Literature Search Request

Search strategy	Database: CAB Abstracts <2000 to 2020 Week 40>
CAB Abstracts on the OVID interface	Search Strategy:
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	1 ('covid 19' or 'novel coronavirus' or 'sars-cov-2').mp. (1429)
	2 2 and (202009* or 202010*).up. (493)
	**************************
	[mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]
Date of coverage	Sept – Oct 2020 (week 40)

Search results

	Date searched	No of items found
CAB Abstracts	12/10/2020	493

References from CAB Abstracts

<1>

Accession Number

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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.

<2>

Accession Number

20203440487

P a g e | 2

Author

  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

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.

<3>

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.

<4>

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.

<5>

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

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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.

<6>

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.

<7>

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.

<8>

Accession Number

20203437499

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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.

<9>

Accession Number

   20203436989

Author

   Goon, D. T.; Okafor, U. B.

Title

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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.

<10>

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.

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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.

<11>

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

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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.

<12>

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

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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.

<13>

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.

<14>

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.

<15>

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

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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.

<16>

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+or-7.4 and the average work experience was 5.6+or-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.

<17>

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.

<18>

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

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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.

<19>

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

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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.

<20>

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.

<21>

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

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+or-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.

<22>

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+or-8.4, 30.1+or-9 and 27.3+or-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.

<23>

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.

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<24>

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.

<25>

Accession Number

   20203435308

Author

   Alao, M. A.; Durodola, A. O.; Ibrahim, O. R.; Asinobi, O. A.

Title

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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 +or- 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.

<26>

Accession Number

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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.

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<27>

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.

<28>

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.

<29>

Accession Number

  20203434164

Author

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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.

<30>

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 /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.

<31>

Accession Number

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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.

<32>

Accession Number

20203433230

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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.

<33>

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.

<34>

Accession Number

  20203432090

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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

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.

<35>

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.

<36>

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

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.

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<37>

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.

<38>

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.

<39>

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

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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.

<40>

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

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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.

<41>

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.

<42>

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

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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.

<43>

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.

<44>

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

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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.

<45>

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

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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.

<46>

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.

<47>

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

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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.

<48>

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.

<49>

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.

<50>

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.

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<51>

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.

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<52>

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.

<53>

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 syntheses 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.

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<54>

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.

<55>

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.

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<56>

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.

<57>

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.

<58>

Accession Number

20203428903

Author

Hussen Mohammed; Lemessa Oljira; Kedir Teji Roba; Getnet Yimer; Abebaw Fekadu; Tsegahun Manyazewal

Title

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Containment of COVID-19 in Ethiopia and implications for tuberculosis care and research.

Source

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.

<59>

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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.

<60>

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.

<61>

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

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Publisher

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.

<62>

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

Publisher

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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.

<63>

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. 744. 37 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 m (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 g/m3 (4.3%) in Maryland to 4.20 g/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.

<64>

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. 744. 21 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.

<65>

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. 744. 42 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.

<66>

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. 744. 41 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

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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.

<67>

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.

<68>

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.

<69>

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. 743. many 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.

<70>

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. 743. many 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.

<71>

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. 287. many 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.

<72>

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. 159. 35 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.

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<73>

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. 742. 15 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.

<74>

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. 742. 15 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 4 degrees C 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.

<75>

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. 742. 30 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.

<76>

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.

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<77>

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.

<78>

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 indicatorsx100%) 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 (X2=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+or-3.65]% vs[85.63+or-4.52]% and[346.3+or-43.6] m

vs[272.2+or-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.

<79>

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. 144. 72 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,

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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.

<80>

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.

<81>

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. 741. many 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 g m-3 and most often <35 g 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

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normal periods. Due to the length of the episode and the significant reduction in emissions, Taiwan avoided a PM2.5 surplus of 19.2 g m-3 on average during the episode, equivalent to a 0.5 g 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 g m-3 surplus for the whole year.

Publication Type

 Journal article.

<82>

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. 741. 39 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 ($R^2 > 0.7$) between increment in air pollution and an increase in the risk of COVID-19 transmission within London boroughs. Particularly, strong correlations ($R^2 > 0.72$) 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.

<83>

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.

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<84>

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.

<85>

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.

<86>

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.

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<87>

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.

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<88>

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. 130. 5 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.

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<89>

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.

<90>

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.

<91>

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.

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<92>

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.

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<93>

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.

<94>

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.

<95>

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.

<96>

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.

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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.

<97>

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

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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.

<98>

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.

<99>

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.

<100>

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.

<101>

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.

<102>

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.

<103>

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.

<104>

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.

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102

<105>

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.

<106>

Accession Number

  20203427805

Author

  Pierro, F. di; Bertuccioli, A.; Cavecchia, I.

Title

  Possible therapeutic role of a highly standardized mixture of active compounds derived from cultured lentinula edodes mycelia (AHCC) in patients infected with 2019 novel coronavirus.

Source

  Minerva Gastroenterologica e Dietologica; 2020. 66(2):172-176.

Publisher

  Edizioni Minerva Medica

Location of Publisher

  Torino

Country of Publication

  Italy

Abstract

  The outbreak of SARS-CoV-2 disease (COVID-19) is currently, March 2020, affecting more than 100,000 people worldwide and, according to the WHO (World Health Organization), a pandemic is shortly expected. The virus infects the lower respiratory tract and causes severe pneumonia and mortality in approximately 10% and 3-5%, respectively, of cases, mainly among the elderly and/or people affected by other diseases. AHCC is an a-glucan-based standardized mushroom extract that has been extensively investigated as an immunostimulant both in animals and/or in humans affected by West Nile virus, influenza virus, avian influenza virus, hepatitis C virus, papillomavirus, herpes virus, hepatitis B virus and HIV by promoting a regulated and protective immune response. Although the efficacy of AHCC has not yet been specifically evaluated with respect to SARS-CoV-2 disease, its action in promoting a protective response to a wide range of viral infections, and the current absence of effective vaccines, could support its use in the prevention of diseases provoked by human pathogenic coronavirus, including COVID-19.

Publication Type

  Journal article.

<107>

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104

Accession Number

20203427670

Author

Chen Xi; Gao HaiYan; Zou YuChun; Lin Fen

Title

Changes in psychological wellbeing, attitude and information-seeking behaviour among people at the epicentre of the COVID-19 pandemic: a panel survey of residents in Hubei Province, China.

Source

Epidemiology and Infection; 2020. 148(e201). 39 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

While most research focuses on the clinical treatment of COVID-19, fewer studies have investigated individuals' responses towards this novel infectious disease. This study aims to report the temporal changes in individuals' psychological wellbeing, perceived discrimination, sociopolitical perceptions and information-seeking behaviours among the general public in Hubei, China. Data were obtained from a two-wave survey of 1902 respondents aged 18-80 in Hubei province during the peak and mitigation stages of the outbreak. The results showed that the prevalence of psychological distress dropped from over 75% to around 15% throughout the study period, but perceived discrimination remained stable. Female, middle-aged, well-educated respondents and those employed in government/public institutions/state-owned enterprises tended to report more distress. While respondents' attention on COVID-19 information kept high and stable, their sources of information diversified across different sociodemographic groups. Over time, people obtained more social support from neighbourhoods than from their friends and relatives or non-government organizations. Over 80% of respondents were satisfied with the performance of the central government, which was notably higher than their ratings on the local government and neighbourhood/village committees. The findings of this research are informative for formulating effective intervention strategies to tackle various psychosocial problems during COVID-19.

Publication Type

Journal article.

<108>

Accession Number

20203427255

Author

Lokida, D.; Lukman, N.; Salim, G.; Butar-Butar, D. P.; Kosasih, H.; Wulan, W. N.; Naysilla, A. M.; Djajady, Y.; Sari, R. A.; Arlinda, D.; Lau ChuenYen; Karyana, M.

Title

Diagnosis of COVID-19 in a dengue-endemic area.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(3):1220-1222. 10 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

Emergence of SARS-CoV-2 in dengue virus (DENV)-endemic areas complicates the diagnosis of both infections. COVID-19 cases may be misdiagnosed as dengue, particularly when relying on DENV IgM, which can remain positive months after infection. To estimate the extent of this problem, we evaluated sera from 42 confirmed COVID-19 patients for evidence of DENV infection. No cases of SARS-CoV-2 and DENV coinfection were identified. However, recent DENV infection, indicated by the presence of DENV IgM and/or high level of IgG antibodies, was found in seven patients. Dengue virus IgM and/or high IgG titer should not exclude COVID-19. SARS-CoV-2 reverse transcription polymerase chain reaction (RT-PCR) testing is appropriate when dengue nonstructural protein 1 (NS1) or RT-PCR is negative. Given the possibility of coinfection, testing for both DENV and SARS-CoV-2 is merited in the setting of the current pandemic.

Publication Type

Journal article.

<109>

Accession Number

20203427254

Author

Moreau, G. B.; Burgess, S. L.; Sturek, J. M.; Donlan, A. N.; Petri, W. A., Jr.; Mann, B. J.

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106

Title

Evaluation of K18-hACE2 mice as a model of SARS-CoV-2 infection.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(3):1215-1219. 13 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

Murine models of SARS-CoV-2 infection are critical for elucidating the biological pathways underlying COVID-19. Because human angiotensin-converting enzyme 2 (ACE2) is the receptor for SARS-CoV-2, mice expressing the human ACE2 gene have shown promise as a potential model for COVID-19. Five mice from the transgenic mouse strain K18-hACE2 were intranasally inoculated with SARS-CoV-2 Hong Kong/VM20001061/2020. Mice were followed twice daily for 5 days and scored for weight loss and clinical symptoms. Infected mice did not exhibit any signs of infection until day 4, when no other obvious clinical symptoms other than weight loss were observed. By day 5, all infected mice had lost around 10% of their original body weight but exhibited variable clinical symptoms. All infected mice showed high viral titers in the lungs as well as altered lung histology associated with proteinaceous debris in the alveolar space, interstitial inflammatory cell infiltration, and alveolar septal thickening. Overall, these results show that the K18-hACE2 transgenic background can be used to establish symptomatic SARS-CoV-2 infection and can be a useful mouse model for COVID-19.

Publication Type

Journal article.

<110>

Accession Number

20203427253

Author

Villanueva, A. M. G.; Lazaro, J.; Sayo, A. R.; Han, S. M.; Ukawa, T.; Suzuki, S.; Takaya, S.; Telan, E.; Solante, R.; Ariyoshi, K.; Smith, C.

Title

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107

COVID-19 screening for healthcare workers in a tertiary infectious diseases referral hospital in Manila, the Philippines.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(3):1211-1214. 12 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

COVID-19 is an emerging disease threatening the lives of patients and healthcare workers (HCWs) alike. In this article, we present initial results of COVID-19 screening performed among the hospital staff of an infectious diseases referral hospital in Manila, the Philippines. Of 324 HCWs tested, eight were positive; only one was exposed to COVID-19 patients, whereas seven others belonged to two different departments. Routine screening of hospital staff is invaluable for the safety of the HCWs and the patients in hospitals and should be performed on a regular basis. In monitoring HCWs, we protect one of our most valuable assets against COVID-19.

Publication Type

Journal article.

<111>

Accession Number

20203427250

Author

Mohamad Hafiz Mukhsam; Mohammad Saffree Jeffree; Pang TzePing [Pang, T. P. N.]; Abdul Rahim, S. S. S.; Azizan Omar; Muhammad Syafiq Abdullah; Khamisah Awang Lukman; Nelbon Giloi; Loganathan Salvaraji; Abd Karim, M. R.; Sahipudin Saupin; Yeap Boon Tat; Mohd Hayati, M. F.; Mohd Yusof Ibrahim; Assikin Muhamad; Syaza Putri Zainudin

Title

A university-wide preparedness effort in the alert phase of COVID-19 incorporating community mental health and task-shifting strategies: experience from a Bornean Institute of higher learning.

Source

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108

American Journal of Tropical Medicine and Hygiene; 2020. 103(3):1201-1203. 17 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

The COVID-19 pandemic caught the world by surprise, causing millions of confirmed cases and hundreds of thousands of deaths. Hence, the Malaysian government announced a Movement Control Order at the start of the containment phase to flatten the epidemiological curve. Universiti Malaysia Sabah (UMS), a public university in Borneo, was accelerated into alert phase because of high risk of case importation from more than 400 China incoming undergraduates. Measures to mitigate the potential COVID-19 outbreaks in its population were taken by using conventional public health measures with special attention to task-shifting and widespread community mental health interventions. A Preparedness and Response Centre was established to overseer the mitigating measures happening inside the university. Measures taken included empowerment of frontline staff, strengthening of restrictions, strengthening university health center, vigorous contact tracing, widespread health education, maintaining cultural sensitivity, and establishment of early standard operating procedures and university continuity plans. Hence, UMS was able to ensure no importation of cases into its campus during both acute and containment phases at the nationwide level.

Publication Type

Journal article.

<112>

Accession Number

20203427249

Author

Abdela, S. G.; Berhanu, A. B.; Ferede, L. M.; Griensven, J. van

Title

Essential healthcare services in the face of COVID-19 prevention: experiences from a referral hospital in Ethiopia.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(3):1198-1200. 10 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

Globally, healthcare systems are facing the enormous challenge of the COVID-19 pandemic. Ethiopia is currently implementing different preventive measures to interrupt the transmission of SARS-CoV-2. The early effect of these preventive measures on essential healthcare service delivery is unknown. In this study, we looked at the number of essential healthcare visits over 8 weeks, 4 weeks before and 4 weeks after the implementation of preventive measures. During the implementation of these measures, patient flow decreased in all elements of essential healthcare service. The decline was dramatic for family planning (98%), emergency surgery (77%), and follow-up of chronic surgical conditions (70%). An understanding of the reasons behind the decrease in patient flow is urgently needed to design ways of sustaining essential care.

Publication Type

Journal article.

<113>

Accession Number

20203427248

Author

Bell, D.; Hansen, K. S.; Kiragga, A. N.; Kambugu, A.; Kissa, J.; Mbonye, A. K.

Title

Predicting the impact of COVID-19 and the potential impact of the public health response on disease burden in Uganda.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(3):1191-1197. 43 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

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110

USA

Abstract

The COVID-19 pandemic and public health "lockdown" responses in sub-Saharan Africa, including Uganda, are now widely reported. Although the impact of COVID-19 on African populations has been relatively light, it is feared that redirecting focus and prioritization of health systems to fight COVID-19 may have an impact on access to non-COVID-19 diseases. We applied age-based COVID-19 mortality data from China to the population structures of Uganda and non-African countries with previously established outbreaks, comparing theoretical mortality and disability-adjusted life years (DALYs) lost. We then predicted the impact of possible scenarios of the COVID-19 public health response on morbidity and mortality for HIV/AIDS, malaria, and maternal health in Uganda. Based on population age structure alone, Uganda is predicted to have a relatively low COVID-19 burden compared with an equivalent transmission in comparison countries, with 12% of the mortality and 19% of the lost DALYs predicted for an equivalent transmission in Italy. By contrast, scenarios of the impact of the public health response on malaria and HIV/AIDS predict additional disease burdens outweighing that predicted from extensive SARS-CoV-2 transmission. Emerging disease data from Uganda suggest that such deterioration may already be occurring. The results predict a relatively low COVID-19 impact on Uganda associated with its young population, with a high risk of negative impact on non-COVID-19 disease burden from a prolonged lockdown response. This may reverse hard-won gains in addressing fundamental vulnerabilities in women and children's health, and underlines the importance of tailoring COVID-19 responses according to population structure and local disease vulnerabilities.

Publication Type

Journal article.

<114>

Accession Number

20203427247

Author

Cassia Menezes Soares, R. de; Mattos, L. R.; Raposo, L. M.

Title

Risk factors for hospitalization and mortality due to COVID-19 in espirito santo state, Brazil.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(3):1184-1190. 49 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

  USA

Abstract

  Brazil is, at the time of writing, the global epicenter of COVID-19, but information on risk factors for hospitalization and mortality in the country is still limited. Demographic and clinical data of COVID-19 patients until June 11th, 2020 were retrieved from the State Health Secretariat of Espirito Santo, Brazil. Potential risk factors for COVID-19 hospitalization and death were analyzed by univariate and multivariable logistic regression models. A total of 10,713 COVID-19 patients were included in this study; 81.0% were younger than 60 years, 55.2% were female, 89.2% were not hospitalized, 32.9% had at least one comorbidity, and 7.7% died. The most common symptoms on admission were cough (67.7%) and fever (62.6%); 7.1% of the patients were asymptomatic. Cardiovascular diseases (23.7%) and diabetes (10.3%) were the two most common chronic diseases. Multivariate logistic regression analysis identified an association of all explanatory variables, except for cough and diarrhea, with hospitalization. Older age (odds ratio [OR] = 3.95, $P < 0.001$) and shortness of breath (OR = 3.55, $P < 0.001$) were associated with increase of odds to COVID-19 death in hospitalized patients. Our study provided evidence that older age, male gender, Asian, indigenous or unknown race, comorbidities (smoking, kidney disease, obesity, pulmonary disease, diabetes, and cardiovascular disease), as well as fever and shortness of breath increased the risk of hospitalization. For death outcome in hospitalized patients, only older age and shortness of breath increased the risk.

Publication Type

  Journal article.

<115>

Accession Number

  20203427246

Author

  Olaimat, A. N.; Aolymat, I.; Elsahoryi, N.; Shahbaz, H. M.; Holley, R. A.

Title

  Attitudes, anxiety, and behavioral practices regarding COVID-19 among university students in Jordan: a cross-sectional study.

Source

  American Journal of Tropical Medicine and Hygiene; 2020. 103(3):1177-1183. 21 ref.

Publisher

  American Society of Tropical Medicine and Hygiene

Location of Publisher

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112

Deerfield

Country of Publication

USA

Abstract

The COVID-19 pandemic represents a major public health, economic, political, and scientific concern in most countries around the globe where COVID-19 cases and deaths have been confirmed. This study assessed the attitudes, anxiety, and behavioral practices of university students in Jordan regarding COVID-19 during the early period of the infection (March 19-21, 2020) using a validated, self-administered survey questionnaire. Positive attitudes or low-risk practices were given 1 point, whereas negative attitudes or high-risk practices were scored 0. Percentages of the total score were used for categorizing data into negative attitudes or high-risk practices (60%), moderate attitudes or moderate-risk practices (60.01-80%), and positive attitudes or low-risk practices (> 80%). Generally, the university students displayed positive attitudes and low-risk practices toward preventing COVID-19, with an average score of 81.1% and 84.3%, respectively. Approximately two-thirds (69.1%) of the students showed a positive attitude toward COVID-19 seriousness, concern of contracting the virus, and the appropriate prevention measures, and low-risk practices (67.6%) toward preventing COVID-19 including implementation of social distancing and good hygiene. Female, older, medical, or postgraduate students practiced significantly more (P 0.05) appropriate hygiene and social distancing behaviors toward COVID-19 than their counterparts of each group. More than two-thirds (69.2%) of the students were anxious that they might become infected with COVID-19. These results are important for health authorities to develop appropriate educational programs and protective health measures including good respiratory etiquette and handwashing practices, to enhance safer lifestyles and prevent COVID-19 transmission.

Publication Type

Journal article.

<116>

Accession Number

20203426768

Author

Pathak, E. B.; Salemi, J. L.; Sobers, N.; Menard, J.; Hambleton, I. R.

Title

COVID-19 in children in the United States: intensive care admissions, estimated total infected, and projected numbers of severe pediatric cases in 2020.

Source

Journal of Public Health Management and Practice; 2020. 26(4):325-333. 38 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Importance: A surge in severe cases of COVID-19 (coronavirus disease 2019) in children would present unique challenges for hospitals and public health preparedness efforts in the United States. Background: To provide evidence-based estimates of children infected with SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) and projected cumulative numbers of severely ill pediatric COVID-19 cases requiring hospitalization during the US 2020 pandemic. Design: Empirical case projection study. Main Outcomes and Measures: Adjusted pediatric severity proportions and adjusted pediatric criticality proportions were derived from clinical and spatiotemporal modeling studies of the COVID-19 epidemic in China for the period January-February 2020. Estimates of total children infected with SARS-CoV-2 in the United States through April 6, 2020, were calculated using US pediatric intensive care unit (PICU) cases and the adjusted pediatric criticality proportion. Projected numbers of severely and critically ill children with COVID-19 were derived by applying the adjusted severity and criticality proportions to US population data, under several scenarios of cumulative pediatric infection proportion (CPIP). Results: By April 6, 2020, there were 74 children who had been reported admitted to PICUs in 19 states, reflecting an estimated 176 190 children nationwide infected with SARS-CoV-2 (52 381 infants and toddlers younger than 2 years, 42 857 children aged 2-11 years, and 80 952 children aged 12-17 years). Under a CPIP scenario of 5%, there would be 3.7 million children infected with SARS-CoV-2, 9907 severely ill children requiring hospitalization, and 1086 critically ill children requiring PICU admission. Under a CPIP scenario of 50%, 10 865 children would require PICU admission, 99 073 would require hospitalization for severe pneumonia, and 37.0 million would be infected with SARS-CoV-2. Conclusions and Relevance: Because there are 74.0 million children 0 to 17 years old in the United States, the projected numbers of severe cases could overextend available pediatric hospital care resources under several moderate CPIP scenarios for 2020 despite lower severity of COVID-19 in children than in adults.

Publication Type

Journal article.

<117>

Accession Number

20203426610

Author

Brlek, A.; Vidovic; Vuzem, S.; Turk, K.; Simonovic, Z.

Title

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114

Possible indirect transmission of COVID-19 at a squash court, Slovenia, March 2020: case report.

Source

Epidemiology and Infection; 2020. 148(e120). 14 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Since the beginning of the COVID-19 epidemic, there is an ongoing debate and research regarding the possible ways of virus transmission. We conducted an epidemiological investigation which revealed a cluster of five COVID-19 cases, linked to playing squash at a sports venue in Maribor, Slovenia. Acquired data raises possibility that the transmission occurred indirectly through contaminated objects in changing room or squash hall or via aerosolisation in squash hall.

Publication Type

Journal article.

<118>

Accession Number

20203426608

Author

Craig, A. T.; Heywood, A. E.; Hall, J.

Title

Risk of COVID-19 importation to the Pacific Islands through global air travel.

Source

Epidemiology and Infection; 2020. 148(e71). 23 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

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115

Country of Publication

 UK

Abstract

  On 30 January 2020, WHO declared coronavirus (COVID-19) a global public health emergency. As of 12 March 2020, 125 048 confirmed COVID-19 cases in 118 countries had been reported. On 12 March 2020, the first case in the Pacific islands was reported in French Polynesia; no other Pacific island country or territory has reported cases. The purpose of our analysis is to show how travellers may introduce COVID-19 into the Pacific islands and discuss the role robust health systems play in protecting health and reducing transmission risk. We analyse travel and Global Health Security Index data using a scoring tool to produce quantitative estimates of COVID-19 importation risk, by departing and arriving country. Our analysis indicates that, as of 12 March 2020, the highest risk air routes by which COVID-19 may be imported into the Pacific islands are from east Asian countries (specifically, China, Korea and Japan) to north Pacific airports (likely Guam, Commonwealth of the Northern Mariana Islands or, to a less extent, Palau); or from China, Japan, Singapore, the United States of America or France to south Pacific ports (likely, Fiji, Papua New Guinea, French Polynesia or New Caledonia). Other importation routes include from other east Asian countries to Guam, and from Australia, New Zealand and other European countries to the south Pacific. The tool provides a useful method for assessing COVID-19 importation risk and may be useful in other settings.

Publication Type

 Journal article.

<119>

Accession Number

 20203426356

Author

 Xie ZhiXiang; Qin YaoChen; Li Yang; Shen Wei; Zheng ZhiCheng; Liu ShiRui

Title

 Spatial and temporal differentiation of COVID-19 epidemic spread in Mainland China and its influencing factors.

Source

 Science of the Total Environment; 2020. 744. 21 ref.

Publisher

 Elsevier Ltd

Location of Publisher

 Oxford

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Country of Publication

UK

Abstract

This paper uses the exploratory spatial data analysis and the geodetector method to analyze the spatial and temporal differentiation characteristics and the influencing factors of the COVID-19 (corona virus disease 2019) epidemic spread in mainland China based on the cumulative confirmed cases, average temperature, and socio-economic data. The results show that: (1) the epidemic spread rapidly from January 24 to February 20, 2020, and the distribution of the epidemic areas tended to be stable over time. The epidemic spread rate in Hubei province, in its surrounding, and in some economically developed cities was higher, while that in western part of China and in remote areas of central and eastern China was lower. (2) The global and local spatial correlation characteristics of the epidemic distribution present a positive correlation. Specifically, the global spatial correlation characteristics experienced a change process from agglomeration to decentralization. The local spatial correlation characteristics were mainly composed of the'high-high' and 'low-low' clustering types, and the situation of the contiguous layout was very significant. (3) The population inflow from Wuhan and the strength of economic connection were the main factors affecting the epidemic spread, together with the population distribution, transport accessibility, average temperature, and medical facilities, which affected the epidemic spread to varying degrees. (4) The detection factors interacted mainly through the mutual enhancement and nonlinear enhancement, and their influence on the epidemic spread rate exceeded that of single factors. Besides, each detection factor has an interval range that is conducive to the epidemic spread.

Publication Type

Journal article.

<120>

Accession Number

20203426321

Author

Patel, P. P.; Sayoni Mondal; Ghosh, K. G.

Title

Some respite for India's dirtiest river? Examining the Yamuna's water quality at Delhi during the COVID-19 lockdown period.

Source

Science of the Total Environment; 2020. 744. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The Yamuna's stretch within Delhi is considered as the dirtiest river reach in India and despite numerous restoration plans, pollution levels have risen unabated. However, the enforcement of a nationwide lockdown due to the ongoing COVID-19 pandemic can possibly provide a ray of hope. We analyze the lockdown's impact on the water quality status of this stretch using a combination of measured parameters and satellite image derived indices. Class C Water Quality Index estimates of nine stations indicate an improvement of 37% during the lockdown period. The Biological Oxygen Demand and Chemical Oxygen Demand values reduced by 42.83% and 39.25%, respectively, compared to the pre-lockdown phase, while Faecal Coliform declined by over 40%. Similar analysis of 20 major drains that meet the Yamuna revealed declining effluent loads and discernable improvements in drain contaminant status were ascertained via a hierarchical cluster analysis. Reach-wise suspended particulate matter content, turbidity and algal signatures were derived from multi-temporal Landsat-8 images of prior and ongoing lockdown periods for 117 channel segment zones. These parameters also declined notably within most stretches, although their extents were spatially varied. While the partial/non-operational status of most industries during the lockdown enabled significant reduction in effluent loads and a consequent betterment in the river water quality, its spatial variations and even deterioration in some locations resulted from the largely undiminished inflow of domestic sewage through multiple drains. This study provides an estimate of possible river recovery extents and degree of improvement if deleterious polluting activities and contaminants are regulated properly.

Publication Type

Journal article.

<121>

Accession Number

20203426305

Author

Poch, M.; Garrido-Baserba, M.; Corominas, L.; Perello-Moragues, A.; Monclus, H.; Cermeron-Romero, M.; Melitas, N.; Jiang, S. C.; Rosso, D.

Title

When the fourth water and digital revolution encountered COVID-19.

Source

Science of the Total Environment; 2020. 744. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The ongoing COVID-19 pandemic is, undeniably, a substantial shock to our civilization which has revealed the value of public services that relate to public health. Ensuring a safe and reliable water supply and maintaining water sanitation has become ever more critical during the pandemic. For this reason, researchers and practitioners have promptly investigated the impact associated with the spread of SARS-CoV-2 on water treatment processes, focusing specifically on water disinfection. However, the COVID-19 pandemic impacts multiple aspects of the urban water sector besides those related to the engineering processes, including sanitary, economic, and social consequences which can have significant effects in the near future. Furthermore, this outbreak appears at a time when the water sector was already experiencing a fourth revolution, transitioning toward the digitalisation of the sector, which redefines the Water-Human-Data Nexus. In this contribution, a product of collaboration between academics and practitioners from water utilities, we delve into the multiple impacts that the pandemic is currently causing and their possible consequences in the future. We show how the digitalisation of the water sector can provide useful approaches and tools to help address the impact of the pandemic. We expect this discussion to contribute not only to current challenges, but also to the conceptualization of new projects and the broader task of ameliorating climate change.

Publication Type

Journal article.

<122>

Accession Number

20203426285

Author

Al-Huraimel, K.; Alhosani, M.; Kunhabdulla, S.; Stietiya, M. H.

Title

SARS-CoV-2 in the environment: modes of transmission, early detection and potential role of pollutions.

Source

Science of the Total Environment; 2020. 744. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The coronavirus disease 2019 (COVID-19) is spreading globally having a profound effect on lives of millions of people, causing worldwide economic disruption. Curbing the spread of COVID-19 and future pandemics may be accomplished through understanding the environmental context of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and adoption of effective detection tools and mitigation policies. This article aims to examine the latest investigations on SARS-CoV-2 plausible environmental transmission modes, employment of wastewater surveillance for early detection of COVID-19, and elucidating the role of solid waste, water, and atmospheric quality on viral infectivity. Transmission of SARS-CoV-2 via faecal-oral or bio-aerosols lacks robust evidence and remains debatable. However, improper disinfection and defected plumbing systems in indoor environments such as hospitals and high-rise towers may facilitate the transport of virus-laden droplets of wastewater causing infection. Clinical and epidemiological studies are needed to present robust evidence that SARS-CoV-2 is transmissible via aerosols, though quantification of virus-laden aerosols at low concentrations presents a challenge. Wastewater surveillance of SARS-CoV-2 can be an effective tool in early detection of outbreak and determination of COVID-19 prevalence within a population, complementing clinical testing and providing decision makers guidance on restricting or relaxing movement. While poor air quality increases susceptibility to diseases, evidence for air pollution impact on COVID-19 infectivity is not available as infections are dynamically changing worldwide. Solid waste generated by households with infected individuals during the lockdown period may facilitate the spread of COVID-19 via fomite transmission route but has received little attention from the scientific community. Water bodies receiving raw sewage may pose risk of infection but this has not been investigated to date. Overall, our understanding of the environmental perspective of SARS-CoV-2 is imperative to detecting outbreak and predicting pandemic severity, allowing us to be equipped with the right tools to curb any future pandemic.

Publication Type

Journal article.

<123>

Accession Number

20203426134

Author

Melo, C. M. L. de; Silva, G. A. S.; Melo, A. R. S.; Freitas, A. C. de

Title

COVID-19 pandemic outbreak: the Brazilian reality from the first case to the collapse of health services.

Source

Anais da Academia Brasileira de Ciencias; 2020. 92(4). many ref.

Publisher

Academia Brasileira de Ciencias

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Coronavirus is associated with several infectious diseases that cause outbreaks in humans, such as SARS in 2002-2003 and MERS in 2012. In December 2019, COVID-19, promoted by the SARS-CoV-2 virus, was first reported in Wuhan (China) as a new coronavirus disease. This outbreak quickly reached a pandemic status, affecting at least 185 countries and territories to date on all continents. The first case of COVID-19 reported in Sao Paulo city (Brazil) occurred in February 26th. Days later, 182 suspected cases in 16 states were being monitored. In May 30th, 514,849 cases and 29,314 deaths were confirmed in Brazil comprising all 26 states and Federal District. The primary measure in order to contain the spread of SARS-CoV-2 involved social isolation. At that time there were not enough diagnostic tests to identify infected individuals and data were strongly associated with sub notifications. Nevertheless, the effectiveness of this measure largely depends on the individual's social responsibility. This measure has a severe economic and social impact, as in other countries. In this review, we present an overview and scientific perspectives of the evolution of COVID-19 from Brazilian databases in which climate and economic situations differ from China, European countries, and the USA.

Publication Type

Journal article.

<124>

Accession Number

20203425923

Author

Miyachi, T.; Tanimoto, T.; Kami, M.

Title

Evaluation of modelling study shows limits of COVID-19 importing risk simulations in sub-Saharan Africa.

Source

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121

Epidemiology and Infection; 2020. 148(e113). 5 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Mathematical modelling studies predicting the spread of the coronavirus disease 2019 (COVID-19) have been used worldwide, but precisions are limited. Thus, continuous evaluation of the modelling studies is crucial. We investigated situations of virus importation in sub-Saharan Africa (SSA) to assess effectiveness of a modelling study by Haider N et al. titled 'Passengers' destinations from China: low risk of novel coronavirus (2019-nCoV) transmission into Africa and South America'. We obtained epidemiological data of 2417 COVID-19 cases reported by 40 countries in SSA within 30 days of the first case confirmed in Nigeria on 27 February. Out of 442 cases which had travel history available, only one (0.2%) had a travel history to China. These findings underline the result of the model. However, the fact that there were numbers of imported cases from other regions shows the limits of the model. The limits could be attributed to the characteristics of the COVID-19 which is infectious even when the patients do not express any symptoms. Therefore, there is a profound need for all modelling researchers to take asymptomatic cases into account when they establish modelling studies.

Publication Type

Journal article.

<125>

Accession Number

20203425539

Author

Hou Wei; Zhang Wei; Jin RongHua; Liang LianChun; Xu Bin; Hu ZhongJie

Title

Risk factors for disease progression in hospitalized patients with COVID-19: a retrospective cohort study.

Source

Infectious Diseases; 2020. 52(7):498-505. 21 ref.

Publisher

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122

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Background: To investigate the risk factors related to aggravation and clinical outcomes in coronavirus disease 2019 (COVID-19) patients. Methods: We performed a retrospective study on the risk factors for disease progression of cases with COVID-19. Based on the clinical types, the patients were divided into a progression group and an improvement group. Multivariable logistic regression and ROC curve analysis were performed to explore the risk factors for disease progression. Results: A total of 101 patients were included in this study; diseases progression occurred in 17 patients, 84 patients improved, 6 were transferred to intensive care unit (ICU), and 5 died. The mean time to obtain negative nucleic acid results was 12.5 +or- 5.0 days. Multivariate logistic analysis indicated that age (OR, 0.104; p = .002), C-reactive protein (CRP) (OR, 0.093; p < .001) and lymphocyte count (OR, 3.397; p = .022) were risk factors for disease progression. ROC curve analysis revealed that the AUC of age, CRP and lymphocyte count for disease progression were 0.873, 0.911 and 0.817, respectively. Conclusions: Older age increased CRP and decreased lymphocyte count resulted in potential risk factors for COVID-19 progression. This may be helpful in identifying patients whose condition worsens at an early stage.

Publication Type

Journal article.

<126>

Accession Number

20203425481

Author

Sternberg, A.; Naujokat, C.

Title

Structural features of coronavirus SARS-CoV-2 spike protein: targets for vaccination.

Source

Life Sciences; 2020. 257. 82 ref.

Publisher

Elsevier

Location of Publisher

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123

New York

Country of Publication

USA

Abstract

Various human pathogenic viruses employ envelope glycoproteins for host cell receptor recognition and binding, membrane fusion and viral entry. The spike (S) glycoprotein of betacoronavirus SARS-CoV-2 is a homotrimeric class I fusion protein that exists in a metastable conformation for cleavage by host cell proteases furin and TMPRSS2, thereby undergoing substantial structural rearrangement for ACE2 host cell receptor binding and subsequent viral entry by membrane fusion. The S protein is densely decorated with N-linked glycans protruding from the trimer surface that affect S protein folding, processing by host cell proteases and the elicitation of humoral immune response. Deep insight into the sophisticated structure of SARS-CoV-2 S protein may provide a blueprint for vaccination strategies, as reviewed herein.

Publication Type

Journal article.

<127>

Accession Number

20203425479

Author

Suvojit Hazra; Chaudhuri, A. G.; Tiwary, B. K.; Nilkanta Chakrabarti

Title

Matrix metallopeptidase 9 as a host protein target of chloroquine and melatonin for immunoregulation in COVID-19: a network-based meta-analysis.

Source

Life Sciences; 2020. 257. 101 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

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124

Aims: The molecular pathogenesis of COVID-19 is similar to other coronavirus (CoV) infections viz. severe acute respiratory syndrome (SARS) in human. Due to scarcity of the suitable treatment strategy, the present study was undertaken to explore host protein(s) targeted by potent repurposed drug(s) in COVID-19. Materials and methods: The differentially expressed genes (DEGs) were identified from microarray data repository of SARS-CoV patient blood. The repurposed drugs for COVID-19 were selected from available literature. Using DEGs and drugs, the protein-protein interaction (PPI) and chemo-protein interaction (CPI) networks were constructed and combined to develop an interactome model of PPI-CPI network. The top-ranked sub-network with its hub-bottleneck nodes were evaluated with their functional annotations. Key findings: A total of 120 DEGs and 65 drugs were identified. The PPI-CPI network (118 nodes and 293 edges) exhibited a top-ranked sub-network (35 nodes and 174 connectivities) with 12 hub-bottleneck nodes having two drugs chloroquine and melatonin in association with 10 proteins corresponding to six upregulated and four downregulated genes. Two drugs interacted directly with the hub-bottleneck node i.e. matrix metallopeptidase 9 (MMP9), a host protein corresponding to its upregulated gene. MMP9 showed functional annotations associated with neutrophil mediated immunoinflammation. Moreover, literature survey revealed that angiotensin converting enzyme 2, a membrane receptor of SARS-CoV-2 virus, might have functional cooperativity with MMP9 and a possible interaction with both drugs. Significance: The present study reveals that between chloroquine and melatonin, melatonin appears to be more promising repurposed drug against MMP9 for better immunocompromisation in COVID-19.

Publication Type

Journal article.

<128>

Accession Number

20203425450

Author

Cao YunLong; Su Bin; Guo XiangHua; Sun WenJie; Deng YongQiang; Bao LinLin; Zhu QinYu; Zhang Xu; Zheng YingHui; Geng ChenYang; Chai XiaoRan; He RunSheng; Li XiaoFeng; Lv Qi; Zhu Hua; Deng Wei; Xu YanFeng; Wang YanJun; Qiao LuXin; Tan YaFang; Song LiYang; Wang GuoPeng; Du XiaoXia; Gao Ning; Liu JiangNing; Xiao JunYu; Su XiaoDong; Du ZongMin; Feng YingMei; Qin Chuan; Qin ChengFeng; Jin RongHua; Xie, X. S.

Title

Potent neutralizing antibodies against SARS-CoV-2 identified by high-throughput single-cell sequencing of convalescent patients' B cells.

Source

Cell (Cambridge); 2020. 182(1):73-84.e16. many ref.

Publisher

Cell Press

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125

Location of Publisher

  Cambridge

Country of Publication

  USA

Abstract

  The COVID-19 pandemic urgently needs therapeutic and prophylactic interventions. Here, we report the rapid identification of SARS-CoV-2-neutralizing antibodies by high-throughput single-cell RNA and VDJ sequencing of antigen-enriched B cells from 60 convalescent patients. From 8,558 antigen-binding IgG1+ clonotypes, 14 potent neutralizing antibodies were identified, with the most potent one, BD-368-2, exhibiting an IC50 of 1.2 and 15 ng/mL against pseudotyped and authentic SARS-CoV-2, respectively. BD-368-2 also displayed strong therapeutic and prophylactic efficacy in SARS-CoV-2-infected hACE2-transgenic mice. Additionally, the 3.8 A cryo-EM structure of a neutralizing antibody in complex with the spike-ectodomain trimer revealed the antibody's epitope overlaps with the ACE2 binding site. Moreover, we demonstrated that SARS-CoV-2-neutralizing antibodies could be directly selected based on similarities of their predicted CDR3H structures to those of SARS-CoV-neutralizing antibodies. Altogether, we showed that human neutralizing antibodies could be efficiently discovered by high-throughput single B cell sequencing in response to pandemic infectious diseases.

Publication Type

  Journal article.

<129>

Accession Number

  20203425448

Author

  Jiang RenDi; Liu MeiQin; Chen Ying; Shan Chao; Zhou YiWu; Shen XuRui; Li Qian; Zhang Lei; Zhu Yan; Si HaoRui; Wang Qi; Min Juan; Wang Xi; Zhang Wei; Li Bei; Zhang HuaJun; Baric, R. S.; Zhou Peng; Yang XingLou; Shi ZhengLi

Title

  Pathogenesis of SARS-CoV-2 in transgenic mice expressing human angiotensin-converting enzyme 2.

Source

  Cell (Cambridge); 2020. 182(1):50-58.e8. 37 ref.

Publisher

  Cell Press

Location of Publisher

Cambridge

Country of Publication

USA

Abstract

COVID-19 has spread worldwide since 2019 and is now a severe threat to public health. We previously identified the causative agent as a novel SARS-related coronavirus (SARS-CoV-2) that uses human angiotensin-converting enzyme 2 (hACE2) as the entry receptor. Here, we successfully developed a SARS-CoV-2 hACE2 transgenic mouse (HFH4-hACE2 in C3B6 mice) infection model. The infected mice generated typical interstitial pneumonia and pathology that were similar to those of COVID-19 patients. Viral quantification revealed the lungs as the major site of infection, although viral RNA could also be found in the eye, heart, and brain in some mice. Virus identical to SARS-CoV-2 in full-genome sequences was isolated from the infected lung and brain tissues. Last, we showed that pre-exposure to SARS-CoV-2 could protect mice from severe pneumonia. Our results show that the hACE2 mouse would be a valuable tool for testing potential vaccines and therapeutics.

Publication Type

Journal article.

<130>

Accession Number

20203425163

Author

Fortaleza, C. M. C. B.; Guimaraes, R. B.; Almeida, G. B. de; Pronunciate, M.; Ferreira, C. P.

Title

Taking the inner route: spatial and demographic factors affecting vulnerability to COVID-19 among 604 cities from inner Sao Paulo State, Brazil.

Source

Epidemiology and Infection; 2020. 148(e118). 16 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Even though the impact of COVID-19 in metropolitan areas has been extensively studied, the geographic spread to smaller cities is also of great concern. We conducted an ecological study aimed at identifying predictors of early introduction, incidence rates of COVID-19 and mortality (up to 8 May 2020) among 604 municipalities in inner Sao Paulo State, Brazil. Socio-demographic indexes, road distance to the state capital and a classification of regional relevance were included in predictive models for time to COVID-19 introduction (Cox regression), incidence and mortality rates (zero-inflated binomial negative regression). In multivariable analyses, greater demographic density and higher classification of regional relevance were associated with both early introduction and increased rates of COVID-19 incidence and mortality. Other predictive factors varied, but distance from the State Capital (Sao Paulo City) was negatively associated with time-to-introduction and with incidence rates of COVID-19. Our results reinforce the hypothesis of two patterns of geographical spread of SARS-Cov-2 infection: one that is spatial (from the metropolitan area into the inner state) and another which is hierarchical (from urban centres of regional relevance to smaller and less connected municipalities). Those findings may apply to other settings, especially in developing and highly heterogeneous countries, and point to a potential benefit from strengthening non-pharmaceutical control strategies in areas of greater risk.

Publication Type

Journal article.

<131>

Accession Number

20203425150

Author

Majowicz, S. E.

Title

What might the future bring? COVID-19 planning considerations for faculty and universities.

Source

Epidemiology and Infection; 2020. 148(e92). 18 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

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Abstract

This paper applies a scenario planning approach, to outline some current uncertainties related to COVID-19 and what they might mean for plausible futures for which we should prepare, and to identify factors that we as individual faculty members and university institutions should be considering now, when planning for the future under COVID-19. Although the contextual focus of this paper is Canada, the content is likely applicable to other places where the COVID-19 epidemic curve is in its initial rising stage, and where universities are predominantly publicly funded institutions.

Publication Type

Journal article.

<132>

Accession Number

20203425075

Author

Sherchan, S. P.; Shahin, S.; Ward, L. M.; Tandukar, S.; Aw, T. G.; Schmitz, B.; Ahmed, W.; Kitajima, M.

Title

First detection of SARS-CoV-2 RNA in wastewater in North America: a study in Louisiana, USA.

Source

Science of the Total Environment; 2020. 743.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

We investigated the presence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) RNA in wastewater samples in southern Louisiana, USA. Untreated and treated wastewater samples were collected on five occasions over a four-month period from January to April 2020. The wastewater samples were concentrated via ultrafiltration (Method A), and an adsorption-elution method using electronegative membranes (Method B). SARS-CoV-2 RNA was detected in 2 out of 15 wastewater samples using two reverse transcription-quantitative polymerase chain reaction (RT-qPCR) assays (CDC N1 and N2). None of the secondary treated and final effluent samples tested positive for SARS-CoV-2 RNA. To our knowledge, this is the first study reporting the detection of SARS-CoV-2 RNA in wastewater in North America, including

the USA. However, concentration methods and RT-qPCR assays need to be refined and validated to increase the sensitivity of SARS-CoV-2 RNA detection in wastewater.

Publication Type

Journal article.

<133>

Accession Number

20203424891

Author

Eren, E.; Kilic, A. U.

Title

Current treatment options for COVID-19.

Source

Science & Healthcare; 2020. 22(3):5-11. 61 ref.

Publisher

Semey State Medical University

Location of Publisher

Semey

Country of Publication

Kazakhstan

Abstract

The current pandemic of Coronavirus Disease 2019 (COVID-19) caused about 350 000 deaths in world. Currently, there are no proven effective vaccines or therapeutic agents against the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). Current clinical management includes supportive treatment and infection prevention and control measures. Research and clinical data regarding suggest a potential list of repurposed drugs with appropriate pharmacological effects and therapeutic efficacies in treating COVID-19 patients. In this review, we will update and summarize the most common and plausible drugs for the treatment of COVID-19 patients. These drugs and therapeutic agents include antiviral agents (favipiravir, remdesivir, hydroxychloroquine-chloroquine, lopinavir/ritonavir) and immunomodulatory agents (tocilizumab, tnf alpha inhibitors, corticosteroids, mesenchymal stem cell), among others.

Publication Type

Journal article.

<134>

Accession Number

20203424605

Author

Jribi, S.; Ben Ismail, H.; Doggui, D.; Debbabi, H.

Title

COVID-19 virus outbreak lockdown: what impacts on household food wastage?

Source

Environment, Development and Sustainability; 2020. 22(5):3939-3955. 49 ref.

Publisher

Springer

Location of Publisher

Dordrecht

Country of Publication

Netherlands

Abstract

The 2019-2020 coronavirus disease (COVID-19) is a public health issue. Lockdown is among options suggested to reduce spread of the virus. This study aimed to determining the impact of COVID-19 lockdown on Tunisian consumer awareness, attitudes and behaviors related to food wastage. An online survey was conducted during the first 2 weeks of COVID-19 lockdown. The survey collected information on demographic data, awareness and attitudes toward food waste, food purchase behavior and household food expenditure estimation; extent of household food waste; willingness and information needs to reduce food waste. This study included 284 respondents. About 89% of respondents claimed to be aware of food waste, and the COVID-19 lockdown would impact for 93% of respondents, their waste levels, and for 80%, their grocery shopping habits. Interestingly, the COVID-19 lockdown improved food shopping performances and pushed toward a positive behavioral change regarding food wastage: 85% respondents declared nothing of what they bought would be discarded, and most of the respondents have set up a strategy of saving, storing and eating leftovers. The most cited reasons given for discarding food were overcooking, inappropriate storage and overbuying. Consumers' changes in food waste prevention might be probably driven more by the socioeconomical context of the COVID-19 lockdown (i.e. food availability, restricted movements, loss of income), than by a pro-environmental concern. Finally, our study pointed out the consumers' needs of information for taking further action. In conclusion, our study can constitute a basis to further promote household food waste prevention behavior, outlasting the COVID-19 crisis.

Publication Type

Journal article.

<135>

Accession Number

  20203424376

Author

  Liu JingTao; Huang JiaQuan; Xiang DanDan

Title

  Large SARS-CoV-2 outbreak caused by asymptomatic traveler, China.

Source

  Emerging Infectious Diseases; 2020. 26(9):2260-2263. 10 ref.

Publisher

  National Center for Infectious Diseases, Centers for Disease Control and Prevention

Location of Publisher

  Atlanta

Country of Publication

  USA

Abstract

  An asymptomatic person infected with severe acute respiratory syndrome coronavirus 2 returned to Heilongjiang Province, China, after international travel. The traveler's neighbor became infected and generated a cluster of >71 cases, including cases in 2 hospitals. Genome sequences of the virus were distinct from viral genomes previously circulating in China.

Publication Type

  Journal article.

<136>

Accession Number

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20203424214

Author

Bostan, S.; Erdem, R.; Ozturk, Y. E.; Kilic, T.; Yilmaz, A.

Title

The effect of COVID-19 pandemic on the Turkish society.

Source

Electronic Journal of General Medicine; 2020. 17(6). 31 ref.

Publisher

Modestrum LTD, UK

Location of Publisher

London

Country of Publication

UK

Abstract

Pandemics leave significant marks on the memories of societies with their permanent impacts. Going beyond a cause of disease or death, they can have consequences in many aspects, psychological, social and economic ones being in the first place. The Covid-19 outbreak, which first emerged in China and has spread to the whole world as of the first months of 2020, has the potential to constitute a breaking the course of history, as well. Turkey is located on the transit point between Asia and Europe with its geographical position, and thus, received its share from the outbreak of Covid-19, which spreads through social contact. The first official case was recorded on 11 March 2020, and then the virus spread rapidly. This study aims to assess the attitude of the public towards Covid-19 at times when the impact of the disease reached maximum. To this end, data were collected from 1586 people with different socio-demographic features through Covid-19 Pandemic Community Scale. The impact of the pandemic on the society was measured in three dimensions as Sensitivity to Pandemic, Protection against Pandemic and Social Trust. The research results showed that the people had high levels of sensitivity to the pandemic, exerted the maximum effort for protection and social trust was above the average although it fell behind the other dimensions. As a consequence, it can be concluded that Covid-19 has had a significant impact on the Turkish people.

Publication Type

Journal article.

<137>

Accession Number

20203424201

Author

  Gallegos, M.; Cervigni, M.; Consoli, A. J.; Caycho-Rodriguez, T.; Polanco, F. A.; Martino, P.; Castro Pecanha, V. de; Videla, C. B.; Polanco-Carrasco Roberto; Cusinato, A. M.

Title

  COVID-19 in Latin America: a bibliometric analysis of scientific publications in health.

Source

  Electronic Journal of General Medicine; 2020. 17(6). 50 ref.

Publisher

  Modestrum LTD, UK

Location of Publisher

  London

Country of Publication

  UK

Abstract

  The coronavirus disease (COVID-19) has become a global health crisis. The scientific community has responded with a sizable level of research and publications, many of which are beginning to be identified and analyzed in systematic reviews of the literature and bibliometric studies. No readily identifiable, comparable study focused on Latin American scientific literature has been undertaken thus far. Therefore, this article analyzes such literature, focused on COVID-19, and one that has been published in the scientific journals of the region. A search with the keyword "COVID-19" in the Scientific Electronic Library Online (SciELO) database resulted in the identification of 261 documents. Following PRISMA guidelines, the total number was reduced to 117 for the purpose of the bibliometric analysis (i.e., elimination of preprint duplicates). Such analysis resulted in the following findings: 69 publications were editorial or individual commentaries, and 48 were original articles. The male authors totaled 280, contrasted with 169 female authors. Two Brazilian journals led in the number of publications: Cadernos de Saude Publica and Clinics. Even though the Latin American scientific productivity regarding COVID-19 is not well represented in the different databases of the region, it is expected that these scientific publications will achieve increased visibility in the coming months. The article emphasizes the importance of systematic and bibliographic reviews of the scientific literature in Latin America in order to evaluate the public health achievements of the region.

Publication Type

  Journal article.

<138>

Accession Number

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134

20203424092

Author

Lian XinBo; Huang JianPing; Huang RuJin; Liu ChuWei; Wang LiNa; Zhang TingHan

Title

Impact of city lockdown on the air quality of COVID-19-hit of Wuhan city.

Source

Science of the Total Environment; 2020. 742. 43 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

A series of strict lockdown measures were implemented in the areas of China worst affected by coronavirus disease 19, including Wuhan, to prevent the disease spreading. The lockdown had a substantial environmental impact, because traffic pollution and industrial emissions are important factors affecting air quality and public health in the region. After the lockdown, the average monthly air quality index (AQI) in Wuhan was 59.7, which is 33.9% lower than that before the lockdown (January 23, 2020) and 47.5% lower than that during the corresponding period (113.6) from 2015 to 2019. Compared with the conditions before the lockdown, fine particulate matter (PM2.5) decreased by 36.9% and remained the main pollutant. Nitrogen dioxide (NO2) showed the largest decrease of approximately 53.3%, and ozone (O3) increased by 116.6%. The proportions of fixed-source emissions and transported external-source emissions in this area increased. After the lockdown, O3 pollution was highly negatively correlated with the NO2 concentration, and the radiation increase caused by the PM2.5 reduction was not the main reason for the increase in O3. This indicates that the generation of secondary pollutants is influenced by multiple factors and is not only governed by emission reduction.

Publication Type

Journal article.

<139>

Accession Number

20203424084

Author

Hu XiaoWen; Xing YuHan; Ni Wei; Zhang Feng; Lu SheYu; Wang ZhaoGuo; Gao RuQin; Jiang FaChun

Title

Environmental contamination by SARS-CoV-2 of an imported case during incubation period.

Source

Science of the Total Environment; 2020. 742. 12 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

We collected environmental surface samples prior to and after disinfection of a quarantine room to evaluate the stability of SARS-CoV-2 during the incubation period of an imported case traveling to Qingdao, China. Overall, 11 of 23 (47.8%) of the first batch of environmental surface samples (within 4 h after case confirmation) were tested positive for SARS-CoV-2. Whereas only 2 of 23 (8.7%) of the second batch of environmental samples (after first disinfection) were tested positive for SARS-CoV-2. The majority of samples from the bedroom (70%) were positive for SARS-CoV-2, followed by 50% of samples from the bathroom and that of 33% from the corridor. The inner walls of toilet bowl and sewer inlet were the most contaminated sites with the highest viral loads. SARS-CoV-2 was widely distributed on object surfaces in a quarantine room of a later diagnosed COVID-19 case during the incubation period. Proper disinfection is crucial to minimize community transmission of this highly contagious virus.

Publication Type

Journal article.

<140>

Accession Number

20203424082

Author

Patricio Silva, A. L.; Prata, J. C.; Walker, T. R.; Campos, D.; Duarte, A. C.; Soares, A. M. V. M.; Barcelo, D.; Rocha-Santos, T.

Title

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136

Rethinking and optimising plastic waste management under COVID-19 pandemic: policy solutions based on redesign and reduction of single-use plastics and personal protective equipment.

Source

Science of the Total Environment; 2020. 742. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Plastics have been on top of the political agenda in Europe and across the world to reduce plastic leakage and pollution. However, the COVID-19 pandemic has severely disrupted plastic reduction policies at the regional and national levels and induced significant changes in plastic waste management with potential for negative impacts in the environment and human health. This paper provides an overview of plastic policies and discusses the readjustments of these policies during the COVID-19 pandemic along with their potential environmental implications. The sudden increase in plastic waste and composition due to the COVID-19 pandemic underlines the crucial need to reinforce plastic reduction policies (and to implement them into action without delays), to scale up in innovation for sustainable and green plastics solutions, and to develop dynamic and responsive waste management systems immediately. Policy recommendations and future research directions are discussed.

Publication Type

Journal article.

<141>

Accession Number

20203424071

Author

Shefali Arora; Bhaukhandi, K. D.; Mishra, P. K.

Title

Coronavirus lockdown helped the environment to bounce back.

Source

Science of the Total Environment; 2020. 742. many ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  As the transmission of novel corona virus (COVID-19) increases rapidly, the whole world adopted the curfew/lockdown activity with restriction of human mobility. The imposition of quarantine stopped all the commercial activity that greatly affects the various important environmental parameters which directly connected to human health. As all the types of social, economic, industrial and urbanization activity suddenly shut off, nature takes the advantages and showed improvement in the quality of air, cleaner rivers, less noise pollution, undisturbed and calm wildlife. This research aims to discuss the COVID-19 effect on the global environment. The outcome of this research says that "Although coronavirus vaccine is not available coronavirus itself is earth's vaccine and us humans are the virus".

Publication Type

  Journal article.

<142>

Accession Number

  20203424064

Author

  Zangari, S.; Hill, D. T.; Charette, A. T.; Mirowsky, J. E.

Title

  Air quality changes in New York city during the COVID-19 pandemic.

Source

  Science of the Total Environment; 2020. 742. 45 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

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UK

Abstract

In December 2019, a new, severe coronavirus (COVID-19) appeared in Wuhan, China. Shortly after, the first COVID-19 case was confirmed in the United States. The emergence of this virus led many United States governors to enact executive orders in an effort to limit the person-to-person spread of the virus. One state that utilized such measures was New York, which contains New York City (NYC), the most populous city in the United States. Many reports have shown that due to the government-backed shutdowns, the air quality in major global cities improved. However, there has been only limited work on whether this same trend is seen throughout the United States, specifically within the densely populated NYC area. Thus, the focus of this study was to examine whether changes in air quality were observed in NYC resulting from New York State's COVID-19-associated shutdown measures. To do this, daily concentrations of fine particulate matter (PM2.5) and nitrogen dioxide (NO2) were obtained from 15 central monitoring stations throughout the five NYC boroughs for the first 17 weeks (January through May) of 2015-2020. Decreases in PM2.5 (36%) and NO2 (51%) concentrations were observed shortly after the shutdown took place; however, using a linear time lag model, when changes in these pollutant concentrations were compared to those measured during the same span of time in 2015-2019, no significant difference between the years was found. Therefore, we highlight the importance of considering temporal variability and long-term trends of pollutant concentrations when analyzing for short-term differences in air pollutant concentrations related to the COVID-19 shutdowns.

Publication Type

Journal article.

<143>

Accession Number

20203424036

Author

Aldaco, R.; Hoehn, D.; Laso, J.; Margallo, M.; Ruiz-Salmon, J.; Cristobal, J.; Kahhat, R.; Villanueva-Rey, P.; Bala, A.; Batlle-Bayer, L.; Fullana-i-Palmer, P.; Irabien, A.; Vazquez-Rowe, I.

Title

Food waste management during the COVID-19 outbreak: a holistic climate, economic and nutritional approach.

Source

Science of the Total Environment; 2020. 742. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Improving the food supply chain efficiency has been identified as an essential means to enhance food security, while reducing pressure on natural resources. Adequate food loss and waste (FLW) management has been proposed as an approach to meet these objectives. The main hypothesis of this study is to consider that the "strong fluctuations and short-term changes" on eating habits may have major consequences on potential FLW generation and management, as well as on GHG emissions, all taking into account the nutritional and the economic cost. Due to the exceptional lockdown measures imposed by the Spanish government, as a consequence of the emerging coronavirus disease, COVID-19, food production and consumption systems have undergone significant changes, which must be properly studied in order to propose strategies from the lessons learned. Taking Spain as a case study, the methodological approach included a deep analysis of the inputs and outputs of the Spanish food basket, the supply chain by means of a Material Flow Analysis, as well as an economic and comprehensive nutritional assessment, all under a life cycle thinking approach. The results reveal that during the first weeks of the COVID-19 lockdown, there was no significant adjustment in overall FLW generation, but a partial reallocation from extra-domestic consumption to households occurred (12% increase in household FLW). Moreover, the economic impact (+11%), GHG emissions (+10%), and the nutritional content (-8%) complete the multivariable impact profile that the COVID-19 outbreak had on FLW generation and management. Accordingly, this study once again highlights that measures aimed at reducing FLW, particularly in the household sector, are critical to make better use of food surpluses and FLW prevention and control, allowing us to confront future unforeseen scenarios.

Publication Type

Journal article.

<144>

Accession Number

20203424033

Author

Hudda, N.; Simon, M. C.; Patton, A. P.; Durant, J. L.

Title

Reductions in traffic-related black carbon and ultrafine particle number concentrations in an urban neighborhood during the COVID-19 pandemic.

Source

Science of the Total Environment; 2020. 742. 31 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

We investigated changes in traffic-related air pollutant concentrations in an urban area during the COVID-19 pandemic. The study was conducted in a mixed commercial-residential neighborhood in Somerville (MA, USA), where traffic is the dominant source of air pollution. Measurements were made between March 27 and May 14, 2020, coinciding with a dramatic reduction in traffic (71% drop in car and 46% drop in truck traffic) due to business shutdowns and a statewide stay-at-home advisory. Indicators of fresh vehicular emissions (ultrafine particle number concentration [PNC] and black carbon [BC]) were measured with a mobile monitoring platform on an interstate highway and major and minor roadways. Our results show that depending on road class, median PNC and BC contributions from traffic were 60-68% and 22-46% lower, respectively, during the lockdown compared to pre-pandemic conditions, and corresponding reductions in total on-road concentrations were 45-69% and 22-56%, respectively. A higher BC: PNC concentration ratio was observed during the lockdown period likely indicative of the higher fraction of diesel vehicles in the fleet during the lockdown. Overall, the scale of reductions in ultrafine particle and BC concentrations was commensurate with the reductions in traffic. This natural experiment allowed us to quantify the direct impacts of reductions in traffic emissions on neighborhood-scale air quality, which are not captured by the regional regulatory-monitoring network. These results underscore the importance of measurements of appropriate proxies for traffic emissions at relevant spatial scales. Our results are useful for exposure analysis as well as city and regional planners evaluating mitigation strategies for traffic-related air pollution.

Publication Type

Journal article.

<145>

Accession Number

20203423845

Author

Curtis, V.; Dreibelbis, R.; Sidibe, M.; Cardosi, J.; Sara, J.; Bonell, C.; Mwambuli, K.; Moulik, S. G.; White, S.; Aunger, R.

Title

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How to set up government-led national hygiene communication campaigns to combat COVID-19: a strategic blueprint.

Source

BMJ Global Health; 2020. 5(8). 36 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

While large-scale changes in population behaviour are required to reduce the transmission of the severe acute respiratory syndrome coronavirus 2 virus, the emergency context is not conducive to the sort of careful communications planning that would normally be required to meet such a task. Rapid strategic communications planning in a pandemic by governments is, however, possible and necessary. Steps include setting up a dedicated communications task force, mobilising partners and resources, developing a creative brief and theory of change and overseeing the creation, testing, roll out and revision of content. In this short guide, we argue that a minimum of strategic planning can be undertaken rapidly, and that good use can be made of simple principles of behaviour change, even during pandemics. Our aim here is to provide a blueprint that governments and their partners, especially in low-income settings, can follow to design, coordinate and resource national communications efforts to combat the COVID-19 pandemic immediately and for the longer term.

Publication Type

Journal article.

<146>

Accession Number

20203423840

Author

Meyer, D.; Bishai, D.; Ravi, S. J.; Rashid, H.; Mahmood, S. S.; Toner, E.; Nuzzo, J. B.

Title

A checklist to improve health system resilience to infectious disease outbreaks and natural hazards.

Source

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Abstract

  Recent infectious disease outbreaks, including the ongoing global COVID-19 pandemic and Ebola in the Democratic Republic of the Congo, have demonstrated the critical importance of resilient health systems in safeguarding global health security. Importantly, the human, economic and political tolls of these crises are being amplified by health systems' inabilities to respond quickly and effectively. Improving resilience within health systems can build on pre-existing strengths to enhance the readiness of health system actors to respond to crises, while also maintaining core functions. Using data gathered from a scoping literature review, interviews with key informants and from stakeholders who attended a workshop held in Dhaka, Bangladesh, we developed a Health System Resilience Checklist ('the checklist'). The aim of the checklist is to measure the specific capacities, capabilities and processes that health systems need in order to ensure resilience in the face of both infectious disease outbreaks and natural hazards. The checklist is intended to be adapted and used in a broad set of countries as a component of ongoing processes to ensure that health actors, institutions and populations can mount an effective response to infectious disease outbreaks and natural hazards while also maintaining core healthcare services. The checklist is an important first step in improving health system resilience to these threats, but additional research and resources will be necessary to further refine and prioritise the checklist items and to pilot the checklist with the frontline health facilities that would be using it. This will help ensure its feasibility and durability for the long-term within the health systems strengthening and health security fields.

Publication Type

  Journal article.

<147>

Accession Number

  20203423830

Author

  Ahmed, S. A. K. S.; Ajisola, M.; Kehkashan Azeem; Bakibinga, P.; Chen YenFu; Choudhury, N. N.; Fayehun, O.; Griffiths, F.; Harris, B.; Kibe, P.; Lilford, R. J.; Omigbodun, A.; Narjis Rizvi; Sartori, J.; Smith, S.; Watson, S. I.; Wilson, R.; Yeboah, G.; Aujla, N.; Azam, S. I.; Diggle, P. J.; Gill, P.; Romaina Iqbal; Kabaria, C.; Kisia, L.; Kyobutungi, C.; Madan, J. J.; Mberu, B.; Mohamed, S. F.; Ahsana Nazish; Odubanjo, O.; Osuh, M. E.; Owoaje,

E.; Oyebode, O.; Albuquerque, J. P. de; Omar Rahman; Komal Tabani; Taiwo, O. J.; Tregonning, G.; Uthman, O. A.; Rita Yusuf

Title

Impact of the societal response to COVID-19 on access to healthcare for non-COVID-19 health issues in slum communities of Bangladesh, Kenya, Nigeria and Pakistan: results of pre-COVID and COVID-19 lockdown stakeholder engagements.

Source

BMJ Global Health; 2020. 5(8). 59 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Introduction: With COVID-19, there is urgency for policymakers to understand and respond to the health needs of slum communities. Lockdowns for pandemic control have health, social and economic consequences. We consider access to healthcare before and during COVID-19 with those working and living in slum communities. Methods: In seven slums in Bangladesh, Kenya, Nigeria and Pakistan, we explored stakeholder perspectives and experiences of healthcare access for non-COVID-19 conditions in two periods: pre-COVID-19 and during COVID-19 lockdowns. Results: Between March 2018 and May 2020, we engaged with 860 community leaders, residents, health workers and local authority representatives. Perceived common illnesses in all sites included respiratory, gastric, waterborne and mosquitoborne illnesses and hypertension. Pre-COVID, stakeholders described various preventive, diagnostic and treatment services, including well-used antenatal and immunisation programmes and some screening for hypertension, tuberculosis, HIV and vectorborne disease. In all sites, pharmacists and patent medicine vendors were key providers of treatment and advice for minor illnesses. Mental health services and those addressing gender-based violence were perceived to be limited or unavailable. With COVID-19, a reduction in access to healthcare services was reported in all sites, including preventive services. Cost of healthcare increased while household income reduced. Residents had difficulty reaching healthcare facilities. Fear of being diagnosed with COVID-19 discouraged healthcare seeking. Alleviators included provision of healthcare by phone, pharmacists/drug vendors extending credit and residents receiving philanthropic or government support; these were inconsistent and inadequate. Conclusion: Slum residents' ability to seek healthcare for non-COVID-19 conditions has been reduced during lockdowns. To encourage healthcare seeking, clear communication is needed about what is available and whether infection control is in place. Policymakers need to ensure that costs do not escalate and unfairly disadvantage slum communities. Remote consulting to reduce face-to-face contact and provision of mental health and gender-based violence services should be considered.

Publication Type

Journal article.

<148>

Accession Number

  20203423807

Author

  Sopeyin, A.; Hornsey, E.; Okwor, T.; Yewande Alimi; Tajudeen Raji; Abdulaziz Mohammed; Hiwot Moges; Onwuekwe, E. V. C.; Minja, F. J.; Gon, G.; Ogbuagu, O.; Ogunsola, F.; Paintsil, E.

Title

  Transmission risk of respiratory viruses in natural and mechanical ventilation environments: implications for SARS-CoV-2 transmission in Africa.

Source

  BMJ Global Health; 2020. 5(8). 50 ref.

Publisher

  BMJ Publishing Group

Location of Publisher

  London

Country of Publication

  UK

Abstract

  Respiratory viruses can be transmitted through contact, droplet and airborne routes. Viruses that are not naturally airborne may be aerosolised during medical procedures and transmitted to healthcare workers. Most resource-limited healthcare settings lack complex air handling systems to filter air and create pressure gradients that are necessary for minimising viral transmission. This review explores the association between ventilation and the transmission of respiratory viruses like SAR-CoV-2. When used appropriately, both natural and mechanical ventilation can decrease the concentration of viral aerosols, thereby reducing transmission. Although mechanical ventilation systems are more efficient, installation and maintenance costs limit their use in resource-limited settings, whereas the prevailing climate conditions make natural ventilation less desirable. Cost-effective hybrid systems of natural and mechanical ventilation may overcome these limitations.

Publication Type

  Journal article.

<149>

Accession Number

20203423633

Author

Wu YanTing; Liu Jun; Xu JingJing; Chen YanFen; Yang Wen; Chen Yang; Li Cheng; Wang Yu; Liu Han; Zhang Chen; Jiang Ling; Qian ZhaoXia; Kawai, A.; Mol, B. W.; Dennis, C. L.; Xiong GuoPing; Cheng BiHeng; Yang Jing; Huang HeFeng

Title

Neonatal outcome in 29 pregnant women with COVID-19: a retrospective study in Wuhan, China.

Source

PLoS Medicine; 2020. 17(7). 40 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Background: As of June 1, 2020, coronavirus disease 2019 (COVID-19) has caused more than 6,000,000 infected persons and 360,000 deaths globally. Previous studies revealed pregnant women with COVID-19 had similar clinical manifestations to nonpregnant women. However, little is known about the outcome of neonates born to infected women. Methods and findings: In this retrospective study, we studied 29 pregnant women with COVID-19 infection delivered in 2 designated general hospitals in Wuhan, China between January 30 and March 10, 2020, and 30 neonates (1 set of twins). Maternal demographic characteristics, delivery course, symptoms, and laboratory tests from hospital records were extracted. Neonates were hospitalized if they had symptoms (5 cases) or their guardians agreed to a hospitalized quarantine (13 cases), whereas symptom-free neonates also could be discharged after birth and followed up through telephone (12 cases). For hospitalized neonates, laboratory test results and chest X-ray or computed tomography (CT) were extracted from hospital records. The presence of antibody of SARS-CoV-2 was assessed in the serum of 4 neonates. Among 29 pregnant COVID-19-infected women (13 confirmed and 16 clinical diagnosed), the majority had higher education (56.6%), half were employed (51.7%), and their mean age was 29 years. Fourteen women experienced mild symptoms including fever (8), cough (9), shortness of breath (3), diarrhea (2), vomiting (1), and 15 were symptom-free. Eleven of 29 women had pregnancy complications, and 27 elected to have a cesarean section delivery. Of 30 neonates, 18 were admitted to Wuhan Children's Hospital for quarantine and care, whereas the other 12 neonates discharged after birth without any symptoms and had normal follow-up. Five hospitalized neonates were diagnosed as COVID-19 infection (2 confirmed and 3 suspected). In addition, 12 of 13 other hospitalized neonates presented with radiological features for pneumonia through X-ray or CT screening, 1 with occasional cough and the others without associated symptoms. SARS-CoV-2 specific serum immunoglobulin M (IgM) and immunoglobulin G (IgG) were measured in 4 neonates and 2 were positive. The limited sample size limited statistical comparison between groups. Conclusions: In this study, we observed COVID-19 or radiological features of pneumonia in some, but not all, neonates born to women with COVID-19 infection. These

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findings suggest that intrauterine or intrapartum transmission is possible and warrants clinical caution and further investigation.

Publication Type

Journal article.

<150>

Accession Number

20203423622

Author

Teslya, A.; Pham, T. M.; Godijk, N. G.; Kretzschmar, M. E.; Bootsma, M. C. J.; Rozhnova, G.

Title

Impact of self-imposed prevention measures and short-term government-imposed social distancing on mitigating and delaying a COVID-19 epidemic: a modelling study.

