Literature Search Request

Search strategy CAB Abstracts on the OVID interface	Search Strategy: Database: CAB Abstracts <2000 to 2020 Week 34> Search Strategy: --- 1 ('covid 19' or 'novel coronavirus' or 'sars-cov-2').mp. (1182) 2 limit 1 to yr="2010 -Current" (1154) 3 2 and 202008*.up. (483) ********** [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]
Date of coverage	Aug 2020

Search results

	Date searched	**No of items found**
CAB Abstracts	2/9/2020	483

References from CAB Abstracts

<1>

Accession Number

20203336739

Author

Alkhazindar, M.; Elnagdy, S. M.

Title

Can lactoferrin boost human immunity against COVID-19?

Source

Pathogens and Global Health; 2020. 114(5):234-235. 7 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

This article discussed the immune boosting potential of lactoferrin against COVID-19. It has been reported that LF shows an inhibitory activity against SAR-CoV-1 by preventing the attachment of the virus. In this study, LF was able to block the binding of spike proteins to the host cells, thus forming a host-defense mechanism against the virus. It also boosted the host's innate immunity by enhancing natural killer cells and neutrophil aggregation and adhesion.

Publication Type

Journal article.

<2>

Accession Number

20203364278

Author

Nichol, J. E.; Muhammad Bilal; Ali, M. A.; Qiu ZhongFeng

Title

Air pollution scenario over China during COVID-19.

Source

Remote Sensing; 2020. 12(13)31 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The unprecedented slowdown in China during the COVID-19 period of November 2019 to April 2020 should have reduced pollution in smog-laden cities. However, moderate resolution imaging spectrometer (MODIS) satellite retrievals of aerosol optical depth (AOD) show a marked increase in aerosols over the Beijing-Tianjin-Hebei (BHT) region and most of Northeast and Central China, compared with the previous winter. Fine particulate (PM2.5) data from ground monitoring stations show an increase of 19.5% in Beijing during January and February 2020, and no reduction for Tianjin. In March and April 2020, a different spatial pattern emerges, with very high AOD levels observed over 50% of the Chinese mainland, and including peripheral regions in the northwest and southwest. At the same time, ozone monitoring instrument (OMI) satellite-derived NO2 concentrations fell drastically across China. The increase in PM2.5 while NO2 decreased in BTH and across China is likely due to enhanced production of secondary particulates. These are formed when reductions in NOx result in increased ozone formation, thus increasing the oxidizing capacity of the atmosphere. Support for this explanation is provided by ground level air quality data showing increased volume of fine mode aerosols throughout February and March 2020, and increased levels of PM2.5, relative humidity (RH), and ozone during haze episodes in the COVID-19 lockdown period. Backward trajectories show the origin of air masses affecting industrial centers of North and East China to be local. Other contributors to increased atmospheric particulates may include inflated industrial production in peripheral regions to compensate loss in the main population and industrial centers, and low wind speeds. Satellite monitoring of the extraordinary atmospheric conditions resulting from the COVID-19 shutdown could enhance understanding of smog formation and attempts to control it.

Publication Type

Journal article.

<3>

Accession Number

20203360444

Author

Seitz, T.; Hoepler, W.; Weseslindtner, L.; Aberle, J. H.; Aberle, S. W.; Puchhammer-Stoeckl, E.; Baumgartner, S.; Traugott, M.; Karolyi, M.; Pawelka, E.; Niculescu, I.; Friese, E.; Neuhold, S.; Stahl, D.; Madl, C.; Zoufaly, A.; Wenisch, C.; Laferl, H.

Title

Successful management of the first reported case in Austria of COVID-19 with ARDS.

Source

Infection; 2020. 48(4):647-651. 11 ref.

Publisher

Springer Medizin Urban & Vogel GmbH

Location of Publisher

Munich

Country of Publication

Germany

Abstract

We report the successful management of a patient with severe respiratory failure due to COVID-19 admitted to an intensive care unit complicated by secondary catheter-related infection of Candida glabrata. We are discussing some of the clinical challenges and the pitfalls in molecular diagnosis of SARS-CoV-2, including the fact that a positive PCR result may not always reflect infectiousness.

Publication Type

Journal article.

<4>

Accession Number

20203364756

Author

Siriwittayakorn, P.

Title

Announcement of the Royal College of Surgeons of Thailand on guidance for surgery in COVID-19 patients.

