confirm the current findings.

Publication Type

Journal article.

<207>

Accession Number

20203470445

Author

Li Xi; Krumholz, H. M.; Yip, W.; Cheng KarKeung; Maeseneer, J. de; Meng QingYue; Mossialos, E.; Li Chuang; Lu JiaPeng; Su Meng; Zhang QiuLi; Xu Dong [Xu, D. R.]; Li LiMing; Normand, S. L. T.; Peto, R.; Li Jing; Wang Zengwu; Yan HongBing; Gao RunLin; Chunharas, S.; Gao Xin; Guerra, R.; Ji HuiJie; Ke Yang; Pan ZhiGang; et al.

Title

Quality of primary health care in China: challenges and recommendations.

Source

Lancet (British edition); 2020. 395(10239):1802-1812. 78 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

China has substantially increased financial investment and introduced favourable policies for strengthening its primary health care system with core responsibilities in preventing and managing chronic diseases such as hypertension and emerging infectious diseases such as coronavirus disease 2019 (COVID-19). However, widespread gaps in the quality of primary health care still exist. In this Review, we aim to identify the causes for this poor quality, and provide policy recommendations. System challenges include: the suboptimal education and training of primary health-care practitioners, a fee-for-service payment system that incentivises testing and treatments over prevention, fragmentation of clinical care and public health service, and insufficient continuity of care throughout the entire health-care system. The following recommendations merit consideration: (1) enhancement of the quality of training for primary health-care physicians, (2) establishment of performance accountability to incentivise high-quality and high-value care; (3) integration of clinical care with the basic public health services, and (4) strengthening of the coordination between primary health-care institutions and hospitals. Additionally, China should consider modernising its primary health-care system through the establishment of a learning health system built on digital data and innovative technologies.

Publication Type

Journal article.

<208>

Accession Number

20203428616

Author

Amit Tomar

Title

COVID-19 infection inhibition by Andrographis paniculate (Burm. F.) Wall, ex Nees (Kalmegh) infusion, decoction and tincture.

Source

Indian Forester; 2020. 146(8):782-784. 13 ref.

Publisher

Indian Forester

Location of Publisher

Dehradun

Country of Publication

India

Publication Type

Journal article.

<209>

Accession Number

20203428610

Author

Astha Srivastava; Pandey, B. K.; Vipin Mishra; Anupam Dikshit; Shukla, S. K.

Title

Indian rituals and herbal remedies: a hope against corona pandemic.

Source

Indian Forester; 2020. 146(8):750-765. 126 ref.

Publisher

Indian Forester

Location of Publisher

Dehradun

Country of Publication

India

Abstract

World health organization (WHO) starts investigating the possibilities in Phyto-medicines after the outburst of SARS in 2002-2003. In the continuation of viral pandemics in December 2019, a novel corona

virus came into existence. The whole world is facing the severe condition due to outbreaks of the present virus. More than two lakhs persons have lost their lives, livelihood and economy due to this COVID-19 virus. In the present review authors are trying to establish the relationship between viral disease and herbal secondary metabolites and rituals smoke with special context to India. Human beings are inhaling the ceremonial fumes from the primeval period. Several plants have shown their antiviral properties against the COVID family viruses such as Ocimum tenuiflorum L. Even every civilization has its strong folk remedial knowledge based on plants, animals and natural products. The ritual vapours not only purify the environment but also increases the immunity of a person. Other promising cure to break the spreading chain of this virus is lockdown. When the whole world is in search of effective medicine for the catastrophic disease, the prospects of Ayurveda should be explored.

Publication Type

Journal article.

<210>

Accession Number

20203459267

Author

Rosa, S. G. V.; Santos, W. C.

Title

Clinical trials on drug repositioning for COVID-19 treatment.

Source

Revista Panamericana de Salud Publica/Pan American Journal of Public Health; 2020. 44(e40)64 ref.

Publisher

Pan American Health Organization

Location of Publisher

Washington

Country of Publication

USA

Abstract

The World Health Organization (WHO) was informed on December 2019 about a coronavirus pneumonia outbreak in Wuhan, Hubei province (China). Subsequently, on March 12, 2020, 125,048 cases and 4,614 deaths were reported. Coronavirus is an enveloped RNA virus, from the genus Betacoronavirus, that is distributed in birds, humans, and other mammals. WHO has named the novel coronavirus disease as COVID-19. More than 80 clinical trials have been launched to test coronavirus treatment, including some drug repurposing or repositioning for COVID-19. Hence, we performed a search in March 2020 of the clinicaltrials.gov database. The eligibility criteria for the retrieved studies were: contain a clinicaltrials.gov base identifier number; describe the number of participants and the period for the study; describe the

participants' clinical conditions; and utilize interventions with medicines already studied or approved for any other disease in patients infected with the novel coronavirus SARS-CoV-2 (2019-nCoV). It is essential to emphasize that this article only captured trials listed in the clinicaltrials.gov database. We identified 24 clinical trials, involving more than 20 medicines, such as human immunoglobulin, interferons, chloroquine, hydroxychloroquine, arbidol, remdesivir, favipiravir, lopinavir, ritonavir, oseltamivir, methylprednisolone, bevacizumab, and traditional Chinese medicines (TCM). Although drug repurposing has some limitations, repositioning clinical trials may represent an attractive strategy because they facilitate the discovery of new classes of medicines; they have lower costs and take less time to reach the market; and there are existing pharmaceutical supply chains for formulation and distribution.

Publication Type

Journal article.

<211>

Accession Number

20203456180

Author

Sabateeshan Mathavarajah; Dellaire, G.

Title

Lions, tigers and kittens too: ACE2 and susceptibility to COVID-19.

Source

Evolution, Medicine, and Public Health; 2020. 2020(109-113):109-113. 14 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

SARS-CoV-2 (Severe Acute Respiratory Syndrome coronavirus 2) has been reported to infect domesticated animals in a species-specific manner, where cats were susceptible but not dogs. Using the recently published crystal structure of the SARS-CoV-2 spike protein complexed with the human host cell receptor angiotensin converting enzyme 2 (ACE2), we characterized the structure and evolution of ACE2 in several of these species and identify a single interacting amino acid residue conserved between human and Felidae ACE2 but not in Canidae that correlates with virus susceptibility. Using computational analyses we describe how this site likely affects ACE2 targeting by the virus. Thus, we highlight how evolution-based approaches can be used to form hypotheses and study animal transmission of such viruses in the future.

Publication Type

Journal article.

<212>

Accession Number

20203452353

Author

Nagaraju Kuravi; Karthik Nagaraju; Voorakaranam, V. K.

Title

Management of asthma and allergic diseases during the coronavirus disease 2019 pandemic in India.

Source

Indian Journal of Allergy, Asthma & Immunology; 2020. 34(1):15-22. many ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Coronavirus disease 2019 (COVID 19) is caused by the novel coronavirus, which has affected 184 countries and the WHO has declared it a pandemic on March 2020. Allergic diseases such as allergic rhinitis and asthma are exaggerated by viral infections. Symptoms of allergic diseases overlap with COVID 19. Current recommendations include following social distancing and frequent hand washing. Confusion exists regarding the use of corticosteroids, biologicals, and immunotherapy for the treatment of allergic diseases during COVID 19 season. Due to the use of Personal Protective Equipments, reports of contact dermatitis are emerging among health-care workers. Remote consultation, like telemedicine, is a valuable tool in this pandemic. This article aims to provide guidance on the management of allergic diseases taking into consideration existing evidence and guidelines from international organizations and the feasibility of implementation in India.

Publication Type

Journal article.

<213>

Accession Number

20203450403

Author

Spinicci, M.; Bartoloni, A.; Mantella, A.; Zammarchi, L.; Rossolini, G. M.; Antonelli, A.

Title

Low risk of serological cross-reactivity between dengue and COVID-19.

Source

Memorias do Instituto Oswaldo Cruz; 2020. 115(8)12 ref.

Publisher

Instituto Oswaldo Cruz

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

In the near future, the overlap of Coronavirus disease 2019 (COVID-19) and dengue epidemics is a concrete threat in tropical regions. Co-epidemics of COVID-19 and dengue could be an overwhelming challenge for health systems in low- and middle-income countries. In this work, we investigated potential serological cross-reactions between COVID-19 and dengue patients. Among 32 COVID-19 positive sera, no positive Dengue virus (DENV) IgG/IgM results were observed. On the other hand, one false-positive result was observed among 44 DENV-positive sera tested for COVID-19 antibodies with each of the two rapid tests used. Further data on accuracy of COVID-19 diagnostic test are urgently warranted.

Publication Type

Journal article.

<214>

Accession Number

20203454790

Author

Prakamya Gupta; Muthukumar, N.; Rajshekhar, V.; Manjari Tripathi; Sanjeev Thomas; Gupta, S. K.; Vivek Lal; Pramod Pal; Mathew Abraham; Sanjay Behari; Vimal Paliwal; Daljit Singh; Sanjay Pandey; Lakshmi Narasimhan; Dwarakanath Srinivas; Samhita Panda; Kale, S. S.; Chandra, P. S.

Title

Neurosurgery and neurology practices during the novel COVID-19 pandemic: a consensus statement from India.

Source

Neurology India; 2020. 68(2):246-254. 24 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: The COVID-19 infection outbreak has aroused increasing attention and affected thousands of people nationwide. The long incubation period, high infectious rate, varied manifestation, and absence of effective treatment make it difficult to manage the disease transmission. Background: The intended goals are to encourage efficient management of neurological and neurosurgical patients, resource utilization, and protecting the healthcare provider during the COVID-19 epidemic. Herein, we present a consensus statement from various centers in India Methodology: In addition to the literature review, recommendations were included from neurologists and neurosurgeons from various centers in India. Results: Every patient presenting for treatment should be treated as a potential asymptomatic infected case. Patients should be categorized based upon the priority as acute (require immediate treatment/surgery within 24 h), sub-acute (requiring treatment within a maximum of 7-10 days), or chronic (requiring treatment within a month). Non-essential elective surgeries and outpatient clinics should be avoided after informing the patient(s). There is a high risk of aerosol dispersion during intubation and certain neurosurgical procedures particularly those involving drills and endoscopes. These procedures should be performed wearing full personal protective equipment. The workflow of the operating rooms should also be modified significantly. Minor modifications in personal and professional lifestyles and routine training to use the PPE will ensure efficient management of resources. Conclusion: These recommendations could be used to mitigate the risks and reduce exposure to other patients, public, and healthcare staff.

Publication Type

Journal article.

<215>

Accession Number

20203451667

Author

Biguetti, C.; Marrelli, M. T.; Brotto, M.

Title

Primum non nocere - are chloroquine and hydroxychloroquine safe prophylactic/treatment options for SARS-CoV-2 (COVID-19)?

Source

Revista de Saude Publica; 2020. 54(68)23 ref.

Publisher

Universidade de Sao Paulo, Faculdade de Saude Publica

Location of Publisher

São Paulo

Country of Publication

Brazil

Abstract

Chloroquine (CQ) and its analog hydroxychloroquine (HCQ) were recently included in several clinical trials as potential prophylactic and therapeutic options for SARS-CoV-2 infection/covid-19. However, drug effectiveness in preventing, treating, or slowing the progression of the disease is still unknown. Despite some initial promising in vitro results, rigorous pre-clinical animal studies and randomized clinical trials have not been performed yet. On the other hand, while the potential effectiveness of CQ/HCQ is, at best, hypothetical, their side effects are factual and most worrisome, particularly when considering vulnerable groups of patients being treated with these drugs. In this comment, we briefly explain the possible mechanisms of action of CQ/HCQ for treating other diseases, possible actions against covid-19, and their potent side effects, in order to reinforce the necessity of evaluating the benefit-risk balance when widely prescribing these drugs for SARS-CoV-2 infection/covid-19. We conclude by strongly recommending against their indiscriminate use.

Publication Type

Journal article.

<216>

Accession Number

20203464181

Author

Chen ShiTao; Li FeiHan; Lin ChaiHua; Han YuGe; Nie Xilun; Portnoy RobertN.; Qiao ZhiHong

Title

Challenges and recommendations for mental health providers during the COVID-19 pandemic: the experience of China's first university-based mental health team.

Source

Globalization and Health; 2020. 16(59):(9 July 2020). 18 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Coronavirus Disease is impacting the entire world. As the first country that has needed to confront this disease, China has responded with unprecedented and hugely successful public health initiatives. Almost simultaneous with the awareness of the potential for widespread loss of life, the first Chinese university recognizing the likely psychological impacts of COVID-19, assembled the first university-based professional team to offer pandemic-related mental health services to the Chinese public. This paper describes the work that we provided and the challenges encountered. The challenges are described in four contexts: the organizational/systemic level, the technical perspective, the therapeutic process, and the ethical aspects. We also provide recommendations on what we can do in the short term, and future improvements that can be made.

Publication Type

Journal article.

<217>

Accession Number

20203464170

Author

Feng Yi; Zong Min; Yang ZhiZun; Gu Wen; Dong Dan; Qiao ZhiHong

Title

When altruists cannot help: the influence of altruism on the mental health of university students during the COVID-19 pandemic.

Source

Globalization and Health; 2020. 16(61):(10 July 2020). 36 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The positive predictive effect of altruism on physical and psychological well-being has been extensively demonstrated in previous studies, but few studies have examined the effect of altruism on negative mental health outcomes when altruists cannot perform altruistic behaviours. This study explored the influence of altruism on negative affect and mental health (anxiety and depressive symptoms) during the COVID-19 pandemic while people self-isolated at home in China. Method: University students were recruited to participate in a cross-sectional online survey during the outbreak of COVID-19 in China. Self-reported perceived risk, altruism, negative affect, anxiety and depressive symptoms were measured using the Self-Report Altruism Scale (SRA scale), the Positive and Negative Affect Schedule (PANAS), the 7-item Generalized Anxiety Disorder Scale (GAD-7) and the 9-item Patient Health Questionnaire depression scale (PHQ-9). A structural equation model was used to analyse the mediating and moderating effects on mental health. Results: The final sample comprised 1346 Chinese participants (Mage = 19.76 +/- 2.23 years, 73% female). Overall, the higher the risk the participants perceived, the more negative affect they exhibited (beta = 0.16, p < .001), and thus, the more anxious and depressed they felt (beta = 0.134, p < .001); however, this relationship between risk perception and negative affect was moderated by altruism. In contrast to previous studies, the increase in negative affect associated with the increased perceived risk was pronounced among individuals with high altruism (t = 7.68, p < .001). Conclusions: Individuals with high altruism exhibited more negative affect than those with low altruism, which indirectly increased their anxiety and depressive symptoms. These findings enrich theories of altruism and provide valuable insight into the influence of altruism on mental health during the COVID-19 outbreak.

Publication Type

Journal article.

<218>

Accession Number

20203467231

Author

Khasne, R. W.; Dhakulkar, B. S.; Mahajan, H. C.; Kulkarni, A. P.

Title

Burnout among healthcare workers during COVID-19 pandemic in India: results of a questionnaire-based survey.

Source

Indian Journal of Critical Care Medicine; 2020. 24(8):664-671. 37 ref.

Publisher

Jaypee Brothers Medical Publishers Pvt. Ltd.

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Background: Burnout, a state of physical and emotional exhaustion, in healthcare workers (HCWs) is a major concern. The prevalence of burnout, due to COVID-19 pandemic in India, is unknown. We therefore conducted this survey. Materials and methods: A questionnaire-based survey using Copenhagen Burnout Inventory was carried out among HCWs looking after COVID-19 patients. Questionnaire was sent to the HCWs, using WhatsApp Messenger, and voluntary participation was sought. We received responses from 2026 HCWs. Burnout was assessed in personal, work, and client-related (COVID-19 pandemic-related) domains. Burnout was defined at a cut-off score of 50 for each domain. Results: The prevalence of personal burnout was 44.6% (903), work-related burn-out was only 26.9% (544), while greater than half of the respondents (1,069, 52.8%) had pandemic-related burnout. Younger respondents (21-30 years) had higher personal and work-related burnout. The prevalence of personal and work-related burnout was significantly ($p < 0.01$) higher among females. The doctors were 1.64 times, and the support staff were 5 times more likely to experience pandemic-related burnout. Conclusion: There is a significant prevalence of burnout during the COVID-19 pandemic among HCWs, in particular, doctors and support staff. Female respondents had higher prevalence. We suggest that the management should be proactive and supportive in improving working conditions and providing assurance to the HCWs. The long-term effects of the current pandemic need to be assessed later.

Publication Type

Journal article.

<219>

Accession Number

20203467226

Author

Kumar, G. P.; Kulkarni, A. P.; Deepak Govil; Dixit, S. B.; Dhruva Chaudhry; Srinivas Samavedam; Zirpe, K. G.; Gopal, P. B. N.; Arindam Kar

Title

Airway management and related procedures in critically ill COVID-19 patients: position statement of the Indian Society of Critical Care Medicine.

Source

Indian Journal of Critical Care Medicine; 2020. 24(8):630-642. 30 ref.

Publisher

Jaypee Brothers Medical Publishers Pvt. Ltd.

Location of Publisher

New Delhi

Country of Publication

India

Abstract

The coronavirus disease (COVID-19) pandemic has affected nearly all nations globally. The highly contagious nature of the disease puts the healthcare workers at high risk of acquiring infection, especially while handling airway and performing aerosol-generating procedures. The Indian Society of Critical Care Medicine, through this position paper, aims to provide guidance for safe airway management to all healthcare workers dealing with airway in COVID-19 patients.

Publication Type

Journal article.

<220>

Accession Number

20203462201

Author

Meneses Calderon, J.; Figueroa Flores, M. del R. del; Coria, L. P.; Briones Garduno, J. C.; Figueroa, J. M.; Vargas Contretas, M. J.; Cruz Avila, L. de la; Diaz Meza, S.; Ramirez Chacon, R.; Padmanabhan, S.; Mendieta Zeron, H.

Title

Nitazoxanide against COVID-19 in three explorative scenarios.

Source

Journal of Infection in Developing Countries; 2020. 14(9):982-986. 24 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

Introduction: Nitazoxanide has shown efficacy in vitro against coronavirus infections (MERS, SARS, SARS-CoV-2). The aim of this report is to describe the results of treating COVID-19 positive patients with nitazoxanide in three clinical settings: pregnancy/puerperium, hospitalized patients in an Internal Medicine Service and in an ambulatory setting. Methodology: This was a prospective follow-up and report of COVID-19 cases in three different situations, pregnant women, hospitalized patients receiving medical attention in an Internal Medicine Service and ambulatory patients residing in Toluca City, and Mexico City. Results: The experience with a first group of 20 women, pregnant (17) or in immediate puerperium (3) was successful in 18 cases with two unfortunate deaths. The five cases treated in an Internal Medicine service showed a positive outcome with two patients weaned from mechanical ventilation. Of the remaining 16 patients treated in an ambulatory setting, all got cured. Nitazoxanide seems to be useful against SARS-CoV-2, not only in an early intervention but also in critical condition as well as in pregnancy without undesired effects for the babies. As an adjunctive therapy budesonide was used that seems to contribute to the clinical improvement. Conclusions: Nitazoxanide could be useful against COVID-19 as a safe and available regimen to be tested in a massive way immediately.

Publication Type

Journal article.

<221>

Accession Number

20203469684

Author

Hoummadi, L.; Hafid, J.; Machraoui, S.; Admou, B.

Title

To what extent Africa can limit the impact of the COVID-19 pandemic? [French]

Source

Revue d'Epidemiologie et de Sante Publique; 2020. 68(5):302-305. 18 ref.

Publisher

Elsevier Masson

Location of Publisher

Paris

Country of Publication

France

Abstract

Following the onset of the global COVID-19 pandemic and the alerts issued by the World Health Organization, for several months attention has been focused on Africa as a potentially severely endangered continent. A sizable number of African countries, mainly low and middle income, suffer from limited available resources, especially in critical care, and COVID-19 is liable to overwhelm their already fragile

health systems. To effectively manage what is shaping up as a multidimensional crisis, the challenge unquestionably goes beyond the necessary upgrading of public health infrastructures. It is also a matter of anticipating and taking timely action with regard to factors that may mitigate the propagation of SARS-CoV2 and thereby cushion the shock of the pandemic on the African continent. While some of these factors are largely unmanageable (climate, geography...), several others (socio-cultural, religious, audio-visual, and potentially political...) could be more or less effectively dealt with by African governments and populations.

Publication Type

Journal article.

<222>

Accession Number

20203469661

Author

Balwinder-Singh; Shirsath, P. B.; Jat, M. L.; McDonald, A. J.; Srivastava, A. K.; Craufurd, P.; Rana, D. S.; Singh, A. K.; Chaudhari, S. K.; Sharma, P. C.; Rajbir Singh; Jat, H. S.; Sidhu, H. S.; Gerard, B.; Braun, H.

Title

Agricultural labor, COVID-19, and potential implications for food security and air quality in the breadbasket of India.

Source

Agricultural Systems; 2020. 18539 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

To contain the COVID-19 pandemic, India imposed a national lockdown at the end of March 2020, a decision that resulted in a massive reverse migration as many workers across economic sectors returned to their home regions. Migrants provide the foundations of the agricultural workforce in the 'breadbasket' states of Punjab and Haryana in Northwest India. There are mounting concerns that near and potentially longer-term reductions in labor availability may jeopardize agricultural production and consequently national food security. The timing of rice transplanting at the beginning of the summer monsoon season has a cascading influence on productivity of the entire rice-wheat cropping system. To assess the potential for COVID-related reductions in the agriculture workforce to disrupt production of the dominant rice-wheat cropping pattern in these states, we use a spatial ex ante modelling framework to evaluate four scenarios representing a range of plausible labor constraints on the timing of rice transplanting. Averaged over both

states, results suggest that rice productivity losses under all delay scenarios would be low as compare to those for wheat, with total system productivity loss estimates ranging from 9%, to 21%, equivalent to economic losses of USD $674 m to $1.48 billion. Late rice transplanting and harvesting can also aggravate winter air pollution with concomitant health risks. Technological options such as direct seeded rice, staggered nursery transplanting, and crop diversification away from rice can help address these challenges but require new approaches to policy and incentives for change.

Publication Type

Journal article.

<223>

Accession Number

20203464654

Author

Sheykhhasan, M.; Manoochehri, H.; Saidijam, M.

Title

New therapeutic strategies in treating the new Coronavirus 2019: review article. [Persian]

Source

Tehran University Medical Journal; 2020. 78(5):fa261-fa273. 67 ref.

Publisher

Tehran University of Medical Sciences, Centre for Electronic Resources Provision and Journal Improvement

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

The highly contagious new coronavirus virus, SARS-CoV-2, was first appeared in Wuhan, China in late 2019. The virus has spread to 216 countries, including Iran, until 7 September 2020. So far, the number of people infected by the new corona virus and died from the disease is 27032617 and 881464 worldwide, respectively. Therefore, it is necessary to introduce the available treatments for this virus, as a global dilemma. Articles for this review study were selected from Embase, Medline and Google Scholar. Published full articles in English, English full articles published from 1st December 2019 to 23rd July 2020, were included. The search terms included combinations of COVID-19, SARS-COV-2, chloroquine, convalescent plasma, antiviral, antibacterial, Remidesivir, hydroxychloroquine, chloroquine phosphate, vaccines and monoclonal antibodies. There were no restrictions on the types of study eligible for inclusion. Different available therapies generally can be divided into small molecules and biological products. Among the small molecule drugs used for COVID-19 patients Remdesivir, Favilavir, and hydroxychloroquine have been associated with considerable success in disease control. Separation and transfusion of plasma from blood

of improved COVID-19 patients to new patients and the use of recombinant Angiotensin converting enzyme 2 (ACE2) have been two very successful biological therapies in the treatment of COVID-19 disease. However, many efforts are being made by researchers around the world to make other effective and promising biological products. The development of a safe and effective vaccine can lead to great success in eradicating the disease. Also, the production of anti-SARS-CoV-2 monoclonal antibodies and using of stem cell-based therapeutics can be a great success in treating the disease. In addition, according to the miRNA properties, many efforts have been made to inhibit the production of viral proteins using natural miRNAs or artificial siRNAs. It has been proposed that aptamers derived from SELEX can be used for the diagnosis and treatment of COVID-19. Subsequently, since the size of miRNAs is at the nanometer level, they can easily incorporate to the targeted exosomes and be delivered via circulation in human blood to the infected cells such as lung cells. Interestingly, miRNAs can be delivered into the lung by inhalation.

Publication Type

Journal article.

<224>

Accession Number

20203463946

Author

Alok Ranjan; Muraleedharan, V. R.

Title

Higher disease burden in India's elderly.

Source

Economic and Political Weekly; 2020. 55(35)

Publisher

Sameeksha Trust

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The disease burden among the elderly population is significantly higher compared to the younger population, according to the data from the 75th round National Sample Survey, 2017-18, which increases their vulnerability during the COVID-19 pandemic. The footprint of elderly population in public facilities for inpatient and outpatient care has increased over the years. Financially, the elderly face far less burden in public facilities than in private facilities.

Publication Type

Journal article.

<225>

Accession Number

20203460859

Author

He HaiJian; Zhang WenYan; Liang JiaWei; Lu Meng; Wang RuYi; Li GaiRu; He JiaWei; Chen Jun; Chen Jun; Xing Gang; Chen Ye

Title

Etiology and genetic evolution of canine coronavirus circulating in five provinces of China, during 2018-2019.

Source

Microbial Pathogenesis; 2020. 14558 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

As the outbreaks of COVID-19 in worldwide, coronavirus has once again caught the attention of people. Canine coronavirus is widespread among dog population, and sometimes causes even fatal cases. Here, to characterize the prevalence and evolution of current circulating canine coronavirus (CCoV) strains in China, we collected 213 fecal samples from diarrheic pet dogs between 2018 and 2019. Of the 213 samples, we found 51 (23.94%) were positive for CCoV. Co-infection with canine parvovirus (CPV), canine astrovirus (CaAstV), canine kobuvirus (CaKV), Torque teno canis virus (TTCaV) were ubiquitous existed. Mixed infection of different CCoV subtypes exists extensively. Considering the limited sequences data in recent years, we sequenced 7 nearly complete genomes and 10 complete spike gene. Phylogenetic analysis of spike gene revealed a new subtype CCoV-II Variant and CCoV-IIa was the most prevalent subtype currently circulating. Moreover, we identified strain B906_ZJ_2019 shared 93.24% nucleotide identifies with previous strain A76, and both of them clustered with CCoV-II Variant, which were not well clustered with the known subtypes. Recombination analysis of B906_ZJ_2019 indicated that strain B906_ZJ_2019 may a recombinant variant between CCoV-I and CCoV-II, which is consistent with strain A76. Furthermore, amino acid variations widely existed among current CCoV-IIa strains circulating in China and the classic CCoV-IIa strains, in spite of the unknown functions. In a word, we report a useful information as to the etiology and evolution of canine coronavirus in China based on the available sequences, which is urgent for the devise of future effective disease prevention and control strategies.

Publication Type

Journal article.

<226>

Accession Number

20203460851

Author

Andreani, J.; Bideau, M. le; Duflot, I.; Jardot, P.; Rolland, C.; Boxberger, M.; Wurtz, N.; Rolain, J. M.; Colson, P.; Scola, B. la; Raoult, D.

Title

In vitro testing of combined hydroxychloroquine and azithromycin on SARS-CoV-2 shows synergistic effect.

Source

Microbial Pathogenesis; 2020. 14539 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Human coronaviruses SARS-CoV-2 appeared at the end of 2019 and led to a pandemic with high morbidity and mortality. As there are currently no effective drugs targeting this virus, drug repurposing represents a short-term strategy to treat millions of infected patients at low costs. Hydroxychloroquine showed an antiviral effect in vitro. In vivo it showed efficacy, especially when combined with azithromycin in a preliminary clinical trial. Here we demonstrate that the combination of hydroxychloroquine and azithromycin has a synergistic effect in vitro on SARS-CoV-2 at concentrations compatible with that obtained in human lung.

Publication Type

Journal article.

<227>

Accession Number

20203449111

Author

Villeneuve, P. J.; Goldberg, M. S.

Title

Methodological considerations for epidemiological studies of air pollution and the SARS and COVID-19 coronavirus outbreaks.

Source

Environmental Health Perspectives; 2020. 128(9)many ref.

Publisher

Public Health Service, U.S. Department of Health and Human Services

Location of Publisher

Durham

Country of Publication

USA

Abstract

Background: Studies have reported that ambient air pollution is associated with an increased risk of developing or dying from coronavirus-2 (COVID-19). Methodological approaches to investigate the health impacts of air pollution on epidemics should differ from those used for chronic diseases, but the methods used in these studies have not been appraised critically. Objectives: Our study aimed to identify and critique the methodological approaches of studies of air pollution on infections and mortality due to COVID-19 and to identify and critique the methodological approaches of similar studies concerning severe acute respiratory syndrome (SARS). Methods: Published and unpublished papers of associations between air pollution and developing or dying from COVID-19 or SARS that were reported as of 10 May 2020 were identified through electronic databases, internet searches, and other sources. Results: All six COVID-19 studies and two of three SARS studies reported positive associations. Two were time series studies that estimated associations between daily changes in air pollution, one was a cohort that assessed associations between air pollution and the secondary spread of SARS, and six were ecological studies that used area-wide exposures and outcomes. Common shortcomings included possible cross-level bias in ecological studies, underreporting of health outcomes, using grouped data, the lack of highly spatially resolved air pollution measures, inadequate control for confounding and evaluation of effect modification, not accounting for regional variations in the timing of outbreaks' temporal changes in at-risk populations, and not accounting for nonindependence of outcomes. Discussion: Studies of air pollution and novel coronaviruses have relied mainly on ecological measures of exposures and outcomes and are susceptible to important sources of bias. Although longitudinal studies with individual-level data may be imperfect, they are needed to adequately address this topic. The complexities involved in these types of studies underscore the need for careful design and for peer review.

Publication Type

Journal article.

<228>

Accession Number

20203447284

Author

Avila, M. A. G. de; Filho, P. T. H.; Jacob, F. L. da S.; Alcantara, L. R. S.; Berghammer, M.; Nolbris, M. J.; Olaya-Contreras, P.; Nilsson, S.

Title

Children's anxiety and factors related to the COVID-19 pandemic: an exploratory study using the children's anxiety questionnaire and the numerical rating scale.

Source

International Journal of Environmental Research and Public Health; 2020. 17(16)44 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The repercussions of the COVID-19 pandemic on children's lives deserve attention. This study aimed to assess the prevalence of anxiety among Brazilian children and its associated factors during social distancing during COVID-19. We used a cross-sectional design with an online survey from April to May 2020 in Brazil. We included children aged 6-12 years and their guardians. The Children's Anxiety Questionnaire (CAQ; scores 4-12) and the Numerical Rating Scale (NRS; scores 0-10) were used to measure anxiety. We enrolled 157 girls and 132 boys, with a mean age of 8.84 (+/-2.05) years; 88.9% of respondents were mothers. Based on CAQ >= 9, the prevalence of anxiety was 19.4% (n = 56), and higher among children with parents with essential jobs and those who were social distancing without parents. In logistic regression, the following variables were associated with higher CAQ scores: social distancing without parents; more persons living together in home; and education level of guardians. Based on NRS > 7, the prevalence of anxiety was 21.8% (n = 63); however, no associations with NRS scores were found with the investigated variables. These findings suggest the necessity of implementing public health actions targeting these parents and their children at the population level.

Publication Type

Journal article.

<229>

Accession Number

20203444140

Author

Westhoff, P.; Meyer, S.

Title

Baseline update for U.S. farm income and the farm balance sheet.

Source

FAPRI-MU Report - Food and Agricultural Policy Research Institute, College of Agriculture, Food and Natural Resources, University of Missouri; 2020. (05-20):7 pp.

Publisher

University of Missouri-Columbia

Location of Publisher

Columbia

Country of Publication

USA

Abstract

Record government payments to farmers, tied to COVID-19 relief efforts, support farm income in 2020. If no new government programs are made available, government payments and net farm income both decline sharply in 2021. This report utilizes commodity supply, demand and price projections from the FAPRI-MU baseline update released in August 2020 (FAPRI-MU Report #04-20, available at www.fapri.missouri.edu). Historical farm income figures are from USDA's Economic Research Service, and reflect the revision made in early September 2020 to previous estimates of 2019 farm production expenses and farm income. The baseline estimates reflect policies in place in late August 2020. Based on existing program rules, Coronavirus Food Assistance Program (CFAP) payments are assumed to total $11 billion in 2020. The 2020 farm income estimates also incorporate Market Facilitation Program (MFP) payments associated with 2019 production that were made in the early months of 2020, as well as $5.8 billion in benefits under the Paycheck Protection Program (PPP). Additional support programs may be developed in the future, but they are not included in these baseline projections. This is one source of difference between these estimates and those of the Economic Research Service, which assumed that the full $16 billion allocated to CFAP would be used to make payments in 2020.

Publication Type

Bulletin.

<230>

Accession Number

20203448489

Author

Qiu Ye; Zhao YuanBo; Wang Qiong; Li JinYan; Zhou ZhiJian; Liao CeHeng; Ge XingYi

Title

Predicting the angiotensin converting enzyme 2 (ACE2) utilizing capability as the receptor of SARS-CoV-2.

Source

Microbes and Infection; 2020. 22(4/5):221-225. 15 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

SARS-CoV-2, the newly identified human coronavirus causing severe pneumonia pandemic, was probably originated from Chinese horseshoe bats. However, direct transmission of the virus from bats to humans is unlikely due to lack of direct contact, implying the existence of unknown intermediate hosts. Angiotensin converting enzyme 2 (ACE2) is the receptor of SARS-CoV-2, but only ACE2s of certain species can be utilized by SARS-CoV-2. Here, we evaluated and ranked the receptor-utilizing capability of ACE2s from various species by phylogenetic clustering and sequence alignment with the currently known ACE2s utilized by SARS-CoV-2. As a result, we predicted that SARS-CoV-2 tends to utilize ACE2s of various mammals, except murines, and some birds, such as pigeon. This prediction may help to screen the intermediate hosts of SARS-CoV-2.

Publication Type

Journal article.

<231>

Accession Number

20203448444

Author

Nimarpreet Kaur; Deepti Dwivedi; Jyoti Arora; Asha Gandhi

Title

Study of the effectiveness of e-learning to conventional teaching in medical undergraduates amid COVID-19 pandemic.

Source

National Journal of Physiology, Pharmacy and Pharmacology; 2020. 10(7):563-567. 16 ref.

Publisher

Association of Physiologists, Pharmacists and Pharmacologists (APPP)

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Background: Sudden outbreak of COVID-19 pandemic created panic, anxiety among the population worldwide. The education sector was among many which had taken a strong blow due to pandemic. In the wake of institute shut down, this was a challenging time for professional education which was combated through introduction of e-learning through online classes so as to ensure continuation of teaching-learning process for the medical students. Aims and Objectives: The aim of the study was to rank the effectiveness and satisfaction of online classes compared to classroom conventional teaching among medical students. Materials and Methods: After the Institutional Ethical Clearance, this online cross-sectional survey study was done on medical students. A total of 983 students participated in this study. This online survey was carried out from April 10, 2020, to April 18, 2020, after completion of 3 weeks of online classes. A set of self-designed questionnaire based on 5-point Likert scale was given to the students, to rank the effectiveness of learning through e-classes and their understanding with the satisfaction level on various parameters. This was pre-tested on 20 students for standardization. All the students voluntarily participated in the survey. Results: The study result shows that online classes were equally effective in five parameters and less effective in the other but were not at all superior than the conventional classroom teachings. We could come to an interpretation that students were not much satisfied with this way of teaching but definitely it was the need of the hour. Conclusion: We could conclude from our study that e-education can supplement the process of present education, but it cannot be a substitute for the established system of education.

Publication Type

Journal article.

<232>

Accession Number

20203448439

Author

Sharma, S. K.; Mudgal, S. K.; Pai, V. S.; Jitender Chaturvedi; Rakhi Gaur

Title

Vitamin D: a cheap yet effective bullet against coronavirus disease-19 - are we convinced yet?

Source

National Journal of Physiology, Pharmacy and Pharmacology; 2020. 10(7):511-518. 73 ref.

Publisher

Association of Physiologists, Pharmacists and Pharmacologists (APPP)

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Novel corona virus disease (COVID-19) pandemic has seriously affected the entire world; moreover, infection and case fatality rate is quite high in countries located in North Hemisphere, where a large proportion of the population is living with Vitamin D (Vit D) deficiency. Vit D is a secosteroid hormone, which plays an important role in calcium and phosphorous homeostasis, and hence bone strength and also has a significant role in the immune health of an individual. It induces the expression of antimicrobial peptides that can decrease viral replication and also reduces the level of pro-inflammatory cytokines while enhancing the level of anti-inflammatory cytokines. Vit D supplementation in daily single doses (300-2000 IU/day) for 8-12 weeks had more protective effect for viral infections than large doses given at fixed intervals (100,000 or 200,000 IU per month or every 3 months). This evidence based review emphasizes the role of Vit D in the immune response to viral infections and proposes the immense value of Vit D supplementation, for the prevention and treatment of COVID-19.

Publication Type

Journal article.

<233>

Accession Number

20203448945

Author

Singh, J. A.; Bandewar, S. V. S.; Bukusi, E. A.

Title

The impact of the COVID-19 pandemic response on other health research.

Source

Bulletin of the World Health Organization; 2020. 98(9):625-631. 33 ref.

Publisher

World Health Organization

Location of Publisher

Geneva

Country of Publication

Switzerland

Abstract

While governments have been focusing on the unprecedented disruption to the global economy caused by coronavirus disease 2019 (COVID-19) and the urgent need for COVID-19 research, other health research has become a casualty of the pandemic. Major research operations that are unrelated to COVID-19 have been significantly diminished or suspended entirely because of either COVID-19-related legal restrictions or logistical, staffing or operational concerns. Billions of people globally are currently affected by lockdowns or curfews. Since the timescale of such restrictive measures is unknown and subject to change, many studies are now in limbo and the welfare of tens of thousands of study participants is at risk. These circumstances have introduced complex ethical challenges that merit urgent attention from international sponsors, researchers and regulators. Certain sponsors and regulators have published guidelines on how the COVID-19-related disruptions to clinical research should be managed. Although these guidelines provide a good starting point in navigating the challenges of the evolving pandemic, they only apply to those researchers funded or governed by these bodies. Here, we provide guidelines on managing such disruptions that apply beyond these specific settings. We highlight some of the effects of the COVID-19 pandemic on other ongoing research projects that are unrelated to COVID-19 and provide practical guidance on how the welfare of affected study participants should be managed. We conclude that policy-makers, sponsors, researchers and regulators must adopt a more flexible approach to ensure participant safety, while maintaining data integrity and complying with good clinical practices.

Publication Type

Journal article.

<234>

Accession Number

20203445848

Author

Butu, A.; Bruma, I. S.; Tanasa, L.; Rodino, S.; Vasiliu, C. D.; Dobos, S.; Butu, M.

Title

The impact of COVID-19 crisis upon the consumer buying behavior of fresh vegetables directly from local producers. Case study: the quarantined area of Suceava County, Romania.

Source

International Journal of Environmental Research and Public Health; 2020. 17(15)97 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The present paper intends to address the impact of COVID-19 crisis upon the consumer buying behavior of fresh vegetables directly from local producers as observed 30 days later, after enforcing the state of emergency in Romania within a well-defined area, namely, the quarantined area of Suceava. The study relies on the interpretation of answers received from the quarantined area (N = 257) to a questionnaire applied online nationwide. The starting point of this paper is the analysis of the sociodemographic factors on the purchasing decision of fresh vegetables directly from local producers before declaring the state of emergency in Romania (16 March 2020). Further research has been conducted by interpreting the changes triggered by the COVID-19 crisis on the purchasing intention of such products before and after the end of the respective crisis. The aim of this scientific investigation relies on identifying the methods by which these behavioral changes can influence the digital transformation of short food supply chains.

Publication Type

Journal article.

<235>

Accession Number

20203458301

Author

Taslima Islam; Kibria, M. G.

Title

Challenges to the prevention of COVID-19 spread in slums of Bangladesh.

Source

Journal of Public Health; 2020. 42(3):637-638. 7 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This article presented the public health challenges, as well as control measures to prevent and control COVID-19 in the slums of Bangladesh. Preventing the spread of this pandemic is unfeasible in slums in

Bangladesh because of some major challenges such as congestion, inadequate water supply, poor sanitation facilities, poverty and lack of awareness. Handwashing facilities are expected much less in slum settlements than in non-slum settlements. Almost two-thirds of households share a water source with 10 or more households in slums. Hence, slum dwellers find it difficult to wash hands with soap and running water. Usually, slum dwellers are poor and engaged in daily wage-based occupations. So, they have to go out every day for their livelihood even during lockdown. Furthermore, they have no adequate knowledge on personal hygiene. Thus, to minimize the spread of COVID-19 infection, some effective measures should be taken for slum dwellers. Temporary shelters, including living space, handwashing facilities and latrines should be built to meet their additional housing needs during the virus pandemic. Moreover, both the government and NGOs should work together to raise awareness on personal hygiene among slum dwellers and improve sanitation facilities in slums to fight against the COVID-19.

Publication Type

Correspondence.

<236>

Accession Number

20203456481

Author

Antommaria, A. H. M.; Gibb, T. S.; McGuire, A. L.; Wolpe, P. R.; Wynia, M. K.; Applewhite, M. K.; Caplan, A.; Diekema, D. S.; Hester, D. M.; Lehmann, L. S.; McLeod-Sordjan, R.; Schiff, T.; Tabor, H. K.; Wieten, S. E.; Eberl, J. T.

Title

Ventilator triage policies during the COVID-19 pandemic at U.S. hospitals associated with members of the Association of Bioethics Program Directors.

Source

Annals of Internal Medicine; 2020. 173(3):188-194.

Publisher

American College of Physicians

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

Background: The coronavirus disease 2019 pandemic has or threatens to overwhelm health care systems. Many institutions are developing ventilator triage policies. Background: To characterize the development of ventilator triage policies and compare policy content. Design: Survey and mixed-methods content analysis. Setting: North American hospitals associated with members of the Association of Bioethics Program

Directors. Participants: Program directors. Measurements: Characteristics of institutions and policies, including triage criteria and triage committee membership. Results: Sixty-seven program directors responded (response rate, 91.8%); 36 (53.7%) hospitals did not yet have a policy, and 7 (10.4%) hospitals' policies could not be shared. The 29 institutions providing policies were relatively evenly distributed among the 4 U.S. geographic regions (range, 5 to 9 policies per region). Among the 26 unique policies analyzed, 3 (11.3%) were produced by state health departments. The most frequently cited triage criteria were benefit (25 policies [96.2%]), need (14 [53.8%]), age (13 [50.0%]), conservation of resources (10 [38.5%]), and lottery (9 [34.6%]). Twenty-one (80.8%) policies use scoring systems, and 20 of these (95.2%) use a version of the Sequential Organ Failure Assessment score. Among the policies that specify the triage team's composition (23 [88.5%]), all require or recommend a physician member, 20 (87.0%) a nurse, 16 (69.6%) an ethicist, 8 (34.8%) a chaplain, and 8 (34.8%) a respiratory therapist. Thirteen (50.0% of all policies) require or recommend that those making triage decisions not be involved in direct patient care, but only 2 (7.7%) require that their decisions be blinded to ethically irrelevant considerations. Limitation: The results may not be generalizable to institutions without academic bioethics programs. Conclusion: Over one half of respondents did not have ventilator triage policies. Policies have substantial heterogeneity, and many omit guidance on fair implementation.

Publication Type

Journal article.

<237>

Accession Number

20203454594

Author

Tejas Venkataram; Nishant Goyal; Chinmaya Dash; Chandra, P. P.; Jitender Chaturvedi; Amol Raheja; Raghav Singla; Jayesh Sardhara; Bhoopendra Singh; Ravi Gupta

Title

Impact of the COVID-19 pandemic on neurosurgical practice in India: results of an anonymized national survey.

Source

Neurology India; 2020. 68(3):595-602.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: The COVID-19 pandemic has created an unprecedented challenge for medical professionals throughout the world to tackle the rapidly changing scenario. The objective of this survey was to analyze the change in neurosurgical practice in India following the COVID-19 outbreak and assess its impact on practising neurosurgeons. Materials and Methods: Between May 7th and 23rd, 2020, a validated questionnaire was circulated amongst practising neurosurgeons across the country by social media and e-mails, regarding changes in the patterns of patients seen, adaptations made in their practice, effect on surgeries performed, financial burden, and impact on their personal lives. The responses were kept anonymous and were analyzed for correlations between the changes observed and independent factors such as hospital affiliations, teaching professions, and neurosurgical experience. Results: Our survey showed a drastic fall in the number of neurosurgical patients seen in the outpatient department (OPD) as well as the number of surgeries performed. A drop of 76.25% was seen in OPD patients (P=0.000) and that of 70.59% in surgeries performed (P=0.000). There was no uniformity among the neurosurgeons in the number of COVID-19 tests being done before elective/emergency surgery and in the use of protective gear while examining patients. Private practitioners were more affected financially as compared to those in the government sector. The pandemic has affected the research work of 53.23% of all respondents, with those in the teaching profession (70.96%) more affected than those in the non-teaching profession (24.67%). Conclusions: Evidence-based policies, screening COVID-19 tests with better sensitivity, and better-quality personal protective equipment kits in adequate numbers are required to protect our medical professionals from COVID-19. Mental health issues among neurosurgeons may also be an issue, this being a high risk speciality and should be closely watched for.

Publication Type

Journal article.

<238>

Accession Number

20203454592

Author

Krishnan Ganapathy

Title

Telemedicine and neurological practice in the COVID-19 era.

Source

Neurology India; 2020. 68(3):555-559. 51 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: The COVID-19 pandemic has within months turned the world upside down. With personal distancing and shortage of personal protective equipment, face-to-face health care encounters are increasingly becoming problematic. Neurological manifestations are also being observed in clinical presentations. Background: Worldwide most countries, the World Health Organization (WHO) and Centre for Disease Control (USA) have recommended use of Telemedicine during the current pandemic. With acute shortage of neurologists and neurosurgeons and their lopsided distribution, it becomes more difficult to provide neurological care to those who need it the most, particularly with travel restrictions. The author has since 2002 been advocating use of Telemedicine in Neurosciences. Materials and Methods: This article reviews the increasing deployment of Telemedicine in neurological practice in the last few years, particularly the radical exponential use in the last few months due to COVID-19. Conclusions: With possible reduction in face-to-face consultations, remote evaluation may become mainstream. Webinars will play an increasing role. CME's and resident training will become more and more digital. The world will never be the same again. It is imperative that we accept and start deploying the "New Normal".

Publication Type

Journal article.

<239>

Accession Number

20203455798

Author

Covarrubias-Gomez, A.; Arellano-Carreno, V. A.; Uscanga-Castillo, J. D.; Rosas-Romero, R.

Title

Hospital and outpatient nutrition in patients with COVID-19. [Spanish]

Source

Revista Salud Publica y Nutricion; 2020. 19(3):28-37. 14 ref.

Publisher

Facultad de Salud Publica y Nutricion, Universidad Autonoma de Nuevo Leon

Location of Publisher

Monterrey

Country of Publication

Mexico

Abstract

Introduction: SARS-CoV-2 disease has changed our perception of hospital care and it includes the medical and nutritional context. Clinical decision making about patient's nutrition occurs in a multidisciplinary setting. Background: Provide the basic elements about nutritional evidence-based suggestions on COVID-19

to health care professionals. Material and method: A clinical case is presented. The available literature on outpatient and hospital nutrition of patients with COVID-19 is reviewed. Nutritional aspects of this population are discussed in the hospital and outpatient setting. Results: Different international guidelines on nutrition in patients with COVID-19 in the hospital and outpatient context were reviewed. Among the recommendations are: (i) considerations on early enteral nutrition and its management during pronation, (ii) the outpatient measures of the patient with COVID-19, and (iii) the impact of the disease on hospital food services. Conclusions: Hospital feeding services are a vulnerable area during a pandemic. Although the nutritional protocols are similar to those carried out in critical units, they should be more oriented to the different moments experienced by COVID-19 patients. Further research is required, and this experience constitutes an area of opportunity.

Publication Type

Journal article.

<240>

Accession Number

20203452631

Author

Deepali Kumar; Manuel, O.; Natori, Y.; Egawa, H.; Grossi, P.; Han SangHoon; Fernandez-Ruiz, M.; Atul Humar

Title

COVID-19: a global transplant perspective on successfully navigating a pandemic.

Source

American Journal of Transplantation; 2020. 20(7):1773-1779. 10 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

The COVID-19 pandemic has rapidly evolved and changed our way of life in an unprecedented manner. The emergence of COVID-19 has impacted transplantation worldwide. The impact has not been just restricted to issues pertaining to donors or recipients, but also health-care resource utilization as the intensity of cases in certain jurisdictions exceeds available capacity. Here we provide a personal viewpoint representing different jurisdictions from around the world in order to outline the impact of the current COVID-19 pandemic on organ transplantation. Based on our collective experience, we discuss mitigation strategies such as donor screening, resource planning, and a staged approach to transplant volume

considerations as local resource issues demand. We also discuss issues related to transplant-related research during the pandemic, the role of transplant infectious diseases, and the influence of transplant societies for education and disseminating current information.

Publication Type

Journal article.

<241>

Accession Number

20203456976

Author

Darberazi, A. S.; Malekinejad, P.; Ziaeian, M.; Ajdari, A.

Title

Designing a comprehensive model of hospital resilience in the face of COVID-19 disease. [Persian]

Source

Journal of Health Administration (JHA); 2020. 23(2):fa77-fa88, en76. 29 ref.

Publisher

Tehran University of Medical Sciences, Centre for Electronic Resources Provision and Journal Improvement

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

Introduction: Introduction: Health centers must can adapt quickly to catastrophic events, such as natural and human disasters. One way to face various disasters in health centers is to increase resilience. This study tries to identify the affecting factors on hospital resilience and the relationship between them, to design a comprehensive model of hospital resilience in the face of COVID-19 disease. Methods: First, the affecting factors on hospital resilience were identified using a research background study. Then, through an interpretive structural modeling (ISM) technique, a relationship model among the identified factors was obtained. The conceptual model obtained from ISM was goodness of fit by using the Smart PLS3 software. For this purpose, a questionnaire containing 33 questions was administered to 80 managers, experts, and staff of Yazd training hospitals. Results: The results identified 8 general affecting factors on hospital resilience. The eight factors identified in this study were structured at 4 general levels by ISM. The initial level of the model consisted of "stability" and "communication system and information technology" factors. Also, the results of model goodness of fit confirmed the relationships formed by ISM. Conclusion: The results of this study can be used by health managers for the countrychr('39')s hospitals resilience in the face of natural disasters and unforeseen accidents.

Publication Type

Journal article.

<242>

Accession Number

20203434530

Author

Yu Yuan; Xu Dan; Fu ShouZhi; Zhang Jun; Yang XiaoBo; Xu Liang; Xu JiQian; Wu YongRan; Huang ChaoLin; Ouyang YaQi; Yang LuYu; Fang MingHao; Xiao HongWen; Ma Jing; Zhu Wei; Hu Song; Hu Quan; Ding DaoYin; Hu Ming; Zhu GuoChao; Xu WeiJiang; Guo Jun; Xu JingLong; Yuan HaiTao; Zhang Bin; et al.

Title

Patients with COVID-19 in 19 ICUs in Wuhan, China: a cross-sectional study.

Source

Critical Care; 2020. 24(219):(14 May 2020). 28 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: A COVID-19 outbreak started in Wuhan, China, last December and now has become a global pandemic. The clinical information in caring of critically ill patients with COVID-19 needs to be shared timely, especially under the situations that there is still a largely ongoing spread of COVID-19 in many countries. Methods: A multicenter prospective observational study investigated all the COVID-19 patients received in 19 ICUs of 16 hospitals in Wuhan, China, over 24 h between 8 AM February 2h and 8 AM February 27, 2020. The demographic information, clinical characteristics, vital signs, complications, laboratory values, and clinical managements of the patients were studied. Results: A total of 226 patients were included. Their median (interquartile range, IQR) age was 64 (57-70) years, and 139 (61.5%) patients were male. The duration from the date of ICU admission to the study date was 11 (5-17) days, and the duration from onset of symptoms to the study date was 31 (24-36) days. Among all the patients, 155 (68.6%) had at least one coexisting disease, and their sequential organ failure assessment score was 4 (2-8). Organ function damages were found in most of the patients: ARDS in 161 (71.2%) patients, septic shock in 34 (15.0%) patients, acute kidney injury occurred in 57 (25.2%) patients, cardiac injury in 61 (27.0%) patients, and lymphocytopenia in 160 (70.8%) patients. Of all the studied patients, 85 (37.6%) received invasive mechanical ventilation, including 14 (6.2%) treated with extracorporeal membrane oxygenation (ECMO) at the same time, 20 (8.8%) received noninvasive mechanical ventilation, and 24 (10.6%) received continuous renal replacement therapy. By April 9, 2020, 87 (38.5%) patients were deceased and 15 (6.7%)

were still in the hospital. Conclusions: Critically ill patients with COVID-19 are associated with a higher risk of severe complications and need to receive an intensive level of treatments. COVID-19 poses a great strain on critical care resources in hospitals.

Publication Type

Journal article.

<243>

Accession Number

20203467082

Author

Nitin Dhochak; Tanu Singhal; Kabra, S. K.; Rakesh Lodha

Title

Pathophysiology of COVID-19: why children fare better than adults?

Source

Indian Journal of Pediatrics; 2020. 87(7):537-546. 87 ref.

Publisher

Springer (India) Private Limited

Location of Publisher

New Delhi

Country of Publication

India

Abstract

The world is facing Coronavirus Disease-2019 (COVID-19) pandemic, which is causing a large number of deaths and burden on intensive care facilities. It is caused by Severe Acute Respiratory Syndrome coronavirus-2 (SARS-CoV-2) originating in Wuhan, China. It has been seen that fewer children contract COVID-19 and among infected, children have less severe disease. Insights in pathophysiological mechanisms of less severity in children could be important for devising therapeutics for high-risk adults and elderly. Early closing of schools and day-care centers led to less frequent exposure and hence, lower infection rate in children. The expression of primary target receptor for SARS-CoV-2, i.e. angiotensin converting enzyme-2 (ACE-2), decreases with age. ACE-2 has lung protective effects by limiting angiotensin-2 mediated pulmonary capillary leak and inflammation. Severe COVID-19 disease is associated with high and persistent viral loads in adults. Children have strong innate immune response due to trained immunity (secondary to live-vaccines and frequent viral infections), leading to probably early control of infection at the site of entry. Adult patients show suppressed adaptive immunity and dysfunctional over-active innate immune response in severe infections, which is not seen in children. These could be related to immune-senescence in elderly. Excellent regeneration capacity of pediatric alveolar epithelium may be contributing to early recovery from COVID-19. Children, less frequently, have risk factors such as co-morbidities,

smoking, and obesity. But young infants and children with pre-existing illnesses could be high risk groups and need careful monitoring. Studies describing immune-pathogenesis in COVID-19 are lacking in children and need urgent attention.

Publication Type

Journal article.

<244>

Accession Number

20203467057

Author

Doumbia, S.; Sow, Y.; Diakite, M.; Lau ChuenYen

Title

Coordinating the research response to COVID-19: Mali's approach.

Source

Health Research Policy and Systems; 2020. 18(105):(17 September 2020). 18 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Mali, like the rest of the world, has seen a rapid spread of COVID-19 since the first report of imported cases. Despite being a low-income country, Mali has leveraged scientific research resources via coordinated approaches to enable public health emergency planning and response to the COVID-19 pandemic. Mali's approach includes the harmonization of research activities; leveraging of research laboratory capacity of the University Clinical Research Center, Mali International Center for Excellence and three other in-country laboratories for community COVID-19 testing; strengthening relationships amongst local and international stakeholders; and collaboration with the Ministry of Health to integrate scientific evidence into public policy and emergency management of COVID-19 through a platform of consultation and open communication. The country has implemented national coordination of its COVID-19 response by establishing a COVID-19 Scientific Advisory Committee and a COVID-19 Technical Coordination Committee, both within the Ministry of Health and working collaboratively with other stakeholders. Members of Mali's COVID-19 Scientific Advisory Committee also serve as leaders of its principal academic and government clinical and public health research entities. This centralised approach has enabled the prioritisation of COVID-19 control activities, informed allocation of resources, evidence-based public health practices and timely decision-making in the pandemic setting. Though challenges remain, lessons learned from Mali's

harnessing of clinical research capacity to guide and support its COVID-19 response can be applied to future global health research challenges and illustrate the power of building public health-responsive research capacity in resourcelimited settings through international collaboration.

Publication Type

Journal article.

<245>

Accession Number

20203467039

Author

Ortolani, C.; Pastorello, E. A.

Title

Hydroxychloroquine and dexamethasone in COVID-19: who won and who lost?

Source

Clinical and Molecular Allergy; 2020. 18(17):(9 September 2020). 41 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: On June 30, 2020, the WHO reported over 10 millions of COVID-19 cases worldwide with over half a million deaths. In severe cases the disease progresses into an Acute Respiratory Distress Syndrome (ARDS), which in turn depends on an overproduction of cytokines (IL-6, TNFa, IL-12, IL-8, CCL-2 and IL1) that causes alveolar and vascular lung damage. Clearly, it is essential to find an immunological treatment that controls the "cytokine storm". In the meantime, however, it is essential to have effective antiviral and anti-inflammatory drugs available immediately. Pharmacologic therapy for COVID-19: Hydroxychloroquine or chloroquine have been widely adopted worldwide for the treatment of SARS-CoV-2 pneumonia. However, the choice of this treatment was based on low quality of evidence, i.e. retrospective, non-randomized controlled studies. Recently, four large Randomized Controlled Trials (RCTs) have been performed in record time delivering reliable data: (1) the National Institutes of Health (NIH) RCT included 60 hospitals participating all over the world and showed the efficacy of remdesivir in reducing the recovery time in hospitalized adults with COVID-19 pneumonia; (2) three large RCTs already completed, for hydroxychloroquine, dexamethasone and Lopinavir and Ritonavir respectively. These trials were done under the umbrella of the 'Recovery' project, headed by the University of Oxford. The project includes 176 participating hospitals in the UK and was set up to verify the efficacy of some of the treatments used for

COVID-19. These three 'Recovery' RCTs concluded definitely: (a) that treatment with hydroxychloroquine provides no benefits in patients hospitalized with COVID-19; (b) that treatment with dexamethasone reduced deaths by one-third in COVID-19 patients that were mechanically ventilated, and by one-fifth in patients receiving oxygen only; (c) that the combination of Lopinavir and Ritonavir is not effective in reducing mortality in COVID-19 hospitalized patients. Conclusions: The results of these four large RCTs have provided sound indications to doctors for the treatment of patients with COVID-19 and prompted the correction of many institutional provisions and guidelines on COVID-19 treatments (i.e. FDA, NIH, UK Health Service, etc.). Even though a definitive treatment for COVID-19 has not yet been found, large RCTs stand as the Gold Standards for COVID-19 therapy and offer a solid scientific base on which to base treatment decisions.

Publication Type

Journal article.

<246>

Accession Number

20203467025

Author

Han BingFeng; Zhao TianShuo; Liu Bei; Liu HanYu; Zheng Hui; Wan YongMei; Qiu JiaYi; Zhuang Hui; Cui FuQiang

Title

Public awareness, individual prevention practice, and psychological effect at the beginning of the COVID-19 outbreak in China.

Source

Journal of Epidemiology; 2020. 30(10):474-482. 34 ref.

Publisher

Japan Epidemiological Association

Location of Publisher

Fukuoka

Country of Publication

Japan

Abstract

Background: The COVID-19 has spread to more than 200 countries and territories. But less is known about the knowledge, protection behavior and anxiety regarding the outbreak among the general population. Methods: A cross-sectional, population-based online survey was conducted in China and abroad from January 28 to February 1, 2020. Socio-demographic information was collected and knowledge scores, practice scores, anxiety scores and perceived risk were calculated. General linear model and binary logistic regression were used to identify possible associations. Results: We included 9,764 individuals in this study,

and 156 (1.6%) were from Hubei Province. The average knowledge score was 4.7 (standard deviation, 1.0) (scored on a 6-point scale); 96.1% maintained hand hygiene, and 90.3% of participants had varying levels of anxiety. People in Hubei Province were the most anxious, followed by those in Beijing and Shanghai. People who had experienced risk behaviors did not pay more attention to wearing masks and hand hygiene. Conclusions: The public had high awareness on knowledge of COVID-19 outbreak, and a high proportion of people practiced good hand hygiene behavior. Many people claimed anxiety, especially in heavily affected areas during pandemic, suggesting the importance of closing the gap between risk awareness and good practice and conduct psychological counseling to public and patients.

Publication Type

Journal article.

<247>

Accession Number

20203462093

Author

Li Ling; Yang Ru; Wang Jue; Lv QiLu; Ren Ming; Zhao Lei; Chen HanWei; Xu HaiXia; Xie SongLi; Xie Jin; Lin Hui; Li WenJuan; Fang Peng; Gong Li; Wang Lan; Wu YanYun; Liu Zhong

Title

Feasibility of a pilot program for COVID-19 convalescent plasma collection in Wuhan, China.