Source

PLoS Medicine; 2020. 17(7). 45 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Background: The coronavirus disease (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has spread to nearly every country in the world since it first emerged in China in December 2019. Many countries have implemented social distancing as a measure to "flatten the curve" of the ongoing epidemics. Evaluation of the impact of government-imposed social distancing and of other measures to control further spread of COVID-19 is urgent, especially because of the large societal and economic impact of the former. The aim of this study was to compare the individual and combined effectiveness of self-imposed prevention measures and of short-term government-imposed social distancing in mitigating, delaying, or preventing a COVID-19 epidemic. Methods and findings: We developed a deterministic compartmental transmission model of SARS-CoV-2 in a population stratified by disease status (susceptible, exposed, infectious with mild or severe disease, diagnosed, and recovered) and disease awareness status (aware and unaware) due to the spread of COVID-19. Self-imposed measures were assumed to be taken by disease-aware individuals and included handwashing, mask-wearing, and

social distancing. Government-imposed social distancing reduced the contact rate of individuals irrespective of their disease or awareness status. The model was parameterized using current best estimates of key epidemiological parameters from COVID-19 clinical studies. The model outcomes included the peak number of diagnoses, attack rate, and time until the peak number of diagnoses. For fast awareness spread in the population, self-imposed measures can significantly reduce the attack rate and diminish and postpone the peak number of diagnoses. We estimate that a large epidemic can be prevented if the efficacy of these measures exceeds 50%. For slow awareness spread, self-imposed measures reduce the peak number of diagnoses and attack rate but do not affect the timing of the peak. Early implementation of short-term government-imposed social distancing alone is estimated to delay (by at most 7 months for a 3-month intervention) but not to reduce the peak. The delay can be even longer and the height of the peak can be additionally reduced if this intervention is combined with self-imposed measures that are continued after government-imposed social distancing has been lifted. Our analyses are limited in that they do not account for stochasticity, demographics, heterogeneities in contact patterns or mixing, spatial effects, imperfect isolation of individuals with severe disease, and reinfection with COVID-19. Conclusions: Our results suggest that information dissemination about COVID-19, which causes individual adoption of handwashing, mask-wearing, and social distancing, can be an effective strategy to mitigate and delay the epidemic. Early initiated short-term government-imposed social distancing can buy time for healthcare systems to prepare for an increasing COVID-19 burden. We stress the importance of disease awareness in controlling the ongoing epidemic and recommend that, in addition to policies on social distancing, governments and public health institutions mobilize people to adopt self-imposed measures with proven efficacy in order to successfully tackle COVID-19.

Publication Type

  Journal article.

<151>

Accession Number

  20203422635

Author

  Brunjes, R.; Hofmann, T.

Title

  Anthropogenic gadolinium in freshwater and drinking water systems.

Source

  Water Research (Oxford); 2020. 182. many ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

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Country of Publication

  UK

Abstract

  The increasing use of gadolinium-based contrast agents (GBCAs) for magnetic resonance imaging is leading to widespread contamination of freshwater and drinking water systems. Contrary to previous assumptions that GBCAs are stable throughout the water cycle, they can degrade. The stability of GBCAs depends largely on their organic ligands, but also on the physicochemical conditions. There is specific concern regarding UV end-of-pipe water treatments, which may degrade GBCAs. Degradation products in drinking water supplies can increase the risk of adverse health effects. This is of particular relevance where the raw water for drinking water production has a higher proportion of recycled wastewater. GBCAs concentrations in aquatic systems, often referred to as anthropogenic gadolinium, are determined using a variety of calculation methods. Where anthropogenic gadolinium concentrations are low, the inconsistent use of these methods results in high discrepancies and high levels of uncertainty. The current COVID-19 crisis will, in the short-term, drastically decrease the input of GBCAs to freshwater systems. Temporal variations in anthropogenic gadolinium concentrations in river water can be used to better understand river-aquifer interactions and groundwater flow velocities. Collecting urine from all patients following MRI examinations could be a way forward to halt the generally increasing concentrations of Gd in drinking water systems and recover this technologically critical element.

Publication Type

  Journal article.

<152>

Accession Number

  20203422071

Author

  Anastasiou, I. A.; Eleftheriadou, I.; Tentolouris, A.; Tsilingiris, D.; Tentolouris, N.

Title

  In vitro data of current therapies for SARS-CoV-2.

Source

  Current Medicinal Chemistry; 2020. 27(27):4542-4548.

Publisher

  Bentham Science Publishers

Location of Publisher

  Sharjah

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149

Country of Publication

United Arab Emirates

Abstract

Background: In December 2019, a new coronavirus, named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), emerged from China, causing pneumonia outbreaks first in the Wuhan region and then spread worldwide. Due to a lack of efficient and specific treatments and the need to contain the epidemic, drug repurposing appears to be the most efficient tool to find a therapeutic solution. Objectives: The aim of this study was to summarize in vitro data of current agents used for the management of SARS-CoV-2 all over the world. Methods: A literature search of articles from January 2000 until April 2020 was performed using MEDLINE, EMBASE and the Cochrane Library to assess in vitro data of current or putative therapies for SARS-CoV-2. Results: Although in vitro studies are scarce, data regarding chloroquine, hydroxychloroquine, remdesivir, nitazoxanide, teicoplanin, ivermectin, lopinavir, homoharringtonine, and emetine seem promising. Conclusion: Scientists all over the world should work together and increase their efforts in order to find feasible and efficient solutions against this new global viral threat.

Publication Type

Journal article.

<153>

Accession Number

20203422070

Author

Costanzo, M.; Giglio, M. A. R. de; Roviello, G. N.

Title

SARS-CoV-2: recent reports on antiviral therapies based on lopinavir/ritonavir, darunavir/umifenovir, hydroxychloroquine, remdesivir, favipiravir and other drugs for the treatment of the new coronavirus.

Source

Current Medicinal Chemistry; 2020. 27(27):4536-4541. 39 ref.

Publisher

Bentham Science Publishers

Location of Publisher

Sharjah

Country of Publication

United Arab Emirates

Abstract

  Here we report on the most recent updates on experimental drugs successfully employed in the treatment of the disease caused by SARS-CoV-2 coronavirus, also referred to as COVID-19 (COronaVIrus Disease-19). In particular, several cases of recovered patients have been reported after being treated with lopinavir/ritonavir [which is widely used to treat Human Immunodeficiency Virus (HIV) infection] in combination with the anti-flu drug oseltamivir. In addition, remdesivir, which has been previously administered to Ebola virus patients, has also proven effective in the U.S. against coronavirus, while antimalarial chloroquine and hydroxychloroquine, favipiravir and co-administered darunavir and umifenovir (in patient therapies) were also recently recorded as having anti-SARS-CoV-2 effects. Since the recoveries/deaths ratio in the last weeks significantly increased, especially in China, it is clear that the experimental antiviral therapy, together with the availability of intensive care unit beds in hospitals and rigorous government control measures, all play an important role in dealing with this virus. This also stresses the urgent need for the scientific community to devote its efforts to the development of other more specific antiviral strategies.

Publication Type

  Journal article.

<154>

Accession Number

  20203421219

Author

  Manish Munjal; Samaresh Das; Nilay Chatterjee; Setra, A. E.; Deepak Govil

Title

  Systemic involvement of novel coronavirus (COVID-19): a review of literature.

Source

  Indian Journal of Critical Care Medicine; 2020. 24(7):565-569. 20 ref.

Publisher

  Jaypee Brothers Medical Publishers Pvt. Ltd.

Location of Publisher

  New Delhi

Country of Publication

  India

Abstract

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COVID-19 outbreak has caused a pandemonium in modern world. As the virus has spread its tentacles across nations, territories, and continents, the civilized society has been compelled to face an unprecedented situation, never experienced before during peacetime. We are being introduced to an ever-growing new terminologies: "social distancing", "lockdown", "stay safe", "key workers", "self-quarantine", "work-from-home", and so on. Many countries across the globe have closed their borders, airlines have been grounded, movement of public transports has come to a grinding halt, and personal vehicular movements have been restricted or barred. In the past couple of months, we have witnessed mayhem in an unprecedented scale: social, economic, food security, education, business, travel, and freedom of movements are all casualties of this pandemic. Our experience about this virus and its epidemiology is limited, and mostly the treatment for symptomatic patients is supportive. However, it has been observed that COVID-19 not only attacks the respiratory system; rather it may involve other systems also from the beginning of infection or subsequent to respiratory infection. In this article, we attempt to describe the systemic involvement of COVID-19 based on the currently available experiences. This description is up to date as of now, but as more experiences are pouring from different corners of the world, almost every day, newer knowledge and information will crop up by the time this article is published.

Publication Type

Journal article.

<155>

Accession Number

20203421188

Author

Qi Meng; Zhou ShuangJiang; Guo ZhaoChang; Zhang LiGang; Min HongJie; Li XiaoMin; Chen JingXu

Title

The effect of social support on mental health in Chinese adolescents during the outbreak of COVID-19.

Source

Journal of Adolescent Health; 2020. 67(4):514-518. 43 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

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152

Purpose: The coronavirus disease 2019 (COVID-19) outbreak impacts physical and mental health. The purpose of this study was to explore the association between the levels of social support and mental health among Chinese adolescents during the outbreak. Methods: A total of 7,202 adolescents aged 14-18 years completed online survceys from March 8 to 15, 2020, in China. Researchers assessed the associations between depression symptoms (Patient Health Questionnaire-9), anxiety symptoms (Chinese version of the 7-item Generalized Anxiety Disorder scale), and social support (Social Support Rate Scale). Results: COVID-19 exposure was associated with a higher prevalence of depression symptoms (odds ratio [OR]=1.38, 95% confidence interval [CI]: 1.14-1.66) and anxiety symptoms (OR=1.26, 95% CI: 1.04-1.52). Only 24.6% of adolescents reported high levels of social support. Most adolescents (70%) reported medium levels of support, and 5.4% reported low support. Low support was associated with higher prevalence of depression (OR=4.24, 95% CI: 3.38-5.33) and anxiety symptoms (OR=3.18, 95% CI: 2.54-3.98), while controlling for gender, grade, living situation, and COVID-19 exposure; similarly, medium support was associated with higher prevalence of depression (OR=2.79, 95% CI: 2.48-3.15) and anxiety (OR=2.19, 95% CI: 1.94-2.48) symptoms. Conclusions: This study indicates there is a higher prevalence of mental health problems among adolescents with medium and low levels of social support in China during the outbreak of COVID-19.

Publication Type

Journal article.

<156>

Accession Number

20203421150

Author

Yao, Y.; Chen, W.; Wu, X.; Shen, L.; Fu, Y.; Yang, Q.; Yao, M.; Zhou, J.; Zhou, H.

Title

Clinical characteristics of COVID-19 patients in three consecutive generations of spread in Zhejiang, China.

Source

Clinical Microbiology and Infection; 2020. 26(10):1380-1385. 18 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: The aim was to determine the clinical characteristics of COVID-19 patients because the SARS-CoV-2 virus continues to circulate in the population. Methods: This is a retrospective, multicentre, cohort study. Adult COVID-19 cases from four hospitals in Zhejiang were enrolled and clustered into three groups based on epidemiological history. First-generation patients had a travel history to Hubei within 14 days before disease onset; second-generation patients had a contact history with first-generation patients; third-generation patients had a contact history with second-generation patients. Demographic, clinical characteristics, clinical outcomes and duration of viral shedding were analysed. Results: A total of 171 patients were enrolled, with 83, 44 and 44 patients in the first-, second-, and third-generation, respectively. Compared with the first and second generations, third-generation patients were older (61.3 vs. 48.3 and 44.0 years, $p < 0.001$) and had more coexisting conditions (56.8% vs. 36.1% and 27.3%, p 0.013). At 7 +or- 1 days from illness onset, third-generation patients had lower lymphocyte (0.6 vs. 0.8 and 0.8 x 109/L, p 0.007), higher C-reactive protein (29.7 vs. 17.1 and 13.8 mg/L, p 0.018) and D-dimer (1066 vs. 412.5 and 549 g/L, p 0.002) and more lesions involving the pulmonary lobes (lobes 5, 81.8% vs. 53.0% and 34.1%, $p < 0.001$). The proportions of third-generation patients developing severe illness (72.7% vs. 32.5% and 27.3%, $p < 0.001$), critical illness (38.6% vs. 10.8% and 6.8%, $p < 0.001$) and receiving endotracheal intubation (20.5% vs. 3.6% and 2.3%, p 0.002) were higher than in the other two groups. Discussion: Third-generation patients were older, had more underlying comorbidities and had a higher proportion of severe or critical illness than first- and second-generation patients.

Publication Type

Journal article.

<157>

Accession Number

20203421065

Author

Zuo PeiYuan; Tong Song; Yan Qi; Cheng Ling; Li YuanYuan; Song KaiXin; Chen YuTing; Dai Yue; Gao HongYu; Zhang CunTai

Title

Decreased prealbumin level is associated with increased risk for mortality in elderly hospitalized patients with COVID-19.

Source

Nutrition; 2020. 78. 19 ref.

Publisher

Elsevier

Location of Publisher

New York

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154

Country of Publication

USA

Abstract

Objectives: High-risk patients 65 y of age with coronavirus disease 2019 (COVID-19) tended to have lower serum prealbumin concentrations. The aim of this study was to investigate the association of prealbumin at baseline on COVID-19-related mortality in elderly patients (65 y of age). Methods: We non-selectively and consecutively collected participants from Tongji Hospital in Wuhan from January 17 to February 17, 2020. Univariate and multivariate logistic regression models were employed to evaluate the correlation between prealbumin and in-hospital outcomes (in-hospital mortality, admission to the intensive care unit [ICU], and mechanical ventilation) in elderly patients with COVID-19. Linear trend was performed by entering the median value of each category of prealbumin tertile as a continuous variable and was visually confirmed by using generalized additive models. Interaction and stratified analyses were conducted as well. Results: We included 446 elderly patients with COVID-19 in the final analyses. In-hospital mortality was 14.79%. Of the 446 patients, 15.47% were admitted to the ICU and 21.3% required mechanical ventilation. Compared with patients in the highest tertile, the prealbumin of patients in the lowest tertile had a 19.09-fold higher risk for death [odds ratio (OR), 20.09; 95% confidence interval (CI), 3.62-111.64; P = 0.0006], 25.39-fold higher risk for ICU admission (OR, 26.39; 95% CI, 4.04-172.39; P = 0.0006), and 1.8-fold higher risk for mechanical ventilation (OR, 2.8; 95% CI, 1.15-6.78; P = 0.0227) after adjustment for potential confounders. There was a linear trend correlation between serum prealbumin concentration and risk for in-hospital mortality, ICU admission, and mechanical ventilation in elderly patients with COVID-19 infection. Conclusion: Prealbumin is an independent risk factor of in-hospital mortality for elderly patients with COVID-19. Assessment of prealbumin may help identify high-risk individuals 65 y of age with COVID-19.

Publication Type

Journal article.

<158>

Accession Number

20203421026

Author

Carteni, A.; Francesco, L. di; Martino, M.

Title

How mobility habits influenced the spread of the COVID-19 pandemic: results from the Italian case study.

Source

Science of the Total Environment; 2020. 741. 39 ref.

Publisher

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Location of Publisher

Oxford

Country of Publication

UK

Abstract

Starting from December 2019 the world has faced an unprecedented health crisis caused by the new Coronavirus (COVID-19) due to the SARS-CoV-2 pathogen. Within this topic, the aim of the paper was to quantify the effect of mobility habits in the spread of the Coronavirus in Italy through a multiple linear regression model. Estimation results showed that mobility habits represent one of the variables that explains the number of COVID-19 infections jointly with the number of tests/day and some environmental variables (i.e. PM pollution and temperature). Nevertheless, a proximity variable to the first outbreak was also significant, meaning that the areas close to the outbreak had a higher risk of contagion, especially in the initial stage of infection (time-decay phenomena). Furthermore, the number of daily new cases was related to the trips performed three weeks before. This threshold of 21 days could be considered as a sort of positivity detection time, meaning that the mobility restrictions quarantine commonly set at 14 days, defined only according to incubation-based epidemiological considerations, is underestimated (possible delays between contagion and detection) as a containment policy and may not always contribute to effectively slowing down the spread of virus worldwide. This result is original and, if confirmed in other studies, will lay the groundwork for more effective containment of COVID-19 in countries that are still in the health emergency, as well as for possible future returns of the virus.

Publication Type

Journal article.

<159>

Accession Number

20203420956

Author

Menut, L.; Bessagnet, B.; Siour, G.; Mailler, S.; Pennel, R.; Cholakian, A.

Title

Impact of lockdown measures to combat COVID-19 on air quality over Western Europe.

Source

Science of the Total Environment; 2020. 741. 44 ref.

Publisher

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Location of Publisher

Oxford

Country of Publication

UK

Abstract

Recent studies based on observations have shown the impact of lockdown measures taken in various European countries to contain the Covid-19 pandemic on air quality. However, these studies are often limited to compare situations without and with lockdown measures, which correspond to different time periods and then under different meteorological conditions. We propose a modelling study with the WRF-CHIMERE modelling suite for March 2020, an approach allowing to compare atmospheric composition with and without lockdown measures without the biases of meteorological conditions. This study shows that the lockdown effect on atmospheric composition, in particular through massive traffic reductions, has been important for several short-lived atmospheric trace species, with a large reduction in NO2 concentrations, a lower reduction in Particulate Matter (PM) concentrations and a mitigated effect on ozone concentrations due to non-linear chemical effects.

Publication Type

Journal article.

<160>

Accession Number

20203420924

Author

Baldasano, J. M.

Title

COVID-19 lockdown effects on air quality by NO2 in the cities of Barcelona and Madrid (Spain).

Source

Science of the Total Environment; 2020. 741. 38 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

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Abstract

   During the months of March and April 2020 we witnessed the largest-scale experiment in history in terms of air quality in cities. Any prediction of this experiment's results may be obvious to science, as it was totally expected, the air quality has improved substantially. Simply stated, it comes as no surprise. The lockdown has made it possible to quantify the limit of decrease in pollution in light of this drastic reduction in traffic, in Madrid and Barcelona showed a significant decrease of the order of 75%. In the case of Spain's two largest cities, the reductions of NO2 concentrations were 62% and 50%, respectively. Hourly measurements were obtained from 24 and 9 air quality stations from the monitoring networks during the month of March 2020. These results allow us to see the limits that can be achieved by implementing low emission zones (LEZ), as well as the amount of contamination that must be eliminated, which in the cases of Madrid and Barcelona, represent 55%. This value defines the levels of effort and scope of actions to be taken in order to ensure that both cities achieve a clean and healthy atmosphere in terms of NO2.

Publication Type

   Journal article.

<161>

Accession Number

   20203420359

Author

   Huang Jing; Liu XiaoYan; Wu ZhouPeng; Zhang Lin; Yang XingHai

Title

   Improving staff safety with checklists during novel coronavirus disease (COVID-19) pandemic: a quasi-experiment study in vascular surgical department.

Source

   Medicine (Baltimore); 2020. 99(32). 13 ref.

Publisher

   Lippincott Williams & Wilkins, Inc.

Location of Publisher

   Hagerstown

Country of Publication

   USA

Abstract

   Novel coronavirus disease (COVID-19) emerged in Wuhan in December 2019, has spread in many countries affected people globally. In response to the economic requirement of the nation and meet the

need of patient's, a momentous event was going back to work step by step as fighting against COVID-19. Safety in clinical work is of priority as elective surgery in the department of surgery progressing. We used checklists based on our experiences on COVID-19 control and reality of clinical work from February to March in the West China Hospital, involving events of screening patient, chaperonage, and healthcare workers. Checklist summarized the actual clinical nursing work and management practices, hope to provide a reference for the order of surgery during the epidemic prevention and control, and standardize the clinical nursing work of surgery during pandemic.

Publication Type

  Journal article.

<162>

Accession Number

  20203420326

Author

  Wang YaXi; Guo HongTao; Du XueWei; Song Wen; Lu Chang; Hao WenNv

Title

  Factors associated with post-traumatic stress disorder of nurses exposed to corona virus disease 2019 in China.

Source

  Medicine (Baltimore); 2020. 99(26). 39 ref.

Publisher

  Lippincott Williams & Wilkins, Inc.

Location of Publisher

  Hagerstown

Country of Publication

   USA

Abstract

  Quantitative studies using validated questionnaires on post-traumatic stress disorder (PTSD) of Nurses exposed to corona virus disease 2019 (COVID-19) in China are rare and the baseline PTSD must first be evaluated before prevention. This study aimed to investigate the factors potentially involved in the level of PTSD of Nurses exposed to COVID-19 in China. In this cross-sectional study, male and female Nurses (n = 202) exposed to COVID-19 from HuBei China were included in the final sample. The PTSD Checklist-Civilian (PCL-C) questionnaire and Simplified Coping Style Questionnaire (SCSQ) were used for evaluation. Multivariate stepwise linear regression analysis and spearman correlation test were performed to assess

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the association between various factors associated with PTSD. The incidence of PTSD in Nurses exposed to COVID-19 was 16.83%, the PCL-C score was 27.00 (21.00-34.00), and the highest score in the three dimensions was avoidance dimension 9.50 (7.00-13.25); multivariable stepwise linear regression analysis showed that job satisfaction and gender were independently associated with lower PCL-C scores (both P < .001); PCL-C scores were correlated with positive coping (r = -0.151, P = .032), negative coping (r = 0.154, P = .029). Nurses exposed to COVID-19 from HuBei China with job satisfaction, male and positive coping had low PCL-C scores which necessitate reducing the PTSD level by ways of improving job satisfaction, positive response, and strengthening the psychological counseling of female nurses in order to reduce the risk of psychological impairment.

Publication Type

  Journal article.

<163>

Accession Number

  20203420321

Author

  Tu ZhiHao; He JingWen; Zhou Na

Title

  Sleep quality and mood symptoms in conscripted frontline nurse in Wuhan, China during COVID-19 outbreak: a cross-sectional study.

Source

  Medicine (Baltimore); 2020. 99(26). 28 ref.

Publisher

  Lippincott Williams & Wilkins, Inc.

Location of Publisher

  Hagerstown

Country of Publication

  USA

Abstract

  The aim of this study was to investigate the prevalence of sleep problems, depression and anxiety symptoms among conscripted frontline nurses fighting coronavirus disease 2019 (COVID-19) in Wuhan. This study was a cross-sectional study conducted with 100 frontline nurses. Sleep quality, depression, and anxiety symptoms were measured using the Pittsburgh sleep quality index (PSQI), the Generalized Anxiety Disorder 7-Item Scale (GAD-7) and the Patient Health Questionnaire-9 (PHQ-9), respectively. Mean sleep

duration was 5.71 hours (SD = 1.09) and mean sleep latency was 33.49 minutes (SD = 28.87). A total of 76%, 81%, 45%, and 19% reported difficulty initiating sleep (DIS), difficulty maintaining sleep (DMS) or early morning awakening (EMA), nightmares and using hypnotics respectively. Among 100 participants in this study, 60 (60%) had poor sleep quality, 46 (46%) suffered depression symptoms and 40 (40%) reported anxiety symptoms. Sleep quality (OR = 3.16, 95% CI: 1.17-8.52) and anxiety symptoms (OR = 8.07, 95% CI: 2.92-22.33) were significantly associated with depression symptoms. Depression symptoms (OR = 7.92, 95% CI: 2.89-21.73) were related to anxiety symptoms. Similarly, depression symptoms (OR = 3.24, 95% CI: 1.19-8.79) were associated with poor sleep quality. Sleep disturbance, depression, and anxiety symptoms are very common among frontline nurses who treating patients with COVID-19 in Wuhan, China. Comprehensive measures that involve psychosocial and personal behaviors should be implemented to improve sleep quality and prevent depression and anxiety symptoms.

Publication Type

Journal article.

<164>

Accession Number

20203420268

Author

Zeenny, R. M.; Ramia, E.; Akiki, Y.; Hallit, S.; Salameh, P.

Title

Assessing knowledge, attitude, practice, and preparedness of hospital pharmacists in Lebanon towards COVID-19 pandemic: a cross-sectional study.

Source

Journal of Pharmaceutical Policy and Practice; 2020. 13(54):(18 September 2020). 55 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: During the COVID-19 pandemic, the Lebanese government has taken the proactive anticipatory measure to minimize the infection rates. Despite the pivotal role of the pharmacists working in hospital settings, hospital pharmacists have not been engaged in the emergency preparedness for

hospitals. The primary objective of this survey is to assess the knowledge, attitude, and practice of hospital pharmacists in Lebanon towards COVID-19 pandemic and explore the level of health emergency preparedness of Lebanese hospitals in response to this outbreak. Methods: A standardized English-based, anonymous and online questionnaire was diffused via social media platforms to all Lebanese hospital pharmacists. The questionnaire consisted of 78 questions related to sociodemographic characteristics, knowledge-based, attitude-based, practice questions, and pandemic preparedness. Descriptive statistical analysis was used to summarize data. Results: A total of 81 questionnaires were completed; the participants were able to know > 90% of the knowledgebased questions regarding COVID-19. Most of the respondents were concerned about getting infected and their families due to their professional exposure. Similarly, around 67% were following the safety recommendations. Most of the participants agreed that they are facing shortages, rising prices, and delays in supply of masks and sanitizers. In terms of COVID-19 readiness, about 50% of hospitals have taken practical steps. Conclusions: Our findings revealed an appropriate level of knowledge and good practice towards COVID-19, among the respondents from Lebanese hospitals. National organizations may benefit in utilizing the expertise of the hospital pharmacists to be able to minimize/avoid future waves of COVID-19 if it emerges.

Publication Type

Journal article.

<165>

Accession Number

20203420240

Author

Kayuni, S. A.; O'Ferrall, A. M.; Baxter, H.; Hesketh, J.; Mainga, B.; Lally, D., Jr.; Al-Harbi, M. H.; Lacourse, E. J.; Juziwelo, L.; Musaya, J.; Makaula, P.; Stothard, J. R.

Title

An outbreak of intestinal schistosomiasis, alongside increasing urogenital schistosomiasis prevalence, in primary school children on the shoreline of Lake Malawi, Mangochi District, Malawi.

Source

Infectious Diseases of Poverty; 2020. 9(121):(31 August 2020). 25 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Intestinal schistosomiasis was not considered endemic in Lake Malawi until November 2017 when populations of Biomphalaria pfeifferi were first reported; in May 2018, emergence of intestinal schistosomiasis was confirmed. This emergence was in spite of ongoing control of urogenital schistosomiasis by preventive chemotherapy. Our current study sought to ascertain whether intestinal schistosomiasis is transitioning from emergence to outbreak, to judge if stepped-up control interventions are needed. Methods; During late-May 2019, three cross-sectional surveys of primary school children for schistosomiasis were conducted using a combination of rapid diagnostic tests, parasitological examinations and applied morbidity-markers; (1) schistosomiasis dynamics were assessed at Samama (n = 80) and Mchoka (n = 80) schools, where Schistosoma mansoni was first reported, (2) occurrence of S. mansoni was investigated at two non-sampled schools, Mangochi Orphan Education and Training (MOET) (n = 60) and Koche (n = 60) schools, where B. pfeifferi was nearby, and (3) rapid mapping of schistosomiasis, and B. pfeifferi, conducted across a further 8 shoreline schools (n = 240). After data collection, univariate analyses and Chi-square testing were performed, followed by binary logistic regression using generalized linear models, to investigate epidemiological associations. Results: In total, 520 children from 12 lakeshore primary schools were examined, mean prevalence of S. mansoni by 'positive' urine circulating cathodic antigen (CCA)-dipsticks was 31.5% (95% confidence interval [CI]: 27.5-35.5). Upon comparisons of infection prevalence in May 2018, significant increases at Samama (relative risk [RR] = 1.7, 95% CI: 1.4-2.2) and Mchoka (RR = 2.7, 95% CI: 1.7-4.3) schools were observed. Intestinal schistosomiasis was confirmed at MOET (18.3%) and Koche (35.0%) schools, and in all rapid mapping schools, ranging from 10.0 to 56.7%. Several populations of B. pfeifferi were confirmed, with two new eastern shoreline locations noted. Mean prevalence of urogenital schistosomiasis was 24.0% (95% CI: 20.3-27.7). Conclusions: We notify that intestinal schistosomiasis, once considered non-endemic in Lake Malawi, is now transitioning from emergence to outbreak. Once control interventions can resume after coronavirus disease 2019 (COVID-19) suspensions, we recommend stepped-up preventive chemotherapy, with increased community-access to treatments, alongside renewed efforts in appropriate environmental control.

Publication Type

Journal article.

<166>

Accession Number

Author

Watteville, A. de; Genton, L.; Barcelos, G. K.; Pugin, J.; Pichard, C.; Heidegger, C. P.

Title

Easy-to-prescribe nutrition support in the intensive care in the era of COVID-19.

Source

Publisher

  Elsevier B.V.

Location of Publisher

  Amsterdam

Country of Publication

  Netherlands

Abstract

  Background & aims: COVID-19 pandemic had resulted in a massive increase in the number of patients admitted to intensive care units (ICUs). This created significant organizational challenges including numerous non-specialist ICU caregivers who came to work in the ICU. In this context, pragmatic protocols were essential to simplify nutritional care. We aimed at providing a simple and easy-to-prescribe nutritional protocol and evaluated its usefulness with questionnaires sent to physicians involved in the care of ICU COVID-19 patients. Methods: A simplified nutrition protocol was distributed to all physicians (n = 122) of the ICU medical team during COVID-19 pandemic. Clinical dieticians estimated energy targets for acute and post-acute phases at patient's admission and suggested adaptations of nutrition therapy. More complex situations were discussed with clinical nutrition doctors and, if required, a clinical evaluation was performed. To further facilitate the procedure, a chart with prescription aids was also distributed to the whole medical ICU team. At the end of the current pandemic wave, a 13-item questionnaire was emailed to the ICU medical team to obtain their opinion on the suggested nutritional therapy. Results: Answers were received from 81/122 medical doctors (MDs) (66% response rate), from intensive care physicians (41%), anaesthesiologists (53%) and MDs from other specialties (6%). Thirty-two percent of MDs felt that their knowledge of nutrition management was insufficient and 45% of the physicians surveyed did not face nutrition management in their daily practice prior to the pandemic. The initially proposed nutritional protocol, the chart with prescription aids and the suggested nutritional proposals were considered as useful to very useful by the majority of physicians surveyed (89.9, 90.7 and 92.1% respectively). The protocol was followed by 92% of MDs, and almost all participants (95%) were convinced that adaptations of nutritional therapy had beneficial effects on patients' outcomes. Conclusions: Nutritional therapy in critically ill COVID-19 patients is a challenge and the implementation of this specific pandemic simplified nutritional protocol was assessed as useful by a great majority of physicians. Pragmatic and simplified protocols are useful for ensuring the quality of nutritional therapy and could be used in future studies to assess its actual impact on the clinical outcomes of COVID-19 patients.

Publication Type

  Journal article.

<167>

Accession Number

  20203420101

Author

Margina, D.; Ungurianu, A.; Purdel, C.; Nitulescu, G. M.; Tsoukalas, D.; Sarandi, E.; Thanasoula, M.; Burykina, T. I.; Tekos, F.; Buha, A.; Nikitovic, D.; Kouretas, D.; Tsatsakis, A. M.

Title

Analysis of the intricate effects of polyunsaturated fatty acids and polyphenols on inflammatory pathways in health and disease.

Source

Food and Chemical Toxicology; 2020. 143. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Prevention and treatment of non-communicable diseases (NCDs), including cardiovascular disease, diabetes, obesity, cancer, Alzheimer's and Parkinson's disease, arthritis, non-alcoholic fatty liver disease and various infectious diseases; lately most notably COVID-19 have been in the front line of research worldwide. Although targeting different organs, these pathologies have common biochemical impairments - redox disparity and, prominently, dysregulation of the inflammatory pathways. Research data have shown that diet components like polyphenols, poly-unsaturated fatty acids (PUFAs), fibres as well as lifestyle (fasting, physical exercise) are important factors influencing signalling pathways with a significant potential to improve metabolic homeostasis and immune cells' functions. In the present manuscript we have reviewed scientific data from recent publications regarding the beneficial cellular and molecular effects induced by dietary plant products, mainly polyphenolic compounds and PUFAs, and summarize the clinical outcomes expected from these types of interventions, in a search for effective long-term approaches to improve the immune system response.

Publication Type

Journal article.

<168>

Accession Number

20203419544

Author

Bounie, D.; Arcot, J.; Cole, M.; Egal, F.; Juliano, P.; Mejia, C.; Rosa, D.; Sellahewa, J.

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Title

The role of food science and technology in humanitarian response.

Source

Trends in Food Science & Technology; 2020. 103:367-375. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: In humanitarian contexts, ensuring access to safe, nutritious, good quality and culturally appropriate food in the right quantity at the right time and place during an emergency or a protracted crisis is an enormous challenge, which is likely to increase given uncertainties such as climate change, global political and economic instability and emerging pandemics like COVID-19. Several international organizations and non-government organizations have well established systems to respond to food security emergencies. However, the role of food science and technology in humanitarian response is not well understood and is seldom considered in humanitarian circles. Scope and approach: The role of food science and technology in humanitarian response and the importance of addressing the requirements of the local consumers within the local food systems are discussed. Key findings and conclusions: Humanitarian food aid policies focus on immediate and short-term assistance to save lives. The implementation of emergency programs and projects tends to induce dependency on aid, rather than strengthening local food systems and ensuring resilience. Transformative change must embrace innovation across the whole food system with an increased emphasis on food science and technology that addresses local food security, generates employment and contributes to the local economy. There needs to be a move beyond rehabilitating and increasing agricultural production to addressing the whole food system with a view to link humanitarian assistance and longer-term support to sustainable livelihoods and resilience.

Publication Type

Journal article.

<169>

Accession Number

20203419543

Author

Farias, D. de P.; Araujo, F. F. de

Title

Will COVID-19 affect food supply in distribution centers of Brazilian regions affected by the pandemic?

Source

Trends in Food Science & Technology; 2020. 103:361-366. 21 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Currently, there is great concern about the consequences of COVID-19 on health and also on food supply globally. Ceasas are important food distribution centers in Brazil that have great economic importance in Brazilian agribusiness. Scope and approach: In this work, the price of fruits and vegetables sold in four Ceasas in different regions affected by COVID-19 in the first quarter of 2020 were evaluated, with the aim of verifying the possible effects of the pandemic on food supply chains. Data were collected from the institutions' websites and subjected to analysis of variance and Tukey's test (p 0.05), principal component analysis and Cluster analysis (Euclidean distance). Key findings and conclusions: The regions affected by COVID-19 showed great variations in the prices of products sold in the studied Ceasas. Statistical analysis showed that food prices were dependent on the regions and the period in which they were traded. In general, the month of March proved to have the greatest impact on the consumer's pocket. The strengthening of Ceasas as platforms for supplying food from short supply chains is essential to guarantee internal food security during crises such as that caused by the new coronavirus.

Publication Type

Journal article.

<170>

Accession Number

20203419262

Author

Zhao ZeYu; Zhu YuanZhao; Xu JingWen; Hu ShiXiong; Hu QingQing; Lei Zhao; Yang Meng; Wang Yao; Rui Jia; Liu XingChun; Luo Li; Yu ShanShan; Li Jia; Liu RuoYun; Xie Fang; Su YingYing; Chiang YiChen; Zhao BenHua; Cui JingAn; Yin Ling; Su YanHua; Zhao QingLong; Gao LiDong; Chen TianMu

Title

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167

A five-compartment model of age-specific transmissibility of SARS-CoV-2.

Source

Infectious Diseases of Poverty; 2020. 9(117):(26 August 2020). 47 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The novel coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2, also called 2019-nCoV) causes different morbidity risks to individuals in different age groups. This study attempts to quantify the age-specific transmissibility using a mathematical model. Methods: An epidemiological model with five compartments (susceptible-exposed-symptomatic-asymptomatic-recovered/removed [SEIAR]) was developed based on observed transmission features. Coronavirus disease 2019 (COVID-19) cases were divided into four age groups: group 1, those 14 years old; group 2, those 15 to 44 years old; group 3, those 45 to 64 years old; and group 4, those 65 years old. The model was initially based on cases (including imported cases and secondary cases) collected in Hunan Province from January 5 to February 19, 2020. Another dataset, from Jilin Province, was used to test the model. Results: The age-specific SEIAR model fitted the data well in each age group (P <0.001). In Hunan Province, the highest transmissibility was from age group 4 to 3 (median: $beta_{43}$ = 7.71 x 10-9; SAR_{43} = 3.86 x 10-8), followed by group 3 to 4 (median: $beta_{34}$ = 3.07 x 10-9; SAR_{34} = 1.53 x 10-8), group 2 to 2 (median: $beta_{22}$ = 1.24 x 10-9; SAR_{22} = 6.21 x 10-9), and group 3 to 1 (median: $beta_{31}$ = 4.10 x 10-10; SAR_{31} = 2.08 x 10-9). The lowest transmissibility was from age group 3 to 3 (median: $beta_{33}$ = 1.64 x 10-19; SAR_{33} = 8.19 x 10-19), followed by group 4 to 4 (median: $beta_{44}$ = 3.66 x 10-17; SAR_{44} = 1.83 x 10-16), group 3 to 2 (median: $beta_{32}$ = 1.21 x 10-16; SAR_{32} = 6.06 x 10-16), and group 1 to 4 (median: $beta_{14}$ = 7.20 x 10-14; SAR_{14} = 3.60 x 10-13). In Jilin Province, the highest transmissibility occurred from age group 4 to 4 (median: $beta_{43}$ = 4.27 x 10-8; SAR_{43} = 2.13 x 10-7), followed by group 3 to 4 (median: $beta_{34}$ = 1.81 x 10-8; SAR_{34} = 9.03 x 10-8). Conclusions: SARS-CoV-2 exhibits high transmissibility between middle-aged (45 to 64 years old) and elderly (65 years old) people. Children (14 years old) have very low susceptibility to COVID-19. This study will improve our understanding of the transmission feature of SARS-CoV-2 in different age groups and suggest the most prevention measures should be applied to middle-aged and elderly people.

Publication Type

Journal article.

<171>

Accession Number

20203419255

Author

Hu Kaihui; Fan Jing; Li XueQin; Gou Xin; Li XinYuan; Zhou Xiang

Title

The adverse skin reactions of health care workers using personal protective equipment for COVID-19.

Source

Medicine (Baltimore); 2020. 99(24). 16 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

In December 2019, a new coronavirus was found in Wuhan, Hubei Province, China, and spread rapidly throughout the country, attracting global attention. On February 11, the World Health Organization (WHO) officially named the disease caused by 2019-nCoV coronavirus disease 2019 (COVID-19). With the increasing number of cases, health care workers (HCWs) from all over China volunteered to work in Hubei Province. Because of the strong infectivity of COVID-19, HCWs need to wear personal protective equipment (PPE), such as N95 masks, latex gloves, and protective clothing. Due to the long-term use of PPE, many adverse skin reactions may occur. Therefore, the purpose of this study is to explore the adverse skin reactions among HCWs using PPE. Questionnaires were used for the research; a quantitative study was carried out to determine the incidence of adverse skin reactions among HCWs using PPE. A total of 61 valid questionnaires were collected. The most common adverse skin reactions among HCWs wearing N95 masks were nasal bridge scarring (68.9%) and facial itching (27.9%). The most common adverse skin reactions among HCWs wearing latex gloves were dry skin (55.7%), itching (31.2%), and rash (23.0%). The most common adverse skin reactions among HCWs wearing protective clothing were dry skin (36.1%) and itching (34.4%). When most HCWs wear PPE for a long period of time, they will experience adverse skin reactions. The incidence of adverse skin reactions to the N95 mask was 95.1%, that to latex gloves was 88.5%, and that to protective clothing was 60.7%.

Publication Type

Journal article.

<172>

Accession Number

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169

20203419254

Author

Jen TungHui; Chien TsairWei; Yeh YuTsen; Lin JuiChung [Lin, J. C. J.]; Kuo ShuChun; Chou, W.

Title

Geographic risk assessment of COVID-19 transmission using recent data: an observational study.

Source

Medicine (Baltimore); 2020. 99(24). 49 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background: The US Centers for Disease Control and Prevention (CDC) regularly issues "travel health notices" that address disease outbreaks of novel coronavirus disease (COVID)-19 in destinations worldwide. The notices are classified into 3 levels based on the risk posed by the outbreak and what precautions should be in place to prevent spreading. What objectively observed criteria of these COVID-19 situations are required for classification and visualization? This study aimed to visualize the epidemic outbreak and the provisional case fatality rate (CFR) using the Rasch model and Bayes's theorem and developed an algorithm that classifies countries/regions into categories that are then shown on Google Maps. Methods: We downloaded daily COVID-19 outbreak numbers for countries/regions from the GitHub website, which contains information on confirmed cases in more than 30 Chinese locations and other countries/regions. The Rasch model was used to estimate the epidemic outbreak for each country/region using data from recent days. All responses were transformed by using the logarithm function. The Bayes's base CFRs were computed for each region. The geographic risk of transmission of the COVID-19 epidemic was thus determined using both magnitudes (i.e., Rasch scores and CFRs) for each country. Results: The top 7 countries were Iran, South Korea, Italy, Germany, Spain, China (Hubei), and France, with values of {4.53, 3.47, 3.18, 1.65, 1.34 1.13, 1.06} and {13.69%, 0.91%, 47.71%, 0.23%, 24.44%, 3.56%, and 16.22%} for the outbreak magnitudes and CFRs, respectively. The results were consistent with the US CDC travel advisories of warning level 3 in China, Iran, and most European countries and of level 2 in South Korea on March 16, 2020. Conclusion: We created an online algorithm that used the CFRs to display the geographic risks to understand COVID-19 transmission. The app was developed to display which countries had higher travel risks and aid with the understanding of the outbreak situation.

Publication Type

Journal article.

<173>

Accession Number

 20203419130

Author

 Li RuiLin; Chen YouLin; Lv JianLin; Liu LinLin; Zong ShiQin; Li HanXia; Li Hong

Title

 Anxiety and related factors in frontline clinical nurses fighting COVID-19 in Wuhan.

Source

 Medicine (Baltimore); 2020. 99(30). 14 ref.

Publisher

 Lippincott Williams & Wilkins, Inc.

Location of Publisher

 Hagerstown

Country of Publication

 USA

Abstract

  The aim of this study was to examine the anxiety status of the frontline clinical nurses in the designated hospitals for the treatment of coronavirus disease 2019 (COVID-19) in Wuhan and to analyze the influencing factors, to provide data for psychologic nursing. This study used a cross-sectional survey design and convenience sampling. The questionnaires were completed by 176 frontline clinical nurses. Anxiety was determined using the Hamilton anxiety scale. General data were collected using a survey. Correlation analyses were used. Among the 176 frontline nurses, 77.3% (136/176) had anxiety. The anxiety scores of the frontline clinical nurse fighting COVID-19 were 17.1 +or- 8.1. Anxiety symptoms, mild to moderate anxiety symptoms, and severe anxiety symptoms were found in 27.3%, 25%, and 25% of the nurses, respectively. Sex, age, marital status, length of service, and clinical working time against COVID-19 were associated with anxiety (P < .05). The frontline nurses working in the designated hospitals for the treatment of COVID-19 in Wuhan had serious anxiety. Sex, age, length of service, and clinical working time against COVID-19 were associated with anxiety in those nurses. Psychologic care guidance, counseling, and social support should be provided to the nurses to reduce their physical and mental burden. Nursing human resources in each province should be adjusted according to each province's reality.

Publication Type

 Journal article.

<174>

Accession Number

20203419092

Author

Archana Angrup; Rimjhim Kanaujia; Pallab Ray; Manisha Biswal

Title

Healthcare facilities in low- and middle-income countries affected by COVID-19: time to upgrade basic infection control and prevention practices.

Source

Indian Journal of Medical Microbiology; 2020. 38(2):139-143. 52 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

COVID-19 as a pandemic has spanned across all continents. With the increasing numbers in cases worldwide, even the countries with the best of healthcare facilities are reeling under the burden of the disease. Therefore, in countries with limited access to resources and poor healthcare infrastructure, the low and middle-income countries (LMICs), limiting spread becomes even more challenging. Low- and middle-income countries (LMICs) are severely hit by any outbreak and pandemics and face the lack of infrastructure and problem of overcrowding. Health facilities are compromised and almost exhausted at the time of emergency. There is disruption of normal supply chain, and consumables are not in sufficient quantity. In the current situation, rationalized use of available supplies is important. This paper presents the perspective on the basis of current literature on gaps in various infection prevention and control (IPC) strategies that are being followed currently in LMICs and suggestions for bridging these gaps.

Publication Type

Journal article.

<175>

Accession Number

20203419070

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172

Author

Zhang Ke; Hou YuanSi; Li Gang

Title

Threat of infectious disease during an outbreak: influence on tourists' emotional responses to disadvantaged price inequality.

Source

Annals of Tourism Research; 2020. 84. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The ongoing COVID-19 pandemic has negatively influenced the global tourism industry. Despite the documented negative impacts of diseases on tourism demand and people's perceived health risk, researchers have seldom examined the psychological responses of tourists travelling during an infectious disease outbreak. We therefore conducted three studies to examine this key aspect, and our findings indicate that tourists have a strong negative emotional reaction towards disadvantaged tourism-related prices in response to a high (vs low) infectious disease threat. Furthermore, risk aversion acts as an underlying mechanism driving this effect: tourists are more risk aversive under the threat of an infectious disease, which consequently magnifies their negative emotional reaction. At last, theoretical and practical implications of these findings for tourism are discussed.

Publication Type

Journal article.

<176>

Accession Number

20203419069

Author

Qiu, R. T. R.; Park JiNah; Li ShiNa; Song HaiYan

Title

Social costs of tourism during the COVID-19 pandemic.

Source

Annals of Tourism Research; 2020. 84. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The severe acute respiratory syndrome coronavirus 2 is currently spreading across the world at an alarming rate, resulting in the coronavirus disease 2019 pandemic. Amidst this crisis, tourism scholars are directing their attention to communities at tourist destinations, looking at their safety and well-being and the costs that they will bear due to the cessation of tourism activity. This article describes residents' perceptions of the risks posed by tourism activity, and estimates their willingness to pay to reduce public health risks based on hypothetical scenarios, using the triple-bounded dichotomous choice contingent valuation method. The social costs in three urban destinations are assessed and compared. Based on the findings, suggestions are made for appropriate post-pandemic recovery actions by local authorities and tourism organizations.

Publication Type

Journal article.

<177>

Accession Number

20203418940

Author

Chen JunFang; He HanQing; Cheng Wei; Liu Yan; Sun Zhou; Chai ChengLiang; Kong QingXin; Sun WanWan; Zhang JiaQi; Guo Song; Shi XuGuang; Wang JinNa; Chen EnFu; Chen ZhiPing

Title

Potential transmission of SARS-CoV-2 on a flight from Singapore to Hangzhou, China: an epidemiological investigation.

Source

Travel Medicine and Infectious Disease; 2020. 36. 23 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Between January 24, 2020 and February 15, 2020, an outbreak of COVID-19 occurred among 335 passengers on a flight from Singapore to Hangzhou in China. This study aimed to investigate the source of the outbreak and assess the risk of transmission of COVID-19 during the flight. Method: Using a standardized questionnaire, we collected information on the travelers' demographic characteristics and illness before, during, and after the flight. We also collected data on factors potentially associated with COVID-19 transmission during the flight. Results: A total of 16 COVID-19 patients were diagnosed among all passengers; the overall attack rate was 4.8%. The attack rate among passengers who had departed from Wuhan was significantly higher than that among those who had departed from other places. One passenger without an epidemiological history of exposure before boarding developed COVID-19. During the flight, he was seated near four infected passengers from Wuhan for approximately an hour and did not wear his facemask correctly during the flight. Conclusions: COVID-19 transmission may have occurred during the flight. However, the majority of the cases in the flight-associated outbreak could not be attributed to transmission on the flight but were associated with exposure to the virus in Wuhan or to infected members in a single tour group.

Publication Type

Journal article.

<178>

Accession Number

20203418939

Author

Hong LuXiao; Lin AiFen; He ZeBao; Zhao HaiHong; Zhang JianGang; Zhang Chao; Ying LingJun; Ge ZhengMing; Zhang Xia; Han QiuYue; Chen QiongYuan; Ye YaoHan; Zhu JianSheng; Chen HaiXiao; Yan WeiHua

Title

Mask wearing in pre-symptomatic patients prevents SARS-CoV-2 transmission: an epidemiological analysis.

Source

Travel Medicine and Infectious Disease; 2020. 36. 25 ref.

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175

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: Pandemic COVID-19 has become a seriously public health priority worldwide. Comprehensive strategies including travel restrictions and mask-wearing have been implemented to mitigate the virus circulation. However, detail information on community transmission is unavailable yet. Methods: From January 23 to March 1, 2020, 127 patients (median age: 46 years; range: 11-80) with 71 male and 56 female, were confirmed to be infected with the SARS-CoV-2 in Taizhou, Zhejiang, China. Epidemiological trajectory and clinical features of these COVID-19 cases were retrospectively retrieved from electronic medical records and valid individual questionnaire. Results: The disease onset was between January 9 to February 14, 2020. Among them, 64 patients are local residents, and 63 patients were back home from Wuhan from January 10 to 24, 2020 before travel restriction. 197 local residents had definite close-contact with 41 pre-symptomatic patients back from Wuhan. 123 and 74 of them contact with mask-wearing or with no mask-wearing pre-symptomatic patients back from Wuhan, respectively. Data showed that incidence of COVID-19 was significantly higher for local residents close-contact with no mask-wearing Wuhan returned pre-symptomatic patients (19.0% vs. 8.1%, p < 0.001). Among 57 close-contact individuals, 21 sequential local COVID-19 patients originated from a pre-symptomatic Wuhan returned couple, indicated dense gathering in congested spaces is a high risk for SARS-CoV-2 transmission. Conclusions: Our findings provided valuable details of pre-symptomatic patient mask-wearing and restriction of mass gathering in congested spaces particularly, are important interventions to mitigate the SARS-CoV-2 transmission.

Publication Type

Journal article.

<179>

Accession Number

20203418911

Author

Pavli, A.; Smeti, P.; Papadima, K.; Andreopoulou, A.; Hadjianastasiou, S.; Triantafillou, E.; Vakali, A.; Kefaloudi, C.; Pervanidou, D.; Gogos, C.; Maltezou, H. C.

Title

A cluster of COVID-19 in pilgrims to Israel.

Source

Journal of Travel Medicine; 2020. 27(5). 10 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Publication Type

Journal article.

<180>

Accession Number

20203418904

Author

Ahmed, W.; Bertsch, P. M.; Angel, N.; Bibby, K.; Bivins, A.; Dierens, L.; Edson, J.; Ehret, J.; Gyawali, P.; Hamilton, K. A.; Hosegood, I.; Hugenholtz, P.; Jiang GuangMing; Kitajima, M.; Sichani, H. T.; Shi, J.; Shimko, K. M.; Simpson, S. L.; Smith, W. J. M.; Symonds, E. M.; Thomas, K. V.; Verhagen, R.; Zaugg, J.; Mueller, J. F.

Title

Detection of SARS-CoV-2 RNA in commercial passenger aircraft and cruise ship wastewater: a surveillance tool for assessing the presence of COVID-19 infected travellers.

Source

Journal of Travel Medicine; 2020. 27(5). 38 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

Background: Wastewater-based epidemiology (WBE) for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) can be an important source of information for coronavirus disease 2019 (COVID-19) management during and after the pandemic. Currently, governments and transportation industries around the world are developing strategies to minimize SARS-CoV-2 transmission associated with resuming activity. This study investigated the possible use of SARS-CoV-2 RNA wastewater surveillance from airline and cruise ship sanitation systems and its potential use as a COVID-19 public health management tool. Methods: Aircraft and cruise ship wastewater samples (n = 21) were tested for SARS-CoV-2 using two virus concentration methods, adsorption-extraction by electronegative membrane (n = 13) and ultrafiltration by Amicon (n = 8), and five assays using reverse-transcription quantitative polymerase chain reaction (RT-qPCR) and RT-droplet digital PCR (RT-ddPCR). Representative qPCR amplicons from positive samples were sequenced to confirm assay specificity. Results: SARS-CoV-2 RNA was detected in samples from both aircraft and cruise ship wastewater; however concentrations were near the assay limit of detection. The analysis of multiple replicate samples and use of multiple RT-qPCR and/or RT-ddPCR assays increased detection sensitivity and minimized false-negative results. Representative qPCR amplicons were confirmed for the correct PCR product by sequencing. However, differences in sensitivity were observed among molecular assays and concentration methods. Conclusions: The study indicates that surveillance of wastewater from large transport vessels with their own sanitation systems has potential as a complementary data source to prioritize clinical testing and contact tracing among disembarking passengers. Importantly, sampling methods and molecular assays must be further optimized to maximize detection sensitivity. The potential for false negatives by both wastewater testing and clinical swab testing suggests that the two strategies could be employed together to maximize the probability of detecting SARS-CoV-2 infections amongst passengers.

Publication Type

Journal article.

<181>

Accession Number

20203418903

Author

Daon, Y.; Thompson, R. N.; Obolski, U.

Title

Estimating COVID-19 outbreak risk through air travel.

Source

Journal of Travel Medicine; 2020. 27(5). 48 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

  USA

Abstract

  Background: Substantial limitations have been imposed on passenger air travel to reduce transmission of severe acute respiratory syndrome coronavirus 2 between regions and countries. However, as case numbers decrease, air travel will gradually resume. We considered a future scenario in which case numbers are low and air travel returns to normal. Under that scenario, there will be a risk of outbreaks in locations worldwide due to imported cases. We estimated the risk of different locations acting as sources of future coronavirus disease 2019 outbreaks elsewhere. Methods: We use modelled global air travel data and population density estimates from locations worldwide to analyse the risk that 1364 airports are sources of future coronavirus disease 2019 outbreaks. We use a probabilistic, branching-process-based approach that considers the volume of air travelers between airports and the reproduction number at each location, accounting for local population density. Results: Under the scenario we model, we identify airports in East Asia as having the highest risk of acting as sources of future outbreaks. Moreover, we investigate the locations most likely to cause outbreaks due to air travel in regions that are large and potentially vulnerable to outbreaks: India, Brazil and Africa. We find that outbreaks in India and Brazil are most likely to be seeded by individuals travelling from within those regions. We find that this is also true for less vulnerable regions, such as the United States, Europe and China. However, outbreaks in Africa due to imported cases are instead most likely to be initiated by passengers travelling from outside the continent. Conclusions: Variation in flight volumes and destination population densities creates a non-uniform distribution of the risk that different airports pose of acting as the source of an outbreak. Accurate quantification of the spatial distribution of outbreak risk can therefore facilitate optimal allocation of resources for effective targeting of public health interventions.

Publication Type

  Journal article.

<182>

Accession Number

  20203418902

Author

  Costantino, V.; MacIntyre, C. R.; Heslop, D. J.

Title

  The effectiveness of full and partial travel bans against COVID-19 spread in Australia for travellers from China during and after the epidemic peak in China.

Source

  Journal of Travel Medicine; 2020. 27(5). 34 ref.

Publisher

  Oxford University Press

Location of Publisher

  Cary

Country of Publication

  USA

Abstract

  Background: Australia implemented a travel ban on China on 1 February 2020, while COVID-19 was largely localized to China. We modelled three scenarios to test the impact of travel bans on epidemic control. Scenario one was no ban; scenario two and three were the current ban followed by a full or partial lifting (allow over 100 000 university students to enter Australia, but not tourists) from the 8th of March 2020. Methods: We used disease incidence data from China and air travel passenger movements between China and Australia during and after the epidemic peak in China, derived from incoming passenger arrival cards. We used the estimated incidence of disease in China, using data on expected proportion of under-ascertainment of cases and an age-specific deterministic model to model the epidemic in each scenario. Results: The modelled epidemic with the full ban fitted the observed incidence of cases well, predicting 57 cases on March 6th in Australia, compared to 66 observed on this date; however, we did not account for imported cases from other countries. The modelled impact without a travel ban results in more than 2000 cases and about 400 deaths, if the epidemic remained localized to China and no importations from other countries occurred. The full travel ban reduced cases by about 86%, while the impact of a partial lifting of the ban is minimal and may be a policy option. Conclusions: Travel restrictions were highly effective for containing the COVID-19 epidemic in Australia during the epidemic peak in China and averted a much larger epidemic at a time when COVID-19 was largely localized to China. This research demonstrates the effectiveness of travel bans applied to countries with high disease incidence. This research can inform decisions on placing or lifting travel bans as a control measure for the COVID-19 epidemic.

Publication Type

  Journal article.

<183>

Accession Number

  20203418901

Author

  Clifford, S.; Pearson, C. A. B.; Klepac, P.; Zandvoort, K. van; Quilty, B. J.; Eggo, R. M.; Flasche, S.

Title

  Effectiveness of interventions targeting air travellers for delaying local outbreaks of SARS-CoV-2.

Source

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

Background: We evaluated if interventions aimed at air travellers can delay local severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) community transmission in a previously unaffected country. Methods: We simulated infected air travellers arriving into countries with no sustained SARS-CoV-2 transmission or other introduction routes from affected regions. We assessed the effectiveness of syndromic screening at departure and/or arrival and traveller sensitisation to the COVID-2019-like symptoms with the aim to trigger rapid self-isolation and reporting on symptom onset to enable contact tracing. We assumed that syndromic screening would reduce the number of infected arrivals and that traveller sensitisation reduces the average number of secondary cases. We use stochastic simulations to account for uncertainty in both arrival and secondary infections rates, and present sensitivity analyses on arrival rates of infected travellers and the effectiveness of traveller sensitisation. We report the median expected delay achievable in each scenario and an inner 50% interval. Results: Under baseline assumptions, introducing exit and entry screening in combination with traveller sensitisation can delay a local SARS-CoV-2 outbreak by 8 days (50% interval: 3-14 days) when the rate of importation is 1 infected traveller per week at time of introduction. The additional benefit of entry screening is small if exit screening is effective: the combination of only exit screening and traveller sensitisation can delay an outbreak by 7 days (50% interval: 2-13 days). In the absence of screening, with less effective sensitisation, or a higher rate of importation, these delays shrink rapidly to <4 days. Conclusion: Syndromic screening and traveller sensitisation in combination may have marginally delayed SARS-CoV-2 outbreaks in unaffected countries.

Publication Type

Journal article.

<184>

Accession Number

20203418897

Author

Chen, L. H.; Freedman, D. O.; Visser, L. G.

Title

COVID-19 immunity passport to ease travel restrictions?

Source

Journal of Travel Medicine; 2020. 27(5). 13 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Publication Type

Journal article.

<185>

Accession Number

20203418891

Author

Arnold, L.; Drees, S.; Geffert, K.; Gepp, S.; Jung, L.; Kerstin, S.; Stratil, J. M.

Title

HiAP after COVID-19: a perspective of the German network of young professionals in public health. (Thematischer Schwerpunkt: Health in all policies.) [German]

Source

Public Health Forum; 2020. 28(3):223-225. 8 ref.

Publisher

De Gruyter

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

In this article, members of the German Network of Young Professionals in Public Health, discuss the opportunities and challenges of the Health in All Policies (HiAP) approach, in view of the current COVID-19

pandemic. It outlines various perspectives, from the interaction and cooperation of different policy areas to the national Public Health Service.

Publication Type

Journal article.

<186>

Accession Number

20203418887

Author

Roller, G.; Wuthe, J.

Title

The public health strategy Baden-Wurttemberg. (Thematischer Schwerpunkt: Health in all policies.) [German]

Source

Public Health Forum; 2020. 28(3):209-212. 18 ref.

Publisher

De Gruyter

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

The challenges of our health system require a long-term health policy approach and a strenghtening of the coordinating tasks of the public health service (OGD). With a health strategy and the further development of the OGD, Baden-Wurttemberg has reacted to these developments at an early stage. Nevertheless, current developments (COVID 19 pandemic) show that the OGD needs further development.

Publication Type

Journal article.

<187>

Accession Number

  20203418878

Author

  Li BoYang; Niehoff, J. U.

Title

  Public health in China: towards HiaP. (Thematischer Schwerpunkt: Health in all policies.) [German]

Source

  Public Health Forum; 2020. 28(3):179-181. 11 ref.

Publisher

  De Gruyter

Location of Publisher

  Berlin

Country of Publication

  Germany

Abstract

  The article provides an overview of the efforts of the People's Republic of China to create a functioning infrastructure for health care and also a basis for public health. The current status is the result of the past 20 years. The COVID-19 epidemic is also a practical test for the efforts in the sense of the WHO-Health in All Politics-Strategy to bundle activities across departmental boundaries and to bring about complex problem solving.

Publication Type

  Journal article.

<188>

Accession Number

  20203418824

Author

  Yilmaz, H. O.; Aslan, R.; Unal, C.

Title

Effect of the COVID-19 pandemic on eating habits and food purchasing behaviors of university students.

Source

Kesmas: National Public Health Journal; 2020. 15(3):154-159. 19 ref.

Publisher

Faculty of Public Health Universitas Indonesia

Location of Publisher

Depok

Country of Publication

Indonesia

Abstract

COVID-19 disease, which has spread rapidly all over the world since the first case was detected in December 2019, has become the primary focus in every country. Radical measures have been taken by governments to prevent the spread of the disease. Precautions and social rules have required drastic changes to daily life activities everywhere. University students who have had to interrupt their educations are one of the affected groups by this disease sociologically, psychologically and physiologically. The aim of this study was planned and conducted to determine the effect of COVID-19 on university students' eating habits and food purchasing behaviors. The study was completed in April 2020 with 866 university students studying and training at the Faculty of Health Sciences, Gumushane, Turkey. Research data was obtained by online questionnaire. The questionnaire was prepared with information obtained from a literature review and the opinions of experts. It included questions about eating habits and food purchasing behaviors. The basic result of the study was that COVID-19 disease has caused significant changes in the eating habits and food purchasing behaviors of university students. Primarily, they now paid greater attention to hygiene when food purchasing, and had increased their consumption compared to previously, since they were now home 24 hours a day, seven days a week.

Publication Type

Journal article.

<189>

Accession Number

20203418532

Author

Salehi, M.; Ahmadikia, K.; Mahmoudi, S.; Kalantari, S.; Jamalimoghadamsiahkali, S.; Izadi, A.; Kord, M.; Manshadi, S. A. D.; Seifi, A.; Ghiasvand, F.; Khajavirad, N.; Ebrahimi, S.; Koohfar, A.; Boekhout, T.; Khodavaisy, S.

Title

  Oropharyngeal candidiasis in hospitalised COVID-19 patients from Iran: species identification and antifungal susceptibility pattern.

Source

  Mycoses; 2020. 63(8):771-778. 41 ref.

Publisher

  Wiley

Location of Publisher

  Berlin

Country of Publication

  Germany

Abstract

  Background: Emergence of coronavirus disease 2019 (COVID-19) is a major healthcare threat. Apparently, the novel coronavirus (SARS-CoV-2) is armed by special abilities to spread and dysregulate the immune mechanisms. The likelihood of oropharyngeal candidiasis (OPC) development in COVID-19 patients with a list of attributable risk factors for oral infections has not yet been investigated. Objectives: We here aim to investigate the prevalence, causative agents and antifungal susceptibility pattern of OPC in Iranian COVID-19 patients. Patients and Methods: A total of 53 hospitalised COVID-19 patients with OPC were studied. Relevant clinical data were mined. Strain identification was performed by 21-plex PCR and sequencing of the internal transcribed spacer region (ITS1-5.8S-ITS2). Antifungal susceptibility testing to fluconazole, itraconazole, voriconazole, amphotericin B, caspofungin, micafungin and anidulafungin was performed according to the CLSI broth dilution method. Results: In 53 COVID-19 patients with OPC, cardiovascular diseases (52.83%) and diabetes (37.7%) were the principal underlying conditions. The most common risk factor was lymphopaenia (71%). In total, 65 Candida isolates causing OPC were recovered. C albicans (70.7%) was the most common, followed by C glabrata (10.7%), C dubliniensis (9.2%), C parapsilosis sensu stricto (4.6%), C tropicalis (3%) and Pichia kudriavzevii (=C krusei, 1.5%). Majority of the Candida isolates were susceptible to all three classes of antifungal drugs. Conclusion: Our data clarified some concerns regarding the occurrence of OPC in Iranian COVID-19 patients. Further studies should be conducted to design an appropriate prophylaxis programme and improve management of OPC in critically ill COVID-19 patients.

Publication Type

  Journal article.

<190>

Accession Number

  20203418531

Author

Nosheen Nasir; Joveria Farooqi; Mahmood, S. F.; Kauser Jabeen

Title

COVID-19-associated pulmonary aspergillosis (CAPA) in patients admitted with severe COVID-19 pneumonia: an observational study from Pakistan.

Source

Mycoses; 2020. 63(8):766-770. 13 ref.

Publisher

Wiley

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

Background: Invasive aspergillosis is a well-known complication of severe influenza pneumonia with acute respiratory distress syndrome (ARDS). However, recent studies are reporting emergence of aspergillosis in severe COVID-19 pneumonia, named as COVID-19-associated pulmonary aspergillosis (CAPA). Methods: A retrospective observational study was conducted in patients with severe COVID-19 pneumonia from February 2020 to April 2020. Patients 18 years of age with clinical features and abnormal chest imaging with confirmed COVID-19 by RT-PCR for SARS-CoV-2 were included. CAPA was diagnosed based on clinical parameters, radiological findings and mycological data. Data were recorded on a structured proforma, and descriptive analysis was performed using Stata ver 12.1. Results: A total of 147 patients with confirmed COVID-19 and 23 (15.6%) patients requiring ICU admission were identified. Aspergillus species were isolated from tracheal aspirates of nine (39.1%) patients, and of these, five patients (21.7%) were diagnosed with CAPA and four (17.4%) had Aspergillus colonisation. The mean age of patients with CAPA was 69 years (Median age: 71, IQR: 24, Range: 51-85), and 3/5 patients were male. The most frequent co-morbid was diabetes mellitus (4/5). The overall fatality rate of COVID-19 patients with aspergillosis was 44% (4/9). The cause of death was ARDS in all three patients with CAPA, and the median length of stay was 16 days (IQR: 10; Range 6-35 days). Conclusion: This study highlights the need for comparative studies to establish whether there is an association of aspergillosis and COVID-19 and the need for screening for fungal infections in severe COVID-19 patients with certain risk factors.

Publication Type

Journal article.

<191>

Accession Number

20203418484

Author

Hoagland, B.; Torres, T. S.; Bezerra, D. R. B.; Geraldo, K.; Pimenta, C.; Veloso, V. G.; Grinsztejn, B.

Title

Telemedicine as a tool for PrEP delivery during the COVID-19 pandemic in a large HIV prevention service in Rio de Janeiro-Brazil.

Source

Brazilian Journal of Infectious Diseases; 2020. 24(4):360-364. 15 ref.

Publisher

Elsevier Editora Ltda.

Location of Publisher

Sao Paulo

Country of Publication

Brazil

Abstract

COVID-19 public health responses such as social distancing and community containment measures protocols are critical to preventing and containing the spread of coronavirus. Brazil accounts for almost half of Latin American HIV cases and Rio de Janeiro is the city with the second largest number of AIDS. Clinical appointments and pharmacy antiretroviral refills may be impaired due to restricted traffic and possible lockdowns, preventing people living with HIV and those using PrEP from accessing needed antiretrovirals. We hereby describe the telemedicine procedures implemented in a large PrEP delivery service in Rio de janeiro in the context of the COVID-19 pandemic. At the initial teleconsultation, individuals undergoe HIV rapid testing and are assessed by phone for PrEP related procedures. Individuals receive a digital prescription to retrieve a 120-day PrEP supply plus two HIV self-test kits. Subsequent follow-up teleconsultations will be performed remotely by phone call, including instructions for the HIV self-test performance, which results are to be sent using a digital picture. Participants will attend the service only for PrEP refill. The use of telemedicine procedures is being effective to avoid PrEP shortage and reduce the time PrEP users spend at the service during the COVID-19 pandemic and social distancing recommendations.

Publication Type

Journal article.

<192>

Accession Number

20203418240

Author

Chen An; Li WenWen; Han Wei

Title

Analysis of the characteristics of risk communication of COVID-19 in the perspective of WeChat Contents. [Chinese]

Source

Science & Technology Review; 2020. 38(6):120-129. 23 ref.

Publisher

Science and Technology Review Publishing House

Location of Publisher

Beijing

Country of Publication

China

Abstract

This paper studies the characteristics and the preferences of the risk communication during the development of COVID-19 epidemic, and to provide a scientific basis for developing risk control strategies for public health emergencies. Based on the theory of the social ampification, descriptive statistics are made on the contents of 458 WeChat friends from January 20 to February 10, 2020, and the correlation analysis is made concerning the gender, the age, the attitude tendency, the epidemic concern extent and the information source. The policy recommendations are made based on the analysis results to rationally guide the spread of risk communication of COVID-19.

Publication Type

Journal article.

<193>

Accession Number

20203418239

Author

Li NingNing; Wu HongZhen

Title

The important role of the internet of things in epidemic prevention and control. [Chinese]

Source

  Science & Technology Review; 2020. 38(6):115-119. 12 ref.

Publisher

  Science and Technology Review Publishing House

Location of Publisher

  Beijing

Country of Publication

  China

Abstract

  In early 2020, the breakout of the COVID-19 has a huge impact on the economic and social development of the whole country and the people's life. From the perspective of the application of the Internet of Things, this paper reviews the applications of the Internet of Things in scenarios such as the epidemic surveillance, the remote cure, the resumption of normal labor and education, and the livelihood services, fully affirming the important role of the Internet of Things in the epidemic prevention and control, and puts forward related proposals.

Publication Type

  Journal article.

<194>

Accession Number

  20203418237

Author

  Wang WeiLing; Wu ZhiGang; Wang Fang

Title

  Impact of epidemic prevention and control on digital government construction and policy recommendations. [Chinese]

Source

  Science & Technology Review; 2020. 38(6):97-102. 11 ref.

Publisher

  Science and Technology Review Publishing House

Location of Publisher

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190

Beijing

Country of Publication

China

Abstract

Throughout the novel coronavirus pneumonia epidemic prevention and control, information technology has become a new weapon against the epidemic. All walks of life actively use information technology to contain the epidemic and carry out online restoration and rehabilitation. The government is no exception. Government websites and new government media have become important windows for online handling of epidemic situation release. On the other hand, epidemic prevention and control has also brought new impetus for data sharing and opening. This paper at first expounds the important role that digital government plays in scientific decision-making, economic regulation, public service, market supervision, social governance and other fields. Then it combs the new space brought by epidemic prevention and control for digital government construction and analyzes the challenges and development bottleneck faced by digital government construction. Finally, the paper puts forward some development suggestions to strengthen the top-level design, government data governance, and talent team construction.

Publication Type

Journal article.

<195>

Accession Number

20203417917

Author

Narang, K.; Enninga, E. A. L.; Gunaratne, M. D. S. K.; Ibirogba, E. R.; Trad, A. T. A.; Elrefaei, A.; Theiler, R. N.; Ruano, R.; Szymanski, L. M.; Chakraborty, R.; Garovic, V. D.

Title

SARS-CoV-2 infection and COVID-19 during pregnancy: a multidisciplinary review.

Source

Mayo Clinic Proceedings; 2020. 95(8):1750-1765. 119 ref.