Source

Siriraj Medical Journal; 2020. 72(5):431-435. 4 ref.

Publisher

Faculty of Medicine, Siriraj Hospital, Mahidol University

Location of Publisher

Bangkok

Country of Publication

Thailand

Abstract

COVID-19 has demonstrated significantly impact on healthcare professionals practice including surgeons. The Royal College of Surgeons of Thailand (RCST) has developed the "Guidance for Surgery in COVID-19 Patients" for surgeons and related medical personnel to handle surgical care during COVID-19 pandemic. COVID-19 is the newly emerged outbreak, the understanding of its nature, also the prevention and control of this disease is limited. Since there are very few studies on this new coronavirus, some knowledge and assumption were drawn from the lesson learnt from the outbreak of SARs and MERs (both are also RNA coronavirus) in the past. Therefore, the recommendation, as stated in this manuscript, needs to be updated accordingly to the current situation. The medical practitioners need to cling on the new status of COVID-19 constantly. In case that anyone who has any relevant information and want to bring to our attention, please email to siriwittayakorn@gmail.com. With no legal effect, this guidance should contemporarily conform to the occurrence (current situation or incident), character (internal factors of the patient), and circumstances (external factors of the patient, e.g. hospital resources, equipment, and capacity).

Publication Type

Journal article.

<5>

Accession Number

20203364745

Author

Major, J.; Crotta, S.; Llorian, M.; McCabe, T. M.; Gad, H. H.; Priestnall, S. L.; Hartmann, R.; Wack, A.

Title

Type I and III interferons disrupt lung epithelial repair during recovery from viral infection.

Source

Science (Washington); 2020. 369(6504):712-717. 38 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

Excessive cytokine signaling frequently exacerbates lung tissue damage during respiratory viral infection. Type I (IFN-a and IFN-beta) and III (IFN-lambda) interferons are host-produced antiviral cytokines. Prolonged IFN-a and IFN-beta responses can lead to harmful proinflammatory effects, whereas IFN-lambda mainly signals in epithelia, thereby inducing localized antiviral immunity. In this work, we show that IFN signaling interferes with lung repair during influenza recovery in mice, with IFN-lambda driving these effects most potently. IFN-induced protein p53 directly reduces epithelial proliferation and differentiation, which increases disease severity and susceptibility to bacterial superinfections. Thus, excessive or prolonged IFN production aggravates viral infection by impairing lung epithelial regeneration. Timing and duration are therefore critical parameters of endogenous IFN action and should be considered carefully for IFN therapeutic strategies against viral infections such as influenza and coronavirus disease 2019 (COVID-19).

Publication Type

Journal article.

<6>

Accession Number

20203364744

Author

Broggi, A.; Ghosh, S.; Sposito, B.; Spreafico, R.; Balzarini, F.; Cascio, A. lo; Clementi, N.; Santis, M. de; Mancini, N.; Granucci, F.; Zanoni, I.

Title

Type III interferons disrupt the lung epithelial barrier upon viral recognition.

Source

Science (Washington); 2020. 369(6504):706-712. 30 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

Viral infections of the lower respiratory tract are a leading cause of mortality. Mounting evidence indicates that most severe cases are characterized by aberrant immune responses and do not depend on viral burden. In this study, we assessed how type III interferons (IFN-lambda) contribute to the pathogenesis induced by RNA viruses. We report that IFN-lambda is present in the lower, but not upper, airways of patients with coronavirus disease 2019 (COVID-19). In mice, we demonstrate that IFN-lambda produced by lung dendritic cells in response to a synthetic viral RNA induces barrier damage, causing susceptibility to lethal bacterial superinfections. These findings provide a strong rationale for rethinking the pathophysiological role of IFN-lambda and its possible use in clinical practice against endemic viruses, such as influenza virus as well as the emerging severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.

Publication Type

Journal article.

<7>

Accession Number

20203364728

Author

Gao Yan; Yan LiMing; Huang YuCen; Liu FengJiang; Zhao Yao; Cao Lin; Wang Tao; Sun QianQian; Ming ZhenHua; Zhang LianQi; Ge Ji; Zheng LiTao; Zhang Ying; Wang HaoFeng; Zhu Yan; Zhu Chen; Hu TianYu; Hua Tian; Zhang Bing; Yang XiuNa; Li Jun; Yang HaiTao; Liu ZhiJie; Xu WenQing; Guddat, L. W.; et al.