Source

Transfusion; 2020. 60(8):1773-1777. 14 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

BACKGROUND: A novel coronavirus has caused an international outbreak. Currently, there are no specific therapeutic agents for coronavirus infections. Convalescent plasma (CP) therapy is a potentially effective treatment option. METHODS: Patients who had recovered from COVID-19 and had been discharged from the hospital for more than 2 weeks were recruited. COVID-19 convalescent plasma (CCP)-specific donor screening and selection were performed based on the following criteria: (1) aged 18-55 years; (2) eligible for blood donation; (3) diagnosed with COVID-19; (4) had two consecutive negative COVID-19 nasopharyngeal swab tests based on PCR (at least 24 hr apart) prior to hospital discharge; (5) had been discharged from the hospital for more than 2 weeks; and (6) had no COVID-19 symptoms prior to convalescent plasma donation. In addition, preference was given to CCP donors who had a fever lasting

more than 3 days or a body temperature exceeding 38.5degreesC (101.3degreesF), and who donated 4 weeks after the onset of symptoms. CCP collection was performed using routine plasma collection procedures via plasmapheresis. In addition to routine donor testing, the CCP donors' plasma was also tested for SARS-CoV-2 nucleic acid and S-RBD-specific IgG antibody. RESULTS: Of the 81 potential CCP donors, 64 (79%) plasma products were collected. There were 18 female donors and 46 male donors. There were 34 first-time blood donors and 30 repeat donors. The average time between CCP collection and initial symptom onset was 49.1 days, and the average time between CCP collection and hospital discharge was 38.7 days. The average volume of CCP collected was 327.7 mL. All Alanine transaminase (ALT) testing results met blood donation requirements. HIV Ag/Ab, anti-HCV, anti-syphilis, and HBsAg were all negative; NAT for HIV, HBV, and HCV were also negative. In addition, all of the CCP donors' plasma units were negative for SARS-CoV-2 RNA. Of the total 64 CCP donors tested, only one had an S-RBD-specific IgG titer of 1:160, all others had a titer of >=1:320. CONCLUSION: Based on a feasibility study of a pilot CCP program in Wuhan, China, we demonstrated the success and feasibility of CCP collection. In addition, all of the CCP units collected had a titer of >=1:160 for S-RBD-specific IgG antibody, which met the CCP quality control requirements based on the Chinese national guidelines for CP.

Publication Type

Journal article.

<248>

Accession Number

20203461315

Author

Schuelter-Trevisol, F.; Iser, B. P. M.; Marcon, C. E. M.; Mello, R. S. de; Souza, K. M. de; Baldessar, M. Z.; Trevisol, D. J.

Title

Partnership between the academy and public and private health systems to fight COVID-19: an experience report in Tubarao, Santa Catarina, Brazil.

Source

Epidemiologia e Servicos de Saude; 2020. 29(4)21 ref.

Publisher

Ministerio de Saude

Location of Publisher

Brasilia

Country of Publication

Brazil

Abstract

This article presents an experience report about integration between public and private health services, health service managers and the academy, for surveillance and control of the COVID-19 epidemic, in the municipality of Tubarao, Santa Catarina, Brazil. The city is home to a university and has a large flow of people from different parts of the country, as well as being one of the first municipalities in the state of Santa Catarina to report cases of community transmission of SARS-CoV-2. The measures adopted included the implementation of the COVID-19 Monitoring Committee, the Municipal Health Emergency Operations Center, and the COVID-19 Contingency Plan. After 100 days of pandemic, 5,979 cases had been reported, 431 (7.2%) had been confirmed, of which five (1.2%) died. Early decisions, such as the immediate suspension of business activities and crowded events, may have reduced the spread of the virus. The partnerships put into place have provided innovation and supported public service management in decision-making based upon scientific evidence.

Publication Type

Journal article.

<249>

Accession Number

20203461314

Author

Silva, J. H. da; Oliveira, E. C. de; Hattori, T. Y.; Lemos, E. R. S. de; Tercas-Trettel, A. C. P.

Title

Description of COVID-19 cluster: isolation and testing in asymptomatic individuals as strategies to prevent local dissemination in Mato Grosso state, Brazil, 2020.

Source

Epidemiologia e Servicos de Saude; 2020. 29(4)30 ref.

Publisher

Ministerio de Saude

Location of Publisher

Brasilia

Country of Publication

Brazil

Abstract

Objective: to describe a COVID-19 cluster and the strategies used to contain the virus, in a municipality in the interior region of Mato Grosso state, Brazil. Methods: this is a descriptive study of documental records of an epidemiological investigation conducted in April 2020. Results: introduction of SARS-CoV-2 in the municipality was identified through a cluster comprised of five people, 4 were symptomatic and 1 was asymptomatic, after the virus was imported by index cases C01 and C02; in addition to household transmission (C03, C04), a physiotherapist (C05) was infected through contact with C02; with the exception

of C04, all had an influenza-like symptoms and C02 required hospitalization; as for laboratory tests, all were seroreactive and C01 was RT-PCR positive. Conclusion: dissemination of COVID-19 was contained by effective home isolation, an important instrument that should be adopted early by unaffected municipalities to contain virus dissemination, as well as by serological testing that detected infection in asymptomatic patients.

Publication Type

Journal article.

<250>

Accession Number

20203461313

Author

Salles Neto, L. L. de; Martins, C. B.; Chaves, A. A.; Oliveira Konstantyner, T. C. R. de; Yanasse, H. H.; Campos, C. B. L. de; Oliveira Bellini, A. J. de; Butkeraites, R. B.; Correia, L.; Magro, I. L.; Santos Soares, F. dos

Title

Forecast UTI: application for predicting intensive care unit beds in the context of the COVID-19 pandemic.

Source

Epidemiologia e Servicos de Saude; 2020. 29(4)9 ref.

Publisher

Ministerio de Saude

Location of Publisher

Brasilia

Country of Publication

Brazil

Abstract

In view of the need to manage and forecast the number of Intensive Care Unit (ICU) beds for critically ill COVID-19 patients, the Forecast UTI open access application was developed to enable hospital indicator monitoring based on past health data and the temporal dynamics of the Coronavirus epidemic. Forecast UTI also enables short-term forecasts of the number of beds occupied daily by COVID-19 patients and possible care scenarios to be established. This article presents the functions, mode of access and examples of uses of Forecast UTI, a computational tool intended to assist managers of public and private hospitals within the Brazilian National Health System by supporting quick, strategic and efficient decision-making.

Publication Type

Journal article.

<251>

Accession Number

20203461308

Author

Malta, D. C.; Szwarcwald, C. L.; Azevedo Barros, M. B. de; Gomes, C. S.; Machado, I. E.; Souza Junior, P. R. B. de; Romero, D. E.; Lima, M. G.; Damacena, G. N.; Fatima Pina, M. de; Fatima Freitas, M. I. de; Werneck, A. O.; Silva, D. R. P. da; Azevedo, L. O.; Gracie, R.

Title

The COVID-19 pandemic and changes in adult Brazilian lifestyles: a cross-sectional study, 2020.

Source

Epidemiologia e Servicos de Saude; 2020. 29(4)29 ref.

Publisher

Ministerio de Saude

Location of Publisher

Brasilia

Country of Publication

Brazil

Abstract

Objective: To describe lifestyle changes with regard to consumption of tobacco and alcohol, food intake and physical activity, in the period of social restriction resulting from the COVID-19 pandemic. Methods: This is a cross-sectional study conducted in Brazil with data from the ConVid online health behavior survey. The data were collected via an online questionnaire answered by the survey participants. Post-stratification procedures were used to calculate prevalence rates and 95% confidence intervals. Results: 45,161 individuals aged 18 years or more participated. During the period of social restriction participants reported a decrease in practicing physical activity and an increase in time spent using computers or tablets or watching TV, intake of ultra-processed foods, number of cigarettes smoked and alcoholic beverage consumption. Differences were observed according to sex and age group. Conclusion: The results indicate a worsening of lifestyles and an increase in health risk behaviors.

Publication Type

Journal article.

<252>

Accession Number

20203468769

Author

Tesfaye, W.; Abrha, S.; Sinnollareddy, M.; Arnold, B.; Brown, A.; Matthew, C.; Oguoma, V. M.; Peterson, G. M.; Thomas, J.

Title

How do we combat bogus medicines in the age of the COVID-19 pandemic?

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(4):1360-1363. 41 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

The COVID-19 pandemic has brought concurrent challenges. The increased incidence of fake and falsified product distribution is one of these problems with tremendous impact, especially in low- and middle-income countries. Up to a tenth of medicines including antibiotics and antimalarial drugs in the African market are considered falsified. Pandemics make this worse by creating an ecosystem of confusion, distraction, and vulnerability stemming from the pandemic as health systems become more stressed and the workload of individuals increased. These environments create opportunities for substandard and falsified medicines to be more easily introduced into the marketplace by unscrupulous operators. In this work we discuss some of the challenges with fake or falsified product distribution in the context of COVID-19 and proposed strategies to best manage this problem.

Publication Type

Journal article.

<253>

Accession Number

20203468768

Author

Al-Zaman, M. S.

Title

Healthcare crisis in Bangladesh during the COVID-19 pandemic.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(4):1357-1359. 24 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

The COVID-19 pandemic has had a severe impact worldwide. Developed countries, such as the United States, United Kingdom, Italy, and Spain, had their highly efficient medical infrastructure greatly stressed and suffered from high death tolls. Similarly, Bangladesh, a poverty-stricken South Asian country, is losing its battle against the pandemic, but mainly because of its incompetent healthcare system. The casualties are escalating and public sufferings are becoming unimaginable. On this backdrop, this perspective piece discusses the healthcare crisis in Bangladesh during the pandemic. This article also identifies three responsible issues for the country's deteriorating health care: (1) poor governance and increased corruption, (2) inadequate healthcare facilities, and (3) weak public health communication.

Publication Type

Journal article.

<254>

Accession Number

20203462570

Author

Uyaroglu, O. A.; Guven, G. S.; Gullu, I.

Title

Can Levamisole be used in the treatment of COVID-19 patients presenting with diarrhea?

Source

Journal of Infection in Developing Countries; 2020. 14(8):844-846. 14 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was first identified in Wuhan, China, on Jan 7, 2020. Over the following months, the virus rapidly spread throughout the world. Coronavirus Disease 2019 (COVID-19) can involve the gastrointestinal tract, including symptoms like nausea, vomiting and diarrhea and shedding of the SARS-CoV-2 in feces. Angiotensin-converting enzyme 2 (ACE2) protein, which has been proven to be a cell receptor for SARS-CoV-2, is expressed in the glandular cells of gastric, duodenal, and rectal epithelia, supporting the entry of SARS-CoV-2 into the host cells. According to the literature, rates of COVID-19 patients reporting diarrhea were between 7 - 14%. Diarrhea in the course of COVID-19 disease can cause dehydration and hospitalization. Although no antiviral drug was specifically designed for the treatment of diarrhea, several molecules could have beneficial effects by reducing viral replication. In this letter, we discussed the Levamisole, which is an anthelmintic agent with immunomodulatory effects, could be used effectively both for antiviral therapy and especially in COVID-19 patients with diarrhea.

Publication Type

Journal article.

<255>

Accession Number

20203462569

Author

Afriyie, D. K.; Asare, G. A.; Amponsah, S. K.; Godman, B.

Title

COVID-19 pandemic in resource-poor countries: challenges, experiences and opportunities in Ghana.

Source

Journal of Infection in Developing Countries; 2020. 14(8):838-843. 33 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

The novel coronavirus, SARS-CoV-2, which causes COVID-19, is seen world-wide. In developing countries, adequate health facilities and staff numbers are a concern. Ghana recorded its first 2 cases of COVID-19 on 12 March 2020. On 30 March 2020, a partial lockdown for 14 days was imposed and later extended along with other measures. By the end of the initial lockdown, 19 April 2020, an estimated 86,000 people had been traced and 68,591 tests performed. Of the 68,591 tests, there were 1,042 (1.5%) positive cases, 9 deaths, and 99 recoveries, with Ghana ranked number one among African countries in administering tests per million people. Ghana's effective track and trace system, as well as lockdown and other measures, have helped limit mortality with only 85 recorded deaths by 23 June 2020. Scientists from three facilities of the University of Ghana have also successfully sequenced the genomes of COVID-19 from 15 confirmed cases, and the Food and Drugs Authority in Ghana have also helped address shortages by fast-tracking certification of hand sanitizers and local production of 3.6 million standardized personal protective equipment. There has also been the development of prototypes of locally-manufactured mechanical ventilators to meet local need at intensive care units. Most people have also resorted to changing diets and the use of supplements to boost their immune system. Although initial results are encouraging, further research is needed to understand the dynamics of COVID-19 in Ghana and provide additional guidance.

Publication Type

Journal article.

<256>

Accession Number

20203462568

Author

Odumosu, B. T.; Suleiman, A. B.

Title

COVID-19 sustainable lockdown exit plan - the Nigerian model.

Source

Journal of Infection in Developing Countries; 2020. 14(8):836-837. 8 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

From an economic and social point of view, citing Nigeria as a case study for COVID-19, confinement measures in Africa are not sustainable in the long run due to economic slump and social tension as a result of prolonged confinement. Many people rely on daily income, living in overcrowded settlements; thus, a well-planned exit strategy from the lockdown is crucial, even though there is no scientific consensus on how and when to relax some of these measures. There are also arguments that many countries in Africa are not carrying out enough testing and it may be just at the start of its peak.

Publication Type

Journal article.

<257>

Accession Number

20203462567

Author

Shamsheer Ul-Haq; Shahbaz, P.; Boz, I.

Title

Knowledge, behavior and precautionary measures related to COVID -19 pandemic among the general public of Punjab province, Pakistan.

Source

Journal of Infection in Developing Countries; 2020. 14(8):823-835. 31 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

Introduction: The world is facing a formidable challenge to prevent the COVID -19 global outbreak, and health care systems are under pressure globally. The governments alone cannot prevent the spread of this pandemic without creating a sensitive public opinion and cooperation. Therefore, this study analyzed the knowledge, behavior, and precautionary measures taken by the general public to protect themselves from COVID-19 pandemic. Methodology: For this purpose, snowball sampling technique was used to collect data from 401 respondents through an online survey in the Punj ab province of Pakistan. A Multivariate Probit Model was used to determine the factors affecting the choice of precautionary measures to avoid COVID -19 infection. Results: Majority of the respondents (58.1%) belonged to urban areas in this study. The urban respondents had higher knowledge about Coronavirus disease as compared to rural respondents. Similarly, the hygienic behavior of urban respondents was better than rural respondents. But unavailability of hygienic material (mask and hand sanitizer) was the main problem faced by the general public. Public

transportation was considered the most risk-prone place to COVID-19 by the respondents. Majority of the respondents perceived medium to highest risk from COVID-19, and it was found one of the most influential factors affecting the adoption of precautionary measures along with knowledge of this pandemic. Conclusions: Government needs to start a comprehensive awareness campaign on social media along with the mainstream media cre ate awareness about the importance of social distancing, washing hands and wearing masks among the general public to enhance knowledge and improve the behavior of the general public about COVID -19.

Publication Type

Journal article.

<258>

Accession Number

20203462565

Author

Alsayedahmed, H. H.

Title

COVID -19 pandemic's precautionary measures had hit the reset button of the quality of life at different aspects.

Source

Journal of Infection in Developing Countries; 2020. 14(8):812-816. 22 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

COVID-19 is a novel coronavirus that emerged in Wuhan-China during the last quarter in 2019 and caused an infectious respiratory disease pandemic. The strategy of "Attack and Defend" was attempted to mitigate COVID-19 crisis worldwide. A list of precautionary measures were set by healthcare professional experts to protect public from infection, social physical distancing measures being the most efficient. On the other hand, Occupational Safety and Health Administration (OSHA) has established protective guidelines for healthcare workers to guarantee a healthy workplace and safe environment. The physical distancing measures have obviously reshaped the relationship between family members leading to better quality of family life. Meanwhile, travel suspension also led to slightly higher health standards with less air pollution, lower traffic induced stress levels and subsequently a greener footprint. Herein, we intend to highlight the impact of COVID-19 pandemic protective measures on family connections, as well as on environmental

health. Moreover, we aimed at pointing out the effect on Saudi Arabian cultural and humanitarian behavior in dealing with the pandemic under the governance care of the custodian of the two holy mosques; King Salman Al-Saud. In fact, a combination of restrictive and protective measures is the most efficient to curb COVID-19 spread. In addition to improving the quality of social life, this pandemic revealed a healthier climate, which will certainly be visible on a large scale. Certainly, all together with solidarity we will be able to restrain COVID-19 pandemic and have a better quality of life.

Publication Type

Journal article.

<259>

Accession Number

20203463773

Author

Anand, K. B.; Karade, S.; Sen, S.; Gupta, R. M.

Title

SARS-CoV-2: Camazotz's curse. (Special Issue: COVID-19 collection.)

Source

Medical Journal Armed Forces India; 2020. 76(2):136-141. 27 ref.

Publisher

Elsevier

Location of Publisher

New Delhi

Country of Publication

India

Abstract

The world is currently face to face with a pandemic which is spreading rapidly across the globe caused by SARS-CoV-2, a strain of Coronaviruses (CoVs) belonging to subgenus Sarbecovirus of genus Betacoronavirus. World Health Organisation (WHO) on 11 Feb 20 named this disease caused by SARS-CoV-2 as Covid-19. This pandemic is spreading rapidly and more than 20,00,000 cases have occurred globally. The human Coronaviruses discovered in 1960s were considered potentially harmless endemic viruses with seasonal distribution before late 2002. The CoVs are found in a large number of domestic and wild animals and birds. The first pandemic caused by Coronavirus caused by SARS-CoV was recognized in the late 2002 in Guangdong Province and resulted in widespread morbidity and mortality. This was followed by MERS-CoV which began in 2012 in the Arabian peninsula with multiple outbreaks related to it in various parts of the globe. Various studies have suggested how these viruses made their entry from their natural reservoir bats via intermediate host like civets and camels in case of SARS-CoV and MERS-CoV respectively. The intermediate host of the SARS-CoV-2 still needs to be established. The SARS-CoV-2 has 96.2% similarity to

the bat Severe Acute Respiratory Syndrome related-Coronavirus (SARSr-CoV RaTG13). SARS-CoV-2 has been found to be more distant in relation to SARS-CoV (79%) and MERS-CoV (50%). At the whole genome sequence level pangolin CoV and SARSr-CoV RaTG13 show 91.02% and 96.2% similarity with SARS-CoV-2 but the S1 subunit of spike protein of pangolin CoV is more closely related to SARS-CoV-2 than SARSr-CoV RaTG13. The genetic analysis of the currently circulating strains of the pandemic have shown 99.98-100% similarity in their genomes implying a recent shift to humans. The animal source of SARS-CoV-2 needs to be identified to implement control measures in the present pandemic. Also, how the virus moves interspecies will help predict and prevent future pandemics.

Publication Type

Journal article.

<260>

Accession Number

20203469905

Author

Navdeep Jethi; Gaurav Pandav; Divya Nagri; Sakshi Pandav; Dibya Kumari; Manpreet Kaur

Title

Asymptomatic COVID-19 patients and possible screening before an emergency aerosol related endodontic protocols in dental clinic - a review.

Source

Journal of Family Medicine and Primary Care; 2020. 9(9):4552-4556.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Dentistry is related to the cure of oral and dental infections, so exposure and proximity of dental practitioners to oral and nasal fluids of a patient is very obvious. Before you proceed for an aerosol-generating procedure like RCT, and crown preparations, diagnosis, and screening of COVID-19 is very important, as failure may end up infecting yourself and would become a source of infection to your patient community. Due to limitations of data, medicines, and PPE shortage all around the world, screening of asymptomatic carriers of COVID-19 is very troublesome but necessary. To avoid any silent positive patient, the possible way is to ensure mandatory testing of every patient before you treat it. As the door to door surveillance of COVID-19 patients seems near to impossible in the Pandemic era for densely populated developing countries like India. The possible screening regimes include personal surveillance and contact

tracing in the very first appointments. So, on the basis of the knowledge and sources we have so far, we have tried to classify the asymptomatic patients seen in the clinics and their possible screening management there. As it is said classification of a disease, is the first step toward a deep understanding of it. After screening, suspects can be sent to more resourceful places for their managements, and incidences of community spread of the disease through dental clinics can be avoided.

Publication Type

Journal article.

<261>

Accession Number

20203469903

Author

Deepanjali Behera; Devarsetty Praveen; Manas Ranjan Behera

Title

Protecting Indian health workforce during the COVID-19 pandemic.

Source

Journal of Family Medicine and Primary Care; 2020. 9(9):4541-4546. 45 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Rapidly growing rate of infection among health workers during the current COVID-19 pandemic, is posing a serious challenge to global health systems. Lately, India is also witnessing an intensifying COVID-19 disease burden and its impact on health workers. This paper aims to discuss the challenges to health worker protection in India and the possible ways forward. Given the inadequate and unequally distributed healthcare workforce, it is highly essential for the country to strategize prompt measures for ensuring occupational health and safety of its health workers. Information for this paper were gathered by searching PubMed and Google Scholar databases using "COVID-19", "Infection Control", "Health worker", "India" as search keywords in different combinations. In addition, websites of Government of India, relevant UN agencies and leading news agencies were also searched manually for related reports and publications. India must take timely measures in rapid manufacturing and procurement of essential personal protective equipment (PPE) to ensure adequate stockpiling to meet the rising demands. Comprehensive and repeated training with sharply focussed content including usage of PPE kits as well as active surveillance of adherence to recommended protocol are critical in protecting health workers especially the primary care

physicians and frontline health staff from the deadly COVID-19 infection. The provision of psychological and financial support for health workers and their families is absolutely critical in building trust and dedicated work efforts by the health workforce for a continuous fight against the deadly disease.

Publication Type

Journal article.

<262>

Accession Number

20203447075

Author

Rameshrad, M.; Ghafoori, M.; Mohammadpour, A. H.; Nayeri, M. J. D.; Hosseinzadeh, H.

Title

A comprehensive review on drug repositioning against coronavirus disease 2019 (COVID19).

Source

Naunyn-Schmiedeburgs Archives of Pharmacology; 2020. 393(7):1137-1152. many ref.

Publisher

Springer Berlin

Location of Publisher

Heidelberg

Country of Publication

Germany

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV2) is the reason for this ongoing pandemic infection diseases termed coronavirus disease 2019 (COVID-19) that has emerged since early December 2019 in Wuhan City, Hubei Province, China. In this century, it is the worst threat to international health and the economy. After 4 months of COVID-19 outbreak, there is no certain and approved medicine against it. In this public health emergency, it makes sense to investigate the possible effects of old drugs and find drug repositioning that is efficient, economical, and riskless process. Old drugs that may be effective are from different pharmacological categories, antimalarials, anthelmintics, anti-protozoal, anti-HIVs, anti-influenza, anti-hepacivirus, antineoplastics, neutralizing antibodies, immunoglobulins, and interferons. In vitro, in vivo, or preliminary trials of these drugs in the treatment of COVID-19 have been encouraging, leading to new research projects and trials to find the best drug/s. In this review, we discuss the possible mechanisms of these drugs against COVID-19. Also, it should be mentioned that in this manuscript, we discuss preliminary rationales; however, clinical trial evidence is needed to prove them. COVID-19 therapy must be based on expert clinical experience and published literature and guidelines from major health organizations. Moreover, herein, we describe current evidence that may be changed in the future.

Publication Type

Journal article.

<263>

Accession Number

20203449495

Author

Lu XiaoFan; Wang Yang; Chen TaiGe; Wang Jun; Yan FangRong

Title

Classification of COVID-19 in intensive care patients.

Source

Critical Care; 2020. 24(399):(9 July 2020). 4 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

This article aimed to bridge the gap between disease classification and clinical outcome in intensive care patients, which could help in the individual evaluation and provide effective triage for treatment and management. One hundred fifty-one intensive care patients with complete medical records were obtained from Tongji Hospital in Wuhan, China. Data on the day of admission were collected, including six data categories: demographic information of age and gender, symptoms (fever, fatigue, dry cough, anorexia, myalgia, dyspnea, expectoration, diarrhea), original comorbidities (hypertension, diabetes, cardiovascular disease [CVD], chronic obstructive pulmonary disease [COPD], malignancy), vital signs (respiratory rate, heart rate, blood pressure, SpO2, FiO2), blood routine tests (count of WBC, lymphocyte, neutrophil, platelet and monocyte, red cell distribution width [RDW]), and inflammatory marker measurements (high-sensitivity C-reactive protein [hs-CRP], interleukin-2 receptor [IL-2R], IL-6, IL-8, IL-10, TNF-a). This article is the first attempt of dealing with the classification of COVID-19 in intensive care patients. The four prognostic types present a stepwise distribution in age, respiratory condition, and inflammatory markers, suggesting their prognostic efficacy. The specificity of symptoms does not appear to be strong, but gastrointestinal response (e.g., diarrhea) needs vigilance.

Publication Type

Journal article.

<264>

Accession Number

20203445698

Author

Santos-Roldan, L.; Canalejo, A. M. C.; Berbel-Pineda, J. M.; Palacios-Florencio, B.

Title

Sustainable tourism as a source of healthy tourism.

Source

International Journal of Environmental Research and Public Health; 2020. 17(15)69 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Even though the World Tourism Organization described Sustainable Tourism as a tourism form that could contribute to the future survival of the industry, the current reality is quite different, since it has not been firmly established in society at expected levels. The present study analyzes which variables drive the consumption of this tourism type, taking tourist awareness as the key element. To this awareness, we must add the current crisis experienced by the tourism industry caused by COVID-19, since it can benefit Sustainable Tourism development, promoting less crowded destinations that favor social distancing. For this, the existing literature on Sustainable Tourism has been examined in order to create a model that highlights the relations among these variables. To determine the meaning of these relations, a sample of 308 tourists was analyzed through structural equation models using Partial Least Squares. The results show that there is a clear attitude on the part of the tourist to develop Sustainable Tourism, driven by the positive effects and motivation it entails, as well as the satisfaction the tourist perceives when consuming a responsible tourism type.

Publication Type

Journal article.

<265>

Accession Number

20203440634

Author

Murgante, B.; Borruso, G.; Balletto, G.; Castiglia, P.; Dettori, M.

Title

Why Italy first? Health, geographical and planning aspects of the COVID-19 outbreak.

Source

Sustainability; 2020. 12(12)164 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

COVID-19 hit Italy in February 2020 after its outbreak in China at the beginning of January. Why was Italy first among the Western countries? What are the conditions that made Italy more vulnerable and the first target of this disease? What characteristics and diffusion patterns could be highlighted and hypothesized from its outbreak to the end of March 2020, after containment measures, including a national lockdown, were introduced? In this paper, we try to provide some answers to these questions, analyzing the issue from medical, geographical and planning points of view. With reference to the Italian case, we observed the phenomenon in terms of the spatial diffusion process and by observing the relation between the epidemic and various environmental elements. In particular, we started from a hypothesis of the comparable economic, geographical, climatic and environmental conditions of the areas of Wuhan (in the Hubei Province in China, where the epidemic broke out) and the Po Valley area (in Italy) where most cases and deaths were registered. Via an ecological approach, we compared the spatial distribution and pattern of COVID-19-related mortality in Italy with several geographical, environmental and socio-economic variables at a Provincial level, analyzing them by means of spatial analytical techniques such as LISA (Local Indicators of Spatial Association). Possible evidence arose relating to COVID-19 cases and Nitrogen-related pollutants and land take, particularly in the Po Valley area.

Publication Type

Journal article.

<266>

Accession Number

20203470581

Author

Salameh, P.

Title

COVID-19 in the eastern Mediterranean region: testing frequency, cumulative cases and mortality analysis.

Source

Eastern Mediterranean Health Journal; 2020. 26(9):1005-1010. 16 ref.

Publisher

World Health Organization, Regional Office for the Eastern Mediterranean

Location of Publisher

Cairo

Country of Publication

Egypt

Abstract

Background: COVID-19 is now well documented in the Eastern Mediterranean Region; however, the incidence, mortality and fatality rates differ by country. Aims: The study aimed to describe the COVID-19 pandemic in the Eastern Mediterranean Region, assessing the incidence, mortality-related and fatality rate in different countries, in comparison with the worldwide mean. Methods: Data were sourced from the Worldometer surveillance page and from governmental reporting channels. Data were exported and analyzed using Statistical Package for Social Sciences (SPSS, version 23.0). Results: In the Eastern Mediterranean Region, the testing frequency is heterogeneous between countries, in addition to the reported cases and death. Very few data are available from countries with political instability and security problems (Yemen, Syrian Arab Republic and Sudan), particularly for the testing frequency. Overall, despite similar rates of testing, there was a significantly lower incidence in the Eastern Mediterranean Region versus the rest of the world, in addition to a lower mortality per million-population, particularly in countries with low to moderate testing rates. However, in countries with higher testing than the world average, there is a higher incidence, a lower mortality, but an unexpected higher fatality rate. Conclusion: The overall testing frequency was similar in the Eastern Mediterranean Region compared to the rest of the world; this would be expected to lead to a similar cumulative incidence and case fatality rate. Nevertheless, the average incidence was 70% lower than the rest of the world, and mortality per million-population was lower (90%). Moreover, in Gulf Cooperation Council high-testing countries, a similar case-fatality rate to other countries in the Region was noted, but was higher than the world average, although expected to be lower. Further studies are necessary to explain discrepancies in incidence, mortality and fatality rates among countries; principally, environmental, genetic and managerial reasons should be investigated.

Publication Type

Journal article.

<267>

Accession Number

20203421352

Author

Ellis, J. A.

Title

COVID-19: is it raining (on) cats and dogs?

Source

Advances in Small Animal Medicine and Surgeryhttps://www.sciencedirect.com/journal/advances-in-small-animal-medicine-and-surgery/issues; 2020. 33(9):1-3.

Publisher

Elsevier Inc.

Location of Publisher

Philadelphia

Country of Publication

USA

Publication Type

Editorial.

<268>

Accession Number

20203455087

Author

Harsh Deora; Nishanth Sadashiva; Manjul Tripathi; Yagnick, N. S.; Sandeep Mohindra; Aman Batish; Patil, N. R.; Ashish Aggarwal; Kiran Jangra; Hemant Bhagat; Nidhi Panda; Manas Panigrahi; Sanjay Behari; Chandra, P. S.; Shukla, D. P.; Lokendra Singh; Math, S. B.; Gupta, S. K.

Title

The aftermath of COVID-19 lockdown- why and how should we be ready?

Source

Neurology India; 2020. 68(4):774-791. 39 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Introduction: Severe acute respiratory syndrome, coronavirus 2 (SARS-COV 2) has inexplicably and irreversibly changed the way of neurosurgery practice. There has been a substantial reduction in neurosurgical operations during the period of lockdown. The lockdown might be the most effective measure to curtail viral transmission. Once we return to the normalization of the lifestyle, there will be a backlog of unoperated pending cases along with the possibility of further spread of the coronavirus. Methods: We reviewed the available literature and protocols for neurosurgical practice in different geographic locations. We drafted a consensus statement based on the literature and protocols suggested by the World Health Organization (WHO) and various professional societies to prevent the spread of SARS-COV2 while streamlining the neurosurgical practice. Results: The consensus statement suggests the patient triage, workflow, resource distribution, and operational efficacy for care providers at different stages of management. The priority is set at personal protection while ensuring patients' safety, timely management, and capacity building. We performed a detailed subsection analysis for the management of trauma and set up for COVID-free hospitals for simultaneous management of routine neurosurgical indications. In this time of medicolegal upheaval, special consent from the patients should be taken in view of the chances of delay in management and the added risk of corona infection. The consensus statements are applicable to neurosurgical setups of all capacities. Conclusion: Along with the glaring problem of infection, there is another threat of neurosurgery emergency building up. This wave may overwhelm the already stretched systems to the hilt. We need to flatten this curve while avoiding contagion. These measures may guide neurosurgery practitioners to effectively manage patients ensuring the safety of caregivers and care seekers both.

Publication Type

Journal article.

<269>

Accession Number

20203458103

Author

Arakpogun, E. O.; Elsahn, Z.; Prime, K. S.; Gerli, P.; Olan, F.

Title

Digital contact-tracing and pandemics: institutional and technological preparedness in Africa. (Special Section: Pandemics and sustainability.)

Source

World Development (Oxford); 2020. 136many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Several countries in Africa have either deployed or considering using digital contact-tracing (DCT) as part of their Covid-19 containment strategy, amidst calls for the use of technology to improve the efficiency of traditional contact-tracing. We discuss some of the complexities entailed in using DCT in Africa. Adopting a socio-technical perspective, we argue that if DCT design and deployment are not well thought out, it can lead to unintended consequences, particularly in a continent like Africa with disproportionate levels of digital divides and other structural inequalities. We suggest that any adoption of DCT by African countries must take account of their compatibility with local resources, values, social structure, and domestic political factors. Accordingly, we propose a process of translation whereby DCT adaptation is made to accommodate the unique institutional and technological characteristics of African countries by leveraging local practices learned from previous pandemics like Ebola to develop a blended epidemiological approach to (digital) contact-tracing.

Publication Type

Journal article.

<270>

Accession Number

20203459361

Author

Aggarwal, G.; Henry, B. M.; Aggarwal, S.; Bangalore, S.

Title

Cardiovascular safety of potential drugs for the treatment of coronavirus disease 2019.

Source

American Journal of Cardiology; 2020. 128:147-150. 30 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19) has become a global pandemic. It is still uncontrolled in most countries and no therapies are currently available. Various drugs are under investigation for its treatment. The disease is known to have worse outcomes in patients who have underlying cardiovascular disease. Chloroquine/hydroxychloroquine, azithromycin, remdesivir and lopinavir/ritonavir are currently being studied in trials and show some promise. Conduction disorders, heart failure, and mortality have been reported with the use of these drugs. It is important to have knowledge of potential cardiotoxic effects of these drugs before using them for COVID-19 patients for better allocation of healthcare resources and improvement in clinical outcomes.

Publication Type

Journal article.

<271>

Accession Number

20203456222

Author

Eftimov, T.; Popovski, G.; Petkovic, M.; Seljak, B. K.; Kocev, D.

Title

COVID-19 pandemic changes the food consumption patterns.

Source

Trends in Food Science & Technology; 2020. 104:268-272. 12 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: The COVID-19 pandemic affects all aspects of human life including their food consumption. The changes in the food production and supply processes introduce changes to the global dietary patterns. Scope and Approach: To study the COVID-19 impact on food consumption process, we have analyzed two data sets that consist of food preparation recipes published before (69,444) and during the quarantine (10,009) period. Since working with large data sets is a time-consuming task, we have applied a recently proposed artificial intelligence approach called DietHub. The approach uses the recipe preparation description (i.e. text) and automatically provides a list of main ingredients annotated using the Hansard

semantic tags. After extracting the semantic tags of the ingredients for every recipe, we have compared the food consumption patterns between the two data sets by comparing the relative frequency of the ingredients that compose the recipes. Key Findings and Conclusions: Using the AI methodology, the changes in the food consumption patterns before and during the COVID-19 pandemic are obvious. The highest positive difference in the food consumption can be found in foods such as "Pulses/plants producing pulses", "Pancake/Tortilla/Outcake", and "Soup/pottage", which increase by 300%, 280%, and 100%, respectively. Conversely, the largest decrease in consumption can be food for food such as "Order Perciformes (type of fish)", "Corn/cereals/grain", and "Wine-making", with a reduction of 50%, 40%, and 30%, respectively. This kind of analysis is valuable in times of crisis and emergencies, which is a very good example of the scientific support that regulators require in order to take quick and appropriate response.

Publication Type

Journal article.

<272>

Accession Number

20203457472

Author

Sakamoto, M.; Begum, S.; Tofayel Ahmed

Title

Vulnerabilities to COVID-19 in Bangladesh and a reconsideration of sustainable development goals.

Source

Sustainability; 2020. 12(13)59 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Bangladesh is one of the high-risk countries of the COVID-19 pandemic and its consequent losses due to social and economic conditions. There is a significant possibility that economic stagnation would push a large population back into poverty. In the present study, we have reviewed the chronology and epidemiology of COVID-19 in Bangladesh and investigated the country's vulnerabilities concerning COVID-19 impacts. We focused primarily on four areas of vulnerabilities in Bangladesh: The garment industry, urban slums, social exclusion, and pre-existing health conditions. The result implicated that the country would take time to recover its economy due to the vulnerabilities mentioned above, and many people in Bangladesh would not be able to tolerate the current situation because they do not have enough reserves

to do so. We concluded that if at least some Sustainable Development Goals (SDGs) had been at least partly attained, the situation would not be as dire as it is now. Based on this conclusion, we suggested a tolerance capacity to indicate how long people can survive without outside support. It is a holistic assessment rather than the indicators presently defined in each SDG, but it should be attained through a harmonized approach to SDGs.

Publication Type

Journal article.

<273>

Accession Number

20203457471

Author

Karkour, S.; Itsubo, N.

Title

Influence of the COVID-19 crisis on global PM2.5 concentration and related health impacts.

Source

Sustainability; 2020. 12(13)45 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The decrease in human activities following the COVID-19 pandemic caused an important change in PM2.5 concentration, especially in the most polluted areas in the world: China (44.28 and 18.88 g/m3 in the first quarters of 2019 and 2020, respectively), India (49.84 and 31.12, respectively), and Nigeria (75.30 and 34.31, respectively). In this study, satellite observations from all around the world of PM2.5 concentration were collected on the grid scale with a high resolution of 0.125degrees (about 15 km). Population data for 2020 were also collected on the same scale. Statistical data from the World Health Organization (WHO) concerning the diseases caused by air pollution (e.g., stroke) were obtained for each country to determine the change in mortality between the first quarter of 2019 and the first quarter of 2020. Expressed in disability-adjusted life years (DALY), it was found that the largest reductions were observed for China (-13.9 million DALY), India (-6.3 million DALY), and Nigeria (-2.3 million DALY).

Publication Type

Journal article.

<274>

Accession Number

20203457466

Author

Marco-Franco, J. E.; Guadalajara-Olmeda, N.; Gonzalez-De Julian, S.; Vivas-Consuelo, D.

Title

COVID-19 healthcare planning: predicting mortality and the role of the herd immunity barrier in the general population.

Source

Sustainability; 2020. 12(13)36 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Using a mathematical model for COVID-19 incorporating data on excess of mortality compared to the corresponding period of the previous year obtained from the daily monitoring of mortality in Spain (MoMo), the prediction of total number of casualties in Spain for the first outbreak has been computed. From this figure, and following a stepwise meta-analysis of available reports, the case fatality rate (CFR) and the infectious case fatality rate (IFR) for the outbreak have been estimated. As the impact of age on these rates is notable, it is proposed to include an age-related adjusted fatality ratio in future comparative analyses between studies, calculated by adjusting the results by risk ratio to a reference age band (e.g., 60-69). From the casualty figures, and the corresponding CFR and IFR ratios, the forecast of serologically positive cases in the general Spanish population has been estimated at approximately 1% (0.87-1.3%) of the samples. If the data are confirmed by the ongoing study of the Carlos III Institute, until a vaccine is found, the immunity acquired in the general population after the infectious outbreak is far from the 65-70% herd immunity required as a barrier for COVID-19.

Publication Type

Journal article.

<275>

Accession Number

20203457438

Author

Edelhauser, E.; Lupu-Dima, L.

Title

Is Romania prepared for eLearning during the COVID-19 pandemic?

Source

Sustainability; 2020. 12(13)45 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Today, Romanian universities largely have eLearning platforms generally based on the most popular Moodle-LMS platform or on the most popular collaborative educational platforms designed by Microsoft and Google, which contain mail group modules, virtual classes, video conferencing, presentation and testing. In the context of the pandemic generated by COVID-19, the authors tried to investigate the way in which Romanian society has managed to face this challenge in the field of education. The events followed one another very quickly, and the first thing that crashed was the medical system, quickly followed by the economic environment and then, obviously, education. The authors' research methodology was based on the interpretation of the results of a questionnaire composed of 19 questions and applied to a population of 200 respondents. The survey period was only 24 h, between 29 April 2020 at 1 p.m. and 30 April 2020 at 1 p.m. The investigated population, the respondents, were students of the University of Petrosani undertaking bachelor and master studies for the academic year 2019-2020, but the study could be extrapolated to the Romanian education system.

Publication Type

Journal article.

<276>

Accession Number

20203451285

Author

Gatto, M.; Perricone, C.; Tonello, M.; Bistoni, O.; Cattelan, A. M.; Bursi, R.; Cafaro, G.; Robertis, E. de; Mencacci, A.; Bozza, S.; Vianello, A.; Iaccarino, L.; Gerli, R.; Doria, A.; Bartoloni, E.

Title

Frequency and clinical correlates of antiphospholipid antibodies arising in patients with SARS-CoV-2 infection: findings from a multicentre study on 122 cases.

Source

Clinical and Experimental Rheumatology; 2020. 38(4):754-759. 31 ref.

Publisher

Clinical and Experimental Rheumatology

Location of Publisher

Pisa

Country of Publication

Italy

Abstract

Objective: COVID-19 features include disseminated intravascular coagulation and thrombotic microangiopathy indicating a hypercoagulable state. We aimed to investigate antiphospholipid antibodies (aPL) prevalence and clinical relationships in a large cohort of COVID-19 patients. Methods: We analysed the prevalence and titres of serum aPL in 122 patients with COVID-19 and 157 with primary antiphospholipid syndrome (PAPS) and 91 with other autoimmune rheumatic diseases (oARD) for comparison. IgG/IgM anticardiolipin (aCL) and IgG/IgM anti-beta2glycoprotein I (beta2GPI) were assayed using homemade ELISA, IgA aCL and anti-beta2GPI by commercial ELISA kits and lupus anticoagulant (LAC) by multiple coagulation tests following updated international guidelines. Results: Prevalence of IgG and IgM aCL and of IgG and IgM anti-beta2GPI across COVID-19 patients were 13.4%, 2.7%, 6.3% and 7.1%, being significantly lower than in PAPS ($p<0.0001$ for all). Frequency of IgG aCL and IgM anti-beta2GPI was comparable to oARD (13.4% vs. 13.2% and 7.1% vs. 11%, respectively), while IgG anti-beta2GPI and IgM aCL were lower ($p<0.01$). IgA aCL and IgA anti-beta2GPI were retrieved in 1.7% and 3.3% of COVID-19 patients, respectively. Positive LAC was observed in 22.2% COVID-19 vs. 54.1% of PAPS ($p<0.0001$) and 14.6% of oARD ($p=0.21$). Venous or arterial thromboses occurred in 18/46 (39.1%) COVID-19 patients and were not associated with positive aPL ($p=0.09$). Conclusion: Thrombosis is a frequent manifestation during COVID-19 infection. However, prevalence and titres of aPL antibodies or LAC were neither consistently increased nor associated with thrombosis when measured at a single timepoint, therefore not representing a suitable screening tool in the acute stage of disease.

Publication Type

Journal article.

<277>

Accession Number

20203454314

Author

Reza, H. M.; Sultana, F.; Khan, I. O.

Title

Disruption of healthcare amid COVID-19 pandemic in Bangladesh.

Source

The Open Public Health Journal; 2020. 13(438-440):438-440. 10 ref.

Publisher

Bentham Open

Location of Publisher

Sharjah

Country of Publication

United Arab Emirates

Abstract

The world is experiencing an unrestrained devastating power of COVID-19. Lack of experience in combating such a pandemic, insufficient medical equipment and professionals, and above all, poor management have led to failure in controlling disease transmission to a large extent in Bangladesh. Therefore, an incredibly high percentage of people may need medical intervention. However, most of the hospitals in the country are not fully ready to cope with the expected surge in critically ill COVID-19 patients. The majority of the private hospitals and some government hospitals are not providing necessary medical care to both COVID-19 and non-COVID-19 patients. Therefore, it is of utmost importance to reinstate the healthcare system to full function to ensure proper treatment to the ailing patients of both COVID-19 and non-COVID-19.

Publication Type

Journal article.

<278>

Accession Number

20203458626

Author

Cattivelli, V.; Rusciano, V.

Title

Social innovation and food provisioning during COVID-19: the case of urban-rural initiatives in the province of Naples.

Source

Sustainability; 2020. 12(11)39 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

This paper draws on the theoretical framework based on social innovation determinants to analyze how and to what extent the recent and self-organized initiatives for food provisioning are contributing to increase food accessibility at the time of personal and mobility restrictions due to Covid-19. Based on this, the paper firstly maps the initiatives activated during the first months of the Covid-19 emergency (March and April 2020) in the urban-rural territories in the province of Naples (Italy). Secondly, it characterizes these initiatives in relation to their capacity to enhance outcome and social well-being, as well as to involve local society in answer to social challenges through a desk research. Thirdly, the paper describes the case of Masseria Ferraioli, which emerges as social innovative best practice among the previous mapped initiatives. Even in these days, the Masseria distributes to people who cannot afford the purchase due to the emergency vegetables grown on land confiscated from the Camorra, the local mafia. Its configuration as social innovative experience is also confirmed directly by the Masseria's project manager, who was required to answer to a semi-structured interview. Based on the evidence of the desk research and this interview, the paper demonstrates the importance of the combined commitment of local communities and volunteering association as a reaction to food provisioning problems in the time of Covid-19, as well as an increasing interest in reconnecting with local food practices, above all when food access has become a priority.

Publication Type

Journal article.

<279>

Accession Number

20203452404

Author

Pereira, B. B.

Title

Challenges and cares to promote rational use of chloroquine and hydroxychloroquine in the management of coronavirus disease 2019 (COVID-19) pandemic: a timely review.

Source

Journal of Toxicology and Environmental Health. Part B Critical Reviews; 2020. 23(4):177-181. 26 ref.

Publisher

Taylor & Francis

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

As a result of the 2019 coronavirus disease pandemic (COVID-19), there has been an urgent worldwide demand for treatments. Due to factors such as history of prescription for other infectious diseases, availability, and relatively low cost, the use of chloroquine (CQ) and hydroxychloroquine (HCQ) has been tested in vivo and in vitro for the ability to inhibit the causative virus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). However, even though investigators noted the therapeutic potential of these drugs, it is important to consider the toxicological risks and necessary care for rational use of CQ and HCQ. This study provides information on the main toxicological and epidemiological aspects to be considered for prophylaxis or treatment of COVID-19 using CQ but mainly HCQ, which is a less toxic derivative than CQ, and was shown to produce better results in inhibiting proliferation of SARS-CoV-2 based upon preliminary tests.

Publication Type

Journal article.

<280>

Accession Number

20203456701

Author

Grundler, F.; Mesnage, R.; Goutzourelas, N.; Tekos, F.; Makri, S.; Brack, M.; Kouretas, D.; Wilhelmi Toledo, F. de

Title

Interplay between oxidative damage, the redox status, and metabolic biomarkers during long-term fasting.

Source

Food and Chemical Toxicology; 2020. 145many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Obesity and its related metabolic disorders, as well as infectious diseases like covid-19, are important health risks nowadays. It was recently documented that long-term fasting improves metabolic health and enhanced the total antioxidant capacity. The present study investigated the influence of a 10-day fasting on markers of the redox status in 109 subjects. Reducing power, 2,2'-Azino-bis(3-ethylbenzothiazoline-6-sulfonic acid) diammonium salt radical cation(ABTS) radical scavenging capacity, and hydroxyl radical scavenging capacity increased significantly, and indicated an increase of circulating antioxidant levels. No differences were detected in superoxide scavenging capacity, protein carbonyls, and superoxide dismutase when measured at baseline and after 10 days of fasting. These findings were concomitant to a decrease in blood glucose, insulin, glycated hemoglobin (HbA1c), total cholesterol, low-density lipoprotein (LDL) and triglycerides as well as an increase in total cholesterol/high-density lipoprotein (HDL) ratio. In addition, the well-being index as well as the subjective energy levels increased, documenting a good tolerability. There was an interplay between redox and metabolic parameters since lipid peroxidation baseline levels (thiobarbituric acid reactive substances [TBARS]) affected the ability of long-term fasting to normalize lipid levels. A machine learning model showed that a combination of antioxidant parameters measured at baseline predicted the efficiency of the fasting regimen to decrease LDL levels. In conclusion, it was demonstrated that long-term fasting enhanced the endogenous production of antioxidant molecules, that act protectively against free radicals, and in parallel improved the metabolic health status. Our results suggest that the outcome of long-term fasting strategies could be depending on the baseline values of the antioxidative and metabolic status of subjects.

Publication Type

Journal article.

<281>

Accession Number

20203457971

Author

Litwin, A.; Masiak, J.

Title

Mental disorders in people infected with the coronavirus SARS-CoV-2 - literature review. [Polish]

Source

Polish Journal of Public Health; 2019. 129(4):141-144. 29 ref.

Publisher

De Gruyter Open

Location of Publisher

Warsaw

Country of Publication

Poland

Abstract

In many patients with confirmed or suspected SARS-CoV-2 infection, psychopathological symptoms appeared in connection with the COVID-19 pandemic. The pathogenesis of mental disorders emerging due to the COVID-19 pandemic may include biological and psychosocial factors. COVID-19 can cause symptoms such as insomnia, attention or concentration deficit, anxiety, memory, orientation and consciousness disorders. COVID-19 affects central nervous system functions, which may cause neuropsychological symptoms in some patients, such as dizziness, headaches and consciousness disorders. Psychiatrists must be aware of the side effects of using certain medications among patients with COVID-19. Administration of hydroxychloroquine, an anti-malarial drug, in some hospitalized patients with COVID-19 is associated with occurrence of psychopathological side effects, such as mood and anxiety disorders, insomnia and sometimes psychotic symptoms. The COVID-19 pandemic may adversely impact upon patients with already diagnosed mental disorders. Based on research conducted during present pandemic and past epidemics, it can be assumed that many of these patients will develop: anxiety and depressive disorders, posttraumatic stress disorder (PTSD), substance use disorders.

Publication Type

Journal article.

<282>

Accession Number

20203457968

Author

Parfin, A.; Wdowiak, K.; Furtak-Niczyporuk, M.; Herda, J.

Title

An influence of social isolation on the level of physical activity as well as on well-being and mental state of people during the coronavirus COVID-19 pandemic. [Polish]

Source

Polish Journal of Public Health; 2019. 129(4):127-131. 15 ref.

Publisher

De Gruyter Open

Location of Publisher

Warsaw

Country of Publication

Poland

Abstract

Introduction. The COVID-19 is the name of an infectious disease caused by a new strain of coronavirus SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2). It was first diagnosed in December 2019 in patients in Wuhan City, Hubei Province, China. The symptoms are dominated by features of respiratory tract infections, in some patients with a very severe course leading to respiratory failure and, in extreme cases to death. Due to the spread of the infection worldwide, the WHO declared a pandemic in March 2020. Aim. An investigation of the impact of social isolation introduced due to the coronavirus pandemic on selected aspects of life. The researchers focused on observing changes in habits related to physical activity and their connections with people's subjective well-being and emotional state. Material and methods. The study was carried out within the international project of the group "IRG on COVID and exercise". The research tool was a standardized questionnaire. Results. Based on the data collected and the analysis of the percentage results, it can be observed that the overwhelming majority of people taking up physical activity reported a better mood during the pandemic. However, statistical tests do not confirm these relationships due to the small sample size. Conclusions. Isolation favours physical activity. Future, indepth studies, by enlarging the population group, are necessary to confirm the above observations.

Publication Type

Journal article.

<283>

Accession Number

20203457967

Author

Misztal-Okonska, P.

Title

Ensuring safety for the Polish population as a task of the state on the example of the SARS-CoV-2. [Polish]

Source

Polish Journal of Public Health; 2019. 129(4):123-126. 8 ref.

Publisher

De Gruyter Open

Location of Publisher

Warsaw

Country of Publication

Poland

Abstract

Ensuring safety for its citizens is a basic task of each country. In the past this function was limited to providing defence in the armed conflicts, while nowadays modern, highly developed countries are obliged to ensure state of safety and protection to their citizens in each situation. Apart from the natural dangers, which constantly appear depending on the season and climate of a certain area, some changes occurring in the world cause a range of new hazards. They include terrorist attacks, technical failures connected with industry development, as well as new natural dangers appearing as a consequence of climate change caused by significant human interference. Moreover, human actions may be a reason of various catastrophes and accidents occurrence, which require fast and effective reaction of services responsible for the safety of state and citizens. In Poland the system appointed for this purpose is an emergency management system, which functions on the basis of the Act of April 26, 2007 on crisis management.

Publication Type

Journal article.

<284>

Accession Number

20203469265

Author

Yin FuLian; Xia XinYu; Song Nan; Zhu LingYao; Wu JianHong

Title

Quantify the role of superspreaders -opinion leaders- on COVID-19 information propagation in the Chinese sina-microblog.

Source

PLoS ONE; 2020. 15(6)31 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Backgroud: Effective communication of accurate information through social media constitutes an important component of public health interventions in modern time, when traditional public health approaches such as contact tracing, quarantine and isolation are among the few options for the containing the disease spread in the population. The success of control of COVID-19 outbreak started from Wuhan, the capital city of Hubei Province of China relies heavily on the resilience of residents to follow public health

interventions which induce substantial interruption of social-economic activities, and evidence shows that opinion leaders have been playing significant roles in the propagation of epidemic information and public health policy and implementations. Methods: We design a mathematical model to quantify the roles of information superspreaders in single specific information which outbreaks rapidly and usually has a short duration period, and to examine the information propagation dynamics in the Chinese Sina-microblog. Our opinion-leader susceptible-forwarding-immune (OL-SFI) model is formulated to track the temporal evolution of forwarding quantities generated by opinion leaders and normal users. Results: Data fitting from the real data of COVID-19 obtained from Chinese Sina-microblog can identify the different contact rates and forwarding probabilities (and hence calculate the basic information forwarding reproduction number of superspreaders), and can be used to evaluate the roles of opinion leaders in different stages of the information propagation and the outbreak unfolding. Conclusions: The parameterized model can be used to nearcast the information propagation trend, and the model-based sensitivity analysis can help to explore important factors for the roles of opinion leaders.

Publication Type

Journal article.

<285>

Accession Number

20203467364

Author

Li HuiQing; Tian ShengHua; Chen Ting; Cui ZhenHai; Shi NingJie; Zhong XueYu; Qiu KangLi; Zhang JiaoYue; Zeng TianShu; Chen LuLu; Zheng Juan

Title

Newly diagnosed diabetes is associated with a higher risk of mortality than known diabetes in hospitalized patients with COVID-19.

Source

Diabetes, Obesity and Metabolism; 2020. 22(10):1897-1906. 30 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Aim: To evaluate the association between different degrees of hyperglycaemia and the risk of all-cause mortality among hospitalized patients with COVID-19. Materials and Methods: In a retrospective study conducted from 22 January to 17 March 2020, 453 patients were admitted to Union Hospital in Wuhan,

China, with laboratory-confirmed severe acute respiratory syndrome coronavirus 2 infection. Patients were classified into four categories: normal glucose, hyperglycaemia (fasting glucose 5.6-6.9 mmol/L and/or HbA1c 5.7%-6.4%), newly diagnosed diabetes (fasting glucose >=7 mmol/L and/or HbA1c >=6.5%) and known diabetes. The major outcomes included in-hospital mortality, intensive care unit (ICU) admission and invasive mechanical ventilation (IMV). Results: Patients with newly diagnosed diabetes constituted the highest percentage to be admitted to the ICU (11.7%) and require IMV (11.7%), followed by patients with known diabetes (4.1%; 9.2%) and patients with hyperglycaemia (6.2%; 4.7%), compared with patients with normal glucose (1.5%; 2.3%), respectively. The multivariable-adjusted hazard ratios of mortality among COVID-19 patients with normal glucose, hyperglycaemia, newly diagnosed diabetes and known diabetes were 1.00, 3.29 (95% confidence interval [CI] 0.65-16.6), 9.42 (95% CI 2.18-40.7) and 4.63 (95% CI 1.02-21.0), respectively. Conclusion: We showed that COVID-19 patients with newly diagnosed diabetes had the highest risk of all-cause mortality compared with COVID-19 patients with known diabetes, hyperglycaemia and normal glucose. Patients with COVID-19 need to be kept under surveillance for blood glucose screening.

Publication Type

Journal article.

<286>

Accession Number

20203468528

Author

Kang SuJin; Moon JihYun; Kang Heewon; Nam Heekyoung; Tak Sangwoo; Cho SungIl

Title

The evolving policy debate on border closure in Korea.

Source

Journal of Preventive Medicine and Public Health; 2020. 53(5):302-306. 20 ref.

Publisher

Korean Society for Preventive Medicine

Location of Publisher

Seoul

Country of Publication

Korea Republic

Abstract

Objectives: In this paper, we aimed to investigate the evolving debate over border closure in Korea during the coronavirus disease 2019 (COVID-19) pandemic, to address the main themes associated with border closure, and to discuss the factors that need to be considered when making such decisions. Methods: We collated and reviewed previously conducted review studies on border closures during infectious disease

outbreaks to derive relevant themes and factors. Results: According to our systematic review on border closures and travel restrictions, the effects of such containment efforts are limited. We suggest considering the following factors when determining whether to impose border closure measures: (1) disease characteristics, (2) timeliness of implementation, (3) transmission delay and the basic reproduction number, (4) globalization and pandemics, and (5) social and economic costs. Conclusions: Our assessment indicates that the effects of border closures are at best temporary and limited. Alternative measures must be contemplated and implemented to suppress the spread of COVID-19 in particular and infectious diseases more broadly.

Publication Type

Journal article.

<287>

Accession Number

20203462364

Author

Duarte-Neto, A. N.; Monteiro, R. A. A.; Silva, L. F. F. da; Malheiros, D. M. A. C.; Oliveira, E. P. de; Theodoro-Filho, J.; Pinho, J. R. R.; Gomes-Gouvea, M. S.; Salles, A. P. M.; Oliveira, I. R. S. de; Mauad, T.; Saldiva, P. H. N.; Dolhnikoff, M.

Title

Pulmonary and systemic involvement in COVID-19 patients assessed with ultrasound-guided minimally invasive autopsy. (Special Issue: The histopathology of COVID-19.)

Source

Histopathology; 2020. 77(2):186-197. 35 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Aims: Brazil ranks high in the number of coronavirus disease 19 (COVID-19) cases and the COVID-19 mortality rate. In this context, autopsies are important to confirm the disease, determine associated conditions, and study the pathophysiology of this novel disease. The aim of this study was to assess the systemic involvement of COVID-19. In order to follow biosafety recommendations, we used ultrasound-guided minimally invasive autopsy (MIA-US), and we present the results of 10 initial autopsies. Methods and results: We used MIA-US for tissue sampling of the lungs, liver, heart, kidneys, spleen, brain, skin, skeletal muscle and testis for histology, and reverse transcription polymerase chain reaction to detect

severe acute respiratory syndrome coronavirus 2 RNA. All patients showed exudative/proliferative diffuse alveolar damage. There were intense pleomorphic cytopathic effects on the respiratory epithelium, including airway and alveolar cells. Fibrinous thrombi in alveolar arterioles were present in eight patients, and all patients showed a high density of alveolar megakaryocytes. Small thrombi were less frequently observed in the glomeruli, spleen, heart, dermis, testis, and liver sinusoids. The main systemic findings were associated with comorbidities, age, and sepsis, in addition to possible tissue damage due to the viral infection, such as myositis, dermatitis, myocarditis, and orchitis. Conclusions: MIA-US is safe and effective for the study of severe COVID-19. Our findings show that COVID-19 is a systemic disease causing major events in the lungs and with involvement of various organs and tissues. Pulmonary changes result from severe epithelial injury and microthrombotic vascular phenomena. These findings indicate that both epithelial and vascular injury should be addressed in therapeutic approaches.

Publication Type

Journal article.

<288>

Accession Number

20203460499

Author

Yao Ye; Pan JinHua; Liu Zhixi; Meng Xia; Wang WeiDong; Kan HaiDong; Wang WeiBing

Title

Temporal association between particulate matter pollution and case fatality rate of COVID-19 in Wuhan.

Source

Environmental Research; 2020. 18912 ref.

Publisher

Elsevier Inc

Location of Publisher

Orlando

Country of Publication

USA

Abstract

The coronavirus (COVID-19) epidemic reported for the first time in Wuhan, China at the end of 2019, which has caused 4648 deaths in China as of July 10, 2020. This study explored the temporal correlation between the case fatality rate (CFR) of COVID-19 and particulate matter (PM) in Wuhan. We conducted a time series analysis to examine the temporal day-by-day associations. We observed a higher CFR of COVID-19 with increasing concentrations of inhalable particulate matter (PM) with an aerodynamic diameter of 10 mum or less (PM10) and fine PM with an aerodynamic diameter of 2.5 mum or less (PM2.5) in the temporal

scale. This association may affect patients with mild to severe disease progression and affect their prognosis.

Publication Type

Journal article.

<289>

Accession Number

20203464750

Author

Li Juan; Zhu YuHang; Feng JiaNing; Meng WeiJing; Begma Kseniia; Zhu GaoPei; Wang XiaoXuan; Wu Di; Shi FuYan; Wang SuZhen

Title

A comparative study of international and Chinese public health emergency management from the perspective of knowledge domains mapping.