Publisher

Mayo Foundation for Medical Education and Research

Location of Publisher

Rochester

Country of Publication

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191

USA

Abstract

The global pandemic of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the cause of coronavirus disease 2019 (COVID-19), has been associated with worse outcomes in several patient populations, including the elderly and those with chronic comorbidities. Data from previous pandemics and seasonal influenza suggest that pregnant women may be at increased risk for infection-associated morbidity and mortality. Physiologic changes in normal pregnancy and metabolic and vascular changes in high-risk pregnancies may affect the pathogenesis or exacerbate the clinical presentation of COVID-19. Specifically, SARS-CoV-2 enters the cell via the angiotensin-converting enzyme 2 (ACE2) receptor, which is upregulated in normal pregnancy. Upregulation of ACE2 mediates conversion of angiotensin II (vasoconstrictor) to angiotensin-(1-7) (vasodilator) and contributes to relatively low blood pressures, despite upregulation of other components of the renin-angiotensin-aldosterone system. As a result of higher ACE2 expression, pregnant women may be at elevated risk for complications from SARS-CoV-2 infection. Upon binding to ACE2, SARS-CoV-2 causes its downregulation, thus lowering angiotensin-(1-7) levels, which can mimic/worsen the vasoconstriction, inflammation, and pro-coagulopathic effects that occur in preeclampsia. Indeed, early reports suggest that, among other adverse outcomes, preeclampsia may be more common in pregnant women with COVID-19. Medical therapy, during pregnancy and breastfeeding, relies on medications with proven safety, but safety data are often missing for medications in the early stages of clinical trials. We summarize guidelines for medical/obstetric care and outline future directions for optimization of treatment and preventive strategies for pregnant patients with COVID-19 with the understanding that relevant data are limited and rapidly changing.

Publication Type

Journal article.

<196>

Accession Number

20203417810

Author

Tomar, P. P. S.; Arkin, I. T.

Title

SARS-CoV-2 E protein is a potential ion channel that can be inhibited by Gliclazide and Memantine.

Source

Biochemical and Biophysical Research Communications; 2020. 530(1):10-14. 40 ref.

Publisher

Elsevier

Location of Publisher

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Page |

Amsterdam

Country of Publication

Netherlands

Abstract

  COVID-19 is one of the most impactful pandemics in recorded history. As such, the identification of inhibitory drugs against its etiological agent, SARS-CoV-2, is of utmost importance, and in particular, repurposing may provide the fastest route to curb the disease. As the first step in this route, we sought to identify an attractive and viable target in the virus for pharmaceutical inhibition. Using three bacteria-based assays that were tested on known viroporins, we demonstrate that one of its essential components, the E protein, is a potential ion channel and, therefore, is an excellent drug target. Channel activity was demonstrated for E proteins in other coronaviruses, providing further emphasis on the importance of this functionally to the virus' pathogenicity. The results of a screening effort involving a repurposing drug library of ion channel blockers yielded two compounds that inhibit the E protein: Gliclazide and Memantine. In conclusion, as a route to curb viral virulence and abate COVID-19, we point to the E protein of SARS-CoV-2 as an attractive drug target and identify off-label compounds that inhibit it.

Publication Type

  Journal article.

<197>

Accession Number

  20203417809

Author

  Chen Peng; Zeng ZeHua; Du HongWu

Title

  Establishment and validation of a drug-target microarray for SARS-CoV-2.

Source

  Biochemical and Biophysical Research Communications; 2020. 530(1):4-9. 29 ref.

Publisher

  Elsevier

Location of Publisher

  Amsterdam

Country of Publication

  Netherlands

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Abstract

  COVID-19 has become one of the worst epidemic in the world, currently already more than four million people have been infected, which probably co-exist with human beings, and has a significant impact on the global economy and political order. In the process of fighting against the epidemic in China, the clinical value of a variety of herbal medicines has been recognized and written into the clinical application guide. However, their effective molecular mechanism and potential targets are still not clear. Pathology and pharmacology research will gradually attract attention in the post-epidemic outbreak term. Here, we constructed a COVID-19 protein microarray of potential therapy targets, which contains the main drug targets to the SARS-CoV-2 virus and the anti-virus, anti-inflammatory cellar targets of the host. Series of quality controls test has been carried out, which showed that it could be applied for drug target screening of bio-active natural products. The establishment of this microarray will provide a useful tool for the study of the molecular pharmacology of natural products.

Publication Type

  Journal article.

<198>

Accession Number

  20203417517

Author

  Santos, M. M.; Lucena, E. E. S.; Lima, K. C.; Brito, A. A. C.; Bay, M. B.; Bonfada, D.

Title

  Survival and predictors of deaths of patients hospitalized due to COVID-19 from a retrospective and multicentre cohort study in Brazil.

Source

  Epidemiology and Infection; 2020. 148(e198). 20 ref.

Publisher

  Cambridge University Press

Location of Publisher

  Cambridge

Country of Publication

  UK

Abstract

  This study aimed to analyze the survival of patients admitted to Brazilian hospitals due to the COVID-19 and estimate prognostic factors. This is a retrospective, multicentre cohort study, based on data from 46

285 hospitalizations for COVID-19 in Brazil. Survival functions were calculated using the Kaplan-Meier's method. The log-rank test compared the survival functions for each variable and from that, hazard ratios (HRs) were calculated, and the proportional hazard model was used in Cox multiple regression. The smallest survival curves were the ones for patients at the age of 68 years or more, black/mixed race, illiterate, living in the countryside, dyspnoea, respiratory distress, influenza-like outbreak, O2 saturation <95%, X-ray change, length of stay in the intensive care unit (ICU), invasive ventilatory support, previous heart disease, pneumopathy, diabetes, Down's syndrome, neurological disease and kidney disease. Better survival was observed in the influenza-like outbreak and in an asthmatic patient. The multiple model for increased risk of death when they were admitted to the ICU HR 1.28, diabetes HR 1.17, neurological disease HR 1.34, kidney disease HR 1.11, heart disease HR 1.14, black or mixed race of HR 1.50, asthma HR 0.71 and pneumopathy HR 1.12. This reinforces the importance of socio-demographic and clinical factors as a prognosis for death.

Publication Type

 Journal article.

<199>

Accession Number

 20203417339

Author

 Barbier, E. B.; Burgess, J. C.

Title

 Sustainability and development after COVID-19. (Special Section: Pandemics and sustainability.)

Source

 World Development (Oxford); 2020. 135. 28 ref.

Publisher

 Elsevier Ltd

Location of Publisher

 Oxford

Country of Publication

 UK

Abstract

 Developing countries are highly vulnerable to the COVID-19 pandemic, in part due to the lack of international support for ensuring progress towards the 17 Sustainable Development Goals (SDGs). Yet the mounting financial burden faced by all countries means that additional support is unlikely to be

forthcoming in the near future. It is critical that developing countries find innovative policy mechanisms to achieve sustainability and development aims in a cost-effective manner. This requires identifying affordable policies that can yield immediate progress towards several SDGs together and aligns economic incentives for longer term sustainable development. We identify three policies that meet these criteria: a fossil fuel subsidy swap to fund clean energy investments and dissemination of renewable energy in rural areas; reallocating irrigation subsidies to improve water supply, sanitation and wastewater infrastructure; and a tropical carbon tax, which is a levy on fossil fuels that funds natural climate solutions. Such innovative and cost-effective policy mechanisms do not require substantial external support, and they foster greater progress towards achieving the SDGs in poorer economies.

Publication Type

  Journal article.

<200>

Accession Number

  20203417338

Author

  Khushbu Mishra; Jeevant Rampal

Title

  The COVID-19 pandemic and food insecurity: a viewpoint on India. (Special Section: Pandemics and sustainability.)

Source

  World Development (Oxford); 2020. 135.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  In this article, we present our viewpoint on COVID-19 pandemic and one of the humanitarian challenges it will likely pose: food insecurity. We begin our article by presenting the status of hunger and food insecurity around the world, followed by that in lower and middle income countries, and in India. Then we discuss the COVID-19 lockdown and India's current economic status, followed by India's ranking in the 2019 Global Hunger Index (GHI) as well as hunger-related facts on Indian women and children. Then after, we discuss

the damages to lives caused by COVID-19 and hunger with implications for food insecurity, nutritional status, productivity, education, and wage earnings (based on literature). More importantly, we discuss various complimentary steps to preventing COVID-19 related deaths with steps to preventing deaths related to food insecurity and hunger for the immediate, medium, and long terms. Finally, we provide a concluding paragraph highlighting the need for the Indian government to carefully combine governmental and non-governmental interventions, in reducing India's food insecurity and hunger rates despite the COVID-19 related slowdown.

Publication Type

  Journal article.

<201>

Accession Number

  20203417337

Author

  Cardwell, R.; Ghazalian, P. L.

Title

  COVID-19 and international food assistance: policy proposals to keep food flowing. (Special Section: Pandemics and sustainability.)

Source

  World Development (Oxford); 2020. 135. 25 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  The COVID-19 pandemic is increasing the need for international food assistance, and disrupting the supply and delivery of food assistance. A series of unprecedented shocks is straining the capacity of food assistance organizations to reach vulnerable populations. We discuss how the COVID-19 pandemic is affecting the demand and the supply of international food assistance, and we propose three policy changes that can keep food flowing to those in need. First, donor countries can prioritize humanitarian spending in aid-allocation decisions. Second, governments can exempt food assistance from trade barriers that impede procurement (export restrictions) and delivery (import tariffs). Third, donor countries can allow flexibility

for implementing agencies by untying food assistance from domestic procurement and shipping restrictions. All of these proposals are regulatory changes that can be made without requiring increased spending. These options are particularly relevant now because donor-country governments are entering economic recessions, and foreign aid budgets will be constrained.

Publication Type

  Journal article.

<202>

Accession Number

  20203417314

Author

  Jiang, H.; Liu, J. W.; Ren, N.; He, R.; Li, M. Q.; Dong, Q. C.

Title

  Emergency management in fever clinic during the outbreak of COVID-19: an experience from Zhuhai.

Source

  Epidemiology and Infection; 2020. 148(e174). 8 ref.

Publisher

  Cambridge University Press

Location of Publisher

  Cambridge

Country of Publication

  UK

Abstract

  Coronavirus disease 2019 (COVID-19) is a global health threat. A hospital in Zhuhai adopted several measures in Fever Clinic Management (FCM) to respond to the outbreak of COVID-19. FCM has been proved to be effective in preventing nosocomial cross infection. Faced with the emergency, the hospital undertook creative operational steps in relation to the control and spread of COVID-19, with special focuses on physical and administrative layout of buildings, staff training and preventative procedures. The first operational step was to set up triaging stations at all entrances and then complete a standard and qualified fever clinic, which was isolated from the other buildings within our hospital complex. Secondly, the hospital established its human resource reservation for emergency response and the allocation of human resources to ensure strict and standardized training methods through the hospital for all medical staff and ancillary employees. Thirdly, the hospital divided the fever clinic into partitioned areas and adapted a three-level triaging system. The experiences shared in this paper would be of practical help for the facilities that are

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encountering or will encounter the challenges of COVID-19, i.e. to prevent nosocomial cross infection among patients and physicians.

Publication Type

  Journal article.

<203>

Accession Number

  20203417271

Author

  Biernat, M. M.; Zinczuk, A.; Biernat, P.; Bogucka-Fedorczuk, A.; Kwiatkowski, J.; Kalicinska, E.; Marciniak, D.; Simon, K.; Wrobel, T.

Title

  Nosocomial outbreak of SARS-CoV-2 infection in a haematological unit - high mortality rate in infected patients with haematologic malignancies. (Special Section: Coronavirus.)

Source

  Journal of Clinical Virology; 2020. 130. 22 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  Background: Here we report nosocomial outbreak of COVID-19 among patients in a haematological unit. To our knowledge this is the first report from Central Europe comparing morbidity and mortality in infected and non-infected patients after exposure to SARS-CoV-2. Methods: The outbreak involved 39 individuals: 19 patients and 20 health care workers. The SARS-CoV-2 test by nasopharyngeal swabs was performed by real-time RT-PCR. Exposed patients were divided into two groups: quarantine patients with and without COVID-19. All patients were prospectively examined at the following time points: 0, 7 days, 14 days, 21 days and 28 days after confirmation or exclusion of SARS-CoV-2. Results: Infection was confirmed in a total of 5/20 health care workers and 10/19 patients. Among the patients positive for SARS-CoV-2 infection, the mortality rate was 36.8%. The probability of death in patients infected with SARS-CoV-2 increased 8-fold (p=0.03). Bacterial, fungal, and viral co-infection significantly decreased survival in these patients (p < 0.05). Additionally, the probability of death was much higher in patients older than 40 years of age (p=0.032).

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Conclusion: This study showed significantly higher mortality rate in COVID-19 patients with haematologic diseases compared to the non-infected patient group. Haematologic patients with COVID-19 have 50% less chance of survival.

Publication Type

 Journal article.

<204>

Accession Number

 20203417226

Author

 Mishra, D. K.; Gaurav Goel; Neeraj Arora; Shekhar Krishnan; Sanjay Bhattacharya; Purva Mathur; Kamini Walia; Mammen Chandy

Title

 The importance of intra- and inter-institutional networks for capacity building in severe acute respiratory syndrome coronavirus 2 reverse transcription polymerase chain reaction services: experience from an oncology centre in eastern India.

Source

 Indian Journal of Medical Microbiology; 2020. 38(1):9-17. 21 ref.

Publisher

 Medknow Publications

Location of Publisher

 Mumbai

Country of Publication

 India

Abstract

 High-throughput, accurate, cost-effective and rapid testing for severe acute respiratory syndrome coronavirus 2 (SARS CoV-2) is the need of the hour in face of the global coronavirus disease pandemic. This target is achievable, within a relatively short time through capacity building of reverse transcription polymerase chain reaction (RT-PCR) tests by utilising the strengths of intra and inter institutional networks. These networks act as force multiplier for vital resources which are required for capacity building, namely, leadership, expertise, equipment, space, infection control inputs and human resources. In this article, we report the experience of capacity building for delivery of RT-PCR tests for SARS CoV-2 from a cancer hospital in Eastern India. The relevance, mode of operation and value addition of this essential public health service are discussed in the context of inter departmental collaboration and interaction with other

institutes through the existing diagnostic, surveillance and infection control networks. This networking model for service development and delivery could be used by other centres.

Publication Type

Journal article.

<205>

Accession Number

20203417074

Author

Saidan, M. N.; Shbool, M. A.; Arabeyyat, O. S.; Al-Shihabi, S. T.; Abdallat, Y. A.; Barghash, M. A.; Saidan, H.

Title

Estimation of the probable outbreak size of novel coronavirus (COVID-19) in social gathering events and industrial activities. (Special Section: Coronavirus (COVID-19) collection.)

Source

International Journal of Infectious Diseases; 2020. 98:321-327. 39 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: The reproduction number (R0) is vital in epidemiology to estimate the number of infected people and trace close contacts. R0 values vary depending on social activity and type of gathering events that induce infection transmissibility and its pathophysiology dependence. Objectives: In this study, we estimated the probable outbreak size of COVID-19 clusters mathematically using a simple model that can predict the number of COVID-19 cases as a function of time. Methods: We proposed a mathematical model to estimate the R0 of COVID-19 in an outbreak occurring in both local and international clusters in light of published data. Different types of clusters (religious, wedding, and industrial activity) were selected based on reported events in different countries between February and April 2020. Results: The highest R0 values were found in wedding party events (5), followed by religious gathering events (2.5), while the lowest value was found in the industrial cluster (2). In return, this will enable us to assess the trend of coronavirus spread by comparing the model results and observed patterns. Conclusions: This study provides predictive COVID-19 transmission patterns in different cluster types based on different R0 values. This model offers a

contact-tracing task with the predicted number of cases, to decision-makers; this would help them in epidemiological investigations by knowing when to stop.

Publication Type

Journal article.

<206>

Accession Number

20203417069

Author

Noh JiYun; Song JoonYoung; Yoon JinGu; Seong Hye; Cheong HeeJin; Kim WooJoo

Title

Safe hospital preparedness in the era of COVID-19: the Swiss cheese model. (Special Section: Coronavirus (COVID-19) collection.)

Source

International Journal of Infectious Diseases; 2020. 98:294-296. 8 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Since it first emerged in December 2019, coronavirus disease 2019 (COVID-19) has spread rapidly worldwide. During the pandemic of an emerging infectious disease, it is very important to prevent nosocomial outbreaks and operate hospitals safely to maintain their functions. In this article, we present the strategies for safe hospital operations based on the experiences of the Republic of Korea early in the COVID-19 pandemic. Each hospital should maintain multiple layers of defenses to prevent even small cracks in the hospital's quarantine system.

Publication Type

Journal article.

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202

<207>

Accession Number

  20203417057

Author

  Amzat, J.; Aminu, K.; Kolo, V. I.; Akinyele, A. A.; Ogundairo, J. A.; Danjibo, M. C.

Title

  Coronavirus outbreak in Nigeria: burden and socio-medical response during the first 100 days. (Special Section: Coronavirus (COVID-19) collection.)

Source

  International Journal of Infectious Diseases; 2020. 98:218-224. 40 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  Background: The coronavirus disease of 2019 (COVID-19) pandemic shocked the world, overwhelming the health systems of even high-income countries. Predictably, the situation has elicited social and medical responses from the public and governments, respectively. Nigeria recorded an imported case from Italy on February 27, 2020. Hence, this paper assesses the early socio-medical response to COVID-19 in Nigeria in the first 100 days after the index case. The paper employs analytical methods and collates data from various media reports and official sources. Findings: The incidence of COVID-19 grew steadily in Nigeria, moving from an imported case and elitist pattern to community transmission. The case fatality stood at 2.8%. The country recorded an upsurge (52% of total cases) in the transmission of COVID-19 during the short period the lockdown was relaxed. This paper presents a concise response framework to highlight some specific multisectoral responses to the pandemic. A combination of social and medical responses to a large extent helped Nigeria curtail the spread of the virus. Conclusion: The potential of overwhelming COVID-19 is still imminent in Nigeria as the country is attempting to hurriedly open the economy, which could sacrifice public health gains for temporary economic gains.

Publication Type

  Journal article.

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203

<208>

Accession Number

  20203417048

Author

  Asma Tariq; Mateen, R. M.; Afzal, M. S.; Mahjabeen Saleem

Title

  Paromomycin: a potential dual targeted drug effectively inhibits both spike (S1) and main protease of COVID-19. (Special Section: Coronavirus (COVID-19) collection.)

Source

  International Journal of Infectious Diseases; 2020. 98:166-175. 34 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  Objectives: With the increasing number of people suffering from coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), there is a dire need to look for effective remedies against this pandemic. Drug repurposing seems to be the solution for the current situation. Methods: In a quest to find a potential drug against this virus, 15 antimalarial drugs (including chloroquine) and 2413 US Food and Drug Administration-approved drugs were investigated for activity against both the protease and spike proteins of SARS-CoV-2 using an in silico approach. Molecular docking analysis followed by molecular dynamics simulation was performed to estimate the binding and stability of the complexes. Results: This study identified a single drug - paromomycin - with activity against two targets of SARS-CoV-2, i.e., spike protein (S1) and protease domain. Paromomycin was found to have strong binding affinity for both targets of coronavirus. The results also showed that no antimalarial drug exhibited effective binding for either S1 or protease. Conclusions: This study found that paromomycin may be an effective dual targeting drug against coronavirus, as it binds not only to the protease domain of the virion, but also to the spike domain, with high stability. Furthermore, none of the antimalarial drugs showed strong binding affinity for either protease or the receptor binding domain (RBD).

Publication Type

  Journal article.

<209>

Accession Number

  20203417047

Author

  Adamu, A. A.; Jalo, R. I.; Habonimana, D.; Wiysonge, C. S.

Title

  COVID-19 and routine childhood immunization in Africa: leveraging systems thinking and implementation science to improve immunization system performance. (Special Section: Coronavirus (COVID-19) collection.)

Source

  International Journal of Infectious Diseases; 2020. 98:161-165. 33 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  One of the routine health services that is being disrupted by coronavirus disease 2019 (COVID-19) in Africa is childhood immunization. This is because the immunization system relies on functioning health facilities and stable communities to be effective. Its disruption increases the risk of epidemics of vaccine-preventable diseases, which could increase child mortality. Therefore, policymakers must quickly identify robust and context-specific strategies to rapidly scale-up routine immunization in order to mitigate the impact of COVID-19 on their national immunization performance. To achieve this, we propose a paradigm shift towards systems thinking and use of implementation science in immunization decision-making. Systems thinking can inform a more nuanced and holistic understanding of the interrelationship between COVID-19, its control strategies, and childhood immunization. Tools like causal loop diagrams can be used to explicitly illustrate the systems structure by identifying feedback loops. Once mapped and leverage points for interventions have been identified, implementation science can be used to guide the rapid uptake and utilization of multifaceted evidence-based innovations in complex practice settings. As Africa re-strategizes for the post-2020 era, these emerging fields could contribute significantly in accelerating progress towards universal access to vaccines for all children on the continent despite COVID-19.

Publication Type

  Journal article.

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205

<210>

Accession Number

  20203417046

Author

  Alkhamis, M. A.; Al-Youha, S.; Khajah, M. M.; Haider, N. B.; Alhardan, S.; Nabeel, A.; Al-Mazeedi, S.; Al-Sabah, S. K.

Title

  Spatiotemporal dynamics of the COVID-19 pandemic in the state of Kuwait. (Special Section: Coronavirus (COVID-19) collection.)

Source

  International Journal of Infectious Diseases; 2020. 98:153-160. 25 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  Objectives: Prompt understanding of the temporal and spatial patterns of the COVID-19 pandemic on a national level is a critical step for the timely allocation of surveillance resources. Therefore, this study explored the temporal and spatiotemporal dynamics of the COVID-19 pandemic in Kuwait using daily confirmed case data collected between the 23 February and 07 May 2020. Methods: The pandemic progression was quantified using the time-dependent reproductive number ($R(t)$). The spatiotemporal scan statistic model was used to identify local clustering events. Variability in transmission dynamics was accounted for within and between two socioeconomic classes: citizens-residents and migrant workers. Results: The pandemic size in Kuwait continues to grow ($R(t) \geq 2$), indicating significant ongoing spread. Significant spreading and clustering events were detected among migrant workers, due to their densely populated areas and poor living conditions. However, the government's aggressive intervention measures have substantially lowered pandemic growth in migrant worker areas. However, at a later stage of the study period, active spreading and clustering events among both socioeconomic classes were found. Conclusions: This study provided deeper insights into the epidemiology of COVID-19 in Kuwait and provided an important platform for rapid guidance of decisions related to intervention activities.

Publication Type

  Journal article.

<211>

Accession Number

  20203416224

Author

  Carr, A. C.

Title

  A new clinical trial to test high-dose vitamin C in patients with COVID-19.

Source

  Critical Care; 2020. 24(133):(7 April 2020). 5 ref.

Publisher

  BioMed Central Ltd

Location of Publisher

  London

Country of Publication

  UK

Publication Type

  Journal article.

<212>

Accession Number

  20203416214

Author

  Pham Quang Thai; Do Thi Thanh Toan; Dinh Thai Son; Hoang Thi Hai Van; Luu Ngoc Minh; Le Xuan Hung; Ngo Van Toan; Luu Ngoc Hoat; Duong Huy Luong; Luong Ngoc Khue; Nguyen Trong Khoa; Le Thi Huong

Title

  Factors associated with the duration of hospitalisation among COVID-19 patients in Vietnam: a survival analysis.

Source

Epidemiology and Infection; 2020. 148(e114). 17 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Background. The median duration of hospital stays due to COVID-19 has been reported in several studies on China as 10-13 days. Global studies have indicated that the length of hospitalisation depends on different factors, such as the time elapsed from exposure to symptom onset, and from symptom onset to hospital admission, as well as specificities of the country under study. The goal of this paper is to identify factors associated with the median duration of hospital stays of COVID-19 patients during the second COVID-19 wave that hit Vietnam from 5 March to 8 April 2020. Method. We used retrospective data on 133 hospitalised patients with COVID-19 recorded over at least two weeks during the study period. The Cox proportional-hazards regression model was applied to determine the potential risk factors associated with length of hospital stay. Results. There were 65 (48.9%) females, 98 (73.7%) patients 48 years old or younger, 15 (11.3%) persons with comorbidities, 21 (16.0%) severely ill patients and 5 (3.8%) individuals with life-threatening conditions. Eighty-two (61.7%) patients were discharged after testing negative for the SARS-CoV-2 virus, 51 were still in the hospital at the end of the study period and none died. The median duration of stay in a hospital was 21 (IQR: 16-34) days. The multivariable Cox regression model showed that age, residence and sources of contamination were significantly associated with longer duration of hospitalisation. Conclusion. A close look at how long COVID-19 patients stayed in the hospital could provide an overview of their treatment process in Vietnam, and support the country's National Steering Committee on COVID-19 Prevention and Control in the efficient allocation of resources over the next stages of the COVID-19 prevention period.

Publication Type

Journal article.

<213>

Accession Number

20203416209

Author

Liu ChenYun; Yang YunZhi; Zhang XiaoMing; Xu XinYing; Dou QingLi; Zhang WenWu; Cheng, A. S. K.

Title

The prevalence and influencing factors in anxiety in medical workers fighting COVID-19 in China: a cross-sectional survey.

Source

Epidemiology and Infection; 2020. 148(e98). 24 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

The coronavirus disease 2019 (COVID-19) outbreak caused by the severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2 virus) has been sustained in China since December 2019, and has become a pandemic. The mental health of frontline medical staff is a concern. In this study, we aimed to identify the factors influencing medical worker anxiety in China during the COVID-19 outbreak. We conducted a cross-sectional study to estimate the prevalence of anxiety among medical staff in China from 10 February 2020 to 20 February 2020 using the Zung Self-rating Anxiety Scale (SAS) to assess anxiety, with the criteria of normal (49), mild (50-59), moderate (60-70) and severe anxiety (70). We used multivariable linear regression to determine the factors (e.g. having direct contact when treating infected patients, being a medical staff worker from Hubei province, being a suspect case) for anxiety. We also used adjusted models to confirm independent factors for anxiety after adjusting for gender, age, education and marital status. Of 512 medical staff in China, 164 (32.03%) had had direct contact treating infected patients. The prevalence of anxiety was 12.5%, with 53 workers suffering from mild (10.35%), seven workers suffering from moderate (1.36%) and four workers suffering from severe anxiety (0.78%). After adjusting for sociodemographic characteristics (gender, age, education and marital status), medical staff who had had direct contact treating infected patients experienced higher anxiety scores than those who had not had direct contact (beta value=2.33, confidence interval (CI) 0.65-4.00; P=0.0068). A similar trend was observed in medical staff from Hubei province, compared with those from other parts of China (beta value=3.67, CI 1.44-5.89; P=0.0013). The most important variable was suspect cases with high anxiety scores, compared to non-suspect cases (beta value=4.44, CI 1.55-7.33; P=0.0028). In this survey of hospital medical workers during the COVID-19 outbreak in China, we found that study participants experienced anxiety symptoms, especially those who had direct clinical contact with infected patients; as did those in the worst affected areas, including Hubei province; and those who were suspect cases. Governments and healthcare authorities should proactively implement appropriate psychological intervention programmes, to prevent, alleviate or treat increased anxiety.

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209

<214>

Accession Number

  20203416175

Author

  Kang Jahyun; Jang YunYoung; Kim Jinhwa; Han SiHyeon; Lee KiRog; Kim MukJu; Eom JoongSik

Title

  South Korea's responses to stop the COVID-19 pandemic.

Source

  AJIC - American Journal of Infection Control; 2020. 48(9):1080-1086. 25 ref.

Publisher

  Elsevier Inc.

Location of Publisher

  St. Louis

Country of Publication

  USA

Abstract

  Background: South Korea's aggressive responses to the coronavirus disease 2019 (COVID-19) have greatly slowed the epidemic without regional lockdowns. Methods: The Korean Centers for Disease Control and Prevention's daily briefings were thoroughly reviewed. Information about hospital countermeasures and government coordination was collected via telephone interviews with 4 infection control team leaders, 1 emergency department nurse, and 1 infectious disease physician in Korea. Results: After the 2015 Middle East Respiratory Syndrome outbreak, the government and hospitals prepared for the inevitable outbreak of emerging infectious diseases by reforming the epidemic preparedness system. As a result, COVID-19 diagnostic test kits were quickly developed, enabling extensive early detection of potential cases. Other key steps were tracking cases, finding exposed individuals, coordinating case assignments with health care facilities, and selective clinic screenings for visitors' entering hospitals with mandatory mask wearing. Consequently, after overcoming the initial peak of the outbreak, which was related to a religious group, Korea has been able to maintain daily new cases at around 100 and to less than 50 daily cases in the second week of April. Conclusions: To counter the COVID-19 pandemic, which may persist, long-term, sustained response strategies must be prepared along with coordination between government and health systems.

Publication Type

  Journal article.

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210

Accession Number

20203416174

Author

Zhou Qian; Lai XiaoQuan; Zhang XinPing; Tan Li

Title

Compliance measurement and observed influencing factors of hand hygiene based on COVID-19 guidelines in China.

Source

AJIC - American Journal of Infection Control; 2020. 48(9):1074-1079. 35 ref.

Publisher

Elsevier Inc.

Location of Publisher

St. Louis

Country of Publication

USA

Abstract

Background: Higher requirement is put forward in the measurement of hand hygiene (HH) during a pandemic. This study aimed to describe HH compliance measurement and explore observed influencing factors with respect to coronavirus disease 2019 (COVID-19) guidelines in China. Methods: Compliance was measured as the percentage of compliant opportunities based on criteria for 17 moments. The criteria for compliance included HH behavior, procedure, duration, hand drying method, and the overall that counts them all. The observed influencing factors included different departments and areas and protection motivation. Descriptive analysis and logistic regression were performed. Results: The compliance of overall criteria, HH behavior, procedure, duration, and hand drying method were 79.44%, 96.71%, 95.74%, 88.93%, and 88.42%, respectively, which were significantly different from each other ($P < .001$). Meanwhile, the overall and hand drying method compliance in semi-contaminated areas (odds ratio [OR]=1.829, $P < .001$; OR=2.149, P=.001) and hygienic areas (OR=1.689, P=.004; OR=1.959, P=.015) were significantly higher than those in contaminated area. The compliance with HH behavior for the motivation of patient-protection (OR=0.362, $P < .001$) was lower than that for the motivation of self-protection. Conclusions: HH compliance was firstly measured using different criteria for 17 moments according to COVID-19 guidelines in China. The measurement of HH compliance needs clearer definition and comprehensive practice. Contaminated areas and motivation of patient-protection contribute to lower compliance, which may be addressed by allocating more human resources and increasing supervision and education.

Publication Type

Journal article.

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211

<216>

Accession Number

  20203416168

Author

  Whittemore, P. B.

Title

  COVID-19 fatalities, latitude, sunlight, and vitamin D.

Source

  AJIC - American Journal of Infection Control; 2020. 48(9):1042-1044. 21 ref.

Publisher

  Elsevier Inc.

Location of Publisher

  St. Louis

Country of Publication

  USA

Abstract

  Background: Since Vitamin D is known to be vital in regulating the immune system, and sunlight UV radiation exposure on the skin produces Vitamin D and UV intensity is highest nearest the equator, a study was done to examine the correlation between the latitude and COVID-19 fatality rates for countries. Methods: Eighty-eight countries were selected based on their likelihood of providing reliable data. Using death rates/million for each country from the "worldometer" website, a correlation analysis was done between death rates and a country's latitude. Results A highly significant, positive correlation was found between lower death rates and a country's proximity to the equator (Pearson r=0.40 P < .0001, 2-tailed t test). The R squared of 0.16 means that 16% of the variation in death rates among nations is accounted for by the latitude of the country. Evidence is presented suggesting a direct correlation between sunlight exposure and reduced mortality. Discussion: This study is the first to document a statistically significant correlation between a country's latitude and its COVID-19 mortality and is consistent with other research regarding latitude, Vitamin D deficiency, and COVID-19 fatalities. Limitations of this study are noted. Conclusions: Further research is needed to confirm the correlation between latitude and COVID-19 fatalities, and to determine the optimum amounts of safe sunlight exposure and/or vitamin D oral supplementation to reduce COVID-19 fatalities in populations that are at high risk for vitamin D deficiency.

Publication Type

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212

<217>

Accession Number

  20203415799

Author

  Oscanoa, T. J.; Romero-Ortuno, R.; Carvajal, A.; Savarino, A.

Title

  A pharmacological perspective of chloroquine in SARS-CoV-2 infection: an old drug for the fight against a new coronavirus? (Special Issue: COVID-19 therapeutic and prevention.)

Source

  International Journal of Antimicrobial Agents; 2020. 56(3). 151 ref.

Publisher

  Elsevier B.V.

Location of Publisher

  Amsterdam

Country of Publication

  Netherlands

Abstract

  The coronavirus disease 2019 (COVID-19) pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is having serious consequences on health and the economy worldwide. All evidence-based treatment strategies need to be considered to combat this new virus. Drugs need to be considered on scientific grounds of efficacy, safety and cost. Chloroquine (CQ) and hydroxychloroquine (HCQ) are old drugs used in the treatment of malaria. Moreover, their antiviral properties have been previously studied, including against coronaviruses, where evidence of efficacy has been found. In the current race against time triggered by the COVID-19 pandemic, the search for new antivirals is very important. However, consideration should be given to old drugs with known anti-coronavirus activity, such as CQ and HCQ. These could be integrated into current treatment strategies while novel treatments are awaited, also in light of the fact that they display an anticoagulant effect that facilitates the activity of low-molecular-weight heparin, aimed at preventing acute respiratory distress syndrome (ARDS)-associated thrombotic events. The safety of CQ and HCQ has been studied for over 50 years, however recently published data raise concerns for cardiac toxicity of CQ/HCQ in patients with COVID-19. This review also re-examines the real information provided by some of the published alarming reports, although concluding that cardiac toxicity should in any case be stringently monitored in patients receiving CQ/HCQ.

Publication Type

  Journal article.

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213

<218>

Accession Number

  20203415795

Author

  Chang, R.; Ng TziBun; Sun WeiZen

Title

  Lactoferrin as potential preventative and adjunct treatment for COVID-19. (Special Issue: COVID-19 therapeutic and prevention.)

Source

  International Journal of Antimicrobial Agents; 2020. 56(3). 46 ref.

Publisher

  Elsevier B.V.

Location of Publisher

  Amsterdam

Country of Publication

  Netherlands

Abstract

  The coronavirus disease 2019 (COVID-19) pandemic is rapidly advancing across the globe despite drastic public and personal health measures. Antivirals and nutritional supplements have been proposed as potentially useful against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the novel coronavirus that causes COVID-19, but few have been clinically established. Lactoferrin (Lf) is a naturally occurring, non-toxic glycoprotein that is orally available as a nutritional supplement and has established in vitro antiviral efficacy against a wide range of viruses, including SARS-CoV, a closely related coronavirus to SARS-CoV-2. Furthermore, Lf possesses unique immunomodulatory and anti-inflammatory effects that may be especially relevant to the pathophysiology of severe COVID-19 cases. Here we review the underlying biological mechanisms of Lf as an antiviral and immune regulator, and propose its unique potential as a preventative and adjunct treatment for COVID-19. We hope that further research and development of Lf nutritional supplementation would establish its role for COVID-19.

Publication Type

  Journal article.

<219>

Accession Number

20203415794

Author

Braz, H. L. B.; Silveira, J. A. de M.; Marinho, A. D.; Moraes, M. E. A. de; Moraes Filho, M. O. de; Monteiro, H. S. A.; Jorge, R. J. B.

Title

In silico study of azithromycin, chloroquine and hydroxychloroquine and their potential mechanisms of action against SARS-CoV-2 infection. (Special Issue: COVID-19 therapeutic and prevention.)

Source

International Journal of Antimicrobial Agents; 2020. 56(3). 67 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Coronavirus disease 2019 (COVID-19) is a highly transmissible viral infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Clinical trials have reported improved outcomes resulting from an effective reduction or absence of viral load when patients were treated with chloroquine (CQ) or hydroxychloroquine (HCQ). In addition, the effects of these drugs were improved by simultaneous administration of azithromycin (AZM). The receptor-binding domain (RBD) of the SARS-CoV-2 spike (S) protein binds to the cell surface angiotensin-converting enzyme 2 (ACE2) receptor, allowing virus entry and replication in host cells. The viral main protease (Mpro) and host cathepsin L (CTSL) are among the proteolytic systems involved in SARS-CoV-2 S protein activation. Hence, molecular docking studies were performed to test the binding performance of these three drugs against four targets. The findings showed AZM affinity scores (G) with strong interactions with ACE2, CTSL, Mpro and RBD. CQ affinity scores showed three low-energy results (less negative) with ACE2, CTSL and RBD, and a firm bond score with Mpro. For HCQ, two results (ACE2 and Mpro) were firmly bound to the receptors, however CTSL and RBD showed low interaction energies. The differences in better interactions and affinity between HCQ and CQ with ACE2 and Mpro were probably due to structural differences between the drugs. On other hand, AZM not only showed more negative (better) values in affinity, but also in the number of interactions in all targets. Nevertheless, further studies are needed to investigate the antiviral properties of these drugs against SARS-CoV-2.

Publication Type

Journal article.

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215

<220>

Accession Number

  20203415793

Author

  Khuroo, M. S.

Title

  Chloroquine and hydroxychloroquine in coronavirus disease 2019 (COVID-19). Facts, fiction and the hype: a critical appraisal. (Special Issue: COVID-19 therapeutic and prevention.)

Source

  International Journal of Antimicrobial Agents; 2020. 56(3). 103 ref.

Publisher

  Elsevier B.V.

Location of Publisher

  Amsterdam

Country of Publication

  Netherlands

Abstract

  The coronavirus infection (COVID-19) has turned into a global catastrophe and there is an intense search for effective drug therapy. Of all the potential therapies, chloroquine and hydroxychloroquine have been the focus of tremendous public attention. Both drugs have been used in the treatment and prophylaxis of malaria. Long-term use of hydroxychloroquine is the cornerstone in the treatment of several auto-immune disorders. There is convincing evidence that hydroxychloroquine has strong in vitro antiviral activity against SARS-CoV-2. A few small uncontrolled trials and several anecdotal reports have shown conflicting results of such drug therapy in COVID-19. However, the results of preliminary large-scale randomized controlled trials have failed to show any survival benefit of such drug therapy in COVID-19. Despite the lack of such evidence, hydroxychloroquine has been used as a desperate attempt for prophylaxis and treatment of COVID-19. The drug has wide-ranging drug interactions and potential cardiotoxicity. Indiscriminate unsupervised use can expose the public to serious adverse drug effects.

Publication Type

  Journal article.

<221>

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216

20203415733

Author

Yoshimura, Y.; Sasaki, H.; Horiuchi, H.; Miyata, N.; Tachikawa, N.

Title

Clinical characteristics of the coronavirus disease 2019 (COVID-19) outbreak on a cruise ship.

Source

Journal of Infection and Chemotherapy; 2020. 26(11):1177-1180. 17 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: A large COVID-19 outbreak occurred on the cruise ship Diamond Princess in February 2020. Little information has been reported about the clinical characteristics of the patients. Methods: This single-center, retrospective, observational study was conducted in Yokohama, Japan. We included symptomatic patients who were infected on the ship and admitted to our hospital between 5 and 19 February 2020. All the cases were confirmed with SARS-CoV-2 infection by polymerase chain reaction (PCR). Results: We confirmed 17 cases. The average age was 69 years; 10 patients were Asian and 7 were Caucasian. Eleven patients had one or more chronic diseases. The major symptoms were cough and fever. Chest computed tomography (CT) scans found bilateral ground-glass opacities predominantly in the peripheral area, which were similar to reports from cases in China. C-reactive protein (CRP) levels were higher in severe and critical cases than in mild to moderate cases. The moderate to severe cases reached symptomatic resolution; one of the three critical cases resulted in death due to multiple organ failure. SARS-CoV-2 was detected by PCR at an average of 7 days after symptomatic resolution. Conclusions: Cough and fever, increased blood CRP levels, and CT findings of bilateral ground-glass opacities predominantly in the peripheral lung were characteristic of the COVID-19 cases in this study. These findings were compatible with those of previous reports.

Publication Type

Journal article.

<222>

Accession Number

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217

20203415704

Author

Baloch, Z.; Ma ZhongRen; Ji YunPeng; Ghanbari, M.; Pan QiuWei; Waleed Aljabr

Title

Unique challenges to control the spread of COVID-19 in the Middle East.

Source

Journal of Infection and Public Health; 2020. 13(9):1247-1250. 24 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The COVID-19 pandemic is spreading at unprecedented pace among the Middle East and neighboring countries. This region is geographically, economically, politically, culturally and religiously a very sensitive area, which impose unique challenges for effective control of this epidemic. These challenges include compromised healthcare systems, prolonged regional conflicts and humanitarian crises, suboptimal levels of transparency and cooperation, and frequent religious gatherings. These factors are interrelated and collectively determine the response to the pandemic in this region. Here, we in-depth emphasize these challenges and take a glimpse of possible solutions towards mitigating the spread of COVID-19.

Publication Type

Journal article.

<223>

Accession Number

20203415703

Author

Ahmed, M. K.; Afifi, M.; Uskokovic, V.

Title

Protecting healthcare workers during COVID-19 pandemic with nanotechnology: a protocol for a new device from Egypt.

Source

Journal of Infection and Public Health; 2020. 13(9):1243-1246. 39 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The outbreak of the coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is thought to have occurred first in Wuhan, China in December 2019, before spreading to over 120 countries in the months that followed. It was declared a "public health emergency of international concern" by the World Health Organization on January 31, 2020 and recognized as a pandemic on March 11, 2020. The primary route of SARS-CoV-2 transmission from human to human is through inhalation of respiratory droplets. Devising protective technologies for stopping the spread of the droplets of aerosol containing the viral particles is a vital requirement to curb the ongoing outbreak. However, the current generations of protective respirator masks in use are noted for their imperfect design and there is a need to develop their more advanced analogues, with higher blockage efficiency and the ability to deactivate the trapped bacteria and viruses. It is likely that one such design will be inspired by nanotechnologies. Here we describe a new design from Egypt, utilizing a reusable, recyclable, customizable, antimicrobial and antiviral respirator facial mask feasible for mass production. The novel design is based on the filtration system composed of a nanofibrous matrix of polylactic acid and cellulose acetate containing copper oxide nanoparticles and graphene oxide nanosheets and produced using the electrospinning technique. Simultaneously, the flat pattern fabricated from a thermoplastic composite material is used to provide a solid fit with the facial anatomy. This design illustrates an effort made in a developing setting to provide innovative solutions for combating the SARS-CoV-2 pandemic of potentially global significance.

Publication Type

Journal article.

<224>

Accession Number

20203415698

Author

Yogesh Kumar; Harvijay Singh; Patel, C. N.

Title

In silico prediction of potential inhibitors for the main protease of SARS-CoV-2 using molecular docking and dynamics simulation based drug-repurposing.

Source

Journal of Infection and Public Health; 2020. 13(9):1210-1223. 52 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: The rapidly enlarging COVID-19 pandemic caused by the novel SARS-corona virus-2 is a global public health emergency of an unprecedented level. Unfortunately no treatment therapy or vaccine is yet available to counter the SARS-CoV-2 infection, which substantiates the need to expand research efforts in this direction. The indispensable function of the main protease in virus replication makes this enzyme a promising target for inhibitors screening and drug discovery to treat novel coronavirus infection. The recently concluded a-ketoamide ligand-bound X-ray crystal structure of SARS-CoV-2 Mpro (PDB ID: 6Y2F) from Zhang et al. has revealed the potential inhibitor binding mechanism and the molecular determinants responsible for substrate binding. Methods: For the study, we have targeted the SARS-CoV-2 Mpro for the screening of FDA approved antiviral drugs and carried out molecular docking based virtual screening. Further molecular dynamic simulation studies of the top three selected drugs carried out to investigated for their binding affinity and stability in the SARS-CoV-2 Mpro active site. The phylogenetic analysis was also performed to know the relatedness between the SARS-CoV-2 genomes isolated from different countries. Results: The phylogenetic analysis of the SARS-CoV-2 genome reveals that the virus is closely related to the Bat-SL-CoV and does not exhibit any divergence at the genomic level. Molecular docking studies revealed that among the 77 drugs, screened top ten drugs shows good binding affinities, whereas the top three drugs: Lopinavir-Ritonavir, Tipranavir, and Raltegravir were undergone for molecular dynamics simulation studies for their conformational stability in the active site of the SARS-CoV-2 Mpro protein. Conclusions: In the present study among the library of FDA approved antiviral drugs, the top three inhibitors Lopinavir-Ritonavir, Tipranavir, and Raltegravir show the best molecular interaction with the main protease of SARS-CoV-2. However, the in-vitro efficacy of the drug molecules screened in this study further needs to be corroborated by carrying out a biochemical and structural investigation.

Publication Type

Journal article.

<225>

Accession Number

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220

20203415654

Author

Hossain, M. A.; Sanjida Rahman; Karim, M. R.

Title

Mental health of school-going children during existing lockdown situation due to COVID-19 pandemic in Bangladesh.

Source

Bangladesh Journal of Infectious Diseases; 2020. 7(1):33-37. 16 ref.

Publisher

Bangladesh Infection Research Association

Location of Publisher

Dhaka

Country of Publication

Bangladesh

Abstract

During this epidemic of COVID-19, children are in need of much concentration and profound love of the senior family members. Although the measures taken by the organizations are necessary to prevent the spread of the novel coronavirus, they may be causing widespread mental health issues, including depression and loneliness. Therefore, it is imperative that parents have to spend the lion-share of time with children while listening to them cordially. Parents can participate in sports with them to help them stay fit so that they can enjoy commemorating moments. However, in this additional time, the parents can also make them habituated to practice the rules of health, so does social distancing.

Publication Type

Journal article.

<226>

Accession Number

20203414741

Author

Schellack, N.; Coetzee, M.; Schellack, G.; Gijzelaar, M.; Hassim, Z.; Milne, M.; Bronkhorst, E.; Padayachee, N.; Singh, N.; Kolman, S.; Gray, A. L.

Title

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221

COVID-19: guidelines for pharmacists in South Africa.

Source

Southern African Journal of Infectious Diseases; 2020. 35(a206). 34 ref.

Publisher

AOSIS OpenJournals

Location of Publisher

Tygervalley

Country of Publication

South Africa

Abstract

  Since the outbreak of COVID-19, and its declaration as a pandemic by the World Health Organization (WHO), the reliance on pharmacists as one of the first points of contact within the healthcare system has been highlighted. This evidence-based review is aimed at providing guidance for pharmacists in community, hospital and other settings in South Africa, on the management of patients with suspected or confirmed coronavirus disease 2019, or COVID-19. The situation is rapidly evolving, and new evidence continues to emerge on a daily basis. This guidance document takes into account and includes newly available evidence and recommendations, particularly around the following aspects relating to COVID-19: *Epidemiology *The virus, its modes of transmission and incubation period *Symptom identification, including the differentiation between influenza, allergic rhinitis, sinusitis and COVID-19 *Social media myths and misinformation *Treatment guidelines and medicines that may need to be kept in stock *Treatment and prevention options, including an update on vaccine development *The case for and against the use of NSAIDs, ACE-inhibitors and angiotensin receptor blockers (ARBs) in patients with COVID-19 *Interventions and patient counselling by the pharmacist. It is critical, though, that pharmacists access the most recent and authoritative information to guide their practice. Key websites that can be relied upon are: *World Health Organization (WHO): https://www.who.int/emergencies/diseases/novel-coronavirus-2019 *National Institute for Communicable Diseases (NICD): https://www.nicd.ac.za/diseases-a-z-index/covid-19/*National Department of Health (NDoH): http://www.health.gov.za/index.php/outbreaks/145-corona-virus-outbreak/465-corona-virus-outbreak; https://sacoronavirus.co.za/.

Publication Type

  Journal article.

<227>

Accession Number

  20203414066

Author

  Nair, A. M.; Shilpa, P. H.; Vijay Shekhar; Tiwari, R. V. C.; Izaz Shaik; Bhargavi Dasari; Heena Tiwari

Title

  Novel coronavirus - a comprehensive review.

Source

Publisher

  Medknow Publications

Location of Publisher

  Mumbai

Country of Publication

  India

Abstract

  Recently coronavirus outbreak which started in Wuhan, China, has caused international concern that has affected more than 29 lakh people worldwide and with no vaccine or specific antiviral drugs present as well as oblivious testing of carriers who are generally asymptomatic, the use of general health intervention techniques are failing to comply. As compared to other epidemics like severe acute respiratory syndrome-coronavirus (SARS-CoV) and the Middle-East respiratory syndrome (MERS-CoV), coronavirus (also named as COVID-19) exhibit mild symptoms in the majority of cases. But in the case of a vulnerable population, it can prove to be life-threatening. Relying on proper barrier technique, use of chest computed tomography scans, managing co-morbid conditions of susceptible patients, identifying the pattern of disease spread as well as the use of polymerase chain reaction to assess the specificity of cases will eventually prove to be efficacious since most of the positive cases are asymptomatic at the beginning which poses a challenge to the primary health care physicians. The development of vaccines will also take some time so it is better to know about COVID-19 better and also follow quarantine restrictions properly till then. In this review, we try to put forward all the relevant studies which have been published by the end of March 2020 so as to summarize the natural history, diagnosis as well as treatment strategies for eradicating COVID-19, which will help in managing this pandemic.

Publication Type

  Journal article.

<228>

Accession Number

  20203414064

Author

  Jitendra Rohilla; Pinki Tak; Shubham Jhanwar; Shazia Hasan

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223

Title

Primary care physician's approach for mental health impact of COVID-19.

Source

Journal of Family Medicine and Primary Care; 2020. 9(7):3189-3194. 72 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

As the world struggles to control coronavirus infection with the exhausting capacity of health care systems globally, the role of primary care physician and family physician becomes more important as the first point of contact with the community. Limited availability of mental health services in India requires general practitioners to deal with psychological disorders arising due to infection outbreak and its restrictive control strategies. This article discusses what and how primary physicians can manage the psychological burden of a pandemic, and therefore, reducing the reliance on mental health specialist.

Publication Type

Journal article.

<229>

Accession Number

20203413488

Author

Abhijit Chatterjee

Title

Assessment of micronutrient intake of primary school children through mid-day meal scheme in light of COVID-19 pandemic in India.

Source

Indian Journal of Nutrition and Dietetics; 2020. 57(3):362-365. 7 ref.

Publisher

Avinashilingam Institute for Home Science and Higher Education for Women

Location of Publisher

  Saibaba Colony

Country of Publication

  India

Abstract

  The planet is now suffering from COVID-19 pandemic. Since there is no vaccine available for this viral disease, a number of preventive measures including boosting immunity through nutrition have been gaining attention. As Government of India has recently increased the allocation of Mid-Day Meal (MDM) scheme to Rs 8,100 crore from Rs 7,300 crore to ensure the supply of food and nutrition to the beneficiaries amidst COVID-19 lockdown, a nutritional analysis of MDM offered in a rural school of West Tripura district, Tripura, India was performed to reveal that the diet lacks a number of micronutrients generally considered important for immunological function. The findings may help the competent authority for better decision making for usage of the enhanced budgetary allocation for MDM program under COVID-19 pandemic.

Publication Type

  Journal article.

<230>

Accession Number

  20203412977

Author

  Fujita, R.; Hino, M.; Ebihara, T.; Nagasato, T.; Masuda, A.; Lee, J. M.; Fujii, T.; Mon, H.; Kakino, K.; Nagai, R.; Tanaka, M.; Tonooka, Y.; Moriyama, T.; Kusakabe, T.

Title

  Efficient production of recombinant SARS-CoV-2 spike protein using the baculovirus-silkworm system.

Source

  Biochemical and Biophysical Research Communications; 2020. 529(2):257-262. 22 ref.

Publisher

  Elsevier

Location of Publisher

  Amsterdam

Country of Publication

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225

Netherlands

Abstract

In the case of a new viral disease outbreak, an immediate development of virus detection kits and vaccines is required. For COVID-19, we established a rapid production procedure for SARS-CoV-2 spike protein (S protein) by using the baculovirus-silkworm expression system. The baculovirus vector-derived S proteins were successfully secreted to silkworm serum, whereas those formed insoluble structure in the larval fat body and the pupal cells. The ectodomain of S protein with the native sequence was cleaved by the host furin-protease, resulting in less recombinant protein production. The S protein modified in furin protease-target site was efficiently secreted to silkworm serum and was purified as oligomers, which showed immunoreactivity for anti-SARS-CoV-2 S2 antibody. By using the direct transfection of recombinant bacmid to silkworms, we achieved the efficient production of SARS-CoV-2 S protein as fetal bovine serum (FBS)-free system. The resultant purified S protein would be useful tools for the development of immunodetection kits, antigen for immunization for immunoglobulin production, and vaccines.

Publication Type

Journal article.

<231>

Accession Number

20203412455

Author

Prashant Kumar Gangwar; Mohammed Arif Shaikh; Pagadala Suganda Devi

Title

A critique on COVID -19 with reference to India on global business platform.

Source

International Journal for Research in Applied Science and Engineering Technology; 2020. 8(4):1666-1668. 9 ref.

Publisher

Indian Institute of Technology

Location of Publisher

Bombay

Country of Publication

India

Abstract

China's sneeze may prove to be hault vexing for long-complacent financial markets of the world. Corona virus has spread to nearly all countries across the world from China. It emerged out as a blockage which disturbs whole economy of the globe. Trade action of China has been affecting the globe economy which resulting into a deflation situation. The crisis occurred due to one of the paralysis in China economy and has dumped the world into next deflation. Cities that are in 'not working mode" have had complete blocking of travel, closing of different manufacturing units etc., leading in worldwide changes in business, tourism, funding and supply process in disarray affecting production of the commodities and the service sector. The Lockout has resulted in fall of aggregate forces like demand and supply which will result in the creation of deflationary gap in the international trade. India is also adversely affected with the disease in all the sectors of economy. But Corona virus has brought the golden opportunity to growth and development. It is a way to move on the path of success and glory in international trade by extending the market size. Corona virus has given opening door to supply requirements of the countries that are looking forward for an alternative to China. The manufacturing sector can be revived with the new soul only and only if these prospective have been analyzed in efficient and effective manner.

Publication Type

  Journal article.

<232>

Accession Number

  20203411141

Author

  Lee HoCheol; Moon SeokJun; Ndombi, G. O.; Kim KyeongNa; Berhe, H.; Nam EunWoo

Title

  COVID-19 perception, knowledge, and preventive practice: comparison between South Korea, Ethiopia, and Democratic Republic of Congo. (Special edition for COVID-19.)

Source

  African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):66-77. 41 ref.

Publisher

  Women's Health and Action Research Centre

Location of Publisher

  Benin City

Country of Publication

  Nigeria

Abstract

In Africa, the first confirmed case of COVID-19 was reported in Egypt on February 14, 2020. Since then, the number of cases has continued to increase with Ethiopia, the Democratic Republic of Congo (DRC), Nigeria, Sudan, Angola, Tanzania, Ghana, and Kenya identified as vulnerable countries. The present study aimed to: (1) identify differences in trust level of COVID-19 diagnosis, recent healthcare utilization experiences, and COVID-19-related knowledge, information, and prevention practices in South Korea, Ethiopia, and DRC; and (2) identify factors influencing trust level in healthcare facilities regarding COVID-19 diagnosis. The present study was cross-sectional. The questionnaire survey was conducted between May 1-14, 2020 using Google forms, and 748 respondents were included in the final analysis. The data collected were analyzed using ANOVA, post-hoc test, and binary logistic regression analysis. South Korea showed higher rate of practice for COVID-19 prevention such as hand washing, mask wearing, and etc. than Ethiopia and DRC. The results showed significant differences with the trust level being 3.129 times higher in respondents from DRC than those from Ethiopia (aOR=3.129, 95% CI: [1.884-5.196], p<.000) and 29.137 times higher in respondents from South Korean than those from Ethiopia (aOR=29.137, 95% CI: [13.869-61.210], p<.000). Gender, age, number of family members, healthcare utilization experience, information, and practice were significant variables. Health education expansion for information and practice about COVID-19 in Ethiopia and DRC is necessary.

Publication Type

Journal article.

<233>

Accession Number

20203398523

Author

Charlier, J.; Sabini, M.; Messori, S.; Bagni, M.

Title

Pandemic! A one health view of emerging infectious diseases.

Source

PANDEMIC! A one health view of emerging infectious diseases. What veterinary sciences can contribute. Meeting report; 2020. 20 pp.

Publisher

STAR-IDAZ International Research Consortium on Animal Health

Location of Publisher

London

Country of Publication

UK

Abstract

This article presents the contents of the webinar conducted on 30 June 2020, organized in a cooperation between the Collaborative Working Group on Animal Health and Welfare Research (CWG-AHW) and the Global Strategic Alliances for the Coordination of Research on the Major Infectious Diseases of Animals and Zoonoses and its related International Research Consortium (STAR-IDAZ IRC). The report identified research needs and policy recommendations for the prevention and control of human and animal pandemics and how strategic research agendas in animal health can be improved to respond to emerging animal diseases, based on lessons learned from the COVID-19 pandemic.

Publication Type

Miscellaneous.

<234>

Accession Number

20203318633

Author

Jayne, T. S.; Adelaja, A.; Mkandawire, R.

Title

Africa's rapid economic transformation. (Focus: Employment for rural Africa.)

Source

Rural 21; 2020. 54(2):14-17.

Publisher

DLG-Verlag

Location of Publisher

Frankfurt am Main

Country of Publication

Germany

Abstract

Thirty years ago, Africa was synonymous with war, famine and poverty. That narrative is clearly outdated. The living standards of Africans are rising remarkably fast, also thanks to the country's agricultural growth and the development of rural-urban value chains. Our authors are convinced that improving education and entrepreneurship will ensure that the region's progress is irreversible even as it confronts COVID-19.

Publication Type

Journal article.

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229

<235>

Accession Number

  20203318632

Author

  Weigelt, J.; Muller, A.

Title

  Building our food systems back better. (Special Section: COVID-19.)

Source

  Rural 21; 2020. 54(2):12-13.

Publisher

  DLG-Verlag

Location of Publisher

  Frankfurt am Main

Country of Publication

  Germany

Abstract

  What is required to make food systems provide sufficient, healthy food while not harming the planet? How should food security be maintained given the threat posed by climate change? Our authors look at some aspects of tomorrow's food systems against the backdrop of the corona crisis.

Publication Type

  Journal article.

<236>

Accession Number

  20203318631

Author

Borner, J.; Nothlings, U.

Title

Towards sustainable diets and planetary health: lessons from early research and knowledge gaps. (Special Section: COVID-19.)

Source

Rural 21; 2020. 54(2):10-11.

Publisher

DLG-Verlag

Location of Publisher

Frankfurt am Main

Country of Publication

Germany

Abstract

In 2019, the EAT-Lancet commission launched a thought-provoking report proposing the "planetary health diet". The idea was to formulate a diet that is both healthy and environmentally benign in terms of limiting societies' environmental footprints. So far, however, we know far too little about how governments and other stakeholders can cost-effectively govern globalised sustainable food production and consumption systems. Our authors summarise recent research on measuring health and environmental impacts of such systems as well as related policy interventions and propose ingredients of a future research agenda.

Publication Type

Journal article.

<237>

Accession Number

20203318630

Author

Fanzo, J.; Sarria, I.

Title

Changing times, changing diets. (Special Section: COVID-19.)

Source

Rural 21; 2020. 54(2):4-5.

Publisher

DLG-Verlag

Location of Publisher

Frankfurt am Main

Country of Publication

Germany

Abstract

Diets are the great equaliser. Depending on who you are, where you live and the amount of resources at your disposal, diets can either hinder or promote human and environmental health. Overall, diets are changing for various reasons, particularly in rapidly transitioning low- and middle-income countries. If trends in these countries follow those in high-income contexts and countries, fragile health systems could be overwhelmed and burdened with a new host of complex diseases. How can low- and middle-income countries leapfrog over the mistakes made in high-income countries and ensure that dietary changes are moving in a direction benefiting both human and planetary health.

Publication Type

Journal article.

<238>

Accession Number

20203414586

Author

Souza, C. D. F. de; Machado, M. F.; Carmo, R. F. do

Title

Human development, social vulnerability and COVID-19 in Brazil: a study of the social determinants of health.

Source

Infectious Diseases of Poverty; 2020. 9(124):(31 August 2020). 27 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Coronavirus disease 2019 (COVID-19) was confirmed in Brazil in February 2020. Since then, the disease has spread throughout the country, reaching the poorest areas. This study analyzes the relationship between COVID-19 and the population's living conditions. We aimed to identify social determinants related to the incidence, mortality, and case fatality rate of COVID-19 in Brazil, in 2020. Methods: This is an ecological study evaluating the relationship between COVID-19 incidence, mortality, and case fatality rates and 49 social indicators of human development and social vulnerability. For the analysis, bivariate spatial correlation and multivariate and spatial regression models (spatial lag model and spatial error models) were used, considering a 95% confidence interval and a significance level of 5%. Results: A total of 44.8% of municipalities registered confirmed cases of COVID-19 and 14.7% had deaths. We observed that 56.2% of municipalities with confirmed cases had very low human development (COVID-19 incidence rate: 59.00/100 000; mortality rate: 36.75/1 000 000), and 52.8% had very high vulnerability (COVID-19 incidence rate: 41.68/100 000; mortality rate: 27.46/1 000 000). The regression model showed 17 indicators associated with transmission of COVID-19 in Brazil. Conclusions: Although COVID-19 first arrived in the most developed and least vulnerable municipalities in Brazil, it has already reached locations that are farther from large urban centers, whose populations are exposed to a context of intense social vulnerability. Based on these findings, it is necessary to adopt measures that take local social aspects into account in order to contain the pandemic.

Publication Type

Journal article.

<239>

Accession Number

20203414454

Author

Angrist, N.; Bergman, P.; Evans, D. K.; Hares, S.; Jukes, M. C. H.; Letsomo, T.

Title

Practical lessons for phone-based assessments of learning.

Source

BMJ Global Health; 2020. 5(7). 38 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

School closures affecting more than 1.5 billion children are designed to prevent the spread of current public health risks from the COVID-19 pandemic, but they simultaneously introduce new short-term and long-term health risks through lost education. Measuring these effects in real time is critical to inform effective public health responses, and remote phone-based approaches are one of the only viable options with extreme social distancing in place. However, both the health and education literature are sparse on guidance for phone-based assessments. In this article, we draw on our pilot testing of phone-based assessments in Botswana, along with the existing literature on oral testing of reading and mathematics, to propose a series of preliminary practical lessons to guide researchers and service providers as they try phone-based learning assessments. We provide preliminary evidence that phone-based assessments can accurately capture basic numeracy skills. We provide guidance to help teams (1) ensure that children are not put at risk, (2) test the reliability and validity of phone-based measures, (3) use simple instructions and practice items to ensure the assessment is focused on the target skill, not general language and test-taking skills, (4) adapt the items from oral assessments that will be most effective in phone-based assessments, (5) keep assessments brief while still gathering meaningful learning data, (6) use effective strategies to encourage respondents to pick up the phone, (7) build rapport with adult caregivers and youth respondents, (8) choose the most cost-effective medium and (9) account for potential bias in samples.

Publication Type

Journal article.

<240>

Accession Number

20203414264

Author

Sonkar, S. K.; Satish Kumar; Gupta, K. K.; Chaudhary, S. C.; Vivek Kumar; Sawlani, K. K.; Verma, S. K.

Title

A learning experience of pandemic COVID-19 management at our medical institute.

Source

Journal of Family Medicine and Primary Care; 2020. 9(8):4270-4276. 17 ref.

Publisher

Medknow Publications

Location of Publisher

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234

Mumbai

Country of Publication

India

Abstract

Background: Coronavirus disease-19 (COVID-19) pandemic caused by Severe Acute Respiratory Syndrome Corona Virus 2 (SARS-CoV-2) is a novel disease. Objectives: Our healthcare sector is at the epicentre of this unprecedented global pandemic challenge and we are not fully aware of it's management. Here we have discussed our learning experience in managing and tackling the COVID-19 pandemic at our institute which will set an example for other hospitals as well as instill confidence in our primary care physicians who are the frontline warriors. Methods and Results: For combating COVID-19, dedicated teams for its management including logistic support was streamlined. Our capacity was built up for 200 isolation beds including 40 ventilator equipped beds and 645 defined quarantine rooms, to be implemented in phased manner. Till date more than 200 COVID-19 patients have been admitted here. Fever and cough were common presentations. Mortality was high in patients with advanced age or who had multiple co-morbid conditions. Efficient training and infection prevention control have resulted in a satisfactory outcome. Conclusion: In the wake of this pandemic all hospital setup, with collective responsibility should follow a specified protocol so that our hospital is not converted to the hotspot. COVID-19 has imposed a new challenge where not only patients have to be managed but our health care workers also need to be protected. Telemedicine and our primary care physicians will play a crucial role. Here at a medical institute, medical teaching, and learning atmosphere has to be created amidst the pandemic apprehension for our budding medicos.

Publication Type

Journal article.

<241>

Accession Number

20203413590

Author

Salehi, M.; Ahmadikia, K.; Badali, H.; Khodavaisy, S.

Title

Opportunistic fungal infections in the epidemic area of COVID-19: a clinical and diagnostic perspective from Iran.

Source

Mycopathologia; 2020. 185(4):607-611. 25 ref.

Publisher

Springer

Location of Publisher

Dordrecht

Country of Publication

Netherlands

Abstract

The coronavirus disease 2019 (COVID- 19) pandemic emerged in Wuhan, China, in late 2109, and has rapidly spread around the world. Until May 25, 2020, there were 133,521 confirmed COVID-19 cases and 7359 deaths in Iran. The role of opportunistic fungal infections in the morbidity and mortality of COVID-19 patients remains less defined. Based on our multicenter experiences, we categorized the risks of opportunistic fungal infections in COVID-19 patients in Iran. The COVID-19 patients at high risk included those with acute respiratory distress syndrome, in intensive care units, receiving broad-spectrum antibiotics, immunosuppressants or corticosteroid, and supported by invasive or noninvasive ventilation. The patients were most likely to develop pulmonary aspergillosis, oral candidiasis, or pneumocystis pneumonia. Most diagnoses were probable as the accurate diagnosis of opportunistic fungal infections remains challenging in resource-poor settings. We summarize the clinical signs and laboratory tests needed to confirm candidiasis, aspergillosis, or pneumocystosis in our COVID-19 patients.

Publication Type

Journal article.

<242>

Accession Number

20203413558

Author

Davoudi-Monfared, E.; Rahmani, H.; Khalili, H.; Hajiabdolbaghi, M.; Salehi, M.; Abbasian, L.; Kazemzadeh, H.; Yekaninejad, M. S.

Title

A randomized clinical trial of the efficacy and safety of interferon beta-1a in treatment of severe COVID-19.

Source

Antimicrobial Agents and Chemotherapy; 2020. 64(9).

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

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Country of Publication

USA

Abstract

To the best of our knowledge, there is no published study on the use of interferon beta-1a (IFN beta-1a) in the treatment of severe COVID-19. In this randomized clinical trial, the efficacy and safety of IFN beta-1a were evaluated in patients with severe COVID-19. Forty-two patients in the interferon group received IFN beta-1a in addition to the national protocol medications (hydroxychloroquine plus lopinavir-ritonavir or atazanavir-ritonavir). Each 44-g/ml (12 million IU/ml) dose of interferon beta-1a was subcutaneously injected three times weekly for two consecutive weeks. The control group consisted of 39 patients who received only the national protocol medications. The primary outcome of the study was time to reach clinical response. Secondary outcomes were duration of hospital stay, length of intensive care unit stay, 28-day mortality, effect of early or late administration of IFN on mortality, adverse effects, and complications during the hospitalization. Between 29 February and 3 April 2020, 92 patients were recruited, and a total of 42 patients in the IFN group and 39 patients in the control group completed the study. As the primary outcome, time to the clinical response was not significantly different between the IFN and the control groups (9.7 +or- 5.8 versus 8.3 +or- 4.9 days, respectively, P = 0.95). On day 14, 66.7% versus 43.6% of patients in the IFN group and the control group, respectively, were discharged (odds ratio [OR], 2.5; 95% confidence interval [CI], 1.05 to 6.37). The 28-day overall mortality was significantly lower in the IFN than the control group (19% versus 43.6%, respectively, P = 0.015). Early administration significantly reduced mortality (OR, 13.5; 95% CI, 1.5 to 118). Although IFN did not change the time to reach the clinical response, adding it to the national protocol significantly increased discharge rate on day 14 and decreased 28-day mortality.

Publication Type

Journal article.

<243>

Accession Number

20203413519

Author

Vanachayangkul, P.; Im-Erbsin, R.; Tungtaeng, A.; Kodchakorn, C.; Roth, A.; Adams, J.; Chaisatit, C.; Saingam, P.; Sciotti, R. J.; Reichard, G. A.; Nolan, C. K.; Pybus, B. S.; Black, C. C.; Lugo-Roman, L. A.; Wegner, M. D.; Smith, P. L.; Wojnarski, M.; Vesely, B. A.; Kobylinski, K. C.

Title

Safety, pharmacokinetics, and activity of high-dose ivermectin and chloroquine against the liver stage of Plasmodium cynomolgi infection in Rhesus macaques.

Source

Antimicrobial Agents and Chemotherapy; 2020. 64(9). 38 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

Previously, ivermectin (1 to 10 mg/kg of body weight) was shown to inhibit the liver-stage development of Plasmodium berghei in orally dosed mice. Here, ivermectin showed inhibition of the in vitro development of Plasmodium cynomolgi schizonts (50% inhibitory concentration [IC50], 10.42 M) and hypnozoites (IC50, 29.24 M) in primary macaque hepatocytes when administered as a high dose prophylactically but not when administered in radical cure mode. The safety, pharmacokinetics, and efficacy of oral ivermectin (0.3, 0.6, and 1.2 mg/kg) with and without chloroquine (10 mg/kg) administered for 7 consecutive days were evaluated for prophylaxis or radical cure of P. cynomolgi liver stages in rhesus macaques. No inhibition or delay to blood-stage P. cynomolgi parasitemia was observed at any ivermectin dose (0.3, 0.6, and 1.2 mg/kg). Ivermectin (0.6 and 1.2 mg/kg) and chloroquine (10 mg/kg) in combination were well-tolerated with no adverse events and no significant pharmacokinetic drug-drug interactions observed. Repeated daily ivermectin administration for 7 days did not inhibit ivermectin bioavailability. It was recently demonstrated that both ivermectin and chloroquine inhibit replication of the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in vitro. Further ivermectin and chloroquine trials in humans are warranted to evaluate their role in Plasmodium vivax control and as adjunctive therapies against COVID-19 infections.

Publication Type

Journal article.

<244>

Accession Number

20203413486

Author

Dimple Rawat; Arti Gulati; Namrata Singh; Vikram, N. K.; Amit Kumar; Anshu Sharma

Title

Holistic approach during a pandemic for healthy well-being.

Source

Indian Journal of Nutrition and Dietetics; 2020. 57(3):329-340. 45 ref.

Publisher

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238

Avinashilingam Institute for Home Science and Higher Education for Women

Location of Publisher

Saibaba Colony

Country of Publication

India

Abstract

Currently, the entire globe is facing a pandemic 'COVID-19' and the numbers are rising exponentially. Unfortunately, along with the triple burden of malnutrition and many non-communicable diseases, Corona virus has knocked India's door. As it is don't know for how long this battle will continue, the present review is an attempt to highlight the importance of non-pharmacological approaches like a balanced diet, stress management, adequate sleep and physical activity to build up a strong immune system, as it reduces the complications in individuals who are already at nutritional risk and might get exposed to the infection. Globally, scientists are working to find potential vaccines to combat COVID-19, meanwhile, it must utilize this time window in building our immunity by adopting a healthy dietary and other lifestyle measures. Hence, it is the need of the hour to build up immunity by adopting a holistic approach as there is no nutritional magic pill, which can boost immunity instantly.