Title

Structure of the RNA-dependent RNA polymerase from COVID-19 virus.

Source

Science (Washington); 2020. 368(6492):779-782. 24 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

A novel coronavirus [severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2)] outbreak has caused a global coronavirus disease 2019 (COVID-19) pandemic, resulting in tens of thousands of infections and thousands of deaths worldwide. The RNA-dependent RNA polymerase [(RdRp), also named nsp12] is the central component of coronaviral replication and transcription machinery, and it appears to be a primary target for the antiviral drug remdesivir. We report the cryo-electron microscopy structure of COVID-19 virus full-length nsp12 in complex with cofactors nsp7 and nsp8 at 2.9-angstrom resolution. In addition to the conserved architecture of the polymerase core of the viral polymerase family, nsp12 possesses a newly identified beta-hairpin domain at its N terminus. A comparative analysis model shows how remdesivir binds to this polymerase. The structure provides a basis for the design of new antiviral therapeutics that target viral RdRp.

Publication Type

Journal article.

<8>

Accession Number

20203340979

Author

Sonenthal, P. D.; Masiye, J.; Kasomekera, N.; Marsh, R. H.; Wroe, E. B.; Scott, K. W.; Li, R.; Murray, M. B.; Bukhman, A.; Connolly, E.; Minyaliwa, T.; Katete, M.; Banda, G.; Nyirenda, M.; Rouhani, S. A.

Title

COVID-19 preparedness in Malawi: a national facility-based critical care assessment.

Source

Lancet Global Health; 2020. 8(7):e890-e892. 11 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The aim of the article was to evaluate the public health preparedness of Malawi for the COVID-19 pandemic. The findings highlight the crucial importance of early containment in Malawi and other low-income countries through widespread testing, outpatient treatment, contact tracing, isolation, and physical distancing. These efforts must be multisectoral and tailored to the local context. Effective isolation and quarantine will probably require additional social supports, such as food and water distribution.

Publication Type

Correspondence.

<9>

Accession Number

20203325975

Author

Aitken, T.; Chin, K. L.; Liew, D.; Ofori-Asenso, R.

Title

Rethinking pandemic preparation: global health security index (GHSI) is predictive of COVID-19 burden, but in the opposite direction.

Source

Journal of Infection; 2020. 81(2):353-355. 6 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This article examined the correlation between GHSI and various measures of COVID-19 burden across different countries. It is hypothesized that higher GHSI was inversely associated with measures of COVID-19 burden. No association was noted between GHSI and testing rate, despite that GHSI should serve as a surrogate for healthcare capacity, including COVID-19 testing. Effective pandemic response requires significant investment in testing, with adequate training of healthcare workers in testing, as well as sufficient supply of PPE and testing kits. In addition, effective and widespread dissemination of information to the general population regarding testing criteria assists case detection. The associations between GHSI and COVID-19 cases and deaths were positive, meaning that the GHSI can reflect a country's capacity to deal with epidemics or pandemics, but in the opposite manner than intended. No doubt there was confounding by increased globalization among more developed countries (with higher GHSI). Increased exposure to foreigners travelling for the purposes of tourism, business and use of healthcare is likely to increase the risk of new infectious pathogens being introduced. Similarly, mass migration contributes to disruption of local bacterial and viral environments. Furthermore, the rarity of pandemics in conjunction with false reassurance from a high GHSI may have contributed to more lenient adherence to infection control mechanisms in recent years.

Publication Type

Correspondence.

<10>

Accession Number

20203325968

Author

Frontera, A.; Martin, C.; Vlachos, K.; Sgubin, G.

Title

Regional air pollution persistence links to COVID-19 infection zoning.

Source

Journal of Infection; 2020. 81(2):339-340. 7 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The aim of the article was to examine air pollution as risk factor for COVID-19 infection. The hypothesis is that the atmosphere, rich of air pollutants, together with certain climatic conditions may promote a longer permanence of the of viral particles in the air, thus favoring an "indirect" diffusion in addition to the direct one (individual to individual). If confirmed, the hypothesis may imply a higher level of control on the risk of infection spread. Indeed, its potential evolution may be partly anticipated by weather forecasting and seasonal prediction systems, thus allowing for timely measures of mitigation over critical regions. Also, it may further strengthen the need to reduce the level of air pollutants as part of public health measures to curb the spread of COVID-19 and other infections.