Source

Environmental Health and Preventive Medicine; 2020. 25(57):(2 October 2020). 64 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: At the end of 2019, the outbreak of coronavirus disease 2019 (COVID-19) severely damaged and endangered people's lives. The public health emergency management system in China has played an essential role in handling the response to the outbreak, which has been appreciated by the World Health Organization and some countries. Hence, it is necessary to conduct an overall analysis of the development of the health emergency management system in China. This can provide a reference for scholars to aid in understanding the current situation and to reveal new research topics. Methods: We collected 2247 international articles from the Web of Science database and 959 Chinese articles from the China National Knowledge Infrastructure database. Bibliometric and mapping knowledge domain analysis methods were used in this study for temporal distribution analysis, cooperation network analysis, and co-word network analysis. Results: The first international article in this field was published in 1991, while the first Chinese article was published in 2005. The research institutions producing these studies mainly existed in universities and health organizations. Developed countries and European countries published the most articles overall, while eastern China published the most articles within China. There were 52 burst words for international articles published from 1999-2018 and 18 burst words for Chinese articles published from

2003-2018. International top-ranked articles according to the number of citations appeared in 2005, 2007, 2009, 2014, 2015, and 2016, while the corresponding Chinese articles appeared in 2003, 2004, 2009, and 2011. Conclusions: There are differences in the regional and economic distribution of international and Chinese cooperation networks. International research is often related to timely issues mainly by focusing on emergency preparedness and monitoring of public health events, while China has focused on public health emergencies and their disposition. International research began on terrorism and bioterrorism, followed by disaster planning and emergency preparedness, epidemics, and infectious diseases. China considered severe acute respiratory syndrome as the starting research background and the legal system construction as the research starting point, which was followed by the mechanism, structure, system, and training abroad for public health emergency management.

Publication Type

Journal article.

<290>

Accession Number

20203464742

Author

Liu XiuCheng; Zhuang Wei; Quan XiaoYu; Zhou YeQing; Qin Hao; Zou ChengHang; Zhang Hao

Title

An especial transition phase of hospitals: the adaptation of hospital operations to the development of COVID-19 and policy adjustments.

Source

Environmental Health and Preventive Medicine; 2020. 25(55):(21 September 2020). 9 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The ongoing pandemic coronavirus disease 19 (COVID-19) remains a significant issue for global health, economics, and society. In order to balance epidemic control and economic recovery, many countries have successively announced the gradual relaxation of some lockdown restrictions. Hospitals and medical staff constitute the backbone in this war against COVID-19. In response to this serious situation, many hospitals went into emergency and impaired healthcare access to patients with conditions other than COVID-19. Therefore, gradually promoting hospital operations and functions back to the new normal is important, especially when this outbreak has been effectively controlled. In this study, we introduce existing and

potential problems that could seriously affect people's health. Additionally, we propose that an especial transition phase between the emergency and regular modes of hospitals can be well adapted to the current situation.

Publication Type

Journal article.

<291>

Accession Number

20203464706

Author

Ohaegbulam, K. C.; Swalih, M.; Pranavkumar Patel; Smith, M. A.; Perrin, R.

Title

Vitamin D supplementation in COVID-19 patients: a clinical case series.

Source

American Journal of Therapeutics; 2020. 27(5):e485-e490.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background: Coronavirus disease 2019 (COVID-19) has infected more than 4.4 million people and caused more than 300,000 deaths partly through acute respiratory distress syndrome with propensity to affect African American and Hispanic communities disproportionately. Patients with worse outcomes have exhibited higher blood plasma levels of proinflammatory cytokines. Activation of the vitamin D receptor expressed on immune cells has been shown to directly reduce the secretion of inflammatory cytokines, such as interleukin-6, and indirectly affect C-reactive protein. Areas of Uncertainty: The significance of the vitamin D pathway in patients diagnosed with COVID-19. Therapeutic Innovation: Vitamin D supplementation in patients after diagnosis of COVID-19. Patients and Pharmacological Interventions: We report 4 vitamin D deficient patients diagnosed with COVID-19 in April 2020 who were provided with either cholecalciferol of 1000 IU daily (standard dose) or ergocalciferol 50,000 IU daily for 5 days (high dose) as part of supplementation. Clinical Outcomes: Patients that received a high dose of vitamin D supplementation achieved normalization of vitamin D levels and improved clinical recovery evidenced by shorter lengths of stay, lower oxygen requirements, and a reduction in inflammatory marker status. Conclusions: Vitamin D supplementation may serve as a viable alternative for curtailing acute respiratory distress syndrome in patients in underserved communities where resources to expensive and sought-after

medications may be scarce. Randomized clinical trials will serve as an appropriate vessel to validate the efficacy of the therapeutic regimen and dissection of the pathway.

Publication Type

Journal article.

<292>

Accession Number

20203460934

Author

Rakesh Datta; Yadav, A. K.; Anubhav Singh; Karuna Datta; Ankur Bansal

Title

The infodemics of COVID-19 amongst healthcare professionals in India.

Source

Medical Journal Armed Forces India; 2020. 76(3):276-283. 30 ref.

Publisher

Elsevier

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Background: There is a deluge of information and misinformation about COVID-19. The present survey was conducted to explore the sources of information/misinformation for healthcare professionals from India. Methods: A cross-sectional online survey using snowballing technique was conducted from 24 Mar to 10 Apr 2020. The questionnaire was pretested and developed using standard techniques. It was circulated among medical students and physicians. Data were analysed using the STATA software. Results: Data of 758 participants were analysed. A total of 255 (33.6%) medical students, 335 (44.2%) nonspecialists and 168 (22.1%) specialists participated. The most common source of formal and informal information was official government websites and online news, respectively. A total of 517 (68.2%) participants accepted receiving misinformation. Social media and family and friends were the most common sources of misinformation. Seventy-two percent of participants agreed that spread of information helped to contain COVID-19, but more than that 75% agreed to having received inaccurate information. Seventy-four percent of respondents felt the need for regulation of information during such times; 26% and 33% felt that information about COVID-19 made them feel uncomfortable and distracts routine decision-making, respectively, and 50% felt it was difficult to differentiate correct from incorrect information about COVID-19. Conclusion: The study explored the sources of information and misinformation and found a high prevalence of misinformation, especially from social media. We suggest the need to better manage the

flow of information so that it can be an effective weapon against SARS-CoV2. There is a need for doctors to adapt to the changing times of infodemics accompanying pandemics.

Publication Type

Journal article.

<293>

Accession Number

20203460933

Author

Seema Patrikar; Deepti Poojary; Basannar, D. R.; Faujdar, D. S.; Renuka Kunte

Title

Projections for novel coronavirus (COVID-19) and evaluation of epidemic response strategies for India.

Source

Medical Journal Armed Forces India; 2020. 76(3):268-275. 21 ref.

Publisher

Elsevier

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Background: The World Health Organization on 11 March 2020, declared COVID-19 as a pandemic. India initiated social distancing measures to combat the epidemic of COVID-19. The course of the epidemic of COVID-19 for India was predicted using stochastic probability-based mathematical modeling. Methods: Data synthesis for the top few countries affected was studied for various factors affecting the epidemic. For projections of infected cases for India, the modified susceptible-exposed-infectious-removed/recovered framework modified for the effect of social distancing (Rho) was used. Simulation was carried out for 10,000 runs using Python. Projections for infected cases and hospitalization requirement were estimated. Results: The epidemic curve will peak in the third week of June in India with 17,525,869 and 2,153,200 infected people with reproduction number of 1.8 and Rho of 0.7 and 0.6, respectively. Compared with the baseline scenario of no social distancing, for transmissibility with R0 = 1.8, the reduction in infections due to social distancing measure is 78% (Rho = 0.7) and 97% (Rho = 0.6). Similarly for R0 = 2.2 and 2.4, the reduction in infected numbers slightly lowers to 62% and 66% with Rho = 0.7 and 92% and 75% with Rho = 0.6, respectively. With R0 = 1.8 and Rho = 0.6, the Intensive Care Unit (ICU) bed requirement is 107,660, whereas if transmissibility is high, the ICU bed requirement would increase to 1,994,682. Conclusions: The social distancing measures seem to have been working for India in absence of treatment in sight for COVID-19. Although with the government's response strategy of social distancing, the peak of the epidemic is

extended giving more months for preparedness to the country; however, the sustainability of these measures is uncertain.

Publication Type

Journal article.

<294>

Accession Number

20203449298

Author

Udwadia, Z. F.; Malu, K. N.; Rana, D.; Joshi, S. R.

Title

Hydroxychloroquine for COVID-19: what is our current state of knowledge?

Source

Journal of the Association of Physicians of India; 2020. 68(June):48-52. 37 ref.

Publisher

Association of Physicians of India

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Chloroquine and Hydroxychloroquine are drugs which have been widely used in malaria and rheumatoid arthritis respectively for over 50 years. There was anecdotal evidence of their efficacy in the earlier SARS outbreak in 2003. This prompted physicians from across the world to use them in the present SARS-CoV- 2 pandemic that is currently sweeping the globe, with 5 million people already infected to date. These drugs are already in widespread use for the treatment of COVID-19 in India, mainly because they are cheap and easily available, and because of the absence of any readily available alternative therapy. This timely review discusses the pre-clinical evidence, and data from the eight available clinical trials. We emphasise that careful monitoring for cardiac toxicity is required when these drugs are used. Finally, we conclude that current data does not allow us to recommend for or against the use of these drugs. Results of two large RCTs, one from the NIH and the other from WHO (Solidarity) are eagerly awaited before the role of these drugs in COVID-19 can be definitively established.

Publication Type

Journal article.

<295>

Accession Number

20203448582

Author

Lalitha Guruprasad

Title

Evolutionary relationships and sequence-structure determinants in human SARS coronavirus-2 spike proteins for host receptor recognition.

Source

Proteins: Structure, Function, and Bioinformatics; 2020. 88(11):1387-1393. 31 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19) is a pandemic infectious disease caused by novel severe acute respiratory syndrome coronavirus-2 (SARS CoV-2). The SARS CoV-2 is transmitted more rapidly and readily than SARS CoV. Both, SARS CoV and SARS CoV-2 via their glycosylated spike proteins recognize the human angiotensin converting enzyme-2 (ACE-2) receptor. We generated multiple sequence alignments and phylogenetic trees for representative spike proteins of SARS CoV and SARS CoV-2 from various host sources in order to analyze the specificity in SARS CoV-2 spike proteins required for causing infection in humans. Our results show that among the genomes analyzed, two sequence regions in the N-terminal domain "MESEFR" and "SYLTPG" are specific to human SARS CoV-2. In the receptor-binding domain, two sequence regions "VGGNY" and "EIYQAGSTPCNGV" and a disulfide bridge connecting 480C and 488C in the extended loop are structural determinants for the recognition of human ACE-2 receptor. The complete genome analysis of representative SARS CoVs from bat, civet, human host sources, and human SARS CoV-2 identified the bat genome (GenBank code: MN996532.1) as closest to the recent novel human SARS CoV-2 genomes. The bat SARS CoV genomes (GenBank codes: MG772933 and MG772934) are evolutionary intermediates in the mutagenesis progression toward becoming human SARS CoV-2.

Publication Type

Journal article.

<296>

Accession Number

20203446693

Author

Xiong Yuan; Chen Lang; Lin Ze; Panayi, A. C.; Mi BoBin; Liu GuoHui

Title

Orthopaedic guidelines for the COVID-19 post-outbreak period: experience from Wuhan, People's Republic of China.

Source

Journal of Bone and Joint Surgery, American volume; 2020. 102(15)9 ref.

Publisher

Journal of Bone and Joint Surgery Incorporated

Location of Publisher

Boston

Country of Publication

USA

Abstract

Currently, the coronavirus disease 2019 (COVID-19) crisis has rapidly spread worldwide. As the earliest outbreak area of the pandemic, Wuhan, People's Republic of China, is gradually recovering to its normal state under the effective control of government authorities. Outpatient services in major hospitals are now being restored. An accumulation of asymptomatic infections is a potential risk for medical personnel, especially when there is crowding in hospitals. As the biggest center for orthopaedic patients in Wuhan, our orthopaedic outpatient department admits >300 patients per day. Optimal guidelines on how to handle this huge number of patients during the post-outbreak stage of the COVID-19 pandemic, particularly with regard to potential asymptomatic infection, are urgently needed for orthopaedic surgeons. We have developed and proposed applicable guidelines to fill this knowledge gap, including the necessary protective strategies for medical personnel in orthopaedic outpatient and inpatient wards as well as during surgery. We also have provided mental health recommendations for health-care workers. To the best of our knowledge, these guidelines are the first of their kind for orthopaedic surgeons who are slowly reestablishing medical activity following the pandemic.

Publication Type

Journal article.

<297>

Accession Number

20203443551

Author

Hayashi, T.; Abiko, K.; Mandai, M.; Yaegashi, N.; Konishi, I.

Title

Highly conserved binding region of ACE2 as a receptor for SARS-CoV-2 between humans and mammals.

Source

Veterinary Quarterly; 2020. 40(243-249):243-249. 20 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Several cases of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection transmitted from human owners to their dogs have recently been reported. The first ever case of SARS-CoV-2 transmission from a human owner to a domestic cat was confirmed on March 27, 2020. A tiger from a zoo in New York, USA, was also reportedly infected with SARS-CoV-2. It is believed that SARS-CoV-2 was transmitted to tigers from their caretakers, who were previously infected with this virus. On May 25, 2020, the Dutch Minister of Agriculture, Nature and Food Quality reported that two employees were infected with SARS-CoV-2 transmitted from minks. These reports have influenced us to perform a comparative analysis among angiotensin-converting enzyme 2 (ACE2) homologous proteins for verifying the conservation of specific protein regions. One of the most conserved peptides is represented by the peptide "353-KGDFR-357 (H. sapiens ACE2 residue numbering), which is located on the surface of the ACE2 molecule and participates in the binding of SARS-CoV-2 spike receptor binding domain (RBD). Multiple sequence alignments of the ACE2 proteins by ClustalW, whereas the three-dimensional structure of its binding region for the spike glycoprotein of SARS-CoV-2 was assessed by means of Spanner, a structural homology modeling pipeline method. In addition, evolutionary phylogenetic tree analysis by ETE3 was used. ACE2 works as a receptor for the SARS-CoV-2 spike glycoprotein between humans, dogs, cats, tigers, minks, and other animals, except for snakes. The three-dimensional structure of the KGDFR hosting protein region involved in direct interactions with SARS-CoV-2 spike RBD of the mink ACE2 appears to form a loop structurally related to the human ACE2 corresponding protein loop, despite of the reduced available protein length (401 residues of the mink ACE2 available sequence vs 805 residues of the human ACE2). The multiple sequence alignments of the ACE2 proteins shows high homology and complete conservation of the five amino acid residues: 353-KGDFR-357 with humans, dogs, cats, tigers, minks, and other animals, except for snakes. Where the information revealed from our examinations can support precision vaccine design and the discovery of antiviral therapeutics, which will accelerate the development of medical countermeasures, the World Health Organization recently reported on the possible risks of reciprocal infections regarding SARS-CoV-2 transmission from animals to humans.

Publication Type

Journal article.

<298>

Accession Number

20203445926

Author

Eroglu, Y.

Title

An evaluation about determining the factors affecting passenger's attitudes in airline companies pre-global pandemic. [Turkish]

Source

Journal of Hospitality and Tourism Issues (JOHTI); 2020. 2(1):25-38. 37 ref.

Publisher

Sedat C&tail;ELIK

Location of Publisher

Şırnak

Country of Publication

Turkey

Abstract

Pre global pandemic which has occured because of COVID-19 virus, air transportation was in a continuous development and growth process in all over the world and Turkey. It was observed that the increasing competition in this process has affected the attitudes of passengers about preference of airline companies with the services which they offer. The preference of the airline companies by the passengers depends upon the airline companies' value-added activities. Therefore, the factors affecting the passengers' attitudes should be taken into consideration. Airline companies should inform their passengers about their services which they offer by using various means of communication. It has been observed that airline companies are offering a variety of services which are increasing the competition and differentiating the airline companies in order to ensure passenger satisfaction and loyalty. This study has aimed to offer a literature review which may be a guide in order to determine the factors affecting into the passengers' attitudes in the flag carrier and low-cost national and international airline companies pre global pandemic. In addition to this, the examples of the services of various airline companies that are increasing passenger satisfaction were given in the study.

Publication Type

Journal article.

<299>

Accession Number

20203421158

Author

Costa, S.; Posteraro, B.; Marchetti, S.; Tamburrini, E.; Carducci, B.; Lanzone, A.; Valentini, P.; Buonsenso, D.; Sanguinetti, M.; Vento, G.; Cattani, P.

Title

Excretion of SARS-CoV-2 in human breast milk.

Source

Clinical Microbiology and Infection; 2020. 26(10):1430-1432. 8 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This article studied two pregnant women admitted to the hospital (Fondazione Policlinico Universitario A. Gemelli IRCCS in Rome, Italy) who received a laboratory-documented diagnosis of COVID-19. Patient 1 presented with fever, shortness of breath, and diarrhoea, and patient 2 presented with a cough. The patients were in their third trimester and, 8 days after COVID-19 diagnosis, both underwent caesarean section following foetal distress or a history of caesarean section. The patients were treated empirically with antimicrobial agents, and only patient 1 received oxygen support (nasal cannula). The neonate of patient 1 was born prematurely at 35 gestational age plus 5 days and had a birthweight less than 2500 g. Both neonates were without/did not develop any clinical symptoms and, as a precaution, did not receive breast milk. The investigations of pregnant women with COVID-19 symptoms should necessarily include testing from various body sites or fluids. This will help to improve the sensitivity and reduce false-negative test results.

Publication Type

Correspondence.

<300>

Accession Number

20203428595

Author

Streeter, C.

Title

COVID-19: social isolation and optimism in sport.

Source

The Sport Journal; 2020. 23(28):28-unpaginated. 41 ref.

Publisher

United States Sports Academy

Location of Publisher

Alabama

Country of Publication

USA

Abstract

The purpose of this discussion is to explore communicative strategies that sport practitioners can implement during this unprecedented time of social isolation as a result of COVID-19. The goal of this discussion is to frame COVID-19 social isolation mandates as opportunities for coaches and sport practitioners to maintain mental health by revisiting their commitment to their players, to their teams, and to the industry of sport. Social isolation is a fundamental safety step that can limit the spread of COVID-19. However, research links prolonged social isolation with adverse health consequences including depression, poor sleep quality, impaired executive function, accelerated cognitive decline, and increased levels of anxiety. The social isolation that COVID-19 has thrust upon the world, including the sport industry, presents a paradox: Can social isolation manifest optimism in sport? Recommendations for coaches and sport practitioners include communicative behaviors intended to deafen the social isolation created by COVID-19. Communicative approaches discussed include empathetic language, articulation of meaning and purpose, connectedness, and strategies to overcome social isolation.

Publication Type

Journal article.

<301>

Accession Number

20203456063

Author

Chiaramonti, D.; Maniatis, K.

Title

Security of supply, strategic storage and covid19: which lessons learnt for renewable and recycled carbon fuels, and their future role in decarbonizing transport? (Special section on COVID-19-SI2020.)

Source

Applied Energy; 2020. 271

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The present work analyses the lessons learnt from the Covid19 (Coronavirus) pandemic that could possibly apply to the energy sector, with a special focus to decarbonizing transport. Distinguishing between short/medium- and medium/long-term options, the scope is to discuss how issues such energy security, energy storage and energy system resilience should deserve more attention. Today, fuel demand has fallen to unprecedented levels, with jet fuel demand being the most affected one. Oil price is at the lowest values recorded for many years while on 20 April it even reached a negative price in the US for the first time in history. While in the short-term low oil prices would be attractive, the long-term negative consequences could be very relevant, with significant associated costs for the EU economy and Member states (MS) related to the collapse of demand and to the socio-economic impacts. New measures should thus be considered in the post Covid19 strategy. In particular, while in a short- to medium-term view the oil sector will require specific support measures to overcome the economic and physical shock brought in by the pandemic, in a medium to long-term perspective domestic sources such as Renewable and Recycled Carbon Fuels (RRCF) should be regarded as a way to secure energy supply, leading to significant technical and economic advantages. Thus, EU should allocate adequate resources in the post-Covid recovery plans to definitely allow the transition to renewable energy sources and particularly to bio-based economy and stainable transport fuels. Decarbonisation of transport through RRCF and economic recovery do not compete, but rather represent a win-win solution in a well-designed and sustainable implementation strategy, especially when low or zero interest-rate investments are foreseen. The EU should take the opportunity to match the UN SDG (Sustainable Development Goals) and EU Green Deal goals with the need to inject economic and financial resources into the real economy improving the socio-economic conditions of EU populations. Both agroforestry and RRCF industry are ready to produce (biomass) or source (waste) the feedstocks as well as the technologies, systems and components needed by the industry along the whole value chain. The roadmap to cleaner transport fuels thus represent an evident opportunity to meet climate, economic and societal post-Covid19 goals, in a win-win-win approach.

Publication Type

Journal article.

<302>

Accession Number

20203453974

Author

Peng ShanBi; Chen, Q.; Liu EnBin

Title

The role of computational fluid dynamics tools on investigation of pathogen transmission: prevention and control.

Source

Science of the Total Environment; 2020. 746many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Transmission mechanics of infectious pathogen in various environments are of great complexity and has always been attracting many researchers' attention. As a cost-effective and powerful method, Computational Fluid Dynamics (CFD) plays an important role in numerically solving environmental fluid mechanics. Besides, with the development of computer science, an increasing number of researchers start to analyze pathogen transmission by using CFD methods. Inspired by the impact of COVID-19, this review summarizes research works of pathogen transmission based on CFD methods with different models and algorithms. Defining the pathogen as the particle or gaseous in CFD simulation is a common method and epidemic models are used in some investigations to rise the authenticity of calculation. Although it is not so difficult to describe the physical characteristics of pathogens, how to describe the biological characteristics of it is still a big challenge in the CFD simulation. A series of investigations which analyzed pathogen transmission in different environments (hospital, teaching building, etc) demonstrated the effect of airflow on pathogen transmission and emphasized the importance of reasonable ventilation. Finally, this review presented three advanced methods: LBM method, Porous Media method, and Web-based forecasting method. Although CFD methods mentioned in this review may not alleviate the current pandemic situation, it helps researchers realize the transmission mechanisms of pathogens like viruses and bacteria and provides guidelines for reducing infection risk in epidemic or pandemic situations.

Publication Type

Journal article.

<303>

Accession Number

20203453968

Author

Manish Kumar; Patel, A. K.; Shah, A. V.; Janvi Raval; Neha Rajpara; Madhvi Joshi; Joshi, C. G.

Title

First proof of the capability of wastewater surveillance for COVID-19 in India through detection of genetic material of SARS-CoV-2.

Source

Science of the Total Environment; 2020. 74640 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

We made the first ever successful effort in India to detect the genetic material of SARS-CoV-2 viruses to understand the capability and application of wastewater-based epidemiology (WBE) surveillance in India. Sampling was carried out on 8 and 27 May 2020 at the Old Pirana Waste Water Treatment Plant (WWTP) at Ahmedabad, Gujarat that receives effluent from Civil Hospital treating COVID-19 patients. All three, i.e. ORF1ab, N and S genes of SARS-CoV-2, were found in the influent with no genes detected in effluent collected on 8 and 27 May 2020. Increase in SARS-CoV-2 genetic loading in the wastewater between 8 and 27 May 2020 samples concurred with corresponding increase in the number of active COVID-19 patients in the city. The number of gene copies was comparable to that reported in untreated wastewaters of Australia, China and Turkey and lower than that of the USA, France and Spain. However, temporal changes in SARS-CoV-2 RNA concentrations need to be substantiated further from the perspectives of daily and short-term changes of SARS-CoV-2 in wastewater through long-term monitoring. The study results SARS-CoV-2 will assist concerned authorities and policymakers to formulate and/or upgrade COVID-19 surveillance to have a more explicit picture of the pandemic curve. While infectivity of SARS-CoV-2 through the excreted viral genetic material in the aquatic environment is still being debated, the presence and detection of genes in wastewater systems makes a strong case for the environmental surveillance of the COVID-19 pandemic.

Publication Type

Journal article.

<304>

Accession Number

20203436565

Author

Tan ChuenWen; Low GuekHong [Low, G. H. J.]; Wong WanHui; Chua YingYing; Goh SherLi; Ng HengJoo

Title

Critically ill COVID-19 infected patients exhibit increased clot waveform analysis parameters consistent with hypercoagulability.

Source

American Journal of Hematology; 2020. 95(7):E158-E160. 7 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

This article postulated COVID-19 patients requiring intensive care unit (ICU) support would exhibit haemostatic disturbances and interrogated their aPTT-based CWA parameters as surrogates of their haemostatic functions. The findings are limited by the relatively few patients and data points and by the lack of other correlation studies with other coagulation assays, the authors still believe there are still valuable points to take away. Many of the specialized and research haemostatic assays cannot be safely and easily performed on samples collected from COVID-19 patients in view of laboratory biosafety concerns. As COVID-19 infection is spreading relentlessly worldwide, there is an urgent need for rapid and readily accessible biomarkers that can aid clinical stratification and management. So, CWA represents a simple, automated and rapid test, which fulfills these biosafety criteria. Whenever an aPTT is performed, an aPTT waveform is generated automatically by commonly used optical analysers worldwide. Therefore, the rise of CWA parameters precedes and coincides with ICU admission and warrant further study to confirm its utility in the routine management of COVID-19 patients.

Publication Type

Correspondence.

<305>

Accession Number

20203431564

Author

Bereir, A.

Title

Impact of COVID19 on Sudan agriculture: the role of agricultural extension during the pandemic era.

Source

International Journal of Agricultural Science, Research and Technology in Extension and Education Systems; 2020. 10(1):43-49. 18 ref.

Publisher

Islamic Azad University

Location of Publisher

Shoushtar

Country of Publication

Iran

Abstract

Agriculture is the backbone of the Sudan economy and represents the biggest industry of the country. The majority of Sudanese people live in rural areas and depend on agricultural production as the main source of their income and food security. This paper was prepared to study the impact of COVID19 on Sudan agricultural production and marketing in addition to the national policy response to mitigate this impact, and to study the role of agricultural extension to help farmers cope with the Covid19 pandemic era. This study was descriptive and mainly based on secondary data. The study showed that agricultural production and marketing in Sudan are affected by the impact of COVID-19 pandemic, and the country is also faced by desert locust problem that may cause considerable losses of both crop production and pasture and shortly along with the pandemic will lead to food insecurity in the country. The study also revealed that the government of Sudan has taken some measures to alleviate this situation and the agricultural extension has a key role to help farmers cope with the pandemic era. It can be concluded that agricultural production and marketing in Sudan are not outside the impact of COVID-19 and consequently Sudan food security was affected by the pandemic. The government of Sudan has taken some measures to alleviate this situation. The agricultural extension has a key role to help farmers cope with the pandemic era.

Publication Type

Journal article.

<306>

Accession Number

20203438963

Author

Kneyber, M. C. J.; Engels, B.; Voort, P. H. J. van der

Title

Paediatric and adult critical care medicine: joining forces against Covid-19.

Source

Critical Care; 2020. 24(350):(16 June 2020). 5 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

This article decided to maintain the current PICU capacity and to re-open, for adult COVID-19 care, the part of that PICU that was closed due nursing staff shortage. The main hurdle was how to staff the unit. PICU physicians and nurses advocated to remain in their environment and use the well-established working relationships within the PICU bedside team when caring for the adult COVID-19 patients because the general principles of intensive care medicine would not be different between children and adults. The entire nursing team was split into two. One group of nurses originally coming from the adult ICU before becoming a PICU nurse were exclusively allocated to the COVID-19 part of our PICU. These nurses and our own PICU consultants were the primary care providers. An adult intensive care unit consultant reviewed patient plans twice a day to guarantee quality of adult critical care. The 6-bedded Covid-19 unit located in the PICU opened at the end of March and remained open for six weeks. The ICUs admitted 98 adult COVID-19 patients, 12 of them were treated in the PICU by paediatric nurses and intensivists. All but one of these 12 survived to PICU discharge. Preserving the PICU team ensured a rapid transition and boosted morale. This period proved to be a unique collaboration between paediatric and adult intensivists and unforgettable experience. It made PICU practitioners stronger in many ways and sets in motion a stronger relationship between paediatric and adult critical care medicine in our hospital. Also, PICU occupancy remained >80%, supporting our decision not to reduce PICU capacity and not to redeploy staff.

Publication Type

Journal article.

<307>

Accession Number

20203447178

Author

Liu ZiYuan; Li Zhi; Chen WeiMing; Zhao YunPu; Yue HanXun; Wu ZhenZhen

Title

Path optimization of medical waste transport routes in the emergent public health event of COVID-19: a hybrid optimization algorithm based on the immune-ant colony algorithm.

Source

International Journal of Environmental Research and Public Health; 2020. 17(16)43 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

In response to the emergent public health event of COVID-19, the efficiency of transport of medical waste from hospitals to disposal stations is a worthwhile issue to study. In this paper, based on the actual situation of COVID-19 and environmental impact assessment guidelines, an immune algorithm is used to establish a location model of urban medical waste storage sites. In view of the selection of temporary storage stations and realistic transportation demand, an efficiency-of-transport model of medical waste between hospitals and temporary storage stations is established by using an ant colony-tabu hybrid algorithm. In order to specify such status, Wuhan city in Hubei Province, China - considered the first city to suffer from COVID-19 - was chosen as an example of verification; the two-level model and the immune algorithm-ant colony optimization-tabu search (IA-ACO-TS) algorithm were used for simulation and testing, which achieved good verification. To a certain extent, the model and the algorithm are proposed to solve the problem of medical waste disposal, based on transit temporary storage stations, which we are convinced will have far-reaching significance for China and other countries to dispatch medical waste in response to such public health emergencies.

Publication Type

Journal article.

<308>

Accession Number

20203447174

Author

Stangvaltaite-Mouhat, L.; Uhlen, M. M.; Skudutyte-Rysstad, R.; Hovden, E. A. S.; Shabestari, M.; Ansteinsson, V. E.

Title

Dental health services response to COVID-19 in Norway.

Source

International Journal of Environmental Research and Public Health; 2020. 17(16)46 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

We aimed to investigate the management of urgent dental care, the perception of risk and workplace preparedness among dental staff in Norway during the COVID-19 pandemic. An electronic questionnaire regarding the strictest confinement period in Norway (13 March-17 April 2020) was distributed to dental staff. Among the 1237 respondents, 727 (59%) treated patients, of whom 170 (14%) worked in clinics designated to treat patients suspected or confirmed to have COVID-19. Out of them 88% (143) received training and 64% (103) simulation in additional infection prevention procedures, while 27 (24%) respondents reported deviation. In total, 1051 (85%) respondents perceived that dental staff had a high risk of being infected, 1039 (84%) that their workplace handled the current situation well, 767 (62%) that their workplace had adequate infection control equipment and 507 (41%) agreed that their workplace is well equipped to handle an escalation. Before an appointment, 1182 (96%) respondents always/often inquired per phone information if a patient experienced symptoms of COVID-19, and 1104 (89%) asked about a history of travel to affected areas. Twice as many patients on average per week were treated by phone than in a clinic. A lower proportion of dental staff in high incidence counties applied additional infection prevention measures compared to low and medium incidence counties. To conclude, urgent dental health care was managed relatively well in Norway. Additional training of the dental staff in adequate infection prevention and step-by-step procedures may be needed. These results may be used to improve the dental health service's response to future outbreaks.

Publication Type

Journal article.

<309>

Accession Number

20203447172

Author

Jeon WooHwi; Seon JeongYeon; Park SoYoun; Oh InHwan

Title

Analysis of risk factors on readmission cases of COVID-19 in the Republic of Korea: using nationwide health claims data.

Source

International Journal of Environmental Research and Public Health; 2020. 17(16)32 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

In South Korea, 4.5% patients of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) were readmitted to hospitals after discharge. However, there is insufficient research on risk factors for readmission and management of patients after discharge is poor. In this study, 7590 confirmed coronavirus disease (COVID-19) patients were defined as a target for analysis using nationwide medical claims data. The demographic characteristics, underlying diseases, and the use of medical resources were used to examine the association with readmission through the chi-square test and then logistic regression analysis was performed to analyze factors affecting readmission. Of the 7590 subjects analyzed, 328 patients were readmitted. The readmission rates of men, older age and patients with medical benefits showed a high risk of readmission. The Charlson Comorbidity Index score was also related to COVID-19 readmission. Concerning requiring medical attention, there was a higher risk of readmission for the patients with chest radiographs, computed tomography scans taken and lopinavir/ritonavir at the time of their first admission. Considering the risk factors presented in this study, classifying patients with a high risk of readmission and managing patients before and after discharge based on priority can make patient management and medical resource utilization more efficient. This study also indicates the importance of lifestyle management after discharge.

Publication Type

Journal article.

<310>

Accession Number

20203447115

Author

Erokhin, V.; Gao TianMing

Title

Impacts of COVID-19 on trade and economic aspects of food security: evidence from 45 developing countries.

Source

International Journal of Environmental Research and Public Health; 2020. 17(16)179 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The stability of food supply chains is crucial to the food security of people around the world. Since the beginning of 2020, this stability has been undergoing one of the most vigorous pressure tests ever due to the COVID-19 outbreak. From a mere health issue, the pandemic has turned into an economic threat to food security globally in the forms of lockdowns, economic decline, food trade restrictions, and rising food inflation. It is safe to assume that the novel health crisis has badly struck the least developed and developing economies, where people are particularly vulnerable to hunger and malnutrition. However, due to the recency of the COVID-19 problem, the impacts of macroeconomic fluctuations on food insecurity have remained scantily explored. In this study, the authors attempted to bridge this gap by revealing interactions between the food security status of people and the dynamics of COVID-19 cases, food trade, food inflation, and currency volatilities. The study was performed in the cases of 45 developing economies distributed to three groups by the level of income. The consecutive application of the autoregressive distributed lag method, Yamamoto's causality test, and variance decomposition analysis allowed the authors to find the food insecurity effects of COVID-19 to be more perceptible in upper-middle-income economies than in the least developed countries. In the latter, food security risks attributed to the emergence of the health crisis were mainly related to economic access to adequate food supply (food inflation), whereas in higher-income developing economies, availability-sided food security risks (food trade restrictions and currency depreciation) were more prevalent. The approach presented in this paper contributes to the establishment of a methodology framework that may equip decision-makers with up-to-date estimations of health crisis effects on economic parameters of food availability and access to staples in food-insecure communities.

Publication Type

Journal article.

<311>

Accession Number

20203444035

Author

Tu YungFang; Chien ChianShiu; Yarmishyn, A. A.; Lin YiYing; Luo YungHung; Lin YiTsung; Lai WeiYi; Yang DeMing; Chou ShihJie; Yang YiPing; Wang MongLien; Chiou ShihHwa

Title

A review of SARS-CoV-2 and the ongoing clinical trials.

Source

International Journal of Molecular Sciences; 2020. 21(7)86 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The sudden outbreak of 2019 novel coronavirus (2019-nCoV, later named SARS-CoV-2) in Wuhan, China, which rapidly grew into a global pandemic, marked the third introduction of a virulent coronavirus into the human society, affecting not only the healthcare system, but also the global economy. Although our understanding of coronaviruses has undergone a huge leap after two precedents, the effective approaches to treatment and epidemiological control are still lacking. In this article, we present a succinct overview of the epidemiology, clinical features, and molecular characteristics of SARS-CoV-2. We summarize the current epidemiological and clinical data from the initial Wuhan studies, and emphasize several features of SARS-CoV-2, which differentiate it from SARS-CoV and Middle East respiratory syndrome coronavirus (MERS-CoV), such as high variability of disease presentation. We systematize the current clinical trials that have been rapidly initiated after the outbreak of COVID-19 pandemic. Whereas the trials on SARS-CoV-2 genome-based specific vaccines and therapeutic antibodies are currently being tested, this solution is more long-term, as they require thorough testing of their safety. On the other hand, the repurposing of the existing therapeutic agents previously designed for other virus infections and pathologies happens to be the only practical approach as a rapid response measure to the emergent pandemic, as most of these agents have already been tested for their safety. These agents can be divided into two broad categories, those that can directly target the virus replication cycle, and those based on immunotherapy approaches either aimed to boost innate antiviral immune responses or alleviate damage induced by dysregulated inflammatory responses. The initial clinical studies revealed the promising therapeutic potential of several of such drugs, including favipiravir, a broad-spectrum antiviral drug that interferes with the viral replication, and hydroxychloroquine, the repurposed antimalarial drug that interferes with the virus endosomal entry pathway. We speculate that the current pandemic emergency will be a trigger for more systematic drug repurposing design approaches based on big data analysis.

Publication Type

Journal article.

<312>

Accession Number

20203444537

Author

Wong SiuHim [Wong, S. H. J.]; Cheung ManChee [Cheung, M. C. K.]

Title

Impact of COVID-19 on orthopaedic and trauma service an epidemiological study.

Source

Journal of Bone and Joint Surgery, American volume; 2020. 102(14)

Publisher

Journal of Bone and Joint Surgery Incorporated

Location of Publisher

Boston

Country of Publication

USA

Abstract

Background: Coronavirus disease 2019 (COVID-19) has caused substantial disruptions to orthopaedic and trauma services. The purpose of the present study was to quantify its impact on surgical volume, hospitalizations, clinic appointments, and accident and emergency attendances to guide staffing and resource deployment for the sustenance of emergency services. Methods: Data were retrieved from all 43 Hong Kong public hospitals and 122 outpatient clinics from a population of 7.5 million residents. The "COVID-19 cohort" of patients who received treatment from January 25 to March 27, 2020, was compared with the "control cohort" of patients who received treatment during the same time of year over the past 4 years. Primary outcomes consisted of changes in patient diagnoses, number of operations performed, and hospitalizations during the COVID-19 pandemic. Secondary outcomes included differences in patient age and comorbidity, the nature of operations performed, types of anesthesia for orthopaedic procedures, difference in anesthetic times, wait times, and personal protective equipment (PPE) reserves. Results: A total of 928,278 patient-episodes (32,613 operations, 97,648 hospital admissions, 302,717 accident and emergency attendances, and 495,300 outpatient clinic attendances) were analyzed. Orthopaedic operations were reduced by 44.2%, from a mean (and standard deviation) of 795 +/- 115.1 to 443.6 +/- 25.8 per week ($p < 0.001$), with the ratio of emergency to elective operations increasing from 1.27:1 to 3.78:1. Operations for the treatment of upper and lower-limb fractures decreased by 23% (from 98.5 +/- 14 to 75.9 +/- 15.2 per week; $p < 0.001$) and 20% (from 210.6 +/- 29.5 to 168.4 +/- 16.9 per week; $p < 0.001$), respectively, whereas elective joint replacement and ligamentous reconstruction procedures decreased by 74% to 84% ($p < 0.001$). Operations for orthopaedic infections such as necrotizing fasciitis and septic arthritis remained similar ($p > 0.05$). The number of hospitalizations decreased by 41.2% (from 2,365 +/- 243 to 1,391 +/- 53 per week; $p < 0.001$), whereas clinical outpatient visits decreased by 29.4% (from 11,693 +/- 2,240 to 8,261 +/- 1,104 per week; $p < 0.001$). Patients did not endure longer wait times for emergency operations and accident and emergency consultations ($p > 0.05$). PPE consumption did not exceed procurement, with net increases in PPE reserves. Conclusions: Demand for orthopaedic care remains, despite weekly reductions of 351 orthopaedic operations, 974 hospital admissions, and 3,432 clinic attendances. Orthopaedic surgeons and health-care professionals should factor this into consideration during staffing and resource deployment.

Publication Type

Journal article.

<313>

Accession Number

20203445797

Author

Filho, W. L.; Lutz, J. M.; Sattler, D. N.; Nunn, P. D.

Title

Coronavirus: COVID-19 transmission in pacific small island developing states.

Source

International Journal of Environmental Research and Public Health; 2020. 17(15)22 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Background: Pacific Small Island Developing States (SIDS) have health care systems with a limited capacity to deal with pandemics, making them especially vulnerable to the economic and social impacts of the coronavirus (COVID-19). This paper examines the introduction, transmission, and incidence of COVID-19 into Pacific SIDS. Methods: Calculate the rate of transmission (the average number of new cases per day between the first recorded case and the most recent day) and connectivity (daily direct flights to the leading airport in each selected island group) using flight history and COVID-19 transmission data. Results: Correlational analyses show that connectivity is positively related with (a) first-case dates and (b) spread rate in Pacific SIDS. Conclusion: Connectivity plays a central role in the spread of COVID-19 in Pacific SIDS. The continued entry of people was a significant factor for spread within countries. Efforts to prevent transmission by closing borders reduced transmission but also created significant economic hardship because many Pacific SIDS rely heavily on tourism and international exchange. The findings highlight the importance of exploring the possibility that the COVID-19 spread rate may be higher than official figures indicate, and present pathways to mitigate socio-economic impacts. The practical implications of the findings reveal the vulnerability of Pacific SIDS to pandemics and the key role of connectivity in the spread of COVID-19 in the Pacific region.

Publication Type

Journal article.

<314>

Accession Number

20203445765

Author

Matos, R. A. da C.; Akutsu, R. de C. C. de A.; Zandonadi, R. P.; Rocha, A.; Botelho, R. B. A.

Title

Wellbeing at work before and during the SARS-CoV-2 pandemic: a Brazilian nationwide study among dietitians.

Source

International Journal of Environmental Research and Public Health; 2020. 17(15)53 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

This study aimed to evaluate the perceptions of dietitians' wellbeing at work before and during the SARS-COV-2 pandemic in Brazil. This cross-sectional study was performed using a previously validated instrument to investigate the wellbeing of dietitians at work in Brazil. The questionnaire on the wellbeing of dietitians was composed of 25 items (with a 5-point scale), characteristics, and questions about the SARS-COV-2 period. The application was carried out with GoogleForms tool from 26 May to 7 June 2020. The weblink to access the research was sent via email, messaging apps, and social networks. Volunteers were recruited nationwide with the help of the Brazilian Dietitians Councils, support groups, as well as media outreach to reach as many dietitians as possible. Volunteers received, along with the research link, the invitation to participate, as well as the consent form. A representative sample of 1359 dietitians from all the Brazilian regions answered the questionnaire-mostly female (92.5%), Catholic (52.9%), from 25 to 39 years old (58.4%), with a partner (63.8%), and with no children (58%). Most of the participants continue working during the pandemic period (83.8%), but they did not have SARS-COV-2 (96%), nor did their family members (80.7%). The wellbeing at work before SARS-COV-2 was 3.88 +/- 0.71, statistically different ($p < 0.05$) from during the pandemic, with the wellbeing of 3.71 +/- 0.78. Wellbeing at work was higher before the pandemic for all the analyzed variables. Analyzing variables separately before and during the pandemic, dietitians with partners, children and a Ph.D. presented higher scores for wellbeing at work. Professionals receiving more than five times the minimum wage have higher scores. During the pandemic, better wellbeing was observed for dietitians working remotely.

Publication Type

Journal article.

<315>

Accession Number

20203445753

Author

Borro, M.; Girolamo, P. di; Gentile, G.; Luca, O. de; Preissner, R.; Marcolongo, A.; Ferracuti, S.; Simmaco, M.

Title

Evidence-based considerations exploring relations between SARS-CoV-2 pandemic and air pollution: involvement of PM2.5-mediated up-regulation of the viral receptor ACE-2.

Source

International Journal of Environmental Research and Public Health; 2020. 17(15)53 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19/SARS-CoV-2 pandemic struck health, social and economic systems worldwide, and represents an open challenge for scientists -coping with the high inter-individual variability of COVID-19, and for policy makers -coping with the responsibility to understand environmental factors affecting its severity across different geographical areas. Air pollution has been warned of as a modifiable factor contributing to differential SARS-CoV-2 spread but the biological mechanisms underlying the phenomenon are still unknown. Air quality and COVID-19 epidemiological data from 110 Italian provinces were studied by correlation analysis, to evaluate the association between particulate matter (PM)2.5 concentrations and incidence, mortality rate and case fatality risk of COVID-19 in the period 20 February-31 March 2020. Bioinformatic analysis of the DNA sequence encoding the SARS-CoV-2 cell receptor angiotensin-converting enzyme 2 (ACE-2) was performed to identify consensus motifs for transcription factors mediating cellular response to pollutant insult. Positive correlations between PM2.5 levels and the incidence ($r = 0.67$, $p < 0.0001$), the mortality rate ($r = 0.65$, $p < 0.0001$) and the case fatality rate ($r = 0.7$, $p < 0.0001$) of COVID-19 were found. The bioinformatic analysis of the ACE-2 gene identified nine putative consensus motifs for the aryl hydrocarbon receptor (AHR). Our results confirm the supposed link between air pollution and the rate and outcome of SARS-CoV-2 infection and support the hypothesis that pollution-induced over-expression of ACE-2 on human airways may favor SARS-CoV-2 infectivity.

Publication Type

Journal article.

<316>

Accession Number

20203445752

Author

Zobbi, M. A.; Alsinglawi, B.; Mubin, O.; Fady Alnajjar

Title

Measurement method for evaluating the lockdown policies during the COVID-19 pandemic.

Source

International Journal of Environmental Research and Public Health; 2020. 17(15)18 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Coronavirus Disease 2019 (COVID-19) has affected day to day life and slowed down the global economy. Most countries are enforcing strict quarantine to control the havoc of this highly contagious disease. Since the outbreak of COVID-19, many data analyses have been done to provide close support to decision-makers. We propose a method comprising data analytics and machine learning classification for evaluating the effectiveness of lockdown regulations. Lockdown regulations should be reviewed on a regular basis by governments, to enable reasonable control over the outbreak. The model aims to measure the efficiency of lockdown procedures for various countries. The model shows a direct correlation between lockdown procedures and the infection rate. Lockdown efficiency is measured by finding a correlation coefficient between lockdown attributes and the infection rate. The lockdown attributes include retail and recreation, grocery and pharmacy, parks, transit stations, workplaces, residential, and schools. Our results show that combining all the independent attributes in our study resulted in a higher correlation (0.68) to the dependent value Interquartile 3 (Q3). Mean Absolute Error (MAE) was found to be the least value when combining all attributes.

Publication Type

Journal article.

<317>

Accession Number

20203445741

Author

Agapito, G.; Zucco, C.; Cannataro, M.

Title

COVID-WAREHOUSE: a data warehouse of Italian COVID-19, pollution, and climate data.

Source

International Journal of Environmental Research and Public Health; 2020. 17(15)25 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The management of the COVID-19 pandemic presents several unprecedented challenges in different fields, from medicine to biology, from public health to social science, that may benefit from computing methods able to integrate the increasing available COVID-19 and related data (e.g., pollution, demographics, climate, etc.). With the aim to face the COVID-19 data collection, harmonization and integration problems, we present the design and development of COVID-WAREHOUSE, a data warehouse that models, integrates and stores the COVID-19 data made available daily by the Italian Protezione Civile Department and several pollution and climate data made available by the Italian Regions. After an automatic ETL (Extraction, Transformation and Loading) step, COVID-19 cases, pollution measures and climate data, are integrated and organized using the Dimensional Fact Model, using two main dimensions: time and geographical location. COVID-WAREHOUSE supports OLAP (On-Line Analytical Processing) analysis, provides a heatmap visualizer, and allows easy extraction of selected data for further analysis. The proposed tool can be used in the context of Public Health to underline how the pandemic is spreading, with respect to time and geographical location, and to correlate the pandemic to pollution and climate data in a specific region. Moreover, public decision-makers could use the tool to discover combinations of pollution and climate conditions correlated to an increase of the pandemic, and thus, they could act in a consequent manner. Case studies based on data cubes built on data from Lombardia and Puglia regions are discussed. Our preliminary findings indicate that COVID-19 pandemic is significantly spread in regions characterized by high concentration of particulate in the air and the absence of rain and wind, as even stated in other works available in literature.

Publication Type

Journal article.

<318>

Accession Number

20203445705

Author

Mlejnkova, H.; Sovova, K.; Vasickova, P.; Ocenaskova, V.; Jasikova, L.; Juranova, E.

Title

Preliminary study of SARS-CoV-2 occurrence in wastewater in the Czech Republic.

Source

International Journal of Environmental Research and Public Health; 2020. 17(15)51 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The virus SARS-CoV-2, which has caused the recent COVID-19 pandemic, may be present in the stools of COVID-19 patients. Therefore, we aimed to detect SARS-CoV-2 in wastewater for surveillance of SARS-CoV-2 in the population. Samples of untreated wastewater were collected from 33 wastewater treatment plants (WWTPs) of different sizes within the Czech Republic. SARS-CoV-2 RNA was concentrated from wastewater and viral RNA was determined using real-time reverse transcription polymerase chain reaction (RT-qPCR). SARS-CoV-2 RNA was detected in 11.6% of samples and more than 27.3% of WWTPs; in some of them, SARS-CoV-2 was detected repeatedly. Our preliminary results indicate that an epidemiology approach that focuses on the determination of SARS-CoV-2 in wastewater could be suitable for SARS-CoV-2 surveillance in the population.

Publication Type

Journal article.

<319>

Accession Number

20203440752

Author

Song Shuang; Peng HaoRan; Wang QingLing; Liu ZhengQi; Dong XiuPing; Wen ChengRong; Ai ChunQing; Zhang YuJiao; Wang ZhongFu; Zhu BeiWei

Title

Inhibitory activities of marine sulfated polysaccharides against SARS-CoV-2.

Source

Food and Function; 2020. 11(9):7415-7420.

Publisher

Royal Society of Chemistry

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has spread around the world at an unprecedented rate. In the present study, 4 marine sulfated polysaccharides were screened for their inhibitory activity against SARS-CoV-2, including sea cucumber sulfated polysaccharide (SCSP), fucoidan from brown algae, iota-carrageenan from red algae, and chondroitin sulfate C from sharks (CS). Of them, SCSP, fucoidan, and carrageenan showed significant antiviral activities at concentrations of 3.90-500 mug mL-1. SCSP exhibited the strongest inhibitory activity with IC50 of 9.10 mug mL-1. Furthermore, a test using pseudotype virus with S glycoprotein confirmed that SCSP could bind to the S glycoprotein to prevent SARS-CoV-2 host cell entry. The three antiviral polysaccharides could be employed to treat and prevent COVID-19.

Publication Type

Journal article.

<320>

Accession Number

20203450153

Author

Medina-Arellano, M. de J.; Palacios-Gonzalez, C.; Santos-Preciado, J. I.

Title

Bioethics guide on scarce medical resource allocation in Mexico. [Spanish]

Source

Salud Publica de Mexico; 2020. 62(5):607-609. 3 ref.

Publisher

Instituto Nacional de Salud Publica

Location of Publisher

Cuernavaca

Country of Publication

Mexico

Abstract

The bioethical inquiry about allocating fairly scarce health resources is not new, all countries around the world that were seriously afflicted by SARS-CoV-2 have issued triage guidelines in order to address the dilemmas raised by the pandemic. There is no question about the need to create bioethical guidelines, since its creation provides a degree of certainty that fair and ethical decisions are taken. This also prevents that decisions are made in solitary and maybe motivated by corrupted actions. In Mexico, the creation of this guideline was a proactive and preventive measure to what was unavoidable, the exponential contagion phase of the pandemical scenario caused by Covid-19. On April 30, 2020 the General Sanitary Council

published the Bioethical Guide to Allocate Scarce Resources on Critical Care Medicine in Emergency Situation. This guide has at its core that principle of utmost importance in social justice which main thesis is: "All lives have the same value". The aim of this contribution is to provide the ethical and legal principles established in the aforementioned bioethical guideline. In sum, a brief exploration of the ethical reasons that support a specific way to allocate scarce health resources is provided, as well as the foundations of the procedural part from a human rights-based approach.

Publication Type

Journal article.

<321>

Accession Number

20203450152

Author

Barrientos-Gutierrez, T.; Alpuche-Aranda, C.; Lazcano-Ponce, E.; Perez-Ferrer, C.; Rivera-Dommarco, J.

Title

Public health in the first wave: a research agenda for cooperation under COVID-19. [Spanish]

Source

Salud Publica de Mexico; 2020. 62(5):598-606. 58 ref.

Publisher

Instituto Nacional de Salud Publica

Location of Publisher

Cuernavaca

Country of Publication

Mexico

Abstract

Covid-19 represents one of the largest challenges in the recent history of public health. It is fundamental that we strengthen scientific cooperation under a common goal: to protect the health of the population. In this article, we present ideas that need urgent and collaborative efforts. We discuss the estimation of the magnitude of the epidemic through a nationwide seroprevalence panel, as well as new strategies to monitor the epidemic in real time. We also analyze the negative externalities associated to the pandemic. Finally, we present a general framework to develop ideas to come out of the lockdown, highlighting the importance of implementing sustainable and equitable structural interventions. We call for solidarity and cooperation, focusing our efforts and creativity in the resolution of the problems that currently affect Mexico and the world.

Publication Type

Journal article.

<322>

Accession Number

20203450150

Author

MacKlin, R.

Title

Allocating medical resources fairly: the CSG bioethics guide.

Source

Salud Publica de Mexico; 2020. 62(5):590-592. 5 ref.

Publisher

Instituto Nacional de Salud Publica

Location of Publisher

Cuernavaca

Country of Publication

Mexico

Abstract

On April 12, 2020, a bioethics guide for allocating scarce hospital resources during the current Covid-19 pandemic was posted on the website of the Consejo de Salubridad General(CSG) of the Government of Mexico. The guide, entitled Guia bioetica para asignacion de recursos limitados de medicina critica en situacion de emergencia, was intended as a preliminary document, but the website posting did not describe it as a first step in the process. The publicity resulted in a wide array of comments and criticisms. That first version posted on the CSG website contained an age-based criterion for breaking a tie between two or more medically eligible patients who needed of a ventilator: younger patients would have prefer-ence over older ones. The final version of the guide eliminated that criterion and instead, relied on the leading public health principle, "save the most lives", without regard to personal characteristics other than the possibility of benefitting from the scarce medical resources.

Publication Type

Journal article.

<323>

Accession Number

20203454479

Author

Li Ling; Zhang Wei; Hu Yu; Tong XunLiang; Zheng ShangEn; Yang JunTao; Kong YuJie; Ren LiLi; Wei Qing; Mei Heng; Hu CaiYing; Tao CuiHua; Yang Ru; Wang Jue; Yu YongPei; Guo Yong; Wu XiaoXiong; Xu ZhiHua; Zeng Li; Xiong Nian; Chen LiFeng; Wang Juan; Man Ning; Liu Yu; Xu HaiXia; et al.

Title

Effect of convalescent plasma therapy on time to clinical improvement in patients with severe and life-threatening COVID-19: a randomized clinical trial.

Source

JAMA, Journal of the American Medical Association; 2020. 324(5):460-470.

Publisher

American Medical Association

Location of Publisher

Chicago

Country of Publication

USA

Abstract

Importance: Convalescent plasma is a potential therapeutic option for patients with coronavirus disease 2019 (COVID-19), but further data from randomized clinical trials are needed. Background: To evaluate the efficacy and adverse effects of convalescent plasma therapy for patients with COVID-19. Design, Setting, and Participants: Open-label, multicenter, randomized clinical trial performed in 7 medical centers in Wuhan, China, from February 14, 2020, to April 1, 2020, with final follow-up April 28, 2020. The trial included 103 participants with laboratory-confirmed COVID-19 that was severe (respiratory distress and/or hypoxemia) or life-threatening (shock, organ failure, or requiring mechanical ventilation). The trial was terminated early after 103 of a planned 200 patients were enrolled. Intervention: Convalescent plasma in addition to standard treatment (n = 52) vs standard treatment alone (control) (n = 51), stratified by disease severity. Main Outcomes and Measures: Primary outcome was time to clinical improvement within 28 days, defined as patient discharged alive or reduction of 2 points on a 6-point disease severity scale (ranging from 1 [discharge] to 6 [death]). Secondary outcomes included 28-day mortality, time to discharge, and the rate of viral polymerase chain reaction (PCR) results turned from positive at baseline to negative at up to 72 hours. Results: Of 103 patients who were randomized (median age, 70 years; 60 [58.3%] male), 101 (98.1%) completed the trial. Clinical improvement occurred within 28 days in 51.9% (27/52) of the convalescent plasma group vs 43.1% (22/51) in the control group (difference, 8.8% [95% CI, -10.4% to 28.0%]; hazard ratio [HR], 1.40 [95% CI, 0.79-2.49]; P = .26). Among those with severe disease, the primary outcome occurred in 91.3% (21/23) of the convalescent plasma group vs 68.2% (15/22) of the control group (HR, 2.15 [95% CI, 1.07-4.32]; P = .03); among those with life-threatening disease the primary outcome occurred in 20.7% (6/29) of the convalescent plasma group vs 24.1% (7/29) of the control group (HR, 0.88 [95% CI, 0.30-2.63]; P = .83) (P for interaction = .17). There was no significant difference in 28-day mortality (15.7% vs 24.0%; OR, 0.59 [95% CI, 0.22-1.59]; P = .30) or time from randomization to discharge (51.0% vs 36.0% discharged by day 28; HR, 1.61 [95% CI, 0.88-2.95]; P = .12). Convalescent plasma treatment was associated with a negative conversion rate of viral PCR at 72 hours in 87.2% of the convalescent plasma group vs 37.5% of the control group (OR, 11.39 [95% CI, 3.91-33.18]; P < .001). Two patients in the convalescent plasma group experienced adverse events within hours after transfusion that improved with supportive care. Conclusion and Relevance: Among patients with severe or life-threatening COVID-19, convalescent

plasma therapy added to standard treatment, compared with standard treatment alone, did not result in a statistically significant improvement in time to clinical improvement within 28 days. Interpretation is limited by early termination of the trial, which may have been underpowered to detect a clinically important difference.

Publication Type

Journal article.

<324>

Accession Number

20203452520

Author

Kedar Sharma; Sudhir Morla; Arun Goyal; Sachin Kumar

Title

Computational guided drug repurposing for targeting 2'-O-ribose methyltransferase of SARS-CoV-2.

Source

Life Sciences; 2020. 25920 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Aims: The recent outbreak of pandemic severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) has led the world towards a global health emergency. Currently, no proper medicine or effective treatment strategies are available; therefore, repurposing of FDA approved drugs may play an important role in overcoming the situation. Materials and methods: The SARS-CoV-2 genome encodes for 2-O-methyltransferase (2'OMTase), which plays a key role in methylation of viral RNA for evading host immune system. In the present study, the protein sequence of 2'OMTase of SARS-CoV-2 was analyzed, and its structure was modeled by a comparative modeling approach and validated. The library of 3000 drugs was screened against the active site of 2'OMTase followed by re-docking analysis. The apo and ligand-bound 2'OMTase were further validated and analyzed by using molecular dynamics simulation. Key findings: The modeled structure displayed the conserved characteristic fold of class I MTase family. The quality assessment analysis by SAVES server reveals that the modeled structure follows protein folding rules and of excellent quality. The docking analysis displayed that the active site of 2'OMTase accommodates an array of drugs, which includes alkaloids, antivirals, cardiac glycosides, anticancer, steroids, and other drugs. The redocking and MD simulation analysis of the best 5 FDA approved drugs reveals that these drugs form a

stable conformation with the 2'OMTase. Significance: The results suggested that these drugs may be used as potential inhibitors for 2'OMTase for combating the SARS-CoV-2 infection.

Publication Type

Journal article.

<325>

Accession Number

20203450690

Author

Liu YongChun; Ni ShuangYing; Jiang Tao; Xing ShuBin; Zhang YuSheng; Bao XiaoLei; Feng ZeMing; Fan XiaoLong; Zhang Liang; Feng HaiBo

Title

Influence of Chinese new year overlapping COVID-19 lockdown on hono sources in Shijiazhuang.

Source

Science of the Total Environment; 2020. 745

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Nitrous acid (HONO) is an important precursor of hydroxyl radical (OH) in the atmosphere. It is also toxic to human health. In this work, HONO concentrations were measured in Shijiazhuang using a Monitor for AeRosols and Gases in ambient Air (MARGA) from December 15, 2019 to March 15, 2020, which covered the heavy air pollution season, the Chinese New Year (CNY) vocation and the Corona Virus Disease-19 (COVID-19) lockdown period. During & after CNY overlapping COVID-19 lockdown, the air quality was significantly improved because of both the emission reduction and the increase in diffusion ability of air masses. The mean HONO concentration was 2.43 +/- 1.08 ppbv before CNY, while it decreased to 1.53 +/- 1.16 ppbv during CNY and 0.97 +/- 0.76 ppbv after CNY. The lockdown during & after CNY reduced ~31% of ambient HONO along with ~62% of NO and ~36% of NO2 compared with those before CNY after the improvement of diffusion ability had been taken into consideration. Heterogeneous reaction of NO2 on ground surface dominated the nocturnal HONO sources, followed by heterogeneous reaction on aerosol surface, vehicle emission, reaction between NO and OH and emission from soil on pollution days throughout the observation. Except for elevated soil emission, other nighttime HONO sources and sinks decreased significantly during & after CNY. The relative importance of heterogeneous reaction of NO2 on

surfaces further increased because of both the decrease in vehicle emission and the increase in the heterogeneous conversion kinetics from NO2 to HONO during & after CNY.

Publication Type

Journal article.

<326>

Accession Number

20203450675

Author

Ragazzi, M.; Rada, E. C.; Schiavon, M.

Title

Municipal solid waste management during the SARS-CoV-2 outbreak and lockdown ease: lessons from Italy.