Publication Type

Journal article.

<245>

Accession Number

20203412435

Author

Abhishek Porwal; Shruti Jain

Title

Analysis of machine learning algorithms for predicting confirmed cases of COVID-19 in India.

Source

International Journal for Research in Applied Science and Engineering Technology; 2020. 8(4):784-790. 5 ref.

Publisher

Indian Institute of Technology

Location of Publisher

Bombay

Country of Publication

India

Abstract

There are many models and algorithms are available in Machine Learning for generating prediction which can be applied to wide range of cases. Good predictions can help us prepare better for the future. This paper is a practice to implement those application on the CVID-19 data set to predict confirmed cases of COVID-19 in India. The data set is available open on Government of India dashboard but we have used dataset from Kaggle and tried to see which Machine Learning Models will give good predictions. In this, we had analyzed Simple Artificial Neural Network, Deep Neural Network and Recurrent Neural Network. We had run the same experiment with different setups where we enhance number of hidden layers to see how model performance will change. At the end we had given a comparison of all the models for their performance.

Publication Type

Journal article.

<246>

Accession Number

20203411790

Author

Liu Yong; Li JinXiu; Feng YongWen

Title

Critical care response to a hospital outbreak of the 2019-nCoV infection in Shenzhen, China.

Source

Critical Care; 2020. 24(56):(19 February 2020). 9 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The aim of the article was to discuss the critical care responses to a nosocomial outbreak of COVID-19 in Shenzhen, China. 2019-nCoV management was largely supportive, including intubation, early prone

positioning, neuromuscular blockade, and extracorporeal membrane oxygenation (ECMO) according to the recommendations updated by CNHC. Low-dose systematic corticosteroids, lopinavir/ritonavir, and atomization inhalation of interferon were encouraged. These critical managements have worked well so far, as the 2019-nCoV patients had zero mortality. On the contrary, the previously reported mortality of 2019 nCoV patients in Wuhan ranged from 11 to 15%.

Publication Type

  Journal article.

<247>

Accession Number

  20203411149

Author

  Aigba, S. R.; Paul, O.; Lamarque, M.; Sall, B.

Title

  African children vulnerabilities in COVID-19 era: a review. (Special edition for COVID-19.)

Source

  African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):154-171. 85 ref.

Publisher

  Women's Health and Action Research Centre

Location of Publisher

  Benin City

Country of Publication

  Nigeria

Abstract

  The pandemic of COVID-19 has spread from China to the whole world. Here we address the vulnerability of African children in the context of this health crisis. Based on medical, socio-economic and anthropological studies, we present a thematic review that examines the issue at three levels. Firstly, we address the question of the effect of the virus on children in regard to strategies implemented to limit its spread and the capacity of medical devices in Africa. Second, we address the issue of the additional disruptions that the virus could generate by infecting the parents or guardians of children who often find themselves subject to the disquietudes of an informal economy. Finally, we discuss the long-term effects of the crisis on children about food security issues, particularly in relation to overweight and obesity. Based on studies that have documented the long-term overweight risks that can occur due to school cessation as a result of lockdown measures, we provide strategies to address this emerging public health problem in

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Africa. We conclude the study by suggesting that all these forms of vulnerabilities remain proactive areas of work to better prepare Africa for future pandemics.

Publication Type

Journal article.

<248>

Accession Number

20203411147

Author

Kaba, A. J.; Kaba, A. N.

Title

COVID-19 in African countries versus other world regions: a review. (Special edition for COVID-19.)

Source

African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):125-141. 40 ref.

Publisher

Women's Health and Action Research Centre

Location of Publisher

Benin City

Country of Publication

Nigeria

Abstract

This review examines the spread of COVID-19 (coronavirus) in Africa. By May 15, 2020, while the COVID-19 infections were 1,741,129 in Europe, 1,632,167 in North America, 757,924 in Asia, 401,072 in South America, there were only 79,780 infections in Africa, a continent with 1.34 billion people. During this same date, of the total COVID-19 deaths of 308,154 worldwide, Europe accounted for 160,482 (52.1%) deaths; North America accounted for 99,633 (32.3%) deaths; Asia accounted for 23,963 (7.8%) deaths; South America accounted for 21,303 (6.9%) deaths; and Africa accounted for only 2,639 (0.9%) deaths. Among the factors cited for this phenomenon (Africa's low figures) are: low volumes of international tourism to most African nations; a relatively young African population, with 533.5 (39.8%) million under the age of 15; low obesity rates in Africa; low rates of urbanization in most African nations; hot or high temperatures and high humidity in most African nations; low levels of testing, which continues to be the case in countries all across the world and proactive measures by African governments and people to slow the spread of the coronavirus. It is recommended that African countries continue to pursue proactive measures such as use

of facemasks, hand sanitizers, regular hand washing and immediate partial or full lockdown when necessary.

Publication Type

Journal article.

<249>

Accession Number

20203411145

Author

Mafugu, T.; Abel, S.

Title

The pattern of coronavirus cases in South Africa compared with the United States of America and South Korea. (Special edition for COVID-19.)

Source

African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):108-116. 29 ref.

Publisher

Women's Health and Action Research Centre

Location of Publisher

Benin City

Country of Publication

Nigeria

Abstract

The coronavirus pandemic has spread worldwide, causing massive deaths of people in different countries. The study sought to find successes and failures in preventing the spread of the disease. This study results would assist states in identifying practical measures that can be used to avoid the spread of the pandemic. The cross-sectional study used a comparative analysis method. The study employed cross country comparison to conclude the effectiveness of the various measures implemented by different countries. Seven key phrases were searched, and the results were considered for analysis and presentation. The data were analyzed using the paired sample t-test and spearman's correlation coefficient. The USA and South Africa are on the exponential growth phase for the total number of infections per day. At the same time, South Korea and Taiwan were able to contain the virus. Western Cape is the epicenter of coronavirus cases in South Africa. The extensive production of face masks, quarantine measures, banning overseas travel, physical distancing, monitoring self-isolating individuals may help to contain the virus. In South Africa,

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banning the interprovincial movement may keep the spread to a minimum. Rapid implementation of preventive measures in the early stages is vital in preventing the spread of the pandemic.

Publication Type

Journal article.

<250>

Accession Number

20203411144

Author

Afemikhe, J. A.; Esewe, R. E.; Enuku, C. A.; Ehwarieme, T. A.

Title

Transmission based precaution practices among nurses in Edo State, Nigeria during COVID-19 pandemic. (Special edition for COVID-19.)

Source

African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):98-107. 37 ref.

Publisher

Women's Health and Action Research Centre

Location of Publisher

Benin City

Country of Publication

Nigeria

Abstract

The novel covid-19 pandemic is a highly infectious disease without known specific treatment and vaccine. Transmission based precautions are important in the fight against the virus. This study investigated the level of transmission-based precautions practiced, the predictors of correct practices, and the challenges experienced by nurses in public health facilities in Edo State during the outbreak of the Covid-19 pandemic. The study employed a descriptive cross-sectional survey to elicit responses from 367 front line nurses using a Google online questionnaire. Data analysis involved descriptive statistics and logistic regression analysis. The majority 314(85.6%) of the respondents maintained a good level of transmission-based precautions practice. Hand hygiene was performed by 327(89.1%) of the respondents. Academic qualification was a significant predictor of good practice in favour of respondents with a degree in nursing. Challenges identified were lack of financial motivation, fear of infecting family members and fear of contracting the virus (93.5%). It was concluded that nurses in Edo State Nigeria have good transmission-based practices in relation to covid-19 however efforts should be made to ensure 100% compliance and sustain practices.

Publication Type

 Journal article.

<251>

Accession Number

 20203411142

Author

 Elgzar, W. T.; Al-Qahtani, A. M.; Elfeki, N. K.; Ibrahim, H. A.

Title

 COVID-19 outbreak: effect of an educational intervention based on health belief model on nursing students' awareness and health beliefs at Najran University, Kingdom of Saudi Arabia. (Special edition for COVID-19.)

Source

 African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):78-86. 21 ref.

Publisher

 Women's Health and Action Research Centre

Location of Publisher

 Benin City

Country of Publication

 Nigeria

Abstract

  This study aimed to investigate the effect of an educational intervention based on the health belief model (HBM) about COVID-19 on nursing students' awareness and health beliefs. A true-experimental research design was conducted at nursing college, Najran University, KSA. A comprehensive sampling was followed to include all female students at the colleges (164 students). The sample was divided randomly into intervention (82) and control group (82). The educational intervention was designed and conducted based on the HBM through four sequential phases: assessment, planning, implementation, and evaluation. The current study results indicated no statistically significant differences between intervention and control groups concerning their demographic characteristic, awareness, and health beliefs before intervention. After intervention, significant differences (p < 0.05) were observed between intervention and control groups in their awareness and all HBM constructs regarding COVID19. There were positive, statistically significant correlations (P < 0.05) between participants' total HBM score and their total awareness score. This study concluded that HBM is effective in increasing nursing students' awareness regarding COVID-19. It also increases their perceived susceptibility, severity, and benefits. Besides, it may increase their self-

efficacy to overcome perceived barriers to practice protective and preventive actions while dealing with COVID-19.

Publication Type

Journal article.

<252>

Accession Number

20203411139

Author

Govender, D.; Naidoo, S.; Taylor, M.

Title

Don't let sexual and reproductive health become collateral damage in the face of the COVID-19 pandemic: a public health perspective. (Special edition for COVID-19.)

Source

African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):56-63. 35 ref.

Publisher

Women's Health and Action Research Centre

Location of Publisher

Benin City

Country of Publication

Nigeria

Abstract

South Africa, similar to many other countries in the African continent is still experiencing challenges in its efforts to provide sexual and reproductive health (SRH) care to women and adolescent girls, and it has become clear that the COVID-19 pandemic is the latest threat to universal access to SRH. In the face of this threat, the Sustainable Developmental Goals that call on the global community to "leave no one behind" may become a blurred vision unless we adopt a wider lens away from the tunnel vision that currently plagues health systems around the globe. This paper therefore exposes how SRH may become collateral damage in the face of the present COVID-19 pandemic. Previous disease outbreaks diverted attention from critical SRH services, including antenatal care, safe abortions, contraception, HIV/AIDS and sexually transmitted infections. Governments, policy makers, health system gatekeepers and civil society organisations should not allow the COVID-19 phobia to bar women and adolescent girls from accessing SRH services. In fact, the global and South African response to the COVID-19 pandemic must protect everyone's

rights, particularly in the health care context. Gender considerations and a human rights approach must be embedded in ensuring the accessibility and availability of SRH services.

Publication Type

Journal article.

<253>

Accession Number

20203411138

Author

Oyediran, K. A.; Makinde, O. A.; Adelakin, O.

Title

The role of telemedicine in addressing access to sexual and reproductive health services in sub-Saharan Africa during the COVID-19 pandemic. (Special edition for COVID-19.)

Source

African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):49-55. 31 ref.

Publisher

Women's Health and Action Research Centre

Location of Publisher

Benin City

Country of Publication

Nigeria

Abstract

The outbreak of COVID-19 threatens continued access to non-urgent healthcare including sexual and reproductive health (SRH) services. With the epicentre of the outbreak projected to shift to sub-Saharan Africa (SSA) after making significant impact in China, Europe, USA, and South America, it is necessary for countries in this region to begin to plan for how to tackle a rapid surge in cases. Health facilities are already being primed for increased presentation of COVID-19 cases. As countries prepare, they also need to consider how non-urgent services will not be interrupted. Estimates of a potential disruption in access to long and short acting contraceptives for up to 12 months will result in an additional 15 million unintended pregnancies and additional 28,000 maternal deaths. Thus, effort must be made to ensure that the gains made in SRH outcomes over several years are not lost. The potential of utilizing telemedicine to continue to offer healthcare services to the population for non-urgent care needs to be considered. It will not only provide for continued access to important services that can be delivered remotely but will reduce the risks of COVID-19 infection for both the client and the health workers.

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Publication Type

 Journal article.

<254>

Accession Number

 20203411137

Author

 Dune, T.; Hailay Abrha Gesesew; Hiruy, K.; Udah, H.; Lee, V.; Kwedza, R.; Mwanri, L.

Title

 Use of indigenous informed epistemologies can inform intervention models to fight COVID-19 in Africa. (Special edition for COVID-19.)

Source

 African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):46-48. 9 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 discuss the utilization of indigenous informed epistomologies for the prevention and control of COVID-19. The incorporation of indigenous epistemologies and methodologies can create decolonized frameworks and structures that explore innovative local solutions for future health interventions. Therefore, it is suggested that indigenous communities across Africa be considered as knowledge partners who contribute to the solution by sharing their cultural ways of doing, knowing and being rather than passive participants who needed to be protected. This can go a long way in informing potential intervention models that are effective and culturally appropriate. Such outcomes would also lead to culturally safe, appropriate, and culturally competent programs by Africans and for Africans.

Publication Type

 Journal article.

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248

<255>

Accession Number

  20203411136

Author

  Adejumo, O. A.; Adejumo, O. A.; Okonofua, F. E.

Title

  Rights versus responsibilities of health care workers in Nigeria: changing the narrative in the COVID-19 era. (Special edition for COVID-19.)

Source

  African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):41-45. 19 ref.

Publisher

  Women's Health and Action Research Centre

Location of Publisher

  Benin City

Country of Publication

  Nigeria

Abstract

  The outbreak of the coronavirus disease (COVID-19) in December 2019 and its spread to 216 countries within the first eight months has created a huge strain on health systems across the world. Health care workers (HCWs) at the fore-front of combating the pandemic are largely at risk of infection with the number of infected HCWs increasing daily in many countries. Prior to the outbreak of COVID-19, focus of laws and policies have largely been on the responsibilities of HCWs with little or no attention paid to their rights and protection. The increased rate of infection among health workers and the inadequate conditions under which HCWs have carried out their lifesaving responsibilities during the pandemic has created the need to change the narrative by focusing on policy formulation and implementation to ensure that HCWs rights are protected. We endorse the widespread use of the WHO recommendations on Coronavirus Disease (COVID-19) Outbreak: Rights, Roles and Responsibilities of Health workers, including key considerations for occupational safety and health.

Publication Type

  Journal article.

<256>

Accession Number

20203411134

Author

Mueller, U. E.; Omosehin, O.; Akinkunmi, A. E.; Ayanbadejo, J. O.; Somefun, E. O.; Momah-Haruna, A. P.

Title

Contact tracing in an African megacity during COVID 19: lessons learned. (Special edition for COVID-19.)

Source

African Journal of Reproductive Health; 2020. 24(2 (Special Edition)):27-31. 4 ref.

Publisher

Women's Health and Action Research Centre

Location of Publisher

Benin City

Country of Publication

Nigeria

Abstract

Contact tracing is the process of identifying, assessing, and managing people who have been exposed to a disease to prevent onward transmission. It is an essential public health tool and a crucial component to the on-going COVID-19 pandemic response in Lagos State, Nigeria. This contact tracing exercise is the largest one to be conducted in the megacity and is leveraging on the expertise of professionals across different strata of the health care system. Following the confirmation of a positive case of COVID-19; the State's contact tracing team commenced investigations by identifying contacts and following them up daily for 14 days from the last point of exposure. In the process of conducting this large-scale exercise, several lessons that can improve contact tracing outcomes such as the need for community mobilizers and decentralization, the importance of technology and communication campaigns were learnt and can serve as good practice for other implementers.

Publication Type

Journal article.

<257>

Accession Number

20203410193

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Author

Hamadah, H.; Alahmad, B.; Behbehani, M.; Al-Youha, S.; Almazeedi, S.; Al-Haddad, M.; Jamal, M. H.; Al-Sabah, S.

Title

COVID-19 clinical outcomes and nationality: results from a nationwide registry in Kuwait.

Source

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: In light of the COVID-19 pandemic, many have flagged racial and ethnic differences in health outcomes in western countries as an urgent global public health priority. Kuwait has a unique demographic profile with two-thirds of the population consisting of non-nationals, most of which are migrant workers. We aimed to explore whether there is a significant difference in health outcomes between non-Kuwaiti and Kuwaiti patients diagnosed with COVID-19. Methods: We used a prospective COVID-19 registry of all patients (symptomatic and asymptomatic) in Kuwait who tested positive from February 24th to April 20th, 2020, collected from Jaber Al-Ahmad Al-Sabah Hospital, the officially-designated COVID-19 healthcare facility in the country. We ran separate logistic regression models comparing non-Kuwaitis to Kuwaitis for death, intensive care unit (ICU) admission, acute respiratory distress syndrome (ARDS) and pneumonia. Results: The first 1123 COVID-19 positive patients in Kuwait were all recruited in the study. About 26% were Kuwaitis and 73% were non-Kuwaiti. With adjustments made to age, gender, smoking and selected co-morbidities, non-Kuwaitis had two-fold increase in the odds of death or being admitted to the intensive care unit compared to Kuwaitis (OR: 2.14, 95% CI 1.12-4.32). Non-Kuwaitis had also higher odds of ARDS (OR:2.44, 95% CI 1.23-5.09) and pneumonia (OR: 2.24, 95% CI 1.27-4.12). Conclusion: This is the first study to report on COVID-19 outcomes between Kuwaiti and non-Kuwaiti patients. The current pandemic may have amplified the differences of health outcomes among marginalized subpopulations. A number of socioeconomic and environmental factors could explain this health disparity. More research is needed to advance the understanding of policymakers in Kuwait in order to make urgent public health interventions.

Publication Type

Journal article.

<258>

Accession Number

20203409643

Author

Fleischhacker, S. E.; Woteki, C. E.; Coates, P. M.; Hubbard, van S.; Flaherty, G. E.; Glickman, D. R.; Harkin, T. R.; Kessler, D.; Li, W. W.; Loscalzo, J.; Parekh, A.; Rowe, S.; Stover, P. J.; Yun, A. J.; Mozaffarian, D.

Title

Strengthening national nutrition research: rationale and options for a new coordinated federal research effort and authority.

Source

American Journal of Clinical Nutrition; 2020. 112(3):721-769. 341 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

Background: The US faces remarkable food and nutrition challenges. A new federal effort to strengthen and coordinate nutrition research could rapidly generate the evidence base needed to address these multiple national challenges. However, the relevant characteristics of such an effort have been uncertain. Objectives: Our aim was to provide an objective, informative summary of (1) the mounting diet-related health burdens facing our nation and corresponding economic, health equity, national security, and sustainability implications; (2) the current federal nutrition research landscape and existing mechanisms for its coordination; (3) the opportunities for and potential impact of new fundamental, clinical, public health, food and agricultural, and translational scientific discoveries; and (4) the various options for further strengthening and coordinating federal nutrition research, including corresponding advantages, disadvantages, and potential executive and legislative considerations. Methods: We reviewed government and other published documents on federal nutrition research; held various discussions with expert groups, advocacy organizations, and scientific societies; and held in-person or phone meetings with >50 federal staff in executive and legislative roles, as well as with a variety of other stakeholders in academic, industry, and nongovernment organizations. Results: Stark national nutrition challenges were identified. More Americans are sick than are healthy, largely from rising diet-related illnesses. These conditions create tremendous strains on productivity, health care costs, health disparities, government budgets, US economic competitiveness, and military readiness. The coronavirus disease 2019 (COVID-19) outbreak has further laid bare these strains, including food insecurity, major diet-related comorbidities for poor outcomes from COVID-19 such as diabetes, hypertension, and obesity, and insufficient surveillance on and coordination of our food system. More than 10 federal departments and agencies currently invest in critical nutrition research, yet with relatively flat investments over several decades. Coordination also remains suboptimal, documented by multiple governmental reports over 50 years. Greater harmonization and expansion of federal investment in nutrition science, not a silo-ing or rearrangement of existing investments, has tremendous potential to generate new discoveries to improve and sustain the health of all Americans. Two identified key strategies to achieve this were as follows: (1) a new authority for robust cross-governmental coordination of nutrition research and other nutrition-related policy and (2) strengthened authority, investment, and coordination for nutrition research within the NIH. These

strategies were found to be complementary, together catalyzing important new science, partnerships, coordination, and returns on investment. Additional complementary actions to accelerate federal nutrition research were identified at the USDA. Conclusions: The need and opportunities for strengthened federal nutrition research are clear, with specific identified options to help create the new leadership, strategic planning, coordination, and investment the nation requires to address the multiple nutrition-related challenges and grasp the opportunities before us.

Publication Type

Journal article.

<259>

Accession Number

20203408924

Author

Klemes, J. J.; Fan YeeVan; Tan, R. R.; Jiang Peng

Title

Minimising the present and future plastic waste, energy and environmental footprints related to COVID-19. (Special issue on COVID19 Society & UNSDGs.)

Source

Renewable and Sustainable Energy Reviews; 2020. 127.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

The COVID-19 pandemic has had growing environmental consequences related to plastic use and follow-up waste, but more urgent health issues have far overshadowed the potential impacts. This paper gives a prospective outlook on how the disruption caused by COVID-19 can act as a catalyst for short-term and long-term changes in plastic waste management practices throughout the world. The impact of the pandemic and epidemic following through the life cycles of various plastic products, particularly those needed for personal protection and healthcare, is assessed. The energy and environmental footprints of these product systems have increased rapidly in response to the surge in the number of COVID-19 cases worldwide, while critical hazardous waste management issues are emerging due to the need to ensure

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destruction of residual pathogens in household and medical waste. The concept of Plastic Waste Footprint (PWF) is proposed to capture the environmental footprint of a plastic product throughout its entire life cycle. Emerging challenges in waste management during and after the pandemic are discussed from the perspective of novel research and environmental policies. The sudden shift in waste composition and quantity highlights the need for a dynamically reponsive waste management system. Six future research directions are suggested to mitigate the potential impacts of the pandemic on waste management systems.

Publication Type

Journal article.

<260>

Accession Number

20203408636

Author

Akseer, N.; Kandru, G.; Keats, E. C.; Bhutta, Z. A.

Title

COVID-19 pandemic and mitigation strategies: implications for maternal and child health and nutrition.

Source

American Journal of Clinical Nutrition; 2020. 112(2):251-256. 24 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19) continues to ravage health and economic metrics globally, including progress in maternal and child nutrition. Although there has been focus on rising rates of childhood wasting in the short term, maternal and child undernutrition rates are also likely to increase as a consequence of COVID-19 and its impacts on poverty, coverage of essential interventions, and access to appropriate nutritious foods. Key sectors at particular risk of collapse or reduced efficiency in the wake of COVID-19 include food systems, incomes, and social protection, health care services for women and children, and services and access to clean water and sanitation. This review highlights key areas of concern for maternal and child nutrition during and in the aftermath of COVID-19 while providing strategic guidance for countries in their efforts to reduce maternal and child undernutrition. Rooted in learnings from the exemplars in

Global Health's Stunting Reduction Exemplars project, we provide a set of recommendations that span investments in sectors that have sustained direct and indirect impact on nutrition. These include interventions to strengthen the food-supply chain and reducing food insecurity to assist those at immediate risk of food shortages. Other strategies could include targeted social safety net programs, payment deferrals, or tax breaks as well as suitable cash-support programs for the most vulnerable. Targeting the most marginalized households in rural populations and urban slums could be achieved through deploying community health workers and supporting women and community members. Community-led sanitation programs could be key to ensuring healthy household environments and reducing undernutrition. Additionally, several COVID-19 response measures such as contact tracing and self-isolation could also be exploited for nutrition protection. Global health and improvements in undernutrition will require governments, donors, and development partners to restrategize and reprioritize investments for the COVID-19 era, and will necessitate data-driven decision making, political will and commitment, and international unity.

Publication Type

Journal article.

<261>

Accession Number

20203408631

Author

Chen XueSong; Geiger, J. D.

Title

Janus sword actions of chloroquine and hydroxychloroquine against COVID-19.

Source

Cellular Signalling; 2020. 73. 176 ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Chloroquine (CQ) and its analogue hydroxychloroquine (HCQ) have been thrust into our everyday vernacular because some believe, based on very limited basic and clinical data, that they might be helpful

in preventing and/or lessening the severity of the pandemic coronavirus disease 2019 (COVID-19). However, lacking is a temperance in enthusiasm for their possible use as well as sufficient perspective on their effects and side-effects. CQ and HCQ have well-known properties of being diprotic weak bases that preferentially accumulate in acidic organelles (endolysosomes and Golgi apparatus) and neutralize luminal pH of acidic organelles. These primary actions of CQ and HCQ are responsible for their anti-malarial effects; malaria parasites rely on acidic digestive vacuoles for survival. Similarly, de-acidification of endolysosomes and Golgi by CQ and HCQ may block severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) integration into host cells because SARS-CoV-2 may require an acidic environment for its entry and for its ability to bud and infect bystander cells. Further, de-acidification of endolysosomes and Golgi may underly the immunosuppressive effects of these two drugs. However, modern cell biology studies have shown clearly that de-acidification results in profound changes in the structure, function and cellular positioning of endolysosomes and Golgi, in signaling between these organelles and other subcellular organelles, and in fundamental cellular functions. Thus, studying the possible therapeutic effects of CQ and HCQ against COVID-19 must occur concurrent with studies of the extent to which these drugs affect organellar and cell biology. When comprehensively examined, a better understanding of the Janus sword actions of these and other drugs might yield better decisions and better outcomes.

Publication Type

  Journal article.

<262>

Accession Number

  20203408578

Author

  Xu Ling; Yu DanDan; Ma YuHua; Yao YuLin; Luo RongHua; Feng XiaoLi; Cai HouRong; Han JianBao; Wang XueHui; Li MingHua; Ke ChangWen; Zheng YongTang; Yao YongGang

Title

  COVID-19-like symptoms observed in Chinese tree shrews infected with SARS-CoV-2.

Source

  Zoological Research; 2020. 41(5):517-526. 46 ref.

Publisher

  Kunming Institute of Zoology, Academia Sinica

Location of Publisher

  Kunming

Country of Publication

  China

Abstract

The coronavirus disease 2019 (COVID-19) pandemic continues to pose a global threat to the human population. Identifying animal species susceptible to infection with the SARS-CoV-2/HCoV-19 pathogen is essential for controlling the outbreak and for testing valid prophylactics or therapeutics based on animal model studies. Here, different aged Chinese tree shrews (adult group, 1 year old; old group, 5-6 years old), which are close relatives to primates, were infected with SARS-CoV-2. X-ray, viral shedding, laboratory, and histological analyses were performed on different days post-inoculation (dpi). Results showed that Chinese tree shrews could be infected by SARS-CoV-2. Lung infiltrates were visible in X-ray radiographs in most infected animals. Viral RNA was consistently detected in lung tissues from infected animals at 3, 5, and 7 dpi, along with alterations in related parameters from routine blood tests and serum biochemistry, including increased levels of aspartate aminotransferase (AST) and blood urea nitrogen (BUN). Histological analysis of lung tissues from animals at 3 dpi (adult group) and 7 dpi (old group) showed thickened alveolar septa and interstitial hemorrhage. Several differences were found between the two different aged groups in regard to viral shedding peak. Our results indicate that Chinese tree shrews have the potential to be used as animal models for SARS-CoV-2 infection.

Publication Type

Journal article.

<263>

Accession Number

20203408577

Author

Song TianZhang; Zheng HongYi; Han JianBao; Jin Lin; Yang Xiang; Liu FengLiang; Luo RongHua; Tian RenRong; Cai HouRong; Feng XiaoLi; Liu Chao; Li MingHua; Zheng YongTang

Title

Delayed severe cytokine storm and immune cell infiltration in SARS-CoV-2-infected aged Chinese rhesus macaques.

Source

Zoological Research; 2020. 41(5):503-516. 57 ref.

Publisher

Kunming Institute of Zoology, Academia Sinica

Location of Publisher

Kunming

Country of Publication

China

Abstract

As of June 2020, Coronavirus Disease 2019 (COVID-19) has killed an estimated 440 000 people worldwide, 74% of whom were aged 65 years, making age the most significant risk factor for death caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. To examine the effect of age on death, we established a SARS-CoV-2 infection model in Chinese rhesus macaques (Macaca mulatta) of varied ages. Results indicated that infected young macaques manifested impaired respiratory function, active viral replication, severe lung damage, and infiltration of CD11b+ and CD8+ cells in lungs at one-week post infection (wpi), but also recovered rapidly at 2 wpi. In contrast, aged macaques demonstrated delayed immune responses with a more severe cytokine storm, increased infiltration of CD11b+ cells, and persistent infiltration of CD8+ cells in the lungs at 2 wpi. In addition, peripheral blood T cells from aged macaques showed greater inflammation and chemotaxis, but weaker antiviral functions than that in cells from young macaques. Thus, the delayed but more severe cytokine storm and higher immune cell infiltration may explain the poorer prognosis of older aged patients suffering SARS-CoV-2 infection.

Publication Type

Journal article.

<264>

Accession Number

20203408031

Author

Mouchtouri, V. A.; Bogogiannidou, Z.; Dirksen-Fischer, M.; Tsiodras, S.; Hadjichristodoulou, C.

Title

Detection of imported COVID-19 cases worldwide: early assessment of airport entry screening, 24 January until 17 February 2020.

Source

Tropical Medicine and Health; 2020. 48(79):(14 September 2020). 10 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The purpose of this study was to provide an overview of entry screening measures applied at airports in response to the COVID-19 epidemic worldwide. Between 24 January and 17 February 2020, 5.2% (95% CI 3.1-8.5) of the 271 total imported COVID-19 cases worldwide (excluding imported cases arriving in China, Macao, and Hong Kong) with known detection location were captured through airport entry screening. The majority of imported COVID-19 cases (210) were identified by the health care system (77.5%). Efforts should focus on health care system preparedness for early case detection, since according to our and previous studies health care facilities are the actual point of entry of imported cases.

Publication Type

Journal article.

<265>

Accession Number

20203407257

Author

Youssef, T. E.

Title

Computational predictions and comparative structural analysis for 4-aminoquinoline/Umifenovir drug combinations towards drug for coronavirus disease-19 (COVID-19).

Source

International Journal for Research in Applied Science and Engineering Technology; 2020. 8(5):2949-2955. 21 ref.

Publisher

Indian Institute of Technology

Location of Publisher

Bombay

Country of Publication

India

Abstract

As of 28 Mai 2020, more than 5 593 631 cases of confirmed COVID-19 have been documented globally with over 353 334 deaths. The COVID-19 patients have common presentations like the influenza patients include fever, dry cough, and difficulty of breath. Parallel evidence indicates that the risk of disease increases with critically chronic lung patients. No strong efficacy to use drugs on the market. We apply drug design computer techniques to find the expected drug for COVID-19 after knowing the repurposing the detailed of 3D-structures of its key proteins. The combination of the analyzed spectra of the

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antimalarial/antiviral drugs: Chloroquine (CQ)/Umifenovir, Hydroxychloroquine (HQ)/Umifenovir and Amodiaquine (ADQ)/Umifenovir have been discussed to give an additional information about the investigated set of complex drugs. The aim of this work is the bioinformatic study of COVID_19 inhibition by antimalarial/antiviral combined drugs.

Publication Type

  Journal article.

<266>

Accession Number

  20203407249

Author

  Harshal Varade; Simran Makhija

Title

  Impact of COVID-19 pandemic situation on consumer buying behaviour in Indian market - a review.

Source

  International Journal for Research in Applied Science and Engineering Technology; 2020. 8(5):2584-2589. 13 ref.

Publisher

  Indian Institute of Technology

Location of Publisher

  Bombay

Country of Publication

  India

Abstract

  Consumer behaviour is determined deeply by cultural factors and India being influenced by social community for group activities have experienced shift in consumer buying behaviour due to covid-19 pandemic situations, changing consumption patterns of people and the lockdown resulted in panic buying behaviour rushing to stock up on essentials. Further the major sectors experiencing consumer behaviour changes including entertainment, travel tourism, newspaper, food industry, personal hygiene, small business, education, pharmacy, agriculture, and e-commerce have resulted in proactive buying behaviour, adaptability to new technologies, reactive health management, pantry preparation, quarantined living preparation, restricted living and living a life with basic requirements. The consumer companies urgently need to anticipate, so that they can make it through the current crisis and build capabilities that can meet

future necessities. Therefore, in this paper we will be reviewing possible consumer changes in their buying behaviour in various sectors during covid-19 outbreak in India.

Publication Type

 Journal article.

<267>

Accession Number

 20203407228

Author

 Raju, K.; Lavanya, R.; Manikandan, S.; Srilekha, K.

Title

 Application of GIS in COVID-19 monitoring and surveillance.

Source

 International Journal for Research in Applied Science and Engineering Technology; 2020. 8(5):1435-1440. 9 ref.

Publisher

 Indian Institute of Technology

Location of Publisher

 Bombay

Country of Publication

 India

Abstract

 COVID-19 is a virus part of corona virus family that causes a range of familiar disease from the common cold to SARS, COVID-19 is referred as novel corona virus because it is new to human. According to virus it spread from one person to other person through contact. So research public health practices and guidelines, one of the tool to our society can use to understand the disease is Geographic information systems (GIS) provide the utilization, easy access and manipulation of geospatial information. The main advantage of GIS is mapping the many different locations of country and other facilities with human on a dashboard which helps in better monitoring and surveillance. Also, detailed studies are possible with respect to diseases forecasting, prediction of outbreaks, identification of disease cluster or hotspot and to evaluate different strategies to prevent the spread of infectious diseases. Geospatial industries have come to rescue in a lot of crises and disasters by boosting relief and rehabilitation efforts. In the case of COVID-19 geospatial communities is proactive in tracking the spread of the virus. Constantly updating the number of people affected and providing real-time information company like ESRI, CSSE (JHU) which help to manage

disaster mapping and helping agencies with data gathering it helps to transfer the data in dashboard, Apps, Information and data using the GIS technique GIS operations, mainly overlay analysis, buffer analysis, network analysis, statistical analysis, query, time series analysis, temporal cluster analysis, spatial-temporal analytic techniques to identify the catchment areas, vulnerable groups, health centers, movement of carriers etc. GIS provide ideal platform for the convergence of disease- specific information and their analyses in relation to population settlements, surrounding social and health services and the natural environment.

Publication Type

  Journal article.

<268>

Accession Number

  20203407225

Author

  Bhoring, S. K.

Title

  Impact of coronavirus on Indian economy.

Source

  International Journal for Research in Applied Science and Engineering Technology; 2020. 8(5):1332-1339. 20 ref.

Publisher

  Indian Institute of Technology

Location of Publisher

  Bombay

Country of Publication

  India

Abstract

  Coronavirus (COVID-19) is the biggest crisis in the world in last 75 years. The pandemic set foot in India from Wuhan, China. Seeing the peril of this virus the Indian Government had announced complete lockdown in the country from 25th March, 2020 to 14th April, 2020. The lockdown was further extended till 3rd May and with the number of cases shooting upward the government had to increase it further till 17th May, 2020. In this research paper the impact of coronavirus on Indian Economy is discussed. An attempt is made to have a sector wise research on the impact of COVID-19. The sectors include Aviation, Hospitality, Agriculture, Chemical industry, Electronics etc. Impact of COVID-19 on imports and exports is also stated.

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How coronavirus has affected the unemployment rate in the country has also been discussed. In the end the current article also seeks to suggest the different ways in which the situation can be overcome.

Publication Type

Journal article.

<269>

Accession Number

20203407220

Author

Tanvi Golwelkar; Yash Navlakha

Title

Using data analytics to determine the disruptions in supply chain due to the COVID-19 pandemic: a literature review.

Source

International Journal for Research in Applied Science and Engineering Technology; 2020. 8(5):1199-1209. 11 ref.

Publisher

Indian Institute of Technology

Location of Publisher

Bombay

Country of Publication

India

Abstract

An Efficient and a sturdy supply chain forms the crux of a stable economy. The outbreak of the novel coronavirus has caused countries and organizations worldwide to take precautions in the interest of public health. Travel restrictions, change in consumer behaviour, hoarding of food, overstocking of essential commodities and over-cautious mindset towards hygiene are some of the repercussions of the pandemic which are malign to the smooth functioning of the supply chain. The food industry is particularly vulnerable during this pandemic and is facing challenges to bridge the demand-supply gap. The enormous amounts of data generated can help companies analyze trends, altered customer expectations, newer demands and take relevant decisions based on this data to help them overcome the disruptions in supply chain. This study discusses the obstacles in supply chain as a result of COVID-19 outbreak. Furthermore, a case study is presented later in the paper to understand the effect of the pandemic on perishable and non-perishable

products. Finally, some suggestions are made, based on the available data, which could be beneficial for companies to be back in business.

Publication Type

Journal article.

<270>

Accession Number

20203407210

Author

Mukundan Satyanarayanan; Radhika, V.

Title

Ligands based drug design for COVID 19 - a multi - faceted approach using ligand design, molecular docking and binding probability calculation.

Source

Abstract

Covid 19 has been the most devastating pandemic of the recent years, affecting 3 million people in about 210 Countries. Entire World is working on inventing a drug for this pandemic. As a major breakthrough, the crystal structure of Covid 19 main protease 3CLPro or MPro, which plays a major role in mediating the replication and transcription of the virus, was derived by Jin, Z., Du, X., Xu, Y. et al., paving way for the drug design. The crystal structure of MPro with a computer aided design inhibitor N (6LU7) has been used as a potential target for drug design in this work. Three possible binding sites were identified for 3CLPro or MPro using DEEPSITE, a protein binding pocket predictor. Complimentary Ligand shapes were generated for the SARS CoV2 main protease MPro, making use of LIGANN, a structure based de novo drug design tool. They are purely structure based designs and do not have any previous history of synthesis or usage. Molecular docking of the new ligands with the target protein 6LU7 was done using iGEMdock. The binding free energy values were calculated. 10 best ligand designs, for each binding site, based on lowest free

energy requirement for have been selected for further study. The binding probability for the 10 ligands were calculated using BINDSCOPE, a structure based protein ligand binding predictor. The identical structures for these ligands were identified using Drug bank database. The results were verified with Tanimoto Coefficient calculation. Based on various parameters like free binding energy, binding probability, structural identity and Tanimoto coefficient, top 5 ligand structures have been selected as potential leads for drug discovery.

Publication Type

Journal article.

<271>

Accession Number

20203406569

Author

Huang LiShan; Lin GuanWen; Tang Li; Yu LingNa; Zhou ZhiLai

Title

Special attention to nurses' protection during the COVID-19 epidemic.

Source

Critical Care; 2020. 24(120):(27 March 2020). 1 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

As of March 8, 2020, the novel coronavirus disease 2019 (COVID-19) had caused 80,815 human infections and 3073 deaths in China, including more than 3000 infections among medical staff. Guangdong Second Provincial General Hospital (Guangzhou, Guangdong Province, China), a provincial emergency hospital, has treated more than 35 confirmed cases of COVID-19 and more than 260 suspected cases. Most of nurses' work involves direct contact with patients. As nurses have high vulnerability to COVID-19, it is necessary to establish hospital-specific protocols to reduce the risk of nurses' infection in interactions with COVID-19 patients. Our hospital has maintained a "zero nurse infection" rate while battling SARS in 2003 and during the present COVID-19 epidemic. The following are the key measures implemented in our hospital.

Publication Type

Journal article.

<272>

Accession Number

20203406153

Author

Banu, N.; Panikar, S. S.; Riera Leal, L.; Leal, A. R.

Title

Protective role of ACE2 and its downregulation in SARS-CoV-2 infection leading to macrophage activation syndrome: therapeutic implications.

Source

Life Sciences; 2020. 256. 282 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

In light of the outbreak of the 2019 novel coronavirus disease (COVID-19), the international scientific community has joined forces to develop effective treatment strategies. The Angiotensin-Converting Enzyme (ACE) 2, is an essential receptor for cell fusion and engulfs the SARS coronavirus infections. ACE2 plays an important physiological role, practically in all the organs and systems. Also, ACE2 exerts protective functions in various models of pathologies with acute and chronic inflammation. While ACE2 downregulation by SARS-CoV-2 spike protein leads to an overactivation of Angiotensin (Ang) II/AT1R axis and the deleterious effects of Ang II may explain the multiorgan dysfunction seen in patients. Specifically, the role of Ang II leading to the appearance of Macrophage Activation Syndrome (MAS) and the cytokine storm in COVID-19 is discussed below. In this review, we summarized the latest research progress in the strategies of treatments that mainly focus on reducing the Ang II-induced deleterious effects rather than attenuating the virus replication.

Publication Type

Journal article.

<273>

Accession Number

  20203405967

Author

  Hassan, A. O.; Case, J. B.; Winkler, E. S.; Thackray, L. B.; Kafai, N. M.; Bailey, A. L.; McCune, B. T.; Fox, J. M.; Chen, R. E.; Alsoussi, W. B.; Turner, J. S.; Schmitz, A. J.; Lei TingTing; Shrihari, S.; Keeler, S. P.; Fremont, D. H.; Greco, S.; McCray, P. B.; Perlman, S.; Holtzman, M. J.; Ellebedy, A. H.; Diamond, M. S.

Title

  A SARS-CoV-2 infection model in mice demonstrates protection by neutralizing antibodies.

Source

  Cell (Cambridge); 2020. 182(3):744-753.e4. 50 ref.

Publisher

  Cell Press

Location of Publisher

  Cambridge

Country of Publication

   USA

Abstract

  Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has caused a pandemic with millions of human infections. One limitation to the evaluation of potential therapies and vaccines to inhibit SARS-CoV-2 infection and ameliorate disease is the lack of susceptible small animals in large numbers. Commercially available laboratory strains of mice are not readily infected by SARS-CoV-2 because of species-specific differences in their angiotensin-converting enzyme 2 (ACE2) receptors. Here, we transduced replication-defective adenoviruses encoding human ACE2 via intranasal administration into BALB/c mice and established receptor expression in lung tissues. hACE2-transduced mice were productively infected with SARS-CoV-2, and this resulted in high viral titers in the lung, lung pathology, and weight loss. Passive transfer of a neutralizing monoclonal antibody reduced viral burden in the lung and mitigated inflammation and weight loss. The development of an accessible mouse model of SARS-CoV-2 infection and pathogenesis will expedite the testing and deployment of therapeutics and vaccines.

Publication Type

  Journal article.

<274>

Accession Number

  20203405966

Author

  Sun Jing; Zhuang Zhen; Zheng, J.; Li Kun; Wong LokYin [Wong, L. Y. R.]; Liu DongLan; Huang JiCheng; He JiangPing; Zhu AiRu; Zhao JingXian; Li XiaoBo; Xi Yin; Chen RongChang; Alshukairi, A. N.; Chen Zhao; Zhang ZhaoYong; Chen ChunKe; Huang XiaoFang; Li Fang; Lai XiaoMin; Chen DingBin; Wen LiYan; Zhuo JianFen; Zhang YanJun; Wang YanQun; Huang ShuXiang; Dai Jun; Shi YongXia; Zheng Kui; Leidinger, M. R.; Chen JieKai; Li YiMin; Zhong NanShan; Meyerholz, D. K.; McCray, P. B.; Perlman, S.; Zhao JinCun

Title

  Generation of a broadly useful model for COVID-19 pathogenesis, vaccination, and treatment.

Source

  Cell (Cambridge); 2020. 182(3):734-743.e5. 44 ref.

Publisher

  Cell Press

Location of Publisher

  Cambridge

Country of Publication

  USA

Abstract

  COVID-19, caused by SARS-CoV-2, is a virulent pneumonia, with >4,000,000 confirmed cases worldwide and >290,000 deaths as of May 15, 2020. It is critical that vaccines and therapeutics be developed very rapidly. Mice, the ideal animal for assessing such interventions, are resistant to SARS-CoV-2. Here, we overcome this difficulty by exogenous delivery of human ACE2 with a replication-deficient adenovirus (Ad5-hACE2). Ad5-hACE2-sensitized mice developed pneumonia characterized by weight loss, severe pulmonary pathology, and high-titer virus replication in lungs. Type I interferon, T cells, and, most importantly, signal transducer and activator of transcription 1 (STAT1) are critical for virus clearance and disease resolution in these mice. Ad5-hACE2-transduced mice enabled rapid assessments of a vaccine candidate, of human convalescent plasma, and of two antiviral therapies (poly I:C and remdesivir). In summary, we describe a murine model of broad and immediate utility to investigate COVID-19 pathogenesis and to evaluate new therapies and vaccines.

Publication Type

  Journal article.

<275>

Accession Number

   20203405964

Author

   Wang Hui; Zhang YunTao; Huang BaoYing; Deng Wei; Quan YaRu; Wang WenLing; Xu WenBo; Zhao YuXiu; Li Na; Zhang Jin; Liang HongYang; Bao LinLin; Xu YanFeng; Ding Ling; Zhou WeiMin; Gao Hong; Liu JiangNing; Niu PeiHua; Zhao Li; Zhen Wei; Fu Hui; Yu ShouZhi; Zhang ZhengLi; Xu GuangXue; Li ChangGui; Lou ZhiYong; Xu Miao; Qin Chuan; Wu GuiZhen; Gao GeorgeFu; Tan WenJie; Yang XiaoMing

Title

   Development of an Inactivated Vaccine Candidate, BBIBP-CorV, with potent protection against SARS-CoV-2.

Source

   Cell (Cambridge); 2020. 182(3):713-721.e9. 24 ref.

Publisher

   Cell Press

Location of Publisher

   Cambridge

Country of Publication

   USA

Abstract

   The coronavirus disease 2019 (COVID-19) pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) threatens global public health. The development of a vaccine is urgently needed for the prevention and control of COVID-19. Here, we report the pilot-scale production of an inactivated SARS-CoV-2 vaccine candidate (BBIBP-CorV) that induces high levels of neutralizing antibodies titers in mice, rats, guinea pigs, rabbits, and nonhuman primates (cynomolgus monkeys and rhesus macaques) to provide protection against SARS-CoV-2. Two-dose immunizations using 2 g/dose of BBIBP-CorV provided highly efficient protection against SARS-CoV-2 intratracheal challenge in rhesus macaques, without detectable antibody-dependent enhancement of infection. In addition, BBIBP-CorV exhibits efficient productivity and good genetic stability for vaccine manufacture. These results support the further evaluation of BBIBP-CorV in a clinical trial.

Publication Type

   Journal article.

<276>

Accession Number

  20203405963

Author

  Bouhaddou, M.; Memon, D.; Meyer, B.; White, K. M.; Rezelj, V. V.; Marrero, M. C.; Polacco, B. J.; Melnyk, J. E.; Ulferts, S.; Kaake, R. M.; Batra, J.; Richards, A. L.; Stevenson, E.; Gordon, D. E.; Rojc, A.; Obernier, K.; Fabius, J. M.; Soucheray, M.; Miorin, L.; Moreno, E.; Koh, C.; Tran, Q. D.; Hardy, A.; Robinot, R.; Vallet, T.; Nilsson-Payant, B. E.; Hernandez-Armenta, C.; Dunham, A.; Weigang, S.; Knerr, J.; Modak, M.; Quintero, D.; Zhou, Y.; Dugourd, A.; Valdeolivas, A.; Patil, T.; Li QiongYu; Huttenhain, R.; Cakir, M.; Muralidharan, M.; Kim, M.; Jang, G.; Tutuncuoglu, B.; Hiatt, J.; Guo, J. Z.; Xu JieWei; Bouhaddou, S.; Mathy, C. J. P.; Gaulton, A.; Manners, E. J.; Felix, E.; Shi Ying; Goff, M.; Lim, J. K.; McBride, T.; O'Neal, M. C.; Cai YiMing; Chang, J. C. J.; Broadhurst, D. J.; Klippsten, S.; Wit, E. de; Leach, A. R.; Kortemme, T.; Shoichet, B.; Ott, M.; Saez-Rodriguez, J.; Tenoever, B. R.; Mullins, R. D.; Fischer, E. R.; Kochs, G.; Grosse, R.; Garcia-Sastre, A.; Vignuzzi, M.; Johnson, J. R.; Shokat, K. M.; Swaney, D. L.; Beltrao, P.; Krogan, N. J.

Title

  The global phosphorylation landscape of SARS-CoV-2 infection.

Source

  Cell (Cambridge); 2020. 182(3):685-712.e19. many ref.

Publisher

  Cell Press

Location of Publisher

  Cambridge

Country of Publication

  USA

Abstract

  The causative agent of the coronavirus disease 2019 (COVID-19) pandemic, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has infected millions and killed hundreds of thousands of people worldwide, highlighting an urgent need to develop antiviral therapies. Here we present a quantitative mass spectrometry-based phosphoproteomics survey of SARS-CoV-2 infection in Vero E6 cells, revealing dramatic rewiring of phosphorylation on host and viral proteins. SARS-CoV-2 infection promoted casein kinase II (CK2) and p38 MAPK activation, production of diverse cytokines, and shutdown of mitotic kinases, resulting in cell cycle arrest. Infection also stimulated a marked induction of CK2-containing filopodial protrusions possessing budding viral particles. Eighty-seven drugs and compounds were identified by mapping global phosphorylation profiles to dysregulated kinases and pathways. We found pharmacologic inhibition of the p38, CK2, CDK, AXL, and PIKFYVE kinases to possess antiviral efficacy, representing potential COVID-19 therapies.

Publication Type

  Journal article.

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<277>

Accession Number

  20203405918

Author

  Pitakbut, T.

Title

  The antiviral activity of andrographolide, the active metabolite from andrographis paniculata (Burm. f.)
Wall. ex Nees. against SARS-CoV-2 by using bio- and chemoinformatic tools.

Source

  Walailak Journal of Science and Technology; 2020. 17(8):851-856. 23 ref.

Publisher

  Institute of Research and Development, Walailak University

Location of Publisher

  Nakhonsithammarat

Country of Publication

  Thailand

Abstract

  Due to the severe acute respiratory syndrome coronavirus 2 or SARS-CoV-2 outbreak, the virus has been
wildly spread throughout the world and the number of infected patients has rapidly increased. More
importantly, neither the official drug treatment nor the vaccine has been officially offered. These have
considerably increased the public concerns internationally and nationally. Recently, there has been one
question raised in the Thai society; "Could a common Thai herbal medicine namely Andrographis paniculata
be used against SARS-CoV-2 infection?". It is well-known that the plant has antiviral properties against wild
ranges of viruses and the active metabolite is andrographolide. To date, there have only been a few studies
investigating the anti-SARS-CoV-2 activity from andrographolide. To provide a better understanding, this
study was conducted by applying the advanced techniques in both computational biology and chemistry to
evaluate the anti-SARS-CoV-2 potential of andrographolide. In this study, andrographolide was tested
against two key enzymes of SAR-CoV-2 namely 3C main proteinase and RNA dependent RNA polymerase.
The result here indicated that andrographolide could only inhibit the SARS-CoV-2 3C main proteinase as
strong as lopinavir (the standard medicine), which has been recommended as the drug of choice to treat
SARS-CoV-2 patient.

Publication Type

  Journal article.

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271

<278>

Accession Number

  20203405744

Author

  Lemaire, E. C.

Title

  Extraordinary times call for extraordinary measures: the use of music to communicate public health recommendations against the spread of COVID-19. (Special section on COVID-19.)

Source

  Canadian Journal of Public Health; 2020. 111(4):477-479. 15 ref.

Publisher

  Springer International Publishing AG

Location of Publisher

  Cham

Country of Publication

  Switzerland

Abstract

  To promote the population's adherence to COVID-19 public health preventive measures, the Quebec (Canada) government solicited the assistance of local music artists. This commentary aims to demonstrate how music has been utilized to communicate the public health recommendations relative to the COVID-19 pandemic and to discuss the relevance of using music in this context, as supported by research. More specifically, music is discussed in terms of its powerful capacity to reach out to a large population pool; to capture the population's attention quickly and massively in spite of age, language, or cultural barriers; to effectively communicate messages; and to affect individuals' behaviours. In this regard, the current COVID-19 pandemic demonstrates how music can be utilized as a communication tool and offers an interesting perspective for the consideration of music in future public health research.

Publication Type

  Journal article.

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272

<279>

Accession Number

20203405741

Author

Lange, S.; Probst, C.; Rehm, J.

Title

Coronavirus disease 2019 crisis and intentional injuries: now is not the time to Erode alcohol control policies. (Special section on COVID-19.)

Source

Canadian Journal of Public Health; 2020. 111(4):466-468. 17 ref.

Publisher

Springer International Publishing AG

Location of Publisher

Cham

Country of Publication

Switzerland

Abstract

In Canada, and elsewhere, the coronavirus disease 2019 (COVID-19) crisis has resulted in a social, economic, and alcohol policy environment that is likely to contribute to a rise in intentional injuries, whether interpersonal or self-directed violence. Heavy drinking has been identified as an important risk factor for intentional injuries, and with the erosion of alcohol control policies on alcohol availability, heavy drinking is likely to increase. During a time of social isolation, economic loss, psychological distress, and reduced access to health services and support networks, all of which are catalytic factors for both intentional injuries and heavy alcohol use, what is needed is individualized and population-based preventive interventions aimed at reducing alcohol consumption, rather than decisions to increase certain forms of alcohol availability.

Publication Type

Journal article.

<280>

Accession Number

20203405555

Author

Saleem, M. K. M.; Abhishek Lal; Anas Sanaullah; Mahnoor Sheikh; Sara Saaed; Naseer Ahmed

Title

Knowledge, attitude, and practice towards COVID-19 among general population of Karachi south: a cross-sectional survey.

Source

Journal of the Dow University of Health Sciences; 2020. 14(2):77-82. 36 ref.

Publisher

Dow University of Health Sciences

Location of Publisher

Karachi

Country of Publication

Pakistan

Abstract

Objective: To assess the knowledge, attitude, and practices of precautionary measures against COVID-19 by the general population of Karachi South, Pakistan. Methods: This descriptive cross-sectional questionnaire-based survey was conducted among the general population living in the district South of Karachi, Pakistan from April to May 2020. A structured questionnaire was formed using google forms, containing 31 questions regarding knowledge regarding transmission, signs and symptoms of the coronavirus, attitude, and precautionary measures for novel coronavirus outbreak were noted. Results: Of 400 participants, most of the participants 259 (64.8%) were from 20-30 years of age group with females predominantly higher, i.e. 217 (54.3%). The majority of the participants 315 (78.5%) believed that COVID-19 is a viral infection. The majority of the participants 328 (82.0%) believed that COVID-19 starts with flu-like symptoms whereas few of them 65 (16.3%) thought stomach upset was also part of it. Similarly, majority of the participants, 320 (80.0%) presumed that elderly population was most effected by COVID-19 pandemic. The majority 286 (71.5%) of the participants were consuming home-based food rich in vitamin c and zinc. only 233 (58.3%) participants preferred to wear a surgical mask. Regarding use of supplements to boost immunity, 213 (53.3%) of the participants were not taking supplements, comparatively 186 (46.5%) consumed it. Conclusion: Currently COVID-19 outbreak is on rise worldwide, but the general population is cognizant of knowledge, attitude, and practices of precautionary measures against it. Our findings can be useful for public health authorities, clinicians, and media to intercept the transmission of COVID-19.

Publication Type

Journal article.

<281>

Accession Number

20203405308

Author

Li YuanChao; Wang HongLiang; Jiao JunDong

Title

The application of strong matrix management and PDCA cycle in the management of severe COVID-19 patients.

Source

Critical Care; 2020. 24(157):(17 April 2020). 9 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The article summarized the application of this emergency management mode. The article hopes it can be helpful in dealing with the outbreak of COVID-19 and managing severe patients. Medical treatment system is a core part for the prevention and control of public health emergencies. The intensive medical staffs from Heilongjiang province established a new emergency management strategy by applying the SMM mode and PDCA cycle to fight against the epidemic of COVID-19 in Hubei province. "There are a thousand Hamlets in a thousand people's eyes". Each medical team adopted a corresponding protocol to deal with COVID-19 according to their own situation.

Publication Type

Journal article.

<282>

Accession Number

20203405238

Author

Baquedano, F.; Cheryl, C.; Ajewole, K.; Beckman, J.

Title

International food security assessment, 2020-30.

Source

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Electronic Outlook Report from the Economic Research Service; 2020. (GFA-31):v + 74 pp. 4 ref.

Publisher

US Department of Agriculture, Economic Research Service (ERS-NASS)

Location of Publisher

Washington

Country of Publication

USA

Abstract

This report presents results from USDA, Economic Research Service's International Food Security Assessment model, a demand-driven framework that includes information on domestic prices and consumer responsiveness to changes in prices and incomes. Prior to the emergence of COVID-19 pandemic, in the 76 low- and middle-income countries examined in the report, the number of people considered food insecure in 2020 was estimated at almost 761 million people or 19.8 percent of the total population. The shock to gross domestic product (GDP) from COVID-19 is projected to increase the number of food-insecure people by almost 84 million and increase the prevalence of food insecurity by an additional 2.2 percentage points. In 2030, the number of food-insecure people is projected to decline to 456.8 million people, but this is 51 million more people than the pre-COVID-19 estimate. Asia, the most populous region in our study, and Sub-Saharan Africa are the regions projected to be most affected by the increase in food insecurity due to the COVID-19 shock to GDP growth. Given the rapidly evolving situation at a country level and the uncertainty of estimates of economic shocks at the country and global levels from the COVID-19 pandemic, the results presented in this report are more representative of a baseline scenario. The projections do not consider the potential impacts of certain types of events that may occur in the future, such as catastrophic weather, armed conflict, or political and economic instability.

Publication Type

Bulletin.

<283>

Accession Number

20203405116

Author

Wang HongLiang; Wang SiCong; Yu KaiJiang

Title

COVID-19 infection epidemic: the medical management strategies in Heilongjiang Province, China.

Source

Critical Care; 2020. 24(107):(18 March 2020). 4 ref.

Publisher

  BioMed Central Ltd

Location of Publisher

  London

Country of Publication

  UK

Abstract

  The aim of the article was to summarize the experiences from Heilongjiang province in dealing with COVID-19. To prevent the spread of COVID-19, the province suspended outpatient services and non-emergency surgeries of all levels of hospitals. Health Commission of Heilongjiang Province launched online free consultations. More than 12,000 medical staffs provided free online consultation, initial screening, popularizing the knowledge, and summarizing the experiences of managing COVID-19.

Publication Type

  Journal article.

<284>

Accession Number

  20203405115

Author

  He HongLi; Hu CaiYing; Xiong Nian; Liu Cheng; Huang XiaoBo

Title

  How to transform a general hospital into an "infectious disease hospital" during the epidemic of COVID-19.

Source

  Critical Care; 2020. 24(145):(14 April 2020). 3 ref.

Publisher

  BioMed Central Ltd

Location of Publisher

  London

Country of Publication

  UK

Abstract

  The aim of the article was to discuss the guidelines for the reconstruction of a general hospital into an infectious disease hospital during the COVID-19 pandemic. First, all the uninfected patients were transferred to other hospitals. Second, the sixteen-story hospital building was redesigned. Most importantly, two independent observation area and intensive care units (ICU) were rebuilt for COVID-19 test negative and positive patients; the ICU beds should occupy 26.1-32% of total beds. Third, twelve fever clinics were set to triage the patients. Fourth, infection prevention and control is very important: (a) training of the medical staff through face to face and video; (b) independent accesses for patients and medical staff; (c) the staff enter and exit the contaminated zone via two isolated aisles; (d) an infection control team checks each step of putting on and taking off personal protective equipment (PPE) to make sure that the staff is doing correctly; and (e) the doctors take 4-8 hours shift, and the nurses take 4 hours shift to reduce the exposure risk. Fifth, prepare enough PPEs, medical equipment like high-flow nasal cannula, ventilator, bronchoscope, sterilizing equipment, and extracorporeal membrane oxygenation (ECMO) if possible. Sixth, sufficient oxygen supply is very crucial for these patients as all the patients need oxygen therapy; unfortunately, some of our patients died because of the shortage of oxygen at the early time. Seventh, with the help of the government, several medical teams including doctors and nurses from infectious disease, pulmonary department, and ICU from other provinces came to help the team. The specialists from the three departments were the leader of the new wards. Eighth, the treatment of the patients was according to the guidelines updated by the National Health Committee of China. A multidisciplinary team was formed to help to make a treatment plan for the critically ill patients, and sometimes, the teleconsultation was held for the patients either.

Publication Type

  Journal article.

<285>

Accession Number

  20203405114

Author

  Li Li; Gong ShiJin; Yan Jing

Title

  COVID-19 in China: ten critical issues for intensive care medicine.

Source

  Critical Care; 2020. 24(124):(31 March 2020). 6 ref.

Publisher

  BioMed Central Ltd

Location of Publisher

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London

Country of Publication

UK

Abstract

The aim of the article was to report the prevalence and epidemiology of COVID-19 in China as reported in intensive care units. During the fight against COVID-19, it is urgent to think and discover problems in the development of intensive care medicine, find the critical issues to be improved and ultimately promote the development of intensive care medicine.

Publication Type

Journal article.

<286>

Accession Number

20203404267

Author

Lubrano, C.; Risi, R.; Masi, D.; Gnessi, L.; Colao, A.

Title

Is obesity the missing link between COVID-19 severity and air pollution?

Source

Environmental Pollution; 2020. 266(Part 3). 37 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

In the previous publication "Can atmospheric pollution be considered a co-factor in extremely high level of SARS-CoV-2 lethality in Northern Italy?" Conticini et al. hypothesized that the surplus of lethality of the novel SARS-CoV-2 in Northern Italy may be at least in part explained by the evidence of highest pollution reported in this area, as both severe COVID-19 and smog exposure are correlated to an innate immune system hyper-activation with subsequent lung inflammation and injury. Since this hypothesis alone does

not fully explain why specific subgroups of patients are at major risk, we hypothesized that obesity may be one of the links between COVID-19 severity and high level of air pollution. First, obesity is a predisposing factor for SARS-Cov-2 infection and worse COVID-19 outcomes, and unequivocal evidence demonstrated that fat mass excess is independently associated with several pulmonary diseases and lung inflammation. Moreover, it has been shown that obesity may intensify the detrimental effects of air pollution on the lungs, and this is not surprising if we consider that these conditions share an excessive activation of the immune system and a lung inflammatory infiltrate. Finally, fat mass excess has also been speculated to be itself a consequence of air pollutants exposure, which has been proved to induce metabolic disruption and weight gain in murine models. In conclusion, although many variables must be taken into account in the analysis of the pandemic, our observations suggest that obesity may act as effect modifier of smog-induced lung-injury, and the concomitant presence of these two factors could better explain the higher virulence, faster spread and greater mortality of SARS-CoV-2 in Northern Italy compared to the rest of the country.

Publication Type

Journal article.

<287>

Accession Number

20203404261

Author

Chennakesavulu, K.; Reddy, G. R.

Title

The effect of latitude and PM2.5 on spreading of SARS-CoV-2 in tropical and temperate zone countries.

Source

Environmental Pollution; 2020. 266(Part 3).

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The present work describes spreading of Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) at the tropical and temperate zones which are explained based on insolation energy, Particulate Matter (PM2.5), latitude, temperature, humidity, Population Density (PD), Human Development Index (HDI) and

Global Health Security Index (GHSI) parameters. In order to analyze the spreading of SARS-CoV-2 by statistical data based on the confirmed positive cases which are collected between December 31, 2019 to April 25, 2020. The present analysis reveals that the outbreak of SARS-CoV-2 in the major countries lie on the Equator is 78,509 cases, the countries lie on the Tropic of Cancer is 62,930 cases (excluding China) and the countries lie on the Tropic of Capricorn is 22,842 cases. The tropical countries, which comes between the Tropic of Cancer and Tropic of Capricorn is reported to be 1,77,877 cases. The temperate zone countries, which are above and below the tropical countries are reported to be 25,66,171 cases so, the pandemic analysis describes the correlation between latitude, temperate zones, PM2.5 and local environmental factors. Hence, the temperature plays a pivotal role in the spreading of coronavirus at below 20 degrees C. The spreading of SARS-CoV-2 cases in Northern and Southern Hemispheres has inverse order against absorption of insolated energy. In temperate zone countries, the concentration of PM2.5 at below 20 g/m3 has higher spreading rate of SARS-CoV-2 cases. The effect of insolation energy and PM2.5, it is confirmed that the spreading of SARS-CoV-2 is explained by dumb-bell model and solid/liquid interface formation mechanism. The present meta-analysis also focuses on the impact of GHSI, HDI, PD and PM2.5 on spreading of SARS-CoV-2 cases.

Publication Type

  Journal article.

<288>

Accession Number

  20203404252

Author

  Vikas Singh; Shweta Singh; Akash Biswal; Kesarkar, A. P.; Suman Mor; Khaiwal Ravindra

Title

  Diurnal and temporal changes in air pollution during COVID-19 strict lockdown over different regions of India.

Source

  Environmental Pollution; 2020. 266(Part 3). many ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

Lockdown measures to contain COVID-19 pandemic has resulted in a considerable change in air pollution worldwide. We estimate the temporal and diurnal changes of the six criteria air pollutants, including particulate matter (PM2.5 and PM10) and gaseous pollutants (NO2, O3, CO, and SO2) during lockdown (25th March - 3rd May 2020) across regions of India using the observations from 134 real-time monitoring sites of Central Pollution Control Board (CPCB). Significant reduction in PM2.5, PM10, NO2, and CO has been found in all the regions during the lockdown. SO2 showed mixed behavior, with a slight increase at some sites but a comparatively significant decrease at other locations. O3 also showed a mixed variation with a mild increase in IGP and a decrease in the South. The absolute decrease in PM2.5, PM10, and NO2 was observed during peak morning traffic hours (08 - 10 Hrs) and late evening (20 - 24 Hrs), but the percentage reduction is almost constant throughout the day. A significant decrease in day-time O3 has been found over Indo Gangetic plain (IGP) and central India, whereas night-time O3 has increased over IGP due to less O3 loss. The most significant reduction (~40 - 60%) was found in PM2.5 and PM10. The highest decrease in PM was found for the north-west and IGP followed by South and central regions. A considerable reduction (~30 - 70%) in NO2 was found except for a few sites in the central region. A similar pattern was observed for CO having a ~20 - 40% reduction. The reduction observed for PM2.5, PM10, NO2, and enhancement in O3 was proportional to the population density. Delhi's air quality has improved with a significant reduction in primary pollutants, however, an increase in O3 was observed. The changes reported during the lockdown are combined effect of changes in the emissions, meteorology, and atmospheric chemistry that requires detailed investigations.

Publication Type

Journal article.

<289>

Accession Number

20203403825

Author

Sun ShiHui; Chen Qi; Gu HongJing; Yang Guan; Wang YanXiao; Huang XingYao; Liu SuSu; Zhang NaNa; Li XiaoFeng; Xiong Rui; Guo Yan; Deng YongQiang; Huang WeiJin; Liu Quan; Liu QuanMing; Shen YueLei; Zhou Yong; Yang Xiao; Zhao TongYan; Fan ChangFa; Zhou YuSen; Qin ChengFeng; Wang YouChun

Title

A mouse model of SARS-CoV-2 infection and pathogenesis.

Source

Cell Host & Microbe; 2020. 28(1):124-133.e4. 39 ref.

Publisher

Cell Press

Location of Publisher

Cambridge

Country of Publication

USA

Abstract

Since December 2019, a novel coronavirus SARS-CoV-2 has emerged and rapidly spread throughout the world, resulting in a global public health emergency. The lack of vaccine and antivirals has brought an urgent need for an animal model. Human angiotensin-converting enzyme II (ACE2) has been identified as a functional receptor for SARS-CoV-2. In this study, we generated a mouse model expressing human ACE2 (hACE2) by using CRISPR/Cas9 knockin technology. In comparison with wild-type C57BL/6 mice, both young and aged hACE2 mice sustained high viral loads in lung, trachea, and brain upon intranasal infection. Although fatalities were not observed, interstitial pneumonia and elevated cytokines were seen in SARS-CoV-2 infected-aged hACE2 mice. Interestingly, intragastric inoculation of SARS-CoV-2 was seen to cause productive infection and lead to pulmonary pathological changes in hACE2 mice. Overall, this animal model described here provides a useful tool for studying SARS-CoV-2 transmission and pathogenesis and evaluating COVID-19 vaccines and therapeutics.

Publication Type

Journal article.

<290>

Accession Number

20203403691

Author

Nie JianHui; Li QianQian; Wu JiaJing; Zhao ChenYan; Hao Huan; Liu Huan; Zhang Li; Nie LingLing; Qin HaiYang; Wang Meng; Lu Qiong; Li XiaoYu; Sun QiYu; Liu JunKai; Fan ChangFa; Huang WeiJin; Xu Miao; Wang YouChun

Title

Establishment and validation of a pseudovirus neutralization assay for SARS-CoV-2.

Source

Emerging Microbes and Infections; 2020. 9(680-686):680-686. 27 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Pseudoviruses are useful virological tools because of their safety and versatility, especially for emerging and re-emerging viruses. Due to its high pathogenicity and infectivity and the lack of effective vaccines and therapeutics, live SARS-CoV-2 has to be handled under biosafety level 3 conditions, which has hindered the development of vaccines and therapeutics. Based on a VSV pseudovirus production system, a pseudovirus-based neutralization assay has been developed for evaluating neutralizing antibodies against SARS-CoV-2 in biosafety level 2 facilities. The key parameters for this assay were optimized, including cell types, cell numbers, virus inoculum. When tested against the SARS-CoV-2 pseudovirus, SARS-CoV-2 convalescent patient sera showed high neutralizing potency, which underscore its potential as therapeutics. The limit of detection for this assay was determined as 22.1 and 43.2 for human and mouse serum samples respectively using a panel of 120 negative samples. The cutoff values were set as 30 and 50 for human and mouse serum samples, respectively. This assay showed relatively low coefficient of variations with 15.9% and 16.2% for the intra- and inter-assay analyses respectively. Taken together, we established a robust pseudovirus-based neutralization assay for SARS-CoV-2 and are glad to share pseudoviruses and related protocols with the developers of vaccines or therapeutics to fight against this lethal virus.

Publication Type

Journal article.

<291>

Accession Number

20203403471

Author

Shehzad Khurram; Sarfraz Muddassar; Shah SyedGhulamMeran

Title

The impact of COVID-19 as a necessary evil on air pollution in India during the lockdown.

Source

Environmental Pollution; 2020. 266(Part 1). 20 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

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The study objective is to contemplate the effectiveness of COVID-19 on the air pollution of Indian territory from January 2020 to April 2020. We have executed data from European Space Agency (ESA) and CPCB online portal for air quality data dissemination. The Sentinel - 5 P satellite images elucidate that the Air quality of Indian territory has been improved significantly during COVID-19. Mumbai and Delhi are one of the most populated cities. These two cities have observed a substantial decrease in Nitrogen Dioxide (40-50%) compared to the same period last year. It suggests that the emergence of COVID-19 has been proved to a necessary evil as being advantageous for mitigating air pollution on Indian territory during the lock-down. The study found a significant decline in Nitrogen Dioxide in reputed states of India, i.e., Delhi and Mumbai. Moreover, a faded track of Nitrogen Dioxide can be seen at the Maritime route in the Indian Ocean. An upsurge in the environmental quality of India will also be beneficial for its neighbor countries, i.e., China, Pakistan, Iran, and Afghanistan.

Publication Type

Journal article.

<292>

Accession Number

20203403212

Author

Stanley, K. E.; Thomas, E.; Leaver, M.; Wells, D.

Title

Coronavirus disease-19 and fertility: viral host entry protein expression in male and female reproductive tissues.