Publication Type

Correspondence.

<11>

Accession Number

20203359198

Author

Thomas, B.; Pallivalapila, A.; El-Kassem, W.; Tarannum, A.; Al-Hail, F.; Rijims, M.; Parappil, H.; Bayo, A. I.; Ahmad, S.; Nazar, Z.; Stewart, D.; Al-Hail, M.

Title

Maternal and perinatal outcomes and pharmacological management of Covid-19 infection in pregnancy: a systematic review protocol.

Source

Systematic Reviews; 2020. 9(161):(18 July 2020). 31 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Over 4.2 million confirmed cases and more than 285,000 deaths, COVID-19 pandemic continues to harm significant number of people worldwide. Several studies have reported the impact of COVID-19 in general population; however, there is scarcity of information related to pharmacological management and maternal and perinatal outcomes during the pandemic. Altered physiological, anatomical, and immunological response during pregnancy makes it more susceptible to infections. Furthermore, during pregnancy, a woman undergoes multiple interactions with the health care system that increases her chance of getting infected; therefore, managing pregnant population presents a unique challenge. Research questions: This systematic review seeks to answer the following questions in relation to COVID-19: What are the different clinical characteristics presented in maternal and perinatal population? What are the different maternal and perinatal

outcome measures reported? What are the distinct therapeutic interventions reported to treat COVID-19? Is it safe to use "medications" used in the treatment of COVID-19 during antenatal, perinatal, postnatal, and breastfeeding? Method: The search will follow a comprehensive, sequential three step search strategy. Several databases relevant to COVID-19 and its impact on pregnancy including Medline, CINAHL, and LitCovid will be searched from the inception of the disease until the completion of data collection. The quality of this search strategy will be assessed using Peer Review of Electronic Search Strategies Evidence-Based Checklist (PRESS EBC). An eligibility form will be developed for a transparent screening and inclusion/exclusion of studies. All studies will be sent to RefWorks, and abstraction will be independently performed by two researchers. Risk of bias will be assessed using Cochrane Risk of Bias tool for randomized controlled trials, Newcastle-Ottawa Quality Assessment Scale for non-randomized studies, and for case reports, Murad et al. tool will be used. Decision to conduct meta-analysis will be based on several factors including homogeneity and outcome measures reported; otherwise, a narrative synthesis will be deemed appropriate. Discussion: This systematic review will summarize the existing data on effect of COVID-19 on maternal and perinatal population. Furthermore, to the best of our knowledge, this is the first systematic review addressing therapeutic management and safety of medicines to treat COVID-19 during pregnancy and breastfeeding.

Publication Type

Journal article.

<12>

Accession Number

20203359190

Author

Watsa, M.

Title

Rigorous wildlife disease surveillance.

Source

Science (Washington); 2020. 369(6500):145-147. 15 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

Evidence suggests that zoonotic (animal origin) coronaviruses have caused three recent emerging infectious disease (EID) outbreaks: severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), and the current coronavirus disease 2019 (COVID-19) pandemic. In the search for an intermediate host for SARS coronavirus 2 (SARS-CoV-2, which causes COVID-19), studies have identified SARS-CoV-2-like strains in bats (1) and pangolins (2), but these do not contain the same polybasic cleavage site that is present in SARS-CoV-2 (3). It is unknown what the intermediate host for this spillover event was because to date there are no international or national conventions on pathogen screening associated with animals, animal products, or their movements, and capacity for EID diagnostics is limited along much of the human-wildlife interface. EID risks associated with the wildlife trade remain the largest unmet challenge of current disease surveillance efforts.

Publication Type

Journal article.

<13>

Accession Number

20203359148

Author

Dai WenHao; Zhang Bing; Jiang XiaMing; Su HaiXia; Li Jian; Zhao Yao; Xie Xiong; Jin ZhenMing; Peng JingJing; Liu FengJiang; Li ChunPu; Li You; Bai Fang; Wang HaoFeng; Cheng Xi; Cen XiaoBo; Hu ShuLei; Yang XiuNa; Wang Jiang; Liu Xiang; Xiao GengFu; Jiang HuaLiang; Rao ZiHe; Zhang LeiKe; Xu YeChun; et al.

Title

Structure-based design of antiviral drug candidates targeting the SARS-CoV-2 main protease.