Source

Science of the Total Environment; 2020. 74549 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The literature on municipal solid waste in relation to COVID-19 is scarce. Based on the experience of Italy, the present article contributes to the strategies aimed at preventing a second virus outbreak. In fact, the mismanagement of municipal solid waste could undermine the strategies during the ease of the lockdown. During the SARS-COV-2 outbreak in Italy, there was a general decrease in the selective collection rate (-15% in one municipality with a well-developed door-to-door collection system). Delays in the publication of guidelines on waste management impacted on the safety of the operators collecting potentially infected waste. Contrarily to expectations, single-use masks and gloves do not have significant impact on waste management, accounting for <1% of the residual municipal solid waste collected annually. However, the dispersion of abandoned masks and gloves outside indoor environments is creating environmental problems. Recommendations on waste management and the protection of waste operators are discussed. Finally, guidelines on the most appropriate waste treatment are presented and analyzed. The results presented in this article show that the MSW management sector has found useful solutions to tackle COVID-19; however, these solutions are not being shared sufficiently. The case study analyzed in the present work could help define strategies for preventing or controlling similar future epidemics or pandemic episodes.

Publication Type

Journal article.

<327>

Accession Number

20203450637

Author

Corpuz, M. V. A.; Buonerba, A.; Vigliotta, G.; Zarra, T.; Ballesteros, F.; Campiglia, P.; Belgiorno, V.; Korshin, G.; Naddeo, V.

Title

Viruses in wastewater: occurrence, abundance and detection methods.

Source

Science of the Total Environment; 2020. 745many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This paper presents an updated and comprehensive review on the different methods used for detection and quantification of viruses in wastewater treatment systems. The analysis of viability of viruses in wastewater and sludge is another thrust of this review. Recent studies have mostly focused on determining the abundance and diversity of viruses in wastewater influents, in samples from primary, secondary, and tertiary treatment stages, and in final effluents. A few studies have also examined the occurrence and diversity of viruses in raw and digested sludge samples. Recent efforts to improve efficiency of virus detection and quantification methods in the complex wastewater and sludge matrices are highlighted in this review. A summary and a detailed comparison of the pre-treatment methods that have been utilized for wastewater and sludge samples are also presented. The role of metagenomics or sequencing analysis in monitoring wastewater systems to predict disease outbreaks, to conduct public health surveillance, to assess the efficiency of existing treatment systems in virus removal, and to re-evaluate current regulations regarding pathogenic viruses in wastewater is discussed in this paper. Challenges and future perspectives in the detection of viruses, including emerging and newly emerged viruses such as the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), in wastewater systems are discussed in this review.

Publication Type

Journal article.

<328>

Accession Number

20203450626

Author

Usman, M.; Muhammad Farooq; Hanna, K.

Title

Environmental side effects of the injudicious use of antimicrobials in the era of COVID-19.

Source

Science of the Total Environment; 2020. 745

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Use of antimicrobials in the treatment and prevention of COVID-19, caused by novel coronavirus SARS-CoV-2, is on the rise. The increased use of antimicrobials can have serious consequences on the environment. Antibiotics have had a reasonable role in bacterial co-infections with regards to the management of COVID-19. However, recent evidences suggest that there has been injudicious prescription of antimicrobials. Moreover, a large number of people are self-medicating with antibiotics in a misguided attempt to protect themselves from the virus. This practice is especially prevalent in developing communities. Although common soaps are effective at inactivating enveloped viruses, such as the SARS-CoV-2, use of antibacterial products bearing biocides has increased during this pandemic. Current wastewater treatment techniques are unable to offer complete elimination of antibacterial biocides. These compounds can then accumulate in different environmental compartments thus, disrupting the functioning of native microbes. These microbes are involved in the biogeochemical cycling of elements and environmental remediation. In addition, the presence of antimicrobial elements in the environment can stimulate antimicrobial resistance. Concrete actions are needed to address this issue. Development of an antimicrobial policy specific for COVID-19 is urgently needed. Investments into improving wastewater infrastructure as well as public awareness is crucial. Moreover, global monitoring programs and multidisciplinary collaborations are required to understand the environmental impact of this pandemics.

Publication Type

Journal article.

<329>

Accession Number

20203450604

Author

Chen, L. W. A.; Chien LungChang; Li Yi; Lin Ge

Title

Nonuniform impacts of COVID-19 lockdown on air quality over the United States.

Source

Science of the Total Environment; 2020. 74519 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Most of the state governments in United States (U.S.) issued lockdown or business restrictions amid the COVID-19 pandemic in March 2020, which created a unique opportunity to evaluate the air quality response to reduced economic activities. Data acquired from 28 long-term air quality stations across the U.S. revealed widespread but nonuniform reductions of nitrogen dioxide (NO2) and carbon monoxide (CO) during the first phase of lockdown (March 15-April 25, 2020) relative to a pre-lockdown reference period and historical baselines established in 2017-2019. The reductions, up to 49% for NO2 and 37% for CO, are statistically significant at two thirds of the sites and tend to increase with local population density. Significant reductions of particulate matter (PM2.5 and PM10) only occurred in the Northeast and California/Nevada metropolises where NO2 declined the most, while the changes in ozone (O3) were mixed and relatively minor. These findings are consistent with lower transportation and utility demands that dominate NO2 and CO emissions, especially in major urban areas, due to the lockdown. This study provides an insight into potential public health benefits with more aggressive air quality management, which should be factored into strategies to reopen the U.S. and global economy.

Publication Type

Journal article.

<330>

Accession Number

20203451856

Author

Narain, T. A.; Gagan Gautam; Amlesh Seth; Vikas K Panwar; Sudhir Rawal; Puneet Dhar; Amitabh Singh; Talwar, H. S.; Jiten Jaipuria; Ankur Mittal

Title

Uro-oncology in times of COVID-19: the available evidence and recommendations in the Indian scenario.

Source

Indian Journal of Cancer; 2020. 57(2):129-138.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The Corona Virus Disease-2019 (COVID-19), one of the most devastating pandemics ever, has left thousands of cancer patients to their fate. The future course of this pandemic is still an enigma, but health care services are expected to resume soon in a phased manner. This might be a long drawn process and we need to have policies in place, to be able to fight both, the SARS-CoV-2 virus and cancer, simultaneously, and emerge triumphant. An extensive literature search for impact of delay in management of various urological malignancies was carried out. Expert opinions were sought wherever there was paucity of evidence, in order to reach a consensus and come up with recommendations for directing uro-oncology services in the times of COVID-19. The panel recommends deferring treatment of patients with renal cell carcinoma by 3 to 6 months, except for those with ongoing hematuria and/or inferior vena cava thrombus, which warrant immediate surgery. Metastatic renal cell cancers should be started on targeted therapy. Low grade non-muscle invasive bladder cancers can be kept on active surveillance while high risk non-muscle invasive bladder cancers and muscle invasive bladder cancers should be treated within 3 months. Neoadjuvant chemotherapy should be avoided. Management of low and intermediate risk prostate cancer can be deferred for 3 to 6 months while high risk prostate cancer patients can be initiated on neoadjuvant androgen deprivation therapy. Patients with testicular tumors should undergo high inguinal orchiectomy and be treated according to stage without delay, with stage I patients being offered surveillance. Penile cancers should undergo penectomy, while clinically negative groins can be kept on surveillance. Neoadjuvant chemotherapy should be avoided and adjuvant therapy should be deferred. We need to tailor our treatment strategies to the prevailing present conditions, so as to fight and defeat both, the SARS-CoV-2 virus and cancer. Protection of health care workers, judicious use of available resources, and a rational and balanced outlook towards different malignancies is the need of the hour.

Publication Type

Journal article.

<331>

Accession Number

20203363804

Author

Romagosa, F.

Title

The COVID-19 crisis: opportunities for sustainable and proximity tourism. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):690-694. 15 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

In light of the health crisis arising from the COVID-19 pandemic a large number of questions are being raised about its impact, in the near and long term, on the tourism sector. There are likely to be socioeconomic changes that will have a very significant impact on tourism as we have come to know it: changes in mobility, socialization and consumption patterns, our leisure and work, and many other dimensions of our social lives. Based on the evidence we have and on recent trends in the tourism sector up until now, this paper reflects on the implications that this crisis may have for the sustainability of the sector and the challenges it faces.

Publication Type

Journal article.

<332>

Accession Number

20203433236

Author

Niyati, S.; Mandela, S. N.

Title

Impact of the pandemic on Accredited Social Health Activists (ASHA) in India. (Special Issue: The impact of the covid-19 pandemic.)

Source

Review of Agrarian Studies; 2020. 10(1):204-212. 7 ref.

Publisher

Foundation for Agrarian Studies

Location of Publisher

Kolkata

Country of Publication

India

Abstract

This article describes the situation of ASHAs during the Covid-19 pandemic. Along with the local bodies and other peripheral health workers (such as AWWs and ANMs), ASHAs play an essential role in strengthening the primary healthcare system in India. ASHAs are paid a small "honorarium" and some task-based incentive payments. The state does not recognize ASHAs as "workers" but as "volunteers/activists" and excludes them from the protection offered under various labour laws. They do not receive social security benefits such as paid leave, insurance of any kind, or maternity leave. Firstly, their work has intensified because of the additional tasks and longer commutes. Secondly, their remuneration was low and irregular, and they have also lost earnings because of the suspension of their usual incentive-based payments. Thirdly, their health was endangered because they were provided inadequate safety gear and insufficient training. Despite their essential role in delivering primary healthcare services, they had no social security benefits and were not recognized officially as health workers. A few of our respondents reported caste- and gender-based discrimination while performing Covid-19-related duties in the village. Finally, the loss of employment and earnings of their household members caused severe economic distress for ASHAs. Along with an increased work burden, they also shoulder an increased burden in domestic care work.

Publication Type

Journal article.

<333>

Accession Number

20203433234

Author

Ravi Srivastava

Title

Covid-19 and circular migration in India. (Special Issue: The impact of the covid-19 pandemic.)

Source

Review of Agrarian Studies; 2020. 10(1):164-180. 42 ref.

Publisher

Foundation for Agrarian Studies

Location of Publisher

Kolkata

Country of Publication

India

Abstract

Informal workers, especially migrant labour from rural areas working in urban and peri-urban areas, have borne the major impact of the lockdown due to the COVID-19 pandemic in India. Their loss of employment and incomes threatened access to food and non-food essential items, notably rented accommodation. In many cases, they were denied wage arrears for past work and lost their accommodation at their worksites. Circular migrants, who have a weak or no foothold in urban areas and the destinations where they work, began to leave urban centres in large numbers even before the start of the formal lockdown. After a few days of the lockdown, they emerged on the roads in large numbers out of hunger and dire desperation. The Central Government then issued new guidelines on the closure of State and district borders and pushed migrants to shelters and quarantine facilities. At the same time, the government's response, which is explored in this paper, clearly establishes that its strategy was to cancel inter-state public transport, which severely restricted the means by which migrant workers could go home. In addition, labour laws were altered in the interests of capital.

Publication Type

Journal article.

<334>

Accession Number

20203433233

Author

Alves, C.; Kvangraven, I. H.

Title

Changing the narrative: economics after COVID-19. (Special Issue: The impact of the covid-19 pandemic.)

Source

Review of Agrarian Studies; 2020. 10(1):147-163. many ref.

Publisher

Foundation for Agrarian Studies

Location of Publisher

Kolkata

Country of Publication

India

Abstract

In this article, we argue that societies' unpreparedness and inadequate responses to the Covid-19 pandemic expose weaknesses in the foundations of the dominant economic paradigm. We document how economics came to disembed itself from broader societal analysis and how this has influenced public policy in problematic ways, leading to privileging of efficiency over resilience. We then go a step further to consider the role of economic evidence in public policy more generally. Furthermore, we demonstrate how heterodox economics can enrich our understandings of our economies' weaknesses and of how to build a more resilient and just economy. We conclude that we need an explanation of the crisis that is capable of seeing the economy as more than just markets and as embedded in society; one that is capable of linking the causes and consequences of the pandemic to our systems of production and distribution.

Publication Type

Journal article.

<335>

Accession Number

20203433232

Author

Sundararaman, T.; Alok Ranjan

Title

Challenges to India's rural healthcare system in the context of COVID-19. (Special Issue: The impact of the covid-19 pandemic.)

Source

Review of Agrarian Studies; 2020. 10(1):128-146. many ref.

Publisher

Foundation for Agrarian Studies

Location of Publisher

Kolkata

Country of Publication

India

Abstract

This article explores the likely spread of Covid-19 to rural areas in India and the preparedness of Indian rural healthcare systems to meet the demands created by the pandemic. Less well recognized are the lockdown's adverse impacts on the social determinants of health and on access to essential health services. If the impact of this disease is similar to that of earlier contagious diseases like TB, it will have a greater adverse impact on socio-economically disadvantaged populations. For example, although both infection and case fatality are higher in males, 70 per cent of health and social service staff, globally, are women, putting them at a higher risk of contracting Covid-19. Also, there are other gendered effects that flow from the lockdown, rather than the virus. For instance, domestic violence increased globally during the 2014-16 Ebola and 2015-16 Zika epidemics, and is increasing during the Covid-19 pandemic as well. Although India's Covid-19 death rates may be lower than elsewhere because of India's younger population, this demographic advantage may be offset by the threat of malnutrition. One recent post-lockdown study by PRADHAN conducted in 12 States showed that 50 per cent of rural households are eating less than usual, and 68 per cent have reduced the number of food items from their meals. The workforce in health must have regular employment. It is difficult, if not impossible, to provide universal access to quality public services using only contractual or contracted-in employment. If public policy supports a meaningful expansion of public sector employment, it could be an effective way to address burgeoning poverty and unemployment as well as the lack of social security across rural India.

Publication Type

Journal article.

<336>

Accession Number

20203433231

Author

Sudha Narayanan; Shree Saha

Title

One step behind: the government of India and agricultural policy during the Covid-19 lockdown. (Special Issue: The impact of the covid-19 pandemic.)

Source

Review of Agrarian Studies; 2020. 10(1):111-127. 12 ref.

Publisher

Foundation for Agrarian Studies

Location of Publisher

Kolkata

Country of Publication

India

Abstract

This paper reviews the Indian state's response to the disruption in agri-food supply chains triggered by the lockdown as revealed in notifications pertaining to the agricultural sector. This paper contends that though many notifications and orders did not percolate to State and local-level administrative enforcement mechanisms, the greater problem was the absence of coordination between the Centre and States. Our analysis suggests that State Governments better managed the situation and in tackling many issues pertaining to agri-food supply chains, took action before the Centre did. The Centre's actions were not only a step behind but also largely uncoordinated with State initiatives. This disjunction was not addressed, and the ensuing chaos was therefore unsurprising. This experience highlights the importance of better Centre-State coordination and offers lessons for both future emergencies and structural reform in agriculture.

Publication Type

Journal article.

<337>

Accession Number

20203439946

Author

Zinsstag, J.; Schelling, E.; Crump, L.; Whittaker, M.; Tanner, M.; Stephen, C.

Title

One Health: the theory and practice of integrated health approaches.

Source

One Health: the theory and practice of integrated health approaches; 2021. (Ed.2):xv + 440 pp.

Publisher

CABI

Location of Publisher

Wallingford

Country of Publication

UK

Abstract

The second edition of this book contains 32 chapters divided into 4 main sections that discuss the theoretical foundations of One Health; methods, skills and perspectives for the practice of One Health; the application of One Health in infectious and non-infectious diseases and governance and capacity building, all of which are related to the global issues of the prevention and control of animal, plant and human diseases in the wake of drug resistance by pathogens, biodiversity loss, natural disasters, climate change and the recent COVID-19 novel coronavirus pandemic.

Publication Type

Book.

<338>

Accession Number

20203448175

Author

Rith, M.; Piantanakulchai, M.

Title

At-home activities and subjective well-being of foreign college students in Thailand during the COVID-19 pandemic outbreak.

Source

Walailak Journal of Science and Technology; 2020. 17(9):1024-1033. 19 ref.

Publisher

Institute of Research and Development, Walailak University

Location of Publisher

Nakhonsithammarat

Country of Publication

Thailand

Abstract

Sirindhorn International Institute of Technology (SIIT) is an international institute of Thammasat University (TU), located in Pathum Thani, Thailand. The courses are offered in English, and many foreign students are studying at SIIT-TU. The classes have been suspended since 16 March 2020 to slow down the COVID-19 disease spread, and the students are suggested to study online at home. The present study intends to understand the at-home activities and well-being of foreign students. A web-based survey was conducted from 22 through 23 March 2020 to record the activities and well-being of the students on 20 and 21 March 2020. Happiness and stress levels with the seven-points Likert scales were considered as the two output variables (1 = lowest and 7 = highest). The ordered probit model was applied to develop the subjective well-being models, taking into account at-home activities. The results highlighted that students who were happier were more likely to study for longer at home, but that studying for longer increases stress levels. Students who were less happy and more stressed were more likely to speak on the phone for longer, while doing exercise at home for longer increased the likelihood of happiness. This paper contributes to a better understanding of at-home activities associated with well-being of foreign students in Thailand during the COVID-19 outbreak.

Publication Type

Journal article.

<339>

Accession Number

20203448172

Author

Singkun, A.; Payodeuramae, F.; Samae, N.; Patiwikriwong, P.; Chainapong, K.; Weerakhachon, P.

Title

Social responsibility behaviors among universities students in the 3 southern border provinces of Thailand in the period of Corona Virus 2019 (COVID-19) pandemic.

Source

Walailak Journal of Science and Technology; 2020. 17(9):979-989. 16 ref.

Publisher

Institute of Research and Development, Walailak University

Location of Publisher

Nakhonsithammarat

Country of Publication

Thailand

Abstract

The objectives of this cross-sectional research were to study university students' knowledge on COVID-19 transmission, their attitude toward the measures of COVID-19 prevention and control, social responsibility behaviors, and factors association with participants' social responsibility behaviors. The population from 3 universities were 17,765 students, the sample size was at least 376 participants according to Krejcie and Morgan's formula. Purposive sampling was employed to select the target participants. Then, each student shared the questionnaire link with their friends. The self-administered questionnaires were distributed by using Google Forms. The content validity was evaluated by 3 experts; the Index of Item-Objective Congruence (IOC) of each item of all part was 1 and the coefficient of reliability knowledge and attitude were more than 0.70. The links of each Google Form was sent through Facebook and Line contact friends and asked them for distribution to others. The were 416 students who completed the questionnaires. Descriptive statistics were used to analyze the data, while for the association study, Chi-square and Binary logistic regression were used. The results disclosed that the university students had the knowledge of Covid-19 transmission at Moderate level (50.72%), and had the attitude of the state measures for Covid-19 prevention and control in High level (81.01%). Additionally, their social responsibility behaviors for COVID-19 prevention and control were in High level (57.21%). The knowledge on Covid-19 transmission was significantly associated with social responsibility behaviors among university students (p-value < 0.05) as well as their attitude on the state measures for Covid-19 prevention and control that was significantly associated with university students' social responsibility behaviors (p-value < 0.01).

Publication Type

Journal article.

<340>

Accession Number

20203448171

Author

Singkun, A.; Patiwikriwong, P.; Chainapong, K.; Weerakhachon, P.

Title

Factors associated with coronavirus 2019 (COVID-19) prevention behaviors among health sciences students of a higher education institution in Yala province, Thailand.

Source

Walailak Journal of Science and Technology; 2020. 17(9):967-978. 23 ref.

Publisher

Institute of Research and Development, Walailak University

Location of Publisher

Nakhonsithammarat

Country of Publication

Thailand

Abstract

The objectives of this research were to study the knowledge on COVID-19 infection, satisfaction of the measures on disease prevention and control, and the association between factors and COVID-19 prevention behaviors among health sciences students. Content validity and reliability of research tools were measured. Ethical for human study was approved by Research Ethic Committee. Self-administered questionnaires were used to collect the data of 184 health sciences students in April, 2020. First, a proportion by curriculum and year of study was made. Then, simple random sampling was created based on student identification. Data analysis involved descriptive statistics, Chi-square and Fisher's exact tests. The results found that participants had correct answer for COVID-19 infection (70.65 - 99.46%) and had a good knowledge level on COVID-19 infection (90.22%). Their satisfaction of the institute's measures on COVID-19 prevention and control was at High level (50.54%). COVID-19 prevention behavior among participants was at moderate level (51.63%). Age, year level, payment per week, and satisfaction level of their organization's measures on COVID-19 prevention and control were closely associated with COVID-19 prevention behavior (p - value < 0.05). These results could be used as guidelines to arrange additional activities for students in lower age and integrate health concern into the curriculum in early year of study. For further study, satisfaction theory can be applied to encourage students to have positive behaviors.

Publication Type

Journal article.

<341>

Accession Number

20203445045

Author

Lacroix, A.; Vidal, N.; Keita, A. K.; Thaurignac, G.; Esteban, A.; Nys, H. de; Diallo, R.; Toure, A.; Goumou, S.; Soumah, A. K.; Povogui, M.; Koivogui, J.; Monemou, J. L.; Raulino, R.; Nkuba, A.; Foulongne, V.; Delaporte, E.; Ayouba, A.; Peeters, M.

Title

Wide diversity of coronaviruses in frugivorous and insectivorous bat species: a pilot study in Guinea, West Africa.

Source

Viruses; 2020. 12(8)67 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Zoonoses can constitute a threat for public health that can have a global importance, as seen with the current COVID-19 pandemic of severe acute respiratory syndrome coronavirus (SARS-CoV2). Bats have been recognized as an important reservoir of zoonotic coronaviruses (CoVs). In West Africa, where there is a high diversity of bat species, little is known on the circulation of CoVs in these hosts, especially at the interface with human populations. In this study, in Guinea, we tested a total of 319 bats belonging to 14 genera and six families of insectivorous and frugivorous bats across the country, for the presence of coronaviruses. We found CoVs in 35 (11%) of the tested bats - in three insectivorous bat species and five fruit bat species that were mostly captured close to human habitat. Positivity rates varied from 5.7% to 100%, depending on bat species. A wide diversity of alpha and beta coronaviruses was found across the country, including three sequences belonging to SarbeCoVs and MerbeCoVs subgenera known to harbor highly pathogenic human coronaviruses. Our findings suggest that CoVs are widely spread in West Africa and their circulation should be assessed to evaluate the risk of exposure of potential zoonotic CoVs to humans.

Publication Type

Journal article.

<342>

Accession Number

20203445011

Author

Korner, R. W.; Majjouti, M.; Alcazar, M. A. A.; Mahabir, E.

Title

Of mice and men: the coronavirus MHV and mouse models as a translational approach to understand SARS-CoV-2.

Source

Viruses; 2020. 12(8)many ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The fatal acute respiratory coronavirus disease 2019 (COVID-19) is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Since COVID-19 was declared a pandemic by the World Health Organization in March 2020, infection and mortality rates have been rising steadily worldwide. The lack of a vaccine, as well as preventive and therapeutic strategies, emphasize the need to develop new strategies to mitigate SARS-CoV-2 transmission and pathogenesis. Since mouse hepatitis virus (MHV), severe acute respiratory syndrome coronavirus (SARS-CoV), and SARS-CoV-2 share a common genus, lessons learnt from MHV and SARS-CoV could offer mechanistic insights into SARS-CoV-2. This review provides a comprehensive review of MHV in mice and SARS-CoV-2 in humans, thereby highlighting further translational avenues in the development of innovative strategies in controlling the detrimental course of SARS-CoV-2. Specifically, we have focused on various aspects, including host species, organotropism, transmission, clinical disease, pathogenesis, control and therapy, MHV as a model for SARS-CoV and SARS-CoV-2 as well as mouse models for infection with SARS-CoV and SARS-CoV-2. While MHV in mice and SARS-CoV-2 in humans share various similarities, there are also differences that need to be addressed when studying murine models. Translational approaches, such as humanized mouse models are pivotal in studying the clinical course and pathology observed in COVID-19 patients. Lessons from prior murine studies on coronavirus, coupled with novel murine models could offer new promising avenues for treatment of COVID-19.

Publication Type

Journal article.

<343>

Accession Number

20203449352

Author

Dobrovolny, H. M.

Title

Quantifying the effect of remdesivir in rhesus macaques infected with SARS-CoV-2.

Source

Virology; 2020. 550:61-69. many ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

The world is in the midst of a pandemic caused by a novel coronavirus and is desperately searching for possible treatments. The antiviral remdesivir has shown some effectiveness against SARS-CoV-2 in vitro and in a recent animal study. We use data from a study of remdesivir in rhesus macaques to fit a viral kinetics model in an effort to determine the most appropriate mathematical descripton of the effect of remdesivir. We find statistically significant differences in the viral decay rate and use this to inform a possible mathematical formulation of the effect of remdesivir. Unfortunately, this model formulation suggests that the application of remdesivir will lengthen SARS-CoV-2 infections, putting into question its potential clinical benefit.

Publication Type

Journal article.

<344>

Accession Number

20203449339

Author

Kabad, J. F.; Noal, D. da S.; Passos, M. F. D.; Melo, B. D.; Pereira, D. R.; Serpeloni, F.; Souza e Souza, M.; El-Kadri, M. R.; Lima, C. C.; Magrin, N. P.; Freitas, C. M.

Title

The experience with volunteer and collaborative work in mental health and psychosocial care during the COVID-19 pandemic.

Source

Cadernos de Saude Publica; 2020. 36(9)7 ref.

Publisher

Escola Nacional de Saude Publica

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Brazil is the country of the world with the second most COVID-19 cases and deaths, and the pandemic's impacts pose multiple challenges for mental health. This paper reports on experience with the emergency organization of the volunteer and collaborative Working Group on mental health and psychosocial care aimed at producing rapid responses for health services in the context of COVID-19. The study involved the identification and systematization of current evidence in the scientific literature on mental health and psychosocial care in public health emergencies and pandemics, with the establishment of a network involving 117 researchers and 25 institutions, and the organization of themes for the elaboration of materials, referenced on the response phases in public health emergencies and pandemics. In less than 60 days, 18 technical documents were produced, ranging from services organization and management for different vulnerable groups. The materials became references in health institutions and services. A national course on mental health and psychosocial care in COVID-19 was also organized, with more than 60,000 people registered. The experience provides food for thought and a contribution for future experiences involving knowledge translation in the current pandemic and in future public health emergencies and pandemics, with the following: (1) combination of volunteer and collaborative work involving professionals with experience in the organization of services and care in past events; (2) reliance on institutional support and resources; (3) speed and credibility of work involving the establishment of networks of professionals and institutions; and (4) responses to the urgent needs with the capacity to shape paths for care in mental health and psychosocial care.

Publication Type

Journal article.

<345>

Accession Number

20203449329

Author

Oliveira, R. G. de; Cunha, A. P. da; Gadelha, A. G. dos S.; Carpio, C. G.; Oliveira, R. B. de; Correa, R. M.

Title

Racial inequalities and death on the horizon: COVID-19 and structural racism.

Source

Cadernos de Saude Publica; 2020. 36(9)many ref.

Publisher

Escola Nacional de Saude Publica

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

COVID-19 incidence and mortality in countries with heavy social inequalities differ in population terms. In countries like Brazil with colonial histories and traditions, the social markers of differences are heavily anchored in social and racial demarcation, and the political and social dynamics and processes based on structural racism act on this demarcation. The pandemic's actual profile in Brazil clashes with narratives according to which COVID-19 is a democratic pandemic, an argument aligned with the rhetoric of racial democracy that represents a powerful strategy aimed at maintaining the subaltern place of racialized populations such as indigenous peoples and blacks, as a product of modern coloniality. This essay focuses on the pandemic's profile in the Brazilian black population, in dialogue with decolonial contributions and critical readings of racism. The authors discuss government responses and COVID-19 indicators according to race/color, demonstrating the maintenance of historical storylines that continue to threaten black lives. The article also discusses the importance of local resistance movements, organized in the favelas, precarious urban spaces underserved by the State and occupied by black Brazilians.

Publication Type

Journal article.

<346>

Accession Number

20203449326

Author

Cortinez-O'ryan, A.; Moran, M. R.; Rios, A. P.; Anza-Ramirez, C.; Slovic, A. D.

Title

Could severe mobility and park use restrictions during the COVID-19 pandemic aggravate health inequalities? Insights and challenges from Latin America. (Thematic Section: COVID-19 - public health contributions.)

Source

Cadernos de Saude Publica; 2020. 36(9)25 ref.

Publisher

Escola Nacional de Saude Publica

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Measures' severity and extension need cautious weighting so they yield more benefits than the health risks they pose, particularly amongst vulnerable populations that already accumulate greater health risks. Thoughtful strategies need to be built to allow vulnerable population to perform safe outdoors physical activity during the confinement and re-opening stages. These need to be accompanied by a preparation of existing spaces such as parks, the provision of new additional spaces, and a strong communicational strategy to increase awareness and encourage responsible behaviors. The aim of the article was to examine the role of parks in aggravating health inequalities in the time of COVID-19. Confinement measures have been in place for prolonged periods in our region and might be reimposed in the future in Latin America and other regions if spikes recur. Understanding and quantifying their effects on health disparities is critical to better inform decision making and public policy development regarding restrictions that affect physical activity and psychological restoration. This will also enhance preparedness for eventual future pandemics. The lagging stage of the pandemic in Latin America provides an opportunity to adopt responsible re-opening models and learn from successful phased strategies implemented by other countries. These require cautious adaptations according to the local cultural aspects and the physical and social environmental features of our countries. Adopting timely measures to regulate safe park use and outdoor recreation in Latin American cities is critical and should be a public health priority.

Publication Type

Journal article.

<347>

Accession Number

20203443173

Author

Kim Tark; Choi MinJoo; Kim SunBean; Kim JinYong; Lee Jacob; Oh HongSang; Lee Heeyoung; Yoon YoungKyung

Title

Strategical preparedness and response actions in the healthcare system against coronavirus disease 2019 according to transmission scenario in Korea.

Source

Infection and Chemotherapy; 2020. 52(3):389-395. 12 ref.

Publisher

Korean Society of Infectious Diseases and Korean Society of Chemotherapy

Location of Publisher

Seoul

Country of Publication

Korea Republic

Abstract

The dynamic nature of coronavirus disease 2019 (COVID-19) pandemic requires us to be efficient and flexible in resource utilization. The strategical preparedness and response actions of the healthcare system are the key component to contain COVID-19 and to decrease its case fatality ratio. Depending on the epidemiological situation, each medical institution should systematically share the responsibility for patient screening, disposition and treatment according to clinical severity. To overcome fast-paced COVID-19 pandemic, the government should be rapidly ready and primed for action according to the specific transmission scenario.

Publication Type

Journal article.

<348>

Accession Number

20203443169

Author

Chang Euijin; Choi JaeSung; Park TaeYun; Kim SeungBin; Ko SuHui; Kwon YangSun; Kim EunJin; Song Hyunju; Noh HwaKyung; Park SangWon

Title

A universal screening strategy for SARS-CoV-2 infection in intensive care units: Korean experience in a single hospital.

Source

Infection and Chemotherapy; 2020. 52(3):352-359. 14 ref.

Publisher

Korean Society of Infectious Diseases and Korean Society of Chemotherapy

Location of Publisher

Seoul

Country of Publication

Korea Republic

Abstract

Background: Severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2) infection is not differentiated clinically from other respiratory infections, and intensive care units (ICUs) are vulnerable to in-hospital transmission due to interventions inducing respiratory aerosols. This study evaluated the effectiveness of universal SARS-CoV-2 screening in ICUs in terms of screened-out cases and reduction in anxiety of healthcare personnel (HCP). Materials and Methods: This prospective single-armed observational study was conducted in 2 ICUs of a single hospital. The number of patients diagnosed with SARS-CoV-2 infection by the screening program and healthcare workers in ICUs that visited the SARS-CoV-2 screening clinic or infection clinic were investigated. Results: During the 7-week study period, no positive screening case was reported among a total of 142 patients. Among 86 HCP in the ICUs, only 2 HCP sought medical consultation for SARS-CoV-2 infection during the initial 2 weeks. Conclusion: A universal screening program for SARS-CoV-2 infection in ICUs with the coordination of other countermeasures in the hospital was reasonably effective in preventing in-hospital transmission in a pandemic situation and making clinical practices and HCP stable.

Publication Type

Journal article.

<349>

Accession Number

20203443163

Author

Vaduganathan, M.; Meijgaard, J. van; Mehra, M. R.; Joseph, J.; O'donnell, C. J.; Warraich, H. J.

Title

Prescription fill patterns for commonly used drugs during the COVID-19 pandemic in the United States.

Source

JAMA, Journal of the American Medical Association; 2020. 323(24):2524-2526. 5 ref.

Publisher

American Medical Association

Location of Publisher

Chicago

Country of Publication

USA

Abstract

The aim of the article was to evaluate prescription patterns of these therapies, along with other commonly used drugs for reference, in the United States during the COVID-19 pandemic. The study hypothesized that the prescription of hydroxychloroquine/chloroquine and azithromycin would exceed historical estimates while ACE inhibitor/ARB use would be reduced. Fills for all drugs except amoxicillin and hydrocodone-acetaminophen peaked during the week of March 15 to March 21, 2020, followed by subsequent declines. During this week, hydroxychloroquine/chloroquine fills increased from 2208 in 2019 to 45,858 prescriptions for fewer than 28 tablet fills (+1977.0% increase), 70,472 to 196,606 prescriptions for 28 to 60 tablet fills (+179.0%), and 44,245 to 124,833 prescriptions for more than 60 tablet fills (+182.1%). At study end, these increases remained sustained for fewer than 28 tablet fills (+848.4%) and 28 to 60 tablet fills (+53.3%), while more than 60 tablet fills of hydroxychloroquine/chloroquine were below 2019 estimates (-64.0% decrease). Overall, there were 483-425 excess fills of hydroxychloroquine/chloroquine during the 10-week period in 2020 compared with 2019. The sharpest declines at study end were noted for amoxicillin (-64.4%), azithromycin (-62.7%), and hydrocodone-acetaminophen (-21.8%); however, cardiometabolic therapies remained stable or declined slightly (amlodipine [-9.2%], atorvastatin [-9.1%], lisinopril [-15.3%], and losartan [+1.7%]) compared with 2019 estimates.

Publication Type

Journal article.

<350>

Accession Number

20203446237

Author

Bamka, W.; Komar, S.; Melendez, M.; Infante-Casella, M.

Title

"Ask the ag agent" weekly webinar series: agriculture-focused response to the COVID-19 pandemic.

Source

Journal of Extension; 2020. 58(4)8 ref.

Publisher

Extension Journal Inc

Location of Publisher

West Lafayette

Country of Publication

USA

Abstract

The COVID-19 pandemic has restricted traditional delivery of Extension programs. Our group of Rutgers agricultural agents responded by developing a weekly webinar series to remotely continue agricultural consultations and provide an open forum for farmers. Pandemic-related topics included farm labor, compliance with state executive orders, supply-chain disruptions, livestock processing, farmer assistance programs, and other issues. Participation from 258 farmers, agricultural agencies, and other groups resulted in effective networking and timely delivery of information to the agriculture industry. By using available online tools, we were able to efficiently deliver Extension programming and resources to agricultural producers and industry partners. Our efforts may be informative for others as needs related to the pandemic evolve.

Publication Type

Journal article.

<351>

Accession Number

20203449304

Author

Arun Gaur; Meena, S. K.; Ramavtar Bairwa; Daulat Meena; Rajan Nanda; Sharma, S. R.; Rajawat, G. S.

Title

Clinico-radiological presentation of COVID-19 patients at a tertiary care center at Bhilwara Rajasthan, India.

Source

Journal of the Association of Physicians of India; 2020. 68(July):29-33. 23 ref.

Publisher

Association of Physicians of India

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: COVID-19 has now become a pandemic. From Wuhan, China, in December 2019 to European countries, USA and now it seems to gain a strong foothold in India. The objective of this work is to report the initial experience with demographic and clinical features, and management of COVID-19 patients admitted in medical college Bhilwara, India. Methods: This is a descriptive case series of first 26 COVID-19 patients. Demographical, clinical, laboratory, and radiological characteristics and treatment and outcomes data were obtained with data collection forms and history given by 26 COVID-19 patients. Results and

Discussion: During this study 26 COVID-19 positive patients were admitted in MG Hospital, Bhilwara. Male patients were 61.54% and majority (88.46%) were below 60 years of age. Approximately 30.76% patients were asymptomatic. Fever was the most common symptom (61.54%) followed by sore throat (53.84%), cough (42.30%) myalgia (38.46%)and dyspnea(23.07%). Six patients (23.07%) of total 26 had comorbidities. Leucopenia was seen in in 9 (34.61%) and leukocytosis was seen in 2 patient. Ten patient (38.46%) out of 26 shown increased lymphocyte/neutrophil ratio. Chest X- ray was normal in 20 patients (76.92%). Abnormalities in chest CT were detected among 10 (38.46%) patients. Typical findings were bilateral multifocal patchy peripheral subsegmental areas of consolidation more towards middle and lower zones and bilateral ground glass opacities involving multiple segments. Oseltamivir and chloroquine were given to all 26 patients. Azithromycin was given in 24 patients. Mean duration of conversion of COVID-19 patients was 6.83 days. All discharged patients advised home quarantine for 14 days as per guidelines. Conclusion: Patients often present without fever, and many may not have abnormal radiologic findings. Patients with older age and associated comorbid conditions (COPD and diabetes) seem to have greater risk for lung injury.

Publication Type

Journal article.

<352>

Accession Number

20203449303

Author

Sujeet Jha; Aakriti Soni; Samreen Siddiqui; Nitish Batra; Nikita Goel; Sneha Dey; Sandeep Budhiraja; Rahul Naithani

Title

Prevalence of Flu-like symptoms and COVID-19 in healthcare workers from India.

Source

Journal of the Association of Physicians of India; 2020. 68(July):27-29. 11 ref.

Publisher

Association of Physicians of India

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: The current COVID-19 pandemic is unprecedented. As the numbers expand exponentially, a paucity of data regarding health care workers (HCWs), who are at the forefront of this disaster, exists. Hence we decided to conduct a study amongst the HCWs to determine the prevalence and risk factor

stratification. Methods: This was an online questionnaire-based survey of healthcare workers conducted at Max Super Speciality Hospital, Saket, New Delhi, India from 23rd March to 30th April 2020. Data on flu-like symptoms, travel history, posting in high-risk or low risk zones, and prophylactic drugs was collected. Results: Out of the 18000 HCWs who were approached 4403 responded and adequate data of 3667 was available for analysis. 14.7% had flu-like symptoms. 1.8% (20/1113) of the participants tested were positive for the virus. HCWs posted in the high-risk zones had more symptoms than those working in low-risk zones (169/539, 31.4% vs 679/3128, 21.7%), p<0.001; but no difference in COVID-19 positivity rates (p=0.849). Symptomatic HCWs had higher positivity (10/193, 5.2%) than the asymptomatic ones (10/920, 1.1%), p=0.001. HCQ was taken by 755/1113 (67.8%) people and 14 (1.9%) of these reported positive for the virus. Conclusion: This is the first study on healthcare workers from India to the best of our knowledge. Our findings suggest that posting in a high-risk zone with adequate PPE does not pose higher risk to the HCWs. Moreover, HCQ as a prophylactic has no use.

Publication Type

Journal article.

<353>

Accession Number

20203444313

Author

Mi BoBin; Xiong Yuan; Lin Ze; Panayi, A. C.; Chen Lang; Liu GuoHui

Title

COVID-19 orthopaedic safe care toolset: guidelines for the diagnosis and management of patients with fracture and COVID-19.

Source

Journal of Bone and Joint Surgery, American volume; 2020. 102(13):1116-1122. 13 ref.

Publisher

Journal of Bone and Joint Surgery Incorporated

Location of Publisher

Boston

Country of Publication

USA

Abstract

The SARS-CoV-2 (severe acute respiratory syndrome-coronavirus 2) was reported in Wuhan, Hubei Province, People's Republic of China, and, subsequently, in other provinces and regions across the People's Republic of China and >212 countries. COVID-19, the disease caused by this coronavirus, was declared a worldwide pandemic by the World Health Organization (WHO). The incidence of patients with fracture who are also positive for COVID-19 is on the rise. The diagnosis and management of such patients can be

complicated as their clinical characteristics are heterogeneous. Furthermore, a surgical procedure can be particularly challenging given that the use of high-speed devices results in aerosol generation. In this study, we develop and propose globally applicable guidelines to fill this knowledge gap and we identify and propose the necessary protective strategies for medical personnel in an orthopaedic emergency department and in the inpatient wards. We also introduce diagnostic criteria, surgical complication management, and follow-up strategies for infected patients. These guidelines may be helpful to decrease the infection rate of orthopaedic trauma personnel and to provide diagnosis and treatment therapy for patients with fracture and COVID-19.

Publication Type

Journal article.

<354>

Accession Number

20203444306

Author

Liu, M.; Caputi, T. L.; Dredze, M.; Kesselheim, A. S.; Ayers, J. W.

Title

Internet searches for unproven COVID-19 therapies in the United States.

Source

JAMA Internal Medicine; 2020. 180(8):1116-1118.

Publisher

American Medical Association

Location of Publisher

Chicago

Country of Publication

USA

Abstract

This article examined internet searches indicative of shopping for chloroquine and hydroxychloroquine. Demand for chloroquine and hydroxychloroquine increased substantially following endorsements by high-profile figures and remained high even after a death attributable to chloroquine-containing products was reported. In times of public health crises, therapies not supported by adequate evidence-such as would lead to US Food and Drug Administration approval-should not be touted by public figures. Endorsements can lead to unsupervised use of the products with dangerous consequences to the people who take them, and hoarding of these medications can result in shortages for those who require them for legitimate health reasons. These negative consequences are magnified in this circumstance because chloroquine-containing products are commercially available to the public through such sites as Amazon. Findings about the clinical efficacy of chloroquine and hydroxychloroquine were inconclusive at the time these drugs were promoted.

Until such time as these or other drugs are found to be effective for COVID-19 treatment, regulatory agencies and public-facing companies should be actively mitigating the negative consequences of this misinformation. The US Food and Drug Administration should warn the public against procuring unapproved therapies unless prescribed. Google responded to COVID-19 by integrating an educational website into search results related to the outbreak, and this could be expanded to include searches for unapproved COVID-19 therapies. Similarly, retailers must establish warnings or withhold products that might be linked to use for COVID-19 treatment, as was exemplified by eBay's removing chloroquine sales from its site.

Publication Type

Journal article.

<355>

Accession Number

20203440550

Author

Zhu, Q.; Krikke, H.

Title

Managing a sustainable and resilient perishable food supply chain (PFSC) after an outbreak.

Source

Sustainability; 2020. 12(12)36 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

It is a challenging task to manage a perishable food supply chain (PFSC), due to the product's short lifetime and to demand uncertainty. Even worse is the fact that, because of the multitude of participating stakeholders in production, distribution, and retailing, the PFSC becomes complex and thus particularly vulnerable to crises. Product shortages that result from an outbreak like COVID-19 often cause customers to seek alternative sources of supply, possibly with a larger purchasing amount (i.e., hoarding), leading to even severer demand uncertainty after the shortage period. To manage a sustainable and resilient PFSC after an outbreak, supply chain partners need to share and use the right information to facilitate decision making. A system dynamics simulation was thus applied to study a cheese supply chain with three tiers. Three scenarios that cause product shortages were simulated. Seven balanced feedback loops and two reinforced feedback loops were identified from the simulation model. Through the feedback loop

dominance analysis, we identified four dominant loops that facilitate the generation of endogenous demand. In order to alleviate the negative influence of endogenous demand, it is suggested that the information sharing that causes endogenous demand be stopped and a loosely coupled strategy to support decision making utilized.

Publication Type

Journal article.

<356>

Accession Number

20203440549

Author

Pulighe, G.; Lupia, F.

Title

Food first: COVID-19 outbreak and cities lockdown a booster for a wider vision on urban agriculture.

Source

Sustainability; 2020. 12(12)26 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 emergency has revealed the extreme fragility of large cities to unexpected complex global risks and crises. City lockdown has led to increasing awareness of the vital importance of food availability for citizens. The combined effect of border closure and movement restrictions increased food losses and export costs, especially for vegetables and perishable goods exposing non-self-sufficient countries. We claim the idea that urban agriculture in developed countries should be fostered with emerging growing practices and edible green infrastructures, such as vertical farming, hydroponics, aeroponic, aquaponic, and rooftop greenhouses. Notwithstanding the limitations of traditional urban farming activities, innovative and disruptive solutions and short food supply chains of fresh agricultural products might play a positive role in lessening uncertainties from global systemic risks.

Publication Type

Journal article.

<357>

Accession Number

20203441703

Author

Bianco, A.; Buckley, A. B.; Overbey, J.; Smilen, S.; Wagner, B.; Dinglas, C.; Loudon, H.; Garely, A.; Brodman, M.; Stone, J.

Title

Testing of patients and support persons for coronavirus disease 2019 (COVID-19) infection before scheduled deliveries.

Source

Obstetrics & Gynecology (New York); 2020. 136(2):283-287. 23 ref.

Publisher

Lippincott Williams & Wilkins

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

OBJECTIVE: To evaluate the rate of coronavirus disease 2019 (COVID-19) infection with the use of universal testing in our obstetric population presenting for scheduled deliveries, as well as the concordance or discordance rate among their support persons during the initial 2-week period of testing. Additionally, we assessed the utility of a screening tool in predicting severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) testing results in our cohort. METHODS: This was an observational study in which all women who were scheduled for a planned delivery within the Mount Sinai Health system from April 4 to April 15, 2020, were contacted and provided with an appointment for themselves as well as their support persons to undergo COVID-19 testing 1 day before their scheduled delivery. Both the patients and the support persons were administered a standardized screen specific for COVID-19 infection by telephone interview. Those support persons who screened positive were not permitted to attend the birth. All patients and screen-negative support persons underwent SARS-CoV-2 testing. RESULTS: During the study period, 155 patients and 146 support persons underwent SARS-CoV-2 testing. The prevalence of asymptomatic COVID-19 infection was 15.5% (CI 9.8-21.2%) and 9.6% (CI 4.8-14.4%) among patients and support persons, respectively. The rate of discordance among tested pairs was 7.5%. Among patients with COVID-19 infection, 58% of their support persons also had infection; in patients without infection, fewer than 3.0% of their support persons had infection. CONCLUSION: We found that more than 15% of asymptomatic maternity patients tested positive for SARS-CoV-2 infection despite having screened negative with the use of a telephone screening tool. Additionally, 58% of their asymptomatic, screen-negative support persons also tested positive for SARS-CoV-2 infection. Alternatively, testing of the support persons of women who had tested negative for COVID-19 infection had a low yield for positive results. This has important implications for obstetric and newborn care practices as well as for health care professionals.

Publication Type

Journal article.

<358>

Accession Number

20203426769

Author

Zhang Ni; Shi TianQin; Zhong Heng; Guo YiJia

Title

COVID-19 prevention and control public health strategies in Shanghai, China.

Source

Journal of Public Health Management and Practice; 2020. 26(4):334-344. 32 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Context: COVID-19 was characterized as a pandemic by the World Health Organization on March 11, 2020. This research aims to analyze the public health strategies to prevent and control COVID-19 in Shanghai, China, and provide recommendations for public health policy and interventions in the United States. Program: Based on the Social-Ecological Model, this research collected information for public health strategies from the Shanghai Municipal Health Commission and various Chinese websites. Evaluation: The daily confirmed new cases of COVID-19 decreased from 27 to 0 in 53 days since the first case of COVID-19 was confirmed in Shanghai on January 20, 2020. Discussion: The pattern of daily confirmed new cases suggests the effectiveness of public health strategies. This research also provides recommendations on the development and improvements of public health strategies in the U.S. by acknowledging the differences in political and social systems between the two countries.

Publication Type

Journal article.

<359>

Accession Number

20203439279

Author

Li ChengLong; Hou XiaoTong; Tong ZhaoHui; Qiu HaiBo; Li YiMin; Li Ang

Title

Extracorporeal membrane oxygenation programs for COVID-19 in China.

Source

Critical Care; 2020. 24(317):(8 June 2020). 6 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

This article aimed at investigating the program organization and the potential factors associated with outcomes during the pandemic. The large national survey provided detailed information regarding the organization of ECMO programs for COVID-19 in China. To improve outcomes with ECMO during the pandemic, it is key to provide information about ECMO experience, patient selection, and resource allocation to ECMO programs throughout the world.

Publication Type

Correspondence.

<360>

Accession Number

20203435919

Author

Doi, K.; Ikeda, M.; Hayase, N.; Moriya, K.; Morimura, N.

Title

Nafamostat mesylate treatment in combination with favipiravir for patients critically ill with COVID-19: a case series.

Source

Critical Care; 2020. 24(392):(3 July 2020). 5 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

This article aims to report the antiviral efficacy of nafamostat with favipravir. Nafamostat mesylate has been clinically used for the treatment of acute pancreatitis and disseminated intravascular coagulation in Japan. By intravenous administration, its blood concentrations are maintained at 30-240 nM, which are sufficient to block the virus entry. An anti-influenza A H1N1 virus drug favipiravir exhibits antiviral activity against other RNA viruses and therefore is expected to have antiviral action against SARS-CoV-2. This drug has been approved in Japan for novel influenza virus disease. This is the first report on nafamostat mesylate treatment in combination with favipiravir against Covid-19. In comparison with previous reports about critically ill patients with Covid-19, the case series also demonstrated a high number of patients (8 [73%]) who required MV requirement; however, the mortality rate was low (1 patient [9%]). Patients with severe Covid-19 often suffer from microvascular thrombosis and hemorrhage with extensive alveolar and interstitial inflammation in the lung. Nafamostat mesylate might thus be effective, because it inhibits intravascular coagulopathy, in addition to directly targeting the virus entry in host epithelial cells. In conclusion, nafamostat mesylate therapy in combination with favipiravir may allow blockade of virus entry and replication, as well as inhibition of pathogenic host response, i.e., hyper-coagulopathy. Although the number of patients in this case series was very small, this low mortality rate suggests that combination treatment of favipiravir and nafamostat mesylate may be effective for critically ill Covid-19 patients. A clinical trial for the combination treatment of nafamostat mesylate and favipiravir against Covid-19 will be initiated in Japan.

Publication Type

Journal article.

<361>

Accession Number

20203446065

Author

Song, W.; Sawafta, F. J.; Ebrahem, B. M.; Jebril, M. A.

Title

Public attitude towards quarantine during the COVID-19 outbreak.

Source

Epidemiology and Infection; 2020. 148(e220)27 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Due to the outbreak of the deadly coronavirus disease in 2019 (COVID-19), Wuhan was on lockdown for more than 60 days by the state government. This study investigated the perceptions and attitudes of the public on quarantine as a practical approach to halting the spread of COVID-19. An online survey was conducted via WeChat between 10 January 2020 and 10 March 2020 on the general population in Hubei province at the height of the COVID-19 outbreak. In total, 549 respondents participated in the survey. Results revealed that the public displayed significantly strong support towards quarantine throughout the outbreak period, apart from locking people up and using imprisonment legal sanctions against those who failed to comply with the stringent regulations. The support exerted by the public stemmed from the execution of authorised officers to protect the public interest and provision of psychosocial support for those affected. In situations where quarantine could not be imposed, public health policy-makers and government officials should implement an extensive system of psychosocial support to safeguard, instruct and inform frontline public health workers. The public should also be enlisted in an open conversation concerning the ethical utility of restrictive values during the COVID-19 outbreak.

Publication Type

Journal article.

<362>

Accession Number

20203447279

Author

Ding YuBin; Xu JunLing; Huang SiSi; Li PeiPei; Lu CuiZhen; Xie ShengHua

Title

Risk perception and depression in public health crises: evidence from the COVID-19 crisis in China.

Source

International Journal of Environmental Research and Public Health; 2020. 17(16)51 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Background: Scant attention has been paid to how risk perceptions of public health crises may affect people's mental health. Aims: The aims of this study are to (1) construct a conceptual framework for risk perception and depression of people in public health crises, (2) examine how the mental health of people in the crisis of Coronavirus Disease 2019 (COVID-19) is affected by risk perception and its associated factors, including distance perception of the crisis and support of prevention and control policies, and (3) propose policy recommendations on how to deal with psychological problems in the current COVID-19 crisis. Methods: Online questionnaire survey was implemented. A total of 6373 people visited the questionnaire online, 1115 people completed the questionnaire, and the number of valid questionnaires was 1081. Structural equation modeling was employed for data analysis. Results: Risk perception and its associated factors significantly affect the mental health of people in public health crises. Specifically, (1) distance perception of public health crises is negatively associated with depression among people, (2) affective risk perception is positively associated with depression of people in public health crises, (3) cognitive risk perception is negatively associated with depression of people in public health crises, and (4) support of prevention and control policies is negatively associated with depression of people in public health crises. Conclusion: The findings of this study suggest that risk perception plays an important role in affecting the mental health of people in a public health crisis. Therefore, health policies aiming to improve the psychological wellbeing of the people in a public health crisis should take risk perception into consideration.

Publication Type

Journal article.

<363>

Accession Number

20203447263

Author

Pu Bo; Zhang Lu; Tang ZhiWei; Qiu YanJun

Title

The relationship between health consciousness and home-based exercise in China during the COVID-19 pandemic.

Source

International Journal of Environmental Research and Public Health; 2020. 17(16)many ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

During the COVID-19 pandemic, people have reduced the frequency of going out, and need to engage in health behaviors at home. Home-based exercise has aroused people's attention. This paper aims to examine the influencing mechanism of health consciousness on home-based exercise during the COVID-19 pandemic. A questionnaire method was used to select 449 Chinese respondents on an online platform; the questionnaire includes a health consciousness scale, health life goal scale, perceived behavioral control scale, and the home-based exercise scale. A T-test was used to conduct differential analysis. The hierarchical regression analysis method was used to examine the relationship between health consciousness and home-based exercise, and the Hayes' SPSS PROCESS macro was used to test mediating effect. The results show that there are significant differences in home-based exercise with respect to gender, age, and marital status. Health consciousness has a significant positive effect on home-based exercise. Perceived behavioral control acts as the mediator between health consciousness and home-based exercise. Health consciousness can influence home-based exercise through health life goals and perceived behavioral control in turn. This paper takes a home-based exercise survey, and expands the theoretical research of home-based exercise. The findings suggest that people should pay attention to promoting the transformation of health consciousness into home-based exercise. It provides enlightenment for people to adopt health behaviors during the COVID-19 pandemic.

Publication Type

Journal article.

<364>

Accession Number

20203444152

Author

Steensels, D.; Oris, E.; Coninx, L.; Nuyens, D.; Delforge, M. L.; Vermeersch, P.; Heylen, L.

Title

Hospital-wide SARS-CoV-2 antibody screening in 3056 staff in a tertiary center in Belgium.

Source

JAMA, Journal of the American Medical Association; 2020. 324(2):195-197. 4 ref.

Publisher

American Medical Association

Location of Publisher

Chicago

Country of Publication

USA

Abstract

This article investigated the prevalence of antibodies against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) among hospital staff. All 4125 staff were invited and 3056 (74%) participated (306 physicians, 1266 nurses, 292 paramedical staff, 555 technical staff, 445 administrative staff, and 192 others, including students and volunteers). At least one-third of those not tested were individuals not at work during the period. Overall, 197 staff had IgG antibodies for SARS-CoV-2. Age and sex were not statistically significantly different among staff with or without antibodies. Being involved in clinical care, having worked during the lockdown phase, being involved in care for patients with COVID-19, and exposure to COVID-19-positive coworkers were not statistically significantly associated with seroprevalence. In contrast, having a household contact with suspected or confirmed COVID-19 was associated with antibody positivity (81/593 [13.7%] with household contacts vs 116/2435). This hospital-wide screening study for SARS-CoV-2 antibodies among hospital staff, neither being directly involved in clinical care nor working in a COVID-19 unit increased the odds of being seropositive, while having a suspected COVID-19 household contact did. The high availability of PPE, high standards of infection prevention, and polymerase chain reaction screening in symptomatic staff, coupled with contact tracing and quarantine, might explain a relatively low seroprevalence.

Publication Type

Journal article.

<365>

Accession Number

20203444151

Author

Rasmussen, S. A.; Jamieson, D. J.

Title

Caring for women who are planning a pregnancy, pregnant, or postpartum during the COVID-19 pandemic.

Source

JAMA, Journal of the American Medical Association; 2020. 324(2):190-191. 9 ref.

Publisher

American Medical Association

Location of Publisher

Chicago

Country of Publication

USA

Abstract

Issues related to hospital placement of the newborn born to a mother with known or suspected COVID-19 are challenging. Measures to reduce the risk of transmission from an infected mother to her newborn include placing them in separate rooms or using other controls (eg, physical barriers, the mother wearing a face mask during contact with the newborn); shared decision-making between the mother and the care team regarding this issue is recommended. For those who select temporary separation, expression of breast milk with careful hand and breast hygiene should be encouraged, with feeding of the breast milk done by a healthy caregiver. A mother who chooses to room with her newborn should use a face mask and careful hand and breast hygiene before breastfeeding. Newborns born to mothers with COVID-19 at delivery should be considered to have suspected COVID-19 and isolated from healthy newborns.

Publication Type

Journal article.

<366>

Accession Number

20203447222

Author

Farronato, M.; Boccalari, E.; Rosso, E. del; Lanteri, V.; Mulder, R.; Maspero, C.

Title

A scoping review of respirator literature and a survey among dental professionals.

Source

International Journal of Environmental Research and Public Health; 2020. 17(16)30 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus was discovered in China in late 2019 and subsequently triggered a global pandemic. Dentists, like many other health professionals, are at an increased risk of contracting the virus as they work in close proximity to patients, especially when performing aerosol-generating procedures. Thus, in order for dentists to protect themselves and their patients, it is recommended that practitioners wear filtering facepiece 2 (FFP2) respirators. The prolonged use of these FFP2 respirators has been linked to several side effects. The aim of this paper is to assess the perceived experience associated with N95/FFP2 respirators based on the available literature and data collected through an online survey completed by Italian dental professionals. Articles were included up to May 2020 and literature searches were conducted through The National Library of Medicine, Cochrane Central Register of Controlled Trials, and Embase databases. The search terms included COVID-19, respirators, masks, and discomfort. An online survey was administered to 256 Italian dentists. The results from this survey were in agreement with the available literature. The findings concurred that the prolonged use of respirators was associated with headaches (47.5%), severe exertion and discomfort (50.8%), moderate concentration problems (54.3%), moderate breathing difficulties (63.5%), and consequently, an impaired work ability (85.5%). These findings were not influenced by the number of hours spent wearing the respirator. Despite several side effects, FFP2 respirators are fundamental in protecting dentists and their importance was acknowledged.

Publication Type

Journal article.

<367>

Accession Number

20203444107

Author

Asanov, I.; Flores, F.; McKenzie, D. J.; Mensmann, M.; Schulte, M.

Title

Remote-learning, time-use, and mental health of Ecuadorian high-school students during the COVID-19 quarantine.

Source

Policy Research Working Paper - World Bank; 2020. (9252):23 pp.

Publisher

World Bank

Location of Publisher

Washington

Country of Publication

USA

Abstract

The COVID-19 pandemic has closed schools around the world, forcing school systems and students to quickly attempt remote learning. A rapid response phone survey of over 1,500 high school students aged 14 to 18 in Ecuador was conducted to learn how students spend their time during the period of quarantine, examine their access to remote learning, and measure their mental health status. The data show that 59 percent of students have both an internet connection at home and a computer or tablet, 74 percent are engaging in some online or telelearning, and 86 percent have done some schoolwork on the last weekday. Detailed time-use data show most students have established similar daily routines around education, although gender and wealth differences emerge in time spent working and on household tasks. Closure of schools and social isolation are the two main problems students say they face, and while the majority are mostly happy, 16 percent have mental health scores that indicate depression.

Publication Type

Bulletin.

<368>

Accession Number

20203442299

Author

Zemouri, C.; Awad, S. F.; Volgenant, C. M. C.; Crielaard, W.; Laheij, A. M. G. A.; Soet, J. J. de

Title

Modeling of the transmission of coronaviruses, measles virus, influenza virus, Mycobacterium tuberculosis, and Legionella pneumophila in dental clinics.

Source

Journal of Dental Research; 2020. 99(10):1192-1198. 35 ref.

Publisher

International and American Associations for Dental Research

Location of Publisher

Alexandria

Country of Publication

USA

Abstract

Dental health care workers are in close contact to their patients and are therefore at higher risk for contracting airborne infectious diseases. The transmission rates of airborne pathogens from patient to dental health care workers are unknown. With the outbreaks of infectious diseases, such as seasonal influenza, occasional outbreaks of measles and tuberculosis, and the current pandemic of the coronavirus disease COVID-19, it is important to estimate the risks for dental health care workers. Therefore, the transmission probability of these airborne infectious diseases was estimated via mathematical modeling. The transmission probability was modeled for Mycobacterium tuberculosis, Legionella pneumophila,

measles virus, influenza virus, and coronaviruses per a modified version of the Wells-Riley equation. This equation incorporated the indoor air quality by using carbon dioxide as a proxy and added the respiratory protection rate from medical face masks and N95 respirators. Scenario-specific analyses, uncertainty analyses, and sensitivity analyses were run to produce probability rates. A high transmission probability was characterized by high patient infectiousness, the absence of respiratory protection, and poor indoor air quality. The highest transmission probabilities were estimated for measles virus (100%), coronaviruses (99.4%), influenza virus (89.4%), and M. tuberculosis (84.0%). The low-risk scenario leads to transmission probabilities of 4.5% for measles virus and 0% for the other pathogens. From the sensitivity analysis, it shows that the transmission probability is strongly driven by indoor air quality, followed by patient infectiousness, and the least by respiratory protection from medical face mask use. Airborne infection transmission of pathogens such as measles virus and coronaviruses is likely to occur in the dental practice. The risk magnitude, however, is highly dependent on specific conditions in each dental clinic. Improved indoor air quality by ventilation, which reduces carbon dioxide, is the most important factor that will either strongly increase or decrease the probability of the transmission of a pathogen.