Source

Fertility and Sterility; 2020. 114(1):33-43. 30 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Objective: To identify cell types in the male and female reproductive systems at risk for SARS-CoV-2 infection because of the expression of host genes and proteins used by the virus for cell entry. Design: Descriptive analysis of transcriptomic and proteomic data. Setting: Academic research department and

clinical diagnostic laboratory. Patients: Not applicable (focus was on previously generated gene and protein expression data). Interventions: None. Main Outcome Measures: Identification of cell types coexpressing the key angiotensin-converting enzyme 2 (ACE2) and transmembrane serine protease 2 (TMPRSS2) genes and proteins as well as other candidates potentially involved in SARS-CoV-2 cell entry. Results: On the basis of single-cell RNA sequencing data, coexpression of ACE2 and TMPRSS2 was not detected in testicular cells, including sperm. A subpopulation of oocytes in nonhuman primate ovarian tissue was found to express ACE2 and TMPRSS2, but coexpression was not observed in ovarian somatic cells. RNA expression of TMPRSS2 in 18 samples of human cumulus cells was shown to be low or absent. There was general agreement between publicly available bulk RNA and protein datasets in terms of ACE2 and TMPRSS2 expression patterns in testis, ovary, endometrial, and placental cells. Conclusions: These analyses suggest that SARS-CoV-2 infection is unlikely to have long-term effects on male and female reproductive function. Although the results cannot be considered definitive, they imply that procedures in which oocytes are collected and fertilized in vitro are associated with very little risk of viral transmission from gametes to embryos and may indeed have the potential to minimize exposure of susceptible reproductive cell types to infection in comparison with natural conception.

Publication Type

  Journal article.

<293>

Accession Number

  20203403152

Author

  MacEdo, P. M. de; Freitas, D. F. S.; Varon, A. G.; Lamas, C. da C.; Ferreira, L. C. F.; Freitas, A. D.; Ferreira, M. T.; Nunes, E. P.; Siqueira, M. M.; Veloso, V. G.; Valle, A. C. F. do

Title

  COVID-19 and acute juvenile paracoccidioidomycosis coinfection.

Source

  PLoS Neglected Tropical Diseases; 2020. 14(8). 18 ref.

Publisher

  Public Library of Sciences (PLoS)

Location of Publisher

  San Francisco

Country of Publication

  USA

Abstract

This case report describes the clinical course and management of a 19-year-old male patient was admitted to the Evandro Chagas National Institute of Infectious Diseases, Fiocruz, on 10 March 2020 complaining of an 8-month history of progressive weight loss; multiple cervical, axillary, and inguinal lymph node enlargements; abdominal distension; and disseminated cutaneous lesions. Pulmonary findings and complications of PCM may hinder and retard the specific diagnosis and the clinical management of COVID-19. The case reported herein shows the harmful potential that COVID-19 can represent for vulnerable populations suffering from severe endemic mycoses.

Publication Type

Journal article.

<294>

Accession Number

20203403115

Author

Hays, R.; Pierce, D.; Giacomin, P.; Loukas, A.; Bourke, P.; McDermott, R.

Title

Helminth coinfection and COVID-19: an alternate hypothesis.

Source

PLoS Neglected Tropical Diseases; 2020. 14(8). 15 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

This was a prospective study examining the effect of EHI on subsequent severe COVID-19 could produce valuable insights into the immunology of this condition. A case-matched cohort study conducted at multiple locations around the world would require large numbers of subjects and would be dependent on the unpredictable future course of the pandemic. Nevertheless, such a trial could demonstrate a potential mitigation of severe disease in susceptible individuals and give some evidence-based guidance on how to best manage the helminth elimination programs currently operating in many countries as the pandemic unfolds over coming years.

Publication Type

Journal article.

<295>

Accession Number

20203403095

Author

Verduynid, M.; Allou, N.; Gazailleid, V.; Andreid, M.; Desrocheid, T.; Jaffarid, M. C.; Traversier, N.; Levinid, C.; Lagrange-Xelot, M.; Moiton, M. P.; Hoangid, S.

Title

Co-infection of dengue and COVID-19: a case report.

Source

PLoS Neglected Tropical Diseases; 2020. 14(8). 13 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

This case report describes the clinical course and management of an 18-year-old male living in Reunion Island, with no relevant past medical history except occasional migraines. The patient travelled back from Strasbourg (initial French epicenter of COVID-19) to Reunion Island on March 18, 2020. After his arrival, he returned to his parents' home, respected national confinement guidelines, and only went shopping once. This article first confirmed case of co-infection of dengue fever and COVID-19. In tropical areas where arboviruses and COVID-19 may coexist, clinical diagnosis is difficult, and patients should be tested for both viruses. Larger studies are needed to evaluate increased morbidity of these co-infections.

Publication Type

Journal article.

<296>

Accession Number

20203403094

Author

Seelig, F.; Bezerra, H.; Cameron, M.; Hii, J.; Hiscox, A.; Irish, S.; Jones, R. T.; Lang, T.; Lindsay, S. W.; Lowe, R.; Nyoni, T. M.; Power, G. M.; Quintero, J.; Stewart-Ibarra, A. M.; Tusting, L. S.; Tytheridge, S.; Logan, J. G.

Title

The COVID-19 pandemic should not derail global vector control efforts.

Source

PLoS Neglected Tropical Diseases; 2020. 14(8). 11 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

This article argues that vector control should not be hampered despite the ongoing efforts to curb and control COVID-19. A list of recommended actions grouped into three categories: maintain vector control operations in the context of COVID-19 (adapting activities to improve worker safety and to prevent further spread), broad programmatic considerations for vector control activities during outbreaks of other aetiologies, and COVID-19 disease monitoring and control innovations that could be applied to vector control. It is expected that the most vulnerable and poorest populations will suffer most from COVID-19, due to lack of access to appropriate care and the impacts of isolation measures on fragile livelihoods. It is vital that the COVID-19 response does not increase VBD threats in these communities by derailing global vector control efforts.

Publication Type

Journal article.

<297>

Accession Number

20203403092

Author

  Nacher, M.; Douine, M.; Gaillet, M.; Flamand, C.; Rousset, D.; Rousseau, C.; Mahdaoui, C.; Carroll, S.; Valdes, A.; Passard, N.; Carles, G.; Djossou, F.; Demar, M.; Epelboin, L.

Title

  Simultaneous dengue and COVID-19 epidemics: difficult days ahead?

Source

  PLoS Neglected Tropical Diseases; 2020. 14(8). 36 ref.

Publisher

  Public Library of Sciences (PLoS)

Location of Publisher

  San Francisco

Country of Publication

  USA

Abstract

  The aim of the article was to present the differential diagnosis between dengue and COVID-19. The objectives of paraclinical explorations are 2-fold: to make the differential diagnosis and to look for signs of severity (white blood cell and platelet counts, C-reactive protein, serum electrolytes, aspartate amino transferase, alanine amino transferase, bilirubin, prothrombin time, activated thromboplastin time, and lactate dehydrogenase [LDH]). According to the context and clinical presentation, physicians may prescribe a malaria test, blood and urine cultures, serologies, or molecular diagnosis of differential diagnoses.

Publication Type

  Journal article.

<298>

Accession Number

  20203402789

Author

  Holm, A. M.; Mehra, M. R.; Courtwright, A.; Teuteberg, J.; Sweet, S.; Potena, L.; Singer, L. G.; Farrero, M.; Shullo, M. A.; Benza, R.; Ensminger, S.; Aslam, S.

Title

  Ethical considerations regarding heart and lung transplantation and mechanical circulatory support during the COVID-19 pandemic: an ISHLT COVID-19 Task Force statement.

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290

Source

Journal of Heart and Lung Transplantation; 2020. 39(7):619-626. 27 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

To understand the challenges for thoracic transplantation and mechanical circulatory support during the current coronavirus disease 2019 pandemic, we propose separating the effects of the pandemic into 5 distinct stages from a healthcare system perspective. We discuss how the classical ethical principles of utility, justice, and efficiency may need to be adapted, and we give specific recommendations for thoracic transplantation and mechanical circulatory support centers to balance their clinical decisions and strategies for advanced heart and lung disease during the current pandemic.

Publication Type

Journal article.

<299>

Accession Number

20203402783

Author

Ribero, M. S.; Jouvenet, N.; Dreux, M.; Nisole, S.

Title

Interplay between SARS-CoV-2 and the type I interferon response.

Source

PLoS Pathogens; 2020. 16(7). 159 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

The severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) is responsible for the current COVID-19 pandemic. An unbalanced immune response, characterized by a weak production of type I interferons (IFN-Is) and an exacerbated release of proinflammatory cytokines, contributes to the severe forms of the disease. SARS-CoV-2 is genetically related to SARS-CoV and Middle East respiratory syndrome-related coronavirus (MERS-CoV), which caused outbreaks in 2003 and 2013, respectively. Although IFN treatment gave some encouraging results against SARS-CoV and MERS-CoV in animal models, its potential as a therapeutic against COVID-19 awaits validation. Here, we describe our current knowledge of the complex interplay between SARS-CoV-2 infection and the IFN system, highlighting some of the gaps that need to be filled for a better understanding of the underlying molecular mechanisms. In addition to the conserved IFN evasion strategies that are likely shared with SARS-CoV and MERS-CoV, novel counteraction mechanisms are being discovered in SARS-CoV-2-infected cells. Since the last coronavirus epidemic, we have made considerable progress in understanding the IFN-I response, including its spatiotemporal regulation and the prominent role of plasmacytoid dendritic cells (pDCs), which are the main IFN-I-producing cells. While awaiting the results of the many clinical trials that are evaluating the efficacy of IFN-I alone or in combination with antiviral molecules, we discuss the potential benefits of a well-timed IFN-I treatment and propose strategies to boost pDC-mediated IFN responses during the early stages of viral infection.

Publication Type

Journal article.

<300>

Accession Number

20203402774

Author

Hamilton, B.; Anderson, L.; Anglem, N.; Armstrong, S.; Baker, S.; Beable, S.; Burt, P.; Coleman, L.; Doughty, R.; Edwards, T.; Exeter, D.; Fulcher, M.; Kara, S.; Mayhew, J.; Mayhew, S.; Milne, C.; O'Neill, B.; Osborne, H.; Parnell, M.; Pearson, J.; Rasmussen, K.; Scheffer, J.; Swan, M.; Thomas, M.; Gerrard, D.

Title

Medical considerations for supporting elite athletes during the post-peak phase of the New Zealand COVID-19 pandemic: a New Zealand sporting code consensus.

Source

New Zealand Medical Journal; 2020. 133(1517):107-116. 31 ref.

Publisher

New Zealand Medical Association

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Location of Publisher

Wellington

Country of Publication

New Zealand

Abstract

This article provides evidence and consensus-based guidelines relevant to the medical support of New Zealand elite athletes during the transition to a "new normal" in the New Zealand environment. The following recommendations have resulted from consultation between the medical officers of New Zealand's major sporting codes, Sports Medicine New Zealand and other health specialists. The specific foci of the consensus are the medical considerations relevant to the transition period characterized by a gradual re-opening of elite sporting facilities and a resumption of group-based training. While specific details of New Zealand COVID-19 levels may vary over time and potentially by location, this document assumes a situation whereby isolation "bubbles" are no longer operating for the majority of the population.

Publication Type

Journal article.

<301>

Accession Number

20203402664

Author

Wang YingMei; Zhang ShiQian; Wei LiHui; Lin ZhongQiu; Wang XinYu; Wang JianLiu; Hua KeQin; Cui ManHua; Wang JianDong; Wang ShiXuan; Di Wen; Wang YuDong; An RuiFang; Xi MingRong; Guo RuiXia; Zhou Qi; Xie Xing; Xue FengXia

Title

Recommendations on management of gynecological malignancies during the COVID-19 pandemic: perspectives from Chinese gynecological oncologists.

Source

Journal of Gynecologic Oncology; 2020. 31(4). 8 ref.

Publisher

Korean Society of Gynecologic Oncology

Location of Publisher

Seoul

Country of Publication

Korea Republic

Abstract

The outbreak of coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 has rapidly spread globally. Cancer patients are at a higher risk of being infected with the coronavirus and are more likely to develop severe complications, as compared to the general population. The increasing spread of COVID-19 presents challenges for the clinical care of patients with gynecological malignancies. Concerted efforts should be put into managing gynecological malignancies in an orderly manner by strictly implementing the measures that are specifically developed for controlling the spread of COVID-19. We have drafted Recommendations on Management of Gynecological Malignancies during the COVID-19 Pandemic based on our experience on controlling COVID-19 pandemic in China. We recommend that patients with gynecological malignancies should be managed in hierarchical and individualized manners in combination with local conditions related to COVID-19. Medical care decision should be balanced between controlling COVID-19 pandemic spread and timely diagnosis and treatment for gynecologic oncology patients.

Publication Type

Journal article.

<302>

Accession Number

20203402292

Author

Chen MinHong; Jia HaiMei; Wang HanWei; Zheng XiaoYan; Wang QingHua

Title

Infection status of coronavirus disease 2019 cases and close contacts in Fuzhou, Fujian. [Chinese]

Source

Disease Surveillance; 2020. 35(7):608-612. 11 ref.

Publisher

Editorial Board of Disease Surveillance

Location of Publisher

Beijing

Country of Publication

China

Abstract

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Objective: To analyze the infection status of coronavirus disease 2019 (COVID-19) cases and close contacts in Fuzhou, Fujian province, and evaluate the risk of infection and morbidity in different exposure mode. Methods: Descriptive Epidemiology investigation of COVID-19 cases and close contacts was conducted to analyze the secondary attack rate (SAR) of COVID-19 in Fuzhou. Results: The epidemic of COVID-19 in Fuzhou had three stages. A total of 1 159 close contacts were found, the SAR was 2.07% (24/1 159). The median of interval was 12 days (rang: 2-21 days). In the relationship between close contact and cases, the SAR in old people in nursing home was highest (28.57%), followed by that in family members (5.52%), medical staff (3.23%), relatives (2.41%) and colleagues/classmates (1.67%), respectively. The differences were significant ($X2=534.376$, $P < 0.001$). Among the contact ways, the SAR of nursing (nursing home) were highest (28.57%), followed by that of living in same room (5.26%), medical care (3.23%), being guest (2.82%), living in same building (1.77%) and short talk or other contact in daily work (1.55%), respectively. The differences were significant ($X2=575.075$, $P < 0.001$). The median of incubation period was 5 days (rang: 1-12 days). Conclusion: COVID-19 is highly contagious. Timely and strict quarantine should be conducted for close contacts, especially for those at high risk, to reduce the possibility of community transmission.

Publication Type

Journal article.

<303>

Accession Number

20203402284

Author

Han Hui; Wu Bo; Jia JiaoJiao; Song YaJing

Title

Summary of global surveillance data of infectious diseases in June 2020. [Chinese]

Source

Disease Surveillance; 2020. 35(7):568-570. 8 ref.

Publisher

Editorial Board of Disease Surveillance

Location of Publisher

Beijing

Country of Publication

China

Abstract

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In June 2020, a total of 65 infectious diseases were reported globally, affecting 217 countries and regions. Except for influenza, the top five infectious diseases affecting greatest number of countries and regions were Coronavirus disease 2019 (COVID-19, 217), dengue fever (28), measles (24), malaria (10) and poliomyelitis (7). The top four infectious diseases with highest case fatality rates were Ebola virus disease (65.7%), plague (25.5%), Lassa fever (20.8%) and COVID-19 (5.0%). The top five infectious diseases with greatest number of deaths were COVID-19, measles, dengue fever, cholera and Ebola virus disease. The prevalent infectious diseases in Asia were COVID-19 and dengue fever, the prevalent infectious diseases in Africa were COVID-19, Ebola virus disease, plague, cholera, yellow fever, Lassa fever and measles, the prevalent infectious diseases in America were COVID-19 and dengue fever, the prevalent infectious diseases in Europe were COVID-19 and measles.

Publication Type

  Journal article.

<304>

Accession Number

  20203402193

Author

  Jegatheswaran Ratnasingam; Khoo, A.; Natkuncaran Jegathesan; Wei LumChee; Latib, H. A.; Ganesh Thanasegaran; Liat LimChoon; Yi LeeYan; Kamaruzaman Othman; Mohd. Afthar Amir

Title

  How are small and medium enterprises in Malaysia's furniture industry coping with COVID-19 pandemic? Early evidences from a survey and recommendations for policymakers.

Source

  BioResources; 2020. 15(3):5951-5964. 23 ref.

Publisher

  North Carolina State University, College of Natural Resources

Location of Publisher

  Raleigh

Country of Publication

  USA

Abstract

  In the wake of the global COVID-19 pandemic and the subsequent movement control order (MCO) in Malaysia, an on-line survey was undertaken involving 748 small and medium enterprises (SMEs) in the furniture industry. The main objective was to examine the impact of the pandemic and the subsequent

MCO on the various business aspects of the SMEs as well as to make recommendations to the government on supportive measures for the SMEs. The survey found that although all aspects of the business were impacted, the two major concerns of the SMEs during this crisis were the financial management and the supply chain disruptions. Inevitably, it was found that most of the SMEs were operating well below capacity, which was a huge financial strain on their business viability. It was recommended that the government provide measures to help the SMEs manage their cash-flow and ease the restrictions to facilitate supply-chain commencement that is crucial to their business. The survey also revealed that most SMEs acknowledged the importance of automation and the adoption of technologies. Respondents regarded the shift towards Industry 4.0 was inevitable as a means increase their resilience when facing future uncertainties.

Publication Type

Journal article.

<305>

Accession Number

20203401606

Author

Carraturo, F.; Giudice, C. del; Morelli, M.; Cerullo, V.; Libralato, G.; Galdiero, E.; Guida, M.

Title

Persistence of SARS-CoV-2 in the environment and COVID-19 transmission risk from environmental matrices and surfaces.

Source

Environmental Pollution; 2020. 265(Part B). 41 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The Coronavirus disease 2019 (COVID-19) is spreading around the world, representing a global pandemic, counting, as of June 5th, 2020, over 6,600,000 confirmed cases and more than 390,000 deaths, with exponentially increasing numbers. In the first half of 2020, because of the widespread of the COVID-19, researches were focused on the monitoring of SARS-CoV-2 in water, wastewater, sludge, air, and on

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surfaces, in order to assess the risk of contracting the viral infection from contaminated environments. So far, the survival of the novel Coronavirus out of the human body has been reported for short time periods (from hours to few days, in optimized in vitro conditions), mainly because of the need of an host organism which could consent the viral attack, and due to the weak external membrane of the virus. SARS-CoV-2 viral shedding strategies in the environment, either through animate and unanimate matrices, or exploiting the organic matter in water, wastewater, and waste in general, have been discussed in the present article. We concluded that, besides the high infectuousness of the novel Coronavirus, the transmission of the pathogen may be efficiently contained applying the adequate preventive measures (e.g., personal protection equipments, and disinfecting agents), indicated by national and international health authories.

Publication Type

  Journal article.

<306>

Accession Number

  20203401457

Author

  Biswajit Naik; Nidhi Gupta; Rupal Ojha; Satyendra Singh; Prajapati, V. K.; Dhaneswar Prusty

Title

  High throughput virtual screening reveals SARS-CoV-2 multi-target binding natural compounds to lead instant therapy for COVID-19 treatment.

Source

  International Journal of Biological Macromolecules; 2020. 160:1-17. 142 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  The present-day world is severely suffering from the recently emerged SARS-CoV-2. The lack of prescribed drugs for the deadly virus has stressed the likely need to identify novel inhibitors to alleviate and stop the pandemic. In the present high throughput virtual screening study, we used in silico techniques like receptor-ligand docking, Molecular dynamic (MD), and ADME properties to screen natural compounds. It has been documented that many natural compounds display antiviral activities, including anti-SARS-CoV

effect. The present study deals with compounds of Natural Product Activity and Species Source (NPASS) database with known biological activity that probably impedes the activity of six essential enzymes of the virus. Promising drug-like compounds were identified, demonstrating better docking score and binding energy for each druggable targets. After an extensive screening analysis, three novel multi-target natural compounds were predicted to subdue the activity of three/more major drug targets simultaneously. Concerning the utility of natural compounds in the formulation of many therapies, we propose these compounds as excellent lead candidates for the development of therapeutic drugs against SARS-CoV-2.

Publication Type

  Journal article.

<307>

Accession Number

  20203401410

Author

  Ma, T.; Heywood, A.; MacIntyre, C. R.

Title

  Travel health risk perceptions of Chinese international students in Australia - implications for COVID-19.

Source

  Infection, Disease & Health; 2020. 25(3):197-204. 56 ref.

Publisher

  Elsevier

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  Background: International students frequently return to their country of origin to visit friends and relatives (VFR), and are at increased risk of travel-associated infections. Little is known of their travel health seeking behaviours. China is the biggest source of international students studying in Australia and the unprecedented epidemic of COVID-19 in China makes this an important area of research. Methods: Focus groups of Chinese international students were conducted to explore travel health-related knowledge, attitudes and practices. Eligible participants were studying in Sydney, and had travelled to China and Hong Kong to visit friends and relatives in the preceding 18 months. A variety of topics were explored, using a focus group guide. Thematic analysis was undertaken on the transcripts using nVivo software. The list of

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codes and themes were not pre-determined but developed through content analysis. Results: Two focus groups were held with a total of 28 participants. Risk perception about VFR travel was generally low among Chinese international students. Pre-travel healthcare was not sought. Students strongly relied on the Internet, social media, parents and friends in China for travel health advice. Conclusion: This research provides insights into Chinese international students as VFR travellers. It confirms students could be a risk population for importations of infections such as COVID-19 because of low risk perception and lack of seeking travel health advice. This can inform health promotion strategies for students.

Publication Type

Journal article.

<308>

Accession Number

20203401314

Author

Zhang Chi; Chen Cai; Shen Wei; Tang Feng; Lei Hao; Xie Yu; Cao ZiCheng; Tang Kang; Bai JunBo; Xiao LeHan; Xu YuTian; Song YanXin; Chen JiWei; Guo ZhiHui; Guo YiChen; Wang Xiao; Xu MoDi; Zou HuaChun; Shu YueLong; Du XiangJun

Title

Impact of population movement on the spread of 2019-nCoV in China.

Source

Emerging Microbes and Infections; 2020. 9(988-990):988-990. 11 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Since Dec 2019, China has experienced an outbreak caused by a novel coronavirus, 2019-nCoV. A travel ban was implemented for Wuhan, Hubei on Jan 23 to slow down the outbreak. We found a significant positive correlation between population influx from Wuhan and confirmed cases in other cities across China ($R2 = 0.85$, $P < 0.001$), especially cities in Hubei ($R2 = 0.88$, $P < 0.001$). Removing the travel restriction would have increased 118% (91%-172%) of the overall cases for the coming week, and a travel ban taken three days or a week earlier would have reduced 47% (26%-58%) and 83% (78%-89%) of the early cases.

We would expect a 61% (48%-92%) increase of overall cumulative cases without any restrictions on returning residents, and 11% (8%-16%) increase if the travel ban stays in place for Hubei. Cities from Yangtze River Delta, Pearl River Delta, and Capital Economic Circle regions are at higher risk.

Publication Type

  Journal article.

<309>

Accession Number

  20203401313

Author

  Yuan LunZhi; Tang QiYi; Cheng Tong; Xia NingShao

Title

  Animal models for emerging coronavirus: progress and new insights.

Source

  Emerging Microbes and Infections; 2020. 9(949-961):949-961. 79 ref.

Publisher

  Taylor & Francis

Location of Publisher

  Abingdon

Country of Publication

  UK

Abstract

  The emergences of coronaviruses have caused a serious global public health problem because their infection in humans caused the severe acute respiratory disease and deaths. The outbreaks of lethal coronaviruses have taken place for three times within recent two decades (SARS-CoV in 2002, MERS-CoV in 2012 and SARS-CoV-2 in 2019). Much more serious than SARS-CoV in 2002, the current SARS-CoV-2 infection has been spreading to more than 213 countries, areas or territories and causing more than two million cases up to date (17 April 2020). Unfortunately, no vaccine and specific anti-coronavirus drugs are available at present time. Current clinical treatment at hand is inadequate to suppress viral replication and inflammation, and reverse organ failure. Intensive research efforts have focused on increasing our understanding of viral biology of SARS-CoV-2, improving antiviral therapy and vaccination strategies. The animal models are important for both the fundamental research and drug discovery of coronavirus. This review aims to summarize the animal models currently available for SARS-CoV and MERS-CoV, and their potential use for the study of SARS-CoV-2. We will discuss the benefits and caveats of these animal models

and present critical findings that might guide the fundamental studies and urgent treatment of SARS-CoV-2-caused diseases.

Publication Type

  Journal article.

<310>

Accession Number

  20203401312

Author

  Li TaiSheng; Lu HongZhou; Zhang WenHong

Title

  Clinical observation and management of COVID-19 patients.

Source

  Emerging Microbes and Infections; 2020. 9(687-690):687-690. 7 ref.

Publisher

  Taylor & Francis

Location of Publisher

  Abingdon

Country of Publication

  UK

Abstract

  Three leading infectious disease experts in China were invited to share their bedside observations in the management of COVID-19 patients. Professor Taisheng Li was sent to Wuhan to provide frontline medical care. He depicts the clinical course of SARS-CoV-2 infection. Furthermore, he observes the significant abnormality of coagulation function and proposes that the early intravenous immunoglobulin and low molecular weight heparin anticoagulation therapy are very important. Professor Hongzhou Lu, a leader in China to try various anti-viral drugs, expresses concern on the quality of the ongoing clinical trials as most trials are small in scale and repetitive in nature, and emphasizes the importance of the quick publication of clinical trial results. Regarding the traditional Chinese medicine, Professor Lu suggests to develop a creative evaluation system because of the complicated chemical compositions. Professor Wenhong Zhang is responsible for Shanghai's overall clinical management of the COVID-19 cases. He introduces the team approach to manage COVID-19 patients. For severe or critically ill patients, in addition to the respiratory supportive treatment, timely multiorgan evaluation and treatment is very crucial. The medical decisions and interventions are carefully tailored to the unique characteristics of each patient.

Publication Type

 Journal article.

<311>

Accession Number

 20203399439

Author

 Deng XuFang; Buckley, A. C.; Pillatzki, A.; Lager, K. M.; Faaberg, K. S.; Baker, S. C.

Title

 Inactivating three interferon antagonists attenuates pathogenesis of an enteric coronavirus.

Source

 Journal of Virology; 2020. 94(17).

Publisher

 American Society for Microbiology (ASM)

Location of Publisher

 Washington, D.C.

Country of Publication

 USA

Abstract

  Coronaviruses (CoVs) have repeatedly emerged from wildlife hosts and infected humans and livestock animals to cause epidemics with significant morbidity and mortality. CoVs infect various organs, including respiratory and enteric systems, as exemplified by newly emerged severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The constellation of viral factors that contribute to developing enteric disease remains elusive. Here, we investigated CoV interferon antagonists for their contribution to enteric pathogenesis. Using an infectious clone of an enteric CoV, porcine epidemic diarrhea virus (icPEDV), we generated viruses with inactive versions of interferon antagonist nonstructural protein 1 (nsp1), nsp15, and nsp16 individually or combined into one virus designated icPEDV-mut4. Interferon-responsive PK1 cells were infected with these viruses and produced higher levels of interferon responses than were seen with wild-type icPEDV infection. icPEDV-mut4 elicited robust interferon responses and was severely impaired for replication in PK1 cells. To evaluate viral pathogenesis, piglets were infected with either icPEDV or icPEDV-mut4. While the icPEDV-infected piglets exhibited clinical disease, the icPEDV-mut4-infected piglets showed no clinical symptoms and exhibited normal intestinal pathology at day 2 postinfection. icPEDV-mut4 replicated in the intestinal tract, as revealed by detection of viral RNA in fecal swabs, with sequence analysis documenting genetic stability of the input strain. Importantly, icPEDV-mut4 infection elicited IgG and neutralizing antibody responses to PEDV. These results identify nsp1, nsp15, and nsp16 as virulence

factors that contribute to the development of PEDV-induced diarrhea in swine. Inactivation of these CoV interferon antagonists is a rational approach for generating candidate vaccines to prevent disease and spread of enteric CoVs, including SARS-CoV-2. Importance: Emerging coronaviruses, including SARS-CoV-2 and porcine CoVs, can infect enterocytes, cause diarrhea, and be shed in the feces. New approaches are needed to understand enteric pathogenesis and to develop vaccines and therapeutics to prevent the spread of these viruses. Here, we exploited a reverse genetic system for an enteric CoV, porcine epidemic diarrhea virus (PEDV), and outline an approach of genetically inactivating highly conserved viral factors known to limit the host innate immune response to infection. Our report reveals that generating PEDV with inactive versions of three viral interferon antagonists, nonstructural proteins 1, 15, and 16, results in a highly attenuated virus that does not cause diarrhea in animals and elicits a neutralizing antibody response in virus-infected animals. This strategy may be useful for generating live attenuated vaccine candidates that prevent disease and fecal spread of enteric CoVs, including SARS-CoV-2.

Publication Type

  Journal article.

<312>

Accession Number

  20203398126

Author

  Ndiaye, O.; Fall, F. T.; Faye, P. M.; Thiongane, A.; Fall, A. L.

Title

  Department of Pediatrics at the Albert Royer National Children's Hospital: preliminary study comparing the first quarter of 2019 and 2020. [French]

Source

  Pan African Medical Journal; 2020. 36. 14 ref.

Publisher

  African Field Epidemiology Network

Location of Publisher

  Kampala

Country of Publication

  Uganda

Abstract

  Introduction: the purpose of our study was to assess the impact of COVID-19 on health care activities and prescriptions at the Albert Royer National Children's Hospital in Dakar, Senegal. Methods: we conducted a

retrospective, descriptive and analytical study comparing outpatient activity, hospitalizations and prescriptions over the firstquarter of 2019 and 2020. Results: an average drop in external consultations of 33% was reported in the first quarter of 2020 (the pandemic period) compared to the first quarter of 2019. An increase in hospitalizations was observed mainly in the months of January and February. However, a drop of 11% was reported in the month of March. The same is true for prescriptions, for which a drop of 10% was reported only in the month of March. Conclusion: the current COVID-19 pandemic has a significant impact on outpatients' consultations, health care activities and prescriptions at the Albert Royer National Children's Hospital. Effective measures should be taken to prevent effects on mortality and Hospital activities.

Publication Type

 Journal article.

<313>

Accession Number

  20203396005

Author

  Zhu ChengLiang; Liu WeiYong; Su HanWen; Li SiTong; Shereen MuhammadAdnan; Lv ZhiHua; Niu ZhiLi; Li Dong; Liu Fang; Luo Zhen; Xia YuChen

Title

  Breastfeeding risk from detectable severe acute respiratory syndrome coronavirus 2 in breastmilk.

Source

  Journal of Infection; 2020. 81(3):470-473. 10 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  The aim of the article was to report clinical characteristics of COVID-19 pneumonia in puerperal women and evidence of SARS-CoV-2 shedding in the mother's breastmilk. In brief, SARS-CoV-2 causes milder COVID-19 in children as compared to adults, while newborns are still vulnerable to SARS-CoV-2 infection through the maternal-fetal transmission. The breastmilk (containing antibodies and other antimicrobial

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factors) feeding to infants safely is highly concerned in puerperal women with COVID-19. it's hard to ignore SARS-CoV-2 infection risk factors in breastfeeding.

Publication Type

Correspondence.

<314>

Accession Number

20203395974

Author

Chen JianJun; Huang ChaoLin; Zhang YanAn; Zhang Sai; Jin MeiLin

Title

Severe acute respiratory syndrome coronavirus 2-specific antibodies in pets in Wuhan, China.

Source

Journal of Infection; 2020. 81(3):e68-e69. 8 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This article collected swab and blood samples from pet cats and dogs in Wuhan whose owners were confirmed to have COVID-19. Our results provide serological evidence for SARS-CoV-2 infection in pets. Serological data suggests that three pets (two cats, one dog) had been exposed to the virus, although viral RNA detection was negative. Prior to our study, a preprint of a research article posted online at bioRxiv indicated that SARS-CoV-2-specific antibodies were detected in cats in Wuhan at the time of the COVID-19 epidemic. In addition, pet dogs and cats in Hong Kong, whose owners had been diagnosed with COVID-19, tested positive for SARS-CoV-2 RNA. Collectively, these results indicate the SARS-CoV-2 can be transmitted to companion animals, possible through contact with owners carrying COVID-19. However, the study were not able to determine whether, under natural conditions, pet cats and dogs can be readily infected with or transmit SARS-CoV-2. Further studies will be needed to establish the role of pets in the current COVID-19 epidemic.

Publication Type

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Correspondence.

<315>

Accession Number

20203395808

Author

Ngwa, W.; Kumar, R.; Thompson, D.; Lyerly, W.; Moore, R.; Reid, T. E.; Lowe, H.; Toyang, N.

Title

Potential of flavonoid-inspired phytomedicines against COVID-19.

Source

Molecules; 2020. 25(11). 33 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Flavonoids are widely used as phytomedicines. Here, we report on flavonoid phytomedicines with potential for development into prophylactics or therapeutics against coronavirus disease 2019 (COVID-19). These flavonoid-based phytomedicines include: caflanone, Equivir, hesperetin, myricetin, and Linebacker. Our in silico studies show that these flavonoid-based molecules can bind with high affinity to the spike protein, helicase, and protease sites on the ACE2 receptor used by the severe acute respiratory syndrome coronavirus 2 to infect cells and cause COVID-19. Meanwhile, in vitro studies show potential of caflanone to inhibit virus entry factors including, ABL-2, cathepsin L, cytokines (IL-1beta, IL-6, IL-8, Mip-1a, TNF-a), and PI4Kiiibeta as well as AXL-2, which facilitates mother-to-fetus transmission of coronavirus. The potential for the use of smart drug delivery technologies like nanoparticle drones loaded with these phytomedicines to overcome bioavailability limitations and improve therapeutic efficacy are discussed.

Publication Type

Journal article.

<316>

Accession Number

  20203395627

Title

  Considerations for travel-related measures to reduce spread of COVID-19 in the EU/EEA.

Source

  Considerations for travel-related measures to reduce spread of COVID-19 in the EU/EEA; 2020. 9 pp. 21 ref.

Publisher

  European Centre for Disease Prevention and Control

Location of Publisher

  Stockholm

Country of Publication

  Sweden

Abstract

  This article outlines principles for developing more individualised guidance or operating procedures related to travel in European countries.

Publication Type

  Miscellaneous.

<317>

Accession Number

  20203395214

Author

  Garcia, M. V. F.; Garcia, M. A. F.

Title

  Telemedicine, legal certainty, and COVID-19: where are we?

Source

Jornal Brasileiro de Pneumologia; 2020. 46(4). 14 ref.

Publisher

Sociedade Brasileira de Pneumologia Tisiologia

Location of Publisher

Sao Paulo

Country of Publication

Brazil

Abstract

Telemedicine has been a successful tool and was the major international technological innovation implemented during the pandemichowever, legal uncertainty on the topic is still common among health care professionals and institutions. This article discussed the utilization and relevance of telemedicine during the COVID-19 pandemic. Given the very favorable results of telemedicine obtained in a very short time in Brazil and worldwide, it is natural to expect that there will be no setbacks, such as the prohibition of telemedicine services in Brazil. Telemedicine has become a critical component during the pandemic and improved the efficacy of health care services, multiplying the capacity of the health care system to cope with COVID-19. The article believe that telemedicine plays a fundamental role in defeating the pandemic and should not be considered just an option or a complement to react against a crisis. Therefore, the dissemination of telemedicine is a path of no return. The regulation of telemedicine will be remembered as a historic landmark for the Brazilian Unified Health Care System in the future.

Publication Type

Journal article.

<318>

Accession Number

20203395213

Author

Holanda, M. A.; Pinheiro, B. V.

Title

COVID-19 pandemic and mechanical ventilation: facing the present, designing the future.

Source

Jornal Brasileiro de Pneumologia; 2020. 46(4). 12 ref.

Publisher

Sociedade Brasileira de Pneumologia Tisiologia

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Location of Publisher

  Sao Paulo

Country of Publication

  Brazil

Abstract

  The aim of the article was to report the utilization of mechanical ventilation during the COVID-19 pandemic. This is a historical moment because awareness has been raised and there have been paradigm shifts regarding the role of mechanical ventilatory support in health care systems. Accessibility, expertise, technology, innovation, usability, training, excellence, safety, effectiveness, low cost, equity, and universality are some of the concepts that permeate the role of MV in health care policies worldwide. It is certain that there will be new catastrophes and pandemics in the future and that the health of millions, perhaps billions of people, will be seriously affected. Contingency plans for current and future threats to global health, especially infections and respiratory diseases, should guide and enable universal access to safe, high-quality ventilatory support, even in regions with limited financial resources. The challenges have been set; it is up to us to face them in the present as we build the foundations for a promising future for MV in Brazil and in the world.

Publication Type

  Journal article.

<319>

Accession Number

  20203392413

Author

  Gevers, S.; Kwa, M. S. G.; Wijnans, E.; Nieuwkoop, C. van

Title

  Safety considerations for chloroquine and hydroxychloroquine in the treatment of COVID-19.

Source

  Clinical Microbiology and Infection; 2020. 26(9):1276-1277. 7 ref.

Publisher

  Elsevier

Location of Publisher

  Oxford

Country of Publication

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310

UK

Abstract

The aim of the article was to present and examine the efficacy and safety of chloroquine and hydroxychloroquine for the treatment of COVID-19. Thus, until adequately powered randomized controlled trials (RCTs) provide more information on the efficacy and safety of CQ/HCQ use in the treatment of patients with COVID-19, it is very important that the potential benefits of these agents are weighed against the potential risks. Furthermore, clinical trials should also evaluate the long-term (e.g. 3-6 months post-therapy) (side) effects of the use of CQ/HCQ in COVID-19, such as cardiomyopathy, muscle weakness, anxiety, sleeplessness and gastrointestinal disorders. Preferably, until data from RCTs become available, the off-label use of CQ/HCQ should be reserved only for COVID-19 patients treated in context of clinical trials in order to improve our knowledge on safety and efficacy.

Publication Type

Correspondence.

<320>

Accession Number

20203389457

Author

Boukhatem, M. N.; Setzer, W. N.

Title

Aromatic herbs, medicinal plant-derived essential oils, and phytochemical extracts as potential therapies for coronaviruses: future perspectives.

Source

Plants; 2020. 9(6). 110 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

After its recent discovery in patients with serious pneumonia in Wuhan (China), the 2019 novel coronavirus (2019-nCoV), named also Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), has

spread quickly. Unfortunately, no drug or vaccine for treating human this coronavirus infection is available yet. Numerous options for controlling or preventing emerging 2019-nCoV infections may be predicted, including vaccines, interferon therapies, and small-molecule drugs. However, new interventions are likely to require months to years to develop. In addition, most of the existing antiviral treatments frequently lead to the development of viral resistance combined with the problem of side effects, viral re-emergence, and viral dormancy. The pharmaceutical industry is progressively targeting phytochemical extracts, medicinal plants, and aromatic herbs with the aim of identifying lead compounds, focusing principally on appropriate alternative antiviral drugs. Spices, herbal medicines, essential oils (EOs), and distilled natural products provide a rich source of compounds for the discovery and production of novel antiviral drugs. The determination of the antiviral mechanisms of these natural products has revealed how they interfere with the viral life cycle, i.e., during viral entry, replication, assembly, or discharge, as well as virus-specific host targets. Presently, there are no appropriate or approved drugs against CoVs, but some potential natural treatments and cures have been proposed. Given the perseverance of the 2019-nCoV outbreak, this review paper will illustrate several of the potent antiviral chemical constituents extracted from medicinal and aromatic plants, natural products, and herbal medicines with recognized in vitro and in vivo effects, along with their structure-effect relationships. As this review shows, numerous potentially valuable aromatic herbs and phytochemicals are awaiting assessment and exploitation for therapeutic use against genetically and functionally different virus families, including coronaviruses.

Publication Type

Journal article.

<321>

Accession Number

20203387781

Author

Vischi, A.

Title

Covid-19 and economic shock. Tackle the emergency with creativity by avoiding cognitive bias. [Italian]

Source

Summa, Animali da Compagnia; 2020. 37(5):66-68. 4 ref.

Publisher

Point Veterinaire Italie s.r.l.

Location of Publisher

Milan

Country of Publication

Italy

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312

Abstract

   The health crisis that hit Italy in February 2020 quickly turned into an economic crisis. Italian economic fundamentals have suffered severe degradation. In this context, the veterinary services, considered essential, were ensured throughout the lockdown period. If in the short term a rebound can be expected with a recovery of turnover, in the medium-long term the needs and expectations of customers will no longer be the same. priorities will have changed. Therefore, you will have to change your point of view and offer new, different services or remodel existing ones. In this situation one must avoid making an analysis avoiding distortions due to cognitive bias and be creative in finding new solutions.

Publication Type

   Journal article.

<322>

Accession Number

   20203401072

Author

   Akumbu, P. W.

Title

   Legitimizing the development and use of Cameroon's national languages: lessons from COVID-19.

Source

   Journal of the Cameroon Academy of Sciences; 2020. 15(3):193-206. 11 ref.

Publisher

   Cameroon Academy of Sciences

Location of Publisher

   Province

Country of Publication

   Cameroon

Abstract

   The advent of COVID-19 has revealed the inability of the Cameroonian Government to provide information to all its citizens in the languages they understand best since a majority of the languages are neither developed for use nor empowered by the language policy of the country. Based on data from online and secondary sources this study highlights and insists on the necessity to develop and use national languages in official communication particularly when transmitting health related information. If this is done, it will become possible to easily reach out to all Cameroonians with vital information for their

wellbeing whenever need be. Other sectors of the country such as education and agriculture would benefit squarely from a language policy that incorporates the language of each and every Cameroonian.

Publication Type

Journal article.

<323>

Accession Number

20203401062

Author

Sangeeta Shroff

Title

Market intervention and markets - issues and opportunities.

Source

Indian Journal of Agricultural Marketing; 2020. 34(1):91-103.

Publisher

Indian Society of Agricultural Marketing

Location of Publisher

Nagpur

Country of Publication

India

Abstract

Market interventions, such as Minimum Support Price, are important to meet the requirements of vulnerable sections of society and also prevent farmers from making distress sales. However, interventions such as export bans have often proved to be unfavorable to the producer. While sale of agricultural produce normally takes place in regulated markets, in the recent past, these markets have lost their monopoly and alternative markets have emerged. The private sector has also started playing a role in aggregating the farmers' produce and ensuring a better price while there is benefit to the consumer as well. These emerging forms of marketing such as Direct Marketing and Farmer Producer Organizations/Companies are still in their infancy but have tremendous opportunities in emergency situations such as that caused by the pandemic created by covid-19, when the supply chain initially collapsed due to Pan India lockdown. The alternative markets through proper planning can ensure an efficient supply chain and bridge the gap between rural areas and urban consumers.

Publication Type

Journal article.

<324>

Accession Number

20203400613

Author

Chen MengJou; Chang KaoJung; Hsu ChihChien; Lin PeiYu; Jui-Ling Liu [Jui-Ling Liu C.]

Title

Precaution and prevention of coronavirus disease 2019 infection in the eye.

Source

Journal of the Chinese Medical Association; 2020. 83(7):648-650. 18 ref.

Publisher

Wolters Kluwer Health

Location of Publisher

Illinois

Country of Publication

USA

Abstract

Although current studies suggested that conjunctivitis is not a common presentation of coronavirus disease 2019 (COVID-19), several studies have reported the presence of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) in ocular secretions. Coronavirus had not yet been successfully cultured from tears or conjunctival swabs in humans, neither SARS-CoV-2 nor SARS-CoV. However, live feline coronavirus has been isolated from conjunctival swabs. In addition, infection of COVID-19 through unprotected eye exposure had been suspected in several articles. Reports of ophthalmologists and otolaryngologists died of COVID-19 also raised concern on ocular transmission. As a result, we strongly suggest that personal protective equipment (PPE) should cover the mouth, nose, and eyes of ophthalmologists, especially when conjunctivitis caused by SARS-CoV-2 is clinically indistinguishable from other viral follicular conjunctivitis.

Publication Type

Journal article.

<325>

Accession Number

  20203400609

Author

  Archana Dhok; Butola, L. K.; Ashish Anjankar; Shinde, A. D. R.; Kute, P. K.; Jha, R. K.

Title

  Role of vitamins and minerals in improving immunity during COVID-19 pandemic - a review.

Source

  Journal of Evolution of Medical and Dental Sciences; 2020. 9(32):2296-2300. 37 ref.

Publisher

  Akshantala Enterprises

Location of Publisher

  Mysore

Country of Publication

  India

Abstract

  The COVID-19 pandemic has brought attention to the role of the immune system. The immune system can be strengthened by diet, supplements and good hygiene practices. The immune system is comprised of different cells contained in the blood, lymph, and tissues that are distributed across the body. A large number of cells and even greater numbers of chemical messengers engage in the body's immune defence. In immune response blood cells, B-lymphocytes and T- lymphocytes play a vital role. The world health organization, urges people to follow a healthier lifestyle, saying it will increase their chances of a quick recovery. Proper nutrition is required for proper functioning of immune system. Therefore, healthy balanced diet is the best way to support the immune function. Vitamins and minerals are important ingredients of the diet that the body requires to work properly. Vit D is required in limited amounts to maintain good health. Vitamins and minerals together are also called micronutrients, as they are required in very small quantities. On the other hand, carbs, proteins and fats are altogether termed as macronutrients. In recent years, vitamins A, C, D, and E, believed to have an effect on the immune system, have gained significant attention because they are involved in enhancement of immune systems. Solely, vit-A is involved in proper functioning of eye, immune system and also takes care of skin and genes. In green leafy vegetables, carrots, pumpkin, melons and mangoes vitamins are present in form of pre-vitamins, and further converted into active vit A inside the human body. It is surprising that liver, yolk of egg, butter, whole milk, and cheese are active source of vitamin A. Having a healthy diet including lots of fruits, vegetables is a key component of healthy lifestyles and plays a crucial role in maintaining a properly functioning and efficient immune system to defend against infections and other diseases. All the data was assessed from online search (PubMed, Google Scholar). In this review article we concentrate on vitamins and minerals.

Publication Type

  Journal article.

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316

<326>

Accession Number

  20203399848

Author

  Fisher, E.; Astles, C.

Title

  Puppet theatre under COVID-19. (Special Issue: Puppetry, disability, health and well-being.)

Source

  Journal of Applied Arts & Health; 2020. 11(1/2):163-170.

Publisher

  Intellect Ltd.

Location of Publisher

  Bristol

Country of Publication

  UK

Abstract

  Puppetry is a resilient art form, as has been evidenced by the response of puppeteers to the recent COVID-19 pandemic. Perhaps this is fitting, as puppeteers have a long history of travelling to perform and adapting their performances to changing circumstances. In this report, we provide a sample of puppetry projects that are taking place around the world and some insights from puppeteers on how they are working through COVID-19; using puppetry to teach about COVID-19 and teaching puppetry in general; to entertain and to perform puppetry that is offered as ritual at a time of crisis.

Publication Type

  Journal article.

<327>

Accession Number

   20203399847

Author

   Kent, L.

Title

   The truth behind the screen: digital shadows in the time of pandemic. (Special Issue: Puppetry, disability, health and well-being.)

Source

   Journal of Applied Arts & Health; 2020. 11(1/2):157-161.

Publisher

   Intellect Ltd.

Location of Publisher

   Bristol

Country of Publication

   UK

Abstract

   The COVID-19 pandemic has highlighted the challenges of communicating digitally to the fore as people turn almost solely to their digital screens for connection and collaboration. In doing so, such as through web conferencing, we open up our living spaces to others, revealing parts of our lives heretofore we could keep hidden. In this article, I will describe 'Interior', a live Zoom shadow puppet performance by Australian puppet theatre collective, The Jill Collective, as an example of a deliberate response to COVID-19 pandemic isolation and social distancing restrictions. I offer the practice of traditional Wayang architecture of the shadow screen as a surface to physically work on, in, behind and through, as well as the screen as metaphorical facade or gateway as a unique theoretical and practical approach to digital performance.

Publication Type

   Journal article.

<328>

Accession Number

   20203399759

Author

   Li JunXiong; Hallsworth, A. G.; Coca-Stefaniak, J. A.

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318

Title

  Changing grocery shopping behaviours among Chinese consumers at the outset of the COVID-19 outbreak. (Special Issue: The geography of the COVID-19 pandemic.)

Source

  Tijdschrift voor Economische en Sociale Geografie; 2020. 111(3):574-583. many ref.

Publisher

  Wiley

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  This study focuses on the embryonic stages of the COVID-19 pandemic in China, where most people affected opted to abide by the Chinese government's national self-quarantine campaign. This resulted in major disruptions to one of the most common market processes in retail: food retailing. The research adopts the theory of planned behaviour to provide early empirical insights into changes in consumer behaviour related to food purchases during the initial stages of the COVID-19 outbreak in China. Data from the online survey carried out suggest that the outbreak triggered considerable levels of switching behaviours among customers, with farmers' markets losing most of their customers, while local small independent retailers experienced the highest levels of resilience in terms of customer retention. This study suggests avenues for further scholarly research and policy making related to the impact this behaviour may be having around the world on society's more vulnerable groups, particularly the elderly.

Publication Type

  Journal article.

<329>

Accession Number

  20203399758

Author

  Dannenberg, P.; Fuchs, M.; Riedler, T.; Wiedemann, C.

Title

  Digital transition by COVID-19 pandemic? The German food online retail. (Special Issue: The geography of the COVID-19 pandemic.)

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Source

  Tijdschrift voor Economische en Sociale Geografie; 2020. 111(3):543-560. many ref.

Publisher

  Wiley

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  The COVID-19 pandemic has led to a sharp increase in online trade. This article examines the impact of the pandemic on online grocery retail in Germany. Here we follow and refine the multi-level perspective by Geels, and examine to what extent and why the online grocery retail expanded during the pandemic. A particular focus is on the spatial expansion into rural areas. The study shows a general upswing in the grocery trade and disproportionately high growth in online grocery trade and identifies driving and limiting factors. While COVID-19 has opened a window of opportunity, our results indicate little transition of grocery to e-grocery. This finding can be explained by the sudden and temporary constellation at the level of the socio-technical regime during the pandemic. As a result, we argue for a rethinking the temporality of windows of opportunities and the related vulnerability of the innovations which need them.

Publication Type

  Journal article.

<330>

Accession Number

  20203399754

Author

  Mohamad, S. M.

Title

  Creative production of 'COVID-19 social distancing' narratives on social media. (Special Issue: The geography of the COVID-19 pandemic.)

Source

  Tijdschrift voor Economische en Sociale Geografie; 2020. 111(3):347-359. 29 ref.

Publisher

  Wiley

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  This paper offers an insight into the role of young people in shifting risk perception of the current global pandemic, COVID-19, via social distancing narratives on social media. Young people are creatively and affectively supporting the social distancing initiatives in Brunei Darussalam through the use of social media platforms such as Instagram, Twitter, and Tik Tok. Using qualitative content analysis (QCA) data of social media content by Bruneian youth, this paper reveals the localised and contextualised creative production of five 'social distancing' narratives as a response to the national and global concerns in times of a global pandemic: narrative of fear; narrative of responsibility; narrative of annoyance; narrative of fun; and narrative of resistance. This paper reflects on three key socio-cultural reconfigurations that have broader implications beyond the COVID-19 crisis: new youth spatialities and social engagements; youth leadership in development; and consideration of social participation and reach in risk communication.

Publication Type

  Journal article.

<331>

Accession Number

  20203399426

Author

  Moore, J. P.; Klasse, P. J.

Title

  COVID-19 vaccines: "Warp Speed" needs mind melds, not warped minds.

Source

  Journal of Virology; 2020. 94(17). 175 ref.

Publisher

  American Society for Microbiology (ASM)

Location of Publisher

  Washington, D.C.

Country of Publication

  USA

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Abstract

In this review, we address issues that relate to the rapid "Warp Speed" development of vaccines to counter the COVID-19 pandemic. We review the antibody response that is triggered by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection of humans and how it may inform vaccine research. The isolation and properties of neutralizing monoclonal antibodies from COVID-19 patients provide additional information on what vaccines should try to elicit. The nature and longevity of the antibody response to coronaviruses are relevant to the potency and duration of vaccine-induced immunity. We summarize the immunogenicity of leading vaccine candidates tested to date in animals and humans and discuss the outcome and interpretation of virus challenge experiments in animals. By far the most immunogenic vaccine candidates for antibody responses are recombinant proteins, which were not included in the initial wave of Warp Speed immunogens. A substantial concern for SARS-CoV-2 vaccines is adverse events, which we review by considering what was seen in studies of SARS-CoV-1 and Middle East respiratory syndrome coronavirus (MERS-CoV) vaccines. We conclude by outlining the possible outcomes of the Warp Speed vaccine program, which range from the hoped-for rapid success to a catastrophic adverse influence on vaccine uptake generally.

Publication Type

Journal article.

<332>

Accession Number

20203399095

Author

Sohal, K. S.; Simon, E. N. M.; Kalyanyama, B.; Moshy, J. R.

Title

Oral and maxillofacial surgical services amid COVID-19 pandemic: perspective from Tanzania.

Source

Tropical Medicine and Health; 2020. 48(70):(17 August 2020). 14 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

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322

The coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 is a global pandemic that affects individuals from all walks of life. Considering that the virus can be passed on directly from person to person through respiratory droplets, contact, fomites, and saliva, the oral and maxillofacial surgeons are exposed to COVID-19 in their daily clinical duties. This is because of the nature of their work, which entails working within a short distance from patients' oral cavity and upper airway. As such, there is a need for having locally tailored standard guidelines for managing patients with oral and maxillofacial conditions during the COVID 19 pandemic in Tanzania.

Publication Type

Journal article.

<333>

Accession Number

20203399093

Author

Mulusew Andualem Asemahagn

Title

Factors determining the knowledge and prevention practice of healthcare workers towards COVID-19 in Amhara Region, Ethiopia: a cross-sectional survey.

Source

Tropical Medicine and Health; 2020. 48(72):(20 August 2020). 43 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Healthcare workers (HWs) are at the highest risk of getting CIVID-19. This study aimed to assess factors determining the knowledge and prevention of HWs towards COVID-19 in the Amhara Region, Ethiopia. Methods: A cross-sectional online survey was conducted among 442 HWs using email and telegram addresses. The knowledge and practice of HWs were estimated using 16 knowledge and 11 practice questions. A multivariable logistic regression analysis was used on SPSS version 25 to identify factors related to the knowledge and prevention practice of HWs on COVID-19. Significance was determined at a p value of < 0.05 and association was described by using odds ratio at 95% CI. Results: Of

442 HWs, 398 (90% response rate) responded to the online interview questionnaire. From 398 HWs, 231(58%), 225(56%), 207(53%), and 191(48%) were males, from rural area, aged 34 years and nurses, respectively. About 279(70%) HWs had good knowledge of COVID-19 followed by 247(62%) good prevention practices. Age < 34 years (AOR = 2.14, 95% CI = 1.25-3.62), rural residence (AOR = 0.44, 95% CI = 0.26-0.70), access to infection prevention (IP) training (AOR = 2.4, 95% CI = 1.36-4.21), presence of IP guideline (AOR = 2.82, 95% CI = 1.64-4.62), and using social media (AOR = 2.51, 95% CI = 1.42-4.53) were factors of knowledge about COVID-19. Whereas, rural residence (AOR = 0.45, 95% CI = 0.31-0.75), facility type (AOR = 0.40, 95% CI = 0.28-0.89), access to IP training (AOR = 2.32, 95% CI = 1.35-4.16), presence of IP guidelines (AOR = 2.10, 95% CI = 1.21-3.45), knowledge about COVID-19 (AOR = 2.98, 95% CI = 2.15-5.27), having chronic illnesses (AOR = 2.0, 95% CI = 1.15-3.75), lack of protective equipment (PPE) (AOR = 0.42, 95% CI = 0.32-0.74), and high workload (AOR = 0.40, 95% CI = 0.36-0.87) were factors of COVID-19 prevention. Conclusion: In this study, most of the HWs had good knowledge but had lower prevention practice of COVID-19. Socio-demographic and access to information sources were factors of knowledge on COVID-19. Similarly, residence, shortage of PPE, high workload, comorbidities, knowledge, and access to IP training and guideline were factors limiting prevention practices. Thus, a consistent supply of PPE and improving health workers' knowledge, making IP guidelines and information sources available, and managing chronic illnesses are crucial to prevent COVID-19 among HWs.

Publication Type

Journal article.

<334>

Accession Number

20203399047

Author

Nundoochan, A.

Title

Improving public hospital efficiency and fiscal space implications: the case of Mauritius.

Source

International Journal for Equity in Health; 2020. 19(152):(04 September 2020). 54 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

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324

Abstract

  Background: General Government Health Expenditure (GGHE) in Mauritius accounted for only 10% of General Government Expenditure for the fiscal year 2018. This is less than the pledge taken under the Abuja 2001 Declaration to allocate at least 15% of national budget to the health sector. The latest National Health Accounts also urged for an expansion in the fiscal space for health. As public hospitals in Mauritius absorb 70% of GGHE, maximising returns of hospitals is essential to achieve Universal Health Coverage. More so, as Mauritius is bracing for its worst recession in 40 years in the aftermath of the COVID-19 pandemic public health financing will be heavily impacted. A thorough assessment of hospital efficiency and its implications on effective public health financing and fiscal space creation is, therefore, vital to inform ongoing health reform agenda. Objectives: This paper aims to examine the trend in hospital technical efficiency over the period 2001-2017, to measure the elasticity of hospital output to changes in inputs variables and to assess the impact of improved hospital technical efficiency in terms of fiscal space creation. Methods: Annual health statistics released by the Ministry of Health and Wellness and national budget of the Ministry of Finance, Economic Planning and Development were the principal sources of data. Applying Stochastic Frontier Analysis, technical efficiency of public regional hospitals was estimated under Cobb-Douglas, Translog and Multi-output distance functions, using STATA 11. Hospital beds, doctors, nurses and non-medical staff were used as input variables. Output variable combined inpatients and outpatients seen at Accident Emergency, Sorted and Unsorted departments. Efficiency scores were used to determine potential efficiency savings and fiscal space creation. Findings: Mean technical efficiency scores, using the Cobb Douglas, Translog and Multi-output functions, were estimated at 0.83, 0.84 and 0.89, respectively. Nurses and beds are the most important factors in hospital production, as a 1% increase in the number of beds and nurses, result in an increase in hospital outputs by 0.73 and 0.51%, respectively. If hospitals are to increase their inputs by 1%, their outputs will increase by 1.16%. Hospital output process has an increasing return to scale. With technical efficiencies improving to scores of 0.95 and 1.0 in 2021-2022, potential savings and fiscal space creation at hospital level, would amount to MUR 633 million (US$ 16.2 million) and MUR 1161 million (US$ 29.6 million), respectively. Conclusion: Fiscal space creation through full technical efficiency, is estimated to represent 8.9 and 9.2% of GGHE in fiscal year 2021-2022 and 2022-2023, respectively. This will allow without any restrictions the funding of the national response for HIV, vaccine preventable diseases as well as building a resilient health system to mitigate impact of emerging infectious diseases as experienced with COVID-19.

Publication Type

  Journal article.

<335>

Accession Number

  20203399038

Author

  Vankadari, N.; Wilce, J. A.

Title

Emerging COVID-19 coronavirus: glycan shield and structure prediction of spike glycoprotein and its interaction with human CD26.

Source

Emerging Microbes and Infections; 2020. 9(601-604):601-604. 10 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The recent outbreak of pneumonia-causing COVID-19 in China is an urgent global public health issue with an increase in mortality and morbidity. Here we report our modelled homo-trimer structure of COVID-19 spike glycoprotein in both closed (ligand-free) and open (ligand-bound) conformation, which is involved in host cell adhesion. We also predict the unique N- and O-linked glycosylation sites of spike glycoprotein that distinguish it from the SARS and underlines shielding and camouflage of COVID-19 from the host the defence system. Furthermore, our study also highlights the key finding that the S1 domain of COVID-19 spike glycoprotein potentially interacts with the human CD26, a key immunoregulatory factor for hijacking and virulence. These findings accentuate the unique features of COVID-19 and assist in the development of new therapeutics.

Publication Type

Journal article.

<336>

Accession Number

20203398764

Author

Romani, L.; Vilchez-Cornejo, J.

Title

Reusing N95 Respirators: decontamination strategies applicable in COVID-19 pandemics in Peru. [Spanish]

Source

Acta Medica Peruana; 2020. 37(2):223-227. 23 ref.

Publisher

Colegio Medico del Peru

Location of Publisher

Lima

Country of Publication

Peru

Abstract

The SARS-CoV-2 virus, also called COVID-19, was initially considered as an international public health emergency, and later it was declared as a pandemic. Due to the high spread of COVID-19 through droplets, the demand for personal protective equipment (PPE) for healthcare professionals has been remarkable, particularly filtering face-piece particulate respirators. Therefore, it is important to know the decontamination methods proposed for their application in our environment, considering the proper asepsis and antisepsis measures to be used, and also on how to preserve the integrity of the device (straps, nasal bridge and nasal foam material) and counting on its natural degradation process. Adequate methods for disinfecting these devices are as follows: using sterilizing ovens (dry heat), autoclave (steam), ultraviolet radiation (UV) and homemade vaporizers, which should be used according to the needs of the healthcare professionals.

Publication Type

Journal article.

<337>

Accession Number

20203398762

Author

Vivar-Mendoza, A.

Title

The ageless stress between the individual and the collective: the case of corruption in Peru. [Spanish]

Source

Acta Medica Peruana; 2020. 37(2):209-214. 22 ref.

Publisher

Colegio Medico del Peru

Location of Publisher

Lima

Country of Publication

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327

Peru

Abstract

Peru is a varied and convulsed country, and our republican history is a proof for that. The Peruvian health system has just been built during the 20th century. However, its development has been continuously affected by inadequate government policies and by corrosive and constant corruption acts. Now, in the 21st century, the health system has undergone some sort of reconstruction, but still with a very low budget and continuing venal practices that impede its proper functioning. This paper attempts to describe the anthropological basis underlying the human actions leading to corruption. It also reviews some of the main corruption modalities within the whole Peruvian healthcare system, a fragmented entity both in its public area and in its private counterpart. Also, some influencing factors are dealt with, as it is the case for the pharmaceutical industry. The resulting situation of the Peruvian healthcare system makes it quite vulnerable when facing sanitary crisis such as that generated by Covid-19. Finally, some proposals for change are outlined.

Publication Type

Journal article.

<338>

Accession Number

20203398756

Author

Herrera-Anazco, P.; Toro-Huamanchumo, C. J.

Title

Medical education during the COVID -19 pandemic: global initiatives for undergraduate, internship, and medical residency. [Spanish]

Source

Acta Medica Peruana; 2020. 37(2):169-175. 45 ref.

Publisher

Colegio Medico del Peru

Location of Publisher

Lima

Country of Publication

Peru

Abstract

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328

The 2019 coronavirus disease pandemic (COVID-19) has posed various challenges to the strata of society and medical education has been no exception. Globally, universities have proposed various initiatives in undergraduate and medical internships such as the partial virtualization of their curricular content, the modification of their curriculum and educational activities and the incorporation of students from the last years to the management of COVID-19 patients. In medical residency, surgical specialties and those that base their learning on procedures are the most affected. Residents of different specialties have been incorporated into healthcare tasks different from their specialty and some of their learning activities have been virtualized. Peru must make an evaluation of these strategies and the possible adaptation to our reality.

Publication Type

 Journal article.

<339>

Accession Number

 20203398534

Author

 Li HuiYan; Jia WanNan; Li XinYi; Zhang Li; Liu Chang; Wu Jian

Title

 Advances in detection of infectious agents by aptamer-based technologies.

Source

 Emerging Microbes and Infections; 2020. 9(1671-1681):1671-1681. 49 ref.

Publisher

 Taylor & Francis

Location of Publisher

 Abingdon

Country of Publication

 UK

Abstract

Infectious diseases still remain one of the biggest challenges for human health. Accurate and early detection of infectious pathogens are crucial for transmission control, clinical diagnosis, and therapy. For a traditional reason, most immunological and microbiological laboratories are equipped with instruments designated for antibody-based assays in detection of infectious pathogens or clinical diagnosis. Emerging aptamer-based technologies have pushed a shift from antibody-based to aptamer-based assays due to equal specificity, even better sensitivity, lower manufacturing cost and more flexibility in amending for

chemiluminescent, electrochemical or fluorescent detection in a multifaceted and high throughput fashion in comparison of aptamer-based to antibody-based assays. The nature of aptamer-based technologies is particularly suitable for point-of-care testing in remote areas at warm or hot atmosphere, and mass screening for potential infection in pandemic of emerging infectious agents, such as SARS-CoV or SARS-CoV-2 in an epicentre or other regions. This review intends to summarize currently available aptamer-based technologies in detection of bacterial, viral, and protozoan pathogens for research and clinical application. It is anticipated that potential technologies will be further optimized and validated for clinical translation in meeting increasing demands for prompt, precise, and reliable detection of specific pathogens in various atmospheric conditions.

Publication Type

  Journal article.

<340>

Accession Number

  20203398310

Author

  Ameyaw, E. K.; Hagan&, J. E.; Ahinkorah, B. O.; Seidu, A. A.; Schack, T.

Title

  One novel virus, different beliefs as playmakers towards disease spread in Africa: looking at COVID-19 from a religious lens.

Source

  Pan African Medical Journal; 2020. 36. 15 ref.

Publisher

  African Field Epidemiology Network

Location of Publisher

  Kampala

Country of Publication

  Uganda

Abstract

  Religious and spiritual observances that draw large people together are pervasive in many parts of the world, including Africa. With the recent emergence of COVID-19, these mass religious gatherings may pose significant threats to human health. Given the compromised healthcare systems in many parts of Africa, faith-based institutions have a huge responsibility towards the management of the potential spread of the virus through effective organizational strategies or interventions. This essay sheds light on what the novel

virus has to do with religion, the role of religious practices in inhibiting or spreading COVID-19, and what appropriate evidence-based interventions religious or faith-based organizations could adopt to help prevent the spread of the disease in Africa through a unity of thoughts for religious action.

Publication Type

Journal article.

<341>

Accession Number

20203398259

Author

Oladipo, E. K.; Ariyo, O. E.; Ibukun, F. I.; Osasona, O. G.; Akinbodewa, A. A.; Abejegah, C.; Oloke, J. K.

Title

A critical appraisal of COVID-19 as a nosocomial infection: an African perspective.

Source

Pan African Medical Journal; 2020. 36. 8 ref.

Publisher

African Field Epidemiology Network

Location of Publisher

Kampala

Country of Publication

Uganda

Abstract

The pandemic of Coronavirus disease 19 is not abating since the outbreak began in December 2019. Africa is currently experiencing a surge after an initial low incidence and nosocomial infections could be contributing to this. A dominant factor responsible for this is a weak healthcare system because of many years of neglect due to abysmal budgetary allocation to the sector. The testing capacity for COVID-19 diagnosis in Africa is grossly inadequate coupled with a severe shortage of personal protective equipment and inadequate infectious diseases expert. These factors exposed the frontline health workers and patients to the hazard of nosocomial infection with the attendants' morbidity and mortality. Deliberate efforts need to be made toward reducing nosocomial COVID-19 infection.

Publication Type

Journal article.

<342>

Accession Number

  20203398141

Author

  Kitara, D. L.; Ikoona, E. N.

Title

  Proposed strategies for easing COVID-19 lockdown measures in Africa.

Source

  Pan African Medical Journal; 2020. 36. 9 ref.

Publisher

  African Field Epidemiology Network

Location of Publisher

  Kampala

Country of Publication

  Uganda

Abstract

  As SARS-CoV-2 rapidly spread across the globe, short-term modeling forecasts provided timecritical information for containment and mitigation strategies. Global projections had so far incorrectly predicted large numbers of COVID-19 cases in Africa and that its health systems would be overwhelmed. Significantly higher COVID-19-related mortality were expected in Africa mainly because of its poor socio-economic determinants that make it vulnerable to public health threats, including diseases of epidemic potential. Surprisingly as SARS-CoV-2 swept across the globe, causing tens of thousands of deaths and massive economic disruptions, Africa has so far been largely spared the impact that threw China, USA, and Europe into chaos. To date, 42 African countries imposed lockdowns on movements and activities. Experience from around the world suggests that such interventions effectively suppressed the spread of COVID-19. However, lockdown measures posed considerable economic costs that, in turn, threatened lives, put livelihoods at risk, exacerbated poverty and the deleterious effects on cultures, health and behaviours. Consequently, there has been great interest in lockdown exit strategies that preserve lives while protecting livelihoods. Nonetheless in the last few weeks, African countries have started easing restrictions imposed to curb the spread of SARS-CoV-2. WHO recommends lifting of lockdowns should depend on the ability to contain SARS-CoV-2 and protect the public once restrictions are lifted. Yet, the greatest challenge is the critical decision which must be made in this time of uncertainties. We propose simple strategies on how to ease lockdowns in Africa based on evidence, disease dynamics, situational analysis and ability of national governments to handle upsurges.

Publication Type

  Journal article.

<343>

Accession Number

20203398127

Author

Louaya, S.; Moustaine, O.; Badaoui, M.; Hnach, Y.; Alaayoud, A.; Chatoui, S.

Title

Impact of COVID-19 on ophthalmology consultations: survey among 35 ophthalmologists. [French]

Source

Pan African Medical Journal; 2020. 36. 8 ref.

Publisher

African Field Epidemiology Network

Location of Publisher

Kampala

Country of Publication

Uganda

Abstract

From an epidemic in December to a global pandemic in early March, COVID-19 arrived on Moroccan soil on March 2nd and ophthalmology consultations decreased considerably. The majority of ophthalmologists come to the fore to ensure continuity of care and emergency care following health regulations. We developed a questionnaire to collect information on the general approach of 35 ophthalmologists regarding the impact of COVID - 19 on consultation activities. The results of the survey objectified that 88.57% of the ophthalmologists surveyed maintained their consultation activities; 3/4 of them only treated urgent cases or patients whose condition required undelayed management. The majority of ophthalmologists reported a decrease in consultations of at least 90% compared to their standard workflow. Active ophthalmologists believe that the risk of being infected or infecting their patients and others ranges from medium to high in the majority of cases despite protective barrier gestures.

Publication Type

Journal article.

<344>

Accession Number

  20203398117

Author

  Olabumuyi, A. A.; Ali-Gombe, M.; Biyi-Olutunde, O. A.; Gbolahan, O.; Iwuji, C. O.; Joseph, A. O.; Lasebikan, N. N.; Ogunnorin, B. O.; Salako, O.; Salawu, A.; Omikunle, A. E.

Title

  Oncology practice in the COVID-19 pandemic: a report of a Nigerian expert panel discussion (oncology care in Nigeria during the COVID-19 pandemic).

Source

  Pan African Medical Journal; 2020. 36. 21 ref.

Publisher

  African Field Epidemiology Network

Location of Publisher

  Kampala

Country of Publication

  Uganda

Abstract

  Since the first case of COVID-19 and its progression to a pandemic, healthcare systems the world over have experienced severe difficulties coping with patient care for both COVID-19 and other diseases most especially non communicable diseases like cancer. These difficulties in Low- and middle-income countries (LMICs), especially in Sub-Saharan Africa including Nigeria, are myriad. These LMICs are already bedeviled weak health systems, ill equipped cancer treatment centers, with outdated machines and grossly inadequate numbers of oncologists required to treat patients with cancer. As a result of these challenges coupled with unclear guidelines on how to manage cancer patients in the wake of the COVID-19 pandemic, 11 key Nigerian opinion leaders had a consensus meeting to identify challenges and possible workable solutions on continuing cancer care during the COVID-19 pandemic. The discussion highlighted ethical issues, barriers to continuing cancer care (such as lockdown, fear of contracting disease, downscaled health services) and resource constraints such unavailable personal protective equipment. Yet, practical solutions were proffered such as necessary protective measures, case by case prioritization or de-prioritization, telemedicine and other achievable means in the Nigerian setting.

Publication Type

  Journal article.

<345>

Accession Number

20203398088

Author

Chireh, B.; Essien, S. K.

Title

Leveraging best practices: protecting sub-Saharan African prison detainees amid COVID-19.

Source

Pan African Medical Journal; 2020. 36. 10 ref.

Publisher

African Field Epidemiology Network

Location of Publisher

Kampala

Country of Publication

Uganda

Abstract

The risk of infection and death from COVID-19 is higher among older prisoners with pre-existing health conditions especially in sub-Saharan African. Hawks L et al. raise four concerns that need to be considered when developing public health and clinical responses to COVID-19 to protect prisoners. This paper applies these concerns to the sub-Saharan African context. These focus areas include (1) challenges of social distancing; (2) higher risk of severe infection and death; (3) difficulties health care systems may face in the case of COVID-19 surge; and (4) recommended solutions to prevent harm and preventing a public health catastrophe. Prisoners are more vulnerable and the time to take immediate actions to minimize an imminent COVID-19 outbreak and its impacts is now.

Publication Type

Journal article.

<346>

Accession Number

20203398076

Author

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335

Singh, K. T.; Gaurav Mishra&; Shukla, A. K.; Subasish Behera; Tiwari, A. K.; Subhasish Panigrahi; Chhabra, K. G.

Title

Preparedness among dental professionals towards COVID-19 in India.

Source

Pan African Medical Journal; 2020. 36. 17 ref.

Publisher

African Field Epidemiology Network

Location of Publisher

Kampala

Country of Publication

Uganda

Abstract

Introduction: Novel corona virus infection has become a public health crisis leading the world to a standstill including dentistry. However, since the dental services cannot be stopped for a long period it is important that dentist be fully prepared before resuming their services. Therefore, the current study was carried out for evaluating knowledge, attitude and practices (KAP) along with perceived barriers to practice dentistry during pandemic. Methods: This cross-sectional study was conducted through an online survey questionnaire on dentists of India. Dentists were enquired for demographics, KAP and perceived barriers regarding practicing dentistry during pandemic. The knowledge was assessed based on 16 items in true or false or multiple choice questions format getting score of 1 or 0. The attitude and practices by 8 items each, on 5-point Likert scale and 4 items perceived barriers were enquired. The differences between the median scores among demographic variables were determined by applying student's t-test and keeping level of significance at below 0.05. Results: Out of 500 dentists who were approached through email, a total of 296 dentists returned the questionnaire (response rate, 59.2%) among which 22 questionnaires were incomplete and thus excluded making 274 as final study participants. Overall poor median scores of knowledge and practices were obtained whereas for attitude total median score was good. Median practice scores were significantly higher among female respondents (20(6)). Median knowledge and practice scores were significantly better in study participants with age <40 years (6(4) and 19(5), respectively). Conclusion: With the recent claims of authorities that virus is going to stay in world for quite some time it is essential that dentists must be fully prepared before resuming their services and must attain proper awareness to limit the disease spread.

Publication Type

Journal article.

<347>

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336

Accession Number

  20203397760

Author

  Dong YunZhu; Chi XiangYang; Hai Huang; Sun LiangLiang; Zhang MengYao; Xie WeiFen; Chen Wei

Title

  Antibodies in the breast milk of a maternal woman with COVID-19.

Source

  Emerging Microbes and Infections; 2020. 9(1467-1469):1467-1469. 10 ref.

Publisher

  Taylor & Francis

Location of Publisher

  Abingdon

Country of Publication

  UK

Abstract

  A maternal woman was positive for SARS-CoV-2 tested in throat swabs but negative tested in other body fluids, and she had IgG and IgA detected in breast milk. Her infant negative for SARS-CoV-2 at birth had elevated IgG in serum but quickly decayed. These findings suggest that breastfeeding might have the potential benefit to the neonates.

Publication Type

  Journal article.

<348>

Accession Number

  20203397711

Author

  Prasitsirikul, W.; Pongpirul, K.; Pongpirul, W. A.; Panitantum, N.; Ratnarathon, A. C.; Hemachudha, T.

Title

  Nurse infected with COVID-19 from a provisional dengue patient.

Source

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Emerging Microbes and Infections; 2020. 9(1354-1355):1354-1355. 3 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

We report a 35-year-old female nurse who possibly received the SARS-CoV-2 virus during the blood sampling of a 35-year-old male patient initially suspected as a dengue infection. The patient had mild thrombocytopenia and positive dengue IgG and IgM whereas the clinicians were not aware of the possibility of false-positive dengue serology revealed in the published case report from Singapore. The nurse put on a pair of gloves but did not wear a mask during the only encounter with this patient. This nosocomial transmission raised a safety concern among healthcare professionals in an area with a relatively low Covid-19 prevalence, especially when the clinical and laboratory characteristics could be confused with other viral infections.

Publication Type

Journal article.

<349>

Accession Number

20203397410

Author

Zhao Jing; Fu TingTing; He Li

Title

Emergency management of emergency surgery for patients with suspected COVID-19 in a large-scale general hospital. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(12):1801-1804.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To explore the measures and experience of emergency management of emergency surgery for the patients with suspected COVID-19. METHODS: On the basis of the guidelines for prevention, control, diagnosis and treatment of patients with COVID-19 released by the National Health Committee of the People's Republic of China, the emergency surgeries were carried out for 5 patients with suspected COVID-19 in the hospital from Feb. 2, 2020 to Mar. 14, 2020. The emergency surgeries, involving the evaluation of illness condition, preoperative preparation, preparation of operating room and equipment, management and control of personnel, characteristics of anesthesia protection, key points of postoperative nursing and particularities of postoperative environment, equipment and disposal of materials, were actively explored. The results of blood routine test, chest X-ray and CT were carefully checked and reported for registration. The capability and measures of the emergency management were continuously optimized. RESULTS: The surgeries of the 5 patients were successful and achieved favorable effect, and the patients did not have the surgery-induced complications. Neither the patients nor the surgery staff had cross infection. CONCLUSION: The guidelines for prevention, control, diagnosis and treatment of the COVID-19 patients released by the National Health Committee of the People's Republic of China achieves remarkable effect.It is necessary for the health care workers to raise their vigilance during the emergency surgery for the patients with suspected COVID-19 and intensify the concept of control of infection and management of operating room so as to ensure the smooth progress of emergency surgery and prevent cross infection in the hospital.

Publication Type

Journal article.

<350>

Accession Number

20203397408

Author

Tan Qing; Li HaiFeng; Wu FengFu; Zhang HongYan; Ge Zhe; Tan DanDan; Yin ShuiZe; Zhao ChenHao; He HaiYan; Zhang SiBing

Title

Experience of medical waste management at Wuhan Huoshenshan hospital. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(12):1793-1796.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To explore the problems and corresponding solutions in the process of medical waste management in 2019-novel coronavirus pneumonia specialist hospitals. METHODS: According to the laws and regulations related to the management of medical waste issued by the National Health and Health Commission and relevant departments of Wuhan City, in view of the problems in the medical waste management process during the initial operation of the hospital, the medical waste management system was formulated and continuously improved in accordance with the actual situation of the hospital, the response strategy was adjusted in time, the disposal process was optimized, the training and evaluation system was strengthened, and the supervision and inspection was strengthened. RESULTS: Various types of personnel strictly implemented the regulations on the management of medical waste, and gradually normalized and standardized the management of medical waste. CONLUSION: Strengthening the management and disposal of medical waste in strict accordance with laws and regulations can effectively prevent the spread of pathogenic microorganisms such as 2019-novel coronavirus, protect the health of medical staff, control the hospital infection and environmental pollution. The series of medical waste management measures adopted by the hospital are worthy of promotion by medical institutions.

Publication Type

Journal article.

<351>

Accession Number

20203397405

Author

Han Li; Xiang DaWei; Zhang HongYan; Li HaiFeng; Jia RuiZhong; Zhao JingYa; Tan Qing; Yu LeCheng; Huang MinJie; Li ShunFei; Fan ShanHong; Wang JunXue; Chen Wei; Wang ChangJun; Zhang SiBing

Title

Practice of emergency contruction for control of nosocomial infection in Wuhan Huoshenshan Hospital. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(12):1778-1781.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To explore the stages and characteristics of infection control in the process of emergency construction of hospital specialized for novel coronavirus pneumonia, so as to provide reference for such work in the future. METHODS: Based on the relevant national laws and regulations, the main characteristics and key links of infection control during the emergency construction of the new coronavirus pneumonia special hospitalty were analyzed and summarized, and strategies for infection control were proposed. RESULTS: The infection prevention and control work of the newly-constructed emergency hospital were majorly divided into three stages: the start-up, the continuous improvement and the summary. In these three different periods, infection prevention and control work had its own focus. The first phase focused on organizational command, process transformation and personal protection process; the second phase focused on perfection of system, monitoring and early warning, emergency response, etc.; the third phase focused on the system summary and the formulation and implementation of various terminal disinfection program. CONCLUSION: During the emergency construction of the new coronavirus pneumonia specialty hospital, the infection control work had obvious stage characteristics, and it is necessary to grasp the key points and form an effective emergency work mechanism.

Publication Type

Journal article.

<352>

Accession Number

20203397404

Author

Fan ShanHong; Li HaiFeng; Tan Qing; Huang MinJie; Chen Wei; Wang JunXue; Le-Cheng Yu; Xue Xin; Cao XiaoQin; Ma LiLi; Jiang Hong

Title

Key technical process of prevention and control of COVID-19 pneumonia infection in Wuhan Huoshenshan Hospital. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(12):1771-1777.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

 Beijing

Country of Publication

 China

Abstract

 OBJECTIVE: Infection prevention and control is an important part of curbing the spread of CoronaVirus Disease 2019(COVID-19). Being a specialized hospital, the Wuhan Huoshenshan Hospital undertaked a large number of treatment tasks for COVID-19 patients. This article aimed to explore the key technical processes of infection prevention and control in front-line treatment, and propose targeted prevention and control measures, so as to provide guidance and reference for ensuring the safety of medical staff and patients and improving the success rate of treatment. METHODS: According to the national guidelines and infection control objectives and requirements, combined with the actual work of the hospital, we have developed specific technical processs from the key aspects of isolation technology, standard prevention, frequent cleaning and disinfection, and proper disposal of medical wastes, which all contributed to the medical diagnosis, treatment and prevention of COVID-19 infections at Huoshenshan Hospital. RESULTS: From Feb. 4 to Apr. 3, a total of 3 059 patients of COVID-19 were admitted to Huoshenshan Hospital, and 2 806 patients were eventually cured and discharged. None of the 1 400 medical staff had been infected. CONCLUSION: Two-month of clinical practice in Huoshenshan Hospital has proved that the above key technical processes are practical and effective, and they should be used as a reference for the formulation and improvement of current infection prevention and control program of COVID-19.

Publication Type

 Journal article.

<353>

Accession Number

 20203397402

Author

 Xue Xin; Han Li; Li HaiFeng; Wang ChangJun; Fan ShanHong; Chen Wei; Tan Qing; Wang JunXue; Yu LeCheng; Huang MinJie; Zhang HongYan; Wu Tao; Xiang DaWei

Title

 Research on the construction of the guidance system of infection prevention and control technology in Wuhan Huoshenshan Hospital. [Chinese]

Source

 Chinese Journal of Nosocomiology; 2020. 30(12):1761-1767.

Publisher

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To explore the system architecture, construction achievements and experiences of infection prevention and control technology guidelines in Wuhan Huoshenshan Hospital. METHODS: The system construction process were reviewed, and various infection prevention and control technical guidelines of Wuhan Huoshenshan Hospital were summarized and analyzed. RESULTS: The hospital has successively formulated and issued more than 30 technical guidelines on infection prevention and control, and made specifications from the aspects of prevention and control points, monitoring and early warning, logistic support, and emergency response, and continued to enrich the contents of technical guidance system of infection prevention and control based on the application of new technologies and the opening of new projects, to ensure that the hospital's medical work is carried out in an orderly manner under the standard of sense control. CONCLUSION: The construction of the infection prevention and control technical guidance system in Wuhan Huoshenshan Hospital highlights the characteristics of the COVID-19 specialty hospital. It intuitively and clearly regulates the key links of infection prevention and control in medical work of the hospital, effectively reduces the risk of disease transmission within the hospital, and effectively protects the health and safety of all staffs in hospital, as well as the targeted prevention of the contamination of the pathogenic microorganisms to the environment and human population. The composition and construction methods of its system structure are wothy of the reference for the construction of emergency hospital and the construction of infection prevention and control work systems in the event of a major epidemics in the future.

Publication Type

Journal article.

<354>

Accession Number

20203397368

Author

Meng XiuJuan; Huang Xun; Zhou PengCheng; Li ChunHui; Wu AnHua

Title

Alert for SARS-CoV-2 infection caused by fecal aerosols in rural areas in China.

Source

Infection Control and Hospital Epidemiology; 2020. 41(8):987-987. 7 ref.

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343

Publisher

  Cambridge University Press

Location of Publisher

  Cambridge

Country of Publication

  UK

Publication Type

  Correspondence.

<355>

Accession Number

  20203397083

Author

  Calil, V. M. L. T.; Krebs, V. L. J.; Carvalho, W. B. de

Title

  Guidance on breastfeeding during the COVID-19 pandemic.

Source

  Revista da Associacao Medica Brasileira; 2020. 66(4):541-546. 20 ref.

Publisher

  Associacao Medica Brasileira

Location of Publisher

  Sao Paulo

Country of Publication

  Brazil

Abstract

  OBJECTIVE: These recommendations aim to provide guidance on breastfeeding for mothers with suspected or confirmed Covid-19. METHODS: We performed a review of the recent medical literature on breastfeeding mothers with suspected or confirmed Covid-19, focusing on the neonatal period. RESULTS: We analyzed 20 recent publications on breastfeeding, Covid-19, and its transmission through breastmilk. We presented possible options for breastfeeding and their consequences for the mother and the child. CONCLUSION: All maternal decisions in relation to breastfeeding are justifiable since the infection by Covid-

19 is still poorly known. However, puerperal women and their families must be very well informed to make a conscious choice based on the information available in the literature so far.

Publication Type

Journal article.

<356>

Accession Number

20203397080

Author

Pegado, R.; Silva-Filho, E.; Lima, I. N. D. F.; Gualdi, L.

Title

Coronavirus disease 2019 (COVID-19) in Brasil: information to physical therapists.

Source

Revista da Associacao Medica Brasileira; 2020. 66(4):498-501. 11 ref.

Publisher

Associacao Medica Brasileira

Location of Publisher

Sao Paulo

Country of Publication

Brazil

Abstract

The emergence of the Coronavirus Disease 2019 (COVID-19) pandemic shows a rapid increase in cases and deaths. The World Health Organization (WHO) has shown that more than 200.000 confirmed cases have been identified in more than 166 countries/territories. Public health authorities in Brasil have reported 532 confirmed cases by March 19. Approximately 5% of the patients will require intensive care unit treatment with oxygen therapy and mechanical ventilation. Limited data are available about rehabilitation protocols for severe illness and intensive care treatment of COVID-19 increase. Thus, we aim to show current information about COVID-19, describing symptoms and the respiratory management for critical patients and preventive care. Physical therapists and all health care professionals need to recognize the challenges they will face in the coming months.

Publication Type

Journal article.

<357>

Accession Number

  20203396697

Title

  COVID-19 outbreaks in a transmission control scenario: challenges posed by social and leisure activities, and for workers in vulnerable conditions, Spain, early summer 2020.

Source

  Eurosurveillance; 2020. 25(35). 10 ref.

Publisher

  European Centre for Disease Prevention and Control

Location of Publisher

  Stockholm

Country of Publication

  Sweden

Abstract

  Severe acute respiratory syndrome coronavirus 2 community-wide transmission declined in Spain by early May 2020, being replaced by outbreaks and sporadic cases. From mid-June to 2 August, excluding single household outbreaks, 673 outbreaks were notified nationally, 551 active (>6,200 cases) at the time. More than half of these outbreaks and cases coincided with: (i) social (family/friends' gatherings or leisure venues) and (ii) occupational (mainly involving workers in vulnerable conditions) settings. Control measures were accordingly applied.

Publication Type

  Journal article.

<358>

Accession Number

  20203396648

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346

Author

Wajiha Haq; Raza, S. H.; Malik, M. W.

Title

Missed takes towards a pandemic of COVID-19? A systematic literature review of Coronavirus related diseases in Pakistan.

Source

Journal of Infection in Developing Countries; 2020. 14(7):726-731. 21 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

Pakistan is also seeing the profound effect of the outbreak of COVID-19, which demands an urgent investigation of literature and further scientific investigation for cure and prevention. This study has employed the systematic approach for searching the literature from the recently compiled database of researches namely COVID-19 Open Research Dataset (CORD-19) and related diseases. The literature on Pakistan has shown the evidence of human-to-human and animal-to-human transmission of viruses, the presence of antibodies of MERS-CoV in camels, and careless attitude towards preventive measures of such respiratory diseases. There is a lot of gap in the literature regarding coronaviruses and their antibodies creating herd immunity for another coronavirus and COVID-19. In particular to Pakistan, and in general, for other developing countries, a weak health-care system coupled with the trembling economy has many implications of COVID-19 which should be carefully thought-out to combat the spread.

Publication Type

Journal article.

<359>

Accession Number

20203396645

Author

Muhammad Salman; Zia-Ul-Mustafa; Noman Asif; Zaidi, H. A.; Naureen Shehzadi; Khan, T. M.; Zikria Saleem; Khalid Hussain

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347

Title

Knowledge, attitude and preventive practices related to COVID-19 among health professionals of Punjab province of Pakistan.

Source

Journal of Infection in Developing Countries; 2020. 14(7):707-712. 18 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

Introduction: Considering health professionals among high-risk individuals, we aimed to evaluate their knowledge, attitude and practices (KAP) regarding COVID-19. Methodology: This cross-sectional study was conducted among the health professionals (medical doctors, nurses, pharmacists, physiotherapists, hospital technicians and technologists) providing services at seven hospitals of Punjab province of Pakistan. A self-administer ed questionnaire was used to evaluate knowledge, attitude and practices regarding COVID-19. Results: All of the participants (N=429) reported that they were aware of COVID-19 and social media was the major source (65%) of this information. Mean knowledge score was 12 +or- 2.1, with 75.5% of participants having satisfactory knowledge. Doctors were found to have significantly better knowledge scores than the other health professionals (p=0.001). Mean attitude score was 8.0 +or- 1.2, with a wide majority of health professionals (86.5%) having positive attitudes. Regarding preventive practices, around 64% reported of always covering nose and mouth with a tissue paper during sneezing or coughing and nearly 65% disposed of the dirty tissue paper in trash bin. Only 40% of the participants reported that 'if they do not have tissue, they cough or sneeze into upper sleeves'. Around 45% reported that they used face mask during their working hours in hospitals nowadays. Mean practice score was 23.3 +or- 3.6, with 73.4% of health professionals having satisfactory practices. Conclusions: The overall COVID-19 related KAP of Pakistani health professionals are satisfactory, however some misperceptions and malpractices uncovered in the present study must be addressed to effectively combat COVID-19.

Publication Type

Journal article.

<360>

Accession Number

20203396642

Author

Abdullahi, I. N.; Emeribe, A. U.; Akande, A. O.; Ghamba, P. E.; Adekola, H. A.; Ibrahim, Y.; Dangana, A.

Title

Roles and challenges of coordinated public health laboratory response against COVID-19 pandemic in Africa.

Source

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

As the incidence of Coronavirus Disease 19 (COVID-19) continues to rise, many countries have been seeking for medical assistance such as donation or procurement of laboratory test kits and strips. These consumables are largely intended for use in the laboratory investigations of COVID-19 cases, suspected contacts, asymptomatic persons and in discharging cured persons. Thus, this article was instigated to update and remind healthcare providers and policymakers (especially those in developing countries) on the principles of sample collections, storage, transportation, laboratory protocols and networks needed for appropriate public health response against COVID-19 pandemic in Africa and other developing countries. In addition, this article presents challenges that hinder adequate COVID-19 laboratory response and discuss some possible solutions that could ameliorate these constrains.

Publication Type

Journal article.

<361>

Accession Number

20203396619

Author

Sun XiaoXuan; Ni YiCheng; Zhang MiaoJia

Title

Rheumotologitsts' view on the use of hydroxychloroquine to treat COVID-19.

Source

Emerging Microbes and Infections; 2020. 9(830-832):830-832. 15 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The current pandemic coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) calls urgently for effective therapies. Anti-malarial medicine chloroquine (CQ) and particularly its chemical analogue hydroxychloroquine (HCQ) have been recommended as promising candidate therapeutics that are now under either compassionate off-label use or clinical trials for the treatment of COVID-19 patients. However, there are public concerns and disputes about both the safety and efficacy of CQ and HCQ for this new application. Given the fact that for decades HCQ has been approved as an immunomodulatory drug for the long term treatment of chronic rheumatic diseases, as experienced rheumatologists, we would like to share our thoughts in this regard and trigger a brainstorm among clinical care providers for exchanging their diverse opinions on this urgent topic.

Publication Type

Journal article.

<362>

Accession Number

20203396506

Author

Khodamoradi, Z.; Boogar, S. S.; Shirazi, F. K. H.; Kouhi, P.

Title

COVID-19 and acute pulmonary embolism in postpartum patient.

Source

Emerging Infectious Diseases; 2020. 26(8):1937-1939. 9 ref.

Publisher

National Center for Infectious Diseases, Centers for Disease Control and Prevention

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

We report a 36-year-old woman in Iran who sought care for left shoulder pain and cough 5 days after a scheduled cesarean section. Acute pulmonary embolism and coronavirus disease were diagnosed. Physicians should be aware of the potential for these concurrent conditions in postpartum women.

Publication Type

Journal article.

<363>

Accession Number

20203396391

Author

Peng YaLing; Pei ChenChen; Zheng Yan; Wang Juan; Zhang Kui; Zheng ZhaoHui; Zhu Ping

Title

A cross-sectional survey of knowledge, attitude and practice associated with COVID-19 among undergraduate students in China.

Source

BMC Public Health; 2020. 20(1292):(26 August 2020). 17 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The COVID-19 pandemic has become a great threat to public health, which has greatly impacted the study and life of undergraduate students in China. This study aims to perform a survey of their knowledge, attitude and practice (KAP) associated with COVID-19. Methods: A cross-sectional survey was designed to gather information regarding the COVID-19 related KAP among undergraduates during the home isolation in the outbreak. Subjects were recruited from 10 universities in Shaanxi Province, China.

Enrollees voluntarily submitted their answers to a pre-designed questionnaire online. Results: A total of 872 subjects (female, 534; male, 338) were enrolled with ages from 17 to 25 years old. This cohort included 430 medical and 442 non-medical students, 580 freshmen and 292 higher school year students. There were 453 from public schools and 442 from private school, residing in 28 regions and provinces at the time of study. Results showed that appropriate knowledge was acquired by 82.34% subjects; the levels were significantly higher in undergraduates from public universities and medical majors than those from private schools and non-medical majors ($p < 0.05$). 73.81% subjects reported positive attitudes; females showed significantly higher levels of positive attitudes than males ($p < 0.05$). Proactive practice was found in 87.94% subjects. Using a common scoring method, the overall scores for Knowledge, Attitude and Practice were 4.12 +or- 0.749 (range: 0 ~ 5), 8.54 +or- 1.201 (range: 0 ~ 10), and 8.91 +or- 1.431 (range: 0 ~ 10), respectively. There was a positive correlation between attitude and practice ($r = 0.319$, $p < 0.05$) in the whole study group. Total KAP score was 21.57 +or- 2.291 (range: 0 ~ 25), which was significantly different between gender groups and major groups. Conclusions: Most undergraduates acquired necessary knowledge, positive attitude and proactive practice in response to COVID-19 outbreak; but their KAP scores significantly varied by gender, major and school types.

Publication Type

  Journal article.

<364>

Accession Number

  20203396370

Author

  Zhou ShiYi; Qin DePing; Li LanHong; Han Yan

Title

  Analysis of food safety supervision and sampling inspection in Chongqing during prevention and control of COVID-19 pandemic. [Chinese]

Source

  Journal of Food Safety and Quality; 2020. 11(16):5682-5687. 12 ref.

Publisher

  Journal of Food Safety and Quality

Location of Publisher

  Beijing

Country of Publication

  China

Abstract

Objective: To analyse the food safety supervision and sampling inspection in Chongqing during the period of prevention and control of COVID-19. Methods: The results of food safety supervision and sampling inspection in Chongqing during COVID-19 pandemic were analyzed by Microsoft Excel software according to the regions, locations, food types and unqualified items. Results: A total of 1314 batches of food samples were specially spot-checked in Chongqing during prevention and control of COVID-19 pandemic. Three batches of food samples were unqualified and the total unqualified rate was 0.23%. The food samples covered urban and rural areas, involving 36 districts and counties, 21 food types and 11 locations. Conclusion: The status of food safety in Chongqing is stable and controllable during prevention and control of COVID-19 pandemic. However, the emergency food support during COVID-19 pandemic is a systematic, long-term, and comprehensive complex project, which needs multiple cooperation and continuous improvements.

Publication Type

Journal article.

<365>

Accession Number

20203396238

Author

Hu ZheFu; Zhou ChenLiang; Tang QiZhu; Yan JuanJuan; Sun LiFang; Cheng Li; Xu PingYing; Wei Jie; Niu ZhiLi; Wang Xin

Title

Clinical treatment experience of one critically ill patient with typical COVID-19. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(13):1960-1963.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To explore the experience of treatment of one critically ill patient with Corona Virus Disease 2019(COVID-19) in early stage. METHODS: The clinical data of one critically ill patient with COVID-19 who was treated Renmin Hospital of Wuhan University on Feb.25,2020. was retrospectively analyzed, and the

illness condition, results of clinical laboratory tests and imaging data of the patient were descriptively analyzed and summarized after the patient was hospitalized. RESULTS: The chest CT scan of the patient showed that there were multiple infectious lesions in both lungs, the throat swab was successively tested positive for 2019-nCoV nucleic acid, and the peripheral blood white blood cell(WBC) count, lymphocyte(LYM), interleukin-6(IL-6), procalcitonin(PCT) and cellular and humoral immunity indexes showed dynamic changes with the progress of treatment. The patient was tested twice negative for the virus on Feb 27 and Feb 28 and was given offline treatment on Mar 4 and alternate treatment of invasive ventilation and high flow humidification oxygen therapy, at present, the patient could breathe autonomously without any respiratory support, and the pulmonary infection was improved dramatically. The main treatment plans were the antibiotic therapy, antiviral therapy, use of hormones, respiratory support, gamma globulin, nutritional support, maintenance of organ function, stabilization of internal environment, rehabilitation of respiratory muscle and close nursing. The patient was tested negative for the nucleic acid of the virus and succeeded in offline treatment and extubation, and the illness condition was recovered. CONCLUSION: COVID-19 is an extremely harmful and novel viral disease. It is necessary to carry out active respiratory support means for the critically ill patient who is complicated with respiratory failure and multiple organ dysfunction, dynamically adjust the treatment plans by closely evaluating the illness condition of the patient and protect the organ function so as to achieve the purpose of advanced life support.

Publication Type

 Journal article.

<366>

Accession Number

 20203396236

Author

 Li Lu; Suo JiJiang; Gao Yan; Du MingMei; Yao HongWu; Liu BoWei; Bai YanLing; Ren ShiWang; Xie LiJun; Liu YunXi

Title

 Practical experience of prevention and control of COVID-19 in wards of a large-scale general hospital during stable stage of the epidemic. [Chinese]

Source

 Chinese Journal of Nosocomiology; 2020. 30(13):1952-1955.

Publisher

 Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

 Beijing

Country of Publication

China

Abstract

OBJECTIVE: To explore the experience of prevention and control of Corona Virus Disease 2019(COVID-19) in wards of a large-scale tertiary general hospital under a double risks of resumption of labor and boom of returning from abroad so as to effectively block the spread of COVID-19 in the hospital. METHODS: Based on the mode of quality management and working practice for prevention and control of the epidemic in the First Medical Center, Chinese PLA General Hospital, the specific guidelines for management of the epidemic in terms of the influencing factors like personnel management, management of equipment and device, management of items, environmental management, training, assessment and supervision were formulated. RESULTS: All of the patients received scientific and reasonable diagnosis and treatment, the medical staff showed stable physical and mental state, the medical and living supplies were appropriately arranged and organized, and neither the hospitalized patients nor the medical staff had hospital-acquired COVID-19. CONCLUSION: The study on the strategies for prevention and control of the epidemic in wards of a large-scale tertiary general hospital under a double risks of resumption of labor and boom of returning from abroad may provide guidance for prevention and control of hospital-acquired infection in non-COVID-19 designated hospitals.

Publication Type

Journal article.

<367>

Accession Number

20203396188

Author

Infantino, M.; Grossi, V.; Lari, B.; Bambi, R.; Perri, A.; Manneschi, M.; Terenzi, G.; Liotti, I.; Ciotta, G.; Taddei, C.; Benucci, M.; Casprini, P.; Veneziani, F.; Fabbri, S.; Pompetti, A.; Manfredi, M.

Title

Diagnostic accuracy of an automated chemiluminescent immunoassay for anti-SARS-CoV-2 IgM and IgG antibodies: an Italian experience. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-V.)

Source

Journal of Medical Virology; 2020. 92(9):1671-1675. 16 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

A pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has been spreading throughout the world. Though molecular diagnostic tests are the gold standard for COVID-19, serological testing is emerging as a potential surveillance tool, in addition to its complementary role in COVID-19 diagnostics. Indubitably quantitative serological testing provides greater advantages than qualitative tests but today there is still little known about serological diagnostics and what the most appropriate role quantitative tests might play. Sixty-one COVID-19 patients and 64 patients from a control group were tested by iFlash1800 CLIA analyzer for anti-SARS CoV-2 antibodies IgM and IgG. All COVID-19 patients were hospitalized in San Giovanni di Dio Hospital (Florence, Italy) and had a positive oro/nasopharyngeal swab reverse-transcription polymerase chain reaction result. The highest sensitivity with a very good specificity performance was reached at a cutoff value of 10.0 AU/mL for IgM and of 7.1 for IgG antibodies, hence near to the manufacturer's cutoff values of 10 AU/mL for both isotypes. The receiver operating characteristic curves showed area under the curve values of 0.918 and 0.980 for anti-SARS CoV-2 antibodies IgM and IgG, respectively. iFlash1800 CLIA analyzer has shown highly accurate results for the anti-SARS-CoV-2 antibodies profile and can be considered an excellent tool for COVID-19 diagnostics.

Publication Type

Journal article.

<368>

Accession Number

20203396187

Author

Mahmoud Kandeel; Abdulla Al-Taher; Park, B. K.; Kwon HyungJoo; Mohammed Al-Nazawi

Title

A pilot study of the antiviral activity of anionic and cationic polyamidoamine dendrimers against the Middle East respiratory syndrome coronavirus. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-V.)

Source

Journal of Medical Virology; 2020. 92(9):1665-1670. 24 ref.

Publisher

Wiley

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Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The Middle East respiratory syndrome coronavirus (MERS-CoV) is an emerging virus that causes infection with a potentially fatal outcome. Dendrimers are highly branched molecules that can be added to antiviral preparations to improve their delivery, as well as their intrinsic antiviral activity. Studies on identifying anti-MERS-CoV agents are few. Three types of polyanionic dendrimers comprising the terminal groups sodium carboxylate (generations 1.5, 2.5, 3.5, and 4.5), hydroxyl (generations 2, 3, 4, and 5), and succinamic acid (generations 2, 3, 4, and 5) and polycationic dendrimers containing primary amine (generations 2, 3, 4, and 5) were used to assess their antiviral activity with the MERS-CoV plaque inhibition assay. The hydroxyl polyanionic set showed a 17.36% to 29.75% decrease in MERS-CoV plaque formation. The most potent inhibition of MERS-CoV plaque formation was seen by G(1.5)-16COONa (40.5% inhibition), followed by G(5)-128SA (39.77% inhibition). In contrast, the cationic dendrimers were cytotoxic to Vero cells. Polyanionic dendrimers can be added to antiviral preparations to improve the delivery of antivirals, as well as the intrinsic antiviral activity.

Publication Type

Journal article.

<369>

Accession Number

20203396181

Author

Giovanetti, M.; Angeletti, S.; Benvenuto, D.; Ciccozzi, M.

Title

A doubt of multiple introduction of SARS-CoV-2 in Italy: a preliminary overview. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-V.)

Source

Journal of Medical Virology; 2020. 92(9):1634-1636. 13 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

  USA

Abstract

  The emergence of the novel betacoronavirus, recently renamed as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has raised serious concerns due to the virus's rapid dissemination worldwide. Nevertheless, there is limited information about the genomic epidemiology of SARS-CoV-2 circulating in Italy from surveillance studies. The shortage of complete genomic sequences available impairs our understanding of the SARS-CoV-2 introduction and establishment in the country. To better understand its dynamics in Italy, we analyzed complete genomes of SARS-CoV-2 isolates, obtained directly from clinical samples. Our phylogenetic reconstructions suggest possible multiple introduction of SARS-CoV-2. Continued genomic surveillance strategies are needed to improve monitoring and understanding of the current SARS-CoV-2 epidemics, which might help to attenuate public health impact of infectious diseases.

Publication Type

  Journal article.

<370>

Accession Number

  20203396180

Author

  Conway, M. J.

Title

  Identification of coronavirus sequences in carp cDNA from Wuhan, China. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-V.)

Source

  Journal of Medical Virology; 2020. 92(9):1629-1633. 7 ref.

Publisher

  Wiley

Location of Publisher

  Hoboken

Country of Publication

  USA

Abstract

Severe acute respiratory syndrome (SARS)-like coronavirus sequences were identified in two separate complementary DNA (cDNA) pools. The first pool was from a Carassius auratus (crusian carp) cell line and the second was from Ctenopharyngodon idella (grass carp) head kidney tissue. BLAST analysis suggests that these sequences belong to SARS-like coronaviruses, and that they are not evolutionarily conserved in other species. Investigation of the submitting laboratories revealed that two laboratories from the Institute of Hydrobiology at the Chinese Academy of Sciences in Wuhan, China performed the research and submitted the cDNA libraries to GenBank. This institution is very close in proximity to the Wuhan South China Seafood Wholesale Market where SARS-CoV-2 first amplified in the human population. It is possible that these sequences are an artifact of the bioinformatics pipeline that was used. It is also possible that SARS-like coronaviruses are a common environmental pathogen in the region that may be in aquatic habitats.

Publication Type

Journal article.

<371>

Accession Number

20203396172

Author

Ma QingXia; Shan Hu; Zhang HongLiang; Li GuiMei; Yang RuiMei; Chen JiMing

Title

Potential utilities of mask-wearing and instant hand hygiene for fighting SARS-CoV-2. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-V.)

Source

Journal of Medical Virology; 2020. 92(9):1567-1571. 21 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The surge of patients in the pandemic of COVID-19 caused by the novel coronavirus SARS-CoV-2 may overwhelm the medical systems of many countries. Mask-wearing and handwashing can slow the spread of the virus, but currently, masks are in shortage in many countries, and timely handwashing is often impossible. In this study, the efficacy of three types of masks and instant hand wiping was evaluated using

the avian influenza virus to mock the coronavirus. Virus quantification was performed using real-time reverse transcription-polymerase chain reaction. Previous studies on mask-wearing were reviewed. The results showed that instant hand wiping using a wet towel soaked in water containing 1.00% soap powder, 0.05% active chlorine, or 0.25% active chlorine from sodium hypochlorite removed 98.36%, 96.62%, and 99.98% of the virus from hands, respectively. N95 masks, medical masks, and homemade masks made of four-layer kitchen paper and one-layer cloth could block 99.98%, 97.14%, and 95.15% of the virus in aerosols. Medical mask-wearing which was supported by many studies was opposed by other studies possibly due to erroneous judgment. With these data, we propose the approach of mask-wearing plus instant hand hygiene (MIH) to slow the exponential spread of the virus. This MIH approach has been supported by the experiences of seven countries in fighting against COVID-19. Collectively, a simple approach to slow the exponential spread of SARS-CoV-2 was proposed with the support of experiments, literature review, and control experiences.

Publication Type

  Journal article.

<372>

Accession Number

  20203396155

Author

  Zhang CanTong; Huang ShaoYing; Zheng FengPing; Dai Yong

Title

  Controversial treatments: an updated understanding of the coronavirus disease 2019. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-V.)

Source

  Journal of Medical Virology; 2020. 92(9):1441-1448. 60 ref.

Publisher

  Wiley

Location of Publisher

  Hoboken

Country of Publication

  USA

Abstract

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360

An outbreak of severe acute respiratory syndrome-related coronavirus 2 infection has posed significant threats to international health and the economy. In the absence of specific treatment for this virus, there is an urgent need to learn from the experience and lessons in China. To reduce the case-fatality rate among coronavirus disease 2019 patients, we should not ignore the complications, such as RNAaemia, acute respiratory distress syndrome, and multiple organ dysfunction. To help understand the advantages and limitations of differential treatments, we provide a timely review and discuss the complications and corresponding major treatments, especially controversial ones such as antiviral therapy (remdesivir, ribavirin, and chloroquine), glucocorticoid therapy, extracorporeal support including an artificial liver system, and extracorporeal membrane oxygenation based on available evidence. As a result, we suggest that antiviral therapy and organ function support are vital to reduce mortality for mild patients and critical patients, respectively.

Publication Type

Journal article.

<373>

Accession Number

20203396088

Author

Qin XiaoPing; Wang ChuanQing; Wang Li; Zhao DanYang; Wang Jun; Yang Jian

Title

Investigation and analysis of children's hospital's prevention and control ability against COVID-19. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(11):1606-1609.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To investigate the diagnosis and treatment of infectious diseases in children's hospitals in China and the response to SARS-CoV-2 pneumonia outbreak. METHOD: On February 10 to 14, a questionnaire survey was conducted in 30 children 's hospitals. The survey contents included : setting up of

fever clinic and infectious department, setting up of emergency wards to respond to outbreaks of infectious diseases, monitoring and management of hospital sense, formulating plans, staff training and exercise. RESULT: Only 5(16.67%) out of the 30 children's hospitals have set up fever clinics, and 25(83.33%) children's hospitals have set up infectious diseases department. In the event of an epidemic of infectious diseases, such as hand-foot-mouth disease, influenza and other outbreaks, 25 hospitals(83.33%) temporarily changed the general ward to the infectious ward to treat children. Eight(26.67%) children's hospitals routinely had infectious wards of 20-50 beds. In response to the SARS-CoV-2 epidemic, 26 hospitals(86.67%) treated suspected children in fever clinic and infectious department. Among them, 15(50.00%) hospitals had also established temporary emergency ward, 8(26.67%) hospitals with infectious ward were designated hospitals for children, and 4(13.33%) hospitals without conditions transfered children to the infectious hospital or designated hospitals. Since 22 hospitals(73.33%) had no infectious ward, medical personnel's protective equipment were only routinely stocked with a small amount for urgent needs. If the epidemic situation was sustained, hospitals with infectious diseases departments would also facea lack of protective equipment. The Settings of infectious disease ward and fever clinic were high risk factors. CONCLUSION: In general, children's hospitals lacked adequate hardware protection when preventing and controlling sudden epidemic. It is recommended to establish a children's specialist infectious disease hospital or a standardized infectious department ward in a children's hospital, to ensure the treatment of children with infectious diseases.

Publication Type

Journal article.

<374>

Accession Number

20203396087

Author

He Lei; Liu Ding

Title

Challenges and reflections of COVID-19 on modern nosocomial infection management. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(11):1601-1605.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: It has paid much attention to the control of nosocomial infection due to the emergence of infection in medical staff since the outbreak of Corona Virus Disease(COVID-19), to explore the reform of nosocomial infection control systems so as to meet the requirements of future medical treatment. METHODS: The current status, existing problems and insufficiencies of the control of nosocomial infection in China were summarized, the challenges that the control of nosocomial infection wound be confronted with in the future were analyzed, and the orientations and countermeasures for the reform of infection control system were put forward. RESULTS: The greatest challenge that the control of nosomcial infection would be confronted in the future remained the novel infectious disease like COVID-19, a orientation of reform that the reform of nosocomial infection control system was integrated into the while public health and disease prevention and control system was proposed, an advice to establish centralized medical institutions for severe infectious diseases in different regions was proposed, and a coordinated development of medical technology and control of nosocomial infection was also advised. CONCLUSION: It is a scientific and effective counter measure to perfect the system of nosocomial infection control, promote the construction of discipline of nosocomial infection control and improve the medical staff' s awareness of infection control, which may indicate the direction for control of nosocomial infection in modern society.

Publication Type

Journal article.

<375>

Accession Number

20203396083

Author

Zheng Mei; Zhao XueSen; Zheng ShuangLi; Chen DanYing; Du PengCheng; Li XingLin; Jiang Dong; Guo JuTao; Zeng Hui; Lin HanXin

Title

Bat SARS-like WIV1 coronavirus uses the ACE2 of multiple animal species as receptor and evades IFITM3 restriction via TMPRSS2 activation of membrane fusion.

Source

Emerging Microbes and Infections; 2020. 9(1567-1579):1567-1579. many ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Diverse SARS-like coronaviruses (SL-CoVs) have been identified from bats and other animal species. Like SARS-CoV, some bat SL-CoVs, such as WIV1, also use angiotensin converting enzyme 2 (ACE2) from human and bat as entry receptor. However, whether these viruses can also use the ACE2 of other animal species as their receptor remains to be determined. We report herein that WIV1 has a broader tropism to ACE2 orthologs than SARS-CoV isolate Tor2. Among the 9 ACE2 orthologs examined, human ACE2 exhibited the highest efficiency to mediate the infection of WIV1 pseudotyped virus. Our findings thus imply that WIV1 has the potential to infect a wide range of wild animals and may directly jump to humans. We also showed that cell entry of WIV1 could be restricted by interferon-induced transmembrane proteins (IFITMs). However, WIV1 could exploit the airway protease TMPRSS2 to partially evade the IFITM3 restriction. Interestingly, we also found that amphotericin B could enhance the infectious entry of SARS-CoVs and SL-CoVs by evading IFITM3-mediated restriction. Collectively, our findings further underscore the risk of exposure to animal SL-CoVs and highlight the vulnerability of patients who take amphotericin B to infection by SL-CoVs, including the most recently emerging (SARS-CoV-2).

Publication Type

Journal article.

<376>

Accession Number

20203396080

Author

Jaja, I. F.; Anyanwu, M. U.; Jaja, C. J. I.

Title

Social distancing: how religion, culture and burial ceremony undermine the effort to curb COVID-19 in South Africa.

Source

Emerging Microbes and Infections; 2020. 9(1077-1079):1077-1079. 18 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

This article examined the interplay of religion, culture, and burial ceremonies for social distancing as means to curb COVID-19 infection in South Africa.

Publication Type

Journal article.

<377>

Accession Number

20203396028

Author

Zhang Min; Wang LiLi; Yu SiYuan; Sun GuiXin; Lei Han; Wu WenJuan

Title

Status of occupational protection in the COVID-19 Fangcang shelter hospital in Wuhan, China.

Source

Emerging Microbes and Infections; 2020. 9(1835-1842):1835-1842. 14 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Staff and employees "Zero infection" has been achieved during the whole medical activities in the COVID-19 Fangcang Shelter Hospital in Wuhan, China. This study analyses the personnel and environmental protection status of the East-West Lake Fangcang Shelter Hospital. The HCWs were mostly composed of national medical rescue teams, from different provinces in China. Before the COVID-19 outbreak, 82.64% of the HCWs had already known the proper procedure of wearing masks and other personal protective equipment (PPE). For the total of 634 participants entering the inpatient areas, 99.8% of them took occupational protection trainings via various methods. By carefully training and supervision, most of them were competent to work in the inpatient areas six hours/d, three-four times/week. Besides, 7.8% experienced different types of occupational exposure, which mainly caused by the damage of PPE. Once exposed, the HCWs would disinfect skin or mucous in time. No SARS-CoV-2 RNA was detected in 48 air and environmental samples after regular disinfection and cleaning. To conclude, the bundle including intensive

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training, strengthened personal protection, strict environmental disinfection and timely remedial measures for occupational exposure had ensured the safety of the East-West Lake Fangcang Shelter Hospital.

Publication Type

Journal article.

<378>

Accession Number

20203396025

Author

Bull-Otterson, L.; Gray, E. B.; Budnitz, D. S.; Strosnider, H. M.; Schieber, L. Z.; Courtney, J.; Garcia, M. C.; Brooks, J. T.; Kenzie, W. R. M.; Gundlapalli, A. V.

Title

Hydroxychloroquine and chloroquine prescribing patterns by provider specialty following initial reports of potential benefit for COVID-19 treatment - United States, January-June 2020.

Source

Morbidity and Mortality Weekly Report; 2020. 69(35):1210-1215. 10 ref.

Publisher

Epidemiology Program Office, Centers for Disease Control and Prevention (CDC)

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

What is already known about this topic? Hydroxychloroquine and chloroquine are approved to treat autoimmune diseases and to prevent and treat malaria. Earlier this year, they were widely reported to be of potential benefit in the prevention and treatment of COVID-19; however, current data indicate that the potential benefits of these drugs do not outweigh their risks. What is added by the report? New prescriptions by specialists who did not typically prescribe these medications (defined as specialties accounting for 2% of new prescriptions before 2020) increased from 1,143 prescriptions in February 2020 to 75,569 in March 2020, an 80-fold increase from March 2019. What are the implications for public health practice? Attention to updated clinical guidance, especially by nonroutine prescribers, will help safeguard supplies and ensure safe use of hydroxychloroquine and chloroquine for patients with approved indications.

Publication Type

Journal article.

<379>

Accession Number

20203396008

Author

Ha, D. P.; Krieken, R. van; Carlos, A. J.; Lee, A. S.

Title

The stress-inducible molecular chaperone GRP78 as potential therapeutic target for coronavirus infection.

Source

Journal of Infection; 2020. 81(3):478-480. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This article discusses GRP78 as a promising drug target and expand the emerging development of anti-GRP78 agents in the fight against SARS-CoV-2 and viral infection in general.

Publication Type

Correspondence.

<380>

Accession Number

20203395973

Author

Fan Jun; Li Xiang; Gao Yong; Zhou JunJie; Wang SiHua; Huang Bo; Wu JunHua; Cao Qin; Chen YaJun; Wang ZhenKao; Luo DanJu; Zhou Ting; Li RuiTing; Shang You; Nie Xiu

Title

The lung tissue microbiota features of 20 deceased patients with COVID-19.

Source

Journal of Infection; 2020. 81(3):e64-e67. 6 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This article investigated the microbiota characteristics of lung tissue from 20 deceased COVID-19 patients. The most prevalent genera were Acinetobacter (80.70% of the total sequences), Chryseobacterium (2.68%), Burkholderia (2.00%), Brevundimonas (1.18%), Sphingobium (0.93%), and Enterobacteriaceae (0.68%), together comprising 92.32% of the total sequences and regularly detected in all subjects. Mycobacterium (3.59%) and Prevotella (0.56%) were detected mainly in patients. The fungal community in the lung microbiome of each patient was analysed by ITS gene sequencing. The most common genus was Cutaneotrichosporon (Cryptococcus, 28.14%), followed by Issatchenkia (8.22%), Wallemia (4.77%), Cladosporium (4.67%), Alternaria (4.46%), Dipodascus (4.01%), Mortierella (3.22%), Aspergillus (2.72%), Naganishia(2.53%), Diutina (2.15%), and Candida (1.42%). More remarkably, the vast majority of patients had mixed bacterial and fungal infections.

Publication Type

Correspondence.

<381>

Accession Number

20203395961

Author

Lim KeyHwan; Yang SuMin; Kim SungHyun; Joo JaeYeol

Title

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368

Elevation of ACE2 as a SARS-CoV-2 entry receptor gene expression in Alzheimer's disease.

Source

Journal of Infection; 2020. 81(3):e33-e34. 8 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This article queried RNA-seq data and performed a genome-wide association study (GWAS) for Ace genes in an AD model. Expression analysis of the increase in Ace genes in the AD mouse model showed dominant expression of the Ace2 gene in brain tissue, however, unlike Ace2, Ace1 gene expression did not differ in healthy vs. diseased brain tissue. Ace1 gene expression showed a slightly decreased tendency in AD brain tissue; on the other hand, it was observed that Ace1 gene expression was significantly increased in blood. Gene difference analysis showed that Ace2 gene expression levels gradually elevated in incipient (135%), moderate (148%), and severe patients (164%) groups vs. healthy groups, however Ace1 gene expression levels decreased by 32% in incipient patients, and then return to normal levels in moderate and severe patients groups. Emerging analyses may link these findings to prevention or therapeutics for SARS-CoV2. It was found that expression of the Ace2 gene, which codes for a SARS-Cov-2-binding protein, was increased in AD patient brain. Interestingly, ACE inhibitors have recently been suggested as treatments for NDs.8 Therefore, ACE inhibitors may treat both NDs and Covid-19. Collectively, our results suggest that high ACE2 expression may be a risk factor for Covid-19 transmission in AD patients. Careful diagnosis and healthcare provisions are needed to address this issue therapeutically.

Publication Type

Correspondence.

<382>

Accession Number

20203395951

Author

Fodjo, J. N. S.; Pengpid, S.; Villela, E. F. de M.; Vo Van Thang; Ahmed, M.; Ditekemena, J.; Crespo, B. V.; Wanyenze, R. K.; Dula, J.; Watanabe, T.; Delgado-Ratto, C.; Driessche, K. vanden; Bergh, R. van den; Colebunders, R.

Title

Mass masking as a way to contain COVID-19 and exit lockdown in low- and middle-income countries.

Source

Journal of Infection; 2020. 81(3):e1-e5. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

In new guidelines published on June 5th 2020, the World Health Organization (WHO) recommends that in areas with ongoing COVID-19 community transmission, governments should encourage the general public to wear face masks in specific situations and settings as part of a comprehensive approach to suppress COVID-19 transmission. Recent online surveys in 206,729 persons residing in nine low- and middle-income countries showed that 32.7%-99.7% of respondents used face masks with significant differences across age groups and sexes. Targeted health promotion strategies and government support are required to increase mask use by the general population.

Publication Type

Correspondence.

<383>

Accession Number

20203395911

Author

Honarvar, B.; Lankarani, K. B.; Kharmandar, A.; Shaygani, F.; Zahedroozgar, M.; Rahmanian Haghighi, M. R.; Ghahramani, S.; Honarvar, H.; Daryabadi, M. M.; Salavati, Z.; Hashemi, S. M.; Joulaei, H.; Zare, M.

Title

Knowledge, attitudes, risk perceptions, and practices of adults toward COVID-19: a population and field-based study from Iran.

Source

International Journal of Public Health; 2020. 65(6):731-739. 23 ref.

Publisher

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370

Springer

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Objectives: To determine peoples' knowledge, attitudes, risk perceptions, and practices to provide policymakers pieces of field-based evidence and help them in the management of the COVID-19 epidemic. Methods: This population-based survey was conducted using multi-stage stratified and cluster sampling in Shiraz, Iran. A total of 1331 persons were interviewed. The questionnaires were completed by face-to-face interviews. Univariable and multivariable (linear regression) data analyses were done using SPSS. Results; The participants answered 63% of questions regarding knowledge, and 78% of questions regarding practice correctly. Only, 4.8% knew about common symptoms of COVID-19 and 7.3% about warning signs that require referral to hospitals. Males, lower educated people, and elders had a lower level of knowledge and poorer practices. Knowledge was also lower in the marginalized (socially deprived) people. Knowledge and practices' correlation was 37%. Overall, 43.6% considered themselves at high risk of COVID-19, and 50% considered it as a severe disease. This disease had negative effects on most participants' routine activities (69.1%). The participants preferred to follow the news from the national TV/Radio, social networks, and foreign satellite channels, respectively. Conclusions: Encouragement of people to observe preventive measures and decreasing social stress, especially among males, lower educated people, elders, and marginalized groups, are highly recommended.

Publication Type

Journal article.

<384>

Accession Number

20203395621

Author

Faden, Y. A.; Alghilan, N. A.; Alawami, S. H.; Alsulmi, E. S.; Alsum, H. A.; Katib, Y. A.; Sabr, Y. S.; Tahir, F. H.; Bondagji, N. S.

Title

Saudi Society of Maternal-Fetal Medicine guidance on pregnancy and coronavirus disease 2019.

Source

Saudi Medical Journal; 2020. 41(8):779-790. many ref.

Publisher

Prince Sultan Military Medical City

Location of Publisher

Riyadh

Country of Publication

Saudi Arabia

Abstract

Coronavirus disease (COVID-19) has been shown to be highly contagious and outbreaks have been reported to occur easily. Antenatal clinics and labor and delivery units are considered to be high-risk areas. The consequences of an outbreak occurring in a maternal and child health facility could be detrimental. COVID-19 is complicated to treat, unpredictable, and difficult to control. Therefore, increased health education and effective prevention and control measures must be undertaken.

Publication Type

Journal article.

<385>

Accession Number

20203395390

Author

Sigala, M.

Title

Tourism and COVID-19: impacts and implications for advancing and resetting industry and research. (Special Section: COVID-19 impact on business and research.)

Source

Journal of Business Research; 2020. 117:312-321. many ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

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The paper aims to critically review past and emerging literature to help professionals and researchers alike to better understand, manage and valorize both the tourism impacts and transformational affordance of COVID-19. To achieve this, first, the paper discusses why and how the COVID-19 can be a transformational opportunity by discussing the circumstances and the questions raised by the pandemic. By doing this, the paper identifies the fundamental values, institutions and pre-assumptions that the tourism industry and academia should challenge and break through to advance and reset the research and practice frontiers. The paper continues by discussing the major impacts, behaviours and experiences that three major tourism stakeholders (namely tourism demand, supply and destination management organisations and policy makers) are experiencing during three COVID-19 stages (response, recovery and reset). This provides an overview of the type and scale of the COVID-19 tourism impacts and implications for tourism research.

Publication Type

  Journal article.

<386>

Accession Number

  20203395319

Author

  Carrascosa, M. M. C.; Campos, T. de; Sampaio, J. E.; Souza, R. R. F.; Ribeiro, V. L.; Maia, M. L. N.; Gama, L. C. L.; Severino, M. P.; Semer, N. K.; Rondon, O.; Silva, J. B. M.; Miyazi, M.; Domingues, S. R.; Batalha, N. E. S.; Martins, D. E.

Title

  Medical Interns and COVID-19: results of national research.

Source

  Revista da Associacao Medica Brasileira; 2020. 66(6):812-817. 9 ref.

Publisher

  Associacao Medica Brasileira

Location of Publisher

  Sao Paulo

Country of Publication

  Brazil

Abstract

  OBJECTIVE: Assess the impact of COVID-19 on medical students' internships in public and private institutions in Brasil, in addition to estimating the quality of the measures taken by their respective Universities in the face of the problem and the availability of personal protective equipment (PPE).

METHODS: A descriptive cross-sectional quantitative analysis study carried out with 317 students undergoing medical internship from March 31, 2020, to April 12, 2020. The survey was conducted through an online questionnaire using the SurveyMonkey tool with 20 questions. Interns from the fourth to the sixth year of medical schools in the country were randomly included in the study through a survey sent by Whatsapp application. Statistical analysis was performed using the Chi-Square, considering $p < 0.05$ as significant. RESULTS: Four main topics were identified in the research: student demographic data; how classes and courses are being taught; the use and ease of access to personal protective equipment and the students' fears and perspectives for the future. CONCLUSION: The study clarified that although half of the students still have some degree of content and, in their majority, they are satisfied, there is still a lot of difficulty in obtaining personal protective equipment, which prevents students from returning safely to their internships.

Publication Type

Journal article.

<387>

Accession Number

20203395316

Author

Jin, L.; Xu, Y.; Yuan Hui

Title

Effects of four types of integrated Chinese and western medicines for the treatment of COVID-19 in China: a network meta-analysis.

Source

Revista da Associacao Medica Brasileira; 2020. 66(6):771-777. 12 ref.

Publisher

Associacao Medica Brasileira

Location of Publisher

Sao Paulo

Country of Publication

Brazil

Abstract

OBJECTIVE: Various integrated Chinese and Western medicines might be beneficial for the treatment of Coronavirus disease 2019 (COVID-19). This study aims to evaluate the efficacy of lung computed tomography (CT) of four integrated Chinese and Western medicines in the treatment of COVID-19 using

network meta-analysis (NMA). METHODS: Multiple databases were consulted to find randomized controlled trials of four different types of integrated Chinese and Western medicines for the treatment of COVID-19. NMA was conducted on the data using Stata (13.0) software. The odds ratio (OR) was calculated. The studies included in this paper were divided into a control group (Western medicine) and an observation group (one of four integrated Chinese and Western medicines). RESULTS: 5 eligible publications were identified. A total of 598 cases were included in the study, and the results showed that the four types of integrated Chinese and Western medicines (symptomatic and supportive care with Qingfei Touxie Fuzheng, Lianhua Qingke, and Xuebijing) were significantly superior (P < 0.05) to symptomatic and supportive care alone, except for symptomatic and supportive care with Lianhua Qingwen. The combination of symptomatic and supportive care with Lianhua Qingke had the highest probability of being the most clinically efficacious intervention, with a surface under the cumulative ranking (SUCRA) curve of 85.7. CONCLUSIONS: A combination of symptomatic and supportive care with Lianhua Qingke is the best option among the four integrated Chinese and Western medicines considered for the treatment of COVID-19.

Publication Type

 Journal article.

<388>

Accession Number

 20203395170

Author

 Omar, S.; Baker, D.; Siebert, R.; Joubert, I.; Levy, B.; Paruk, F.; Gopalan, P. D.

Title

 The role of laboratory testing in hospitalised and critically ill COVID-19-positive patients.

Source

 SAJCC - Southern African Journal of Critical Care; 2020. 36(1):14-17. 29 ref.

Publisher

 Health and Medical Publishing Group

Location of Publisher

 Cape Town

Country of Publication

 South Africa

Abstract

 The COVID-19 pandemic has placed healthcare resources around the world under immense pressure. South Africa, given the condition of its healthcare system, is particularly vulnerable. There has been much

discussion around rational healthcare utilisation, ranging from diagnostic testing and personal protective equipment to triage and appropriate use of ventilation strategies. There has, however, been little guidance around use of laboratory tests once COVID-19 positive patients have been admitted to hospital. We present a working guide to rational laboratory test use, specifically for COVID-19, among hospitalised patients, including the critically ill. The specific tests, the reasons for testing, their clinical usefulness, timing and frequency are addressed. We also provide a discussion around evidence for the use of these tests from a clinical perspective.

Publication Type

Journal article.

<389>

Accession Number

20203393503

Author

Garassino, M. C.; Whisenant, J. G.; Huang LiChing; Trama, A.; Torri, V.; Agustoni, F.; Baena, J.; Banna, G.; Berardi, R.; Bettini, A. C.; Bria, E.; Brighenti, M.; Cadranel, J.; Toma, A. de; Chini, C.; Cortellini, A.; Felip, E.; Finocchiaro, G.; Garrido, P.; Genova, C.; Giusti, R.; Gregorc, V.; Grossi, F.; Grosso, F.; Intagliata, S.; Verde, N. la; Liu, S. V.; Mazieres, J.; Mercadante, E.; Michielin, O.; Minuti, G.; Moro-Sibilot, D.; Pasello Giulia; Passaro, A.; Scotti, V.; Solli, P.; Stroppa, E.; Tiseo, M.; Viscardi, G.; Voltolini, L.; Wu YiLong; Zai, S.; Pancaldi, V.; Dingemans, A. M.; Meerbeeck, J. van; Barlesi, F.; Wakelee, H.; Peters, S.; Horn, L.

Title

COVID-19 in patients with thoracic malignancies (TERAVOLT): first results of an international, registry-based, cohort study.

Source

Lancet Oncology; 2020. 21(7):914-922. 26 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Early reports on patients with cancer and COVID-19 have suggested a high mortality rate compared with the general population. Patients with thoracic malignancies are thought to be particularly

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susceptible to COVID-19 given their older age, smoking habits, and pre-existing cardiopulmonary comorbidities, in addition to cancer treatments. We aimed to study the effect of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection on patients with thoracic malignancies. Methods: The Thoracic Cancers International COVID-19 Collaboration (TERAVOLT) registry is a multicentre observational study composed of a cross-sectional component and a longitudinal cohort component. Eligibility criteria were the presence of any thoracic cancer (non-small-cell lung cancer [NSCLC], small-cell lung cancer, mesothelioma, thymic epithelial tumours, and other pulmonary neuroendocrine neoplasms) and a COVID-19 diagnosis, either laboratory confirmed with RT-PCR, suspected with symptoms and contacts, or radiologically suspected cases with lung imaging features consistent with COVID-19 pneumonia and symptoms. Patients of any age, sex, histology, or stage were considered eligible, including those in active treatment and clinical follow-up. Clinical data were extracted from medical records of consecutive patients from Jan 1, 2020, and will be collected until the end of pandemic declared by WHO. Data on demographics, oncological history and comorbidities, COVID-19 diagnosis, and course of illness and clinical outcomes were collected. Associations between demographic or clinical characteristics and outcomes were measured with odds ratios (ORs) with 95% CIs using univariable and multivariable logistic regression, with sex, age, smoking status, hypertension, and chronic obstructive pulmonary disease included in multivariable analysis. This is a preliminary analysis of the first 200 patients. The registry continues to accept new sites and patient data. Findings: Between March 26 and April 12, 2020, 200 patients with COVID-19 and thoracic cancers from eight countries were identified and included in the TERAVOLT registry; median age was 68.0 years (61.8-75.0) and the majority had an Eastern Cooperative Oncology Group performance status of 0-1 (142 [72%] of 196 patients), were current or former smokers (159 [81%] of 196), had non-small-cell lung cancer (151 [76%] of 200), and were on therapy at the time of COVID-19 diagnosis (147 [74%] of 199), with 112 (57%) of 197 on first-line treatment. 152 (76%) patients were hospitalized and 66 (33%) died. 13 (10%) of 134 patients who met criteria for ICU admission were admitted to ICU; the remaining 121 were hospitalized, but were not admitted to ICU. Univariable analyses revealed that being older than 65 years (OR 1.88, 95% 1.00-3.62), being a current or former smoker (4.24, 1.70-12.95), receiving treatment with chemotherapy alone (2.54, 1.09-6.11), and the presence of any comorbidities (2.65, 1.09-7.46) were associated with increased risk of death. However, in multivariable analysis, only smoking history (OR 3.18, 95% CI 1.11-9.06) was associated with increased risk of death. Interpretation With an ongoing global pandemic of COVID-19, our data suggest high mortality and low admission to intensive care in patients with thoracic cancer. Whether mortality could be reduced with treatment in intensive care remains to be determined. With improved cancer therapeutic options, access to intensive care should be discussed in a multidisciplinary setting based on cancer specific mortality and patients' preference.

Publication Type

 Journal article.

<390>

Accession Number

 20203393300

Author

 Zhao Ying; Wu WeiShen; He HaiYan; Wei ZhaoFei; Zhang GuoPing

Title

 Analysis of re-positive nucleic acid conversion in patients recovered from COVID-19 in Tianjin. [Chinese]

Source

 Journal of Third Military Medical University; 2020. 42(09):879-882. 16 ref.

Publisher

 Third Military Medical University

Location of Publisher

 Chongqing

Country of Publication

 China

Abstract

 Objective: To analyze the re-positive nucleic acid cases in patients recovered from coronavirus disease 2019 (COVID-19) in Tianjin, and to provide suggestions on making prevention and control strategies. Methods: Among the 109 confirmed COVID-19 patients in Tianjin who were reported by the China Information System for Disease Control and Prevention, 8 patients re-positive for nucleic acid test after discharge were enrolled in this study. Their conditions after discharge were monitored by our group, including epidemiology, onset time, symptoms, and results of regular viral nucleic acid test. The epidemiological characteristics were analyzed. Results: As of March 7, 2020, the positive rate of re-positive nucleic acid conversion in patients recovered from COVID-19 was 7.34% (8/109). The median days of disease was 20.5 (14.0-28.0) d in 8 re-positive cases, which was not statistically different from those with negative results after discharge. Among the viral nucleic acid-positive samples, fecal specimens or anal swabs accounted for 62.50% (5/8), and throat swabs for 37.50% (3/8). All 8 cases had identified epidemiological history. When the nucleic acid re-positive, 12.50% of them (1/8) had clinical symptoms, but they did not cause any secondary transmission. Conclusion: Re-positiveness for nucleic acid test are found in the COVID-19 patients after discharge in Tianjin, but no one causes further transmission till now. It is recommended to add standards for fecal nucleic acid test during discharge and quarantine, regularly nucleic acid detection after the patient is discharged from the hospital.

Publication Type

 Journal article.

<391>

Accession Number

 20203393299

Author

 Li MeiLing; Liu Dan; Yang Quan; Ying Jie; Zhou Wei

Title

  Correlation between lymphocyte subsets and CT pneumonia index in patients with coronavirus disease 2019. [Chinese]

Source

  Journal of Third Military Medical University; 2020. 42(09):872-878. 15 ref.

Publisher

  Third Military Medical University

Location of Publisher

  Chongqing

Country of Publication

  China

Abstract

  Objective: To explore the correlation between lymphocyte subtypes and CT pulmonary inflammatory index in patients with coronavirus disease 2019 (COVID-19). Methods: Clinical data of 80 COVID-19 patients identified by nucleic acid test and clinical symptoms admitted in our hospital from January to February 2020 were collected in this study. They were 45 males and 35 females, and at an average age of 51.2 years. According to the severity of the disease, they were divided into the non-severe group (ordinary type, n=68) and the severe group (serious and critical type, n=12). The clinical data, chest CT findings and pneumonia index of the patients were observed and analyzed. Spearman analysis was employed to analyze the correlation between pneumonia index and lymphocyte subtypes count. Results: The results showed that the T lymphocyte subsets of patients with COVID-19 were normal or decreased, and the levels of C-reactive protein and IL-6 were increased or normal. During the following courses of disease, within 1 week, weeks 1-2 and 2 weeks later, counts of CD3+ and CD4+ T cells in the severe group were decreased significantly at above 3 periods (P < 0.05), CT pulmonary inflammatory index was obviously elevated at the 3 periods (P < 0.05), and CD8+ T cells count was decreased during the former 2 periods (P < 0.05), when compared with the non-severe group. It was found that the peak time of CT pulmonary inflammation was mainly within 2 weeks after onset, and the beginning time of pneumonia absorption was mainly within 1-3 weeks. The pneumonia index was negatively correlated with CD3+, CD4+, CD8+ T cells and Lym counts (P<0.05). Conclusion: The lower counts of lymphocyte subsets are, the severer the CT pulmonary inflammation is, and the more serious the condition is in COVID-19 patients.

Publication Type

  Journal article.

<392>

Accession Number

  20203393297

Author

  Cao Jia; Li Ying

Title

  Construction of military disease prevention and control system and thinking on talent cultivation for public health emergency under the pandemic of COVID-19. [Chinese]

Source

  Journal of Third Military Medical University; 2020. 42(09):855-860. 21 ref.

Publisher

  Third Military Medical University

Location of Publisher

  Chongqing

Country of Publication

  China

Abstract

  The pandemic of coronavirus disease 2019 (COVID-19) threatened the people's lives and health all over the world in 2020. China has achieved preliminary success in fighting the epidemic through joint efforts of the whole country. Military medical and health services have made important contributions to the fight. Based on the analysis and summary of the advantages and disadvantages of our army, we make in-depth thinking on the construction of military disease prevention and control system and on the training of public health emergency professionals.

Publication Type

  Journal article.

<393>

Accession Number

  20203392917

Author

  Luo, Y.; Yao, L.; Zhou, L.; Yuan, F.; Zhong, X.

Title

  Factors influencing health behaviours during the coronavirus disease 2019 outbreak in China: an extended information-motivation-behaviour skills model.

Source

Public Health; 2020. 185:298-305. 27 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: This study explored the factors influencing health behaviours during the coronavirus disease 2019 (COVID-19) outbreak in China. The impact of perceived stress and positive perception of interventions on health behaviours in China were assessed using the extended information-motivation-behaviour skills (IMB) model. Study design: Cross-sectional survey. Methods: The Questionstar online survey tool was used to construct a structured questionnaire based on the IMB model. Between 14 and 22 February 2020, during the peak of COVID-19 epidemic in China, 2449 participants were recruited by snowball sampling on WeChat and Tencent QQ social media platforms in China. Data were collected through an online questionnaire, and structural equation modelling was performed to evaluate the extended IMB model. Results: Health behaviours were assessed using a scoring system (total score range: 8-40); the average health behaviour score in this study was 34.62 +or- 4.44. The term 'health risk stress' refers to the impact that perceived stress has on health, and this was experienced by 39.9% of participants. Only 35.9% of participants answered all seven questions on COVID-19 information correctly. The final model showed that information, motivation, behavioural skills, heath risk stress and positive perception of interventions had significant direct effects on health behaviours. Health behaviours were positively associated with the positive perception of interventions but negatively associated with health risk stress. Behavioural skills had the greatest impact on health behaviours. Conclusions: In the face of public health emergencies, the extended IMB model has been used as a theoretical framework to construct more effective interventions. The government should pay attention to publicity and guidance, strengthen positive interactions with the public and disclose relevant information in a timely manner to gain trust and to maintain the positive public perception of the interventions. In terms of health education, the government should focus on behavioural skills, promptly rectify ineffective prevention information and raise awareness about the disease to relieve stress and anxiety in the population.

Publication Type

Journal article.

<394>

Accession Number

20203392912

Author

Das, A.; Ghosh, S.; Das, K.; Basu, T.; Das, M.; Dutta, I.

Title

Modeling the effect of area deprivation on COVID-19 incidences: a study of Chennai megacity, India.

Source

Public Health; 2020. 185:266-269. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: Socio-economic inequalities may affect coronavirus disease 2019 (COVID-19) incidence. The goal of the research was to explore the association between deprivation of socio-economic status (SES) and spatial patterns of COVID-19 incidence in Chennai megacity for unfolding the disease epidemiology. Study design: This is an ecological (or contextual) study for electoral wards (subcities) of Chennai megacity. Methods: Using data of confirmed COVID-19 cases from May 15, 2020, to May 21, 2020, for 155 electoral wards obtained from the official website of the Chennai Municipal Corporation, we examined the incidence of COVID-19 using two count regression models, namely, Poisson regression (PR) and negative binomial regression (NBR). As explanatory factors, we considered area deprivation that represented the deprivation of SES. An index of multiple deprivations (IMD) was developed to measure the area deprivation using an advanced local statistic, geographically weighted principal component analysis. Based on the availability of appropriately scaled data, five domains (i.e., poor housing condition, low asset possession, poor availability of WaSH services, lack of household amenities and services, and gender disparity) were selected as components of the IMD in this study. Results: The hot spot analysis revealed that area deprivation was significantly associated with higher incidences of COVID-19 in Chennai megacity. The high variations (adjusted R^2: 72.2%) with the lower Bayesian Information Criteria (BIC) (124.34) and Akaike's Information Criteria (AIC) (112.12) for NBR compared with PR suggests that the NBR model better explains the relationship between area deprivation and COVID-19 incidences in Chennai megacity. NBR with two-sided tests and $P < 0.05$ were considered statistically significant. The outcome of the PR and NBR models suggests that when all other variables were constant, according to NBR, the relative risk (RR) of COVID-19 incidences was 2.19 for the wards with high housing deprivation or, in other words, the wards with high housing deprivation having 119% higher probability (RR=$e0.786$=2.19, 95% confidence interval [CI]=1.98 to 2.40), compared with areas with low deprivation. Similarly, in the wards with poor availability of WaSH services, chances of having COVID-19 incidence was 90% higher than in the wards with good WaSH services (RR=$e0.642$=1.90, 95% CI=1.79 to 2.00). Spatial risks of COVID-19 were predominantly concentrated in the wards with higher levels of area deprivation, which were mostly located in the northeastern parts of Chennai megacity. Conclusions: We formulated an area-based IMD, which was substantially related to COVID-19 incidences in Chennai megacity. This study highlights that the risks of COVID-19 tend to be higher in areas with low SES and that the northeastern part of Chennai megacity is predominantly high-risk areas. Our results can guide measures of COVID-19 control and prevention by considering spatial risks and area deprivation.