Publication Type

Journal article.

<369>

Accession Number

20203448419

Author

Barton, M. C.; Bennett, K. V.; Cook, J. R.; Gallup, G. G.; Platek, S. M.

Title

Hypothesized behavioral host manipulation by SARS-CoV2/COVID-19 infection.

Source

Medical Hypotheses; 2020. 14119 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Although not widely studied, behavioral host manipulation by various pathogens has been documented. Host manipulation is the process by which a pathogen evolves adaptations to manipulate the behavior of the host to maximize reproduction (Ro) of the pathogen. The most notable example is rabies. When a host is infected with the rabies virus it gets into the host's central nervous system and triggers hyper aggression.

The virus is also present in the rabid animal's saliva so being bitten transmits the infection to a new host and the old host is left to eventually die if untreated. Toxoplasmosis is another example. When mice are infected they demonstrate a fearlessness toward cats, thus increasing their chances of being eaten. Toxoplasmosis needs the digestive tract of the feline to survive. Recent studies have shown that exposure to toxoplasmosis in humans (e.g., through cat feces) has also been associated with behavioral changes that are predicted to enhance the spread of the pathogen. Even the common influenza virus has been shown to selectively increase in-person sociality during the 48-hour incubation period, thus producing an obvious vector for transmission. Here we hypothesize that the novel coronavirus, SARS-CoV2, which produces the COVID-19 disease may produce similar host manipulations that maximize its transmission between humans.

Publication Type

Journal article.

<370>

Accession Number

20203446595

Author

Obeidat, N.; Saadeh, R.; Obeidat, M.; Khasawneh, W.; Khader, Y.; Alfaqih, M.

Title

Perceptions of obstetricians and pediatricians about the risk of COVID-19 for pregnant women and newborns.

Source

International Journal of Gynecology & Obstetrics; 2020. 150(3):306-311. 15 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objective: To assess the perception of obstetricians and pediatricians about risks of COVID-19 to pregnant women and possible complications in newborns. Methods: A structured 27-item online survey was sent via social media messaging to obstetricians and pediatricians from public, academic, and private sectors in Jordan between March 23-30, 2020. Descriptive statistics were used to represent numbers and percentages of participants' responses to survey items. Results: A total of 147 physicians participated (107 obstetricians, 40 pediatricians). Participants were well informed about the symptoms, diagnosis, modes of transmission, and methods of prevention. Participants had variable perceptions about COVID-19 risk during pregnancy,

including potential vertical transmission, preferred route of delivery, and safety of breastfeeding. Most participants felt that pregnant women should be prioritized for testing and medical care provision. Conclusion: While evidence-based strategies to reduce the risks of COVID-19 in pregnant women and newborns are evolving, healthcare providers showed excellent knowledge of the infection and were vigilant regarding its complications for mothers and newborns. To ensure safe pregnancy, physicians must keep informed of developing guidance on best and safest prenatal and perinatal health services. Implementing local hospital policies and adequate training in infection control measures is strongly encouraged.

Publication Type

Journal article.

<371>

Accession Number

20203446592

Author

Johnson, K.; Green, L.; Volpellier, M.; Kidenda, S.; McHale, T.; Naimer, K.; Mishori, R.

Title

The impact of COVID-19 on services for people affected by sexual and gender-based violence.

Source

International Journal of Gynecology & Obstetrics; 2020. 150(3):285-287. 10 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Sexual and gender-based violence (SGBV), and particularly intimate partner violence (IPV), has spiked dramatically during the COVID-19 pandemic. At the same time, the pandemic is impacting and interrupting SGBV and IPV services of all kinds. This paper focuses on the impact of the COVID-19 pandemic on clinical care and forensic medical documentation for SGBV survivors, including an analysis of the response in the UK and Kenya, and provides recommendations for safe implementation of these services during the pandemic.

Publication Type

Journal article.

<372>

Accession Number

20203446591

Author

Okunade, K. S.; Makwe, C. C.; Akinajo, O. R.; Owie, E.; Ohazurike, E. O.; Babah, O. A.; Okunowo, A. A.; Omisakin, S. I.; Oluwole, A. A.; Olamijulo, J. A.; Adegbola, O.; Anorlu, R. I.; Afolabi, B. B.

Title

Good clinical practice advice for the management of pregnant women with suspected or confirmed COVID-19 in Nigeria.

Source

International Journal of Gynecology & Obstetrics; 2020. 150(3):278-284. 33 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The impact on healthcare services in settings with under-resourced health systems, such as Nigeria, is likely to be substantial in the coming months due to the COVID-19 pandemic, and maternity services still need to be prioritized as an essential core health service. The healthcare system should ensure the provision of safe and quality care to women during pregnancy, labor, and childbirth, and at the same time, maternity care providers including obstetricians and midwives must be protected and prioritized to continue providing care to childbearing women and their babies during the pandemic. This practical guideline was developed for the management of pregnant women with suspected or confirmed COVID-19 in Nigeria and other low-resource countries.

Publication Type

Journal article.

<373>

Accession Number

20203445855

Author

Reyes-Olavarria, D.; Latorre-Roman, P. A.; Guzman-Guzman, I. P.; Jerez-Mayorga, D.; Caamano-Navarrete, F.; Delgado-Floody, P.

Title

Positive and negative changes in food habits, physical activity patterns, and weight status during COVID-19 confinement: associated factors in the Chilean population.

Source

International Journal of Environmental Research and Public Health; 2020. 17(15)51 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The association between the changes in lifestyle during coronavirus disease 2019 (COVID-19) confinement and body weight have not been studied deeply. Therefore, the aim of the present study was to determine lifestyle changes, such as eating habits and physical activity (PA) patterns, caused by confinement during the COVID-19 pandemic and to analyze its association with changes in body weight. Seven hundred participants (women, n = 528 and men, n = 172) aged between 18-62 years old of the Chilean national territory participated in the study. Food habits, PA, body weight, and sociodemographic variables were measured through a survey in May and June 2020. The body weight increase presented positive association with the consumption of fried foods >= 3 times per week (OR; 3.36, p < 0.001), low water consumption (OR; 1.58, p = 0.03), and sedentary time >=6 h/day (OR; 1.85, p = 0.01). Conversely, fish consumed (OR; 0.67, p = 0.03), active breaks (OR; 0.72, p = 0.04), and PA >= 4 times per week (OR; 0.51, p = 0.001) presented an inverse association with body weight increase. Daily alcohol consumption (OR; 4.77, p = 0.003) was associated with PA decrease. Food habits, PA, and active breaks may be protective factors for weight increase during COVID-19 confinement.

Publication Type

Journal article.

<374>

Accession Number

20203443933

Author

Unger, S.; Christie-Holmes, N.; Guvenc, F.; Budylowski, P.; Mubareka, S.; Gray-Owen, S. D.; O'Connor, D. L.

Title

Holder pasteurization of donated human milk is effective in inactivating SARS-CoV-2.

Source

Canadian Medical Association Journal; 2020. 192(31):E871-E874. 36 ref.

Publisher

Public Health Agency of Canada

Location of Publisher

Ottawa

Country of Publication

Canada

Abstract

BACKGROUND: Provision of pasteurized donor human milk, as a bridge to mother's own milk, is the standard of care for very low-birth-weight infants in hospital. The aim of this research was to confirm that Holder pasteurization (62.5degreesC for 30 min) would be sufficient to inactivate severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in donated human milk samples. METHODS: We spiked frozen milk samples from 10 donors to the Rogers Hixon Ontario Human Milk Bank with SARS-CoV-2 to achieve a final concentration of 1 107 TCID50/mL (50% of the tissue culture infectivity dose per mL). We pasteurized samples using the Holder method or held them at room temperature for 30 minutes and plated serial dilutions on Vero E6 cells for 5 days. We included comparative controls in the study using milk samples from the same donors without addition of virus (pasteurized and unpasteurized) as well as replicates of Vero E6 cells directly inoculated with SARS-CoV-2. We reported cytopathic effects as TCID50/mL. RESULTS: We detected no cytopathic activity in any of the SARS-CoV-2-spiked milk samples that had been pasteurized using the Holder method. In the SARS-CoV-2-spiked milk samples that were not pasteurized but were kept at room temperature for 30 minutes, we observed a reduction in infectious viral titre of about 1 log. INTERPRETATION: Pasteurization of human milk by the Holder method (62.5degreesC for 30 min) inactivates SARS-CoV-2. Thus, in the event that donated human milk contains SARS-CoV-2 by transmission through the mammary gland or by contamination, this method of pasteurization renders milk safe for consumption and handling by care providers.

Publication Type

Journal article.

<375>

Accession Number

20203426091

Title

WHO alliance for the global elimination of trachoma by 2020: progress report, 2019.

Source

Weekly Epidemiological Record; 2020. 95(30):349-360.

Publisher

World Health Organization

Location of Publisher

Geneva

Country of Publication

Switzerland

Abstract

This article summarizes work conducted during 2019 to apply the SAFE strategy against trachoma. It also provides estimates of the global population at risk of trachoma blindness based on district-by-district data submitted to WHO by national programmes. As of 1 May 2020, there were 46 countries in which the most recent district prevalence data in the GET2020 database suggest that trachoma is a public health problem in at least part of the country. They include 2 countries that claim to have eliminated trachoma, as those claims are based on data that have not yet been formally reported to WHO. Seven countries may require interventions, but the necessary investigations in suspected trachoma-endemic areas have not yet been completed. Beyond the absolute numbers of TT patients who are operated, the quality of surgery is key to reducing the number of people who will go blind from trachoma. Current enhancement of training, certification and supervision of TT surgeons is therefore applauded; this includes efforts by health ministries to share their experience and expertise with other countries. Further research is still required to optimize TT patient outcomes, including management of post-operative TT and many other areas of technical uncertainty. A focus during the next 12 months will be mitigation of and recovery from COVID-19-related postponement of community-based neglected tropical disease programme activities.

Publication Type

Journal article.

<376>

Accession Number

20203426086

Author

Virgilio, A. de; Costantino, A.; Mercante, G.; Spriano, G.

Title

How to increase the SARS-CoV-2 detection rate through the nasopharyngeal swab?

Source

Oral Oncology; 2020. 10610 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

A retrospective study conducted in Wuhan showed a poor detection rate of nasal and pharyngeal swabs (38.25%), while collected sputum exhibited a 49.12% positive rate. In another study conducted on 205 patients, nasal swabs obtained a positive rate of 63% (n = 8), significantly lower than bronchoalveolar lavage (BAL, 93%, n = 15) or sputum (72%, n = 104). However, the collection of lower respiratory tract fluids is associated with invasive procedures (e.g. BAL) with higher costs, and greater risk for the physician. These factor have limited the role of these invasive procedures in case of asymptomatic or mildly symptomatic patients. BAL is unreasonable as a screening tool, and it is indeed performed only if a false negative result from the nasopharyngeal swab is suspected. Further studies are recommended in order to improve the SARS-CoV-2 detection rate through the nasopharyngeal swab. Important implications are particularly evident in the expectation of activities re-opening, particularly for the health-care setting where the suspension of the elective activity could not be further delayed.

Publication Type

Correspondence.

<377>

Accession Number

20203427207

Author

Kapepula, P. M.; Kabengele, J. K.; Kingombe, M.; Bambeke, F. van; Tulkens, P. M.; Kishabongo, A. S.; Decloedt, E.; Zumla, A.; Suleman, F.; Tshilolo, L.; Muyembe-Tamfum, J. J.; Zumla, A.; Nachega, J. B.

Title

Artemisia spp. derivatives for COVID-19 treatment: anecdotal use, political hype, treatment potential, challenges, and road map to randomized clinical trials.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(3):960-964. 29 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

The world is currently facing a novel COVID-19 pandemic caused by SARS-CoV-2 that, as of July 12, 2020, has caused a reported 12,322,395 cases and 556,335 deaths. To date, only two treatments, remdesivir and dexamethasone, have demonstrated clinical efficacy through randomized controlled trials (RCTs) in seriously ill patients. The search for new or repurposed drugs for treatment of COVID-19 continues. We have witnessed anecdotal use of herbal medicines, including Artemisia spp. extracts, in low-income countries, and exaggerated claims of their efficacies that are not evidence based, with subsequent political controversy. These events highlight the urgent need for further research on herbal compounds to evaluate efficacy through RCTs, and, when efficacious compounds are identified, to establish the active ingredients, develop formulations and dosing, and define pharmacokinetics, toxicology, and safety to enable drug development. Derivatives from the herb Artemisia annua have been used as traditional medicine over centuries for the treatment of fevers, malaria, and respiratory tract infections. We review the bioactive compounds, pharmacological and immunological effects, and traditional uses for Artemisia spp. derivatives, and discuss the challenges and controversies surrounding current efforts and the scientific road map to advance them to prevent or treat COVID-19.

Publication Type

Journal article.

<378>

Accession Number

20203422228

Author

Yu HaiPing; Ma LiLi; Hung YunYing; Wang XueBin; Peng YouQing; Chen Chi; Zhuang HuiRen

Title

Application of 'mobile hospital' against 2019-nCoV in China.

Source

Epidemiology and Infection; 2020. 148(e111)3 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

The aim of the article was to discuss the utilization of a mobile hospital (a temporary medical institution that can be rapidly deployed) as a medical resource against COVID-19. This mobile hospital was adopted to deal with the early stages of the COVID-19 outbreak in Shanghai, China.

Publication Type

Journal article.

<379>

Accession Number

20203423943

Author

Mont'Alverne, F. J. A.; Lima, F. O.; Nogueira, R. G.; Freitas, C. C. M. de; Neto, O. M. P.; Silva, G. S.; Oliveira, M. S. de; Frudit, M.; Caldas, J. G. M. P.; Abud, D. G.; Conforto, A. B.; Carvalho, F. M. M.; Dias, F. A.; Bazan, R.; Avelar, W. M.; Moro, C. H. C.; Magalhaes, P. S. C. de; Miranda, M.; Barbosa, L. de A.; Fiorot Junior, J. A.; Cardoso, F. B.; Rebello, L. C.; Parente, B. de S. M.; Faria, M. de B.; Freitas, G. R. de; et al.

Title

Management of acute stroke and urgent neurointerventional procedures during COVID-19 pandemic: recommendations on the scientific department on cerebrovascular diseases of the Brazilian Academy of Neurology, Brazilian society of cerebrovascular diseases and Brazilian society of neuroradiology.

Source

Arquivos de Neuro-Psiquiatria; 2020. 78(7):440-449. 32 ref.

Publisher

Academia Brasileira de Neurologia

Location of Publisher

São Paulo

Country of Publication

Brazil

Abstract

Introduction: Although the 2019 severe acute respiratory syndrome coronavirus 2 infection (SARS-CoV-2, COVID-19) pandemic poses new challenges to the healthcare system to provide support for thousands of patients, there is special concern about common medical emergencies, such as stroke, that will continue to occur and will require adequate treatment. The allocation of both material and human resources to fight the pandemic cannot overshadow the care for acute stroke, a time-sensitive emergency that with an inefficient treatment will further increase mortality and long-term disability. Background: This paper summarizes the recommendations from the Scientific Department on Cerebrovascular Diseases of the Brazilian Academy of Neurology, the Brazilian Society of Cerebrovascular Diseases and the Brazilian Society

of Neuroradiology for management of acute stroke and urgent neuro-interventional procedures during the COVID-19 pandemic, including proper use of screening tools, personal protective equipment (for patients and health professionals), and patient allocation.

Publication Type

Journal article.

<380>

Accession Number

20203452166

Author

Sandeep Grover; Aseem Mehra; Swapnajeet Sahoo; Ajit Avasthi; Adarsh Tripathi; Avinash D'souza; Gautam Saha; Jagadhisha, A.; Mahesh Gowda; Mrugesh Vaishnav; Omprakash Singh; Dalal, P. K.; Parmod Kumar

Title

State of mental health services in various training centers in India during the lockdown and COVID-19 pandemic.

Source

Indian Journal of Psychiatry; 2020. 62(4):363-369. 14 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: There is some information from different developed coutries that mental health services have been badly affected by the COVID-19 pandemic. Little information is available from India. Aim: The aim of this study was to evaluate the impact of lockdown and COVID-19 pandemic on mental health services in India's various training centers. Materials and Methods: In an online survey, information was collected from various training centers of India through E-mail or WhatsApp. Results: Responses were received from 109 institutes. The majority of the responses were received from state-funded government medical colleges and private medical colleges. Since the lockdown and COVID-19 pandemic, brain stimulation treatments have completed stopped. Other, most affected services included electroconvulsive therapy, inpatient services, outpatient services, and psychotherapy services. However, there was an expansion of teleconsultations services because of the lockdown and the COVID-19 pandemic. In three-fourth of the centers mental health services were being provided to the patients with COVID-19 infection. In most of the institutes, mental health professionals were involved at different levels in the COVID-19 responsibilities. These included providing helpline services to the general public, screening people in

quarantine for mental health issues, providing clinical care to COVID-19 patients, screening health care workers (HCWs) for mental health issues, and training the HCWs. Conclusion: COVID-19 pandemic and lockdown have led to the collapse of regular mental health services. The present study also shows that mental health professionals are playing a significant role in addressing the prevailing psychiatric morbidity, specifically related to the COVID-19 related issues, and taking care of the HCWs.

Publication Type

Journal article.

<381>

Accession Number

20203454565

Author

Li GuoZhen; Hu CaiYing; He QiOng; Liu Jing; Xiong Nian; Wang HaiZhou

Title

Apparent and occult infections of medical staff in a COVID-19 designated hospital. (Special Issue: Novel coronavirus (COVID-19).)

Source

Journal of Infection and Public Health; 2020. 13(10):1453-1455. 8 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Since the outbreak of novel coronavirus (SARS-CoV-2)-infected pneumonia (COVID-19), numerous medical staff are fighting on the frontline. However, the possibility of occult infection in medical staff is ignored in many recent studies. Herein, we collected data in a COVID-19 designated hospital from January 22, 2020 to March 10, 2020. A total of 33 medical staff had at least one nucleic acid test of throat swab, immunoglobulin G (IgG) or IgM serum antibody test, and chest computed tomography (CT), were enrolled. Finally, we identified 25 cases (75.8%) were isolated for hospitalized treatment after positive virus detection. In addition, 4 cases who were all negative for nucleic acid test detection with no clinical symptoms, and none of their chest CT were abnormal. However, the results of serum IgG or IgM antibody test in these 4 cases were positive, suggesting the presence of occult infection. In conclusion, data from our single center indicated that SARS-CoV-2 had a high medical infection rate (29/33 = 87.9%) and might have a potential risk of occult infection.

Publication Type

Journal article.

<382>

Accession Number

20203454564

Author

Hadil Alahdal; Fatemah Basingab; Reem Alotaibi

Title

An analytical study on the awareness, attitude and practice during the COVID-19 pandemic in Riyadh, Saudi Arabia. (Special Issue: Novel coronavirus (COVID-19).)

Source

Journal of Infection and Public Health; 2020. 13(10):1446-1452. 41 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Coronavirus disease (COVID-19) is an infectious disease caused by a new variable of the Coronaviridae family. COVID-19 spreads primarily by contacting the virus either from a COVID-19-infected individual through coughing or sneezing or from COVID-19-contaminated surfaces. On March 12, 2020, the World Health Organization (WHO) announced COVID-19 as a pandemic. The government of Saudi Arabia was among the first countries in the world to take quick and serious precautions. The Ministry of Health (MOH) has made the public aware of the virus transmission patterns and the importance of quarantine and curfew. Despite strict measures taken, the awareness of people towards infectious viruses remains the most important factor in limiting the widespread of diseases. Method: A cross-sectional survey of 1767 participants, was conducted to explore the awareness, attitude and practice of COVID-19 in relation to socioeconomic data among residents in the city of Riyadh. Results: Of all the participants, 58% showed a moderate level of awareness, 95% presented a high attitude and 81% presented an adequate practice regarding COVID-19. Significant positive correlation between awareness-attitude ($r=0.132$, p-value < 0.001) and attitude-practice ($r=0.149$, p-value < 0.001) were found. The gender of the participants was the only common characteristic significantly associated with both awareness and practice. This study revealed that males showed a slight increase (60%) in the level of awareness compared to female participants (57%), however, when it comes to the practice towards COVID-19, females showed slightly better practice (82%) than males (80%). The World health organization (WHO) and the Ministry of Health (MOH) were the main sources of information. Conclusion: Despite the moderate public awareness, their attitude and practice

were better. Therefore, public awareness must be improved to be prepared for epidemic and pandemic situations. A comprehensive public health education program is important to increase awareness and to reach sufficient knowledge.

Publication Type

Journal article.

<383>

Accession Number

20203454562

Author

Al-Ateeq, D. A.; Sumayah Aljhani; Ibrahim Althiyabi; Safaa Majzoub

Title

Mental health among healthcare providers during coronavirus disease (COVID-19) outbreak in Saudi Arabia. (Special Issue: Novel coronavirus (COVID-19).)

Source

Journal of Infection and Public Health; 2020. 13(10):1432-1437. 37 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: The novel coronavirus (COVID-19) was recently declared a pandemic by the World Health Organization (WHO). The first confirmed case in Saudi Arabia was announced on March 2, 2020. Several psychiatric manifestations may appear during pandemics, especially among frontline healthcare providers. Objectives: This study sought to explore depression and anxiety levels among healthcare providers during the COVID-19 outbreak in Saudi Arabia. Methods: This was a cross-sectional study of a convenience sample of 502 healthcare providers in the Ministry of Health. Depression and anxiety were assessed via the Patient Health Questionnaire (PHQ-9) and Generalized Anxiety Disorder 7 (GAD-7) questionnaires, respectively. Results: The respondents represented various healthcare occupations: administrators (28.49%), nurses (26.29%), physicians (22.11%), non-physician specialists (13.94%), technicians (6.77%), and pharmacists (2.30%). The majority of them were male (68.1%). More than half of them had depressive disorder (55.2%), which ranged from mild (24.9%), moderate (14.5%), and moderately severe (10%) to severe (5.8%). Half of the sample had generalized anxiety disorder (51.4%), which ranged from mild (25.1%) and moderate (11%) to severe (15.3%). Multivariate analysis showed that males were significantly less predicted to have anxiety (Beta = -0.22, P-value <0.04), 30-39 years age group were significantly more predicted to have depression

and anxiety group (Beta = 0.204, P-value <0.001 and beta = 0.521, P-value <0.003 respectively), and nurses had significantly higher mean score of anxiety (Beta = 0.445, P-value <0.026). Conclusions: This study revealed that depression and anxiety are prevailing conditions among healthcare providers. Although efforts were accelerated to support their psychological well-being, more attention should be paid to the mental health of female, 30-39 age group and nursing staff. Promoting healthcare service as a humanitarian and national duty may contribute to making it a more meaningful experience in addition to advocating for solidarity, altruism, and social inclusion. Longitudinal research studies need to be conducted to follow up on healthcare providers' mental health symptoms and develop evidence-based interventions.

Publication Type

Journal article.

<384>

Accession Number

20203454560

Author

Gao ZhiYan; Ying SongSong; Liu Jun; Zhang HuiQiu; Li JinXin; Ma ChangLing

Title

A cross-sectional study: comparing the attitude and knowledge of medical and non-medical students toward 2019 novel coronavirus. (Special Issue: Novel coronavirus (COVID-19).)

Source

Journal of Infection and Public Health; 2020. 13(10):1419-1423. 18 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background and objectives: Since December 2019, the rapid epidemic spread of COVID-19 in China has aroused the attention of the government and the public. The purpose of this study is to investigate the attitude and knowledge among medical students and non-medical students toward SARS-CoV-2 infection. Methods: A web-based survey was disseminated to the students from medical colleges and comprehensive universities via the survey website (www.wjx.cn) and via WeChat. Participation in the study was voluntary with the instruction to click on the website or scan the QR code to complete the anonymous electronic questionnaire from February 5 to 7, 2020. Results: The questionnaire was completed by 588 students from 20 colleges and universities in China. Of the respondents, 66.0% were medical students and 34.0% were non-medical students. 99.6% of the students held an optimistic attitude toward the COVID-19 epidemic

situation. The majority of participants had a good level of knowledge of common symptoms, transmission, and prevention of the disease. In a comparison between non-medical students with medical students, the medical students had a deeper understanding of COVID-19. In this study, we also found that female students had a better understanding of transmission and prevention than male students did. Conclusions: The majority of students who participated in the questionnaire had a positive attitude and a good perception about COVID-19.

Publication Type

Journal article.

<385>

Accession Number

20203454555

Author

Nurshad Ali

Title

Role of vitamin D in preventing of COVID-19 infection, progression and severity. (Special Issue: Novel coronavirus (COVID-19).)

Source

Journal of Infection and Public Health; 2020. 13(10):1373-1380. 75 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The outbreak of COVID-19 has created a global public health crisis. Little is known about the protective factors of this infection. Therefore, preventive health measures that can reduce the risk of infection, progression and severity are desperately needed. This review discussed the possible roles of vitamin D in reducing the risk of COVID-19 and other acute respiratory tract infections and severity. Moreover, this study determined the correlation of vitamin D levels with COVID-19 cases and deaths in 20 European countries as of 20 May 2020. A significant negative correlation ($p = 0.033$) has been observed between mean vitamin D levels and COVID-19 cases per one million population in European countries. However, the correlation of vitamin D with COVID-19 deaths of these countries was not significant. Some retrospective studies demonstrated a correlation between vitamin D status and COVID-19 severity and mortality, while other studies did not find the correlation when confounding variables are adjusted. Several studies demonstrated the role of vitamin D in reducing the risk of acute viral respiratory tract infections and

pneumonia. These include direct inhibition with viral replication or with anti-inflammatory or immunomodulatory ways. In the meta-analysis, vitamin D supplementation has been shown as safe and effective against acute respiratory tract infections. Thus, people who are at higher risk of vitamin D deficiency during this global pandemic should consider taking vitamin D supplements to maintain the circulating 25(OH)D in the optimal levels (75-125 nmol/L). In conclusion, there is not enough evidence on the association between vitamin D levels and COVID-19 severity and mortality. Therefore, randomized control trials and cohort studies are necessary to test this hypothesis.

Publication Type

Journal article.

<386>

Accession Number

20203432103

Author

Rajiv Kumar Sinha; Bishnu Deo Singh

Title

Effects of COVID-19 lockdown on agriculture sector & extenuating measures: an overview of Bihar and Jharkhand.

Source

Agricultural Situation in India; 2020. 77(2):31-40. 8 ref.

Publisher

Ministry of Agriculture and Cooperation, Directorate of Economics and Statistics

Location of Publisher

New Delhi

Country of Publication

India

Abstract

India has been under unprecedented lockdown since 24th March, 2020, and there is no forecast as to how long will it last. Due to this still continuing lockdown, along with various other economic activities, agriculture and allied sector has been severely affected across the value chains of various crops, particularly garma/summer crops (crops which are being sown in March and harvested in June-July). Some policy related analysis on the effects and implications of COVID-19 for agricultural and rural sector is desired to frame short, medium and long-term policies. In view of this, this research study is undertaken based on 'Online Survey' of 50 farm households of Patna district along with telephonic discussions with some progressive farmers of Begusarai, Muzaffarpur and Bhagalpur districts of Bihar and Godda and Giridih districts of Jharkhand. This paper seeks to examine effects of lockdown on crop-raising and allied activities in Bihar and Jharkhand states during and post-lockdown period. It is suggested that our policymakers,

elected public representatives, researchers and scientists should concentrate on determining and chalking out short, medium and long-term contour and contingent plans for sustaining, developing and strengthening agriculture and all its allied activities instead of treating lockdown as a 'Pause Button' only. Provision of inputs, transportation, storage, procurement, etc. should be made for agricultural farmers along with ensuring the fulfillment of basic need of foodgrains through National Food Security Act (NFSA). Emphasis should also be given on confiding and working sincerely on the already devised and determined seven-points' strategy of doubling farmers income (DFI) by the year 2022 which will enable India's economy to regain its 'pre-Corona prosperity'.

Publication Type

Journal article.

<387>

Accession Number

20203430211

Author

Sekhar, C. S. C.

Title

Agriculture during the COVID-19 pandemic: problems and prospects.

Source

Agricultural Situation in India; 2020. 77(1):22-28. 5 ref.

Publisher

Ministry of Agriculture and Cooperation, Directorate of Economics and Statistics

Location of Publisher

New Delhi

Country of Publication

India

Abstract

The current COVID-19 pandemic sweeping across the globe is expected to have a disastrous impact on the world economy. Indian economy is also expected to face severe headwinds. Indian agriculture remains a bright spot though. The real gross domestic product (GDP) from agriculture & allied activities is expected to maintain a robust growth rate of 3% in 2020-21, which in turn can help the overall growth in GDP. The factors on supply side appear to be largely adequate with robust foodgrain production and sufficient stocks. The prices of most of the food commodities have shown a decline in the month of March both at wholesale and retail levels. However, major problem could arise on the demand side due to disruption of livelihoods during the lockdown period leading to lower incomes for farmers, agricultural labourers and seasonal migrants. This negative impact on rural income is likely to derail the economy, which was already reeling with demand contraction even before the crisis. Hence, several safety nets, such as direct cash

payments, free distribution of grains, etc., are needed. These safety nets are needed for at least six months. Immediately after the lockdown period, the activities in agricultural market are likely to increase. The measures of social distancing and hygiene need to be strictly enforced at this time. The supply of inputs, labour and machinery for the upcoming kharif season needs to be ensured with adequate health safeguards. In the wake of fears of a second wave of COVID-19 around November, the recent initiative of selling and transporting directly from the warehouses and FPOs, without passing through the APMC mandies, needs to be strengthened. Also, a robust system of direct payments and grain distribution to the vulnerable sections needs to be continued. Given the satisfactory state of domestic food supplies, restrictions on exports need to be avoided as it could hamper our global food markets.

Publication Type

Journal article.

<388>

Accession Number

20203434529

Author

Cortegiani, A.; Ippolito, M.; Ingoglia, G.; Einav, S.

Title

Chloroquine for COVID-19: rationale, facts, hopes.

Source

Critical Care; 2020. 24(210):(8 May 2020). 15 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The article seeks to answer the question, does the current level of evidence suffice for prescribing chloroquine (CQ) for COVID-19? Several mechanisms have been proposed to assume that CQ or hydroxychloroquine (HCQ) may be effective against SARS-CoV-2: cell models of SARS-CoV-1 infection treated with CQ show interference with the glycosylation of ACE-2 receptors, proposed as the site of SARS-CoV-2 cell binding, CQ/HCQ increases the pH of acidic cellular organelles, hindering the intermediate stages of endocytosis and virion transport and post-translational modification of newly synthesized viral proteins, CQ/HCQ can counter the process of virion assembly and viral protein synthesis, and CQ also downregulates cytokine (e.g., TNF-a) production by monocyte-macrophages. In the frenzy to save patients, the story of CQ may be repeated: description of in vitro activity against SARS-CoV-2 of an "old drug" (as the recent case of

the anti-parasitic ivermectin), drawing huge media attention and incentivizing early publication of small studies in humans and empirical clinical use without quality data collection. Regardless of public pressure, clinicians should adhere to the national authorities' regulations for prescribing off-label and experimental drugs, including CQ/HCQ.

Publication Type

Journal article.

<389>

Accession Number

20203375759

Author

Muraina, I. A.

Title

COVID-19 and zoonosis: control strategy through one health approach.

Source

Asian Pacific Journal of Tropical Medicine; 2020. 13(9):381-383. 10 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The history of human and animal coronaviruses (beginning as early as 1930 in poultry animals up to the recently SARS-CoV-2 in 2019) and the application of One Health approach as a control strategy for epidemic and pandemic incidence of Covid-19 are discussed.

Publication Type

Journal article.

<390>

Accession Number

20203447076

Author

Rizzo, E.

Title

Ivermectin, antiviral properties and COVID-19: a possible new mechanism of action.

Source

Naunyn-Schmiedeburgs Archives of Pharmacology; 2020. 393(7):1153-1156. 36 ref.

Publisher

Springer Berlin

Location of Publisher

Heidelberg

Country of Publication

Germany

Abstract

Ivermectin is an antiparasitic drug that has shown also an effective pharmacological activity towards various infective agents, including viruses. This paper proposes an alternative mechanism of action for this drug that makes it capable of having an antiviral action, also against the novel coronavirus, in addition to the processes already reported in literature.

Publication Type

Journal article.

<391>

Accession Number

20203447030

Author

Sudhakar Srivastava; Amit Kumar; Kuldeep Bauddh; Alok Sagar Gautam; Sanjeev Kumar

Title

21-day lockdown in India dramatically reduced air pollution indices in Lucknow and New Delhi, India.

Source

Bulletin of Environmental Contamination and Toxicology; 2020. 105(1):9-17. 35 ref.

Publisher

Springer

Location of Publisher

New York

Country of Publication

USA

Abstract

In December 2019, the outbreak of viral disease labeled as Novel Coronavirus started in Wuhan, China, which later came to be known as Covid-19. The disease has spread in almost every part of the world and has been declared a global pandemic in March 2020 by World Health Organization (WHO). The corona virus outbreak has emerged as one of the deadliest pandemics of all time in human history. The ongoing pandemic of COVID-19 has forced several countries of the world to observe complete lockdown forcing people to live in their homes. India also faced the phase of total lockdown for 21 days (in first phase) to avoid the spread of coronavirus to the maximum possible extent. This lockdown impacted the pollution levels of environment and improved air and water quality in the short span owing to very less human activities. The present work scientifically analyzed the available data for primary air pollutants (PM2.5, NO2, SO2 and CO) from two major Indian cities, Lucknow and New Delhi. The analysis was based on air quality data for before lockdown and after lockdown (first phase of 21 days) periods of 21 days each. The results showed significant decline in the studied air pollution indices and demonstrated improvement of air quality in both the cities. The major impact was seen in the levels of PM2.5, NO2 and CO. The levels of SO2 showed less significant decline during the lockdown period. The results are presented with future perspectives to mitigate air pollution in near future by adopting the short and periodical lockdown as a tool. Since the first case of coronavirus, named as COVID-19, in Wuhan, China (Zhu et al. 2020), COVID-19 became a pandemic in a short span of time. As on May 15, 2020 (2.00 am; Indian Standard Time; UTC + 05:30), total 4,258,666 coronavirus cases and 294,190 deaths of coronavirus patients have been reported from 216 countries of the world (WHO 2020). India is hugely populated country with a population of 1.38 billion as of March, 2020, which is second most in the world (Ministry of Statistics and Programme Implementation 2020). The problem of huge population is worsened by the fact this population lives in a country, which is 7th largest in the world (Shabudeen 2011) entailing that the density of people residing in per square km area is high. Indian cities are hugely populated with New Delhi ranking 2nd most populated city in the world (World Urbanization Prospects 2020). Further, Indian healthcare system is also poor and lacks sophisticated facilities and specialized doctors especially in small towns and villages (Ramani and Mavalankar 2006; Banerjee et al. 2008). India, therefore, lies at huge risk from current pandemic of COVID-19. As a safety precautionary measure, Prime Minister of India, Shri Narendra Modi, took an extremely bold decision and declared 21 days complete lockdown in India from midnight of 24 March (25 March, 2020-14 April, 2020). Earlier, "Janta Curfew" (a sort of complete lockdown; maintained by the public for the public; Fig S1, S2) was performed on 22nd March, 2020 in India. Such a lockdown was enforced in China in Wuhan, China on 23rd January, 2020 and was lifted on 8th April, 2020 (total 76 days). This lockdown helped China to reduce the number of infections to close to zero. During past 3 months, since coronavirus outbreak began, numerous studies have examined COVID-19 infection. A lot of research on the nature of its spread, the mechanisms of its transfer from human to human, the genome of COVID-19, the mechanisms of its infection in human cells and its effects on various tissues has been published (Chen et al. 2020; Guo et al. 2019; Baig et al. 2020; Gu et al. 2020; Driggin et al. 2020). It is apparent that the lockdown and consequent reduced mobility of people and industrial and almost all other human operations would have also impacted air pollution. In fact, several studies have been published during the last few weeks for Europe, China, Latin America (He et al. 2020; Ma et al. 2020; Wang et al. 2020; Nakada and Urban 2020). Indian lockdown is first such event locking almost 1.38 billion people in their homes and closing down almost all activities in such a large country. In India also, a few studies have shown the positive impact of the lockdown on air and water pollution (Sharma et al. 2020; Mahato et al. 2020; Gautam 2020). This article scientifically examines the impact of lockdown on air pollution indices in two major cities of India, New Delhi and Lucknow. New Delhi is the capital of India with an area of 1448 km2 and total population of 21.8 million. Apart from this, seven

other cities around New Delhi namely Noida, Ghaziabad, Karnal, Faridabad, Greater Noida, Meerut and Gurgaon make a huge cluster and contribute to human and industrial activities. Lucknow is the capital of Uttar Pradesh with an area of 349 km2 and total population of 2.82 million. Both the cities are known to experience severe pollution load days during early winter for the past 2-3 years. During 05 November, 2019, the air quality index (AQI) in New Delhi and Lucknow ranged from 283-500 to 267-486, respectively, which was poor (Unhealthy) to severe as per National Air Quality Index (NAQI 2014) (Table S2). The present study analyzed air pollution indices for before and after lockdown periods (21 days each) for the two cities.

Publication Type

Journal article.

<392>

Accession Number

20203447029

Author

Siciliano, B.; Carvalho, G.; Silva, C. M. da; Arbilla, G.

Title

The impact of COVID-19 partial lockdown on primary pollutant concentrations in the atmosphere of Rio de Janeiro and Sao Paulo megacities (Brazil).

Source

Bulletin of Environmental Contamination and Toxicology; 2020. 105(1):2-8. 26 ref.

Publisher

Springer

Location of Publisher

New York

Country of Publication

USA

Abstract

As COVID-19 spread all over the world, most of the countries adopted some kind of restrictions to avoid the collapse of health systems. In Brazil, Sao Paulo and Rio the Janeiro, the two most populated cities in the country, were the first to determine social distancing. In this study, the impact of the social distancing measures on the concentrations of the three main primary air pollutants (PM10, NO2 and CO) was analyzed. CO levels showed the most significant reductions (up to 100%) since it is related to light-duty vehicular emissions. NO2 also showed reductions (9.1%-41.8%) while PM10 levels were only reduced in the 1st lockdown week. The decrease of pollutants was not directly proportional to the vehicular flux reduction, because it depends on other factors such as the transport of air masses from industrial and rural areas. The differences observed can be explained considering the fleet characteristics in the two cities and the response of the population to the social distancing recommendations.

Publication Type

Journal article.

<393>

Accession Number

20203442004

Author

Pastakia, S. D.; Braitstein, P.; Galarraga, O.; Genberg, B.; Said, J.; Vedanthan, R.; Wachira, J.; Hogan, J. W.

Title

Preserving 2 decades of healthcare gains for Africa in the coronavirus disease 2019 era. (Special Section: COVID-19 among people living with HIV.)

Source

AIDS; 2020. 34(12):1761-1763. 5 ref.

Publisher

Wolters Kluwer (UK) Ltd

Location of Publisher

Kingston upon Thames

Country of Publication

UK

Abstract

As coronavirus disease 2019 (Covid-19) restrictions upend the community bonds that have enabled African communities to thrive in the face of numerous challenges, it is vital that the gains made in community-based healthcare are preserved by adapting our approaches. Instead of reversing the many gains made through locally driven development partnerships with international funding agencies for other viral diseases like HIV, we must use this opportunity to adapt the many lessons learned to address the burden of Covid-19. Programs like the Academic Model Providing Access to Healthcare are currently leveraging widely available technologies in Africa to prevent patients from experiencing significant interruptions in care as the healthcare system adjusts to the challenges presented by Covid-19. These approaches are designed to preserve social contact while incorporating physical distancing. The gains and successes made through approaches like group-based medical care must not only continue but can help expand upon the extraordinary success of programs like President's Emergency Plan for AIDS Relief.

Publication Type

Journal article.

<394>

Accession Number

20203442003

Author

El-Sadr, W. M.

Title

What one pandemic can teach us in facing another. (Special Section: COVID-19 among people living with HIV.)

Source

AIDS; 2020. 34(12):1757-1759. 27 ref.

Publisher

Wolters Kluwer (UK) Ltd

Location of Publisher

Kingston upon Thames

Country of Publication

UK

Abstract

This article seeks to answer the question: what are the similarities and differences between the two pandemics? Are there lessons learned from confronting HIV that should guide the response to COVID-19 pandemic? Firstly, political leadership is critically important. The early denial of the HIV epidemic in South Africa and the United States resulted in unnecessary loss of life. Secondly, perhaps the most durable legacy of the HIV response is the recognition of the critical importance of engaging communities, whether through the early voices of gay advocates in the United States or the vibrant participation of people living with HIV as peer educators around the world. Thirdly, it is widely acknowledged that the successful global response to the HIV epidemic was because of strengthening all pillars of the health system. Fourthly, while during the early desperate years of the HIV epidemic, advocates reached for unproven treatment, they quickly became strong supporters of science-based interventions. Fifthly, the HIV epidemic showed us the importance of using data to inform action. COVID-19 data from New York City, as another example, point to specific zip codes with the highest burden of COVID-19. Lastly, epidemics thrive on mistrust and myths. Conspiracy theories about HIV has jeopardized lives by provoking reluctance to get tested or to initiate treatment.

Publication Type

Journal article.

<395>

Accession Number

20203449437

Title

Self-efficacy at time of COVID-19 pandemic among Najran University students, Kingdom of Saudi Arabia.

Source

Sylwan; 2020. 164(8)

Publisher

Polskie Towarzystwo Lesne

Location of Publisher

Warsaw

Country of Publication

Poland

Abstract

Background: COVID-19 pandemic is unique in many ways compared to previous global epidemics. The cornerstone of COVID-19 management is to raise the public Self-efficacy (SE) toward its control. SE is very important in adherence to self-protection precaution and overcoming psychological stress. The study aims to evaluate self-efficacy and its associated demographic variables at the time of COVID-19 pandemic among Najran university students. \nSubjects and methods: Cross-sectional research design was conducted at Najran University, Najran city, KSA. A snowball sampling technique was used to recruit Najran University students during the COVID-19 pandemic (761 students). \nResults: The present study results showed that 45.9% of the students have moderate self-efficacy, and 22.9% of them have low SE to deal with the COVID-19 pandemic. Furthermore, there are statistically significant relationships ($p < 0.05$) between the participants\' SE regarding the COVID-19 pandemic and their gender, college, marital status, and family income. On the other hand, there are no relationships observed between the participants\' SE and their age, residence, and the history of chronic illness. \nConclusion and implication: The majority of Najran university students have either moderate or low SE to deal with the COVID-19 pandemic. Certain demographic variables have a positive relation to students perceived self-efficacy. The current study results may provide essential data for SE improvement programs; it may also help the successful implementation of preventive health behavior programs during the COVID-19 pandemic.

Publication Type

Journal article.

<396>

Accession Number

20203449436

Title

Perceived barriers and threats at COVID-19 pandemic among Saudi students at Najran university.

Source

Sylwan; 2020. 164(8)

Publisher

Polskie Towarzystwo Lesne

Location of Publisher

Warsaw

Country of Publication

Poland

Abstract

Background: Community members are the master power to limit the spread of COVID-19 and to block its infection chain. The first and most important step is to decrease the public perceived barriers and threats toward COVID-19. If perceived threats are is moderately perceived, it can foster positive preventive behaviors. On the contrary, it may lead to panic behaviors and decreasing immunity if it is highly perceived. This study aimed to explore the perceived barriers and threats at COVID-19 pandemic among Saudi students at Najran University. Subjects and methods: This is a cross-sectional study that was conducted at Najran university campus, Najran city. Snowball sampling technique was used to recruit participants. An electronic questionnaire was used for data collection. It composed of three main parts socio-demographic data, perceived barriers questionnaire based on HBM, and patient threat perceptions in the emergency department scale. Data was collected from the beginning of March till June 2020. Results: The present study results indicated that that around half (48.2%) of the study participants have high perceived barriers and moderate total perceived threats. There are statistically significant relations between the participant total perceived barriers, threats, and their age, college, and monthly income. Also, another significant relationship found between perceived barriers and participant residence and gender. In addition, perceived barriers are significantly correlated with perceived threats. Conclusion: COVID-19 perceived barriers and threats are moderate to high among the most of Najran University students. Perceived barriers and threats are also associated with some demographic variables. The present study findings may help decision-makers to plan for social interventions that decrease the public perceived barriers and threats toward COVID-19.

Publication Type

Journal article.

<397>

Accession Number

20203449430

Title

COVID-19 effect on nursing students' academic responsibility, satisfaction and attitudes toward communication skills.

Source

Sylwan; 2020. 164(8)

Publisher

Polskie Towarzystwo Lesne

Location of Publisher

Warsaw

Country of Publication

Poland

Abstract

The COVID-19 pandemic globally impacting the educational systems, which affect the nursing students' academic responsibility, satisfaction and attitudes toward communication skills. Aim: The study aimed to assess the effect of COVID-19 on nursing students\' academic responsibility, satisfaction and attitudes toward communication skills. Setting: The study was conducted at Faculty of Nursing, Menoufia University in Egypt. Design: Descriptive, correlation design. Subjects: 327 undergraduate nursing students through Non-probability snowball sampling technique are recruited. Tools: Four tools: Socio -demographic characteristic, Academic Responsibilities Scale, Communication Skills Attitudes Scale and Revised undergraduate nursing students\' academic satisfaction scale. Results: Most of studied sample (92.70%) had the highest level of academic responsibility. More than half of the research sample respectively had positive attitude regarding learning communication skills and a reasonable degree of academic satisfaction (64.79%) & (63.90%). Conclusions: Most students had high level of academic responsibility, positive attitude toward learning communication skills and moderate academic satisfaction. Recommendations: Educational policy makers and planners should encourage the constructive and supportive staff-student's relationship as a top priority for high academic satisfaction.

Publication Type

Journal article.

<398>

Accession Number

20203449429

Title

The students' excersice pattern during social quanrantine for COVID-19 pandemic prevention: Vietnam case study.

Source

Sylwan; 2020. 164(8)

Publisher

Polskie Towarzystwo Lesne

Location of Publisher

Warsaw

Country of Publication

Poland

Abstract

This paper reviews the concepts of equality and equity in tertiary education, which can form a theoretical framework suitable for data collection and analysis. The analysis of existing documents and statistical data supports the hypothesis that equality and equity have been expanded and inequality has been reduced in Vietnam's restructuring society. The sustainability of this tendency continues to depend much on Vietnam's policies on support to economically difficult regions and renovation of the educational institutions and systems. It also includes policies on compulsory education, university enrollment and the linkage of tertiary education to research and to the domestic and international labor markets.

Publication Type

Journal article.

<399>

Accession Number

20203443277

Author

Shuai HuiPing; Chu Hin; Hou YuXin; Yang Dong; Wang YiXin; Hu BingJie; Huang XinEr; Zhang Xi; Chai Yue; Cai JianPiao; Chan FukWoo [Chan, F. W. J.]; Yuen KwokYung

Title

Differential immune activation profile of SARS-CoV-2 and SARS-CoV infection in human lung and intestinal cells: implications for treatment with IFN-beta and IFN inducer.

Source

Journal of Infection; 2020. 81(4):e1-e10. 47 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: Respiratory and intestinal tract are two primary target organs of SARS-CoV-2 infection. However, detailed characterization of the host-virus interplay in infected human lung and intestinal epithelial cells is lacking. Methods: We utilized immunofluorescence assays, flow cytometry, and RT-qPCR to delineate the virological features and the innate immune response of the host cells against SARS-CoV-2 infection in two prototype human cell lines representing the human lung (Calu3) and intestinal (Caco2) epithelium when compared with SARS-CoV. Results: Lung epithelial cells were significantly more susceptible to SARS-CoV-2 compared to SARS-CoV. However, SARS-CoV-2 infection induced an attenuated pro-inflammatory cytokines/chemokines induction and type I and type II IFN responses. A single dose of 10 U/mL interferon-beta (IFNbeta) pretreatment potently protected both Calu3 and Caco2 against SARS-CoV-2 infection. Interestingly, SARS-CoV-2 was more sensitive to the pretreatment with IFNbeta and IFN inducer than SARS-CoV in Calu3. Conclusions: Despite robust infection in both human lung and intestinal epithelial cells, SARS-CoV-2 could attenuate the virus-induced pro-inflammatory response and IFN response. Pre-activation of the type I IFN signaling pathway primed a highly efficient antiviral response in the host against SARS-CoV-2 infection, which could serve as a potential therapeutic and prophylactic maneuver to COVID-19 patients.

Publication Type

Journal article.

<400>

Accession Number

20203440182

Author

Zou LiHai

Title

Respiratory protection for medical staff to prevent COVID-19 infection. [Chinese]

Source

China Tropical Medicine; 2020. 20(8):794-798.

Publisher

Editorial Department of China Tropical Medicine

Location of Publisher

Haikou

Country of Publication

China

Abstract

Coronavirus disease 2019 (COVID-19) spread throughout China, which causing a wide scale of infections among medical staff. For the purpose of improving the protection level of medical staff, this article discusses measures to improve the respiratory protection in medical personnel. By analyzing the transmission characteristics of SARS virus and novel coronavirus (SARS-CoV-2) and the infection status of medical staff in the earliest stage of outbreak, to explore the possible causes of infection and the recommended protective measures in medical staff to be taken. This article comprehensively introduced the performance of various types of protective masks in China, as well as the manufacturing standards, protective performance, and application scope of medical and industrial protective masks in China and the Western world. It is proposed that the level of respiratory protection of medical staff should be improved, and medical staff in isolation wards should be equipped with protective masks of medical grade II or higher. In case of shortage, medical N95 masks and medical surgical masks could be used instead of. At present, medical N95 masks as the main respiratory protection measures for medical staff could not reach the requirements to avoid infection of medical personnel. The selection standard of protective masks in medical workplace should be elevated, at the meanwhile, certain types of protective masks should be applied appropriately to protect medical staff from accidentally infection.

Publication Type

Journal article.

<401>

Accession Number

20203440105

Author

McQuaid, C. F.; McCreesh, N.; Read, J. M.; Sumner, T.; Houben, R. M. G. J.; White, R. G.; Harris, R. C.

Title

The potential impact of COVID-19-related disruption on tuberculosis burden.

Source

European Respiratory Journal; 2020. 56(2)16 ref.

Publisher

European Respiratory Society

Location of Publisher

Sheffield

Country of Publication

UK

Abstract

Any benefit of social distancing on TB deaths is likely to be outweighed by health service disruption. As such, it is crucially important to maintain and strengthen TB-related health services during, and after, the COVID-19 pandemic. This article used a mathematical model of TB with an age-specific contact matrix

calibrated to data from China, India and South Africa. It is, however, imperative that continued access to TB diagnosis and care is ensured, together with the collection and regular reporting of TB indicators, to allow the impact on TB to be both measured and mitigated. Research, guidance and funding are urgently required to identify, prioritize and deliver those interventions that could best alleviate the impact of COVID-19-related disruptions. These will differ by timescale. Interventions that are necessarily prioritized during disruptions, such as digital adherence technologies to support patient treatment remotely, will be different to those to prioritized afterwards, such as active case-finding activities focused on the household, where social contacts and transmission may have been concentrated. It is vital that decision-makers and funders recognize the importance of this issue and act to ensure that innovative approaches to people-centred TB care are rapidly scaled up, so that the fight to end one pandemic does not worsen another.

Publication Type

Correspondence.

<402>

Accession Number

20203446898

Author

Muench, P.; Simon Jochum; Verena Wenderoth; Beatus Ofenloch-haehnle; Michael Hombach; Matthias Strobl; Sadlowski, H.; Sachse, C.; Torriani, G.; Eckerle, I.; Riedela, A.

Title

Development and validation of the elecsys anti-SARS-CoV-2 immunoassay as a highly specific tool for determining past exposure to SARS-CoV-2.

Source

Journal of Clinical Microbiology; 2020. 58(10)43 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

The Elecsys Anti-SARS-CoV-2 immunoassay (Roche Diagnostics) was developed to provide accurate, reliable detection of antibodies to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). We evaluated sensitivity, specificity, cross-reactivity, and agreement with a vesicular stomatitis virus-based pseudoneutralization assay for the Elecsys Anti-SARS-CoV-2 immunoassay. Sensitivity and agreement between Elecsys Anti-SARS-CoV-2 immunoassay and pseudoneutralization assay measurements were evaluated using samples from patients with PCR-confirmed SARS-CoV-2 infection, a majority of whom were

hospitalized. Specificity was evaluated using samples from routine diagnostic testing/blood donors collected before December 2019 and thus deemed negative for SARS-CoV-2-specific antibodies. Cross-reactivity was evaluated using samples containing a wide range of potentially cross-reacting analytes, purchased from commercial vendors. For sensitivity and specificity, point estimates and 95% confidence intervals (CIs) were calculated. Agreement between the Elecsys Anti-SARS-CoV-2 immunoassay and the pseudoneutralization assay was calculated. The sensitivity of the Elecsys Anti- SARS-CoV-2 immunoassay in patients with prior PCR-confirmed SARS-CoV-2 infection was 99.5% (95% CI, 97.0 to 100.0%) at \14 days post-PCR confirmation. Overall specificity (n 10,453) was 99.80% (95% CI, 99.69 to 99.88%). Only 4/792 samples containing potential cross-reacting analytes were reactive with the Elecsys Anti-SARS-CoV-2 immunoassay, resulting in an overall specificity in this cohort of 99.5% (95% CI, 98.6 to 99.9%). Positive, negative, and overall agreement (n 46) between the Elecsys Anti-SARS-CoV-2 immunoassay and the pseudoneutralization assay were 86.4% (95% CI, 73.3 to 93.6%), 100% (95% CI, 34.2 to 100%), and 87.0% (95% CI, 74.3 to 93.9%), respectively. The Elecsys Anti-SARSCoV- 2 immunoassay demonstrated high sensitivity (99.5% at 14 days post-PCR confirmation) and specificity (99.80%), supporting its use as a tool for identification of past SARS-CoV-2 infection, including use in populations with low disease prevalence.

Publication Type

Journal article.

<403>

Accession Number

20203446868

Author

Temsah, M. H.; Alhuzaimi, A. N.; Alamro, N.; Alrabiaah, A.; Al-Sohime, F.; Alhasan, K.; Kari, J. A.; Almaghlouth, I.; Aljamaan, F.; Al-Eyadhy, A.; Jamal, A.; Al-Amri, M.; Barry, M.; Al-Subaie, S.; Somily, A. M.; Al-Zamil, F.

Title

Knowledge, attitudes and practices of healthcare workers during the early COVID-19 pandemic in a main, academic tertiary care centre in Saudi Arabia.

Source

Epidemiology and Infection; 2020. 148(e203)34 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

As the Middle East respiratory syndrome coronavirus (MERS-CoV) continues to occur in small outbreaks in Saudi Arabia, we aimed to assess the knowledge, attitudes and intended practices of healthcare workers (HCWs) during the early stage of the COVID-19 pandemic and compare worry levels with previous findings during the MERS-CoV outbreak in 2015. We sent an adapted version of our previously published MERS-CoV questionnaire to the same cohort of HCWs at a tertiary hospital in Saudi Arabia. About 40% of our sample had previous experience with confirmed or suspected MERS-CoV patients, and those had a significantly higher knowledge score (13.16 +/- 2.02 vs. 12.58 +/- 2.27, P = 0.002) and higher adherence to protective hygienic practices (2.95 +/- 0.80 vs. 2.74 +/- 0.92, P = 0.003). The knowledge scores on COVID-19 were higher in the current cohort than the previous MERS-CoV outbreak cohort (68% vs. 79.7%, P < 0.001). HCWs from the current cohort who felt greater anxiety from COVID-19 compared to MERS-CoV were less likely to have been exposed to MERS-CoV infected/suspected cases (odds ratio (OR) = 0.646, P = 0.042) and were less likely to have attended the hospital awareness campaign on COVID-19 (OR = 0.654, P = 0.035). We concluded that previous experience with MERS-CoV was associated with increased knowledge and adherence to protective hygienic practices, and reduction of anxiety towards COVID-19.

Publication Type

Journal article.

<404>

Accession Number

20203446814

Author

Shao Yi; Zhang Wei

Title

Psychological and ocular surface state of ophthalmologists and ophthalmic nurses working with patients with coronavirus disease 2019.

Source

JAMA Ophthalmology; 2020. 138(8):907-910. 8 ref.

Publisher

American Medical Association

Location of Publisher

Chicago

Country of Publication

USA

Abstract

Importance: The influence on the psychology and ocular surface of ophthalmologists and ophthalmic nurses in Wuhan, China, during the coronavirus disease 2019 (COVID-19) pandemic is not yet fully understood. Background: To characterize mental state and ocular surface state of ophthalmologists and

ophthalmic nurses in Wuhan, China, and similar areas during the COVID-19 outbreak. Design, Setting, and Participants: This survey study assessed ophthalmologists and ophthalmic nurses in Wuhan, China, and Jiangxi, China, a province approximately 300 km south of Wuhan. The Hospital Anxiety and Depression Scale, the Van Dream Anxiety Scale, and the Ocular Surface Disease Index were used to conduct questionnaire surveys via a messaging and social media app. Main Outcomes and Measures: Mean scores from the Hospital Anxiety and Depression Scale (0-10 points), the Van Dream Anxiety Scale (0-100 points), and the Ocular Surface Disease Index (0-100 points). Results: Of 126 individuals, there were 42 ophthalmologists (33.3%) and 21 ophthalmic nurses (16.7%) from Wuhan and 42 ophthalmologists (33.3%) and 21 nurses (16.7%) from Jiangxi. The mean (SD) age of ophthalmologists was 36.1 (7.6) years in Wuhan and 41.2 (8.8) years in Jiangxi. For ophthalmic nurses, the mean (SD) age was 35.2 (7.4) years in Wuhan and 33.4 (7.9) years in Jiangxi. The response rate for ophthalmologists was 90.3% (84 of 93) and for nurses was 91.3% (42 of 46). The participation rate of ophthalmologists and nurses in Wuhan was 0.06% (42 of 70 000) and 0.07% (21 of 30 000), respectively; the participation rate in Jiangxi was 0.06% (42 of 70 000; 21 of 35 000) for both groups. In Wuhan, the mean (SD) Hospital Anxiety and Depression Scale (anxiety and depression were counted as separate scores), Van Dream Anxiety Scale, and the Ocular Surface Disease Index scores were 6.90 (2.30), 7.38 (2.19), 24.52 (5.86), and 43.90 (3.74), respectively, in ophthalmologists and 8.67 (3.04), 9.38 (2.64), 21.48 (6.15), and 40.05 (6.67), respectively, in ophthalmic nurses. In Jiangxi, these scores were 5.67 (2.89), 4.90 (3.15), 12.76 (7.27), and 38.79 (7.78), respectively, in ophthalmologists and 4.67 (3.20), 4.33 (3.23), 10.10 (7.62), and 41.52 (5.92), respectively, in ophthalmic nurses. The difference (95% CI) between the 2 regions for these scores in ophthalmologists was 2.48 (95% CI, 1.30-3.65), 11.76 (95% CI, 8.90-14.63), 5.12 (95% CI, 2.45-7.79), and 5.12 (95% CI, 2.47-7.77), respectively, and in ophthalmic nurses was 4.16 (95% CI, 2.05-5.95), 5.05 (95% CI, 3.21-6.89), 11.38 (95% CI, 7.06-15.70), and -1.48 (95% CI, -5.41 to 2.25), respectively. Conclusions and Relevance: These findings suggest that ophthalmologists and ophthalmic nurses in Wuhan experienced more anxiety and depression and reported greater ocular surface abnormalities than counterparts outside of Wuhan, but the wide CIs preclude concluding confidently that there were differences.

Publication Type

Journal article.

<405>

Accession Number

20203443720

Author

Chen MengDing; Wei Xin; Wang ZhengGuang

Title

Protecting healthcare workers from SARS-CoV-2 and other infections.

Source

Epidemiology and Infection; 2020. 148(e217)34 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Coronavirus disease 2019 (COVID-19) has had a tremendous impact in China and abroad since its onset in December 2019 and poses a major threat to human health. Healthcare workers (HCWs) are at the forefront of the response to outbreaks. This study reviewed literature data and found that HCWs were at high risk of infection during the COVID-19 pandemic, especially at the early stage of the epidemic, and many factors greatly affected their occupational safety. Although SARS-CoV-2 transmission was controlled in China, the Chinese experience can help protect HCWs from COVID-19 and other respiratory diseases.

Publication Type

Journal article.

<406>

Accession Number

20203440603

Author

Barreiro-Gen, M.; Lozano, R.; Zafar, A.