Publication Type

Journal article.

<395>

Accession Number

   20203392904

Author

   Schnitzer, M.; Schottl, S. E.; Kopp, M.; Barth, M.

Title

   COVID-19 stay-at-home order in Tyrol, Austria: sports and exercise behaviour in change?

Source

   Public Health; 2020. 185:218-220. 10 ref.

Publisher

   Elsevier Ltd

Location of Publisher

   Oxford

Country of Publication

   UK

Abstract

   Objectives: The aim of the study was to investigate differences in the frequency and types of engagement in sports before, during and after the coronavirus disease 2019 (COVID-19) stay-at-home order in Tyrol, Austria. Study design: A representative population survey was conducted. Methods: A sample of Tyroleans (N = 511) was questioned by a market research institute via an online questionnaire or telephone survey. Results: During the stay-at-home order, participants engaged less in sports than before and after the restrictions. However, within-group analyses revealed increasing sport participation in less active groups when comparing the pre- and post-COVID-19 period. Conclusions: Despite the restrictions during the stay-at-home order, respondents did engage in sports and promoted their health. Nevertheless, it is still necessary to investigate the long-term effects of the COVID-19 crisis on sports and exercise behaviour as well as the extent to which sports policy measures may be able increase sports participation.

Publication Type

   Journal article.

<396>

Accession Number

20203392886

Author

Vicentini, C.; Bordino, V.; Gardois, P.; Zotti, C. M.

Title

Early assessment of the impact of mitigation measures on the COVID-19 outbreak in Italy.

Source

Public Health; 2020. 185:99-101. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: On March 11, 2020, the World Health Organization characterized the novel coronavirus disease 2019 (COVID-19) outbreak as a pandemic. The first cases in Italy were reported on January 30, 2020, and the outbreak quickly escalated. On March 19, 2020, deaths in Italy surpassed those in China. The Italian government implemented progressively restrictive measures leading to a nationwide lockdown on March 8, 2020. This study aimed to assess the impact of mitigation measures implemented in Italy on the spread of COVID-19. Methods: Publicly available data were used to evaluate changes in the growth curve of the number of patients hospitalized in intensive care (IC) at three time intervals between February 19, 2020, and April 9, 2020, after the implementation of progressive measures: (1) containment and travel restrictions, (2) lockdown of the epicenter of the outbreak, and (3) school closures and nationwide lockdown. The models that showed the highest reliability according to the Akaike information criterion and based on data from the three time intervals were projected to assess how the epidemic would have evolved if no other measure had been implemented. Results: The most reliable models were (1) exponential, (2) quadratic, and (3) cubic (R^2 = 0.99, >0.99, and > 0.99 respectively), indicating a progressive decrease in the growth of the curve. Conclusion: This study suggests the measures were effective in flattening the epidemic curve and bought valuable time, allowing for the number of IC beds to be nearly doubled before the national health system reached maximum capacity.

Publication Type

Journal article.

<397>

Accession Number

20203392326

Author

Lai ChihCheng; Wang ChengYi; Hsueh PoRen

Title

Co-infections among patients with COVID-19: the need for combination therapy with non-anti-SARS-CoV-2 agents?

Source

Journal of Microbiology, Immunology and Infection; 2020. 53(4):505-512. 50 ref.

Publisher

Elsevier Taiwan LLC

Location of Publisher

Taipei

Country of Publication

Taiwan

Abstract

Co-infection has been reported in patients with severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome, but there is limited knowledge on co-infection among patients with coronavirus disease 2019 (COVID-19). The prevalence of co-infection was variable among COVID-19 patients in different studies, however, it could be up to 50% among non-survivors. Co-pathogens included bacteria, such as Streptococcus pneumoniae, Staphylococcus aureus, Klebsiella pneumoniae, Mycoplasma pneumoniae, Chlamydia pneumonia, Legionella pneumophila and Acinetobacter baumannii; Candida species and Aspergillus flavus; and viruses such as influenza, coronavirus, rhinovirus/enterovirus, parainfluenza, metapneumovirus, influenza B virus, and human immunodeficiency virus. Influenza A was one of the most common co-infective viruses, which may have caused initial false-negative results of real-time reverse-transcriptase polymerase chain reaction for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Laboratory and imaging findings alone cannot help distinguish co-infection from SARS-CoV-2 infection. Newly developed syndromic multiplex panels that incorporate SARS-CoV-2 may facilitate the early detection of co-infection among COVID-19 patients. By contrast, clinicians cannot rule out SARS-CoV-2 infection by ruling in other respiratory pathogens through old syndromic multiplex panels at this stage of the COVID-19 pandemic. Therefore, clinicians must have a high index of suspicion for coinfection among COVID-19 patients. Clinicians can neither rule out other co-infections caused by respiratory pathogens by diagnosing SARS-CoV-2 infection nor rule out COVID-19 by detection of non-SARS-CoV-2 respiratory pathogens. After recognizing the possible pathogens causing co-infection among COVID-19 patients, appropriate antimicrobial agents can be recommended.

Publication Type

Journal article.

<398>

Accession Number

  20203392009

Author

  Matteo, G. di; Spano, M.; Grosso, M.; Salvo, A.; Ingallina, C.; Russo, M.; Ritieni, A.; Mannina, L.

Title

  Food and COVID-19: preventive/co-therapeutic strategies explored by current clinical trials and in silico studies.

Source

  Foods; 2020. 9(8). 107 ref.

Publisher

  MDPI AG

Location of Publisher

  Basel

Country of Publication

  Switzerland

Abstract

  Foods, food ingredients, and their balanced consumption are recognized to have an important role in achieving or maintaining a state of wellbeing by acting as carriers of functional components and bioactive molecules. However, the potential contribution of foods to consumers' health has so far only been partially exploited. The rapidly evolving scenario of the coronavirus disease 2019 (COVID-19) pandemic is stimulating profound reflection on the relationships between food and the etiological agent, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Here, the status of knowledge regarding food as a possible defense/co-therapeutic strategy against the SARS-CoV-2 coronavirus is considered through the discussion of two main current lines of research. One line of research relates to the role of micronutrients, food components, and diets in the strengthening of the immune system through clinical trials; formulations could be developed as immune system enhancers or as co-adjuvants in therapies. The other line of research relates to investigation of the chemical interactions that specific food compounds can have with host or virus targets so as to interfere with the viral infective cycle of SARS-CoV-2. This line requires, as a first step, an in silico evaluation to discover lead compounds, which may be further developed through drug-design studies, in vitro and in vivo tests, and, finally, clinical trials to obtain therapeutic molecules. All of these promising strategies promote the role of food in preventive/co-therapeutic strategies to tackle the COVID-19 pandemic.

Publication Type

  Journal article.

<399>

Accession Number

20203391868

Author

Laguna, L.; Fiszman, S.; Puerta, P.; Chaya, C.; Tarrega, A.

Title

The impact of COVID-19 lockdown on food priorities. results from a preliminary study using social media and an online survey with Spanish consumers.

Source

Food Quality and Preference; 2020. 86. 18 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This preliminary study describes the impact of the COVID-19 health crisis on people's interests, opinions, and behaviour towards food. Here, the evolution of people's internet searches, the characteristics of the most watched YouTube videos, and Tweeted messages in relation to COVID-19 and food was studied. Additionally, an online questionnaire (Spanish population, n = 362) studied changes in food shopping habits during the lockdown, motivations behind the changes, and perceived reliability of the information received from media. Results showed initial trending searches and most watched YouTube videos were about understanding what COVID-19 is and how the illness can progress and spread. When the official statement of a pandemic was released, trending searches in relation to food and shopping increased. Data retrieved from Twitter also showed an evolution from shopping concerns to the feeling of uncertainty for the oncoming crisis. The answers to the online questionnaire showed reduction of shopping frequency but no changes in shopping location. Products purchased with higher frequency were pasta and vegetables (health motivations), others were purchased to improve their mood (nuts, cheese, and chocolates). Reduced purchasing was attributed to products with a short shelf-life (fish, seafood) or because they were unhealthy and contributed to gained body weight (sugary bakery goods) or mood (desserts). Statements made by experts or scientists were considered by consumers to be the most reliable.

Publication Type

Journal article.

<400>

Accession Number

20203391765

Author

Stout, A. E.; Andre, N. M.; Jaimes, J. A.; Millet, J. K.; Whittaker, G. R.

Title

Coronaviruses in cats and other companion animals: where does SARS-CoV-2/COVID-19 fit?

Source

Veterinary Microbiology; 2020. 247. 43 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Coronaviruses (CoVs) cause disease in a range of agricultural and companion animal species, and can be important causes of zoonotic infections. In humans, several coronaviruses circulate seasonally. Recently, a novel zoonotic CoV named SARS-CoV-2 emerged from a bat reservoir, resulting in the COVID-19 pandemic. With a focus on felines, we review here the evidence for SARS-CoV-2 infection in cats, ferrets and dogs, describe the relationship between SARS-CoV-2 and the natural coronaviruses known to infect these species, and provide a rationale for the relative susceptibility of these species to SARS-CoV-2 through comparative analysis of the ACE-2 receptor.

Publication Type

Journal article.

<401>

Accession Number

  20203391354

Author

  Meschi, S.; Colavita, F.; Bordi, L.; Matusali, G.; Lapa, D.; Amendola, A.; Vairo, F.; Ippolito, G.; Capobianchi, M. R.; Castilletti, C.

Title

  Performance evaluation of abbott ARCHITECT SARS-CoV-2 IgG immunoassay in comparison with indirect immunofluorescence and virus microneutralization test.

Source

  Journal of Clinical Virology; 2020. 129. 11 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  Background: Serological tests for anti-SARS-CoV-2 antibodies are becoming of great interest to determine seroprevalence in a given population, define previous exposure and identify highly reactive human donors for the generation of convalescent serum as therapeutic. Objectives: We evaluated the diagnostic performance of the Abbott ARCHITECT SARS-CoV-2 IgG test, a fully automated indirect immunoassay that detects antibodies directed to a recombinant SARS-CoV-2 Nucleocapsid antigen. Study design: Abbott ARCHITECT SARS-CoV-2 IgG immunoassay was compared to an indirect immunofluorescence assay (IFA) on sera from patients with COVID-19 collected at different days after symptoms onset or infected by other human coronaviruses. Comparison with neutralization test was also performed. Results: After 7, 14 and >14 days after onset ARCHITECT was positive on 8.3%; 61.9% and 100% of the tested samples compared to 58.3%; 85.7% and 100% by IFA. The sensitivity was 72% vs. IFA and 66.7% vs. a real-time PCR, the specificity was 100%. On 18 samples with neutralizing activity, 17 were positive by Abbott ARCHITECT SARS-CoV-2 IgG. Conclusions: In our study, Abbott ARCHITECT SARS-CoV-2 IgG assay showed a satisfactory performance, with a very high specificity. IgG reactivity against SARSCoV-2 N antigen was detectable in all patients by two weeks after symptoms onset. In addition, concordance between this serological response and viral neutralization suggests that a strong humoral response may be predictive of a neutralization activity, regardless of the target antigens. This finding supports the use of this automated serological assay in diagnostic algorithm and public health intervention, especially for high loads of testing.

Publication Type

  Journal article.

<402>

Accession Number

  20203391350

Author

  Martinez Serrano, M.; Navalpotro Rodriguez, D.; Tormo Palop, N.; Olmos Arenas, R.; Moreno Cordoba, M.;
Ocete Mochon, M. D.; Gimeno Cardona, C.

Title

  Comparison of commercial lateral flow immunoassays and ELISA for SARS-CoV-2 antibody detection.

Source

  Journal of Clinical Virology; 2020. 129. 16 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  Background: COVID-19 pandemic has spread worldwide since December 2019. Serological tests for SARS-
CoV-2 antibody testing are needed for detection of current or past infections. A wide range of commercial
tests is available. However, most of them need to be validated. Study design: The aim was to compare a
commercial IgG and IgA ELISA (Euroimmun) with three lateral flow immunoassays (LFI): Hangzhou Alltest
Biotech, Wuhan UNscience Biotechnology and Guangzhou Wondfo Biotech. Specificity was calculated with
62 available serum samples from 2018/19. The study included 152 sera from patients of which 109 were
RT-PCR positive. Sensitivities for ELISA anti SARS-CoV-2 IgG and IgA were 81.5% and 93.1% and specificities
100% and 80.6%, respectively. LFI showed variable performances, overall results being better for
Guangzhou Wondfo Biotech. Conclusions Commercial serological tests are useful for detection of
antibodies in patients with COVID-19. ELISA presented better results than LFI. The results allowed to
incorporate the most sensitive LFI to the daily workflow, combining with ELISA. Careful validation is
encouraged before clinical laboratories start using these tests.

Publication Type

  Journal article.

<403>

Accession Number

 20203391346

Author

 Joshi, R. P.; Pejaver, V.; Hammarlund, N. E.; Sung HeungSup; Lee SeongKyu; Furmanchuk, A.; Lee HyeYoung; Scott, G.; Gombar, S.; Shah, N.; Shen, S.; Nassiri, A.; Schneider, D.; Ahmad, F. S.; Liebovitz, D.; Kho, A.; Mooney, S.; Pinsky, B. A.; Banaei, N.

Title

 Predictive tool for identification of SARS-CoV-2 PCR-negative emergency department patients using routine test results.

Source

 Journal of Clinical Virology; 2020. 129. 7 ref.

Publisher

 Elsevier Ltd

Location of Publisher

 Oxford

Country of Publication

 UK

Abstract

 Background: Testing for COVID-19 remains limited in the United States and across the world. Poor allocation of limited testing resources leads to misutilization of health system resources, which complementary rapid testing tools could ameliorate. Background: To predict SARS-CoV-2 PCR positivity based on complete blood count components and patient sex. Study design: A retrospective case-control design for collection of data and a logistic regression prediction model was used. Participants were emergency department patients > 18 years old who had concurrent complete blood counts and SARS-CoV-2 PCR testing. 33 confirmed SARS-CoV-2 PCR positive and 357 negative patients at Stanford Health Care were used for model training. Validation cohorts consisted of emergency department patients > 18 years old who had concurrent complete blood counts and SARS-CoV-2 PCR testing in Northern California (41 PCR positive, 495 PCR negative), Seattle, Washington (40 PCR positive, 306 PCR negative), Chicago, Illinois (245 PCR positive, 1015 PCR negative), and South Korea (9 PCR positive, 236 PCR negative). Results: A decision support tool that utilizes components of complete blood count and patient sex for prediction of SARS-CoV-2 PCR positivity demonstrated a C-statistic of 78%, an optimized sensitivity of 93%, and generalizability to other emergency department populations. By restricting PCR testing to predicted positive patients in a hypothetical scenario of 1000 patients requiring testing but testing resources limited to 60% of patients, this tool would allow a 33% increase in properly allocated resources. Conclusions: A prediction tool based on complete blood count results can better allocate SARS-CoV-2 testing and other health care resources such as personal protective equipment during a pandemic surge.

Publication Type

 Journal article.

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391

<404>

Accession Number

 20203391116

Author

 Derks, J.; Giessen, L.; Winkel, G.

Title

 COVID-19-induced visitor boom reveals the importance of forests as critical infrastructure.

Source

 Forest Policy and Economics; 2020. 118. 21 ref.

Publisher

 Elsevier B.V.

Location of Publisher

 Amsterdam

Country of Publication

 Netherlands

Abstract

 During the 2020 COVID-19 pandemic, countries around the globe have implemented a certain degree of lockdown, restricting citizens' freedom of movement and freedom of assembly. This article aims to illustrate the impact that the measures against the spread of COVID-19 have on forest recreation, building on a study in an urban context around Bonn (Germany) that was conducted between April 2019 and February 2020. The quantitative and qualitative data on urban forest visits from that study were supplemented with new census data supported by selected expert interviews. We found that visitor numbers since the inception of COVID-19 measures in March 2020 have more than doubled. Visitor patterns have drastically shifted, from an even distribution throughout the day with small peaks before and after office hours to a culmination in the late afternoon. Lastly, the interviewed forestry professionals have noted that a new set of visitors, i.e. young people, families with children and non-locals, has arrived to the forest. This influx of more and novice visitors poses challenges for forest managers and urban forest policy. It is, however, also a unique opportunity for a substantial engagement of forestry with society at large, that has implications for forest policy, especially in urban areas, possibly beyond the COVID-19 pandemic era.

Publication Type

 Journal article.

<405>

Accession Number

  20203390094

Author

  Ntshalintshali, S. D.; Mnqwazi, C.

Title

  Affordable digital innovation to reduce SARS-CoV-2 transmission among healthcare workers.

Source

  SAMJ - South African Medical Journal; 2020. 110(7):605-606. 7 ref.

Publisher

  Health and Medical Publishing Group

Location of Publisher

  Cape Town

Country of Publication

  South Africa

Abstract

  In the South African public healthcare sector, patient medical records are still written on paper and stored in filing rooms. There has been an attempt to move towards a paperless electronic system in many public healthcare facilities, but owing to lack of funding, this has been a challenge to achieve. During the current COVID-19 pandemic, the virus could be transmitted through the physical manipulation of patient records by various categories of staff who handle the records with or without gloves for protection. We discuss a digital option that has been partially used at Tygerberg Hospital (TBH), Cape Town, to avoid SARS-CoV-2 patient hard-copy record manipulation. It includes assignment of a QR code to every patient admitted as a person under investigation or confirmed COVID-19 case. The QR code is synced to one of the many free online medical notes smartphone applications (apps), which are password-protected with patient information privacy regulations (Trello is used at TBH), for daily medical notes review and editing. Upon discharge, all notes made during the patient's hospital stay, together with the discharge summary, are printed to generate a hard copy of notes for filing to avoid violation of the current national and provincial patient records policy. Doing this means that a patient will have a virtual online file through the designated app until discharge, when a physical file will be made for storage and safekeeping. It will keep physical manipulation of patient records to the minimum, and potentially assist in reducing transmission of the SARS-CoV-2 virus among healthcare workers.

Publication Type

  Journal article.

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393

<406>

Accession Number

  20203390091

Author

 Zar, H. J.; Moore, D. P.; Itzikowitz, G.; Green, R. J.; Argent, A. C.; Avenant, T.; Cohen, C.; Jeena, P.; Masekela, R.; Pillay, A.; Reubenson, G.; Madhi, S. A.; Andronikou, S.; Nicol, M. P.

Title

 Diagnosis of community-acquired pneumonia in children: South African Thoracic Society guidelines (part 2).

Source

 SAMJ - South African Medical Journal; 2020. 110(7):588-593. 44 ref.

Publisher

 Health and Medical Publishing Group

Location of Publisher

 Cape Town

Country of Publication

 South Africa

Abstract

  Background. Accurate diagnosis and attribution of the aetiology of pneumonia are important for measuring the burden of disease, implementing appropriate treatment strategies and developing more effective interventions. Objectives. To produce revised guidelines for the diagnosis of pneumonia in South African (SA) children, encompassing clinical, radiological and aetiological methods. Methods. An expert group was established to review diagnostic evidence and make recommendations for a revised SA guideline. Published evidence was reviewed and graded using the British Thoracic Society grading system. Results. Diagnosis of pneumonia should be considered in a child with acute cough, fast breathing or difficulty breathing. Revised World Health Organization guidelines classify such children into: (i) severe pneumonia; (ii) pneumonia (tachypoea or lower chest indrawing); or (iii) no pneumonia. Malnourished or immunocompromised children with lower chest indrawing should be managed as cases of severe pneumonia. Pulse oximetry should be done, with hospital referral for oxygen saturation <92%. A chest X-ray is indicated in severe pneumonia or when tuberculosis (TB) is suspected. Microbiological investigations are recommended in hospitalised patients or in outbreak settings. Improved aetiological methods show the importance of co-infections. Blood cultures have a low sensitivity (<5%), for diagnosing bacterial pneumonia. Highly sensitive, multiplex tests on upper respiratory samples or sputum detect multiple potential pathogens in most children. However, even in symptomatic children, it may be impossible to distinguish colonising from causative organisms, unless identification of the organism is strongly associated with attribution to causality, e.g. respiratory syncytial virus, Mycobacterium tuberculosis, Bordetella pertussis, influenza, para-influenza or severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Investigations for TB should be considered in children with severe pneumonia who have been hospitalised, in a case of a known TB contact, if the tuberculin skin test is positive, if a child is malnourished or has lost weight, and in children living with HIV. Induced sputum may provide a higher yield than upper respiratory sampling for B. pertussis, M. tuberculosis and Pneumocystis jirovecii. Conclusions. Advances in clinical, radiological and aetiological methods have improved the diagnosis of childhood pneumonia.

Publication Type

 Journal article.

<407>

Accession Number

 20203390030

Author

 Zar, H. J.; Moore, D. P.; Andronikou, S.; Argent, A. C.; Avenant, T.; Cohen, C.; Green, R. J.; Itzikowitz, G.; Jeena, P.; Nicol, M. P.; Pillay, A.; Reubenson, G.; Masekela, R.; Madhi, S. A.

Title

 Prevention of community-acquired pneumonia in children: South African thoracic society guidelines (part 4).

Source

 SAMJ - South African Medical Journal; 2020. 110(8):741-746. 81 ref.

Publisher

 Health and Medical Publishing Group

Location of Publisher

 Cape Town

Country of Publication

 South Africa

Abstract

 Background. More comprehensive immunisation regimens, strengthening of HIV prevention and management programmes and improved socioeconomic conditions have impacted on the epidemiology of paediatric community-acquired pneumonia (CAP) in South Africa (SA). Objectives. To summarise effective preventive strategies to reduce the burden of childhood CAP. Methods. An expert subgroup reviewed existing SA guidelines and new publications focusing on prevention. Published evidence on pneumonia prevention informed the revisions; in the absence of evidence, expert opinion was used. Evidence was graded using the British Thoracic Society (BTS) grading system. Recommendations. General measures for prevention include minimising exposure to tobacco smoke or air pollution, breastfeeding, optimising nutrition, optimising maternal health from pregnancy onwards, adequate antenatal care and improvement in socioeconomic and living conditions. Prevention of viral transmission, including SARS-CoV-2, can be achieved by hand hygiene, environmental decontamination, use of masks and isolation of infected people. Specific preventive measures include vaccines as contained in the Expanded Programme on Immunisation schedule, isoniazid prophylaxis for tuberculosis, co-trimoxazole prophylaxis for HIV-infected infants and children who are immunosuppressed, and timely diagnosis of HIV, as well as antiretroviral therapy (ART)

initiation. HIV-infected children treated with ART from early infancy, and HIV-exposed children, have similar immunogenicity and immune responses to most childhood vaccines as HIV-unexposed infants. Validation. These recommendations are based on available published evidence supplemented by the consensus opinion of SA paediatric experts, and are consistent with those in published international guidelines.

Publication Type

Journal article.

<408>

Accession Number

20203389604

Author

Emerson, P.; Hooper, P. J.

Title

ZithromaxR donation for trachoma elimination during the COVID-19 pandemic.

Source

Community Eye Health Journal; 2020. 33(109):38-38.

Publisher

International Centre for Eye Health

Location of Publisher

London

Country of Publication

UK

Abstract

The aim of the article was to discuss the chemoprophylaxis of Zithromax for the control and elimination of trachoma during the time of COVID-19 pandemic.

Publication Type

Journal article.

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396

<409>

Accession Number

  20203389602

Author

  Rizwankanji, R.; Arunga, S.

Title

  Changing ophthalmic practice during the COVID-19 pandemic in Uganda.

Source

  Community Eye Health Journal; 2020. 33(109):34-34.

Publisher

  International Centre for Eye Health

Location of Publisher

  London

Country of Publication

  UK

Abstract

  The aim of the article was to report the state and quality of ophthalmic services rendered during the COVID-19 pandemic.

Publication Type

  Journal article.

<410>

Accession Number

  20203389601

Author

  Miltos, C. P. de; Duerksen, R.

Title

  The importance of planning in the face of the COVID-19 pandemic in Paraguay.

Source

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397

Community Eye Health Journal; 2020. 33(109):33-33.

Publisher

International Centre for Eye Health

Location of Publisher

London

Country of Publication

UK

Abstract

The aim of the article was to discuss information and training, collective decision-making, operational and financial planning, and care of staff members in Paraguay during the COVID-19 pandemic.

Publication Type

Journal article.

<411>

Accession Number

20203389594

Author

Habtamu, E.

Title

COVID-19 and eye care services in Ethiopia.

Source

Community Eye Health Journal; 2020. 33(109):15-15.

Publisher

International Centre for Eye Health

Location of Publisher

London

Country of Publication

UK

Abstract

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398

The aim of the article was to evaluate the quality of ophthalmologic services during the COVID-19 pandemic.

Publication Type

Journal article.

<412>

Accession Number

20203389082

Author

Russo, A.; Cirella, G. T.

Title

Edible green infrastructure for urban regeneration and food security: case studies from the Campania region.

Source

Agriculture; 2020. 10(8). 72 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Ten identified edible green infrastructure (EGI)-related urban regeneration case studies within the Campania region, Italy, are explored in relation to local community development, involvement, and education. Urban space and agriculture are promoted as sustainably planned networks for edible food components and structures. Within an urban ecosystem, city planners are actively promoting urban agriculture after an increase in the availability of unused land. Advantages for public health include stress reduction and physical activity, as well as sustainability of urban gardens by way of far-sighted urban planning. Case studies within the Campania region illustrate EGI know-hows and awareness, and they elucidate upon a number of beneficial reasons for its implementation. Within the Campania region, all five provinces showed positive impacts when using EGI for urban regeneration and well-being. Recent developments from the COVID-19 pandemic are reinforcing a rethink of food security and food supply chains.

Publication Type

Journal article.

<413>

Accession Number

  20203388853

Author

  Sanderson, M. R.

Title

  Topical Collection: Agriculture, food & COVID-19. (Topical Collection: Agriculture, food & Covid-19.)

Source

  Agriculture and Human Values; 2020. 37(3):515-666.

Publisher

  Springer

Location of Publisher

  Amsterdam

Country of Publication

  Netherlands

Abstract

  This collection consists of many short essays about agriculture and human values as seen through the lens of the COVID-19 pandemic. Contributors were asked to consider the following questions: What should we learn from this unprecedented time? What does your work tell us about this time, the role(s) of agriculture and food systems in this time, and what we might do going forward?

Publication Type

  Journal issue.

<414>

Accession Number

　20203386716

Author

　Sun MinJie; Sun ChunYan; Ze-Hui Yang

Title

　Development and suggestion of China HACCP in the new era. [Chinese]

Source

　Journal of Food Safety and Quality; 2020. 11(15):5271-5278. 38 ref.

Publisher

　Journal of Food Safety and Quality

Location of Publisher

　Beijing

Country of Publication

　China

Abstract

　Under the background of novel coronavirus pneumonia, food safety risk has aroused the close attention from consumers again. The food industry is facing many challenges. Consumers put forward higher requirements for the food industry in strengthening food safety management, preventing food safety risks and improving the ability of sanitation and cleaning. Hazard Analysis and Critical Control Point (HACCP), as a prevention system to control food safety in the food production process, can effectively reduce the risk of food safety and is widely used in the world. This paper summarized the development and application of HACCP system in China, and the acceptance and international mutual recognition of government departments to promote the modernization of national governance system and governance capacity, analyzed the problems existing in the application of HACCP system in Chinese food production enterprises, and put forward the development suggestions of HACCP system based on the actual situation.

Publication Type

　Journal article.

<415>

Accession Number

　20203386617

Title

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401

Special Issue: Tourism sustainability in natural, residential and mountain locations: what are the current issues and questions? (Special Issue: Tourism sustainability in natural, residential and mountain locations: what are the current issues and questions?)

Source

  Worldwide Hospitality and Tourism Themes; 2020. 12(4):365-504.

Publisher

  Emerald Publishing

Location of Publisher

  Bingley

Country of Publication

  UK

Abstract

  The collection of nine articles in this issue broadens the perspective of sustainability in tourism in terms of both places and seasons. The aim was to build on an earlier theme issue which focused on mountain areas mostly during the winter season. The present theme issue encompasses aspects of sustainability in natural spaces, second homes in rural and mountain locations and mountain tourism. The articles reflect on the following eight recurring themes: (1) perceived sustainability is a complex issue and is often accompanied by many attributes; (2) over-tourism is not only concerned with too many people in one place; (3) mountain areas should work on two key words: rarefied and uncontaminated; (4) women entrepreneurs seem to be more prone to sustainability; (5) children should be a target of educational initiatives focused on sustainable behaviour; (6) secondary residences are going through a process of commercialization and uberization; (7) tourists' decision to choose natural parks creates an ethical dilemma on the exploitation of animals; and (8) the COVID-19 pandemic may open new opportunities for mountain and marginal areas of the tourism industry.

Publication Type

  Journal issue.

<416>

Accession Number

  20203384633

Author

  Oladipo, E. K.; Ajayi, A. F.; Oladipo, A. A.; Ariyo, O. E.; Oladipo, B. B.; Ajayi, L. O.; Oloke, J. K.

Title

  A call: COVID-19 research funding in Africa.

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402

Source

African Journal of Clinical and Experimental Microbiology; 2020. 21(4):256-257. 4 ref.

Publisher

African Journal of Clinical and Experimental Microbiology

Location of Publisher

Kwara State

Country of Publication

Nigeria

Abstract

This article discussed the public health urgency for funding during the COVID-19 pandemic in Africa.

Publication Type

Journal article.

<417>

Accession Number

20203383830

Author

Wu TsuYin; Ford, O.; Rainville, A. J.; Bessire, R.

Title

COVID-19 care package distribution for senior citizens and families in Detroit and Hamtramck, Michigan.

Source

Journal of Hunger & Environmental Nutrition; 2020. 15(4):585-587. 1 ref.

Publisher

Taylor & Francis

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

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403

The COVID-19 pandemic has increased food insecurity in underserved communities and community partners have joined together to assist families in need. The Association of Chinese Americans Detroit Chapter and Eastern Michigan University Center for Health Disparities Innovations and Studies engaged community partners and distributed care packages to provide nutritious foods and personal protection products to seniors and homeless families in southeastern Michigan. The nutritious foods were tailored to cultural food preferences.

Publication Type

Journal article.

<418>

Accession Number

20203379952

Author

Ruiz-Roso, M. B.; Carvalho Padilha, P. de; Matilla-Escalante, D. C.; Brun, P.; Ulloa, N.; Acevedo-Correa, D.; Peres, W. A. F.; Martorell, M.; Carrilho, T. R. B.; Cardoso, L. de O.; Carrasco-Marin, F.; Paternina-Sierra, K.; Hazas, M. C. L. de las; Rodriguez-Meza, J. E.; Villalba-Montero, L. F.; Bernabe, G.; Pauletto, A.; Taci, X.; Carcamo-Regla, R.; Martinez, J. A.; Davalos, A.

Title

Changes of physical activity and ultra-processed food consumption in adolescents from different countries during COVID-19 pandemic: an observational study.

Source

Nutrients; 2020. 12(8). 37 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Aim: to describe physical activity and ultra-processed foods consumption, their changes and sociodemographic predictors among adolescents from countries in Europe (Italy and Spain) and Latin America (Brazil, Chile, and Colombia) during the SARS-CoV-2-pandemic period. Methods: Cross-sectional study via web survey. International Physical Activity Questionnaire (IPAQ) and weekly ultra-processed food consumption data were used. To compare the frequencies of physical activity status with sociodemographic

variables, a multinomial logistic and a multiple logistic regression for habitual ultra-processed foods was performed. In final models, $p < 0.05$ was considered significant. Results: Sample of 726 adolescents, mostly females (59.6%) aged 16-19 years old (54.3%). Adolescents from Latin America presented odds ratio (OR) 2.98 (CI 95% 1.80-4.94) of being inactive and those whose mothers had higher level of education were less active during lockdown [OR 0.40 (CI 95% 0.20-0.84)]. The habitual ultra-processed consumption was also high during this period in all countries, and more prevalent in Latin America. Conclusion: A higher prevalence of inactivity was observed in this population, but reductions of physical activity and habitual ultra-processed consumption during the pandemic were more pronounced in Latin America. Our findings reinforce the importance of promoting a healthy lifestyle, i.e., exercise and diet, during periods of social isolation.

Publication Type

  Journal article.

<419>

Accession Number

  20203377177

Author

  Hassaniazad, M.; Ghazisaeedi, M.; Baniasadi, T.

Title

  Technology-based solutions to improve management of COVID-19: a call for more utilization in Iran.

Source

  Iranian Journal of Public Health; 2020. 49(8):1588-1589. 10 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

  The aim of the article was to present technology-based solutions to improve the management of COVID-19 in Iran.

Publication Type

  Correspondence.

<420>

Accession Number

  20203366921

Author

  Silva, J. K. R. da; Figueiredo, P. L. B.; Byler, K. G.; Setzer, W. N.

Title

  Essential oils as antiviral agents, potential of essential oils to treat SARS-CoV-2 infection: an in-silico investigation.

Source

  International Journal of Molecular Sciences; 2020. 21(10). 132 ref.

Publisher

  MDPI AG

Location of Publisher

  Basel

Country of Publication

  Switzerland

Abstract

  Essential oils have shown promise as antiviral agents against several pathogenic viruses. In this work we hypothesized that essential oil components may interact with key protein targets of the 2019 severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). A molecular docking analysis was carried out using 171 essential oil components with SARS-CoV-2 main protease (SARS-CoV-2 Mpro), SARS-CoV-2 endoribonucleoase (SARS-CoV-2 Nsp15/NendoU), SARS-CoV-2 ADP-ribose-1"-phosphatase (SARS-CoV-2 ADRP), SARS-CoV-2 RNA-dependent RNA polymerase (SARS-CoV-2 RdRp), the binding domain of the SARS-CoV-2 spike protein (SARS-CoV-2 rS), and human angiotensin-converting enzyme (hACE2). The compound with the best normalized docking score to SARS-CoV-2 Mpro was the sesquiterpene hydrocarbon (E)-beta-farnesene. The best docking ligands for SARS-CoV Nsp15/NendoU were (E,E)-a-farnesene, (E)-beta-farnesene, and (E,E)-farnesol. (E,E)-Farnesol showed the most exothermic docking to SARS-CoV-2 ADRP. Unfortunately, the docking energies of (E,E)-a-farnesene, (E)-beta-farnesene, and (E,E)-farnesol with SARS-CoV-2 targets were relatively weak compared to docking energies with other proteins and are, therefore, unlikely to interact with the virus targets. However, essential oil components may act synergistically, essential oils may potentiate other antiviral agents, or they may provide some relief of COVID-19 symptoms.

Publication Type

  Journal article.

<421>

Accession Number

 20203362321

Author

 Yan BaoFei; Liu Jia; Zeng QingQi; Fu YingXue; Zhang JingZheng

Title

 Study on the potential mechanism of Lonicerae japonicae Flos against COVID-19 based on molecular docking and network pharmacology. [Chinese]

Source

 Journal of Food Safety and Quality; 2020. 11(14):4608-4619. 30 ref.

Publisher

 Journal of Food Safety and Quality

Location of Publisher

 Beijing

Country of Publication

 China

Abstract

 Objective: To discuss the potential mechanism of Lonicerae japonicae Flos on COVID-19 (Corona Virus Disease 2019) based on molecular docking and network pharmacology. Methods: The 14 compounds in L. japonicae Flos were used for molecular docking with the SARS-CoV-2-S-RBD-ACE2 (severe acute respiratory syndrome coronavirus 2 spike receptor-binding domain bound to the angiotensin I converting enzyme 2 receptor) by AutoDock Vina. TCMSP (traditional chinese medicine systems pharmacology database and analysis platform) was used to obtain the target of the 14 components above. GeneCards and NCBI (National Center for Biotechnology Information) were used to obtain the target of COVID-19. The intersection target of drug and disease was introduced into Cytoscape 3.7.0 software to create a drug-compound component-target-disease network, was introduced into STRING and Cytoscape 3.7.0 software to establish and analyze the PPI (protein protein interaction) network, and was introduced into Bioconductor to analyze the GO (gene ontology) function and KEGG (Kyoto Encyclopedia of Genes and Genomes) pathway enrichment of the targets. Results: The results of molecular docking showed that 14 components of L. japonicae Flos had good binding activity with SARS-CoV-2-S-RBD-ACE2, and the binding activity of 12 components were better than that of 4 COVID-19 drugs in the treatment plan. The results of network pharmacology showed that 8 components of L. japonicae Flos could prevent and control COVID-19 by intervening 46 targets and 149 pathways. Conclusion: Many components in L. japonicae Flos could have COVID-19 therapeutic effect by affecting the stability of SARS-CoV-2-S-RBD-ACE2. The treatment of COVID-19 with L. japonicae Flos has the characteristics of multi-component, multi-target and multi-channel, which

has potential prevention and treatment effect on immune system disorder and inflammation caused by COVID-19. The research results can provide certain theoretical basis and scientific basis for the prevention and treatment of COVID-19 by Chinese medicine.

Publication Type

Journal article.

<422>

Accession Number

20203303350

Author

Moradi, H.; Vaezi, A.

Title

Lessons learned from Korea: COVID-19 pandemic.

Source

Infection Control and Hospital Epidemiology; 2020. 41(7):873-874. 9 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

In this study, we describe the outbreak response and preparedness activities that Korea implemented to control the COVID-19 epidemic. Altogether, the main goal of outbreak response in Korea was prevention of entrance of COVID-19 and at the same time, inhibition of the spread of the virus throughout the country. These goals were achieved through 3 main strategies: (1) containment and mitigation based on outbreak situation; (2) Risk communication to attract community participation; and (3) science-based and fact-driven actions.

Publication Type

Correspondence.

<423>

Accession Number

  20203255128

Author

  Decaro, N.; Martella, V.; Saif, L. J.; Buonavoglia, C.

Title

  COVID-19 from veterinary medicine and one health perspectives: what animal coronaviruses have taught us.

Source

  Research in Veterinary Science; 2020. 131:21-23. 28 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  In this article the authors made a brief description of Coronavirus (CoVs) and presents the long-term experience gained with animal CoVs which begun as early as 1900 (where Infectious bronchitis virus (IBV) of poultry and feline infectious peritonitis virus (FIPV) have been known), representing animal examples on how CoVs can evolve, changing their tissue tropism and virulence. But more important is how animal CoVs may also represent excellent host models for development of SARS-CoV-2 vaccines now that COVID-19 has became a pandemic causing deaths in humans. The authors also concludes by making some recommendations to prevent and control COVID-19 which includes: banning deforestation and anthropization of natural environments which have largely compromised some ecological niches where CoVs of wildlife are usually confined. Also, restricting or even banning human consumption of endangered wildlife, even if not demonstrated to play a role in the onset of SARS-CoV-2, particularly in the unsanitary conditions prevalent in live animal markets. Considering that animal CoVs spilled over into humans in three different occasions in the short time span of two decades, a more reverent management of the environment will be fundamental to prevent future emergence of pandemic CoVs. Under these circumstances, veterinary medicine should support policy makers to adopt and promote sound and sustainable measures for management of the environment and of animals and advance the global 'One Health' movement.

Publication Type

  Journal article.

<424>

Accession Number

  20203390096

Author

  Mahomed, S.

Title

  COVID-19: the role of artificial intelligence in empowering the healthcare sector and enhancing social distancing measures during a pandemic.

Source

  SAMJ - South African Medical Journal; 2020. 110(7):610-612. 31 ref.

Publisher

  Health and Medical Publishing Group

Location of Publisher

  Cape Town

Country of Publication

  South Africa

Abstract

  Indiscriminatory in its spread, COVID-19 has engulfed communities from all social backgrounds throughout the world. While healthcare professionals work tirelessly testing for the virus and caring for patients, they too have become casualties of the pandemic. Currently the best way to attempt to curb the spread of the virus, echoed by almost all nation leaders, is to distance ourselves from one another socially or physically. However ideal this may seem, social distancing is not always practical in densely populated lower-income countries with many citizens below the breadline. With the majority of South Africans living in poverty, communities in overcrowded households are unable to distance themselves from one another appropriately. In addition, as a nation we struggle with high HIV and tuberculosis rates, malnutrition and an already overburdened healthcare system, emphasising the extreme vulnerability of our people. These factors, coupled with the fact that many of our healthcare professionals lack the necessary personal protective equipment to prevent them from contracting the virus themselves, highlight the gravity of the damaging repercussions that we may face in the coming months, after the complete national lockdown in force at the time of writing is lifted and we move towards a partial lockdown state. Nationally, there needs to be a shift in mindset towards exploring alternative technology-based preventive measures that may empower the healthcare sector in the long term and enhance social distancing.

Publication Type

  Journal article.

<425>

Accession Number

  20203390093

Author

  Ntshalintshali, S. D.; Mnqwazi, C.

Title

  Affordable digital innovation to reduce SARS-CoV-2 transmission among healthcare workers.

Source

  SAMJ - South African Medical Journal; 2020. 110(7):601-604. 7 ref.

Publisher

  Health and Medical Publishing Group

Location of Publisher

  Cape Town

Country of Publication

  South Africa

Abstract

  In the South African public healthcare sector, patient medical records are still written on paper and stored in filing rooms. There has been an attempt to move towards a paperless electronic system in many public healthcare facilities, but owing to lack of funding, this has been a challenge to achieve. During the current COVID-19 pandemic, the virus could be transmitted through the physical manipulation of patient records by various categories of staff who handle the records with or without gloves for protection. We discuss a digital option that has been partially used at Tygerberg Hospital (TBH), Cape Town, to avoid SARS-CoV-2 patient hard-copy record manipulation. It includes assignment of a QR code to every patient admitted as a person under investigation or confirmed COVID-19 case. The QR code is synced to one of the many free online medical notes smartphone applications (apps), which are password-protected with patient information privacy regulations (Trello is used at TBH), for daily medical notes review and editing. Upon discharge, all notes made during the patient's hospital stay, together with the discharge summary, are printed to generate a hard copy of notes for filing to avoid violation of the current national and provincial patient records policy. Doing this means that a patient will have a virtual online file through the designated app until discharge, when a physical file will be made for storage and safekeeping. It will keep physical manipulation of patient records to the minimum, and potentially assist in reducing transmission of the SARS-CoV-2 virus among healthcare workers.

Publication Type

  Journal article.

<426>

Accession Number

20203390071

Author

Hui, K. P. Y.; Cheung ManChun; Perera, R. A. P. M.; Ng KaChun; Bui, C. H. T.; Ho, J. C. W.; Ng, M. M. T.; Kuok, D. I. T.; Shih, K. C.; Tsao SaiWah; Poon, L. L. M.; Peiris, M.; Nicholls, J. M.; Chan, M. C. W.

Title

Tropism, replication competence, and innate immune responses of the coronavirus SARS-CoV-2 in human respiratory tract and conjunctiva: an analysis in ex-vivo and in-vitro cultures.

Source

Lancet Respiratory Medicine; 2020. 8(7):687-695. 30 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) emerged in December 2019, causing a respiratory disease (coronavirus disease 2019, COVID-19) of varying severity in Wuhan, China, and subsequently leading to a pandemic. The transmissibility and pathogenesis of SARS-CoV-2 remain poorly understood. We evaluate its tissue and cellular tropism in human respiratory tract, conjunctiva, and innate immune responses in comparison with other coronavirus and influenza virus to provide insights into COVID-19 pathogenesis. Methods: We isolated SARS-CoV-2 from a patient with confirmed COVID-19, and compared virus tropism and replication competence with SARS-CoV, Middle East respiratory syndrome-associated coronavirus (MERS-CoV), and 2009 pandemic influenza H1N1 (H1N1pdm) in ex-vivo cultures of human bronchus (n=5) and lung (n=4). We assessed extrapulmonary infection using ex-vivo cultures of human conjunctiva (n=3) and in-vitro cultures of human colorectal adenocarcinoma cell lines. Innate immune responses and angiotensin-converting enzyme 2 expression were investigated in human alveolar epithelial cells and macrophages. In-vitro studies included the highly pathogenic avian influenza H5N1 virus (H5N1) and mock-infected cells as controls. Findings: SARS-CoV-2 infected ciliated, mucus-secreting, and club cells of bronchial epithelium, type 1 pneumocytes in the lung, and the conjunctival mucosa. In the bronchus, SARS-CoV-2 replication competence was similar to MERS-CoV, and higher than SARS-CoV, but lower than H1N1pdm. In the lung, SARS-CoV-2 replication was similar to SARS-CoV and H1N1pdm, but was lower than MERS-CoV. In conjunctiva, SARS-CoV-2 replication was greater than SARS-CoV. SARS-CoV-2 was a less potent inducer of proinflammatory cytokines than H5N1, H1N1pdm, or MERS-CoV. Interpretation: The conjunctival epithelium and conducting airways appear to be potential portals of infection for SARS-

CoV-2. Both SARS-CoV and SARS-CoV-2 replicated similarly in the alveolar epithelium; SARS-CoV-2 replicated more extensively in the bronchus than SARS-CoV. These findings provide important insights into the transmissibility and pathogenesis of SARS-CoV-2 infection and differences with other respiratory pathogens. Funding: US National Institute of Allergy and Infectious Diseases, University Grants Committee of Hong Kong Special Administrative Region, China; Health and Medical Research Fund, Food and Health Bureau, Government of Hong Kong Special Administrative Region, China.

Publication Type

Journal article.

<427>

Accession Number

20203390033

Author

Nnaji, C. A.; Iwu, C. J.; Ndwandwe, D. E.; Jordan, P.; Wiysonge, C. S.

Title

Convalescent plasma or hyperimmune immunoglobulin for people with COVID-19.

Source

SAMJ - South African Medical Journal; 2020. 110(8):759-760. 8 ref.

Publisher

Health and Medical Publishing Group

Location of Publisher

Cape Town

Country of Publication

South Africa

Abstract

Convalescent plasma is being considered as a potential therapy for COVID-19. We highlight and contextualise the findings of a recent Cochrane rapid review that evaluated the effectiveness and safety of convalescent plasma or hyperimmune immunoglobulin transfusion in the treatment of people with COVID-19. The review found low-certainty evidence of the therapeutic effectiveness and safety of convalescent plasma. As the novel coronavirus continues to spread in South Africa (SA), convalescent plasma may offer a therapeutic ray of hope for mitigating the morbidity and mortality burdens of the disease. Further investigation of the clinical benefits of the therapy in well-designed studies is needed to provide more evidence that will guide COVID-19 treatment decision-making in the SA context.

Publication Type

Journal article.

<428>

Accession Number

20203389151

Author

Bhusal Suzit; Niroula Aliska; Kafle, R.

Title

Quarantine: a period of self-discovery and motivation as medical student.

Source

JNMA, Journal of the Nepal Medical Association; 2020. 58(227):536-539. 15 ref.

Publisher

Nepal Medical Association

Location of Publisher

Kathmandu

Country of Publication

Nepal

Abstract

The ongoing nationwide lockdown due to the global pandemic COVID-19 started from March 24, 2020, in Nepal. Lots of students are in dilemma about how to utilize this time to make it more productive. To live a good life, we must be able to balance our life in general so, we can use this time to discover ourselves. It is equally important to adjust to the global pandemic and help locally to combat the current situation. This difficult time demands resilience. This article focuses on some ideas to discover ourselves and develop resilience within us.

Publication Type

Journal article.

<429>

Accession Number

  20203389139

Author

  Neupane, H. C.; Shrestha, N.; Adhikari, S.; Angadi, S.; Shrestha, B. K.; Gauli, B.

Title

  Knowledge of health care professionals and medical students regarding COVID-19 in a tertiary care hospital in Nepal.

Source

  JNMA, Journal of the Nepal Medical Association; 2020. 58(227):480-486. 20 ref.

Publisher

  Nepal Medical Association

Location of Publisher

  Kathmandu

Country of Publication

  Nepal

Abstract

  Introduction: The lack of knowledge among health care professionals leads to diagnostic delays, further spread of disease, and poor infection control practices. Health care professionals must be updated knowledge regarding COVID-19. This study aims to assess the knowledge of health care professionals regarding COVID -19 in a medical college in Chitwan. Methods: A Knowledge, Attitude and Practice Study was carried out in a tertiary care hospital in Chitwan, Nepal from April 22, 2020, to April 28, 2020. The institutional review committee of Chitwan Medical College provided ethical approval for the research. Data were collected with an online questionnaire using Google forms. The questionnaire was sent out to 724 potential responders who included health care professionals from medical, dental, nursing, and allied health sciences in Chitwan Medical College. A convenient sampling method was used for data collection. Data were analyzed using Statistical Package of Social Sciences. Results: A total of 181 respondents completed the web survey. Overall, a total of 35 (19.3%) respondents were found to have "Good" knowledge; 105 (58%) respondents had "Fair" knowledge and 41 (22.7%) respondents had "Poor" knowledge regarding various aspects of COVID-19. There was no significant difference among the various health professional groups in their knowledge scores under the four knowledge domains. Conclusions: The study of knowledge of health care professionals could act as a reference for the prevention and better management of COVID-19. This study shows that there is a need to implement periodic educational interventions and training programs on infection control practices for COVID-19 across all healthcare professions.

Publication Type

  Journal article.

<430>

Accession Number

  20203386826

Author

  Jiang ZhenHua; Zhang LiJun; Li Ying; Xiao YanQin; Li Chao; Shi Bo; Zhang GuiYing; Xu Bin; Deng Wei; Luo Gang; Luo JiFang; Liu GuoQi

Title

  Epidemic control practices of an otolaryngology-head and neck surgery ward in an area with non-high incidence of COVID-19. [Chinese]

Source

  Journal of Otolaryngology and Ophthalmology of Shandong University; 2020. 34(2):93-98. 15 ref.

Publisher

  Editorial Board of Journal of Shandong University (Science and Technology)

Location of Publisher

  Jinan

Country of Publication

  China

Abstract

  The COVID-19 epidemic is still severe. As a non-high incidence area outside Hubei, the epidemic prevention and control of primary otolaryngology-head and neck surgery has its own characteristics. Daily diagnosis and treatment are performed in the ward to prevent cross infection by medical staff. This article combines our department's experience and the measures taken in this area with respect to ward diagnosis and treatment practices. We hope that our experience will be helpful to our otolaryngology-head and neck surgery colleagues in non-high incidence areas outside Hubei.

Publication Type

  Journal article.

<431>

Accession Number

  20203386825

Author

  Liang HuiMin; Wang LiQin; Wan WenJin; Shi SaiLei; Yuan Jing; Shen YuJie; Zhang JiaCheng; Mao ZeFan; Ni JingZi; Pan YiWen; Chen ZhiBin; Cheng Lei

Title

  COVID-19 prevention and control scheme in an ENT endoscopy unit in China. [Chinese]

Source

  Journal of Otolaryngology and Ophthalmology of Shandong University; 2020. 34(2):88-92. 21 ref.

Publisher

  Editorial Board of Journal of Shandong University (Science and Technology)

Location of Publisher

  Jinan

Country of Publication

  China

Abstract

  Due to the increasing spread of the novel coronavirus disease (COVID-19), prevention and control measures have become increasingly important. As a key location for diagnosing and treating upper airway diseases, strict precautions are required in ear nose and throat (ENT) endoscopy units. Endoscopy workers have a high risk of occupational exposure. Therefore, procedures must be strictly performed according to the prevention and control plan. The prevention and control requirements for COVID-19, as directed by the National Health Commission of China, have been universally deployed in our hospital. We have carefully analyzed the risk factors of infection during the epidemic period and subsequently formulated a prevention and control scheme for COVID-19 based on the infection control measures in the ENT endoscopy unit. These have helped to avoid cross-infection in the hospital and ensure the safety of patients and medical staff during the COVID-19 epidemic.

Publication Type

  Journal article.

<432>

Accession Number

  20203386691

Author

  Yin LiangJun; Zhou ZhenQi; Li Yao; Zhang JianHua

Title

Analysis of the application and construction of food and drug emergency inspection in public health emergencies. [Chinese]

Source

 Journal of Food Safety and Quality; 2020. 11(15):5121-5125. 27 ref.

Publisher

 Journal of Food Safety and Quality

Location of Publisher

 Beijing

Country of Publication

 China

Abstract

 Since the novel Coronavirus outbreak (hereinafter referred to as the "COVID-19 Epidemic") occurred, food and drug inspection and testing institutions have performed their due duties in ensuring the safety of drugs and medical devices needed for epidemic prevention and control, and cracking down on illegal activities such as the manufacture and sale of counterfeit and substandard drugs, medical devices and medical sanitary materials, and give full play to the management advantages and core capabilities in responding to public health emergencies. This paper summarized and considered the emergency inspection measures taken by food and drug inspection institutions in response to this public health emergency, analyzed the shortcomings of emergency testing technology, preparation of reagents and consumables and personnel allocation, the problems existing in the emergency concept, plan, fund and knowledge reserve of the food and drug inspection center at the present stage, and put forward corresponding solutions or policy suggestions. It has conducted useful explorations to improve emergency response capabilities, provided practical experience for effective work in response to public health emergencies in the future, and at the same time provided references for improving the emergency management system of food and drug inspection agencies.

Publication Type

 Journal article.

<433>

Accession Number

 20203386626

Author

 Seraphin, H.; Dosquet, F.

Title

Mountain tourism and second home tourism as post COVID-19 lockdown placebo? (Special Issue: Tourism sustainability in natural, residential and mountain locations: what are the current issues and questions?)

Source

Worldwide Hospitality and Tourism Themes; 2020. 12(4):485-500.

Publisher

Emerald Publishing

Location of Publisher

Bingley

Country of Publication

UK

Abstract

Purpose: The purpose of this study adopts a news media narrative approach to Yield insights on aspects of the COVID-19 impact. Design/methodology/approach: This study adopts a news media narrative approach as this method can yield insights on aspects of the COVID-19 impact. Findings: In the post-COVID-19 lockdown context, second-home tourism and mountain tourism could play the role of placebo. The dual dimension of second-home tourism and mountain tourism reflect the Janus-faced character of the tourism industry. Beyond the fact that this study has highlighted the placebo role that both forms of tourism are probably going to play, it makes the connection between mountain tourism and second-home tourism; highlights the Janus-faced character of both forms of tourism; and highlights the mutation impacts of COVID-19 on tourism trends. Originality/value: COVID-19 is the current concern, and this paper offers a timely perspective on a topic of significant interest.

Publication Type

Journal article.

<434>

Accession Number

20203386619

Author

Bramanti, A.; Ricci, S.

Title

Structure and performance of the Italian alpine "core": a counterfactual analysis. (Special Issue: Tourism sustainability in natural, residential and mountain locations: what are the current issues and questions?)

Source

Worldwide Hospitality and Tourism Themes; 2020. 12(4):387-407.

Publisher

Emerald Publishing

Location of Publisher

Bingley

Country of Publication

UK

Abstract

Purpose: The competitiveness of the Alpine regions is strongly influenced by environmental constraints and its relationship with the urban network in the valley floor, which cannot be one of pure dependence. This study aims to analyse the health of the Italian Alpine economy through the performance of its capital companies, defined as those operating in the strictly mountainous are-as within the territories covered by the Alpine Convention. The authors compare the performance (2012-2018) of the "inner core" firms with a counterfactual sample of companies from neighbouring territories to delineate the strengths and weaknesses of the Alpine enterprises. The paper addresses policymakers and practitioners who will design the future policies for the high lands, exploiting a vast collaborative planning network. Design/methodology/approach: The study analyses two broad strands of literature on territorial competitiveness. It uses the coarsened exact matching techniques for the selection of a counterfactual sample at the enterprise level. The study follows a policy-oriented design, offering answers to future challenges. Findings: The Alpine region has several different local production systems, with a significant level of heterogeneity among firms that differentiate the top 25% from the rest. The counterfactual analysis carried out does not provide clear evidence of significant differences. Instead, it con-firms strong similarities between the Alpine core and the peri-Alpine belt. It is only in terms of employment growth that the core grows less (with a high statistical significance). Finally, the authors introduce the analysis of sustainable value added (SVA) in the core area and use the "tourism chain" to compare different models. The focus here is on two keywords - rarefied and uncontaminated - that enable the transformation of some typical weaknesses of the "minor (or marginal) mountain" into assets for development, provided that place-based and network policies are activated. Research limitations/implications: The study focusses on the Italian Alps and could be extended in the future to the other countries participating in the Alpine Convention. It may also be enriched by qualitative analyses of partnerships and sole proprietorships that are not identified by the balance sheet analysis. Practical implications The study follows a policy-oriented design, offering possible solutions to future challenges. Social implications The study offers some suggestions on the post-COVID-19 phase. The bottom-up, reluctant and community dimension are possible strengths to face the challenges that are opening up. Originality/value: The study is one of the very few to carry out a counterfactual analysis of Alpine enterprises. It offers evidence on the strengths and weaknesses of the productive fabric of the high lands and updates the assessment of the health status of Alpine enterprises to accompany future fact-based policies after the COVID pandemic.

Publication Type

Journal article.

<435>

Accession Number

  20203386618

Author

  Bachimon, P.; Eveno, P.; Espinel, C. G.

Title

  Primary and secondary place of residence, the digital link and the rise of presence. (Special Issue: Tourism sustainability in natural, residential and mountain locations: what are the current issues and questions?)

Source

  Worldwide Hospitality and Tourism Themes; 2020. 12(4):369-385.

Publisher

  Emerald Publishing

Location of Publisher

  Bingley

Country of Publication

  UK

Abstract

  Purpose: This paper aims to explore the gradual commercialisation of second homes in non-urban locations and identified a spectrum that ranges from lending to rentals to home exchange. Design/methodology/approach: This paper is a conceptual one based on a review of literature relating to the acquisiting and use of secondary residences or "second homes". Findings: This paper observes that the secondary residence is often the object of a material over-investment that is symbolic and mental. The owners never quite leave their main place of residence when in the secondary one. The result is not two complementary spaces, but a hybrid space made up of the interlocking of the two. This paper also concludes that digitalization has made it easier to rent a secondary residence for a short period of time, using for instance the Airbnb platform, thus making it more an object of trade than a second home. From a sustainability perspective, the COVID-19 pandemic is likely to bring to the relatively rapid growth of short-term renting a halt. Further, it may encourage owners to be more psychologically and physically invested in their secondary residence, thereby contributing more to the local economy. Originality/value: Few authors have considered the way digital tools can alter the relation with the secondary place of residence.

Publication Type

  Journal article.

<436>

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421

Accession Number

   20203386205

Author

   Nikhil Srivastav; Aditi Priya; Payal Hathi

Title

   Our essential workers need essential care.

Source

   Economic and Political Weekly; 2020. 55(31).

Publisher

   Sameeksha Trust

Location of Publisher

   Mumbai

Country of Publication

   India

Abstract

   Through personal interviews of healthcare workers in India, the state of front-line workers in dealing with Covid-19 in the country is discussed. Lack of personal protective equipment and beds as well as the caste system that operates when it comes to doing cleaning work in the hospitals aggravates the already debilitating condition of healthcare personnel. Despite being the most important stakeholders of health in rural areas, the accredited social health activists are leading a life full of struggles.

Publication Type

   Journal article.

<437>

Accession Number

   20203386204

Author

   Parikshit Goyal

Title

   Wet markets and food laws in India: what is needed to ensure safety and hygiene?

Source

Economic and Political Weekly; 2020. 55(31). 8 ref.

Publisher

Sameeksha Trust

Location of Publisher

Mumbai

Country of Publication

India

Abstract

There is a growing worldwide clarion call for a ban on wet markets and meat consumption, in light of the COVID-19 pandemic. Do wet markets in India pose a risk to food safety? Are our food laws efficient and effectively implemented? The article discusses various laws and regulations, such as Food Safety and Standards Act, 2006, Prevention of Cruelty to Animals (Slaughter House) Rules, 2001 and various local municipal laws that are meant to ensure safety and hygiene of our food and markets.

Publication Type

Journal article.

<438>

Accession Number

20203384863

Author

Tasneem Sajjad Burhani; Naqvi, W. M.

Title

Telehealth - a boon in the time of COVID 19 outbreak.

Source

Journal of Evolution of Medical and Dental Sciences; 2020. 9(29):2081-2084. 9 ref.

Publisher

Akshantala Enterprises

Location of Publisher

Mysore

Country of Publication

India

Abstract

BACKGROUND: Since December 2019, a novel coronavirus, SARS-CoV-2, has been identified in a group of community acquired pneumonia patients in Wuhan, Hubei Province, China.(1) Within one month of its discovery, this novel coronavirus was rapidly spreading in all regions of China and 25 countries in Asia-Pacific region, Europe, and South America, North America. With the COVID 19 pandemic rapidly spreading in India and the world, it is imperative that the rehabilitation team understands virus's epidemiology quickly at the beginning stages of this certainly long global epidemic. Coronavirus is a novel virus, and it has no known immunity for most of the world population. This is more contagious and lethal than influenza viruses, and effective medication and a vaccine are months away. Our strategy against this is primarily social distancing and interventions to manage infections.

Publication Type

Journal article.

<439>

Accession Number

20203384769

Author

Moore, S. A.; Faulkner, G.; Rhodes, R. E.; Brussoni, M.; Chulak-Bozzer, T.; Ferguson, L. J.; Mitra, R.; O'Reilly, N.; Spence, J. C.; Vanderloo, L. M.; Tremblay, M. S.

Title

Impact of the COVID-19 virus outbreak on movement and play behaviours of Canadian children and youth: a national survey.

Source

International Journal of Behavioral Nutrition and Physical Activity; 2020. 17(85):(6 July 2020). 36 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Healthy childhood development is fostered through sufficient physical activity (PA; including time outdoors), limiting sedentary behaviours (SB), and adequate sleep; collectively known as movement behaviours. Though the COVID-19 virus outbreak has changed the daily lives of children and youth, it is

unknown to what extent related restrictions may compromise the ability to play and meet movement behaviour recommendations. This secondary data analysis examined the immediate impacts of COVID-19 restrictions on movement and play behaviours in children and youth. Methods: A national sample of Canadian parents (n = 1472) of children (5-11 years) or youth (12-17 years) (54% girls) completed an online survey that assessed immediate changes in child movement and play behaviours during the COVID-19 outbreak. Behaviours included PA and play, SB, and sleep. Family demographics and parental factors that may influence movement behaviours were assessed. Correlations between behaviours and demographic and parental factors were determined. For open-ended questions, word frequency distributions were reported. Results: Only 4.8% (2.8% girls, 6.5% boys) of children and 0.6% (0.8% girls, 0.5% boys) of youth were meeting combined movement behaviour guidelines during COVID-19 restrictions. Children and youth had lower PA levels, less outside time, higher SB (including leisure screen time), and more sleep during the outbreak. Parental encouragement and support, parental engagement in PA, and family dog ownership were positively associated with healthy movement behaviours. Although families spent less time in PA and more time in SB, several parents reported adopting new hobbies or accessing new resources. Conclusions: This study provides evidence of immediate collateral consequences of the COVID-19 outbreak, demonstrating an adverse impact on the movement and play behaviours of Canadian children and youth. These findings can guide efforts to preserve and promote child health during the COVID-19 outbreak and crisis recovery period, and to inform strategies to mitigate potential harm during future pandemics.

Publication Type

  Journal article.

<440>

Accession Number

  20203384634

Author

  Joseph, A. A.; Fagbami, A. H.

Title

  Coronaviruses: a review of their properties and diversity.

Source

  African Journal of Clinical and Experimental Microbiology; 2020. 21(4):258-271. 82 ref.

Publisher

  African Journal of Clinical and Experimental Microbiology

Location of Publisher

  Kwara State

Country of Publication

  Nigeria

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425

Abstract

 Human coronaviruses, which hitherto were causative agents of mild respiratory diseases of man, have recently become one of the most important groups of pathogens of humans the world over. In less than two decades, three members of the group, severe acute respiratory syndrome (SARS) coronavirus (CoV), Middle East respiratory syndrome (MERS)-CoV, and SARS-COV-2, have emerged causing disease outbreaks that affected millions and claimed the lives of thousands of people. In 2017, another coronavirus, the swine acute diarrhea syndrome (SADS) coronavirus (SADS-CoV) emerged in animals killing over 24,000 piglets in China. Because of the medical and veterinary importance of coronaviruses, we carried out a review of available literature and summarized the current information on their properties and diversity. Coronaviruses are single-stranded RNA viruses with some unique characteristics such as the possession of a very large nucleic acid, high infidelity of the RNA-dependent polymerase, and high rate of mutation and recombination in the genome. They are susceptible to a number of physical agents and several chemical agents used for disinfection procedures in hospitals and laboratories. They exhibit considerable genetic and host diversity, causing diseases of gastrointestinal and respiratory system in a wide range of vertebrate hosts including humans. The high prevalence of coronaviruses in domestic and wild animals, especially bats and birds, and the propensity for their genomes to undergo mutation and recombination may lead to emergence of new coronaviruses that could pose a serious threat to human and animal health.

Publication Type

 Journal article.

<441>

Accession Number

 20203383629

Author

 Burnquist, H. L.; Martins, M. M. V.; Campoli, J. S.; Costa, C. C. da

Title

 Covid-19 and agri foods: recalibrating expectations. [Portuguese]

Source

 Revista de Politica Agricola; 2020. 29(2):88-101. 22 ref.

Publisher

 Ministerio da Agricultura, Pecuaria e Abastecimento

Location of Publisher

 Brasilia

Country of Publication

 Brazil

Abstract

The present opinion article shows that a current coronavirus pandemic can result in a major food crisis - but with different effects according to the level of development of countries - unless, of course, they are measures for emergency economic use and keep demand at an adequate minimum level, especially in low-income economies. Governments must provide minimal resources for economies in poorer countries and populations. Otherwise, a COVID-19 can cause more deaths not only from the transmission, but also from the poverty and hunger of part of the world population. The solutions to the current crisis need to be multilateral, or are being carried out among members of the government in order, on the one hand, to avoid restrictions that further reduce economic activity, and, on the other, to support investments with less use so that they have conditions to maintain fiscal and monetary policies that make the volumes of goods, capital, services and people viable.

Publication Type

Journal article.

<442>

Accession Number

20203383456

Author

Dhot, P. S.; Bhatia, P. K.; Dhot, T.; Trupti Barot

Title

Guidelines on Covid-19 for blood banks.

Source

Journal of Evolution of Medical and Dental Sciences; 2020. 9(27):1958-1963. 10 ref.

Publisher

Akshantala Enterprises

Location of Publisher

Mysore

Country of Publication

India

Abstract

BACKGROUND: General measures for infection prevention and control should be followed by the health care workers as the world struggles to control Covid-19 spread. Medical professionals and researchers continue to fight with the recent global outbreak of Covid-19 and its potential impact on blood transfusion services is real and a cause of concern for transfusion medicine experts. The 2002 - 03 SARS outbreak saw

8098 reported cases resulting in 774 deaths, and a 9% mortality rate. The mortality rates for the same spiked to 50% for individuals over the age of 60. It is accepted that the present Covid-19 outbreak originated in bats. As per the American Association of Blood banks (AABB). There is no reported or suspected case of transfusion transmitted Covid-19. Similarly, in India there is no reported case of transfusion transmission. Social distancing of blood donors is of paramount importance for blood donors while blood collection. Similarly, organizing of blood donation camps by organisers and blood bank staff should ensure the same. Facilities for hand washing for blood donors and use of mask should be ensured. Blood donation by blood donors with travel history should be deferred for 28 days.

Publication Type

  Journal article.

<443>

Accession Number

  20203383411

Author

  Schulz, L.; Hart, C.

Title

  Agriculture under the specter of COVID-19.

Source

  CARD Agricultural Policy Review; 2020. (Spring 2020):4-5.

Publisher

  Center for Agricultural and Rural Development (CARD), Iowa State University

Location of Publisher

  Ames

Country of Publication

  USA

Abstract

  Just like other sectors of the economy, the US agricultural sector has seen an economic downturn due to the COVID-19 pandemic. As various economic sectors resume activity, businesses are adjusting to living with the virus. Agricultural producers and USDA are reevaluating commodity markets and changing outlooks for the rest of the year. Schulz and Hart compare USDA's meat, corn, and soybean projections from January 2020 with the most recent update, released in mid-June 2020, and find that the outlook changes are much more concentrated on prices than production.

Publication Type

Journal article.

<444>

Accession Number

20203383409

Author

Cho SeungJin; Lee JunYeong; Winters, J. V.

Title

Rural areas and Middle America see smaller employment losses from COVID-19.

Source

CARD Agricultural Policy Review; 2020. (Spring 2020):1-1-2, 8, 15.

Publisher

Center for Agricultural and Rural Development (CARD), Iowa State University

Location of Publisher

Ames

Country of Publication

USA

Abstract

The ongoing COVID-19 pandemic is causing massive economic disruptions in the United States. Unemployment has hit record levels as businesses nationwide grapple with both mandatory and voluntary closures and dwindling patronage. However, certain factors, such as population density, have led to some parts of the country seeing higher unemployment levels. Cho, Lee, and Winters examine recent IPUMS data to find differences in unemployment levels between urban and rural areas and across US Bureau of Economic Activity regions and find that rural areas are seeing lower unemployment rates than urban areas, and the Plains region is seeing lower unemployment levels than areas than other USBEA regions.

Publication Type

Journal article.

<445>

Accession Number

  20203382764

Author

  Evenett, S. J.

Title

  Sicken thy neighbour: the initial trade policy response to COVID-19.

Source

  World Economy; 2020. 43(4):828-839. 17 ref.

Publisher

  Wiley

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  Since the onset of the COVID-19 pandemic, many governments have limited exports of medical supplies and medicines. Pre-pandemic barriers to imports of medical supplies and soap remain largely in place. Having characterised trade policy stance towards COVID-19-related goods, this study critically assesses the resort to export curbs and import taxes. Elements of an alternative, positive trade policy contribution to surmount this pandemic are presented.

Publication Type

  Journal article.

<446>

Accession Number

  20203382435

Author

  Greer, S. L.; King, E. J.; Fonseca, E. M. da; Peralta-Santos, A.

Title

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430

The comparative politics of COVID-19: the need to understand government responses.

Source

Global Public Health; 2020. 15(9):1413-1416. 11 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

COVID-19 has created a ramifying public health, economic, and political crisis throughout many countries in the world. While globally the pandemic is at different stages and far from under control in some countries, now is the time for public health researchers and political scientists to start understanding how and why governments responded the way they have, explore how effective these responses appear to be, and what lessons we can draw about effective public health policymaking in preparation of the next wave of COVID-19 or the next infectious disease pandemic. We argue that there will be no way to understand the different responses to COVID-19 and their effects without understanding policy and politics. We propose four key focuses to understand the reasons for COVID-19 responses: social policies to crisis management as well as recovery, regime type (democracy or autocracy), formal political institutions (federalism, presidentialism), and state capacity (control over health care systems and public administration). A research agenda to address the COVID-19 pandemic that takes politics as a serious focus can enable the development of more realistic, sustainable interventions in policies and shape our broader understanding of the politics of public health.

Publication Type

Journal article.

<447>

Accession Number

20203382174

Author

Fan ShengGen; Si Wei; Zhang YuMei

Title

How to prevent a global food and nutrition security crisis under COVID-19?

Source

China Agricultural Economic Review; 2020. 12(3):471-480.

Publisher

  Emerald Publishing

Location of Publisher

  Bingley

Country of Publication

  UK

Abstract

  Purpose: The purposes of this paper are to review the impact on food and nutrition security of several pandemic emergencies and the 2018 food price crisis from a global perspective, examine the Chinese experiences and lessons in ensuring food and nutrition security for its citizen and propose policy actions to prevent a global food and nutrition security crisis. Design/methodology/approach: The authors utilize a noncomprehensive review of peer-reviewed and nonpeer-reviewed literature, as well as a case study approach. Findings: Under the ongoing COVID-19, China's food and nutrition are relatively secure in short run largely due to governmental proactive policies but may face uncertainties in livestock production and imports of soybean in the medium and long terms. Given that the disease has spread to almost all countries in the world, global cooperation and coordination are needed to prevent systemic risks to global food and nutrition security. Practical implications: The review and analysis of this paper will help policymakers in China and other countries to design strategies and actions to prevent food and nutrition security crisis under the ongoing COVID-19 emergency and other similar threats in the future. Originality/value: This paper provides recommendations to prevent food and nutrition security crisis based on data, evidence and case studies.

Publication Type

  Journal article.

<448>

Accession Number

  20203382173

Author

  Hao Na; Wang, H. H.; Zhou QingJie

Title

  Online grocery shopping on stockpile behavior in Covid-19.

Source

  China Agricultural Economic Review; 2020. 12(3):459-470.

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432

Publisher

  Emerald Publishing

Location of Publisher

  Bingley

Country of Publication

  UK

Abstract

  Purpose: This research is to examine the impact of online channels on food stockpile behavior. Design/methodology/approach: In this study, we use bivariate probit models to empirically investigate the impact of online purchasing channels on Chinese urban consumer food hoarding behaviors with random survey samples. Findings: Results show that fresh food e-commerce channels are more likely to be associated with panic stockpile behaviors due to higher likelihood of supply shortages than offline channels with government assistance in logistic management. In contrast, community group buy, another format of e-commerce, appears superior in satisfying the consumer needs and easing the panic buying perception. Practical implications: It suggests that online channels may have diverse impacts on consumers' panic stockpiling behaviors during the extreme situations. Online channels need to develop efficient supply chains to be more resilient to extreme situations and the government shall recognize the increasing share of the online channels together with traditional offline channels when implementing supporting policies. Social implications: With ever increasing share of online channels, it is imperative in terms of policy implications to understand how would online channels affect hoarding behavior. Originality/value: We are the first study in online shopping's impact on food stockpile during pandemics using a random sample. Although food stockpile behavior at times of emergency have been investigated in many literature, there are no empirical studies on the impact of online channels on stockpile behaviors under extreme situations. Unlike disasters that immediately impact every entity in supply chains covering producers, vendors, distribution centers and retailers, pandemics did not render supply chains affected immediately, but rather increase consumers' willingness to shop online to avoid virus. Thus, Covid-19 provides a natural experiment to investigate the online channels' impact on stockpile behavior.

Publication Type

  Journal article.

<449>

Accession Number

  20203382172

Author

  Yu XiaoHua; Liu Chang; Wang HanJie; Feil, J. H.

Title

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433

The impact of COVID-19 on food prices in China: evidence of four major food products from Beijing, Shandong and Hubei provinces.

Source

China Agricultural Economic Review; 2020. 12(3):445-458.

Publisher

Emerald Publishing

Location of Publisher

Bingley

Country of Publication

UK

Abstract

Purpose: The purpose of this paper is to empirically study the impact of the coronavirus disease 2019 (COVID-19) on food prices in China and provides policy implications for crisis management for other countries who are still under the crisis of COVID-19 and for the future in China and beyond as well. Design/methodology/approach: This paper first designed a theoretical model of market equilibrium, which shows that the impact of COVID-19 on food prices is linked to the impact difference on demand and supply in response to the COVID-19 crisis. Then we collected the representative prices data for four major food products (rice, wheat flour, pork and Chinese cabbages) from three provinces (Shandong as a producing base, Beijing as a consumption base and Hubei as the epicenter), and set up an iGARCH model. Findings: (1) No significant impact on rice and wheat flour prices, (2) significantly positive impact on cabbages prices and (3) various impact on pork prices. Note that the outbreak and the severity of COVID-19 have different impacts. The outbreak itself may have a relatively large impact on pork and cabbage prices, which may result from social panic, while the magnitude of the impact of severity is relatively small, and some are negative, perhaps due to more reduced demand during the quarantine. Practical implications: China always puts food security in its prior position of policy agenda and has been preparing for the worst scenario of the food security crisis. In the anti-COVID-19 campaign, China's local governments developed many measures to ensure food provision for each consumer. Hence, the impact of COVID-19 on food prices is minor. However, the outbreak of COVID-19 crisis could cause social panic in some scenarios where consumers may hoard food. Eventually, it may form a vicious cycle to push up food prices. This will be a challenging policy issue in crisis management for almost all governments. Originality/value: This paper provides empirical evidence on the impact of COVID-19 on food prices in China. China has basically contained the COVID-19 in the whole country, and no major food crisis occurred during this process. The results will provide information on crisis management for other countries that are still under the COVID-19 crisis, and for future China and beyond.

Publication Type

Journal article.

<450>

Accession Number

20203382171

Author

Wang YuBin; Wang JingJing; Wang XiaoYang

Title

COVID-19, supply chain disruption and China's hog market: a dynamic analysis.

Source

China Agricultural Economic Review; 2020. 12(3):427-443.

Publisher

Emerald Publishing

Location of Publisher

Bingley

Country of Publication

UK

Abstract

Purpose: The authors explicitly evaluate the dynamic impact of five most concerned supply chain disruption scenarios, including: (1) a short-term shortage and price jump of corn supply in hog farms; (2) a shortage of market hogs to packing facilities; (3) disruption in breeding stock adjustments; (4) disruption in pork import; and (5) a combination of scenario (1)-(4). Design/methodology/approach: The agricultural supply chain experienced tremendous disruptions from the COVID-19 pandemic. To evaluate the impact of disruptions, the authors employ a system dynamics model of hog market to simulate and project the impact of COVID-19 on China hog production and pork consumption. In the model the authors explicitly characterize the cyclical pattern of hog market. The hog cycle model is calibrated using market data from 2018-2019 to represent the market situation during an ongoing African swine fever. Findings: The authors find that the impacts of supply chain disruption are generally short-lived. Market hog transportation disruption has immediate impact on price and consumption. But the impact is smoothed out in six months. Delay in import shipment temporarily reduces consumption and raises hog price. A temporary increase of corn price or delay in breeding stock acquisition does not produce significant impact on national hog market as a whole, despite mass media coverage on certain severely affected regions. Originality/value: This is the first evaluation of short-term supply chain disruption on China hog market from COVID-19. The authors employ a system dynamics model of hog markets with an international trade component. The model allows for monthly time step analysis and projection of the COVID-19 impact over a five-year period. The results and discussion have far-reaching implications for agricultural markets around the world.

Publication Type

Journal article.

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435

<451>

Accession Number

20203382170

Author

Zhang ShuRui; Wang Shuo; Yuan LingRan; Liu XiaoGuang; Gong BinLei

Title

The impact of epidemics on agricultural production and forecast of COVID-19.

Source

China Agricultural Economic Review; 2020. 12(3):409-425.

Publisher

Emerald Publishing

Location of Publisher

Bingley

Country of Publication

UK

Abstract

Purpose: This article investigates the mechanism of the direct and indirect effects of epidemics on agricultural production and projects the impact of COVID-19 on agricultural output in China. Design/methodology/approach: This article first adopts a dynamic panel model and spatial Durbin model to estimate the direct and indirect effects, followed by a growth accounting method to identify the channels by which epidemics affect agriculture; finally, it projects the overall impact of COVID-19 on agriculture. Findings: The incidence rate of epidemics in a province has a negative impact on that province's own agricultural productivity, but the increase in the input factors (land, fertilizer and machinery) can make up for the loss and thus lead to insignificant direct effects. However, this "input-offset-productivity" mechanism fails to radiate to the surrounding provinces and therefore leads to significant indirect/spillover effects. It is projected that COVID-19 will lower China's agricultural growth rate by 0.4%-2.0% in 2020 under different scenarios. Research limitations/implications: It is crucial to establish a timely disclosure and sharing system of epidemic information across provinces, improve the support and resilience of agricultural production in the short run and accelerate the process of agricultural modernization in the long run. Originality/value: Considering the infectivity of epidemics, this article evaluates the mechanism of the direct and indirect effects by introducing a spatial dynamic model into the growth accounting framework. Moreover, besides the impact on input portfolio and productivity, this article also investigates whether epidemics reshape agricultural production processes due to panic effects and control measures.

Publication Type

Journal article.

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436

<452>

Accession Number

20203382169

Author

Zhang YuMei; Diao XinShen; Chen, K. Z.; Robinson, S.; Fan ShengGen

Title

COVID-19 on China's macroeconomy and agri-food system - an economy-wide multiplier model analysis.

Source

China Agricultural Economic Review; 2020. 12(3):387-407.

Publisher

Emerald Publishing

Location of Publisher

Bingley

Country of Publication

UK

Abstract

Purpose: The purpose of this study is to assess the potential economic cost of the COVID-19 pandemic on China's macroeconomy and agri-food system and provide policy recommendations to stimulate economic growth and agri-food system development. Design/methodology/approach: An economy-wide multisector multiplier model built on China's most recent social accounting matrix (SAM) for 2017 with 149 economic sectors is used to assess the impact of COVID-19 on China's macroeconomy and agri-food system. SAM multiplier analysis focuses on supply chain linkages and captures the complexity of an interconnected economy. Findings: The paper finds that both the macroeconomy and agri-food systems are hit significantly by COVID-19. There are three main findings. First, affected by COVID-19, GDP decreased by 6.8% in the first quarter of 2020 compared with that in 2019, while the economic loss of the agri-food system is equivalent to 7% of its value added (about RMB 0.26 trillion). More than 46m agri-food system workers (about 27% of total employment) lost their jobs to COVID-19 in the lockdown phase. The COVID-19 affects the employment of unskilled labor more than that of skilled labor. Second, when the economy starts to recover during the second and third quarters, the growth rate in the value added of the agri-food system turns positive but still modest. Many jobs resume during the period, but the level of agri-food system employment continues to be lower than the base. The agri-food system employment recovery is slower than that of other sectors largely due to the sluggish recovery of restaurants. Agri-food system employment drops by 8.6m, which accounts for about 33% of the total jobs lost. Third, although the domestic economy is expected to be normal in the fourth quarter, external demand still faces uncertainties due to the global pandemic. The agri-food system is projected to grow by 1.1% annually in 2020 with resuming export demand, while only by 0.4% without resuming export demand. These rates are much lower than an annual growth rate of 4.3% for the agri-food system in 2019. The results also show that, without resuming export demand, China's total economy will grow less than 1% in 2020, while, with export demand resumed, the growth rate rises to 1.7%. These rates are much lower than an annual GDP growth rate of 6.1% in 2019. Practical implications: The results show that continuously reducing economic dependency on exports and stimulating domestic demand are key areas that require policy support. The agri-food system can play an important role in supporting broad economic growth and job creation as SMEs are major part of the AFS.

Job creation requires policies to promote innovation by entrepreneurs who run numerous SMEs in China. Originality/value: This paper represents the first systematic study assessing the impact of COVID-19 on China's agri-food system in terms of value added and employment. The assessment considers three phases of lockdown, recovery and normal phases in order to capture the full potential cost of COVID-19.

Publication Type

Journal article.

<453>

Accession Number

20203382051

Author

Ray, U. K.

Title

Why Bihar's record in handling COVID-19 is dismal.

Source

Economic and Political Weekly; 2020. 55(32/33):12-15.

Publisher

Sameeksha Trust

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Among the states, Bihar faces the greatest challenge, particularly in terms of the reverse migration occurring from the lockdown following the COVID-19 pandemic. Considering the poor state of its health services infrastructure, the state government should have taken urgent and appropriate measures to screen, test and quarantine the returning migrant workers. This article takes a look at the trajectory of the government's response to the health crisis.

Publication Type

Journal article.

<454>

Accession Number

  20203382049

Author

  Anjali, K. K.; Shubha Ranganathan

Title

  Locked in: what the COVID-19 pandemic spells for survivors of domestic violence.

Source

  Economic and Political Weekly; 2020. 55(32/33). 15 ref.

Publisher

  Sameeksha Trust

Location of Publisher

  Mumbai

Country of Publication

  India

Abstract

  The authors reflect on how COVID-19 has affected the issue of domestic violence against women in Kerala, and argue that it is imperative to include domestic violence-related services as part of the gamut of "essential services" to mitigate the adverse effects of the pandemic and its responses.

Publication Type

  Journal article.

<455>

Accession Number

  20203382011

Author

  Cristian, M. G.

Title

An overview on tourism's contribution to GDP.

Source

Revista Economica; 2020. 72(2):19-26. 11 ref.

Publisher

Lucian Blaga University of Sibiu

Location of Publisher

Sibiu

Country of Publication

Romania

Abstract

Tourism has been developed into the fourth industry in sense of contribution to GDP worldwide. This paper analyses the role of tourism industry to gross domestic product (GDP) of some European countries like as Germany, Italy, France, Spain and Romania, but also countries like USA, China, Japan, Great Britain, Mexico. The objective of this research was to determine the top five tourism markets in 2019 according to annual report of the World Travel and Tourism Council (WTTC, 2020). Romania's tourism industry had a direct role of 3.16 billion USD to the Gross Domestic Product (GDP) in 2018, a little more higher than in 2017, placing Romania on the 64th place in the world. The analysis the World Tourism and Travel Council (WTTC, 2020) estimates an economic impact of the COVID-19 epidemic on tourism and travel 5 times greater than that of the global financial crisis.

Publication Type

Journal article.

<456>

Accession Number

20203381998

Author

Sofo, A.; Sofo, A.

Title

Converting home spaces into food gardens at the time of Covid-19 quarantine: all the benefits of plants in this difficult and unprecedented period.

Source

Human Ecology; 2020. 48(2):131-139. 17 ref.

Publisher

Springer Science + Business Media, Inc (Springer)

Location of Publisher

New York

Country of Publication

USA

Abstract

People are facing uncertain and difficult times in the face of the Covid-19 pandemic. The benefits of plants (psychological, health, economic, productive) in this period of forced isolation can be of key importance. If many of us have to self-isolate in urban or suburban environments, we need something to do to keep our bodies and minds active and fed. In such a challenging scenario, a vegetable garden in home spaces can bring recreational, health, economic and environmental benefits. Regardless of the Covid-19 pandemic, there is untapped potential for this kind of garden to impact environmental outcomes, public awareness, and market trends. Home vegetable gardens could provide a small-scale approach to the sustainable use of natural resources, leading towards self-sufficiency, self-regulation, sustainability, and environmental protection.

Publication Type

Journal article.

<457>

Accession Number

20203381418

Author

Jiang HaiFeng; Su Hang; Zhang ChangChun; Liu XueBing; Li RuiHua; Zhong Na; Zhao Min

Title

Challenges of methadone maintenance treatment during the COVID-19 epidemic in China: policy and service recommendations.

Source

European Neuropsychopharmacology; 2020. 35:136-137. 5 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

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Country of Publication

UK

Abstract

The aim of the article was to discuss challenges regarding methadone maintenance treatment during the COVID-19 pandemic in China, as well as discussing policies and service recommendations.

Publication Type

Journal article.

<458>

Accession Number

20203381186

Author

Ragan, I.; Hartson, L.; Pidcoke, H.; Bowen, R.; Goodrich, R.

Title

Pathogen reduction of SARS-CoV-2 virus in plasma and whole blood using riboflavin and UV light.

Source

PLoS ONE; 2020. 15(5). 21 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Background: Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) has recently been identified as the causative agent for Coronavirus Disease 2019 (COVID-19). The ability of this agent to be transmitted by blood transfusion has not been documented, although viral RNA has been detected in serum. Exposure to treatment with riboflavin and ultraviolet light (R + UV) reduces blood-borne pathogens while maintaining blood product quality. Here, we report on the efficacy of R + UV in reducing SARS-CoV-2 infectivity when tested in human plasma and whole blood products. Study design and methods: SARS-CoV-2 (isolate USA-WA1/2020) was used to inoculate plasma and whole blood units that then underwent treatment with riboflavin and UV light (Mirasol Pathogen Reduction Technology System, Terumo BCT, Lakewood, CO). The infectious titers of SARS-CoV-2 in the samples before and after R + UV treatment were determined by

plaque assay on Vero E6 cells. Each plasma pool (n = 9) underwent R + UV treatment performed in triplicate using individual units of plasma and then repeated using individual whole blood donations (n = 3). Results: Riboflavin and UV light reduced the infectious titer of SARS-CoV-2 below the limit of detection for plasma products at 60-100% of the recommended energy dose. At the UV light dose recommended by the manufacturer, the mean log reductions in the viral titers were 4.79 +or- 0.15 Logs in plasma and 3.30 +or- 0.26 in whole blood units. Conclusion: Riboflavin and UV light effectively reduced the titer of SARS-CoV-2 to the limit of detection in human plasma and by 3.30 +or- 0.26 on average in whole blood. Two clades of SARS-CoV-2 have been described and questions remain about whether exposure to one strain confers strong immunity to the other. Pathogen-reduced blood products may be a safer option for critically ill patients with COVID-19, particularly those in high-risk categories.

Publication Type

  Journal article.

<459>

Accession Number

  20203381178

Author

  Mohit Varshney; Parel, J. T.; Neeraj Raizada; Sarin, S. K.

Title

  Initial psychological impact of COVID-19 and its correlates in Indian community: an online (FEEL-COVID) survey.

Source

  PLoS ONE; 2020. 15(5). 32 ref.

Publisher

  Public Library of Sciences (PLoS)

Location of Publisher

  San Francisco

Country of Publication

  USA

Abstract

  Background: The pandemic of Corona Virus (COVID-19) hit India recently; and the associated uncertainty is increasingly testing psychological resilience of the masses. When the global focus has mostly been on testing, finding a cure and preventing transmission; people are going through a myriad of psychological problems in adjusting to the current lifestyles and fear of the disease. Since there is a severe dearth of

researches on this issue, we decided to conduct an online survey to evaluate its psychological impact. Methods: From 26th to 29th March an online survey (FEEL-COVID) was conducted using principles of snowballing, and by invitation through text messages to participate. The survey collected data on socio-demographic and clinical variables related to COVID-19 (based on the current knowledge); along with measuring psychological impact with the help of Impact of Event-revised (IES-R) scale. Results: There were a total of 1106 responses from around 64 cities in the country. Out of these 453 responses had at least one item missing; and were excluded from the analysis. The mean age of the respondents was around 41 years with a male female ratio of 3:1 and around 22% respondents were health care professionals. Overall approximately one third of respondents had significant psychological impact (IES-R score > 24). Higher psychological impact was predicted with younger age, female gender and comorbid physical illness. Presence of physical symptoms and contact history predicted higher psychological impact, but did not reach statistical significance. Conclusion: During the initial stages of COVID-19 in India, almost one-third respondents had a significant psychological impact. This indicates a need for more systematic and longitudinal assessment of psychological needs of the population, which can help the government in formulating holistic interventions for affected individuals.

Publication Type

Journal article.

<460>

Accession Number

20203381174

Author

Hou TianYa; Zhang TaiQuan; Cai WenPeng; Song XiangRui; Chen AiBin; Deng GuangHui; Ni ChunYan

Title

Social support and mental health among health care workers during Coronavirus Disease 2019 outbreak: a moderated mediation model.

Source

PLoS ONE; 2020. 15(5). many ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Purposes: During the outbreak of Coronavirus Disease 2019 (COVID-19) all over the world, the mental health conditions of health care workers are of great importance to ensure the efficiency of rescue operations. The current study examined the effect of social support on mental health of health care workers and its underlying mechanisms regarding the mediating role of resilience and moderating role of age during the epidemic. Methods: Social Support Rating Scale (SSRS), Connor-Davidson Resilience scale (CD-RISC) and Symptom Checklist 90 (SCL-90) were administrated among 1472 health care workers from Jiangsu Province, China during the peak period of COVID-19 outbreak. Structural equation modeling (SEM) was used to examine the mediation effect of resilience on the relation between social support and mental health, whereas moderated mediation analysis was performed by Hayes PROCESS macro. Results: The findings showed that resilience could partially mediate the effect of social support on mental health among health care workers. Age group moderated the indirect relationship between social support and mental health via resilience. Specifically, compared with younger health care workers, the association between resilience and mental health would be attenuated in the middle-aged workers. Conclusions: The results add knowledge to previous literature by uncovering the underlying mechanisms between social support and mental health. The present study has profound implications for mental health services for health care workers during the peak period of COVID-19.

Publication Type

Journal article.

<461>

Accession Number

20203381159

Author

Yohannes Kebede; Yimenu Yitayih; Zewdie Birhanu; Seblework Mekonen; Argaw Ambelu

Title

Knowledge, perceptions and preventive practices towards COVID-19 early in the outbreak among Jimma University medical center visitors, Southwest Ethiopia.

Source

PLoS ONE; 2020. 15(5). 25 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

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Abstract

Background: Novel-coronavirus disease-2019 (COVID-19) is currently a pandemic and public health emergency of international concern, as avowed by the World Health Organization (WHO). Ethiopia has become one of the affected countries as of March 15, 2020. Background: This study aimed to assess the knowledge, perceptions, and practices among the Jimma University medical center (JUMC) visitors in Jimma town. Methods: A cross-sectional study was conducted on 247 sampled visitors, from 20-24 March 2020. Consecutive sampling was used to recruit the participants. The study tools were adapted from WHO resources. The data were analyzed using the Statistical Package for Social Sciences (SPSS) version 20.0. Descriptive statistics were used to describe the status of knowledge, perception, and practices. Logistic regression was executed to assess the predictors of dominant preventive practices. Results: Of the 247 respondents, 205 (83.0%) knew the main clinical symptoms of COVID-19. 72.0% knew that older people who have chronic illnesses are at high risk of developing a severe form of COVID-19. About 95.1% knew that the COVID-19 virus spreads via respiratory droplets of infected people, while 77 (31.2%) of the respondents knew about the possibility of asymptomatic transmission. Only 15 (6.1%) knew that children and young adults had to involve preventive measures. Overall, 41.3% of the visitors had high knowledge. The majority, 170(68.8%), felt self-efficacious to controlling COVID-19. 207(83.3%) believed that COVID-19 is a stigmatized disease. Frequent hand washing (77.3%) and avoidance of shaking hands (53.8%) were the dominant practices. Knowledge status and self-efficacy (positively), older age, and unemployment (negatively) predicted hand washing and avoidance of handshaking. Conclusions: The status of knowledge and desirable practices were not sufficient enough to combat this rapidly spreading virus. COVID-19 risk communication and public education efforts should focus on building an appropriate level of knowledge while enhancing the adoption of recommended self-care practices with special emphasis on high-risk audience segments.

Publication Type

Journal article.

<462>

Accession Number

20203381142

Author

Arina Anis Azlan; Mohammad Rezal Hamzah; Tham Jen Sern; Suffian Hadi Ayub; Emma Mohamad

Title

Public knowledge, attitudes and practices towards COVID-19: a cross-sectional study in Malaysia.

Source

PLoS ONE; 2020. 15(5). 32 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

In an effort to mitigate the outbreak of COVID-19, many countries have imposed drastic lockdown, movement control or shelter in place orders on their residents. The effectiveness of these mitigation measures is highly dependent on cooperation and compliance of all members of society. The knowledge, attitudes and practices people hold toward the disease play an integral role in determining a society's readiness to accept behavioural change measures from health authorities. The aim of this study was to determine the knowledge levels, attitudes and practices toward COVID-19 among the Malaysian public. A cross-sectional online survey of 4,850 Malaysian residents was conducted between 27th March and 3rd April 2020. The survey instrument consisted of demographic characteristics, 13 items on knowledge, 3 items on attitudes and 3 items on practices, modified from a previously published questionnaire on COVID-19. Descriptive statistics, chi-square tests, t-tests and one-way analysis of variance (ANOVA) were conducted. The overall correct rate of the knowledge questionnaire was 80.5%. Most participants held positive attitudes toward the successful control of COVID-19 (83.1%), the ability of Malaysia to conquer the disease (95.9%) and the way the Malaysian government was handling the crisis (89.9%). Most participants were also taking precautions such as avoiding crowds (83.4%) and practising proper hand hygiene (87.8%) in the week before the movement control order started. However, the wearing of face masks was less common (51.2%). This survey is among the first to assess knowledge, attitudes and practice in response to the COVID-19 pandemic in Malaysia. The results highlight the importance of consistent messaging from health authorities and the government as well as the need for tailored health education programs to improve levels of knowledge, attitudes and practices.

Publication Type

Journal article.

<463>

Accession Number

20203381074

Author

Wang HuiYao; Xia Qian; Xiong ZhenZhen; Li ZhiXiong; Xiang WeiYi; Yuan YiWen; Liu YaYa; Li Zhe

Title

The psychological distress and coping styles in the early stages of the 2019 coronavirus disease (COVID-19) epidemic in the general mainland Chinese population: a web-based survey.

Source

PLoS ONE; 2020. 15(5). 33 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

As the epidemic outbreak of 2019 coronavirus disease (COVID-19), general population may experience psychological distress. Evidence has suggested that negative coping styles may be related to subsequent mental illness. Therefore, we investigate the general population's psychological distress and coping styles in the early stages of the COVID-19 outbreak. A cross-sectional battery of surveys was conducted from February 1-4, 2020. The Kessler 6 psychological distress scale, the simplified coping style questionnaire and a general information questionnaire were administered on-line to a convenience sample of 1599 in China. A multiple linear regression analysis was performed to identify the influence factors of psychological distress. General population's psychological distress were significant differences based on age, marriage, epidemic contact characteristics, concern with media reports, and perceived impacts of the epidemic outbreak (all $p < 0.001$) except gender ($p = 0.316$). The population with younger age ($F = 102.04$), unmarried ($t = 15.28$), with history of visiting Wuhan in the past month ($t = -40.86$), with history of epidemics occurring in the community ($t = -10.25$), more concern with media reports ($F = 21.84$), perceived more impacts of the epidemic outbreak (changes over living situations, $F = 331.71$; emotional control, $F = 1863.07$; epidemic-related dreams, $F = 1642.78$) and negative coping style ($t = 37.41$) had higher level of psychological distress. Multivariate analysis found that marriage, epidemic contact characteristics, perceived impacts of the epidemic and coping style were the influence factors of psychological distress (all $p < 0.001$). Epidemic of COVID-19 caused high level of psychological distress. The general mainland Chinese population with unmarried, history of visiting Wuhan in the past month, perceived more impacts of the epidemic and negative coping style had higher level of psychological distress in the early stages of COVID-19 epidemic. Psychological interventions should be implemented early, especially for those general population with such characteristics.

Publication Type

Journal article.

<464>

Accession Number

20203381018

Author

Gao, W.; Sanna, M.; Tsai MinKuang; Wen ChiPang

Title

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448

Geo-temporal distribution of 1,688 Chinese healthcare workers infected with COVID-19 in severe conditions-a secondary data analysis.

Source

PLoS ONE; 2020. 15(5). 12 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Introduction: The COVID-19 outbreak is posing an unprecedented challenge to healthcare workers. This study analyzes the geo-temporal effects on disease severity for the 1,688 Chinese healthcare workers infected with COVID-19. Methods: Using the descriptive results recently reported by the Chinese CDC, we compare the percentage of infected healthcare workers in severe conditions over time and across three areas in China, and the fatality rate of infected healthcare workers with all the infected individuals in China aged 22-59 years. Results: Among the infected Chinese healthcare workers whose symptoms onset appeared during the same ten-day period, the percentage of those in severe conditions decreased significantly from 19.7% (Jan 11-20) to 14.4% (Jan 21-31) to 8.7% (Feb 1-11). Across the country, there was also a significant difference in the disease severity, with Wuhan being the most severe (17.3%), followed by Hubei Province (10.2%), and the rest of China (6.6%). The case fatality rate for the 1,688 infected Chinese healthcare workers was significantly lower than that for the 29,798 infected patients aged 20-59 years-0.3% (5/1,688) vs. 0.65% (193/29,798), respectively. Conclusion: The disease severity among infected healthcare workers improved considerably over a short period of time in China. The more severe conditions in Wuhan compared to the rest of the country may be attributable to the draconian lockdown. The clinical outcomes of infected Chinese healthcare workers may represent a more accurate estimation of the severity of COVID-19 for those who have access to quality healthcare.

Publication Type

Journal article.

<465>

Accession Number

20203380141

Author

Brenner, H.; Holleczek, B.; Schottker, B.

Title

Vitamin D insufficiency and deficiency and mortality from respiratory diseases in a cohort of older adults: potential for limiting the death toll during and beyond the COVID-19 pandemic?

Source

Nutrients; 2020. 12(8). 31 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 pandemic goes along with increased mortality from acute respiratory disease. It has been suggested that vitamin D3 supplementation might help to reduce respiratory disease mortality. We assessed the prevalence of vitamin D insufficiency and deficiency, defined by 25-hydroxyvitamin D (25(OH)D) blood levels of 30-50 and <30 nmol/L, respectively, and their association with mortality from respiratory diseases during 15 years of follow-up in a cohort of 9548 adults aged 50-75 years from Saarland, Germany. Vitamin D insufficiency and deficiency were common (44% and 15%, respectively). Compared to those with sufficient vitamin D status, participants with vitamin D insufficiency and deficiency had strongly increased respiratory mortality, with adjusted hazard ratios (95% confidence intervals) of 2.1 (1.3-3.2) and 3.0 (1.8-5.2) overall, 4.3 (1.3-14.4) and 8.5 (2.4-30.1) among women, and 1.9 (1.1-3.2) and 2.3 (1.1-4.4) among men. Overall, 41% (95% confidence interval: 20-58%) of respiratory disease mortality was statistically attributable to vitamin D insufficiency or deficiency. Vitamin D insufficiency and deficiency are common and account for a large proportion of respiratory disease mortality in older adults, supporting the hypothesis that vitamin D3 supplementation could be helpful to limit the burden of the COVID-19 pandemic, particularly among women.

Publication Type

Journal article.

<466>

Accession Number

20203380016

Author

Alexander, J.; Tinkov, A.; Strand, T. A.; Alehagen, U.; Skalny, A.; Aaseth, J.

Title

Early nutritional interventions with zinc, selenium and vitamin D for raising anti-viral resistance against progressive COVID-19.

Source

Nutrients; 2020. 12(8). 105 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Objectives: The novel coronavirus infection (COVID-19) conveys a serious threat globally to health and economy because of a lack of vaccines and specific treatments. A common factor for conditions that predispose for serious progress is a low-grade inflammation, e.g., as seen in metabolic syndrome, diabetes, and heart failure, to which micronutrient deficiencies may contribute. The aim of the present article was to explore the usefulness of early micronutrient intervention, with focus on zinc, selenium, and vitamin D, to relieve escalation of COVID-19. Methods: We conducted an online search for articles published in the period 2010-2020 on zinc, selenium, and vitamin D, and corona and related virus infections. Results: There were a few studies providing direct evidence on associations between zinc, selenium, and vitamin D, and COVID-19. Adequate supply of zinc, selenium, and vitamin D is essential for resistance to other viral infections, immune function, and reduced inflammation. Hence, it is suggested that nutrition intervention securing an adequate status might protect against the novel coronavirus SARS-CoV-2 (Severe Acute Respiratory Syndrome - coronavirus-2) and mitigate the course of COVID-19. Conclusion: We recommended initiation of adequate supplementation in high-risk areas and/or soon after the time of suspected infection with SARS-CoV-2. Subjects in high-risk groups should have high priority as regards this nutritive adjuvant therapy, which should be started prior to administration of specific and supportive medical measures.

Publication Type

Journal article.

<467>

Accession Number

20203380010

Author

Carroll, N.; Sadowski, A.; Laila, A.; Hruska, V.; Nixon, M.; Ma, D. W. L.; Haines, J.

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451

Title

  The impact of COVID-19 on health behavior, stress, financial and food security among middle to high income Canadian families with young children.

Source

  Nutrients; 2020. 12(8). 36 ref.

Publisher

  MDPI AG

Location of Publisher

  Basel

Country of Publication

  Switzerland

Abstract

  The COVID-19 pandemic has disrupted many aspects of daily life. The purpose of this study was to identify how health behaviors, level of stress, financial and food security have been impacted by the pandemic among Canadian families with young children. Parents (mothers, n = 235 and fathers, n = 126) from 254 families participating in an ongoing study completed an online survey that included close and open-ended questions. Descriptive statistics were used to summarize the quantitative data and qualitative responses were analyzed using thematic analysis. More than half of our sample reported that their eating and meal routines have changed since COVID-19; most commonly reported changes were eating more snack foods and spending more time cooking. Screen time increased among 74% of mothers, 61% of fathers, and 87% of children and physical activity decreased among 59% of mothers, 52% of fathers, and 52% of children. Key factors influencing family stress include balancing work with childcare/homeschooling and financial instability. While some unhealthful behaviors appeared to have been exacerbated, other more healthful behaviors also emerged since COVID-19. Research is needed to determine the longer-term impact of the pandemic on behaviors and to identify effective strategies to support families in the post-COVID-19 context.

Publication Type

  Journal article.

<468>

Accession Number

  20203379988

Author

  Ruiz-Roso, M. B.; Knott-Torcal, C.; Matilla-Escalante, D. C.; Garcimartin, A.; Sampedro-Nunez, M. A.; Davalos, A.; Marazuela, M.

Title

COVID-19 lockdown and changes of the dietary pattern and physical activity habits in a cohort of patients with type 2 diabetes mellitus.

Source

Nutrients; 2020. 12(8). 39 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 lockdown clearly affected the lifestyle of the population and entailed changes in their daily habits, which involved potential health consequences, especially on patients with Type 2 Diabetes Mellitus (T2DM). We aimed to examine the impact of the lockdown caused by COVID-19 pandemic on both nutrition and exercise habits, as well as the psychological effects in patients with T2DM, compared to their usual diet and physical activity level previous to the complete home confinement. We also intended to analyse any potential variables that may have influenced these lifestyle modifications. A Food Frequency Questionnaire (FFQ), Physical Activity Questionnaire (IPAQ), Food Craving Questionnaire-State (FCQ-S) and Food Craving Questionnaire-Trait (FCQ-T) were used. Our results showed an increase in vegetable, sugary food and snack consumption. An association between levels of foods cravings and snack consumption was also found. Data also showed a high percentage of physical inactivity before the COVID-19 lockdown, which was exacerbated during the home confinement. These findings emphasise the great importance to do further research with larger study samples to analyse and explore dietary habits and to develop public health policies to promote a healthy lifestyle in terms of diet and physical activity in these patients, especially after this strict period of lockdown.

Publication Type

Journal article.

<469>

Accession Number

20203379986

Author

Gornicka, M.; Drywien, M. E.; Zielinska, M. A.; Hamulka, J.

Title

Dietary and lifestyle changes during COVID-19 and the subsequent lockdowns among Polish adults: a cross-sectional online survey PLifeCOVID-19 study.

Source

Nutrients; 2020. 12(8). 48 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The present study aimed to identify patterns of dietary changes during the COVID-19 pandemic and their associations with sociodemographics, body mass index (BMI) before pandemic, and lifestyle changes in Polish adults and to examine the effects of lockdowns on dietary-lifestyle changes. This study used a cross-sectional online survey to collect data. The k-means algorithm was used to determine of patterns of dietary changes, and logistic regression analyses were performed. During the study period, 43% of respondents decreased physical activity (PA), 49%-increased screen time, and 34%-increased food consumption. Among the three dietary changes patterns, two opposite patterns were found: Prohealthy (28% participants) and Unhealthy (19% participants). The adherence to the Prohealthy pattern was negatively associated with age, but positively with being overweight (aOR 1.31) or obese before pandemic (aOR 1.64). Residing in a macroeconomic region with GDP > 100% decreased adherence to the Prohealthy (aOR 0.73) but increased adherence to the Unhealthy pattern (aOR 1.47). Adults over 40 years old, those living with children, unemployed, those living in a region with a higher GDP, and those not consuming homemade meals could be more exposed to unhealthy behaviors. From a public health perspective, enhancing the message "to be active" during the compulsory isolation period should be prioritized.

Publication Type

Journal article.

<470>

Accession Number

20203379913

Author

Zhang Jian; Zhang YuMei; Huo ShanShan; Ma YiDi; Ke YaLei; Wang PeiYu; Zhao Ai

Title

Emotional eating in pregnant women during the COVID-19 pandemic and its association with dietary intake and gestational weight gain.

Source

Nutrients; 2020. 12(8). 34 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Reproductive health is a significant public health issue during pandemics; however, the impacts of the novel 2019 coronavirus disease (COVID-19) on noninfected pregnant women are still unknown. This study intends (1) to examine whether emotional eating (EE) occurred during the pandemic triggered by disease concerns and (2) to explore the associations among EE, dietary changes, and gestational weight gain (GWG). Based on an online survey, 640 new mothers who experienced the lockdown in their third trimester were recruited from seven provinces in China. EE was evaluated with the Chinese version of the Dutch Eating Behavior Questionnaire, EE domain. A self-designed e-questionnaire was used to collect the data of participants on the sociodemographic characteristics, concerns about the COVID-19 pandemic, maternity information, physical activities, and dietary changes during lockdown. The results show that the average EE score was 26.5 +or- 8.3, and women living in a severely affected area, who are very worried about the pandemic and who had less physical activity had a higher tendency of EE. Although there is a dietary pattern changed during pandemic, the average GWG in the studied group was in the normal range. However, a higher EE score was associated with a significant excess of GWG in women not from Wuhan (EE score 33-65 vs. 13-22: adjusted Odd Ratio (OR), 95% Confidence Interval (CI) = 1.90, 1.08-3.32). The sensitivity analysis that additionally adjusted for the pregestational body mass index and gestational metabolic disease was consistent with this result. The mediation model was also examined and showed that, after adjusting for living area and exercise, EE was associated with significantly increased consumption of cereals (EE score 33-65 vs. 13-22: adjusted OR, 95% CI = 2.22, 1.29-3.82) and oil (EE score 33-65 vs. 13-22: adjusted OR, 95% CI = 3.03, 1.06-8.69) but decreased consumption of fish and seafood (EE score 33-65 vs. 13-22: adjusted OR, 95% CI = 1.88, 1.14-3.11; 23-32 vs. 13-22: adjusted OR, 95% CI = 1.79, 1.20-2.66). In conclusion, this study indicated that EE occurred in a proportional number of pregnant women during the COVID-19 pandemic and is associated with excess GWG mediated by increased intake of certain foods. The findings suggest the need for psychosocial and nutritional education and interventions during pregnancy checkups. Further studies are needed to determine modifiable psychosocial predictors and potential nutritional concerns in pregnant women during disease outbreaks.

Publication Type

Journal article.

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<471>

Accession Number

 20203379752

Author

 Vidaurreta, I.; Fe, C. de la; Orengo, J.; Gomez-Martin, A.; Benito, B.

Title

 Short-term economic impact of COVID-19 on Spanish small ruminant flocks.

Source

 Animals; 2020. 10(8). 31 ref.

Publisher

 MDPI AG

Location of Publisher

 Basel

Country of Publication

 Switzerland

Abstract

  The human pandemic COVID-19 caused by the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) started in China in 2019 and has rapidly spread around the world, leading to extreme control measures such as population confinement and industry activity closure. Although small ruminants are not sanitary affected by this virus, the short-term economic impact derived by COVID-19 on Spanish flocks is estimated in this study, using data provided by producers and two major slaughterhouses. Milk prices of dairy goat flocks suffered a substantial drop in April 2020, close to 4.5 cts EUR/liter compared to the previous month. In contrast, the monthly milk prices in sheep remained almost stable during this period, and even increases of more than EUR 6 cts were reported in comparison with the previous year. Nevertheless, economical differences are reported by areas where producers could receive a higher income, close to EUR 0.3 per liter of milk. Global data provided by feedlots affecting 2750 Spanish flocks evidenced a lamb price drop ranging from 16.8% to 26.9% after the pandemic arrival; in line with the data directly reported by a limited sample of producers (ranging from 11.0% to 23.7%). The goat kid meat market also suffered a reduction in prices per kg, near 12.5%; although, for some flocks, losses reached up to 40%. In the same line, 2 slaughterhouses reported a sudden sacrifice drop around 27% for lambs and goat kids sacrifices in April, in contrast with the usual sacrifice figures from the beginning of 2020. Moreover, our study showed a temporary and unexpected retention of lambs and goat kids at farms due to a reduction in animals slaughtered during this period. In conclusion, data evidenced a considerable negative economic impact on Spanish small ruminant flocks, throughout the first 60 days after COVID-19's pandemic declaration. Further studies are needed to evaluate the long-term economic consequences, in order to establish contingency plans and avoid the collapse of small ruminant industries when a crisis of these characteristics occurs.

Publication Type

 Journal article.

<472>

Accession Number

  20203379035

Author

  Anastassopoulou, C.; Russo, L.; Tsakris, A.; Siettos, C.

Title

  Data-based analysis, modelling and forecasting of the COVID-19 outbreak.

Source

  PLoS ONE; 2020. 15(3). 22 ref.

Publisher

  Public Library of Sciences (PLoS)

Location of Publisher

  San Francisco

Country of Publication

  USA

Abstract

  Since the first suspected case of coronavirus disease-2019 (COVID-19) on December 1st, 2019, in Wuhan, Hubei Province, China, a total of 40,235 confirmed cases and 909 deaths have been reported in China up to February 10, 2020, evoking fear locally and internationally. Here, based on the publicly available epidemiological data for Hubei, China from January 11 to February 10, 2020, we provide estimates of the main epidemiological parameters. In particular, we provide an estimation of the case fatality and case recovery ratios, along with their 90% confidence intervals as the outbreak evolves. On the basis of a Susceptible-Infectious-Recovered-Dead (SIDR) model, we provide estimations of the basic reproduction number (R0), and the per day infection mortality and recovery rates. By calibrating the parameters of the SIRD model to the reported data, we also attempt to forecast the evolution of the outbreak at the epicenter three weeks ahead, i.e. until February 29. As the number of infected individuals, especially of those with asymptomatic or mild courses, is suspected to be much higher than the official numbers, which can be considered only as a subset of the actual numbers of infected and recovered cases in the total population, we have repeated the calculations under a second scenario that considers twenty times the number of confirmed infected cases and forty times the number of recovered, leaving the number of deaths unchanged. Based on the reported data, the expected value of R0 as computed considering the period from the 11th of January until the 18th of January, using the official counts of confirmed cases was found to be ~4.6, while the one computed under the second scenario was found to be ~3.2. Thus, based on the SIRD simulations, the estimated average value of R0 was found to be ~2.6 based on confirmed cases and ~2 based on the second scenario. Our forecasting flashes a note of caution for the presently unfolding outbreak in China. Based on the official counts for confirmed cases, the simulations suggest that the cumulative number of infected could reach 180,000 (with a lower bound of 45,000) by February 29.

Regarding the number of deaths, simulations forecast that on the basis of the up to the 10th of February reported data, the death toll might exceed 2,700 (as a lower bound) by February 29. Our analysis further reveals a significant decline of the case fatality ratio from January 26 to which various factors may have contributed, such as the severe control measures taken in Hubei, China (e.g. quarantine and hospitalization of infected individuals), but mainly because of the fact that the actual cumulative numbers of infected and recovered cases in the population most likely are much higher than the reported ones. Thus, in a scenario where we have taken twenty times the confirmed number of infected and forty times the confirmed number of recovered cases, the case fatality ratio is around ~0.15% in the total population. Importantly, based on this scenario, simulations suggest a slow down of the outbreak in Hubei at the end of February.

Publication Type

  Journal article.

<473>

Accession Number

  20203378676

Author

  O'Hara, V. M.; Johnston, S. V.; Browne, N. T.

Title

  The paediatric weight management office visit via telemedicine: pre- to post-COVID-19 pandemic.

Source

  Pediatric Obesity; 2020. 15(8). 38 ref.

Publisher

  Wiley

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  Telemedicine is a powerful tool that erases many logistical barriers to care and may increase access. Due to the need for social distancing, the COVID-19 pandemic has temporarily reduced in-person visits for clinical care. Providers, clinical staff and patients are pressed to acutely learn new skills and adapt clinical care through the use of telemedicine whilst administrators, policy makers and regulatory organizations make changes to existing policies to meet this national emergency. Our tertiary care, interdisciplinary paediatric weight management clinic began the use of telemedicine 5 years ago to bring access to an

underserved, rural population at their primary care office, which has allowed our clinic to pivot seamlessly to in-home telemedicine visits during the pandemic. Telemedicine rules and regulations are rapidly changing to meet the COVID-19 national emergency, but many supports for new telemedicine providers are already in place. In this article, we provide an overview of telemedicine components, policies and regulations. We review the operationalization of our clinic's telemedicine visit prior to the pandemic. We discuss how telemedicine services are impacted by COVID-19 and key resources are provided. Finally, we reimagine telemedicine services post-pandemic to expand effective, coordinated health care, particularly for patients with chronic needs such as obesity.

Publication Type

Journal article.

<474>

Accession Number

20203378201

Author

Rahul, N.; Ranjith, P. M.

Title

Kuttanad and Covid-19 - farmers, floods and the pandemic.

Source

Economic and Political Weekly; 2020. 55(26/27).

Publisher

Sameeksha Trust

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Aided by the Government of Kerala, the farmers in Kuttanad are continuing to show resistance through cooperation and resilience.

Publication Type

Journal article.

<475>

Accession Number

  20203378189

Author

  Roy, D.

Title

  'on the horns of a dilemma'! Climate change, forest conservation and the marginal people in Indian Sundarbans. (Special Section: Challenges in an era of new North-South divides: research in the time of Covid-19.)

Source

  Forum for Development Studies; 2020. 47(2):307-326. 33 ref.

Publisher

  Routledge

Location of Publisher

  Abingdon

Country of Publication

  UK

Abstract

  The marginal people of the Indian part of Sunderbans (SDB) do now subsist 'between two fires' -- climate change and climate change adaptation and mitigation policies. They have already felt the fire of climate change in terms of loss of livelihoods, homelessness, and even life harm. They have begun recently to experience the fire of climate change adaptation and mitigation policies. The fallout of this situation, thus, comes in form of mass-exodus, and social and political conflicts at the margin. This article tells a story of how the postcolonial government in India, like its predecessor i.e. the British colonialists, would orchestrate a concerted effort in accumulation-based development in the name of conservation of SDB. Critically engaging the trajectory of policy interventions including the Forest (Conservation) Act, 1980, the Draft National Forest Policy, 2018 and the Scheduled Tribes and other traditional forest dwellers (Recognition of forest rights) act, 2006, it explores the dynamic way in which the government uses the climate change and conservation excuse to evict the Scheduled Tribes and other traditional forest dwellers from the forestlands. In conclusion, this article argues why we should go beyond the capitalist 'growth' narrative in order to formulate a more grounded climate and social justice legislation.

Publication Type

  Journal article.

<476>

Accession Number

  20203378187

Author

  Ansong, A.

Title

  SDG 8 and elimination of child labour in the cocoa industry in Ghana: can WTO law and private sector responsible business initiatives help? (Special Section: Challenges in an era of new North-South divides: research in the time of Covid-19.)

Source

  Forum for Development Studies; 2020. 47(2):261-281. 46 ref.

Publisher

  Routledge

Location of Publisher

  Abingdon

Country of Publication

  UK

Abstract

  The issue of child labour in the cocoa industries of producer countries like Ghana has come to the forefront of the discourse on trade related problems in international trade and how the World Trade Organisation (WTO) rules can be used to address them. Though the WTO rules are fundamentally aimed at non-discrimination and liberalisation of international trade, they also provide for exceptions that allow member states to impose restrictions or total bans on imports of products that are not in consonance with non-economic objectives like public morals, public health and the conservation of natural resources. This paper conducts analysis of some exceptions to the WTO rules on non-discrimination and trade liberalisation. Using the problem of child labour in the cocoa industry in Ghana as an example, the paper discusses how these exceptions in the WTO rules could be used by an importing country to influence action against the use of child labour in cocoa exporting countries like Ghana. Where either the WTO rules or state action cannot or does not address the problem of child labour adequately, the paper analysis the viability of private sector responsible business initiatives inspired by the United Nations Sustainable Development Goals (SDG) as substitutes or complements to the WTO rules and state action.

Publication Type

  Journal article.

<477>

Accession Number

  20203377168

Author

  Yavarian, J.; Shafiei-Jandaghi, N. Z.; Sadeghi, K.; Malekshahi, S. S.; Salimi, V.; Nejati, A.; Aja-Minejad, F.; Ghavvami, N.; Saadatmand, F.; Mahfouzi, S.; Fateminasab, G.; Parhizgari, N.; Ahmadi, A.; Razavi, K.; Ghabeshi, S.; Saberian, M.; Zanjani, E.; Namazi, F.; Shahbazi, T.; Rezaie, F.; Erfani, H.; Gouya, M. M.; Dadras, M. N.; Azad, T. M.

Title

  First cases of SARS-CoV-2 in Iran, 2020: case series report.

Source

  Iranian Journal of Public Health; 2020. 49(8):1564-1568. 6 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

  In Jan 2020, the outbreak of the 2019 novel coronavirus (SARS-CoV-2) in Wuhan, Hubei Province of China spread increasingly to other countries worldwide which WHO declared it as a public health emergency of interna-tional concern. Iran was included in the affected countries. Throat swab specimens were collected and tested by using real-time reverse transcription PCR (RT-PCR) kit targeting the E region for screening and RNA dependent RNA polymerase for confirmation. Conventional RT-PCR was conducted for the N region and the PCR prod-ucts were sequenced by Sanger sequencing. The first seven cases of SARS-CoV-2 infections were identified in Qom, Iran. This report describes the clinical and epidemiological features of the first cases of SARS-CoV-2 con-firmed in Iran. Future research should focus on finding the routes of transmission for this virus, including the possibility of transmission from foreign tourists to identify the possible origin of SARS-CoV-2 outbreak in Iran.

Publication Type

  Journal article.

<478>

Accession Number

　20203376980

Author

　Ali Reza Rahmani; Mostafa Leili; Ghasem Azarian; Ali Poormohammadi

Title

　Sampling and detection of corona viruses in air: a mini review.

Source

　Science of the Total Environment; 2020. 740. 43 ref.

Publisher

　Elsevier Ltd

Location of Publisher

　Oxford

Country of Publication

　UK

Abstract

　Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a strain of coronaviruses that causes coronavirus disease 2019 (COVID-19). In these days, the spread of the SARS-CoV-2 virus through the air has become a controversial topic among scientists. Various organizations provide standard methods for monitoring biological agents in the air. Nevertheless, there has been no standard recommended method for sampling and determination of viruses in air. This manuscript aimed at reviewing published papers for sampling and detection of corona viruses, especially SARS-Cov-2 as a global health concern. It was found that SARS-Cov 2 was present in some air samples that were collected from patient's rooms in hospitals. This result warrants its airborne transmission potential. However, due to the fact that in the most reviewed studies, sampling was performed in the patient's room, it seems difficult to discriminate whether it is airborne or is transmitted through respiratory droplets. Moreover, some other disrupting factors such as patient distance from the sampler, using protective or oxygen masks by patients, patient activities, coughing and sneezing during sampling time, air movement, air conditioning, sampler type, sampling conditions, storage and transferring conditions, can affect the results. About the sampling methods, most of the used samplers such as PTFE filters, gelatin filers and cyclones showed suitable performance for trapping SARS-Co and MERS-Cov viruses followed by PCR analysis.

Publication Type

　Journal article.

<479>

Accession Number

  20203376972

Author

  Pani, S. K.; Lin NengHuei; Ravindra Babu, S.

Title

  Association of COVID-19 pandemic with meteorological parameters over Singapore.

Source

  Science of the Total Environment; 2020. 740. many ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  Meteorological parameters are the critical factors affecting the transmission of infectious diseases such as Middle East Respiratory Syndrome (MERS), Severe Acute Respiratory Syndrome (SARS), and influenza. Consequently, infectious disease incidence rates are likely to be influenced by the weather change. This study investigates the role of Singapore's hot tropical weather in COVID-19 transmission by exploring the association between meteorological parameters and the COVID-19 pandemic cases in Singapore. This study uses the secondary data of COVID-19 daily cases from the webpage of Ministry of Health (MOH), Singapore. Spearman and Kendall rank correlation tests were used to investigate the correlation between COVID-19 and meteorological parameters. Temperature, dew point, relative humidity, absolute humidity, and water vapor showed positive significant correlation with COVID-19 pandemic. These results will help the epidemiologists to understand the behavior of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) virus against meteorological variables. This study finding would be also a useful supplement to help the local healthcare policymakers, Center for Disease Control (CDC), and the World Health Organization (WHO) in the process of strategy making to combat COVID-19 in Singapore.

Publication Type

  Journal article.

<480>

Accession Number

  20203376911

Author

  Wang WenLu; Yoneda, M.

Title

  Determination of the optimal penetration factor for evaluating the invasion process of aerosols from a confined source space to an uncontaminated area.

Source

  Science of the Total Environment; 2020. 740. 35 ref.

Publisher

  Elsevier Ltd

Location of Publisher

  Oxford

Country of Publication

  UK

Abstract

  Due to the outbreak and spread of COVID-19, SARS-CoV-2 has been proven to survive in aerosols for hours. Virus-containing aerosols may intrude into an uncontaminated area from a confined source space under certain ventilated conditions. The penetration factor, which is the most direct parameter for evaluating the invasion process, can effectively reflect the penetration fraction of aerosols and the shielding efficiency of buildings. Based on the observed concentrations of aerosols combined with a widely used concentration model, four numerical calculations of the penetration factor are proposed in this study. A theoretical time-correction Pest was applied to a size-dependent Pavg by proposing a correction coefficient r, and the error analysis of the real-time P(t) and the derived Pd were also performed. The results indicated that Pavg supplied the most stable values for laboratory penetration simulations. However, the time-correction is of little significance under current experimental conditions. P(t) and Pd are suitable for rough evaluation under certain conditions due to the inevitability of particles detaching and re-entering after capture. The proposed optimal penetration factor and the error analysis of each method in this study can provide insight into the penetration mechanism, and also provide a rapid and accurate assessment method for preventing and controlling the spread of the epidemic.

Publication Type

  Journal article.

<481>

Accession Number

  20203375948

Author

  Iost, S.; Bosch, M.; Jochem, D.; Weimar, H.

Title

  Integration of the forest, wood and paper industries with the critical infrastructures in Germany (KRITIS). [German]

Source

  Thunen Working Paper; 2020. (148):v + 25 pp. 31 ref.

Publisher

  Johann Heinrich von Thunen Institute (vTI)

Location of Publisher

  Braunschweig

Country of Publication

  Germany

Abstract

  Against the background of measures against further spreading of SARS-CoV-2 and their effects in Germany, Europe and the world we analysed interdependences between wood sector and critical infrastructure (KRITIS) in Germany, which wood-based products are used in critical infrastructures and where relevant resources and semi-finished products for wood-based manufacturing originate from. Wood-based energy production, manufacture of wooden containers and containers of paper and paperboard, manufacture of household and sanitary goods and of toilet requisites are directly linked to sectors and branches of critical infrastructure in Germany. These directly linked branches of forestry, wood and paper industries receive inputs that cannot or only with difficulties be substituted with products of other branches. These are sawing and planing of wood, manufacture of veneer sheets and wood-based panels, manufacture of pulp and manufacture of paper and paperboard. Essential prerequisite for these economic activities is a well-functioning forestry including linked services. Against this background it must be noted that all measures and activities connected to forest management have effects in different time horizons. The abandonment of seasonal measures may result in a reduction of roundwood supply, e.g. if calamities are not dealt with properly. This is of particular importance in the current calamity situation in German forests. Energy is also an important sector of critical infrastructures. The definition of dedicated branches within this sector however, does not cover heat generation in private households. In Germany, about 0.9 million households use wood as the primary energy carrier. In terms of quantity, they are the most important user of wood energy. In contrast to heat generation in private households, electricity generation and heat generation in biomass power plants are covered by the definition of critical infrastructures in Germany. Dependence on imports of the identified branches of forestry, wood and paper industries strongly varies. Shares of net imports as related to domestic use are highest for chemical wood pulp and plywood. Net imports of roundwood, fibreboard, wood pulp and recovered paper are also significant. Effects of interrupted supply chains are difficult to assess. If net exports are high in certain branches, the reduction of these exports to compensate for reduced imports, may be an option. Flat pallets of wood play an important role in global transport and logistics. Interruption of commodity flows may also lead to a reduced availability of flat pallets and consequently to larger delays in transport. Goods for daily use in

private households that are not directly vital but important for maintaining hygienic standards or, in a pandemic, for complying with additional rules, should be reviewed. It may be necessary to take them into account more strongly in future definitions of critical infrastructures.

Publication Type

Bulletin.

<482>

Accession Number

20203374791

Author

Lima, L. D. de; Pereira, A. M. M.; Machado, C. V.

Title

Crisis, conditioning factors, and challenges in the coordination of Brazil's federative State in the context of COVID-19. (Thematic section: COVID-19 - public health contributions.) [Portuguese, English]

Source

Cadernos de Saude Publica; 2020. 36(7). 13 ref.

Publisher

Escola Nacional de Saude Publica

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This thematic section contains articles that discuss the factors and public health challenges in the coordination of Brazil's public health care system during the COVID-19 pandemic.

Publication Type

Journal article.

<483>

Accession Number

20203371743

Author

Ragasa, C.; Lambrecht, I.

Title

COVID-19 and the food system: setback or opportunity for gender equality?

Source

Food Security; 2020. 12(4):877-880. 7 ref.

Publisher

Springer

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Agriculture and the food sector are critical to food and nutrition security because they not only produce food but also contribute to economic empowerment by employing a large share of female and male workers, especially in developing countries. Food systems at all levels - globally, domestically, locally, and in the home - are expected to be highly affected by the COVID-19 crisis. Women and men work as food producers, processors, and traders and will likely be impacted differently. Shocks or crises can exacerbate or reduce gender gaps, and so can policy responses to mitigate the impact of these crises or shocks. We offer some perspectives and available country examples on how the COVID-19 crisis and responses to the crisis could be a setback or offer opportunities for gender equality in the food system.

Publication Type

Journal article.

<484>

Accession Number

20203371741

Author

Barker, M.; Russell, J.

Title

Feeding the food insecure in Britain: learning from the 2020 COVID-19 crisis.

Source

Food Security; 2020. 12(4):865-870. 49 ref.

Publisher

Springer

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

The lockdown in Britain has rendered a large proportion of the population economically vulnerable and has at least quadrupled demand for emergency food relief. This paper looks critically at response to the crisis from the government and the voluntary sector with respect to provision of emergency food. In doing so, it has exposed gaps in understanding of the vagaries of the food supply for certain population groups and systemic weaknesses in the current system of emergency food aid. We make recommendations for healthier governmental capacity to react to a food security crisis, better relationships between the government and the voluntary sector, and further research into the dietary constraints of the precariate. Importantly, the social system needs to be responsive to short-term changes in people's income if people are not to fall into food insecurity.

Publication Type

Journal article.

<485>

Accession Number

20203371732

Author

Wegerif, M. C. A.

Title

"informal" food traders and food security: experiences from the Covid-19 response in South Africa.

Source

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469

Food Security; 2020. 12(4):797-800. 20 ref.

Publisher

Springer

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

This opinion piece looks at the substantial role of informal traders in ensuring food security, and other economic and social goods in South Africa and how they have been impacted by Covid-19 and responses to it. The state responses have reflected a continued undervaluing and undermining of this sector to the detriment of the traders themselves, their suppliers, and their customers. There is a need for a new valuing of the sector that would recognise and build on its mode of ordering and key contributions to society. This needs to include: shifting the narrative about the actors involved and challenging the concept of "informal"; planning and regulating to ensure more space for owner-operated small-scale food retailers; and putting in place a social-safety net to support them in times of crisis.

Publication Type

Journal article.

<486>

Accession Number

20203371726

Author

Amjath-Babu, T. S.; Krupnik, T. J.; Thilsted, S. H.; McDonald, A. J.

Title

Key indicators for monitoring food system disruptions caused by the COVID-19 pandemic: insights from Bangladesh towards effective response.

Source

Food Security; 2020. 12(4):761-768. 36 ref.

Publisher

Springer

Location of Publisher

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Amsterdam

Country of Publication

Netherlands

Abstract

In the context of developing countries, early evidence suggests that the impacts of the COVID-19 pandemic on food production systems is complex, heterogenous, and dynamic. As such, robust monitoring of the impact of the health crisis and containment measures across agricultural value chains will likely prove vitally important. With Bangladesh as a case study, we discuss the building blocks of a comprehensive monitoring system for prioritizing and designing interventions that respond to food system disruptions from COVID-19 and preemptively avoid further cascading negative effects. We also highlight the need for parallel research that identifies pathways for enhancing information flow, analysis, and action to improve the efficiency and reliability of input and output value chains. In aggregate, this preliminary work highlights the building blocks of resilient food systems to external shocks such as COVID-19 pandemic in the context of developing nations. In doing so, we call attention to the importance of 'infection safe' agricultural input and output distribution logistics, extended social safety nets, adequate credit facilities, and innovative labor management tools alongside, appropriate farm mechanization. In addition, digital extension services, circular nutrient flows, enhanced storage facilities, as well as innovative and robust marketing mechanisms are required. These should be considered in parallel with effective international trade management policies and institutions as crucial supportive measures.

Publication Type

Journal article.

<487>

Accession Number

20203363808

Author

Tremblay-Huet, S.

Title

COVID-19 leads to a new context for the "right to tourism": a reset of tourists' perspectives on space appropriation is needed. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):720-723. 14 ref.

Publisher

Routledge

Location of Publisher

  Abingdon

Country of Publication

  UK

Abstract

  The COVID-19 pandemic has changed the way actors see transnational mobility, as well as the appropriation of spaces for leisure purposes, for the foreseeable future. This article argues, and hopes, that this will be to the advantage of host communities.

Publication Type

  Journal article.

<488>

Accession Number

  20203363781

Author

  Lew, A.; Cheer, J.; Brouder, P.; Teoh, S.; Clausen, H. B.; Hall, M.; Haywood, M.; Higgins-Desbiolles, F.; Lapointe, D.; Mostafanezhad, M.; Pung, J. M.; Salazar, N.

Title

  Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

  Tourism Geographies; 2020. 22(3):455-746.

Publisher

  Routledge

Location of Publisher

  Abingdon

Country of Publication

  UK

Abstract

  This special issue is a reflection by tourism scholars on the initial impacts of the COVID-19 pandemic on the world, with travel and tourism being among the most significant areas to bear those impacts. However,

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instead of an analysis of the impacts of COVID-19 on tourism places and sectors, the papers in this issue focus on visions of how the pandemic events of 2020 are contributing to a possibly substantial, meaningful and positive transformation of the planet in general, and tourism specifically. This is not a return to a 'normal' that existed before - but is instead a vision of how the world is changing, evolving, and transforming into something different from what it was before the 2020 global pandemic experience.

Publication Type

Journal issue.

<489>

Accession Number

20203362117

Author

Li YuXi; Liu XiaoBo; Guo LiuXue; Li Juan; Zhong DongLing; Zhang YongGang; Clarke, M.; Jin RongJiang

Title

Traditional Chinese herbal medicine for treating novel coronavirus (COVID-19) pneumonia: protocol for a systematic review and meta-analysis.

Source

Systematic Reviews; 2020. 9(75):(08 April 2020). 35 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: A new type of coronavirus, novel coronavirus (COVID-19), is causing an increasing number of cases of pneumonia and was declared a Public Health Emergency of International Concern by the World Health Organization on 30 January 2020. The virus first appeared in Wuhan, China, in late December 2019, and traditional Chinese herbal medicine is being used for its treatment. This systematic review and meta-analysis will assess studies of the effects of traditional Chinese herbal medicine in COVID-19 pneumonia. Methods: We will search electronic databases including PubMed, Embase, the Cochrane Central Register of Controlled Trials (CENTRAL), Chinese Biomedical Literature Database (CBM), China National Knowledge Infrastructure (CNKI), Chinese Science and Technology Periodical Database (VIP), and Wanfang database using keywords related to COVID-19 and traditional Chinese herbal medicine. Reference lists of relevant

trials and reviews will be searched. We will manually search gray literature, such as conference proceedings and academic degree dissertations, and trial registries. Two independent reviewers will screen studies (XL and DZ), extract data (YL and LG), and evaluate risk of bias (YL and DZ). Data analysis will be conducted using the Review Manager software (version 5.3.5) and R software (version 3.6.1). Statistical heterogeneity will be assessed using a standard chi-square test with a significance level of $P < 0.10$. Biases associated with study size (e.g., publication bias) will be investigated using funnel plots, Egger's test and Begg's test, and Trim and Fill analysis. Discussion: This study will provide a high-quality synthesis of the effects of traditional Chinese herbal medicine for COVID-19. The use of traditional Chinese herbal medicine for treatment or prevention of these novel viral infections affecting the pneumonia will be investigated.

Publication Type

  Journal article.

<490>

Accession Number

  20203355350

Author

  Graham, S. P.; McLean, R. K.; Spencer, A. J.; Belij-Rammerstorfer, S.; Wright, D.; Ulaszewska, M.; Edwards, J. C.; Hayes, J. W. P.; Martini, V.; Thakur, N.; Conceicao, C.; Dietrich, I.; Shelton, H.; Waters, R.; Ludi, A.; Wilsden, G.; Browning, C.; Bialy, D.; Bhat, S.; Stevenson-Leggett, P.; Hollinghurst, P.; Gilbride, C.; Pulido, D.; Moffat, K.; Sharpe, H.; Allen, E.; Mioulet, V.; Chiu, C.; Newman, J.; Asfor, A. S.; Burman, A.; Crossley, S.; Huo JianDong; Owens, R. J.; Carroll, M.; Hammond, J. A.; Tchilian, E.; Bailey, D.; Charleston, B.; Gilbert, S. C.; Tuthill, T. J.; Lambe, T.

Title

  Evaluation of the immunogenicity of prime-boost vaccination with the replication-deficient viral vectored COVID-19 vaccine candidate ChAdOx1 ncov-19.

Source

  npj Vaccines; 2020. 5(69). 27 ref.

Publisher

  Nature Publishing Group

Location of Publisher

  London

Country of Publication

  UK

Abstract

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Clinical development of the COVID-19 vaccine candidate ChAdOx1 nCoV-19, a replication-deficient simian adenoviral vector expressing the full-length SARS-CoV-2 spike (S) protein was initiated in April 2020 following non-human primate studies using a single immunisation. Here, we compared the immunogenicity of one or two doses of ChAdOx1 nCoV-19 in both mice and pigs. Whilst a single dose induced antigen-specific antibody and T cells responses, a booster immunisation enhanced antibody responses, particularly in pigs, with a significant increase in SARS-CoV-2 neutralising titres.

Publication Type

Journal article.

<491>

Accession Number

20203352695

Author

Takeda, Y.; Murata, T.; Jamsransuren, D.; Suganuma, K.; Kazami, Y.; Batkhuu, J.; Badral, D.; Ogawa, H.

Title

Saxifraga spinulosa-derived components rapidly inactivate multiple viruses including SARS-CoV-2.

Source

Viruses; 2020. 12(7). 35 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), influenza A virus (IAV), and norovirus (NV) are highly contagious pathogens that threaten human health. Here we focused on the antiviral potential of the medicinal herb, Saxifraga spinulosa (SS). Water-soluble extracts of SS were prepared, and their virus-inactivating activity was evaluated against the human virus pathogens SARS-CoV-2 and IAV; we also examined virucidal activity against feline calicivirus and murine norovirus, which are surrogates for human NV. Among our findings, we found that SS-derived gallocatechin gallate compounds were capable of inactivating all viruses tested. Interestingly, a pyrogallol-enriched fraction (Fr 1C) inactivated all viruses more rapidly and effectively than did any of the component compounds used alone. We found that 25 micro g/mL of Fr 1C inactivated >99.6% of SARS-CoV-2 within 10 s (reduction of 2.33

log10 TCID50/mL). Fr 1C resulted in the disruption of viral genomes and proteins as determined by gel electrophoresis, electron microscopy, and reverse transcription-PCR. Taken together, our results reveal the potential of Fr 1C for development as a novel antiviral disinfectant.

Publication Type

  Journal article.

<492>

Accession Number

  20203352593

Author

  Wink, M.

Title

  Potential of DNA intercalating alkaloids and other plant secondary metabolites against SARS-CoV-2 causing COVID-19.

Source

  Diversity; 2020. 12(5). 43 ref.

Publisher

  MDPI AG

Location of Publisher

  Basel

Country of Publication

  Switzerland

Abstract

  Many plants produce secondary metabolites (PSMs) with antiviral activities. Among the antiviral PSMs, lipophilic terpenoids in essential oils can disturb the lipid envelope of viruses. Phenols and polyphenols (flavonoids, rosmarinic acid and tannins) attack viral proteins present in the viral membrane or inside the virus particle. Both phenolics and essential oils are active against free viral particles but not - or to a lesser degree - after a virus has entered a host cell. Another group of PSMs is directed against DNA or RNA. These are DNA intercalators such as sanguinarine, berberine, emetine and other isoquinoline alkaloids, ss-carboline, and quinoline alkaloids such as quinine, cinchonine, dictamine and skimmianine. The DNA intercalators stabilize double-stranded nucleic acids and inhibit the replication, transcription, and translation of genetic material. These alkaloids can inhibit viral development and viral replication in cells, as shown for SARS-CoV-1 and other viruses. Since chloroquine (which is also a DNA intercalator and a chemical derivative of the alkaloid quinine) is apparently clinically helpful against severe acute respiratory syndrome

coronavirus 2 (SARS-CoV-2) infections, it is assumed that intercalating alkaloids, or the medicinal plants producing them, may be interesting candidates for the development of new antiviral drugs for the treatment of coronavirus disease 2019 (COVID-19).

Publication Type

Journal article.

<493>

Accession Number

20203334970

Author

Kalirajan Rajagopal; Gowramma Byran; Srikanth Jupudi; Vadivelan R

Title

Activity of phytochemical constituents of black pepper, ginger, and garlic against coronavirus (COVID-19): an in silico approach. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):43-50. 43 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

BACKGROUND: In early 2020, many scientists are rushing to discover novel drugs and vaccines against the coronavirus, and treatments for coronavirus disease 2019 (COVID-19), because, the disease which was named as COVID-19, a life-threatening viral disease affected first in china and quickly spread throughout the world. OBJECTIVE: In the present article, in silico studies have been performed to explore the binding modes of chemical constituents for natural remedies such as pepper, ginger, and garlic against COVID-19 (PDB id-5R82) targeting coronavirus using Schrodinger suit 2019-4. METHODS: The docking studies are performed by Glide module, in silico ADMET screening was performed by qik prop module and binding energy of ligands was calculated using Prime Molecular Mechanics-Generalized Born Surface Area module. RESULTS: From the results, the chemical constituents from pepper like Piperdardiine, Piperanine and from ginger like 8-Gingerol, 10-Gingerol, significantly active against COVID-19 with significant Glide score when compared to currently used drug Hydroxychloroquine (-5.47). The docking results of the compounds

exhibited similar mode of interactions with COVID-19, and the residues SER46, MET49, HIE41, GLN189, ARG189, ASP187, MET165, HIE164, THR24, THR25, LEU27, ASN142, and GLY143 play a crucial role in binding with ligands. CONCLUSION: The chemical constituents from pepper such as Piperdardiine, Piperanine, and from ginger like 8-Gingerol, 10-Gingerol are significantly active against COVID-19 which are useful for further development.

Publication Type

 Journal article.