Title

Changes in sustainability priorities in organisations due to the COVID-19 outbreak: averting environmental rebound effects on society.

Source

Sustainability; 2020. 12(12)45 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 outbreak has affected societies and organisations in an unprecedented way. This has resulted in negative impacts to economic and social issues, but it is a "blessing in disguise" for environmental issues. This paper analyses how the outbreak has affected organisations' sustainability

priorities. Prior to the COVID-19 outbreak, such priorities were on the economic dimension followed by the environmental and social dimensions. A survey was sent to 11,657 organisations to analyse such changes, with a 5.60% response rate. The results show that for organisations, the main priority is now on the social dimension, followed by the economic one; however, the environmental dimension has suffered a negative impact in prioritisation, regardless of organisation type, country where they are based, organisation size, or the time they have been working on sustainability. We are currently facing an environmental conundrum, where air quality has improved and pollution has decreased in societies, but organisations are starting to neglect such environmental issues. The COVID-19 outbreak is an opportunity for organisations to better contribute to sustainability by ensuring that the efforts that have been undertaken in the last three decades are not forgotten, and that societies and organisations are better coupled to face such crises and avert rebound effects.

Publication Type

Journal article.

<407>

Accession Number

20203350777

Author

Roderick, E.

Title

The global tilapia: resilience in tilapia culture continues despite lower prices since 2017 and recent upheavals with Covid-19.

Source

Aqua Culture Asia Pacific; 2020. 16(4):52-55.

Publisher

Aqua Research Pte Ltd

Location of Publisher

Singapore

Country of Publication

Singapore

Publication Type

Journal article.

<408>

Accession Number

20203389427

Author

Kumar, K. J. S.; Vani, M. G.; Wang ChungShuan; Chen ChiaChi; Chen YuChien; Lu LiPing; Huang ChingHsiang; Lai ChienSing; Wang ShengYang

Title

Geranium and lemon essential oils and their active compounds downregulate angiotensin-converting enzyme 2 (ACE2), a SARS-CoV-2 spike receptor-binding domain, in epithelial cells.

Source

Plants; 2020. 9(6)30 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), also known as coronavirus disease-2019 (COVID-19), is a pandemic disease that has been declared as modern history's gravest health emergency worldwide. Until now, no precise treatment modality has been developed. The angiotensin-converting enzyme 2 (ACE2) receptor, a host cell receptor, has been found to play a crucial role in virus cell entry; therefore, ACE2 blockers can be a potential target for anti-viral intervention. In this study, we evaluated the ACE2 inhibitory effects of 10 essential oils. Among them, geranium and lemon oils displayed significant ACE2 inhibitory effects in epithelial cells. In addition, immunoblotting and qPCR analysis also confirmed that geranium and lemon oils possess potent ACE2 inhibitory effects. Furthermore, the gas chromatography-mass spectrometry (GC-MS) analysis displayed 22 compounds in geranium oil and 9 compounds in lemon oil. Citronellol, geraniol, and neryl acetate were the major compounds of geranium oil and limonene that represented major compound of lemon oil. Next, we found that treatment with citronellol and limonene significantly downregulated ACE2 expression in epithelial cells. The results suggest that geranium and lemon essential oils and their derivative compounds are valuable natural anti-viral agents that may contribute to the prevention of the invasion of SARS-CoV-2/COVID-19 into the human body.

Publication Type

Journal article.

<409>

Accession Number

20203452474

Author

Bong ChoonLooi; Brasher, C.; Chikumba, E.; McDougall, R.; Mellin-Olsen, J.; Enright, A.

Title

The COVID-19 pandemic: effects on low- and middle-income countries.

Source

Anesthesia and Analgesia; 2020. 131(1):86-92. 46 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19) is spreading rapidly around the world with devastating consequences on patients, health care workers, health systems, and economies. As it reaches low- and middle-income countries, its effects could be even more dire, because it will be difficult for them to respond aggressively to the pandemic. There is a great shortage of all health care providers, who will be at risk due to a lack of personal protection equipment. Social distancing will be almost impossible. The necessary resources to treat patients will be in short supply. The end result could be a catastrophic loss of life. A global effort will be required to support faltering economies and health care systems.

Publication Type

Journal article.

<410>

Accession Number

20203454851

Author

Ebeid, F. S. E.

Title

COVID-19 effect on clinical research: single-site risk management experience.

Source

Perspectives in Clinical Research; 2020. 11(3):106-110. 10 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: The ongoing coronavirus disease 2019 (COVID-19) pandemic is extensively impacting new and ongoing clinical trials of various medical products irrespective of indication. It has the potential to adverse effect not only in terms of recruitment and immediate patient care but is also likely to affect the data collection and analysis in the months to come. Aim: The aim was to illustrate the effect of COVID-19 on the clinical research in one of the research centers in low limited-resource country as Egypt and the management plan performed to decrease this adverse impact. Methodology: Secondary data were collected anonymously about the measures implemented to deal with the challenges of conducting the nine ongoing and new clinical researches during COVID-19 pandemic at Faculty of Medicine, Ain Shams University Research Institute-Clinical Research Center. Results: Out of the 47 enrolled participants, thirty participants required investigational product (IP) dispensation during the remaining study period; 27 of them had their IP dispensed at site, and six participants who were from far away Governorate were not able to come to the center due to the partial lockdown and had their IP deliver through courier to their home. Safety laboratory assessment had performed at the site or local laboratory at their hometown. Virtual visit alternatives to in-person visits for communication and patient evaluation had been performed. Recruitment of new participants and opening new sites were stopped in many trials. In order to reduce the on-site activities, in particular, on-site monitoring, all monitoring visits were performed virtually. Conclusion: The adverse impact of COVID-19 pandemic on clinical trials could be lessening by active management plan.

Publication Type

Journal article.

<411>

Accession Number

20203439309

Author

Dilip Ghosh

Title

Role of evidence-based nutraceuticals in tackling viral infection including COVID-19 pandemic.

Source

Agro Food Industry Hi-Tech; 2020. 31(2):76-78. 20 ref.

Publisher

TeknoScienze S.r.l

Location of Publisher

Milan

Country of Publication

Italy

Abstract

Viral infections including coronavirus (CoV), play an important role in human disease spectrum, and recent pandemic of Covid-19 have highlighted again the importance of prevention as a critical issue in safeguarding public health. Despite the progress made in immunization and drug development, many viruses lack preventive vaccines and efficient antiviral therapies. Botanical-derived products provide a rich resource for novel antiviral drug development based on evidences. Until the world discovered any real solution, evidence-based nutraceuticals/dietary supplement/complementary medicines/herbal medicines (different country coined different regulatory names) may possess some advantages in preventing or treating the SARSCoV-2 infection. Few recent clinical trials' outcomes showed very promising results.

Publication Type

Journal article.

<412>

Accession Number

20203439308

Author

Das, U. N.

Title

Bioactive lipids and COVID-19.

Source

Agro Food Industry Hi-Tech; 2020. 31(2):74-75.

Publisher

TeknoScienze S.r.l

Location of Publisher

Milan

Country of Publication

Italy

Abstract

Linolenic acid (LA), alpha-linolenic acid (ALA), gamma-linolenic acid (GLA), dihomo-GLA (DGLA), arachidonic acid (AA), eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) have been shown to inactivate enveloped viruses such as influenza, Sindbis, Sendai, hepatitis B and C (HBV and HCV) and several bacteria. Since COVID-19 (coronavirus, SARS-CoV-2), SARS of 2002-2003 (SARS-CoV-1) and Middle East respiratory syndrome (MERS; 2012-ongoing) are all enveloped viruses; it is likely that they are also inactivated by these bioactive lipids, especially by AA. Hence, it is worthwhile to test the efficacy of these lipids in the inactivation of SARS-CoV-1 and SARS-CoV-2 (Coronavirus) and whether administration of AA and other lipids as nasal drops, mouth wash or gargling, oral supplements and intravenous infusion can ameliorate their pathogenicity.

Publication Type

Journal article.

<413>

Accession Number

20203437493

Author

Sekulic, D.; Blazevic, M.; Gilic, B.; Kvesic, I.; Zenic, N.

Title

Prospective analysis of levels and correlates of physical activity during COVID-19 pandemic and imposed rules of social distancing; gender specific study among adolescents from Southern Croatia.

Source

Sustainability; 2020. 12(10)41 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Background: Due to the COVID-19 pandemic, global authorities have imposed rules of social distancing that directly influence overall physical activity in populations. The aim of this study was to evaluate the

trends of changes in physical-activity levels (PALs) in adolescents and factors that may be associated with PALs among the studied boys and girls. Methods: Participants in this prospective study comprised 388 adolescents (126 females; mean age: 16.4 +/- 1.9 years) from southern Croatia who were tested at a baseline (before the imposed rules of social distancing) and at a follow-up measurement (three weeks after the initiation). Baseline testing included anthropometric variables, variables of fitness status (done at the beginning of the school year), and PALs. At the follow-up, participants were tested on PALs. PALs were evaluated over an online platform using the Physical Activity Questionnaire for Adolescents. Results: A significant decrease of PALs was evidenced for the total sample (t-test = 3.46, $p < 0.001$), which was primarily influenced by a significant decrease of PALs in boys (t-test = 5.15, $p < 0.001$). The fitness status (jumping capacity, abdominal strength, aerobic endurance, and anaerobic endurance) was systematically positively correlated with PALs at the baseline and follow-up among boys and girls, with the most evident association between aerobic and anaerobic endurance capacities and PALs. Correlations between anthropometric and fitness variables with changes in physical activity (e.g., the difference between baseline and follow-up PALs) were negligible. Conclusions: Differences in PAL changes between genders were probably related to the fact that PALs among boys were mostly related to participation in organized sports. Correlations between baseline fitness status and PALs indicated the importance of overall physical literacy in preserving PALs in challenging circumstances, such as the COVID-19 pandemic observed here.

Publication Type

Journal article.

<414>

Accession Number

20203437485

Author

Trung Tran; Anh-Duc Hoang; Yen-Chi Nguyen; Linh-Chi Nguyen; Ngoc-Thuy Ta; Quang-Hong Pham; Chung-Xuan Pham; Quynh-Anh Le; Viet-Hung Dinh; Tien-Trung Nguyen

Title

Toward sustainable learning during school suspension: socioeconomic, occupational aspirations, and learning behavior of Vietnamese students during COVID-19.

Source

Sustainability; 2020. 12(10)many ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The overspread of the novel coronavirus-SARS-CoV-2-over the globe has caused significant damage to manufacturing and service businesses, regardless of whether they are commercial, public, or not-for-profit sectors. While both the short-term and long-term impacts of most companies can be approximately measured or estimated, it is challenging to address the enduring effects of COVID-19 on teaching and learning activities. The target of this research is to investigate students' manners of studying at home during the school suspension time as a result of COVID-19. Through analyzing original survey data from 420 K6-12 students in Hanoi, Vietnam, this work demonstrates the different learning habits of students with different socioeconomic statuses and occupational aspirations during the disease's outbreak. In particular, we featured the differences in students' learning behaviors between private schools and public schools, as well as between students who plan to follow STEM-related careers and those who intend to engage in social science-related careers. The empirical evidence of this study can be used for the consideration of the local government to increase the sustainability of coming policies and regulations to boost students' self-efficacy, as it will affect 1.4 million students in Hanoi, as well as the larger population of nearly 10 million Vietnamese students. These results can also be the foundation for future investigations on how to elevate students' learning habits toward Sustainable Development Goal 4 (SDG4)-Quality Education-especially in fanciful situations in which the regular school operation has been disrupted, counting with limited observation and support from teachers and parents.

Publication Type

Journal article.

<415>

Accession Number

20203449280

Author

Park ShinYoung; Choi Gawon; Lee Hyeyoung; Kim NaYoung; Lee SeonYoung; Kim Kyungnam; Shin Soyoung; Jang Eunsu; Moon Youngsin; Oh Kwanghwan; Choi Jaerin; Lee Sangeun; Kim YoungMan; Yi Seonju; Gwack Jin; Park Ok; Park YoungJoon

Title

Early intervention reduces the spread of COVID-19 in long-term care facilities in the Republic of Korea.

Source

Osong Public Health and Research Perspectives; 2020. 11(4):259-264. 10 ref.

Publisher

Korea Center for Disease Control and Prevention

Location of Publisher

Chungcheongbuk-do

Country of Publication

Korea Republic

Abstract

This study describes the epidemiological characteristics of coronavirus disease 2019 (COVID-19) based on reported cases from long-term care facilities. As of April 20th, 2020, 3 long-term care facilities in a metropolitan area of South Korea had reported cases of COVID-19. These facilities' employees were presumed to be the sources of infection. There were 2 nursing hospitals that did not report any additional cases. One nursing home had a total of 25 cases, with an attack rate of 51.4% (95% CI 35.6-67.0), and a fatality rate of 38.9% (95% CI 20.3-61.4) among residents. The results from this study suggest that early detection and maintenance of infection control minimizes the risk of rapid transmission.

Publication Type

Journal article.

<416>

Accession Number

20203449237

Author

Razzaque, M. S.

Title

COVID-19 pandemic: can maintaining optimal zinc balance enhance host resistance?

Source

Tohoku Journal of Experimental Medicine; 2020. 251(3):175-181. many ref.

Publisher

Tohoku University Medical Press

Location of Publisher

Sendai

Country of Publication

Japan

Abstract

The novel coronavirus disease 2019 (COVID-19) is now officially declared as a pandemic by the World Health Organization (WHO), and most parts of the world are taking drastic measures to restrict human movements to contain the infection. Millions around the world are wondering, if there is anything that could be done, other than maintaining high personal hygiene, and be vigilant of the symptoms, to reduce the spread of the disease and chances of getting infected, or at least to lessen the burden of the disease, caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The National and International health agencies, including the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), and the WHO have provided clear guidelines for both preventive and treatment suggestions. In this article, I will briefly discuss, why keeping adequate zinc balance might enhance the host response and be protective of viral infections.

Publication Type

Journal article.

<417>

Accession Number

20203446105

Author

O'shea, P. M.; Griffin, T. P.; Brennan, M.; Mulkerrin, E. C.

Title

COVID-19: the older adult and the importance of vitamin D sufficiency.

Source

Journal of Nutritional Science; 2020. 9(e40)65 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

In December 2019, in Wuhan, China, the novel coronavirus 'severe acute respiratory syndrome 2' (SARS-CoV-2) was discovered as the cause of a pneumonia-like illness and subsequently named coronavirus disease 2019 (COVID-19). COVID-19 spread and is now a global pandemic. With few exceptions, countries in the Northern hemisphere have higher mortality rates from COVID-19. This may be due to an increased prevalence of older people in Northern Europe at higher risk of having cardio-pulmonary and metabolic comorbidities as well as hypovitaminosis D. With increasing age, immunosenescence and 'inflammaging' lead to impaired and maladaptive immune responses to SARS-CoV-2 infections, contributing to the enhanced prevalence of severe COVID-19 in older patients. The association of ageing with increased vitamin D deficiency, which is associated with cardiovascular risk factors and disease and worse prognosis in COVID-19 infection, is discussed. Considerable experimental evidence demonstrates the immuno-modulatory properties of vitamin D, in particular, its role in regulating and suppressing the inflammatory cytokine response to viral respiratory infections links the importance of vitamin D sufficiency as a potential protective factor in COVID-19. There is an urgent need for prospective randomised studies to examine whether hypovitaminosis D correlates with severity of COVID-19 disease and the actual benefit of repletion. Moreover, given what has been described as a 'pandemic of vitamin D deficiency', especially in Europe, and in the context of the SARS-CoV-2 contagion, the authors support the call for public health doctors and physicians, with support from Governments, to prioritise and strengthen recommendations on vitamin D intake and supplementation.

Publication Type

Journal article.

<418>

Accession Number

20203448509

Author

Hosseini, F. S.; Amanlou, M.

Title

Anti-HCV and anti-malaria agent, potential candidates to repurpose for coronavirus infection: virtual screening, molecular docking, and molecular dynamics simulation study.

Source

Life Sciences; 2020. 25845 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Aims: Coronavirus disease 2019 (COVID-19) has appeared in Wuhan, China but the fast transmission has led to its widespread prevalence in various countries, which has made it a global concern. Another concern is the lack of definitive treatment for this disease. The researchers tried different treatment options which are not specific. The current study aims to identify potential small molecule inhibitors against the main protease protein of SARS-CoV-2 by the computational approach. Main methods: In this study, a virtual screening procedure employing docking of the two different datasets from the ZINC database, including 1615 FDA approved drugs and 4266 world approved drugs were used to identify new potential small molecule inhibitors for the newly released crystal structure of main protease protein of SARS-CoV-2. In the following to validate the docking result, molecular dynamics simulations were applied on selected ligands to identify the behavior and stability of them in the binding pocket of the main protease in 150 nanoseconds (ns). Furthermore, binding energy using the MMPBSA approach was also calculated. Key findings: The result indicates that simeprevir (Hepatitis C virus NS3/4A protease inhibitor) and pyronaridine (antimalarial agent) could fit well to the binding pocket of the main protease and because of some other beneficial features including broad-spectrum antiviral properties and ADME profile, they might be a promising drug candidate for repurposing to the treatment of COVID-19. Significance: Simeprevir and pyronaridine were selected by the combination of virtual screening and molecular dynamics simulation approaches as a potential candidate for treatment of COVID-19.

Publication Type

Journal article.

<419>

Accession Number

20203442302

Author

Fedorova, E. S.; Stanishevskaya, O. I.

Title

New possibilities of the preservation and practical usage of rare breeds and populations of poultry: the case of Russian white chicken breed. [Russian]

Source

Ptitsevodstvo; 2020. (7/8):5-10. 10 ref.

Publisher

Avian (Redaktsija zhurnala "Ptitsevodstvo")

Location of Publisher

Moscow

Country of Publication

Russia

Abstract

The problem of the preservation and practical use of rare breeds and populations of poultry is reviewed on the example of Russian White chicken breed that could be used for the selection of the specialized populations of chicken as the producers of raw materials for the bioindustry. The urgency of this task is related to the problems of import substitution, adverse epizootic situation in the World's poultry production, and recent COVID-19 pandemia. The results of selection of a population of Russian White breed for higher output of the extraembryonic fluid (EEF) from 12.5-day old embryos in 5 generations are presented, with the criterion no less than 0.200 mL of EEF per 1 g of egg weight and lo less than 1 0 mL per embryo. The increase of EEF output in the selected population was also achieved via the selection for higher egg production and egg weight resulted in the increases in egg production by 15% and egg weight by 10%. The absolute output (mL/embryo) of EEF was increased by 14%, relative output (per 1 g of egg weight) by 8%; bioactivity of the Newcastle disease virus in the EEF increased by 11.5%. The percentage of individuals with high EEF output was increased by 25.2% in average. The virological investigation of embryos of the selected population evidenced their suitability for the production of certain vaccines and diagnostic kits.

Publication Type

Journal article.

<420>

Accession Number

20203440495

Author

Majumdar, B.; Naha, S.

Title

Live sport during the COVID-19 crisis: fans as creative broadcasters.

Source

Sport in Society: Cultures, Commerce, Media, Politics; 2020. 23(7):1091-1099. 19 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The hiatus in stadium spectatorship due to the COVID-19 pandemic presents us with a unique opportunity to rethink the way sport fans participate in the making of live events. Some sport leagues have resumed, with others to follow, but the stadium experience has profoundly changed as fans cannot gather in the galleries until the spread of coronavirus is arrested. How can sport broadcasters continue to engage fans and mitigate the problem of the empty stadium? We argue that creative harnessing of user-generated content and integration of online and offline fandom can help broadcasters present sport in a much more attractive manner during and after the pandemic.

Publication Type

Journal article.

<421>

Accession Number

20203440489

Author

Sharfuddin, S.

Title

The world after Covid-19.

Source

Round Table (London); 2020. 109(3):247-257. 5 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

As countries are firefighting the Covid-19 pandemic, one thing is becoming clear, the post-coronavirus world will be different in many ways economically, socially and health wise. No one will come out of this crisis without losing something. Previous threats to individual and social freedoms could not change our way of life but now this important asset of our civilisation is seriously threatened. In a post-Covid-19 world, a new international order will be redrawn by the powerful countries taking into account the lessons learnt in dealing with the current pandemic. The role of international institutions will also be critically reviewed. Developing countries with low GDP growth, high debt and dependence on oil and essential technologies will find it hard to maintain independent foreign policies. IT will play a major role in all aspects of life in education, e-governance, commerce, health and artificial intelligence. Use of tracking devices to monitor citizens would conflict with human rights concerns in favour of security and safety. Tourism will continue but visa regimes will be tightened. The lesson from Covid-19 is poignant. In the march of civilisation, survival of the fittest will not work. We need to take our weak and vulnerable along, even if we have to carry them on our shoulders.

Publication Type

Journal article.

<422>

Accession Number

20203446601

Author

Rodriguez, J.; Fletcher, A.; Heredia, F.; Fernandez, R.; Salazar, H. R.; Sanabria, D.; Luna, J. B.; Guerrero, E.; Pierre, M. E.; Rendon, G. J.; Rosero, I.; Trujillo, L. M.; Ribeiro, R.; Baiocchi, G.; Blanco, A. L.; Malca, M.;

Hoegl, J.; Garnica, A. B.; Vega, J. L. de la; Laufer, J.; Estrada, E. E.; Criado, A. G.; Nunez, G. S. H.; Cantu-De Leon, D.; Medina, G.; et al.

Title

Alternative management for gynecological cancer care during the COVID-2019 pandemic: a Latin American survey.

Source

International Journal of Gynecology & Obstetrics; 2020. 150(3):368-378. 33 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objective: To determine the acceptance rate of treatment alternatives for women with either preinvasive conditions or gynecologic cancers during the COVID-19 pandemic among Latin American gynecological cancer specialists. Methods: Twelve experts in gynecological cancer designed an electronic survey, according to recommendations from international societies, using an online platform. The survey included 22 questions on five topics: consultation care, preinvasive cervical pathology, and cervical, ovarian, and endometrial cancer. The questionnaire was distributed to 1052 specialists in 14 Latin American countries. A descriptive analysis was carried out using statistical software. Results: A total of 610 responses were received, for an overall response rate of 58.0%. Respondents favored offering teleconsultation as triage for post-cancer treatment follow-up (94.6%), neoadjuvant chemotherapy in advanced stage epithelial ovarian cancer (95.6%), and total hysterectomy with bilateral salpingo-oophorectomy and defining adjuvant treatment with histopathological features in early stage endometrial cancer (85.4%). Other questions showed agreement rates of over 64%, except for review of pathology results in person and use of upfront concurrent chemoradiation for early stage cervical cancer (disagreement 56.4% and 58.9%, respectively). Conclusion: Latin American specialists accepted some alternative management strategies for gynecological cancer care during the COVID-19 pandemic, which may reflect the region's particularities. The COVID-19 pandemic led Latin American specialists to accept alternative management strategies for gynecological cancer care, especially regarding surgical decisions.

Publication Type

Journal article.

<423>

Accession Number

20203440447

Author

Montanari, F.; Arayess, S.; Barbarasa, T.; Clavarino, A.; Ferreira, I.; Mahy, A.; Margaritis, S.; Michalowska, A.; Schrock, C.; Serve, A.; Wesolowska, A. S.; Varallo, C.; Gonzalez, P. V.

Title

The response of the EU agri-food chain to the COVID-19 pandemic: chronicles from the EU and selected member states.

Source

European Food and Feed Law Review; 2020. (4):336-356.

Publisher

Lexxion Verlagsgesellschaft mbH

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

This research article aims at providing a preliminary assessment of the impact of COVID-19 on the EU agri-food sector between March and May 2020. To this end, an analysis of the policy and legislative measures adopted during this period at EU level is first provided. Then, national experiences of nine Member States - i.e. Belgium, Germany, Greece, Italy, the Netherlands, Poland, Portugal, Romania and Spain - are described in detail, illustrating, for each country, the most relevant impacts and responses by competent authorities and stakeholders alike. Overall, whilst one can conclude that the EU agri-food sector has shown a high degree of resilience at the onset of the pandemic, the latter has nevertheless revealed its vulnerability to external threats and, with it, the need to guarantee a proper level of preparedness to ensure, in future, food security on the EU market during similar crisis.

Publication Type

Journal article.

<424>

Accession Number

20203447868

Author

Mishra, V. N.; Nidhi Kumari; Abhishek Pathak; Chaturvedi, R. K.; Gupta, A. K.; Chaurasia, R. N.

Title

Possible role for bacteriophages in the treatment of SARS-CoV-2 infection.

Source

International Journal of Microbiology; 2020. 2020(8844963)40 ref.

Publisher

Hindawi

Location of Publisher

London

Country of Publication

UK

Abstract

An outbreak of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was first reported in Wuhan City, China, in December 2019. Since then, the outbreak has grown into a global pandemic, and neither a vaccine nor a treatment for the disease, termed coronavirus disease 2019 (COVID-19), is currently available. *e slow translational progress in the field of research suggests that a large number of studies are urgently required. In this context, this review explores the impact of bacteriophages on SARS-CoV-2, especially concerning phage therapy (PT). Bacteriophages are viruses that infect and kill bacterial cells. Several studies have confirmed that in addition to their antibacterial abilities, bacteriophages also show antiviral and antifungal properties. It has also been shown that PTis effective for building immunity against viral pathogens by reducing the activation of NF kappa B; additionally, phages produce the antiviral protein phagicin. *e Ganges river in India, which originates from the Himalayan range, is known to harbor a large number of bacteriophages, which are released into the river gradually by the melting permafrost. Water from this river has traditionally been considered a therapeutic agent for several diseases. In this review, we hypothesize that the Ganges river may play a therapeutic role in the treatment of COVID-19.

Publication Type

Journal article.

<425>

Accession Number

20203445908

Author

Atanu Chandra; Sudipta Bandopadhyay; Arindam Nag; Tanuka Mandal; Purbasha Biswas; Dwijen Das; Prabhat Pandey; Uddalak Chakraborty

Title

Frequency of comorbidities & their association with intensive care unit admission in hospitalised patients with 2019 novel coronavirus infection in Tertiary Care Centres of three States of India.

Source

Journal of the Indian Medical Association; 2020. 118(6):31-34. 14 ref.

Publisher

Indian Medical Association (IMA)

Location of Publisher

Kolkata

Country of Publication

India

Abstract

The coronavirus disease 2019 (COVID-19) has created a substantial burden on healthcare services worldwide. Since its first detection in 30th January, it has rapidly spread throughout India. Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) infection results in clusters of severe acute respiratory illness leading to intensive care unit (ICU) admission and considerable mortality. So, there has been an ardent need of data on the frequency of comorbidities in COVID-19 & to assess whether their presence is associated with increased ICU admission. We analysed data from 496 patients with laboratoryconfirmed Covid-19 admitted in tertiary care centers of three states of India from 15th to 30th May, 2020. The mean age was 49.7 years & 41.13% of the patients were female. Hypertension (21.97%) was the most frequent comorbidity followed by diabetes (12.90%) & cardiovascular disease (8.87%). 39.92% of the study population had at least one comorbidity. Patients with comorbidities had higher ICU admission than those without comorbidity (35.35% vs. 20.47%). Associated comorbidity was more frequent among ICU patients in comparison to non-ICU patients (53.43% vs. 35.07%). Our study findings suggest that presence of comorbidity is associated with higher ICU admission thereby indicating more severe disease.

Publication Type

Journal article.

<426>

Accession Number

20203424258

Author

Aragaw, T. A.

Title

Surgical face masks as a potential source for microplastic pollution in the COVID-19 scenario.

Source

Marine Pollution Bulletin; 2020. 15935 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Although there have been enormous reports on the microplastic pollution from different plastic products, impacts, controlling mechanisms in recent years, the surgical face masks, made up of polymeric materials, as a source of microplastic pollution potential in the ecosystem are not fully understood and considered yet. Current studies are mostly stated out that microplastics pollution should be a big deal because of their enormous effect on the aquatic biota, and the entire environment. Due to the complicated conditions of the aquatic bodies, microplastics could have multiple effects, and reports so far are still lacking. In addition to real microplastic pollutions which has been known before, face mask as a potential microplastic source could be also researching out, including the management system, in detail. It is noted that face masks are easily ingested by higher organisms, such as fishes, and microorganisms in the aquatic life which will affect the food chain and finally chronic health problems to humans. As a result, microplastic from the face mask should be a focus worldwide.

Publication Type

Journal article.

<427>

Accession Number

20203421157

Author

Lahmer, T.; Rasch, S.; Spinner, C.; Geisler, F.; Schmid, R. M.; Huber, W.

Title

Invasive pulmonary aspergillosis in severe coronavirus disease 2019 pneumonia.

Source

Clinical Microbiology and Infection; 2020. 26(10):1428-1429. 5 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This case report describes the clinical course and management of invasive pulmonary aspergillosis-related COVID-19 pneumonia. Both individuals were without typical risk factors for IPA, e.g. steroid medication or other immunospuppression, and were admitted from a secondary-care hospital with pneumonia caused by COVID-19 to our intensive care unit (ICU) after progression to severe acute respiratory distress syndrome.

In the initial bronchoalveolar lavage of both patients only COVID-19 was found (PCR negative for influenza virus and respiratory syncytial virus); a follow-up bronchoalveolar lavage because of ongoing fever a few days later (days 5 and 6 after ICU admission) showed elevated galactomannan and growth of Aspergillus fumigatus in standard culture, suggesting IPA. All patients received a chest computed tomography scan before ICU admittance with typical signs for COVID-19 pneumonia but no specific signs for IPA. Follow-up computed tomography scans were not performed for safety reasons. Both patients in our report died as the result of ongoing acute respiratory distress syndrome with multiorgan failure. Growth of Aspergillus spp. in a respiratory culture from an ICU patient is often interpreted as colonization rather than infection. Other typical diagnostics for IPA, such as biopsy or imaging techniques, may be more challenging in critically ill COVID-19 patients for several reasons. In conclusion, COVID-19-associated IPA may lead to a poor outcome even in immune competent individuals.

Publication Type

Correspondence.

<428>

Accession Number

20203429766

Author

Andree, B. P. J.

Title

Incidence of COVID-19 and connections with air pollution exposure: evidence from the Netherlands.

Source

Policy Research Working Paper - World Bank; 2020. (9221):27 pp. 38 ref.

Publisher

World Bank

Location of Publisher

Washington

Country of Publication

USA

Abstract

The fast spread of severe acute respiratory syndrome coronavirus 2 has resulted in the emergence of several hot-spots around the world. Several of these are located in areas associated with high levels of air pollution. This study investigates the relationship between exposure to particulate matter and COVID-19 incidence in 355 municipalities in the Netherlands. The results show that atmospheric particulate matter with diameter less than 2.5 is a highly significant predictor of the number of confirmed COVID-19 cases and related hospital admissions. The estimates suggest that expected COVID-19 cases increase by nearly 100 percent when pollution concentrations increase by 20 percent. The association between air pollution and

case incidence is robust in the presence of data on health-related preconditions, proxies for symptom severity, and demographic control variables. The results are obtained with ground-measurements and satellite-derived measures of atmospheric particulate matter as well as COVID-19 data from alternative dates. The findings call for further investigation into the association between air pollution and SARS-CoV-2 infection risk. If particulate matter plays a significant role in COVID-19 incidence, it has strong implications for the mitigation strategies required to prevent spreading.

Publication Type

Bulletin.

<429>

Accession Number

20203425931

Author

Sun DanDan; Yang DongLiang; Li YaFen; Zhou Jie; Wang WenQing; Wang QuanLiang; Lin Nan; Cao AiLin; Wang HaiChen; Zhang QingYun

Title

Psychological impact of 2019 novel coronavirus (2019-nCoV) outbreak in health workers in China.

Source

Epidemiology and Infection; 2020. 148(e96)23 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

The first case of 2019-nCoV pneumonia infection occurred in Wuhan, Hubei Province, South China Seafood Market in December 2019. As a group with a high probability of infection, health workers are faced with a certain degree of psychological challenges in the process of facing the epidemic. This study attempts to evaluate the impact of 2019-nCoV outbreak on the psychological state of Chinese health workers and to explore the influencing factors. During the period from 31 January 2020 to 4 February 2020, the 'Questionnaire Star' electronic questionnaire system was used to collect data. The 2019-nCoV impact questionnaire and The Impact of Event Scale (IES) were used to check the psychological status of health workers in China. A total of 442 valid data were collected in this study. Seventy-four (16.7%) male and 368 (83.3%) female individuals participated in this study. The average score of high arousal dimension was 5.15 (S.D. = 4.71), and the median score was 4.0 (IQR 2.0, 7.0). The average score of IES was 15.26 (S.D. = 11.23), and the median score was 13.5 (IQR 7.0, 21.0). Multiple regression analysis showed that there were critical

statistical differences in high arousal scores among different gender groups (male 3.0 vs. female 5.0, P = 0.075). Whether being quarantined had significant statistical differences of IES scores (being quarantined 16.0 vs. not being quarantined 13.0, P = 0.021). The overall impact of the 2019-nCoV outbreak on health workers is at a mild level. Chinese health workers have good psychological coping ability in the face of public health emergencies.

Publication Type

Journal article.

<430>

Accession Number

20203420976

Author

Sasidharan, M.; Singh, A.; Torbaghan, M. E.; Parlikad, A. K.

Title

A vulnerability-based approach to human-mobility reduction for countering COVID-19 transmission in London while considering local air quality.

Source

Science of the Total Environment; 2020. 74139 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

An ecologic analysis was conducted to explore the correlation between air pollution, and COVID-19 cases and fatality rates in London. The analysis demonstrated a strong correlation (R2 > 0.7) between increment in air pollution and an increase in the risk of COVID-19 transmission within London boroughs. Particularly, strong correlations (R2 > 0.72) between the risk of COVID-19 fatality and nitrogen dioxide and particulate matter pollution concentrations were found. Although this study assumed the same level of air pollution across a particular London borough, it demonstrates the possibility to employ air pollution as an indicator to rapidly identify the city's vulnerable regions. Such an approach can inform the decisions to suspend or reduce the operation of different public transport modes within a city. The methodology and learnings from the study can thus aid in public transport's response to COVID-19 outbreak by adopting different levels of human-mobility reduction strategies based on the vulnerability of a given region.

Publication Type

Journal article.

<431>

Accession Number

20203436005

Author

Verdecchia, P.; Cavallini, C.; Spanevello, A.; Angeli, F.

Title

COVID-19: ACE2centric infective disease?

Source

Hypertension (Dallas); 2020. 76(2):294-299. many ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Diffuse pulmonary inflammation, endothelial inflammation, and enhanced thrombosis are cardinal features of coronavirus disease 2019 (COVID-19), the disease caused by the severe acute respiratory syndrome coronavirus 2. These features are reminiscent of several adverse reactions triggered by angiotensin II and opposed by angiotensin1-7, in many experimental models. Severe acute respiratory syndrome coronavirus 2 binds to ACE2 (angiotensin-converting enzyme 2) receptors and entries into the cell through the fusion of its membrane with that of the cell. Hence, it downregulates these receptors. The loss of ACE2 receptor activity from the external site of the membrane will lead to less angiotensin II inactivation and less generation of antiotensin1-7. In various experimental models of lung injury, the imbalance between angiotensin II overactivity and of antiotensin1-7 deficiency triggered inflammation, thrombosis, and other adverse reactions. In COVID-19, such imbalance could play an important role in influencing the clinical picture and outcome of the disease. According to this line of thinking, some therapeutic approaches including recombinant ACE2, exogenous angiotensin1-7, and angiotensin receptor blockers seem particularly promising and are being actively tested.

Publication Type

Journal article.

<432>

Accession Number

20203434166

Author

Vakilian, K.

Title

COVID-19: unknowns in pregnancy - what a Health Care Provider should know.

Source

The Open Public Health Journal; 2020. 13(161-162):161-162. 7 ref.

Publisher

Bentham Open

Location of Publisher

Sharjah

Country of Publication

United Arab Emirates

Abstract

At the end of the year 2019, a new virus emerged in Wuhan, China, known as Covid 19 spread rapidly, causing an epidemic in China and then a 2020 pandemic all over the world. This review discusses COVID-19 in pregnant women and carries information that a Health Care Provider must have.

Publication Type

Journal article.

<433>

Accession Number

20203434164

Author

Qin Wei; Sun Jie; Xu PengPeng; Gong TianQi; Li XiuDe; Liu Lei; Hu JieYing; Wang Yao; Xie ShaoYu; Li KaiChun; Chang HongWei; Lyu Yong

Title

The descriptive epidemiology of coronavirus disease 2019 during the epidemic period in Lu'an, China: achieving limited community transmission using proactive response strategies.

Source

Epidemiology and Infection; 2020. 148(e132)15 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Hubei province in China has had the most confirmed coronavirus disease 2019 (COVID-19) cases and has reported sustained transmission of the disease. Although Lu'an city is adjacent to Hubei province, its community transmission was blocked at the early stage, and the impact of the epidemic was limited. Therefore, we summarised the overall characteristics of the entire epidemic course in Lu'an to help cities with a few imported cases better contain the epidemic. A total of 69 confirmed COVID-19 cases and 11 asymptomatic carriers were identified in Lu'an during the epidemic from 12 January to 21 February 2020. Fifty-two (65.0%) cases were male, and the median age was 40 years. On admission, 56.5% of cases had a fever as the initial symptom, and pneumonia was present in 89.9% of cases. The mean serial interval and the mean duration of hospitalisation were 6.5 days (95% CI: 4.8-8.2) and 18.2 days (95% CI: 16.8-19.5), respectively. A total of 16 clusters involving 60 cases (17 first-generation cases and 43 secondary cases) were reported during the epidemic. We observed that only 18.9% (7/37) index cases resulted in community transmission during the epidemic in Lu'an, indicating that the scale of the epidemic was limited to a low level in Lu'an city. An asymptomatic carrier caused the largest cluster, involving 13 cases. Spread of COVID-19 by asymptomatic carriers represents an enormous challenge for countries responding to the pandemic.

Publication Type

Journal article.

<434>

Accession Number

20203434159

Author

Xu KanDi; Zhou Min; Yang DeXiang; Ling Yun; Liu Kui; Bai Tao; Cheng ZengHui; Li Jian

Title

Application of ordinal logistic regression analysis to identify the determinants of illness severity of COVID-19 in China.

Source

Epidemiology and Infection; 2020. 148(e146)24 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Corona Virus Disease 2019 (COVID-19) has presented an unprecedented challenge to the health-care system across the world. The current study aims to identify the determinants of illness severity of COVID-19 based on ordinal responses. A retrospective cohort of COVID-19 patients from four hospitals in three provinces in China was established, and 598 patients were included from 1 January to 8 March 2020, and divided into moderate, severe and critical illness group. Relative variables were retrieved from electronic medical records. The univariate and multivariate ordinal logistic regression models were fitted to identify the independent predictors of illness severity. The cohort included 400 (66.89%) moderate cases, 85 (14.21%) severe and 113 (18.90%) critical cases, of whom 79 died during hospitalisation as of 28 April. Patients in the age group of 70+ years (OR = 3.419, 95% CI: 1.596-7.323), age of 40-69 years (OR = 1.586, 95% CI: 0.824-3.053), hypertension (OR = 3.372, 95% CI: 2.185-5.202), ALT >50 mu/l (OR = 3.304, 95% CI: 2.107-5.180), cTnI >0.04 ng/ml (OR = 7.464, 95% CI: 4.292-12.980), myohaemoglobin>48.8 ng/ml (OR = 2.214, 95% CI: 1.42-3.453) had greater risk of developing worse severity of illness. The interval between illness onset and diagnosis (OR = 1.056, 95% CI: 1.012-1.101) and interval between illness onset and admission (OR = 1.048, 95% CI: 1.009-1.087) were independent significant predictors of illness severity. Patients of critical illness suffered from inferior survival, as compared with patients in the severe group (HR = 14.309, 95% CI: 5.585-36.659) and in the moderate group (HR = 41.021, 95% CI: 17.588-95.678). Our findings highlight that the identified determinants may help to predict the risk of developing more severe illness among COVID-19 patients and contribute to optimising arrangement of health resources.

Publication Type

Journal article.

<435>

Accession Number

20203435308

Author

Alao, M. A.; Durodola, A. O.; Ibrahim, O. R.; Asinobi, O. A.

Title

Assessment of health workers' knowledge, beliefs, attitudes, and use of personal protective equipment for prevention of COVID-19 infection in low-resource settings.

Source

Advances in Public Health; 2020. 2020(4619214)32 ref.

Publisher

Hindawi

Location of Publisher

London

Country of Publication

UK

Abstract

Background. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a highly infectious disease with a potential for healthcare workers (HCWs) getting infected due to inadequate protection while attending to patients. Effective use of personal protective equipment (PPE) is key to mitigating the spread of SARS-CoV-2 infection in healthcare settings. Hence, there is a need to understand HCWs' use of PPE in resource-limited settings and how closely the currently recommended guidelines for PPE are followed. This study assessed the HCWs' knowledge about, attitudes towards, beliefs on, and use of PPE to prevent SARS-CoV-2 infection in a resource-limited setting. Methods. This cross-sectional study was conducted in April 2020 in Southwest and Northwest Nigeria. The selection of participants was performed via the snowball sampling technique using a 33-item, web-based, self-administered questionnaire via a social media network. We obtained relevant sociodemographic data and information on participants' occupations and knowledge about, attitudes towards, beliefs on, and use of PPE. We analysed the data using SPSS version 23.0 for Windows (IBM, Armonk, New York, USA). A P values <0.05 were considered statistically significant. Results. A total of 290 subjects responded to the questionnaire, and 18 (6.2%) were excluded because of incomplete data. The mean age of the respondents was 32.3 +/- 9.9 years. There were 116 males (42.6%). The majority of the respondents were medical doctors (114, 41.9%), followed by nurses and clinical students. Of the 272 respondents in this survey, only 70 (25.7%) had adequate knowledge about PPE. Of the respondents who presumed they had adequate knowledge about donning and doffing PPE, 94 (56%) were incorrect. The predictors of good knowledge were ages younger than 45 years (p = 0.046) and practice location (p = 0.009). Conclusion. This study showed that HCWs' knowledge about, attitudes towards, and beliefs on PPE and their PPE skill in practice in Nigeria were remarkably poor. There is an urgent need for nationwide practical training on PPE use to curtail the spread of SARS-CoV-2 infection among HCWs.

Publication Type

Journal article.

<436>

Accession Number

20203438951

Author

Thibault, R.; Seguin, P.; Tamion, F.; Pichard, C.; Singer, P.

Title

Nutrition of the COVID-19 patient in the intensive care unit (ICU): a practical guidance.

Source

Critical Care; 2020. 24(447):(19 July 2020). 47 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Five to 10% of the coronavirus SARS-CoV-2-infected patients, i.e., with new coronavirus disease 2019 (COVID-19), are presenting with an acute respiratory distress syndrome (ARDS) requiring urgent respiratory and hemodynamic support in the intensive care unit (ICU). However, nutrition is an important element of care. The nutritional assessment and the early nutritional care management of COVID-19 patients must be integrated into the overall therapeutic strategy. The international recommendations on nutrition in the ICU should be followed. Some specific issues about the nutrition of the COVID-19 patients in the ICU should be emphasized. We propose a flow chart and ten key issues for optimizing the nutrition management of COVID-19 patients in the ICU.

Publication Type

Journal article.

<437>

Accession Number

20203417267

Author

Abravanel, F.; Miedouge, M.; Chapuy-Regaud, S.; Mansuy, J. M.; Izopet, J.

Title

Clinical performance of a rapid test compared to a microplate test to detect total anti SARS-CoV-2 antibodies directed to the spike protein.

Source

Journal of Clinical Virology; 2020. 1305 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This article evaluated 2 serological assays that detect total anti-SARS-CoV-2 antibodies. One is a rapid immunochromatographic test (SARS-CoV-2 Ab Rapid Test, Beijing Wantai Biological Pharmacy Ent, Bejing, China) and the other is a microplate assay (SARS-CoV-2 Ab ELISA, Beijing Wantai Biological Pharmacy Ent, Bejing, China). Both are based on the spike antigen of SARS-CoV-2. A previous study found good performance of these assays, but did not find sensitivity variation with the time post disease-onset of sampling and lacked asymptomatic patients. The two immunoassays were used to test 30 negative sera collected in 2019 at our hospital and 69 serum collected from PCR-confirmed SARS-CoV-2 infected patients. The COVID-19 infected patients provided 40 samples collected 2-14 days post symptom-onset (group 1) and 29 collected 15-45 days post symptom-onset or after contact with a positive case, including 3 asymptomatic patients (group 2). This concludes that the Wantai rapid test and the microplate assay have excellent specificity but the rapid test appears to be less sensitive than the microplate assay. Although the rapid test could be ideal for point-of-care use because it requires no highly skilled personnel, no batch testing with a result in less than 15 min, our evidence indicates that the diagnostic performance of the two assays may differ in the early stages of infection and for asymptomatic patients. Despite small sample size, our data could be useful for defining the practical application of these assays that detect anti-SARS-CoV-2 antibodies.

Publication Type

Correspondence.

<438>

Accession Number

20203415373

Author

Lu Xiao; Xu ShanXiang

Title

Intensive care for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in a makeshift ICU in Wuhan.

Source

Critical Care; 2020. 24(199):(6 May 2020). 2 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The aim of the article was to describe the intensive care unit situation amidst the COVID-19 pandemic in Wuhan. Protecting the workforce was another critical challenge. Most of the doctors had no experience working in such a makeshift ICU, which made them nervous and uncomfortable. The doctors were divided into eight groups of 4-5 doctors each (running 6-h shifts), so they could have more time to rest and relax. One psychiatrist in our team helped us to resolve psychological problems such as insomnia and anxiety. It was very difficult for doctors and nurses to manage so many critical patients in this ICU. It is a must to remain vigilant to avoid further infection, as 2050 doctors have been infected in the hospital since the epidemic first began. As it is known, there have been over 10 makeshift ICUs like this in Wuhan that have saved the lives of more than 1000 critically ill patients. It is believed that the doctors from different cities in China will continue to do outstanding work in such a harsh environment.

Publication Type

Journal article.

<439>

Accession Number

20203417788

Author

Kotfis, K.; Roberson, S. W.; Wilson, J. E.; Dabrowski, W.; Pun, B. T.; Ely, E. W.

Title

COVID-19: ICU delirium management during SARS-CoV-2 pandemic.

Source

Critical Care; 2020. 24(176):(28 April 2020). 85 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The novel coronavirus, SARS-CoV-2-causing Coronavirus Disease 19 (COVID-19), emerged as a public health threat in December 2019 and was declared a pandemic by the World Health Organization in March

2020. Delirium, a dangerous untoward prognostic development, serves as a barometer of systemic injury in critical illness. The early reports of 25% encephalopathy from China are likely a gross underestimation, which we know occurs whenever delirium is not monitored with a valid tool. Indeed, patients with COVID-19 are at accelerated risk for delirium due to at least seven factors including (1) direct central nervous system (CNS) invasion, (2) induction of CNS inflammatory mediators, (3) secondary effect of other organ system failure, (4) effect of sedative strategies, (5) prolonged mechanical ventilation time, (6) immobilization, and (7) other needed but unfortunate environmental factors including social isolation and quarantine without family. Given early insights into the pathobiology of the virus, as well as the emerging interventions utilized to treat the critically ill patients, delirium prevention and management will prove exceedingly challenging, especially in the intensive care unit (ICU). The main focus during the COVID-19 pandemic lies within organizational issues, i.e., lack of ventilators, shortage of personal protection equipment, resource allocation, prioritization of limited mechanical ventilation options, and end-of-life care. However, the standard of care for ICU patients, including delirium management, must remain the highest quality possible with an eye towards long-term survival and minimization of issues related to post-intensive care syndrome (PICS). This article discusses how ICU professionals (e.g., physicians, nurses, physiotherapists, pharmacologists) can use our knowledge and resources to limit the burden of delirium on patients by reducing modifiable risk factors despite the imposed heavy workload and difficult clinical challenges posed by the pandemic.

Publication Type

Journal article.

<440>

Accession Number

20203417775

Author

Yuan ShouTao; Zhang WenHao; Zou Lei; Sun JiaKui; Liu Ying; Shi QianKun

Title

Practice of novel method of bedside postpyloric tube placement in patients with coronavirus disease 2019.

Source

Critical Care; 2020. 24(135):(7 April 2020). 4 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The aim of the article was to discuss the clinical experience of the utilization of postpyloric tube on COVID-19 patients. There have been three patients who received our novel method of postpyloric tube placement. The 3 cases were all successful at the first attempt. The median time of procedure was 19 (14-25) minutes, and the median insertion length was 105 (95-110) cm. No operation- and tube-related complications were found. Considering the less expensive tube and high success rate, the novel blind bedside postpyloric placement may be easier to perform in patients with COVID-19 worldwide.

Publication Type

Journal article.

<441>

Accession Number

20203417774

Author

Fu Bao; Fu XiaoYun

Title

The model of epidemic (COVID-19) prevention and control in rural of China.

Source

Critical Care; 2020. 24(146):(14 April 2020). 2 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

This article discussed the infection control and prevention of COVID-19 in rural China. The local government acted quickly and formulated some effective measures. Firstly, they checked the returnees from Hubei Province and isolated them at homes. During isolation, body temperature and symptoms were reported daily. Secondly, they minimize the flow of people. The Chinese government encouraged people to stay at home and discouraged mass gatherings. The village set up checkpoints at all intersections in the countryside to persuade the migrants to return. Thirdly, they popularized the knowledge of epidemic prevention and let people know how to do well in self-protection. The unmanned aerial vehicle was used to supervise and publicize epidemic prevention knowledge. Fourthly, they fought panic with information. The government prevented people's panic by sharing the latest information through the media. Fifthly, for COVID-19, the government implemented free medical treatment to reduce patients' worries. This can promote patients to see a doctor as soon as possible and timely treatment, to prevent further aggravation of the condition. Sixthly, they guarantee the daily needs of the people. Seventhly, they delayed return to

work and school. Schools in rural areas have also been delayed, with teachers teaching online through the Internet. Eighthly, people diagnosed with COVID-19 were isolated and treated in designated hospitals. Ninthly, they use big data to perfect tracking management. The app that can query the flights and trains that the confirmed patients have taken has also been developed. Finally, the discharged patients need to continue medical isolation and observation for half a month before they can enter the society.

Publication Type

Journal article.

<442>

Accession Number

20203429061

Author

Lubbe, W.; Botha, E.; Niela-Vilen, H.; Reimers, P.

Title

Breastfeeding during the COVID-19 pandemic - a literature review for clinical practice.

Source

International Breastfeeding Journal; 2020. 15(82):(14 September 2020). 59 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The COVID-19 pandemic is disrupting normal life globally, every area of life is touched. The pandemic demands quick action and as new information emerges, reliable synthesises and guidelines for care are urgently needed. Breastfeeding protects mother and child; its health benefits are undisputed and based on evidence. To plan and support breastfeeding within the current pandemic, two areas need to be understood: (1) the clinical characteristics of COVID-19 as it applies to breastfeeding and (2) the protective properties of breastfeeding, including the practice of skin-to-skin care. This review aims to summarise how to manage breastfeeding during COVID-19. The summary was used to create guidelines for healthcare professionals and mothers. Methods: Current publications on breastfeeding during the COVID-19 pandemic were reviewed to inform guidelines for clinical practice. Results Current evidence states that the Coronavirus is not transmitted via breastmilk. Breastfeeding benefits outweigh possible risks during the COVID-19 pandemic and may even protect the infant and mother. General infection control measures should be in place and adhered to very strictly. Conclusions: Breastfeeding should be encouraged, mothers and infant dyads should be cared for together, and skin-to-skin contact ensured throughout the COVID-19

pandemic. If mothers are too ill to breastfeed, they should still be supported to express their milk, and the infant should be fed by a healthy individual. Guidelines, based on this current evidence, were produced and can be distributed to health care facilities where accessible information is needed.

Publication Type

Journal article.

<443>

Accession Number

20203424068

Author

Adams, M. D.

Title

Air pollution in Ontario, Canada during the COVID-19 state of emergency.

Source

Science of the Total Environment; 2020. 74215 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

In March of 2020, the province of Ontario declared a State of Emergency (SOE) to reduce the spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which causes the coronavirus disease (COVID-19). This disruption to the economy provided an opportunity to measure change in air pollution when the population spends more time at home with fewer trips. Hourly air pollution observations were obtained for fine particulate matter, nitrogen dioxide, nitrogen oxides and ozone from the Ontario air monitoring network for 2020 and the previous five years. The analysis is focused on a five-week period during the SOE with a previous five-week period used as a control. Fine particulate matter did not show any significant reductions during the SOE. Ozone concentrations at 12 of the 32 monitors were lower than any of the previous five-years; however, four locations were above average. Average ozone concentrations were 1 ppb lower during the SOE, but this ranged at individual monitors from 1.5 ppb above to 4.2 ppb below long-term conditions. Nitrogen dioxide and nitrogen oxides demonstrated a reduction across Ontario, and both pollutants displayed their lowest concentrations for 22 of 29 monitors. Individual monitors ranged from 1 ppb (nitrogen dioxide) and 5 ppb (nitrogen oxides) above average to 4.5 (nitrogen dioxide) and 7.1 ppb (nitrogen oxides) below average. Overall, both nitrogen dioxide and nitrogen oxides

demonstrated a reduction across Ontario in response to the COVID-19 SOE, ozone concentrations suggested a possible reduction, and fine particulate matter has not varied from historic concentrations.

Publication Type

Journal article.

<444>

Accession Number

20203424051

Author

Lv Jun; Yang Jin; Xue Juan; Zhu Ping; Liu LanFang; Li Shan

Title

Detection of SARS-CoV-2 RNA residue on object surfaces in nucleic acid testing laboratory using droplet digital PCR.

Source

Science of the Total Environment; 2020. 74215 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The rapid development of global COVID-19 pandemic poses an unprecedented challenge to the safety and quality of laboratory diagnostic testing. Little is known about the laboratory surface areas and operation behaviors that may cause potential contamination in SARS-CoV-2 nucleic acid testing. This study aims to provide reference basis for the improvement of laboratory disinfection programs and personal operating protocols. In this study, we compared the qRT-PCR and ddPCR in detecting of residual virus that existed on the object surfaces from sample transportation and reception related facilities, testing related instruments, personal protective equipment and other facilities in nucleic acid testing laboratory. All samples were negative by qRT-PCR, in contrast, 13 of 61 samples were positive for SARS-CoV-2 by ddPCR. The areas with highest density of SARS-CoV-2 nucleic acid were the outer gloves of operator A (37.4 copies/cm2), followed by door handle of 4degreesC refrigerator (26.25 copies/cm2), goggles of operator A (22.16 copies/cm2), outer cover of high speed centrifuge (19.95 copies/cm2), inner wall of high speed centrifuge (14.70 copies/cm2) and others. We found that all the positive objects were directly or indirectly contacted by the operator's gloved hands, suggesting that hands contact was the main transmission pathway that led to laboratory environmental contamination. In summary, ddPCR has an advantage over qRT-PCR in tracing laboratory contamination. We evaluated the risk areas and operation behaviors that may easily cause

contamination, and provided recommendation for improving the laboratory disinfection programs and personal operating specifications.

Publication Type

Journal article.

<445>

Accession Number

20203424044

Author

Manzanedo, R. D.; Manning, P.

Title

COVID-19: lessons for the climate change emergency.

Source

Science of the Total Environment; 2020. 74230 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The ongoing COVID-19 outbreak pandemic is now a global crisis. It has caused 9+ million confirmed cases and 400,000+ deaths at the time of writing and triggered unprecedented preventative measures that have confined a substantial portion of the global population and established 'social distancing' as a new global behavioral norm. The COVID-19 crisis has affected all aspects of everyday life and work, and heavily impacted the global economy. This crisis also offers unprecedented insights into how the global climate crisis may be managed, as there are many parallels between the COVID-19 crisis and what we expect from the imminent global climate emergency. Reflecting upon the challenges of today's crisis may help us better prepare for the future. Here we compile a list, by no means comprehensive, of the similarities and differences between the two crises, and the lessons we can learn from them: (i) High momentum trends, (ii) Irreversible changes, (iii) Social and spatial inequality, (iv) Weakening of international solidarity, and (v) Less costly to prevent than to cure.

Publication Type

Journal article.

<446>

Accession Number

20203425276

Author

Clark, M.

Title

Powering up Africa's poultry sector.

Source

African Farming and Food Processing; 2020. (July/August):14-16.

Publisher

Alain Charles Publishing Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

It is reported that there are reasons to be upbeat about Africa's poultry industry in the long-term. According to Rabobank's research team, global poultry demand will be more bullish in the latter half of 2020, as COVID-19 containment measurements are eased. In the continent's biggest economy, South Africa - by far the continent's largest producer and consumer of chicken meat - there are significant moves afoot to improve overall performance in the sector. All the while, there are moves to improve industry productivity and efficiency, driving the demand for new technology in the area. Other factors are shaping the industry too, including the call to reduce the use of antibiotics across the production chain and improve nutrition for poultry.

Publication Type

Journal article.

<447>

Accession Number

20203429570

Author

Basile, G.

Title

SARS-CoV-2 in Latin America and the Caribbean: the three intersections for critical thinking in health. (Special Issue: Resistance and resilience in the throes of a pandemic.) [Spanish]

Source

Ciencia & Saude Coletiva; 2020. 25(9):3557-3562. 23 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Thinking about the SARS-CoV-2 pandemic implies the study of general and unique dimensions for the historical evolution of Latin America and the Caribbean. From the individual to the collective, from biomedical sciences to social sciences and collective health, from risk groups to exclusive societies and the inequities constituting the colonial, patriarchal, modern capitalist heritage in the State and societies. The objective of this article is to review what are called the three intersections for Latin American critical health thinking. Seeking to analyze and reflect on the assumptions and logic present in the responses to the health emergency with reference to: 1. Critical health theory and its intersections with Latin American critical thinking; 2. The decolonial implications of problematizing the State and public health systems; and 3. The geopolitics of global health security as a roadmap for the global North. They outline approaches on the risks of capitalism's acceleration of the post-pandemic disaster and the alternative ways of addressing creative tensions in the reconstruction of emancipatory processes for regional health sovereignty and Health from the South.

Publication Type

Journal article.

<448>

Accession Number

20203429569

Author

Minayo, M. C. de S.; Freire, N. P.

Title

The pandemic exacerbates health inequalities. (Special Issue: Resistance and resilience in the throes of a pandemic.)

Source

Ciencia & Saude Coletiva; 2020. 25(9):3555-3556. 2 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

We live in a global pandemic unprecedented in our generation. These are challenging times for healthcare workers. We are all in the same storm and join the same collective effort against COVID-19. However, we are not in the same boat. Inequality determines how each category of the health workforce is affected by the new coronavirus in Brazil. Exposed to the disease on the frontlines, nursing technicians and assistants suffer disproportionately the dire effects of the pandemic. More than 1.3 million technicians and almost 420 thousand nursing assistants provide essential care in health units and do not have the assistance and financial backing to mitigate the effects of COVID-19 on themselves and their families. Eight in every ten of these professionals are women, who are providers and also assume, in most cases, the role of primary caregivers for children, older adults, and the sick in their families. Low wages make hinder access to safer transportation and care alternatives for dependents, which is the reality of most professionals who keep the health system running throughout the pandemic.

Publication Type

Journal article.

<449>

Accession Number

20203429568

Author

Andrade, K. R. C. de; Carvalho, V. K. da S.; Farinasso, C. M.; Lima, A. A. de; Silva, R. B.; Wachira, V. K.; Capucho, H. C.; Souza, P. M. de; Vanni, T.; Sachetti, C. G.; Rego, D. F.

Title

Pharmacological therapies for patients with human coronavirus infections: a rapid systematic review. (Special Issue: Resistance and resilience in the throes of a pandemic.)

Source

Ciencia & Saude Coletiva; 2020. 25(9):3517-3554. 72 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This work aimed to evaluate the effects of drug therapies for coronavirus infections. Rapid systematic review with search in the MEDLINE, EMBASE, Cochrane, BVS, Global Index Medicus, Medrix, bioRxiv, Clinicaltrials. gov and International Clinical Trials Registry Platform databases. Thirty-six studies evaluating alternative drugs against SARS, SARSCoV- 2 and MERS were included. Most of the included studies were conducted in China with an observational design for the treatment of COVID-19. The most studied treatments were with antimalarials and antivirals. In antimalarial, the meta-analysis of two studies with 180 participants did not identify the benefit of hydroxychloroquine concerning the negative viral load via real-time polymerase chain reaction, and the use of antivirals compared to standard care was similar regarding outcomes. The available scientific evidence is preliminary and of low methodological quality, which suggests caution when interpreting its results. Research that evaluates comparative efficacy in randomized, controlled clinical trials, with adequate follow-up time and with the methods properly disclosed and subject to scientific peer review is required. A periodic update of this review is recommended.

Publication Type

Journal article.

<450>

Accession Number

20203429567

Author

Loch, M. R.; Rech, C. R.; Costa, F. F. da

Title

The urgency of public health in physical education training: lessons from COVID-19. (Special Issue: Resistance and resilience in the throes of a pandemic.) [Portuguese]

Source

Ciencia & Saude Coletiva; 2020. 25(9):3511-3516. 16 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The COVID-19 pandemic has generated several controversies in the health area, particularly regarding social isolation measures, widely perceived as being one of the most effective strategies to reduce the spread of the virus. The Physical Education (PE) area became involved in these discussions, through contradictory positions of professionals, scientific societies and class entities regarding the reopening of fitness centers during the pandemic. We understand that some of these discussions revealed important weaknesses in relation to the approach to basic health knowledge, such as those related to epidemiology and public health measures. We seek in this essay, without the intention of exhausting the subject or performing an academic prescription, to support our position regarding the urgency of the approach of PE training within the field of Public Health, as well as presenting some proposals for this approach to effectively occur. We advocate training that favors a broader view of health, that enables professionals in the field to understand the potential relationship between PE and health, but at the same time recognize that physical activity is not a panacea and that human health has many others determinants and conditions.

Publication Type

Journal article.

<451>

Accession Number

20203429564

Author

Sousa, A. R. de; Carvalho, E. S. de S.; Santana, T. da S.; Sousa, A. F. L.; Figueiredo, T. F. G.; Oscar Javier Vergara Escobar; Mota, T. N.; Pereira, A.

Title

Men's feelings and emotions in the COVID-19 framing. (Special Issue: Resistance and resilience in the throes of a pandemic.)

Source

Ciencia & Saude Coletiva; 2020. 25(9):3481-3491. 44 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Objective: to understand how men's feelings and emotions contribute to the Covid-19 framing in Brazil. Method: Asocial-historical, qualitative study, carried out with 200 men resident in Brazil, through online search on digital platform. The grasped data were analyzed by the Collective Subject Discourse method in the light of the reference of epidemic disease proposed by Charles Rosemberg. Results: Negative feelings and anxiety prevailed due to the knowledge about the growing number of hospitalized patients and deaths from the pandemic conveyed in the news. For men, the optimism is necessary to encourage attitudes with responsibility and trust that the crisis will be overcome. Subsequently, men present a set of attitudes and behaviors for coping with the pandemic. Moreover, the acceptance signals the emergence of the fourth dramaturgical act of the Covid-19framing. Conclusion: Men's feelings and emotions, in this historic context, pervade three of the four acts of the Covid-19 framingin Brazil.

Publication Type

Journal article.

<452>

Accession Number

20203429562

Author

Teixeira, C. F. de S.; Soares, C. M.; Souza, E. A.; Lisboa, E. S.; Pinto, I. C. de M.; Andrade, L. R. de; Espiridiao, M. A.

Title

The health of healthcare professionals coping with the COVID-19 pandemic. (Special Issue: Resistance and resilience in the throes of a pandemic.)

Source

Ciencia & Saude Coletiva; 2020. 25(9):3465-3474. 22 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This work aims to systematize a set of scientific evidence presented in international papers that identify the main problems affecting health professionals directly involved in coping with the COVID-19 pandemic and point out actions and strategies for the protection and healthcare of these professionals. The risk of

infection is the main issue and has led to absence from work, illness, death, and intense psychological distress, expressed in generalized anxiety and sleep disorders, fear of becoming ill and infecting colleagues and relatives. In the Brazilian reality, this work revives the analysis of the chronic problems affecting health workers, resulting from the underfinancing of the Brazilian Unified Health System (SUS), the sector's spending freeze, the deterioration of services and workforce's insecurity, and points out the acute challenges of work management and staff training, given the expanded hospital bed infrastructure and reorganization of the work process in primary care to face the pandemic, emphasizing the necessary measures for the protection and promotion of the physical and mental health of health professionals and workers.

Publication Type

Journal article.

<453>

Accession Number

20203429560

Author

Moraes, E. N. de; Viana, L. de G.; Resende, L. M. H.; Vasconcellos, L. de S.; Moura, A. S.; Menezes, A.; Mansano, N. H.; Rabelo, R.

Title

COVID-19 in long-term care facilities for the elderly: laboratory screening and disease dissemination prevention strategies. (Special Issue: Resistance and resilience in the throes of a pandemic.)

Source

Ciencia & Saude Coletiva; 2020. 25(9):3445-3458. 31 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

An infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the 2019 Novel Coronavirus Disease (COVID-19) pandemic has unveiled a hitherto hidden reality: the vulnerability of the population living in long-term care facilities for the elderly (LTCF). To date, several scientific publications have revealed a concentration of up to 60% of deaths attributed to COVID-19 in such institutions. Most LTFC residents share the primary risk factors currently associated with increased morbimortality due to the COVID-19 infection. It is crucial to define actions to prevent SARS-CoV-2 spread in this environment, besides the usual measures of social distancing and isolation of the carriers of this disease. This paper proposes

strategies for the investigation of this infection in LTCF residents and workers using laboratory tests available in Brazil. The early identification of individuals with SARS-CoV-2, who may actively and continuously spread the virus, allows adopting measures aimed at interrupting the local transmission cycle of this infection.

Publication Type

Journal article.

<454>

Accession Number

20203429559

Author

Machado, C. J.; Pereira, C. C. de A.; Viana, B. de M.; Oliveira, G. L.; Melo, D. C.; Carvalho, J. F. M. G. de; Moraes, F. L. de; Moraes, E. N. de

Title

Estimates of the impact of COVID-19 on mortality of institutionalized elderly in Brazil. (Special Issue: Resistance and resilience in the throes of a pandemic.)

Source

Ciencia & Saude Coletiva; 2020. 25(9):3437-3444. 16 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The COVID-19 pandemic poses difficulties for long-term care institutions for the elderly, with increased mortality rates for the residents. This study aims to estimate the impact of COVID-19 on mortality of institutionalized elderly in Brazil. Estimates of the percentage of elderly deaths occurring in care homes were calculated for Brazil, States and Regions using estimates for the total number of deaths. The estimation was based upon information available for other countries. The weighted percentage was 44.7% and 107,538 COVID-19 deaths were estimated for the elderly in these institutions in Brazil in 2020. Higher numbers of deaths were expected in the Southeast Region (48,779 deaths), followed by the Northeast Region (28,451 deaths); Sao Paulo was the most affected State (24,500 deaths). The strong impact of COVID-19 on the elderly population living in long-term care facilities is clear. Estimates for the country exceeded 100,000 elderly people, potentially the most fragile and vulnerable, and are based upon a conservative number of total deaths, in view of other estimates and the alarming situation of death growth in Brazil from COVID-19.

Publication Type

Journal article.

<455>

Accession Number

20203429557

Author

Ribeiro-Silva, R. de C.; Pereira, M.; Campello, T.; Aragao, E.; Guimaraes, J. M. de M.; Ferreira, A. J. F.; Barreto, M. L.; Santos, S. M. C. dos

Title

COVID-19 pandemic implications for food and nutrition security in Brazil. (Special Issue: Resistance and resilience in the throes of a pandemic.)

Source

Ciencia & Saude Coletiva; 2020. 25(9):3421-3430. 31 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The emergence of COVID-19 in Brazil further explained the massive discrepancy between different social realities coexisting in the country, rekindling the discussions about food and nutrition security, similarly to what has been happening in other countries facing the same pandemic situation. In this paper, we argue that the risks to hunger and food security in Brazil have been present since 2016 and are now being exacerbated due to the emergence of the COVID-19 epidemic. This situation requires knowing the extent and magnitude of the issue and articulation of measures in the three governmental spheres(federal, municipal and state) to ensure access to adequate and healthy food and reduce the disease's adverse effectson the diet, health, and nutrition among the most vulnerable people. Thus, this work aims to contribute to the debate on the measures to be adopted by governments and society to promote and ensure food and nutrition security and prevent insecurity and the expansion of hunger during and after the social and health crisis created by the pandemic.

Publication Type

Journal article.

<456>

Accession Number

20203429556

Author

Paumgartten, F. J. R.; Oliveira, A. C. A. X. de

Title

Off label, compassionate and irrational use of medicines in COVID-19 pandemic, health consequences and ethical issues. (Special Issue: Resistance and resilience in the throes of a pandemic.)

Source

Ciencia & Saude Coletiva; 2020. 25(9):3413-3419. 34 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

When Covid-19 emerged in December last year, there was no vaccine nor was there specific effective treatment for this fast-spreading and life-threatening viral respiratory infection. Clinical trials were planned and are in progress to investigate whether drugs used for influenza, HIV and other viruses, and also anthelmintics (ivermectin, nitazoxanide, niclosamide), and antimalarials (chloroquine, hydroxychloroquine) showing antiviral activity in in vitro assays, are effective and safe for Covid-19. So far there is no convincing evidence that these antiviral and antiparasitic drugs are of any benefit for Covid-19. Notwithsanding the absence of evidence of clinical efficacy, these drugs are widely used outside of clinical trials (off label) for prophylaxis and treatment of this viral infection. The rationale behind the prescription of macrolide antibiotics (azithromycin) for Covid-19 is obscure as well. The widespread prescription and use of drugs of unproven efficacy and safety for Covid-19 is at odds with the rational use of medicines, a cornerstone principle of pharmacotherapy advanced by WHO in 1985. This irrational use of drugs is cause for concern because some of them are associated with serious heart disorders and deaths.

Publication Type

Journal article.

<457>

Accession Number

20203429555

Author

Duarte, M. de Q.; Santo, M. A. da S.; Lima, C. P.; Giordani, J. P.; Trentini, C. M.

Title

COVID-19 and the impacts on mental health: a sample from Rio Grande do Sul, Brazil. (Special Issue: Resistance and resilience in the throes of a pandemic.)

Source

Ciencia & Saude Coletiva; 2020. 25(9):3401-3411. 43 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Pandemics such as that of COVID-19 affect a relatively large number of people and impose new rules and social habits on the world population. Information about the pandemic is constant in the media. Moreover, social distancing has been adopted in Brazil to prevent the spread of COVID-19, which may have economic and psychosocial consequences. This study aimed to verify the factors associated with indicators of mental disorders symptoms in residents of Rio Grande do Sul during the initial period of the social distancing policy. The study was approved by CONEP. There were 799 participants, aged between 18 and 75 years (M = 36.56; SD = 12.88); 82.7% were women, who answered a sociodemographic questionnaire of social distancing and the Self-Report Questionnaire (SRQ-20). The results indicated that having decreased income in the period, being part of the risk group and being more exposed to information about deaths and infected, are factors that can significantly harm mental health in this pandemic period. Investigating social determinants that contribute to greater vulnerability to the mental illness of the population is vital in the field of collective health for the planning of public actions and policies.

Publication Type

Journal article.

<458>

Accession Number

20203429553

Author

Natividade, M. dos S.; Bernardes, K.; Pereira, M.; Miranda, S. S.; Bertoldo, J.; Teixeira, M. da G.; Livramento, H. L.; Aragao, E.

Title

Social distancing and living conditions in the pandemic COVID-19 in Salvador-Bahia, Brazil. (Special Issue: Resistance and resilience in the throes of a pandemic.)

Source

Ciencia & Saude Coletiva; 2020. 25(9):3385-3392. 23 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

In the current scenario of the COVID-19 pandemic, Brazilian states and municipalities have adopted social distancing measures as a strategy to reduce the number of cases and control the disease. These measures affect populations and territories differently. This study aims to analyze the trend of social distancing in this pandemic and its relationship with the context of living conditions in Salvador, Bahia, Brazil. An ecological study with spatial distribution was conducted. The municipality's Social Distancing Index and the Living Conditions Index were calculated. Global and Local Moran Indices were employed to assess the degree of spatial dependence and autocorrelation. Fluctuations were observed in the social distancing levels during the analyzed period, with higher distancing percentages in neighborhoods with more favorable living conditions. The analysis and interpretation of COVID-19 containment measures, such as social distancing, should consider the profile of local vulnerability of each territory for the correct dimensioning of pandemic mitigation strategies from the perspective of developing social actions enabling greater adherence of the most impoverished populations.

Publication Type

Journal article.

<459>

Accession Number

20203423818

Author

Nembaware, V.; Munung, N. S.; Matimba, A.; Tiffin, N.

Title

Patient-centric research in the time of COVID-19: conducting ethical COVID-19 research in Africa.

Source

BMJ Global Health; 2020. 5(8)16 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Research practices should be ethical and transparent, prioritizing patient benefits and provision of health care, and respecting participant autonomy. Priority should be given to research studies with the potential for immediate translated patient benefits based on realistic interventions appropriate to an African context. The article proposed two central tenets for patient-centric ethical COVID-19 research involving participants in Africa: that research practices are ethical and transparent, prioritising patient benefits and provision of healthcare; and that participant autonomy and engagement are upheld. Emergency and pandemic conditions do not necessitate cutting ethical corners or undermining participant autonomy to conduct essential research in Africa; which must instead be patient-centric, given that patients may already be compromised by limited access to healthcare, a high burden of comorbidities and socioeconomic insecurity. Multiple avenues of support can ensure high quality, ethical research by protecting stretched clinical care resources, prioritizing patient recovery and maximizing patient benefits while upholding patients' right to make informed choices about participation wherever possible. Research ethics during pandemics are necessarily complex, but ongoing learnings should continue to be carried forward to inform future response.

Publication Type

Journal article.

<460>

Accession Number

20203432090

Author

Wahba, L.; Jain, N.; Fire, A. Z.; Shoura, M. J.; Artiles, K. L.; McCoy, M. J.; Jeong DaeEun

Title

An extensive meta-metagenomic search identifies SARS-CoV-2-homologous sequences in pangolin lung viromes.

Source

mSphere; 2020. 5(3)41 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

In numerous instances, tracking the biological significance of a nucleic acid sequence can be augmented through the identification of environmental niches in which the sequence of interest is present. Many metagenomic data sets are now available, with deep sequencing of samples from diverse biological niches. While any individual metagenomic data set can be readily queried using web-based tools, meta-searches through all such data sets are less accessible. In this brief communication, we demonstrate such a meta-metagenomic approach, examining close matches to the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in all high-throughput sequencing data sets in the NCBI Sequence Read Archive accessible with the "virome" keyword. In addition to the homology to bat coronaviruses observed in descriptions of the SARS-CoV-2 sequence (F. Wu, S. Zhao, B. Yu, Y. M. Chen, et al., Nature 579:265-269, 2020, https://doi.org/10.1038/s41586-020-2008-3; P. Zhou, X. L. Yang, X. G. Wang, B. Hu, et al., Nature 579:270-273, 2020, https://doi.org/10.1038/s41586-020-2012-7), we note a strong homology to numerous sequence reads in metavirome data sets generated from the lungs of deceased pangolins reported by Liu et al. (P. Liu, W. Chen, and J. P. Chen, Viruses 11:979, 2019, https://doi.org/10.3390/v11110979). While analysis of these reads indicates the presence of a similar viral sequence in pangolin lung, the similarity is not sufficient to either confirm or rule out a role for pangolins as an intermediate host in the recent emergence of SARS-CoV-2. In addition to the implications for SARS-CoV-2 emergence, this study illustrates the utility and limitations of meta-metagenomic search tools in effective and rapid characterization of potentially significant nucleic acid sequences. Importance: Meta-metagenomic searches allow for high-speed, low-cost identification of potentially significant biological niches for sequences of interest.

Publication Type

Journal article.

<461>

Accession Number

20203436387

Author

Doroftei, B.; Ilie, O. D.; Cojocariu, R. O.; Ciobica, A.; Maftei, R.; Grab, D.; Anton, E.; McKenna, J.; Dhunna, N.; Simionescu, G.

Title

Minireview exploring the biological cycle of vitamin B3 and its influence on oxidative stress: further molecular and clinical aspects.

Source

Molecules; 2020. 25(15)many ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Vitamin B3, or niacin, is one of the most important compounds of the B-vitamin complex. Recent reports have demonstrated the involvement of vitamin B3 in a number of pivotal functions which ensure that homeostasis is maintained. In addition, the intriguing nature of its synthesis and the underlying mechanism of action of vitamin B3 have encouraged further studies aimed at deepening our understanding of the close link between the exogenous supply of B3 and how it activates dependent enzymes. This crucial role can be attributed to the gut microflora and its ability to shape human behavior and development by mediating the bioavailability of metabolites. Recent studies have indicated a possible interconnection between the novel coronavirus and commensal bacteria. As such, we have attempted to explain how the gastrointestinal deficiencies displayed by SARS-CoV-2-infected patients arise. It seems that the stimulation of a proinflammatory cascade and the production of large amounts of reactive oxygen species culminates in the subsequent loss of host eubiosis. Studies of the relationship between ROS, SARS-CoV-2, and gut flora are sparse in the current literature. As an integrated component, oxidative stress (OS) has been found to negatively influence host eubiosis, in vitro fertilization outcomes, and oocyte quality, but to act as a sentinel against infections. In conclusion, research suggests that in the future, a healthy diet may be considered a reliable tool for maintaining and optimizing our key internal parameters.

Publication Type

Journal article.

<462>

Accession Number

20203436377

Author

Otto, D. P.; Villiers, M. M. de

Title

Layer-by-layer nanocoating of antiviral polysaccharides on surfaces to prevent coronavirus infections.

Source

Molecules; 2020. 25(15)200 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

In 2020, the world is being ravaged by the coronavirus, SARS-CoV-2, which causes a severe respiratory disease, Covid-19. Hundreds of thousands of people have succumbed to the disease. Efforts at curing the disease are aimed at finding a vaccine and/or developing antiviral drugs. Despite these efforts, the WHO warned that the virus might never be eradicated. Countries around the world have instated non-pharmaceutical interventions such as social distancing and wearing of masks in public to curb the spreading of the disease. Antiviral polysaccharides provide the ideal opportunity to combat the pathogen via pharmacotherapeutic applications. However, a layer-by-layer nanocoating approach is also envisioned to coat surfaces to which humans are exposed that could harbor pathogenic coronaviruses. By coating masks, clothing, and work surfaces in wet markets among others, these antiviral polysaccharides can ensure passive prevention of the spreading of the virus. It poses a so-called "eradicate-in-place" measure against the virus. Antiviral polysaccharides also provide a green chemistry pathway to virus eradication since these molecules are primarily of biological origin and can be modified by minimal synthetic approaches. They are biocompatible as well as biodegradable. This surface passivation approach could provide a powerful measure against the spreading of coronaviruses.

Publication Type

Journal article.

<463>

Accession Number

20203433230

Author

R. Ramakumar

Title

Agriculture and the COVID-19 pandemic: an analysis with special reference to India. (Special Issue: The impact of the covid-19 pandemic.)

Source

Review of Agrarian Studies; 2020. 10(1):72-110. many ref.

Publisher

Foundation for Agrarian Studies

Location of Publisher

Kolkata

Country of Publication

India

Abstract

This paper deals with the impact of Covid-19 on the agricultural sector. The analysis is organised at the global level, but it has a specific focus on India. First, it reviews the overall food supply situation in the world and India to assess the possibilities of food crises. The paper finds that while the food situation in April and May 2020 appeared comfortable, there were likely to be widespread food shortages in countries dependent on food imports if the pandemic was prolonged. This was particularly so if food exporting countries turned precautionary and restricted exports. In the case of many animal products, the paper finds that the drastic reduction in supplies created shortages in both the developed world and countries like India in April and May 2020. Secondly, it reviews the disruptions in food supply chains induced by the pandemic. International trade in agricultural goods shrank during the lockdown as imports fell and ports remained closed. Detailed data across more than 2000 markets in India are analysed to understand the fall in daily market arrivals for 16 crops between March 15 and May 31 over 2019 and 2020. The number of reporting markets fell in this period. Of the 16 crops analysed, it was only in paddy, lentil, tomato and banana that market arrivals in 2020 constituted more than 75 per cent of market arrivals in 2019. Thirdly, analysis of prices indicates that global price indices for food, dairy and meat fell in April and May 2020. For India, we do not find an across the board rise in either wholesale or retail prices of agricultural goods during the lockdown. The fall in wholesale price indices for cereals, vegetables, eggs and poultry chicken was indicative of low price realisation for the farmers. At the same time, the rise in urban CPI for cereals, vegetables, and egg, particularly in April 2020, was indicative of tightening supply chains in these commodities. Finally, the Covid-19 pandemic made the world recognise and appreciate the value of migrant labour. After the lockdown began, the mobility of migrant workers was severely restricted and large numbers of migrant workers returned home. Agriculture was acutely affected; farms across the world suffered from the impacts of labour shortages.

Publication Type

Journal article.

<464>

Accession Number

20203433229

Author

Fan ShengGen

Title

Agriculture, food and nutrition security under Covid-19: lessons from China. (Special Issue: The impact of the covid-19 pandemic.)

Source

Review of Agrarian Studies; 2020. 10(1):61-71. 8 ref.

Publisher

Foundation for Agrarian Studies

Location of Publisher

Kolkata

Country of Publication

India

Abstract

When Covid-19 began in China, various control measures - including road closures, restrictions of movement of people, and social distancing - were introduced. The economy as a whole and food supply chains were severely disrupted. After four months, the virus has largely been brought under control. The country is on the way to full recovery, and food markets and prices have returned to normal. This paper reviews how the pandemic affected Chinese agriculture and food supply, how the government responded and what lessons can be shared with other countries. The paper points out that timely monitoring of food prices, establishing green channels for input and output supplies and for workers, providing safety nets for vulnerable populations, and keeping trade open are critical for ensuring the smooth functioning of food supply chains and preventing potential food crises.

Publication Type

Journal article.

<465>

Accession Number

20203431339

Author

Malik, Y. S.; Shubhankar Sircar; Sudipta Bhat; Khan Sharun; Dhama, K.; Dadar, M.; Tiwari, R.; Chaicumpa, W.

Title

Emerging novel coronavirus (2019-nCoV) - current scenario, evolutionary perspective based on genome analysis and recent developments.

Source

Veterinary Quarterly; 2020. 40(68-76):68-76. 38 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Coronaviruses are the well-known cause of severe respiratory, enteric and systemic infections in a wide range of hosts including man, mammals, fish, and avian. The scientific interest on coronaviruses increased after the emergence of Severe Acute Respiratory Syndrome coronavirus (SARS-CoV) outbreaks in 2002-2003 followed by Middle East Respiratory Syndrome CoV (MERS-CoV). This decade's first CoV, named 2019-nCoV, emerged from Wuhan, China, and declared as 'Public Health Emergency of International Concern' on January 30th, 2020 by the World Health Organization (WHO). As on February 4, 2020, 425 deaths reported in China only and one death outside China (Philippines). In a short span of time, the virus spread has been noted in 24 countries. The zoonotic transmission (animal-to-human) is suspected as the route of disease origin. The genetic analyses predict bats as the most probable source of 2019-nCoV though further investigations needed to confirm the origin of the novel virus. The ongoing nCoV outbreak highlights the hidden wild animal reservoir of the deadly viruses and possible threat of spillover zoonoses as well. The successful virus isolation attempts have made doors open for developing better diagnostics and effective vaccines helping in combating the spread of the virus to newer areas.

Publication Type

Journal article.

<466>

Accession Number

20203431312

Author

Gao GuiJu; Wang AiBin; Wang Sa; Qian Fang; Chen MeiLing; Yu FengTing; Zhang Ju; Wang XuDong; Ma XiaoYang; Zhao TianWei; Zhang FuJie; Chen ZhiHai

Title

Retrospective evaluation on the efficacy of lopinavir/ritonavir and chloroquine to treat nonsevere COVID-19 patients.

Source

JAIDS, Journal of Acquired Immune Deficiency Syndromes; 2020. 85(2):239-243. 18 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background: The effectiveness of lopinavir/ritonavir (LPV/r) and chloroquine treatment for COVID-19 has not been verified. Methods: We conducted a retrospective study to summarize the clinical practices of nonsevere patients with COVID-19 receiving the standard care, LPV/r or chloroquine in Beijing Ditan Hospital from January 20 to March 26, 2020. The main outcome measurements include the changes of cycle threshold values of open reading frame 1 ab (ORF1ab) and nucleocapsid (N) genes by reverse transcriptase-polymerase chain reaction assay from day 1 to 7 after admission for patients receiving standard care or after treatment being initiated for patients receiving either LPV/r or chloroquine. The proportion of developing severe illness, fever duration and the time from symptom onset to chest computer tomography improvement, and negative conversion of nucleic acid were compared. Results: Of the 129 patients included in the study, 59 received the standard care, 51 received LPV/r, and 19 received chloroquine. The demographics and baseline characteristics were comparable among the 3 groups. The median duration of fever, median time from symptom onset to chest computer tomography improvement, and negative conversion of the nucleic acid were similar among the 3 groups. The median increase in cycle threshold values of N and ORF1ab gene for patients receiving LPV/r or chloroquine or the standard care during the treatment course was 7.0 and 8.5, 8.0, and 7.6, 5.0, and 4.0, respectively. These figures were not found significantly different among the 3 groups. Conclusions: Antiviral therapy using LPV/r or chloroquine seemed not to improve the prognosis or shorten the clinical course of COVID-19.

Publication Type

Journal article.

<467>

Accession Number

20203430604

Author

Hua Jing; Qian ChenChen; Luo ZhiBing; Li Qiang; Wang FeiLong

Title

Invasive mechanical ventilation in COVID-19 patient management: the experience with 469 patients in Wuhan.

Source

Critical Care; 2020. 24(349):(16 June 2020). 6 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

This article collected and analyzed the data of 469 ICU COVID-19 patients who were hospitalized from February 2020 to the end of March in 13 ICUs in Wuhan. At the time of data collection, all of the patients were either discharged or deceased. Results found that the mortality rate in the IV group was 92%, compared to the other two groups (6.4% in the NV group, 40.8% in the NIV group). Furthermore, patients in the IV group developed a higher rate of severe comorbidities such as acute kidney injury (AKI) which required continuous renal replacement therapy (CRRT) (26.5%) compared to the NV (2.9%) and NIV (5.3%) groups. Moreover, 10 patients (8.8%) in the IV group received ECMO implementation. Interestingly, there were even more cases of COPD in the NIV group (31, 20.7%) than in the IV group (8, 7.1%). This could be explained that physicians tend to avoid intubation in chronic lung disease patients due to concern of barotrauma and higher DNR/DNI ratio in those patients. From laboratory results, significantly higher white blood cell count, lower lymphocyte count and platelet count, and higher CRP, AST, ALT, and total bilirubin are presented in the IV group than the other two groups on admission. SOFA scores in the IV and NIV groups were also significantly higher than the NV group. There were no significant differences in Scr among these groups on admission though. The study can tell from the data that the patients in the IV group were older with a higher rate of hyperinflammation status on admission compared to the other two groups. These factors may lead to the rapid progress of respiratory failure and fatal outcome eventually. COVID-19 patients who were invasively ventilated exhibited pessimistic outcomes. This suggests that early intubation may not help patients but instead, make things head towards the wrong direction.

Publication Type

Journal article.

<468>

Accession Number

20203417055

Author

Ahmed, M. A. M.; Colebunders, R.; Fodjo, J. N. S.

Title

Evidence for significant COVID-19 community transmission in Somalia using a clinical case definition. (Special Section: Coronavirus (COVID-19) collection.)

Source

International Journal of Infectious Diseases; 2020. 98:206-207. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This article applied the WHO COVID-19 case definition in Somalia and suggest ways to improve its performance. The results strongly suggest a high level of community transmission of COVID-19 in Somalia that is most likely under-reported using current approaches. This implies that a significant portion of infected Somalis go undetected and unwittingly serve as asymptomatic spreaders. The article demonstrates that the inclusion of anosmia into a case definition for COVID-19 may result in fewer false negatives, thus ensuring that a higher number of cases are quarantined until they no longer pose a public health threat. It appears that the onset of anosmia precedes the full-blown clinical disease. Therefore, objectively assessing these symptoms could prove useful in screening for COVID-19, even in primary healthcare settings. Notably, hyposmia/anosmia is seldom reported spontaneously by the patients themselves and should be intentionally investigated during history taking, especially during an ongoing COVID-19 outbreak.

Publication Type

Journal article.

<469>

Accession Number

20203416305

Author

Silva-Arrieta, S.; Goulder, P. J. R.; Brander, C.

Title

In silico veritas? Potential limitations for SARS-CoV-2 vaccine development based on T-cell epitope prediction.

Source

PLoS Pathogens; 2020. 16(6)16 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

With the urgency to develop effective measures to control the COVID-19 pandemic and to design vaccine strategies useful to confront future outbreaks and epidemics of SARS-CoV-2 and related coronaviruses, accelerated programs for T-cell immunogen design are needed. T-cell epitope prediction algorithms are an effective tool to narrow down the potential immunogen cargo in a future SARS-CoV-2 vaccine from the total viral proteome. However, approaches exclusively based on 9-mer epitope prediction will potentially miss critically important responses, and even those based on 9-mer and 10-mer epitope prediction have similar shortcomings, for the reasons described above. In addition, a relatively unbiased approach to characterizing the T-cell response using overlapping peptides will facilitate understanding of immune correlates of SARS-CoV-2 control versus disease. The benefit of the predicted 9-mer/10-mer approach would be that, when used in combination with panels of overlapping peptides spanning the viral proteome, optimal epitopes will be more rapidly identified and, at the same time, immune correlates of disease protection evaluated in an unbiased fashion. These considerations should not be overlooked, as invaluable time and resources could be directed in directions that may not yield the desired success.

Publication Type

Journal article.

<470>

Accession Number

20203414429

Author

Megiddo, I.; Nonvignon, J.; Owusu, R.; Chalkidou, K.; Colson, A.; Gad, M.; Klepac, P.; Ruiz, F.; Morton, A.

Title

Fairer financing of vaccines in a world living with COVID-19.

Source

BMJ Global Health; 2020. 5(7)16 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

The COVID-19 pandemic has disrupted routine and campaign-based vaccination, potentially increasing the future vaccine-preventable disease burden and threatening to overwhelm health systems. Vaccine-preventable diseases are transboundary problems that require global cooperation to achieve the best outcomes. Investments, predominantly by rich countries-in effect transfers to poor countries-are required as part of the financing solution. Theoretical advances show how such funds can be operationally

prioritized and disbursed equitably. Such transfers are also in the interest of high-income countries, and cooperation achieves better outcomes than strategies such as travel restrictions for vaccine-preventable diseases. Similar cooperation and financing issues will arise if and when it is time to distribute a COVID-19 vaccine.

Publication Type

Journal article.

<471>

Accession Number

20203414427

Author

Morse, T.; Chidziwisano, K.; Musoke, D.; Beattie, T. K.; Mudaly, S.

Title

Environmental health practitioners: a key cadre in the control of COVID-19 in sub-Saharan Africa.

Source

BMJ Global Health; 2020. 5(7)17 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

The multidisciplinary nature of environmental health practitioners (EHP) allows them to understand where different sectors can intersect to maximise severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)-related interventions. EHPs have the necessary skills to support the transdisciplinary approach required to halt the further spread of SARS-CoV-2. Governments should support the work of EHPs across the region and include them among key decision-making stakeholders. With an overarching, holistic range of skills, EHPs offer not only an essential but also a unique role in the prevention and control of diseases such as COVID-19 in SSA. However, for them to do this, it is essential that governments support the work of EHPs across the region and include them among key decision-making stakeholders.

Publication Type

Journal article.

<472>

Accession Number

20203414426

Author

Saad, N. J.

Title

The Al Hol camp in Northeast Syria: health and humanitarian challenges.

Source

BMJ Global Health; 2020. 5(7)23 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Al Hol camp is the largest refugee/internally displaced people camp in Northeast Syria. It currently contains approximately 65,000 individuals, of which an estimated 10 000 are foreign non-Iraqi nationals. The current situation for those living in the camp is untenable due to abhorrent living conditions and restriction on medical care or access to care. International humanitarian and human rights law should always be respected in the camp and foreign governments should not forget the plight of their own nationals in the camp. Nine years on in the Syria conflict, the humanitarian crisis will only worsen further due the COVID-19 pandemic. Particularly problematic is the restriction on medical care and access to care for people within the Al Hol camp based on their perceived ISIS affiliation, which is unjust and immoral. No person should be denied essential and potentially life-saving care, regardless of their background, nationality, religion or perceived affiliation. While countries decide on the appropriate long-term answer, international humanitarian and human rights law should always be respected. Countries, including European ones, should take responsibility for their nationals in these camps rather than simply refusing to repatriate them. As long as national governments continue to grapple with the situation in the Al Hol camp and some governments attempt to forget the plight of their nationals, people will continue to suffer and struggle for dignity and survival.

Publication Type

Journal article.

<473>

Accession Number

20203414425

Author

Abiy Seifu Estifanos; Getnet Alemu; Solomon Negussie; Debebe Ero; Yewondwossen Mengistu; Adamu Addissie; Yirgu Gebrehiwot; Helen Yifter; Addisu Melkie; Damen Hailemariam Gebrekiros; Messay Gebremariam Kotecho; Soklaridis, S.; Cartmill, C.; Whitehead, C. R.; Dawit Wondimagegn

Title

'I exist because of we': shielding as a communal ethic of maintaining social bonds during the COVID-19 response in Ethiopia.

Source

BMJ Global Health; 2020. 5(7)14 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Ethiopia's social, cultural and economic conditions place significant limitations to the use of lockdown as a public health strategy for containing the spread of COVID-19. Shielding focuses efforts to prevent vulnerable people from COVID-19 infection, empowers communities to stand by each other and harness the power of communal values, and protects against socio-economic and political crises that may result from complete lockdown. In countries like Ethiopia, there is an opportunity to contain COVID-19 and flatten the curve by implementing public health interventions that are culturally appropriate and that address the health and socioeconomic impacts of COVID-19. Ethiopia's social, cultural and economic state of affairs place significant limitations to the use of lockdown as a public health strategy for containing the spread of COVID-19. By aligning with the Afro-communal philosophy of ubuntu, shielding promotes elements of social distancing among those who are most vulnerable in a way that is practical and appropriate within a culture that values communion, togetherness and cohesion.

Publication Type

Journal article.

<474>

Accession Number

20203414423

Author

Menon, J. C.; Rakesh, P. S.; John, D.; Rajesh Thachathodiyl; Amitava Banerjee

Title

What was right about Kerala's response to the COVID-19 pandemic?

Source

BMJ Global Health; 2020. 5(7)20 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Kerala is among the states, that has high recovery rate, low death rate and slow progression, of COVID-19 cases in India. The actions taken by the Government of Kerala in managing and controlling the COVID-19 pandemic is recognized by policymakers, public, researchers and clinicians, in India and internationally. The COVID-19 management and control received the highest political and administrative commitment with proactive timely interventions. Despite having a low per capita income, the state has its social development indicators, such as human development index, infant mortality rate, sex ratio and female literacy rates, comparable to those of many developed countries. Several key strategies implemented by the state; surveillance, good quality quarantine, testing strategies, uninterrupted treatment services, community participation, proactive care of elderly and people with comorbidity and educational and social mobilization of behavioural change, contributed to effective management and control of COVID-19 in Kerala.

Publication Type

Journal article.

<475>

Accession Number

20203418792

Author

Shepherd, J.; Friedland, G.

Title

Preventing COVID-19 collateral damage.

Source

Clinical Infectious Diseases; 2020. 71(6):1564-1567. 17 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The aim of the article was to discuss the public health implications of concurrence of COVID-19 pandemic with: measles, tuberculosis, HIV, poliovirus, and other risk groups. The necessary public health response to limiting the spread of SARS-CoV-2 should be integrated in both the time-honored and newly established responses for the control of tuberculosis, HIV, and vaccine-preventable diseases and not provided in a separate silo. It should be possible to integrate SARS-CoV-2 screening and testing into existing public health programs, strengthening both. Active screening and testing to identify early and asymptomatic cases, rapid isolation and treatment of cases, efficient tracing of contacts of cases, and support for treatment completion or lifelong therapy for TB and HIV have been successfully integrated in many countries. Vaccines, where available, must be efficiently administered using existing pathways and personnel and their delivery not interrupted. We will need these pathways for SARS-CoV-2 vaccination, hopefully soon. Most low- and middle-income countries are quite experienced and adept at implementing these public health programs and have systems already in place. They have to be maintained and strengthened. COVID-19 programs have to be added and integrated, not substituted.

Publication Type

Journal article.

<476>

Accession Number

20203425085

Author

Street, R.; Malema, S.; Mahlangeni, N.; Mathee, A.

Title

Wastewater surveillance for COVID-19: an African perspective.

Source

Science of the Total Environment; 2020. 743many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The COVID-19 pandemic has once again highlighted the importance of access to sufficient quantities of safe water and sanitation in public health. In the current COVID-19 pandemic, an early warning wastewater system has been proposed as a platform for SARS-CoV-2 surveillance, and a potentially important public health strategy to combat the disease. This short communication on wastewater surveillance in sub-Saharan Africa highlights challenges, opportunities and alternatives taken into account the local context.

Publication Type

Journal article.

<477>

Accession Number

20203426289

Author

Rimoldi, S. G.; Stefani, F.; Gigantiello, A.; Polesello, S.; Comandatore, F.; Mileto, D.; Maresca, M.; Longobardi, C.; Mancon, A.; Romeri, F.; Pagani, C.; Cappelli, F.; Roscioli, C.; Moja, L.; Gismondo, M. R.; Salerno, F.

Title

Presence and infectivity of SARS-CoV-2 virus in wastewaters and rivers.

Source

Science of the Total Environment; 2020. 74442 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The presence of SARS-CoV-2 in raw wastewaters has been demonstrated in many countries affected by this pandemic. Nevertheless, virus presence and infectivity in treated wastewaters, but also in the receiving water bodies are still poorly investigated. In this study, raw and treated samples from three wastewater treatment plants, and three river samples within the Milano Metropolitan Area, Italy, were surveyed for SARS-CoV-2 RNA detection by means of real time RT-PCR and infectivity test on culture cells. SARS-CoV-2 RNA was detected in raw, but not in treated wastewaters (four and two samples, respectively, sampled in two dates). The isolated virus genome was sequenced, and belonged to the strain most spread in Europe and similar to another found in the same region. RNA presence in raw wastewater samples decreased after eight days, probably following the epidemiological trend estimated for the area. Virus infectivity was always null, indicating the natural decay of viral pathogenicity in time from emission. Samples from receiving rivers (three sites, sampled in the same dates as wastewaters) showed in some cases a positivity to real time RT-PCR, probably due to non-treated, or inefficiently treated discharges, or to the combined sewage overflows. Nevertheless, also for rivers infectivity was null. Risks for public health should be limited, although a precautionary approach to risk assessment is here advocated, giving the preliminary nature of the presented data.

Publication Type

Journal article.

<478>

Accession Number

20203426257

Author

Cui Yang; Ji DongSheng; Maenhaut, W.; Gao WenKang; Zhang RenJian; Wang YueSi

Title

Levels and sources of hourly PM2.5-related elements during the control period of the COVID-19 pandemic at a rural site between Beijing and Tianjin.

Source

Science of the Total Environment; 2020. 74441 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

To control the spread of the novel coronavirus disease 2019 (COVID-19) in China, many anthropogenic activities were reduced and even closed on the national scale. To study the impact of this reduction and

closing down, hourly concentrations of PM2.5-related elements were measured at a rural site before (12-25 January 2020), during (26 January-9 February 2020) and after (22 March-2 April 2020) the control period when all people remained socially isolated in their homes and could not return to economic zones for work. Nine major sources were identified by the positive matrix factorization model, including fireworks burning, coal combustion, vehicle emissions, dust, Cr industry, oil combustion, Se industry, Zn smelter, and iron and steel industry. Before the control period, K, Fe, Ca, Zn, Ba and Cu were the main elements, and fireworks burning, Zn smelter and vehicle emissions provided the highest contributions to the total element mass with 55%, 12.1% and 10.3%, respectively. During the control period, K, Fe, Ba, Cu and Zn were the dominating elements, and fireworks burning and vehicle emissions contributed 55% and 27% of the total element mass. After the control period, Fe, K, Ca, Zn and Ba were the main elements, and dust and iron and steel industry were responsible for 56% and 21% of the total element mass. The increased contribution from vehicle emissions during the control period could be attributed to our sampling site being near a town hospital and the fact that the vehicle activities were not restricted. The source apportionment results were also related to air mass backward trajectories. The largest reductions of dust, coal combustion, and the industrial sources (Cr industry, Zn smelter, Se industry, iron and steel industry) were distinctly seen for northwest transport (Ulanqab) and were least significant for northeast transport (Tangshan and Tianjin).

Publication Type

Journal article.

<479>

Accession Number

20203423179

Author

Lee ShinYup; Choi SunHa; Park JiEun; Hwang SoYoon; Kwon KiTae

Title

Crucial role of temporary airborne infection isolation rooms in an intensive care unit: containing the COVID-19 outbreak in South Korea.

Source

Critical Care; 2020. 24(238):(18 May 2020). 6 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

This article reports the assembly of temporary AIIRs in the ICU of a single 635-bed tertiary care, academic hospital and discuss the critical role played by these units toward controlling this explosive outbreak. Before the COVID-19 outbreak, Daegu had only three AIIRs with anteroom in an ICU of one national university hospital; these were built with government support after the 2015 MERS outbreak. The tertiary hospitals in Daegu facilitated the isolation and treatment severely ill patients via temporarily remodeling of existing ICU facilities. Prior to the outbreak, our hospital operated two separate ICU facilities; each was equipped with two AIIRs without anterooms. This was not sufficient for isolation of COVID-19 patients nor did this provide appropriate protection for healthcare workers (HCWs). Critically ill COVID-19 patients were transported to the temporary negative pressure isolation ICU in negative pressure carts that utilized an exclusive path and elevator maintained for this purpose by staff members wearing appropriate personal protective equipment. The COVID-19 team included 5 physicians and 40 nurses. All HCWs in our newly remodeled ICU were screened for COVID-19 via the reverse transcriptase-polymerase chain reaction test after the first 2 weeks on duty; no tests were reported as positive. Approximately 60% of the COVID-19 patients at our hospital had severe pneumonia. The newly renovated temporary AIIRs have been in operation for 4 weeks. During this time, the hospital managed to treat seven patients: six patients have required mechanical ventilation, two patients were treated with extracorporeal membrane oxygenation, and continuous renal replacement therapy has been provided to one patient. The doctors believe that the urgently renovated ICU played an important role in preventing the surge of mortality despite the rapid increasing number of patients with severe pneumonia. Thus, the experience suggests that renovation of our ICUs to include temporary AIIRs was a critical and highly effective measure that permitted us to react appropriately to the explosive outbreak of COVID-19 and to provide optimal care for severely ill patients.

Publication Type

Journal article.

<480>

Accession Number

20203423163

Author

Zhang Qian; Wang HaiXia; Yang LiYing; Xiao Ying; Chen, Y.

Title

Infection control of coronavirus disease 2019 patients receiving hyperbaric oxygen therapy in mobile single air compression chamber. [Chinese]

Source

Academic Journal of Second Military Medical University; 2020. 41(6):628-632. 11 ref.

Publisher

Editorial Department of Academic Journal of Second Military Medical University

Location of Publisher

Shanghai

Country of Publication

China

Abstract

Objective: To study the infection control of patients with coronavirus disease 2019 (COVID-19) during the hyperbaric oxygen therapy, so as to provide references for hyperbaric oxygen therapy in public health events in the future. Methods: A hyperbaric oxygen therapy and nursing team in wards and a full-time infection control nurse post were set up, the responsibilities of infection control nurses were defined, nosocomial infection monitoring was carried out, and meticulous management in all aspects of infection control was carried out. The hand hygiene compliance rates (number of hand hygiene execution/total number of hand hygiene indicators100%) of doctors, nurses and patients were compared before and after supervision by full-time infection control nurses. After the implementation of the hyperbaric oxygen chamber disinfection, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) nucleic acid test was performed on multiple sites inside and outside the hyperbaric oxygen chamber and wards every week. Hyperbaric oxygen therapy was given to four COVID-19 patients in mobile single air compression chamber and the therapy effects were observed. Results After supervision by full-time infection control nurses, the hand hygiene compliance rates of the doctors, nurses and patients were all improved (82.94%[175/211] vs 73.27%[148/202], 94.70%[268/283] vs 89.39%[236/264], and 78.41%[69/88] vs 46.64%[24/55]), and the differences were significant (chi2=5.663 5, 5.308 4, and 17.997 2, all P < 0.05). After the implementation of the hyperbaric oxygen chamber disinfection, the SARS-CoV-2 nucleic acid test results were negative on the door handle, inside and outside of the hyperbaric oxygen chamber, the surface of the transfer bed and the surface of ward supplies during the first and second weeks. The pulse oxygen saturation (SpO2) and the walking distance in six minutes of patients were both increased after hyperbaric oxygen therapy compared with those before hyperbaric oxygen therapy ([91.62+/-3.65]% vs[85.63+/-4.52]% and[346.3+/-43.6] m vs[272.2+/-61.9] m), and the differences were significant (t=2.062 1 and 1.957 4, P=0.042 and 0.049). The symptoms such as chest tightness and shortness of breath were significantly improved after hyperbaric oxygen therapy. Computed tomography reexamination showed that the inflammatory lesions of lungs had subsided to different extents. Conclusion: Hyperbaric oxygen nursing team and infection control nurse post can promote and supervise the implementation of the infection control system and infection control measures, ensuring the infection monitoring of COVID-19 patients and the safety of patients and medical staff.

Publication Type

Journal article.

<481>

Accession Number

20203428631

Author

Espitia, A.; Rocha, N.; Ruta, M.

Title

COVID-19 and food protectionism: the impact of the pandemic and export restrictions on world food markets.

Source

Policy Research Working Paper - World Bank; 2020. (9253):28 pp. 22 ref.

Publisher

World Bank

Location of Publisher

Washington

Country of Publication

USA

Abstract

This paper analyzes the impact of Covid-19 and uncooperative trade policies on world food markets. It quantifies the initial shock due to the pandemic under the assumption that products that are more labor intensive in production are more affected through workers' morbidity and containment policies. It then estimates how escalating export restrictions to shield domestic food markets could magnify the initial shock. The analysis shows that, in the quarter following the outbreak of the pandemic, the global export supply of food could decrease between 6 and 20 percent and global prices increase between 2 and 6 percent on average. Escalating export restrictions would multiply the initial shock by a factor of 3, with world food prices rising by up to 18 percent on average. Import food dependent countries, which are in large majority developing and least developed countries, would be most affected.

Publication Type

Bulletin.

<482>

Accession Number

20203426770

Author

Ding Jing; Tuan WenJan; Temte, J. L.

Title

Managing close contacts of COVID-19 confirmed cases in metropolitan areas in China.

Source

Journal of Public Health Management and Practice; 2020. 26(4):345-348. 15 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

The novel coronavirus (COVID-19) outbreak has rapidly spread across the world. As medical systems continue to develop vaccines and treatments, it is crucial for the public health community to establish nonpharmaceutical interventions (NPIs) that can effectively mitigate the rate of SARS-Coronavirus-2 (SARS-CoV-2) spread across highly populated residential areas, especially among individuals who have close contact with confirmed cases. A community-driven preparedness strategy has been implemented in metropolitan areas in China. The Chinese Center for Disease Control and Prevention (CCDC) has required that all COVID-19 confirmed cases be recorded and documented in a national notifiable disease surveillance system (NDSS). After receiving reports of newly confirmed cases, an epidemiological services team at the CCDC or trained medical professionals at local clinical facilities start a case-contact investigation. A task force performs home visits to infected individuals. Persons under investigation (PUIs) can stay in designated quarantine facilities for 14 days or in special circumstances can be quarantined at home. This community-based approach involved all stakeholders including local public health departments, public safety authorities, neighborhood councils, and community health centers.

Publication Type

Journal article.

<483>

Accession Number

20203421794

Author

Javorac, D.; Grahovac, L.; Manic, L.; Stojilkovic, N.; Andelkovic, M.; Bulat, Z.; Dukic - Cosic, D.; Curcic, M.; Djordjevic, A. B.

Title

An overview of the safety assessment of medicines currently used in the COVID-19 disease treatment.

Source

Food and Chemical Toxicology; 2020. 14472 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

On 11th March 2020, the pandemic of the new coronavirus was declared by the World Health Organization. At the moment, there are no new registered medicines that can effectively treat the coronavirus infection. However, a number of ongoing clinical trials are investigating the efficacy and safety of the medicines which have already been registered and used for the treatment of other diseases, in the treatment of the coronavirus infection. The proposed combinations of these medicines could potentially present a safety risk, since most of these medicines have the potential to cause numerous side or toxic effects, even when used in monotherapy. Thus, the aim of this study was to review and evaluate the literature data on the toxicity of the selected individual drugs (ritonavir, lopinavir, remdesivir, chloroquine, and umifenovir) and the available clinical data concerning the possible adverse effects of the selected drug combinations (lopinavir/ritonavir + umifenovir, lopinavir/ritonavir + interferon beta, chloroquine + remdesivir, and chloroquine + azithromycin). The most often reported toxic effects of these medicines such as hepatotoxicity, retinal damage, nephrotoxicity, and cardiotoxicity, together with the fact that the health status of the patients with COVID-19 disease is often complicated by co-existing illnesses and therapy implicate that the decision on the therapeutic strategy should be made with caution.

Publication Type

Journal article.

<484>

Accession Number

20203438530

Author

Bezerra-Santos, M. A.; Mendoza-Roldan, J. A.; Abramo, F.; Lia, R. P.; Tarallo, V. D.; Salant, H.; Brianti, E.; Baneth, G.; Otranto, D.

Title

Transmammary transmission of Troglostrongylus brevior feline lungworm: a lesson from our gardens.

Source

Veterinary Parasitology; 2020. 28542 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Feline lungworms such as Aerulostrongylus abstrusus and Troglostrongylus brevior are snail-borne pathogens causing respiratory disease in domestic cats. Paratenic hosts such as rodents and reptiles have also been implicated in the epidemiology of these parasites. Although A. abstrusus has been recognized for

a long time as the most prevalent lungworm among cats worldwide, T. brevior is of major concern in kittens. Bearing in mind that disease due to T. brevior occurs mainly in pediatric patients younger than 6 months of age, the diagnosis of this parasite in two kittens presenting severe respiratory disease from the garden of one of the authors inspired us to investigate the potential routes of transmission for T. brevior in domestic cats. Of the three queens (A, B and C) that delivered kittens (n = 8), only cat A was positive for T. brevior, presenting her two kittens severe respiratory clinical signs, which lead to the exitus in one of them, 18 days of age. In addition, three kittens, the offspring of queen B, turned to be positive at the coprological examination after suckling from queen A, whereas those from queen C (that suckled only on their own mother) remained negative. A series of coprological, histological and molecular tests were conducted to confirm the presence of T. brevior in the patients as well as in the other cats cohabiting the same garden. Adult nematodes were retrieved from the trachea and bronchi of the dead kitten (kitten 1A), and larvae at the histology of the lung and liver parenchyma associated with bronco pneumonitis and lymphocytic pericholangitis, respectively. Cornu aspersum (n = 60), Eobania vermiculata (n = 30) snails (intermediate hosts) as well as lizards and rats (potential paratenic hosts) were collected from the same garden and processed through tissue digestion and molecular detection. Troglostrongylus brevior larvae were recovered through tissue digestion from two C. aspersum (3.33%) and it was confirmed by PCR-sequencing approach, which also detected T. brevior DNA in the liver and lungs of one rat and in the coelomatic cavity of one gecko lizard. During the COVID-19 lockdown, when scientists spent more time at home, we grasp the opportunity to decipher T. brevior biology and ecology starting in a small ecological niche, such as the garden of our house. Data herein presented led us to suggest: (i) the transmammary transmission of T. brevior in domestic cats; (ii) the role of intermediate and paratenic hosts (including reptiles) in the epidemiology of the infection which they transmit; as well as (iii) the importance of observational parasitology in studying any event that certainly occurs in small ecological niches, as it could be in our home gardens.

Publication Type

Journal article.

<485>

Accession Number

20203435416

Author

Lazzarini, L.; Barzon, L.; Foglia, F.; Manfrin, V.; Pacenti, M.; Pavan, G.; Rassu, M.; Capelli, G.; Montarsi, F.; Martini, S.; Zanella, F.; Padovan, M. T.; Russo, F.; Gobbi, F.

Title

First autochthonous dengue outbreak in Italy, August 2020.

Source

Eurosurveillance; 2020. 25(36)13 ref.

Publisher

European Centre for Disease Prevention and Control

Location of Publisher

Stockholm

Country of Publication

Sweden

Abstract

In August 2020, during the coronavirus disease (COVID-19) pandemic, five locally acquired cases of dengue virus type 1 were detected in a family cluster in Vicenza Province, North-East Italy where Aedes albopictus mosquitoes are endemic. The primary case was an importation from West Sumatra, Indonesia. This is the first outbreak of autochthonous dengue reported in Italy. During the COVID-19 pandemic, screening of febrile travelers from endemic countries is crucial in areas where competent vectors are present.

Publication Type

Journal article.

<486>

Accession Number

20203430965

Author

Kwok, K. O.; Lai, F. Y. L.; Wei, V. W. I.; Tsoi, M. T. F.; Wong, S. Y. S.; Tang, J. W. T.

Title

Comparing the impact of various interventions to control the spread of COVID-19 in twelve countries.

Source

Journal of Hospital Infection; 2020. 106(1):214-216. 9 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Publication Type

Correspondence.

<487>

Accession Number

20203411140

Author

Webber, G. C.; Chirangi, B. M.

Title

In support of community-based primary health care: coping with the COVID-19 crisis. (Special edition for COVID-19.)

Source

African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):64-65. 3 ref.

Publisher

Women's Health and Action Research Centre

Location of Publisher

Benin City

Country of Publication

Nigeria

Abstract

The aim of the article was to report the public health support extended to the community-based primary health care during the COVID-19 pandemic. In rural Africa, the primary health care system is built upon community health workers collaborating with dispensary nurses to attend to the health needs of the population. It is the relationships of the community health workers with local families which is key to maintaining the health of the community. This is particularly true for reproductive health care services such as family planning and antenatal care. In many regions in Africa, community health workers have been trained to assist women access family planning and prenatal services. The article proposed this relationship needs to be strengthened during a pandemic, when women are less likely to leave their communities for health care. The community health workers need more support at this time - both through phone supervision and through provision of supplies which they can distribute to community members. Community health workers must be trained and supported to refer women with danger signs for higher levels of care. In our research in rural Tanzania, in addition to referring pregnant women with danger signs, trained community health workers can safely distribute condoms and oral contraception and educate women about more advanced family planning methods that can be obtained through a local health facility such as depoprovera injections, implants and intrauterine device.

Publication Type

Journal article.

<488>

Accession Number

20203322498

Author

Zemzem Shigute; Mebratie, A. D.; Getnet Alemu; Bedi, A.

Title

Containing the spread of COVID-19 in Ethiopia.

Source

Journal of Global Health; 2020. 10(1)5 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

The government has moved swiftly and prudently and rolled out a range of measures. On paper, the measures are stringent. However, deliberately, keeping in mind the country's fragile economy, and the social and economic conditions of its citizens, the lockdown has not been heavy-handed. A good balance has been maintained, and economic activities, especially agriculture and industry, have continued with a view to maintaining food security and preventing unrest. The country's early response, its young population, low population density in rural areas, experience in handling large scale crises, dense network of community workers are positive aspects in the fight against the virus. However, these are pitted against a weak health system, poor nutritional status, lack of access to proper hygiene and sanitation and densely populated urban areas. While preparatory measures need to continue, the country's best hopes lie in its strategy of early imposition and continued adherence, if not strengthening of preventive measures, to avoid widespread community transmission of the virus. This viewpoint describes the prevention and preparation measures taken in Ethiopia and comment on the consequences, challenges and strengths of the measures, keeping in mind the Ethiopian context.

Publication Type

Journal article.

<489>

Accession Number

20203321788

Author

Liu Yang; Yan LiMeng; Wan LaGen; Xiang TianXin; Le AiPing; Liu JiaMing; Peiris, M.; Poon, L. L. M.; Zhang Wei

Title

Viral dynamics in mild and severe cases of COVID-19.

Source

Lancet Infectious Diseases; 2020. 20(6):656-657. 6 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This paper reports the viral RNA shedding patterns observed in patients with mild and severe COVID-19. 76 patients admitted to the First Affiliated Hospital of Nanchang University (Nanchang, China) from Jan 21 to Feb 4, 2020, were included in the study. All patients were confirmed to have COVID-19 at the time of admission by RT-PCR. The viral loads of their nasopharyngeal swab samples were estimated with the DCt method. Patients who had any of the following features at the time of, or after, admission were classified as severe cases: (1) respiratory distress (>=30 breaths per min); (2) oxygen saturation at rest <=93%; (3) ratio of partial pressure of arterial oxygen to fractional concentration of oxygen inspired air <=300 mm Hg; or (4) severe disease complications (eg, respiratory failure, requirement of mechanical ventilation, septic shock, or non-respiratory organ failure). 46 (61%) individuals were classified as mild cases and 30 (39%) were classified as severe cases. Parameters did not differ significantly between the groups, except that patients in the severe group were significantly older than those in the mild group, as expected. No patient died from the infection. 23 (77%) of 30 severe cases received intensive care unit (ICU) treatment, whereas none of the mild cases required ICU treatment.

Publication Type

Correspondence.

<490>

Accession Number

20203427252

Author

Brutto, O. H. del; Costa, A. F.; Mera, R. M.; Recalde, B. Y.; Bustos, J. A.; Garcia, H. H.

Title

Household clustering of SARS-CoV-2 in community settings: a study from Rural Ecuador.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(3):1207-1210. 19 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

The SARS-CoV-2 pandemic is now expanding into the developing world with devastating consequences. Departing from a population-based study in rural Ecuador where all adult individuals (aged 40 years or older) were tested for SARS-CoV-2 IgG and IgM antibodies, we expanded it to include a house-based case-control component assessing in-house clustering and other variables potentially associated with infection. We selected houses where exactly two study participants lived and were both seropositive (case-houses), and matched 1:1 to control-houses where both were seronegative. Younger household members had an antibody test performed. Infected household members were found in 33 (92%) case-houses and in only six (17%) control-houses. In 28/29 discordant house pairs, the case-house had seropositive household members and the control-house did not (odds ratio: 28; 95% CI: 4.6-1,144). Our data demonstrate strong in-house clustering of infection in community settings, stressing the importance of early case ascertainment and isolation for SARS-CoV-2 control.

Publication Type

Journal article.

<491>

Accession Number

20203421000

Author

Griffith, S. M.; Huang WeiSyun; Lin ChiaChing; Chen YingChieh; Chang KuoEn; Lin TangHuang; Wang ShengHsiang; Lin NengHuei

Title

Long-range air pollution transport in East Asia during the first week of the COVID-19 lockdown in China.

Source

Science of the Total Environment; 2020. 741many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Long-range transport (LRT) of air pollutants from East Asia during the northeast monsoon season impacts several downwind locations. In 2020, the initial COVID-19 lockdowns in China overlapped with Week 3 of the Chinese New Year (CNY) holiday, and an Asian outflow event. Thus, movement of the Chinese populace from city to city was already greatly reduced by the time of the LRT episode, although the reductions in industrial output are less clear. We found NO2 column concentrations were reduced by 24% during the CNY Week 3 this year compared to previous years. The attenuated transport event arrived to northern Taiwan with a PM2.5 concentration <45 mug m-3 and most often <35 mug m-3, which is 2-3 times lower than LRT episodes of similar back-trajectory and synoptic patterns. The whole episode persisted for about 60 h, longer than most LRT episodes from China to Taiwan. CMAQ v5.2.1 modeling of the LRT event with 100% emission and reduced emission scenarios, revealed emissions in China were approximately 50% less than normal periods. Due to the length of the episode and the significant reduction in emissions, Taiwan avoided a PM2.5 surplus of 19.2 mug m-3 on average during the episode, equivalent to a 0.5 mug m-3 reduction for the whole 3-month winter season. Employing the 100% emission model scenario and scaling up to the average episode hours each winter, the PM2.5 surplus delivered via plumes on the northeast monsoon is equivalent to a 0.5 mug m-3 surplus for the whole year.

Publication Type

Journal article.

<492>

Accession Number

20203429673

Author

Yang, H. M.; Lombardi Junior, L. P.; Castro, F. F. M.; Yang, A. C.

Title

Mathematical model describing CoVID-19 in Sao Paulo, Brazil - evaluating isolation as control mechanism and forecasting epidemiological scenarios of release.

Source

Epidemiology and Infection; 2020. 148(e155)10 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

In Sao Paulo, Brazil, the first case of coronavirus disease 2019 (CoViD-19) was confirmed on 26 February, the first death due to CoViD-19 was registered on 16 March, and on 24 March, Sao Paulo implemented the isolation of persons in non-essential activities. A mathematical model was formulated based on non-linear ordinary differential equations considering young (60 years old or less) and elder (60 years old or more) subpopulations, aiming to describe the introduction and dissemination of the new coronavirus in Sao Paulo. This deterministic model used the data collected from Sao Paulo to estimate the model parameters, obtaining R0 = 6.8 for the basic reproduction number. The model also allowed to estimate that 50% of the population of Sao Paulo was in isolation, which permitted to describe the current epidemiological status. The goal of isolation implemented in Sao Paulo to control the rapid increase of the new coronavirus epidemic was partially succeeded, concluding that if isolation of at least 80% of the population had been implemented, the collapse in the health care system could be avoided. Nevertheless, the isolated persons must be released one day. Based on this model, we studied the potential epidemiological scenarios of release by varying the proportions of the release of young and elder persons. We also evaluated three different strategies of release: All isolated persons are released simultaneously, two and three releases divided in equal proportions. The better scenarios occurred when young persons are released, but maintaining elder persons isolated for a while. When compared with the epidemic without isolation, all strategies of release did not attain the goal of reducing substantially the number of hospitalisations due to severe CoViD-19. Hence, we concluded that the best decision must be postponing the beginning of the release.

Publication Type

Journal article.

<493>

Accession Number

20203428973

Author

Dieterle, M. E.; Haslwanter, D.; Bortz, R. H.; Wirchnianski, A. S.; Lasso, G.; Vergnolle, O.; Abbasi, S. A.; Fels, J. M.; Laudermilch, E.; Florez, C.; Mengotto, A.; Kimmel, D.; Malonis, R. J.; Georgiev, G.; Quiroz, J.; Barnhill, J.; Pirofski, L.; Daily, J. P.; Dye, J. M.; Lai, J. R.; Herbert, A. S.; Chandran, K.; Jangra, R. K.

Title

A replication-competent vesicular stomatitis virus for studies of SARS-CoV-2 spike-mediated cell entry and its inhibition.

Source

Cell Host & Microbe; 2020. 28(3):486-496.e6. many ref.

Publisher

Cell Press

Location of Publisher

Cambridge

Country of Publication

USA

Abstract

There is an urgent need for vaccines and therapeutics to prevent and treat COVID-19. Rapid SARS-CoV-2 countermeasure development is contingent on the availability of robust, scalable, and readily deployable surrogate viral assays to screen antiviral humoral responses, define correlates of immune protection, and down-select candidate antivirals. Here, we generate a highly infectious recombinant vesicular stomatitis virus (VSV) bearing the SARS-CoV-2 spike glycoprotein S as its sole entry glycoprotein and show that this recombinant virus, rVSV-SARS-CoV-2 S, closely resembles SARS-CoV-2 in its entry-related properties. The neutralizing activities of a large panel of COVID-19 convalescent sera can be assessed in a high-throughput fluorescent reporter assay with rVSV-SARS-CoV-2 S, and neutralization of rVSV-SARS-CoV-2 S and authentic SARS-CoV-2 by spike-specific antibodies in these antisera is highly correlated. Our findings underscore the utility of rVSV-SARS-CoV-2 S for the development of spike-specific therapeutics and for mechanistic studies of viral entry and its inhibition.

Publication Type

Journal article.

<494>

Accession Number

20203428972

Author

Case, J. B.; Rothlauf, P. W.; Chen, R. E.; Liu ZhuoMing; Zhao HaiYan; Kim, A. S.; Bloyet, L. M.; Zeng QiRu; Tahan, S.; Droit, L.; Ilagan, M. X. G.; Tartell, M. A.; Amarasinghe, G.; Henderson, J. P.; Miersch, S.; Ustav, M.; Sidhu, S.; Virgin, H. W.; Wang, D.; Ding SiYuan; Corti, D.; Theel, E. S.; Fremont, D. H.; Diamond, M. S.; Whelan, S. P. J.

Title

Neutralizing antibody and soluble ACE2 inhibition of a replication-competent VSV-SARS-CoV-2 and a clinical isolate of SARS-CoV-2.

Source

Cell Host & Microbe; 2020. 28(3):475-485.e5. many ref.

Publisher

Cell Press

Location of Publisher

Cambridge

Country of Publication

USA

Abstract

Antibody-based interventions against SARS-CoV-2 could limit morbidity, mortality, and possibly transmission. An anticipated correlate of such countermeasures is the level of neutralizing antibodies against the SARS-CoV-2 spike protein, which engages with host ACE2 receptor for entry. Using an infectious molecular clone of vesicular stomatitis virus (VSV) expressing eGFP as a marker of infection, we replaced the glycoprotein gene (G) with the spike protein of SARS-CoV-2 (VSV-eGFP-SARS-CoV-2) and developed a high-throughput-imaging-based neutralization assay at biosafety level 2. We also developed a focus-reduction neutralization test with a clinical isolate of SARS-CoV-2 at biosafety level 3. Comparing the neutralizing activities of various antibodies and ACE2-Fc soluble decoy protein in both assays revealed a high degree of concordance. These assays will help define correlates of protection for antibody-based countermeasures and vaccines against SARS-CoV-2. Additionally, replication-competent VSV-eGFP-SARS-CoV-2 provides a tool for testing inhibitors of SARS-CoV-2 mediated entry under reduced biosafety containment.

Publication Type

Journal article.

<495>

Accession Number

20203428971

Author

Case, J. B.; Rothlauf, P. W.; Chen, R. E.; Kafai, N. M.; Fox, J. M.; Smith, B. K.; Shrihari, S.; McCune, B. T.; Harvey, I. B.; Keeler, S. P.; Bloyet, L. M.; Zhao, H.; Ma MeiSheng; Adams, L. J.; Winkler, E. S.; Holtzman, M. J.; Fremont, D. H.; Whelan, S. P. J.; Diamond, M. S.

Title

Replication-competent vesicular stomatitis virus vaccine vector protects against SARS-CoV-2-mediated pathogenesis in mice.

Source

Cell Host & Microbe; 2020. 28(3):465-474.e4. many ref.

Publisher

Cell Press

Location of Publisher

Cambridge

Country of Publication

USA

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has caused millions of human infections, and an effective vaccine is critical to mitigate coronavirus-induced disease 2019 (COVID-19). Previously, we developed a replication-competent vesicular stomatitis virus (VSV) expressing a modified form of the SARS-CoV-2 spike gene in place of the native glycoprotein gene (VSV-eGFP-SARS-CoV-2). Here, we show that vaccination with VSV-eGFP-SARS-CoV-2 generates neutralizing immune responses and protects mice from SARS-CoV-2. Immunization of mice with VSV-eGFP-SARS-CoV-2 elicits high antibody titers that neutralize SARS-CoV-2 and target the receptor binding domain that engages human angiotensin-converting enzyme-2 (ACE2). Upon challenge with a human isolate of SARS-CoV-2, mice that expressed human ACE2 and were immunized with VSV-eGFP-SARS-CoV-2 show profoundly reduced viral infection and inflammation in the lung, indicating protection against pneumonia. Passive transfer of sera from VSV-eGFP-SARS-CoV-2-immunized animals also protects naive mice from SARS-CoV-2 challenge. These data support development of VSV-SARS-CoV-2 as an attenuated, replication-competent vaccine against SARS-CoV-2.

Publication Type

Journal article.

<496>

Accession Number

20203428968

Author

Dagotto, G.; Yu, J.; Barouch, D. H.

Title

Approaches and challenges in SARS-CoV-2 vaccine development.

Source

Cell Host & Microbe; 2020. 28(3):364-370. many ref.

Publisher

Cell Press

Location of Publisher

Cambridge

Country of Publication

USA

Abstract

The explosive spread of SARS-CoV-2 suggests that a vaccine will be required to end this global pandemic. Progress in SARS-CoV-2 vaccine development to date has been faster than for any other pathogen in history. Multiple SARS-CoV-2 vaccine candidates have been evaluated in preclinical models and are currently in clinical trials. In this Perspective, we discuss three topics that are critical for SARS-CoV-2 vaccine development: antigen selection and engineering, preclinical challenge studies in non-human primate models, and immune correlates of protection.

Publication Type

Journal article.

<497>

Accession Number

20203428903

Author

Hussen Mohammed; Lemessa Oljira; Kedir Teji Roba; Getnet Yimer; Abebaw Fekadu; Tsegahun Manyazewal

Title

Containment of COVID-19 in Ethiopia and implications for tuberculosis care and research.

Source

Infectious Diseases of Poverty; 2020. 9(131):(16 September 2020). 19 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The coronavirus disease 2019 (COVID-19) has emerged as a global health and economic security threat with staggering cumulative incidence worldwide. Given the severity of projections, hospitals across the globe are creating additional critical care surge capacity and limiting patient routine access to care for other diseases like tuberculosis (TB). The outbreak fuels panic in sub-Saharan Africa where the healthcare system is fragile in withstanding the disease. Here, we looked over the COVID-19 containment measures in Ethiopia in context from reliable sources and put forth recommendations that leverage the health system response to COVID-19 and TB. Main text: Ethiopia shares a major proportion of the global burden of infectious diseases, while the patterns of COVID-19 are still at an earlier stage of the epidemiology curve. The Ethiopian government exerted tremendous efforts to curb the disease. It limited public gatherings, ordered school closures, directed high-risk civil servants to work from home, and closed borders. It suspended flights to 120 countries and restricted mass transports. It declared a five-month

national state of emergency and granted a pardon for 20 402 prisoners. It officially postponed parliamentary and presidential elections. It launched the 'PM Abiy-Jack Ma initiative', which supports African countries with COVID-19 diagnostics and infection prevention and control commodities. It expanded its COVID-19 testing capacity to 38 countrywide laboratories. Many institutions are made available to provide clinical care and quarantine. However, the outbreak still has the potential for greater loss of life in Ethiopia if the community is unable to shape the regular behavioral and sociocultural norms that would facilitate the spread of the disease. The government needs to keep cautious that irregular migrants would fuel the disease. A robust testing capacity is needed to figure out the actual status of the disease. The pandemic has reduced TB care and research activities significantly and these need due attention. Conclusions: Ethiopia took several steps to detect, manage, and control COVID-19. More efforts are needed to increase testing capacity and bring about behavioral changes in the community. The country needs to put in place alternative options to mitigate interruptions of essential healthcare services and scientific researches of significant impact.

Publication Type

Journal article.

<498>

Accession Number

20203401511

Author

Bixby, M.; Hoover, S. E.; McCallum, R.; Ibrahim, A.; Ovinge, L.; Olmstead, S.; Pernal, S. F.; Zayed, A.; Foster, L. J.; Guarna, M. M.

Title

Honey bee queen production: Canadian costing case study and profitability analysis.

Source

Journal of Economic Entomology; 2020. 113(4):1618-1627. many ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

The decline in managed honey bee (Hymenoptera: Apidae) colony health worldwide has had a significant impact on the beekeeping industry. To mitigate colony losses, beekeepers in Canada and around the world introduce queens into replacement colonies; however, Canada's short queen rearing season has historically limited the production of early season queens. As a result, Canadian beekeepers rely on the importation of

foreign bees, particularly queens from warmer climates. Importing a large proportion of (often mal-adapted) queens each year creates a dependency on foreign bee sources, putting beekeeping, and pollination sectors at risk in the event of border closures, transportation issues, and other restrictions as is currently happening due to the 2020 Covid-19 pandemic. Although traditional Canadian queen production is unable to fully meet early season demand, increasing domestic queen production to meet mid- and later season demand would reduce Canada's dependency. As well, on-going studies exploring the potential for overwintering queens in Canada may offer a strategy to have early season domestic queens available. Increasing the local supply of queens could provide Canadian beekeepers, farmers, and consumers with a greater level of agricultural stability and food security. Our study is the first rigorous analysis of the economic feasibility of queen production. We present the costs of queen production for three Canadian operations over two years. Our results show that it can be profitable for a beekeeping operation in Canada to produce queen cells and mated queens and could be one viable strategy to increase the sustainability of the beekeeping industry.

Publication Type

Journal article.

<499>

Accession Number

20203439006

Author

Silva, L. S.; Machado, E. L.; Oliveira, H. N. de; Ribeiro, A. P.

Title

Working conditions and lack of information on the impact of COVID-19 among health workers. [Portuguese]

Source

Revista Brasileira de Saude Ocupacional; 2020. 45(e24)40 ref.

Publisher

Fundacentro

Location of Publisher

Sao Paulo

Country of Publication

Brazil

Abstract

Introduction: The Covid-19 pandemic has made it more relevant to review workers' health protection matters. Background: To discuss the health and safety conditions of the health workers who care for COVID-19 patients, from the perspective of the information gathered by their professional class representatives and from institutional recommendations. Methods: We searched the academic literature,

documents and guidelines provided by official health institutions and health workers' unions. Discussion: We described the characteristics of the infection by SARS-CoV-2 in health care work, presented initiatives taken by health workers' unions against the disease, outlined the health care working conditions during the pandemic in Brazil, and approached the protection measures recommended by national and international entities. We end by discussing how the exposure to these working conditions may lead the health workers to experience other clinical events that require compliance measures concerning the amount of professionals, improvement in organization and in working conditions, provision of adequate personal protective equipment, and implementation of measures to strengthen health teams to face COVID-19.

Publication Type

Journal article.

<500>

Accession Number

20203435296

Author

Gunthe, S. S.; Patra, S. S.

Title

Impact of international travel dynamics on domestic spread of 2019-nCoV in India: origin-based risk assessment in importation of infected travelers.

Source

Globalization and Health; 2020. 16(45):(12 May 2020). 10 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The recent pandemic caused by the 2019 outbreak of novel coronavirus (2019-nCoV or COVID-19) has affected more than 3.0 million people resulting ~ 212,000 deaths across 215 countries/territories as on 28th April 2020. The importation of the cases owing to enormous international travels from the affected countries is the foremost reason for local cycle of transmission. For a country like India, the second most populous country in the world with ~ 1.35 billion population, the management and control of 2019-nCoV domestic spread heavily relied on effective screening and strict quarantine of passengers arriving at various international airports in India from affected countries. Here, by extracting the data from FLIRT, an online airline database for more than 800 airlines, and scanning more than 180,000 flights and 39.9 million corresponding passenger seats during 4th - 25th March, we show that India experienced the highest risk

index of importing the passengers from middle eastern airports. Contrary to perception, travelers from China imposed lowest risk of importing the infected cases in India. This is clearly evident form the fact that while the number of infected cases were on the peak in China India was one of the least affected countries. The number of cases in India started exhibiting a sharp increase in the infected cases only after the European countries and USA recorded large number of infected cases. We further argue that while the number of cases in middle eastern countries may still be very low, the airports in middle eastern countries, particularly Dubai, being one of the largest transit hubs for international passengers, including arriving in India, might have posed a higher risk of getting infected with 2019-nCoV. We suggest that any future travel related disease infection screening at the airports should critically assess the passengers from major transit hubs in addition to affected country of origin.

Publication Type

Journal article.

<501>

Accession Number

20203438350

Author

Lai RongTao; Chen ErZhen; Gao WeiYi; Cheng ChengWei; Xie Qing

Title

Sentinel surveillance strategies for early detection of coronavirus disease in fever clinics: experience from China.

Source

Epidemiology and Infection; 2020. 148(e205)10 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Sentinel surveillance system plays a key role in screening and monitoring emerging and acute infectious diseases in order to identify the suspected cases in time. During SARS period in 2003, fever clinics emerged in many cities in mainland China with the purpose to screen the suspected SARS patients and to transfer the confirmed cases to designated hospitals for professional management. Shanghai city has reserved the fever clinics and the designated hospitals since then. Hence, clinicians in the front line are able to respond quickly to the emerging COVID-19 outbreak with their accumulated knowledge and experiences from the past. One hundred seventeen fever clinics distributed in various district areas in Shanghai have played a

vital 'sentinel' role to fight against the COVID-19 epidemic. Most of suspected patients were identified in fever clinics and thereafter among these suspected patients the COVID-19 cases were confirmed and were isolated quickly to avoid the spread. We would like to share the sentinel roadmap for screening and diagnosis of COVID-19 to medical healthcare workers around the world, especially countries who are facing great challenges to cope with COVID-19 and meanwhile with limited medical resources. These sentinel surveillance strategies will certainly provide insight into the early detection and timely isolation of suspected cases from the others.

Publication Type

Journal article.

<502>

Accession Number

20203436465

Author

Ritter, A.; Kreis, N. N.; Louwen, F.; Yuan, J.

Title

Obesity and COVID-19: molecular mechanisms linking both pandemics.

Source

International Journal of Molecular Sciences; 2020. 21(16)many ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The coronavirus disease 2019 COVID-19 pandemic is rapidly spreading worldwide and is becoming a major public health crisis. Increasing evidence demonstrates a strong correlation between obesity and the COVID-19 disease. We have summarized recent studies and addressed the impact of obesity on COVID-19 in terms of hospitalization, severity, mortality, and patient outcome. We discuss the potential molecular mechanisms whereby obesity contributes to the pathogenesis of COVID-19. In addition to obesity-related deregulated immune response, chronic inflammation, endothelium imbalance, metabolic dysfunction, and its associated comorbidities, dysfunctional mesenchymal stem cells/adipose-derived mesenchymal stem cells may also play crucial roles in fueling systemic inflammation contributing to the cytokine storm and promoting pulmonary fibrosis causing lung functional failure, characteristic of severe COVID-19. Moreover, obesity may also compromise motile cilia on airway epithelial cells and impair functioning of the mucociliary escalators, reducing the clearance of severe acute respiratory syndrome coronavirus (SARS-

CoV-2). Obese diseased adipose tissues overexpress the receptors and proteases for the SARS-CoV-2 entry, implicating its possible roles as virus reservoir and accelerator reinforcing violent systemic inflammation and immune response. Finally, anti-inflammatory cytokines like anti-interleukin 6 and administration of mesenchymal stromal/stem cells may serve as potential immune modulatory therapies for supportively combating COVID-19. Obesity is conversely related to the development of COVID-19 through numerous molecular mechanisms and individuals with obesity belong to the COVID-19-susceptible population requiring more protective measures.

Publication Type

Journal article.

<503>

Accession Number

20203436453

Author

Gentile, D.; Fuochi, V.; Rescifina, A.; Furneri, P. M.

Title

New anti SARS-Cov-2 targets for quinoline derivatives chloroquine and hydroxychloroquine.

Source

International Journal of Molecular Sciences; 2020. 21(16)119 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The rapid spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has created a severe global health crisis. In this paper, we used docking and simulation methods to identify potential targets and the mechanism of action of chloroquine (CQ) and hydroxychloroquine (HCQ) against SARS-CoV-2. Our results showed that both CQ and HCQ influenced the functionality of the envelope (E) protein, necessary in the maturation processes of the virus, due to interactions that modify the flexibility of the protein structure. Furthermore, CQ and HCQ also influenced the proofreading and capping of viral RNA in SARS-CoV-2, performed by nsp10/nsp14 and nsp10/nsp16. In particular, HCQ demonstrated a better energy binding with the examined targets compared to CQ, probably due to the hydrogen bonding of the hydroxyl group of HCQ with polar amino acid residues.

Publication Type

Journal article.

<504>

Accession Number

20203437655

Author

Oben, J.; Bigoga, J.; Takuissu, G.; Leke, R.; Teta, I.

Title

The acceptability of 'Star Yellow,' a Cameroonian functional food that could curb the spread of the COVID-19 via feces.

Source

Functional Foods in Health and Disease; 2020. 10(8):324-329. 24 ref.

Publisher

Food Science Publisher

Location of Publisher

Denton

Country of Publication

USA

Abstract

Background: COVID-19 is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Despite the World Health Organization's publication of different measures to curb the spread of COVID-19, new cases are reported daily. These protective control measures put in place assumed that transmission of COVID-19 was mediated essentially through droplets released from the nasal and respiratory secretions of infected persons. Recent scientific evidence however puts forward the occurrence and shedding of active COVID-19 virus in stools of infected persons. The present study tested the acceptability of an improved version of the 'Yellow soup' which contains ingredients/spices with known antibacterial/antiviral properties. Methods: Star Yellow was made by using a palm oil/limestone base to which was added spices/ingredients rich in zinc and known for their antiviral/antibacterial activity. Sensory evaluation of the resulting mixture was done by a taste panel comprising habitual eaters of 'Yellow soup' using a hedonic scale of 1 to 5. Results and Conclusion: Sensory assessment of Star Yellow showed a mean acceptability of 77.4% compared to 54.8% obtained for the commercial Yellow Soup served in restaurants. This indicates the acceptable taste of Star Yellow and opens up potential new avenues of research in the control of SARS-CoV-2 virus transmission via feces.

Publication Type

Journal article.

<505>

Accession Number

20203435781

Author

Jebelli, B.; Varahram, M.; Razlighi, M. S.; Palizdar, M.; Ghazanchaei, E.

Title

Management strategies to control the COVID-19 crisis in masih daneshvari hospital, Tehran, Iran. [Persian]

Source

Journal of Military Medicine; 2020. 22(6):fa616-fa622.

Publisher

Baqiyatallah University of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

The gap in knowledge about the cause, modes of transmission, treatment, and high mortality has increased speculation about COVID-19, further confusing health policymakers and therapists. In addition to the unknown nature of the disease, issues such as high virus transmission rate and lack of facilities such as hospital beds, physician-nurse-to-bed ratio, equipment and care facilities such as personal protective equipment and ventilators, and high elderly populations have posed major challenges for health systems and policymakers. Proper crisis response strategies, including emerging diseases, have a significant impact on hospital readiness and success. In this regard, the Ministry of Health of Iran immediately announced several hospitals in Tehran and other cities as referral hospitals for the admission of COVID-19 patients. One of these hospitals is Masih Daneshvari Tuberculosis and Pulmonary Diseases Hospital in Tehran, which immediately held an emergency meeting. It was announced that the hospital will enter a phase of full preparation for the reception of COVID-19 patients from now. In the first step, all wards of the hospital were evacuated and 301 beds were considered for the admission of suspected patients with COVID-19. Since the characteristics and severity of this disease are unknown and the methods of dealing with it have not been experienced so far, so how to prepare the hospital to deal with it is one of the main challenges. The purpose of this brief report is to provide the experience of Masih Daneshvari Hospital on how to manage, prepare and deal with the epidemic of the COVID-19.

Publication Type

Journal article.

<506>

Accession Number

20203435779

Author

Rigi, Z. M.; Dadpisheh, S.; Sheikhi, F.; Balouch, V.; Kalkali, S.

Title

Challenges and strategies to deal with COVID-19 from the perspective of physicians and nurses in southern of Sistan and Baluchestan, Iran. [Persian]

Source

Journal of Military Medicine; 2020. 22(6):fa599-fa606. 15 ref.

Publisher

Baqiyatallah University of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

Background and Aim: COVID-19 has widely spread around the world and has a high mortality rate. The aim of this study was to determine the challenges and strategies to deal with SARS-CoV-2 from the perspective of physicians and nurses in Iranshahr, southern of Sistan and Baluchestan, Iran. Methods: In this descriptive-analytical study, 100 physicians and nurses have participated who working in the wards related to COVID-19 (respiratory isolation ward, intensive care unit and emergency department) of Iran and Khatam-ul-Anbia hospitals in Iranshahr. They were included by available methods from 21 March, 2020 to 8 April 2020. The researcher-made questionnaire assessed the challenges and strategies to deal with COVID-19 from the perspective of nurses and physicians. The reliability and validity of the questionnaire were confirmed. Results: The mean age of samples was 31.94+/-7.4 and the average work experience was 5.6+/-5.6 years. In answer to the question, what are the challenges related to COVID-19? The results showed that the lowest mean responses were related to "people's lack of access to social networks and mass communication" and the highest mean was related to "not taking the disease seriously in the general public." In response to the question "What do you think are the main obstacles to controlling the COVID-19 epidemic?" Non-quarantine of infected cities is the most common obstacle. In response to the question "What solution do you suggest to fight the COVID-19?" The quarantine of cities and stay at home were the most prevalent. Conclusion: In order to break the chain of COVID-19 transmission, it is necessary to observe such issues as quarantine and stay at home, restriction of travels, observe personal hygiene, identify suspicious cases, provide livelihood for the people and a provide medical staff, and raise the level of awareness and attitude of the people through training.

Publication Type

Journal article.

<507>

Accession Number

20203435778

Author

Farahani, A. J.; Mohammadan, M.; Shakibaee, A.; Fallah, M. S.; Galeh, H. E. G.; Bahadori, M. K.

Title

Designing and compiling a comprehensive empirical program for Baqiyatallah University of Medical Sciences in confronting the COVID-19 crisis. [Persian]

Source

Journal of Military Medicine; 2020. 22(6):fa589-fa598. 29 ref.

Publisher

Baqiyatallah University of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

Background and Aim: Experience is obtained as one of the most valuable human assets in different situations and conditions and helps organizations to achieve their strategic goals. The present study was conducted at the Baqiyatallah University of Medical Sciences with aim of designing and compiling a comprehensive empirical program in confronting the COVID-19 crisis. Methods: This applied research was conducted in qualitative and quantitative methods. The statistical population included 24 university experts, managers and executive experts at Baqiyatallah University of Medical Sciences in April and May 2020. All of these individuals were involved in coping with Covid-19. By holding various meetings with the researchers, and obtaining the opinions of experts with the Delphi technique; the events of the crisis and their main axes in dealing with Covid-19 were counted. Results: Findings show 5 areas and 25 main axes of the event (crisis with domestic, regional, international sensitivity and major damage); 18 events in the field of command and leadership, 15 events in research, 9 events in training, 22 events in healthcare, 6 events in support in dealing with Covid-19. Healthcare is the most common (22) and spirituality is the lowest (2) frequency. Conclusion: Due to the Covid-19 crisis, healthcare is the most important axis (22 events) and it is necessary to record experience and document for using in similar crises. This empiricism can be used as a basis for managers' planning to implement experience documentation in the organization.

Publication Type

Journal article.

<508>

Accession Number

20203435777

Author

Fallahi, A.; Mahdavifar, N.; Ghorbani, A.; Mehrdadian, P.; Mehri, A.; Joveini, H.; Shahrabadi, R.

Title

Public knowledge, attitude and practice regarding home quarantine to prevent COVID-19 in Sabzevar city, Iran. [Persian]

Source

Journal of Military Medicine; 2020. 22(6):fa580-fa588. 27 ref.

Publisher

Baqiyatallah University of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

Background and Aim: Prevention is the best way to break the transmission chain of COVID-19. The aim of this study was to determine the knowledge, attitude and practice of people regarding home quarantine to prevent COVID-19 in Sabzevar city, Iran. Methods: In the present cross-sectional study in 2020, 836 people from Sabzevar participated. Data were collected by the virtual questionnaire and released in social media by nonprobability methods (Convenience and Snowball). The study questionnaire was researcher-made. The questions included demographics, knowledge, attitude and practice. The validity and reliability of the questionnaire were confirmed. Results: The variables of gender, attitude and job on practice, variables of gender, education, job and attitude on knowledge and variables of knowledge, age, gender and underlying disease on attitude toward home quarantine have a significant impact (P<0.05). Conclusion: Peoplechr('39')s practice regarding home quarantine to prevent COVID-19 depends on a number of factors. Paying attention to the gender, attitude and occupation of individuals in policy making regarding home quarantine can improve the performance of the public.

Publication Type

Journal article.

<509>

Accession Number

20203435774

Author

Moein Khorsand Chobdar; Moheb Ali Rahdar

Title

Investigating the readiness of hospitals in Sistan and Baluchestan Province in crisis of COVID-19. [Persian]

Source

Journal of Military Medicine; 2020. 22(6):fa553-fa561. 19 ref.

Publisher

Baqiyatallah University of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

Background and Aim: Since the outbreak of Coronavirus Disease 2019 (COVID-19) in the world, hospitals have played a major role in managing the crisis; therefore, the hospitalchr('39')s readiness to continue medical care in the crisis of COVID-19 has particular importance to communities. The aim of the current study was to determine the readiness of hospitals in Sistan and Baluchestan province, Iran in the COVID-19 crisis. Methods: This is a cross-sectional study and the research population includes all hospitals in Sistan and Baluchestan province, which includes 24 hospitals. The data collection tool was the Comprehensive Hospital Preparedness Checklist for COVID-19, which was translated and validated. Data were collected by sending an online questionnaire to the provincechr('39')s hospitals. Results: The average score obtained out of 100 in the hospital readiness checklist for COVID-19; in the general information part was 36, the structure for planning and decision making was 53.3, development of a written COVID-19 plan was 40.9, elements of a COVID-19 plan was 46.7, facility communications were 15, consumables and durable medical equipment and supplies were 37.9, identification and management of ill patients were 54.2, visitor access and movement within the facility was 33.3, occupational health was 30.7, education and training was 49 and healthcare services/surge capacity was 19.1. The average total hospital readiness score for COVID-19 was 40.12, which is classified as weak. Conclusion: The hospitals of Sistan and Baluchestan province received the lowest level of readiness in facility communications among other items of hospital readiness. This indicates that these hospitals are not ready to cooperate and coordinate with each other, and this slows down the process of fighting with COVID-19 in the province. The low amount of healthcare services/surge capacity at the peak of COVID-19 is one of the reasons in which the provincechr('39')s hospitals have not been able to perform well, therefore, it is necessary for the authorities to pay attention to this issue and create serious and quick solutions to increase the readiness of the hospitals in this field in order to reduce casualties and further harm of the society.

Publication Type

Journal article.

<510>

Accession Number

20203435773

Author

Bazargan, M.; Amirfakhriyan, M.

Title

Geographical analysis of COVID-19 epidemiology in Iran with exploratory spatial data analysis approach (ESDA). [Persian]

Source

Journal of Military Medicine; 2020. 22(6):fa542-fa552. 35 ref.

Publisher

Baqiyatallah University of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

Background and Aim: The use of geophysical analysis of the epidemiology to identify geographical factors affecting the prevalence of the disease can be effective on community health policies to control the prevalence of the virus. Therefore, the present study is a geographical analysis of the COVID-19 epidemiology in Iran. Therefore, the purpose of this study is the geographical analysis of coronavirus transmission in the country. Methods: This is a descriptive-analytical study and ArcGIS and GeoDa software has been used to analyze the data. The statistical population included the total number of people infected with COVID-19 (n=21638) in Iran during February 22, 2020, and March 22, 2020. Data entered ArcGIS software by each province. In order to show the spatial distribution of COVID-19 patients in Iran, point density has been used based on the mentioned time period. Then, by using the Moran coefficient, its spatial distribution was examined. Also, by using spatial correlation, the distance between the spread of coronavirus in all provinces of Iran was analyzed. Finally, by using the local index of the single-variable Moran spatial bond, the spatial clustering of the countrychr('39')s provinces was calculated based on the coronavirus. Results: Statistics show that the age group of 21-50 years is the highest percentage of people infected with COVID-19. The results showed that the most important factor in the spatial spread of coronavirus in Iran is the distance and proximity of the provinces affected by this disease so that at a distance of 383.8 km between the provinces, the Moran coefficient is 0.66627 and shows a positive spatial correlation. It is located at a distance of 762.6 km between the provinces and the Moran coefficient is -0.040246, which indicates a negative spatial correlation, which means that this distance decreases after the number of people with COVID-19. In spatial clustering, HH clusters including provinces (Tehran, Alborz, Qom, Mazandaran, Gilan, Qazvin, Isfahan, Semnan, Markazi and Yazd) are known as the main spatial propagation centers of the Coronavirus epidemic, which should be controlled and reduced. Also, LH clusters (including Golestan, Khorasan Razavi, North Khorasan, Ardabil and Hamedan provinces) are the ring around the center of damage, which should be controlled in terms of spatial interaction and proximity to HH clusters. Serious travel bans should be put in place to prevent the spread of coronavirus to the provinces in the LH cluster. Conclusion: One of the most important geographical factors affecting the prevalence of coronavirus is based on spatial distribution theory, distance and spatial proximity. Officials

and planners should intelligently reduce the number of people visiting offices and organizations, and by providing telecommuting, to prevent the upward trend of the outbreak of coronavirus in Iran.

Publication Type

Journal article.

<511>

Accession Number

20203435771

Author

Abadi, T. S. H.; Askari, M.; Miri, K.; Nia, M. N.

Title

Depression, stress and anxiety of nurses in COVID-19 pandemic in Nohe-Dey Hospital in Torbat-e-Heydariyeh city, Iran. [Persian]

Source

Journal of Military Medicine; 2020. 22(6):fa526-fa533. 30 ref.

Publisher

Baqiyatallah University of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

Background and Aim: The lack of any definitive treatment or prevention of COVID-19 has caused a great deal of stress and anxiety in communities. In the present study, depression, stress and anxiety of nurses working in corona wards of hospital were evaluated. Methods: This cross-sectional study was performed with the participation of 125 nurses working in COVID-19 wards of Nohe-Dey Hospital in Torbat-e-Heydariyeh city, Iran in 2020. Data collection tools included a demographic questionnaire and DASS-21 standardized questionnaire. Results: There were 125 nurses with a mean age of 29.4+/-6.5 years. The Chi-square test showed that depression, anxiety and stress of nurses were moderate. The one-way analysis of variance test showed that depression with age (P=0.002), anxiety with age (P=0.018), employment status (P=0.009) and satisfaction with personal protective equipment (p=0.015) and stress with age (P=0.011), employment status (P=0.023) are significantly associated. Conclusion: The rate of depression, anxiety and stress in nurses working in COVID-19 wards in Torbat-e-Heydariyeh Hospital is moderate. It seems that paying attention to training nurses to deal with critical situations similar to COVID-19, and increasing personal protective equipment can be effective in preventing nurses from developing depression, stress, and anxiety.

Publication Type

Journal article.

<512>

Accession Number

20203435770

Author

Mahdieh Zarabadipour; Muhammad Reza Asgari Ghonche; Somayeh Asgari Ghonche; Monirsadat Mirzadeh

Title

Psychological evaluation of the factors affecting the stress caused by COVID-19 outbreak in the medical staff and the community of Qazvin, Iran spring 2020. [Persian]

Source

Journal of Military Medicine; 2020. 22(6):fa517-fa525. 30 ref.

Publisher

Baqiyatallah University of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

Background and Aim: Since public health measures are the only way to control the spread of COVID-19, strict quarantine measures have done around the world. This condition will definitely not be without psychological effects. The aim of this study was to determine the factors affecting the stress caused by COVID-19 in the medical staff and the general population. Methods: This cross-sectional study was conducted by a researcher-made questionnaire on 326 people in Qazvin province, Iran in the spring of 2020. The questionnaire consisted of 40 questions, in 3 sections: demographic information, general and main questions related to COVID-19 stress. The questionnaire was made available to the study population in Qazvin through virtual networks. Results: Of the 326 participants (117 men and 209 women), 71 were medical staff members and 255 in the general population. The mean stress scores of the general population, the medical staff in the corona and non-corona department, were reported 28.7+/-8.4, 30.1+/-9 and 27.3+/-7.8, respectively, with no statistically significant difference among the groups (p=0.374). In the medical staff, access to social response systems (p=0.02), considerable weight change (p=0.019) and reluctance to perform daily activities (p=0.001) were among the factors that had a significant relation with stress score. For the general population, sex (p=0.001), the presence of a high risk elderly person in the family (p=0.001), having a fatal case due to COVID-19 in the family (p=0.014), exacerbation of the underlying disease (p=0.003), job closure (p=0.007), etc had significant relations with stress score. Conclusion: According to the findings of the present study, the level of stress in the study population was

mild, but the psychological effects of coronavirus epidemics are undeniable. Access to psychological counseling systems can be an effective way to improve a personchr('39')s mental state in quarantine.

Publication Type

Journal article.

<513>

Accession Number

20203436989

Author

Goon, D. T.; Okafor, U. B.

Title

Curbing the COVID-19 pandemic in South Africa: taking firmer, aggressive measures and discarding fallacy theories.

Source

The Open Public Health Journal; 2020. 13(395-398):395-398.

Publisher

Bentham Open

Location of Publisher

Sharjah

Country of Publication

United Arab Emirates

Abstract

The ravaging Coronavirus Disease (COVID-19) pandemic is nearly halting global activities. Disturbingly, many countries fear and continue to battle how to combat the epidemic amidst several contextual challenges. In South Africa, amidst other measures, would the 'lockdown' approach help curb the trend of COVID-19? What fallacy are theories spreading against facts about COVID-19? Worried by the rising cases of COVID-19, the government proposed a 'locked down' approach. As of 02 June 2020, COVID-19 cases in South Africa rose to 35812, with 755 deaths recorded. There is a tendency for young people to defy rules. Young people should take the lockdown seriously and discard the unfounded theories or rumors about the virus. Only a collective, decisive and disciplined approach regarding the lockdown measure could reverse the upward trend of COVID-19 cases in South Africa. The collaborative efforts of the government, the private sector and the scientific community are necessary in this situation.

Publication Type

Journal article.

<514>

Accession Number

20203417132

Author

Quah, P.; Li, A.; Phua, J.

Title

Mortality rates of patients with COVID-19 in the intensive care unit: a systematic review of the emerging literature.

Source

Critical Care; 2020. 24(285):(4 June 2020). 5 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

This systematic review aimed to review the outcomes of ICU patients with COVID-19 from the existing literature. First, 56.1% of patients were still in the ICU at the time of study publication, and attempts to calculate mortality based on a sample of only deceased or discharged patients risk painting a skewed picture of reality. Second, with the prior limitation in mind, the overall ICU mortality rate was 25.7%. In China, with 14.1% of patients still in the ICU, the mortality rate was 37.7%. These figures are not higher than the mortality rates of 35 to 45% seen in ARDS. Third, 29% of the ICU patients who died in the Chinese studies did not receive mechanical ventilation, and where systems experienced a surge of critically ill patients, up to 53.2% of patients who required ICU care were unable to receive it because of resource constraints [5]. In New York, 262 deaths occurred in hospital wards and outside the ICU, compared to 291 deaths in the ICU. It is hypothesized that rationing of ventilators and ICU beds in overwhelmed health systems may have resulted in attempts at postponing intubation, with a significant minority of patients received high-flow nasal cannula (13.7%) and noninvasive ventilation (11.3%) based on available data, despite uncertainty surrounding their roles. The article concluded that while there is a need for further studies which capture patients' final dispositions, the current preliminary data does not suggest unusually high ICU mortality rates for COVID-19. The poor outcomes seen in various studies may be related to rationing of resources in overwhelmed ICUs.

Publication Type

Journal article.

<515>

Accession Number

20203417129

Author

Wang Jie; Yang Qing; Zhang PiaoPiao; Sheng JiFang; Zhou JianYing; Qu TingTing

Title

Clinical characteristics of invasive pulmonary aspergillosis in patients with COVID-19 in Zhejiang, China: a retrospective case series.

Source

Critical Care; 2020. 24(299):(5 June 2020). 4 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The aim of the article was to describe the clinical characteristics and risk factors of IPA in patients with COVID-19. Aspergillus was cultured positive from the sputum or bronchoalveolar lavage fluid (BALF) samples of the 8 patients (4 cases from sputum and 4 cases from BALF), and all the 8 cases were Aspergillus fumigatus. Among the 8 patients co-infected with SARS-CoV-2 and Aspergillus, 6 patients were administrated with glucocorticoids, 4 patients mechanical ventilation, 1 patient continuous renal replacement therapy (CRRT)-supported, and 1 patient extracorporeal membrane oxygenation (ECMO)-supported before IPA occurrence. There were significant differences in hypertension, COPD, and chronic kidney disease between the Aspergillus-positive and Aspergillus-negative groups. Prior to the development of IPA, 50.0% vs 11.5% of patients in the Aspergillus-positive and Aspergillus-negative groups required mechanical ventilation support, respectively. Most patients in the 2 groups received glucocorticoids (75.5% vs 59.4%, respectively). There were no significant differences in maximum methylprednisolone equivalent dosage between the 2 groups (methylprednisolone, 40-80 mg/daily). Multivariate analysis showed that older age, initial antibiotic usage of beta-lactamase inhibitor combination, mechanical ventilation, and COPD but not hypertension and glucocorticoid therapy were independent risk factors for IPA in patients with COVID-19. The incidence rate of IPA among the patients with COVID-19 was obviously lower than those among patients with influenza (7.7% vs 19%). Older age, initial antibiotic usage of beta-lactamase inhibitor combination, mechanical ventilation, and COPD were the risk factors of IPA among patients with COVID-19. Early intervention with bronchoscopy, observation of changes in the bronchial mucosa, and obtaining evidence of fungal microbiology were important in patients with severe/critical COVID-19.

Publication Type

Journal article.

<516>

Accession Number

20203415759

Title

American College of Epidemiology Annual Meeting, College Park, Maryland, USA, 21-24 September 2020.

Source

Annals of Epidemiology; 2020. 49:75-84.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

These proceedings contain 25 poster presentations that discuss various epidemiological topics, e.g. obesity, sleep apnea, renal cell carcinoma, infant mortality, breast cancer, lung injury, multiple sclerosis, diabetes, food insecurity, mental health, HIV, tobacco smoking, hepatitis C testing, insomnia, COVID-19, breastfeeding, tuberculosis, and PTSD.

Publication Type

Journal article

Conference paper.

<517>

Accession Number

20203416936

Author

Mizanur Rahaman; Otun Saha; Rakhi, N. N.; Chowdhury, M. K.; Sammonds, P.; Kamal, A. S. M. M.

Title

Overlapping of locust swarms with COVID-19 pandemic: a cascading disaster for Africa.

Source

Pathogens and Global Health; 2020. 114(6):285-286. 5 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Simultaneous to the COVID-19 pandemic, locust swarms primarily of desert locusts (Schistocerca gregaria) are threatening agriculture production and pasture in 23 countries to date. Currently affected are nine countries in the East African region, eleven from North Africa and the Middle East, and three countries from South Asia. Locust outbreaks of large numbers have a history of having extreme effects over food production and mortality. The locust invasion of November 1915-1916 caused starvation or starvation-related diseases in Syria and Palestine, and killed 100,000-200,000 people in the region. The current locust swarm, which began in July 2019, has become endemic in Africa, and alongside the COVID-19 pandemic, it is a disaster with a cascading risk [3]. It is presumed that with the world's attention on COVID-19, the locust-endemic is perceived as a relatively overlooked hazard risk. This has been borne out due to the failed control of the locust infestation in countries which first saw locusts, including Somalia, Kenya, and South Africa. As a result, the swarm has crossed from the Horn of Africa to Pakistan, where the government has declared a national emergency to combat the attack and save crops, just as the Somalian government did. The cascade of both catastrophes may result in a disaster escalating toward famine, health-hazards and poverty in the regions at risk. A recent locust plague in West Africa (2003-2005) severely disrupted agriculture, destroying 2.5 USD billion in crops destined for both subsistence and export. The challenges posed by the cascading effects of both catastrophes might cause starvation in vulnerable African countries if effective interventions by international and local agencies are too slow to materialize. The relevant national and international agencies should take proactive and trade-off interventions simultaneously to minimize the invasions of locusts and the viral infections in vulnerable countries, before the emergent plague takes hold.

Publication Type

Journal article.

<518>

Accession Number

20203440625

Author

Vaio, A. di; Boccia, F.; Landriani, L.; Palladino, R.

Title

Artificial intelligence in the agri-food system: rethinking sustainable business models in the COVID-19 scenario.

Source

Sustainability; 2020. 12(12)60 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The aim of the paper is to investigate the artificial intelligence (AI) function in agri-food industry, as well as the role of stakeholders in its supply chain. Above all, from the beginning of the new millennium, scholars and practitioners have paid an increasing attention to artificial intelligence (AI) technologies in operational processes management and challenges for new business models, in a sustainable and socially responsible perspective. Thus, the stakeholders can assume a proactive or marginal role in the value creation for business, according to their own environmental awareness. These issues appear still "open" in some industries, such as the agri-food system, where the adoption of new technologies requires rethinking and redesigning the whole business model. Methodologically, we brought forward an in-depth review of the literature about major articles in this field. Especially, the study has been conducted following two phases: firstly, we extracted from scientific databases (Web of Science, Scopus, and Google Scholar) and studied relevant articles; secondly, we analyzed the selected articles. The findings highlight interesting issues about AI towards a "space economy" to achieve sustainable and responsible business models, also in the perspective of the COVID-19 pandemic scenario. Theoretical and managerial implications are discussed.

Publication Type

Journal article.

<519>

Accession Number

20203425111

Author

Foladori, P.; Cutrupi, F.; Segata, N.; Manara, S.; Pinto, F.; Malpei, F.; Bruni, L.; Rosa, G. la

Title

SARS-CoV-2 from faeces to wastewater treatment: what do we know? A review.

Source

Science of the Total Environment; 2020. 743many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

SARS-CoV-2, the virus that causes COVID-19, has been found in the faeces of infected patients in numerous studies. Stool may remain positive for SARS-CoV-2, even when the respiratory tract becomes negative, and the interaction with the gastrointestinal tract poses a series of questions about wastewater and its treatments. This review aims to understand the viral load of SARS-CoV-2 in faeces and sewage and its fate in wastewater treatment plants (WWTPs). The viral load in the faeces of persons testing positive for SARS-CoV-2 was estimated at between 5.103 to 107.6 copies/mL, depending on the infection course. In the sewerage, faeces undergo dilution and viral load decreases considerably in the wastewater entering a WWTP with a range from 2 copies/100 mL to 3.103 copies/mL, depending on the level of the epidemic. Monitoring of SARS-CoV-2 in sewage, although no evidence of COVID-19 transmission has been found via this route, could be advantageously exploited as an early warning of outbreaks. Preliminary studies on WBE seem promising; but high uncertainty of viral loads in wastewater and faeces remains, and further research is needed. The detection of SARS-CoV-2 in sewage, based on RNA sequences and RT-PCR, requires a shared approach on sample pre-treatment and on-site collection to ensure comparable results. The finding of viral RNA in stools does not imply that the virus is viable and infectious. Viability of CoVs such as SARS-CoV-2 decreases in wastewater - due to temperature, pH, solids, micropollutants - but high inactivation in WWTPs can be obtained only by using disinfection (free chlorine, UVC light). A reduction in the quantity of disinfectants can be obtained by implementing Membrane-Bioreactors with ultrafiltration to separate SARS-CoV-2 virions with a size of 60-140 nm. In sludge treatment, thermophilic digestion is effective, based on the general consensus that CoVs are highly sensitive to increased temperatures.

Publication Type

Journal article.

<520>

Accession Number

20203426386

Author

Li Mei; Xia ZhiGui; Yin JianHai; Yan He

Title

Consideration and recommendations for malaria blood testing during the COVID-19 pandemic. [Chinese]

Source

Chinese Journal of Parasitology and Parasitic Diseases; 2020. 38(4):464-468. 36 ref.

Publisher

National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention

Location of Publisher

Shanghai

Country of Publication

China

Abstract

With the ongoing global spread of coronavirus disease 2019 (COVID-19) epidemic, there is a risk of co-occurrence of malaria and COVID-19 in people returning from malaria-endemic areas abroad. In order to conduct timely, accurate and safe detection of malaria cases, ensuring early finding, diagnosis and treatment of imported malaria, we propose that facing the current pandemic situation, higher level of biosafety protective practice is needed for handling malaria blood samples with potential risk, use of rapid diagnostic test and nuclear acid detection method is the first choice, confirmation of Plasmodium species should be made based on consistency between at least two detection methods, and blood smears should be prepared with special procedures when necessary.

Publication Type

Journal article.

<521>

Accession Number

20203426362

Author

Son JiYoung; Fong, K. C.; Heo SeulKee; Kim HongHyok; Lim, C. C.; Bell, M. L.

Title

Reductions in mortality resulting from reduced air pollution levels due to COVID-19 mitigation measures.

Source

Science of the Total Environment; 2020. 74437 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

To control the novel coronavirus disease (COVID-19) outbreak, state and local governments in the United States have implemented several mitigation efforts that resulted in lower emissions of traffic-related air pollutants. This study examined the impacts of COVID-19 mitigation measures on air pollution levels and the subsequent reductions in mortality for urban areas in 10 US states and the District of Columbia. We calculated changes in levels of particulate matter with aerodynamic diameter no larger than 2.5 mum (PM2.5) during mitigation period versus the baseline period (pre-mitigation measure) using the difference-in-difference approach and the estimated avoided total and cause-specific mortality attributable to these changes in PM2.5 by state and district. We found that PM2.5 concentration during the mitigation period decreased for most states (except for 3 states) and the capital. Decreases of average PM2.5 concentration ranged from 0.25 mug/m3 (4.3%) in Maryland to 4.20 mug/m3 (45.1%) in California. On average, PM2.5 levels across 7 states and the capital reduced by 12.8%. We estimated that PM2.5 reduction during the mitigation period lowered air pollution-related total and cause-specific deaths. An estimated 483 (95% CI: 307, 665) PM2.5-related deaths was avoided in the urban areas of California. Our findings have implications for the effects of mitigation efforts and provide insight into the mortality reductions can be achieved from reduced air pollution levels.

Publication Type

Journal article.

<522>

Accession Number

20203426303

Author

Melikov, A. K.; Ai, Z. T.; Markov, D. G.

Title

Intermittent occupancy combined with ventilation: an efficient strategy for the reduction of airborne transmission indoors.

Source

Science of the Total Environment; 2020. 74421 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

It is important that efficient measures to reduce the airborne transmission of respiratory infectious diseases (including COVID-19) should be formulated as soon as possible to ensure a safe easing of lockdown. Ventilation has been widely recognized as an efficient engineering control measure for airborne transmission. Room ventilation with an increased supply of clean outdoor air could dilute the expiratory airborne aerosols to a lower concentration level. However, sufficient increase is beyond the capacity of most of the existing mechanical ventilation systems that were designed to be energy efficient under non-pandemic conditions. We propose an improved control strategy based on source control, which would be achieved by implementing intermittent breaks in room occupancy, specifically that all occupants should leave the room periodically and the room occupancy time should be reduced as much as possible. Under the assumption of good mixing of clean outdoor supply air with room air, the evolution of the concentration in the room of aerosols exhaled by infected person(s) is predicted. The risk of airborne cross-infection is then evaluated by calculating the time-averaged intake fraction. The effectiveness of the strategy is demonstrated for a case study of a typical classroom. This strategy, together with other control measures such as continuous supply of maximum clean air, distancing, face-to-back layout of workstations and reducing activities that increase aerosol generation (e.g., loudly talking and singing), is applicable in classrooms, offices, meeting rooms, conference rooms, etc.

Publication Type

Journal article.

<523>

Accession Number

20203382052

Author

Ritu Priya; Sanghmitra Acharya; Rama Baru; Vikas Bajpai; Ramila Bisht; Prachinkumar Ghodajkar; Nemthiang Guite; Sunita Reddy

Title

Indian public health associations on COVID-19: the politics of knowledge.

Source

Economic and Political Weekly; 2020. 55(32/33):19-22. 19 ref.

Publisher

Sameeksha Trust

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Leading Indian professional associations of public health have released a second joint statement on 25 May 2020, on the COVID-19 pandemic and its management in the country. The central issue they raise is the ignoring of technical advice of the country's leading experts and institutions in decision-making about strategies for handling the pandemic. The larger politics of knowledge in public health and its interdisciplinary requirements are discussed.

Publication Type

Journal article.

<524>

Accession Number

20203424407

Author

Juybari, K. B.; Pourhanifeh, M. H.; Hosseinzadeh, A.; Hemati, K.; Mehrzadi, S.

Title

Melatonin potentials against viral infections including COVID-19: current evidence and new findings.

Source

Virus Research; 2020. 287many ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Viral infections are dangerous diseases for human health worldwide, which lead to significant morbidity and mortality each year. Because of their importance and the lack of effective therapeutic approaches, further attempts should be made to discover appropriate alternative or complementary treatments. Melatonin, a multifunctional neurohormone mainly synthesized and secreted by the pineal gland, plays some roles in the treatment of viral infections. Regarding a deadly outbreak of COVID-19 across the world, we decided to discuss melatonin functions against various viral infections including COVID-19. Therefore, in this review, we summarize current evidence on melatonin therapy for viral infections with focus on possible underlying mechanisms of melatonin actions.

Publication Type

Journal article.

<525>

Accession Number

20203435083

Author

Basheti, I. A.; Nassar, R.; Barakat, M.; Alqudah, R.; Farha, R. A.; Muqatash, T.; Thiab, S.; Saini, B.

Title

Pharmacists' perceived barriers towards delivering their emergency roles during the COVID-19 pandemic and perceived policymakers' responsibilities.

Source

Journal of Pharmaceutical Policy and Practice; 2020. 13(62):(16 August 2020). 38 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Rational: In March 2020, the World Health Organization (WHO) declared the coronavirus infectious disease as a pandemic referred to as COVID-19. As an essential service, community pharmacists have been enacting a key role in patient counseling and supply of essential medicines and protective equipment. Objectives: To investigate pharmacists' perspectives of the role of educational institutes and professional pharmacy organizations in supporting them to take on roles during COVID-19 pandemic and to identify barriers to be able to support themselves and their patients. Methods: This descriptive mixed-method study was conducted via a cross-sectional online survey distributed to pharmacists/pharmacy students in Jordan during the COVID-19 outbreak (15-30 March 2020) using an online questionnaire, followed by an online focus group. Questionnaire items related to participants' perspectives in being prepared for and supported in their roles during the COVID-19 pandemic, and items were tested for face validity. Data were descriptively analyzed using the Statistical Package for the Social Sciences and triangulated with focus group findings. Results: Considering that fear and anxiety are a consequence of mass social distancing/quarantine, study participants (n = 726, age = 26.9 (SD = 8.0) years, 71.9% females), reported needing training on mental healthcare to be able to support themselves and people during pandemics (90.2%). Most respondents agreed/strongly agreed (59.7%) with the statement around pharmacy educators/educational institutes having a key role in preparing pharmacists for practice during epidemics/pandemics and agreed that their faculties should add a course regarding pandemic preparedness in their curriculum (89.9%). Results were similar regarding roles for the pharmaceutical associations. Focus group findings (n = 7) mirrored the survey findings to a large extent. Conclusions: Most participants believed that pharmacy educators and pharmaceutical associations have a role in preparing them to deal with the COVID-19 pandemic through online educational workshops/webinars. Online education on mental healthcare is specifically needed.

Publication Type

Journal article.

<526>

Accession Number

20203437499

Author

Phillipson, J.; Gorton, M.; Turner, R.; Shucksmith, M.; Aitken-Mcdermott, K.; Areal, F.; Cowie, P.; Hubbard, C.; Maioli, S.; McAreavey, R.; Souza-Monteiro, D.; Newbery, R.; Panzone, L.; Rowe, F.; Shortall, S.

Title

The COVID-19 pandemic and its implications for rural economies.

Source

Sustainability; 2020. 12(10)38 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

This paper presents a rapid assessment of current and likely future impacts of the COVID-19 outbreak on rural economies given their socio-economic characteristics. Drawing principally on current evidence for the UK, as well as lessons from the 2001 Foot and Mouth Disease outbreak and the 2007/8 financial crises, it outlines the likely key demand and supply effects, paying attention to the situation for agriculture as well as discussing the implications for rural communities. A distinction is made between the effects on businesses offering goods and services for out-of-home as opposed to in-home consumption. Gendered dimensions are also noted as likely business and household strategies for coping and adaptation. The paper concludes with a brief mapping of a research agenda for studying the longer-term effects of COVID-19 on rural economies.

Publication Type

Journal article.

<527>

Accession Number

20203435508

Author

Ruchi Tiwari; Kuldeep Dhama; Khan Sharun; Mohd. Iqbal Yatoo; Yashpal Singh Malik; Rajendra Singh; Michalak, I.; Sah, R.; Bonilla-Aldana, D. K.; Rodriguez-Morales, A. J.

Title

COVID-19: animals, veterinary and zoonotic links.

Source

Veterinary Quarterly; 2020. 40(169-182):169-182. many ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Coronavirus disease 2019 (COVID-19), has spread over 210 countries and territories beyond China shortly. On February 29, 2020, the World Health Organization (WHO) denoted it in a high-risk category, and on March 11, 2020, this virus was designated pandemic, after its declaration being a Public Health International Emergency on January 30, 2020. World over high efforts are being made to counter and contain this virus. The COVID-19 outbreak once again proves the potential of the animal-human interface to act as the primary source of emerging zoonotic diseases. Even though the circumstantial evidence suggests the possibility of an initial zoonotic emergence, it is too early to confirm the role of intermediate hosts such as snakes, pangolins, turtles, and other wild animals in the origin of SARS-CoV-2, in addition to bats, the natural hosts of multiple coronaviruses such as SARS-CoV and MERS-CoV. The lessons learned from past episodes of MERS-CoV and SARS-CoV are being exploited to retort this virus. Best efforts are being taken up by worldwide nations to implement effective diagnosis, strict vigilance, heightened surveillance, and monitoring, along with adopting appropriate preventive and control strategies. Identifying the possible zoonotic emergence and the exact mechanism responsible for its initial transmission will help us to design and implement appropriate preventive barriers against the further transmission of SARS-CoV-2. This review discusses in brief about the COVID-19/SARS-CoV-2 with a particular focus on the role of animals, the veterinary and associated zoonotic links along with prevention and control strategies based on One-health approaches.

Publication Type

Journal article.

<528>

Accession Number

20203433639

Author

Chowdhury, S.; Rathod, J.; Gernsheimer, J.

Title

A rapid systematic review of clinical trials utilizing chloroquine and hydroxychloroquine as a treatment for COVID-19.

Source

Academic Emergency Medicine; 2020. 27(6):493-504. 27 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Objectives: The emergence of SARS-CoV-2 has presented clinicians with a difficult therapeutic dilemma. With supportive care as the current mainstay of treatment, the fatality rate of COVID-19 is 6.9%. There are currently several trials assessing the efficacy of different antivirals as treatment. Of these, chloroquine (CQ) and its derivative hydroxychloroquine (HCQ) have garnered the most attention. Methods: In this study, the literature currently available on CQ and HCQ as treatment of COVID-19 was surveyed using EMBASE, PubMed, Cochrane Library, MedRxiv, and one clinical trial registry. Upon gathering published and preprint trials, risk of bias was assessed using Cochrane Risk of Bias Tool 2.0. Results: There are currently seven completed clinical trials and 29 registered clinical trials focusing on HCQ or CQ as a therapeutic avenue for COVID-19. Of these, five of seven trials have shown favorable outcomes for patients using CQ or HCQ and two of seven have shown no change compared to control. However, all seven trials carried varying degrees of bias and poor study design. Conclusion: There are currently not enough data available to support the routine use of HCQ and CQ as therapies for COVID-19. Pending further results from more extensive studies with more stringent study parameters, clinicians should defer from routine use of HCQ and CQ. There are several clinical trials currently under way with results expected soon.

Publication Type

Journal article.

<529>

Accession Number

20203417920

Author

Vick, D. J.

Title

Glucose-6-phosphate dehydrogenase deficiency and COVID-19 infection.

Source

Mayo Clinic Proceedings; 2020. 95(8):1804-1805. 12 ref.

Publisher

Mayo Foundation for Medical Education and Research

Location of Publisher

Rochester

Country of Publication

USA

Abstract

G6PD deficiency enhanced infection of cells with human coronavirus 229E (HCoV 229E). Using G6PD-deficient fibroblasts and G6PD-knockdown cells derived from human lung epithelial cells subjected to viral inoculum in vitro, they found that viral gene expression was higher in these cells compared with control cells. Production of viral particles in the deficient cells was also higher over time, indicating that G6PD activity modulates this production. Further, the G6PD-deficient cells were more susceptible to HCoV 229E-mediated cell death. SARS-CoV-2 may have a similar effect on cells in G6PD-deficient patients. Studies are needed to determine whether a positive correlation exists between G6PD deficiency and COVID-19, with respect to increased susceptibility to infection and severity of illness. This is important for several reasons. First, it will allow for identification of a subset of COVID-19 patients for whom close monitoring and supportive care may be critical. Second, certain treatments, such as hydroxychloroquine, may be contraindicated in these patients. Third, identification of this relationship may suggest other therapies, such as use of antioxidants, that may prove beneficial for treating COVID-19. Finally, such information will be important for people with known G6PD deficiency to guide their decisions and actions to prevent COVID-19 infection.

Publication Type

Correspondence.

<530>

Accession Number

20203440487

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Echoru, I.; Kasozi, K. I.; Usman, I. M.; Mutuku, I. M.; Ssebuufu, R.; Ajambo, P. D.; Ssempijja, F.; Mujinya, R.; Matama, K.; Musoke, G. H.; Ayikobua, E. T.; Ninsiima, H. I.; Dare, S. S.; Eze, E. D.; Bukenya, E. E.; Nambatya, G. K.; MacLeod, E.; Welburn, S. C.

Title

University lecturers and students could help in community education about SARS-CoV-2 infection in Uganda.

Source

Health Services Insights; 2020. 13(1178632920944167)17 ref.

Publisher

Sage Publications Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The World Health Organization has placed a lot of attention on vulnerable communities of Africa due to their chronically weak health care systems. Recent findings from Uganda show that medical staff members have sufficient knowledge but poor attitudes toward coronavirus disease 2019 (COVID-19) pandemic. Aim: The aim of this study was to determine the knowledge, attitudes, and preparedness/practices of lecturers and students in the fight against COVID-19. Method: This was a descriptive cross-sectional study of 103 lecturers and students both men and women of age group 18 to 69 years in western Uganda. Data were obtained through a pretested questionnaire availed online. Results : Knowledge on COVID-19 symptoms was highest in this order: fever > dry cough > difficulty breathing > fatigue > headache with no significant differences between lecturers and students. Knowledge of participants on transmission of COVID-19 was highest in the order of cough drops > contaminated surfaces > person-to-person contact > asymptomatic persons > airborne > zoonotic with no significant differences among lecturers and students. Lecturers and students were all willing to continue using personal protective equipment like masks, and personal practices such as covering the mouth while sneezing and coughing, no handshaking, and washing of hands with no significant differences in the responses. The positive attitudes that COVID-19 could kill, anyone can get COVID-19, and willing to abide by the set regulations against the pandemic showed personal concerns and desired efforts against COVID-19. Conclusion: The study identifies lecturers and students as potential stakeholders in the fight against community transmission of COVID-19.

Publication Type

Journal article.