Source

Science (Washington); 2020. 368(6497):1331-1335. 29 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) is the etiological agent responsible for the global COVID-19 (coronavirus disease 2019) outbreak. The main protease of SARS-CoV-2, Mpro, is a key enzyme that plays a pivotal role in mediating viral replication and transcription. We designed and synthesized two lead compounds (11a and 11b) targeting Mpro. Both exhibited excellent inhibitory activity and potent anti-SARS-CoV-2 infection activity. The x-ray crystal structures of SARS-CoV-2 Mpro in complex with 11a or 11b, both determined at a resolution of 1.5 angstroms, showed that the aldehyde groups of 11a and 11b are covalently bound to cysteine 145 of Mpro. Both compounds showed good pharmacokinetic properties in vivo, and 11a also exhibited low toxicity, which suggests that these compounds are promising drug candidates.

Publication Type

Journal article.

<14>

Accession Number

20203359144

Author

Shi JianZhong; Wen ZhiYuan; Zhong GongXun; Yang HuanLiang; Wang Chong; Huang BaoYing; Liu RenQiang; He Xijun; Shuai Lei; Sun ZiRuo; Zhao YuBo; Liu PeiPei; Liang LiBin; Cui PengFei; Wang JinLiang; Zhang XianFeng; Guan YunTao; Tan WenJie; Wu GuiZhen; Chen HuaLan; Bu ZhiGao

Title

Susceptibility of ferrets, cats, dogs, and other domesticated animals to SARS-coronavirus 2.

Source

Science (Washington); 2020. 368(6494):1016-1020. 35 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

Severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2) causes the infectious disease COVID-19 (coronavirus disease 2019), which was first reported in Wuhan, China, in December 2019. Despite extensive efforts to control the disease, COVID-19 has now spread to more than 100 countries and caused a global pandemic. SARS-CoV-2 is thought to have originated in bats; however, the intermediate animal sources of the virus are unknown. In this study, we investigated the susceptibility of ferrets and animals in close contact with humans to SARS-CoV-2. We found that SARS-CoV-2 replicates poorly in dogs, pigs, chickens, and ducks, but ferrets and cats are permissive to infection. Additionally, cats are susceptible to airborne transmission. Our study provides insights into the animal models for SARS-CoV-2 and animal management for COVID-19 control.

Publication Type

Journal article.

<15>

Accession Number

20203359140

Author

Lakdawala, S. S.; Menachery, V. D.

Title

The search for a COVID-19 animal model.

Source

Science (Washington); 2020. 368(6494):942-943. 15 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

As the pandemic caused by severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2) continues to cause worldwide upheaval, scientists are racing to find appropriate animal models to study the coronavirus disease 2019 (COVID-19) attributed to the virus. The optimal animal model will depend on the scientific question. On page 1016 of this issue, Shi et al. (1) describe severe viral burden and airborne transmission of SARS-CoV-2 between cats and ferrets, highlighting an important animal model for SARS-CoV-2 transmission. Additionally, on page 1012 of this issue, Rockx et al. (2) found that young and aged cynomolgus macaques infected with SARS-CoV-2 shed virus in the upper and lower respiratory tract, but failed to develop severe clinical symptoms. These animal models offer distinct platforms to ask specific questions about SARS-CoV-2 infection, induction of disease, and transmission.

Publication Type

Journal article.

<16>

Accession Number

20203359655

Author

Meyerowitz, E. A.; Vannier, A. G. L.; Friesen, M. G. N.; Schoenfeld, S.; Gelfand, J. A.; Callahan, M. V.; Kim, A. Y.; Reeves, P. M.; Poznansky, M. C.

Title

Rethinking the role of hydroxychloroquine in the treatment of COVID-19.

Source

FASEB Journal; 2020. 34(5):6027-6037. 82 ref.

Publisher

John Wiley and Sons, Inc

Location of Publisher

New York

Country of Publication

USA

Abstract

There are currently no proven or approved treatments for coronavirus disease 2019 (COVID-19). Early anecdotal reports and limited in vitro data led to the significant uptake of hydroxychloroquine (HCQ), and to lesser extent chloroquine (CQ), for many patients with this disease. As an increasing number of patients with COVID-19 are treated with these agents and more evidence accumulates, there continues to be no high-quality clinical data showing a clear benefit of these agents for this disease. Moreover, these agents have the potential to cause harm, including a broad range of adverse events including serious cardiac side effects when combined with other agents. In addition, the known and potent immunomodulatory effects of these agents which support their use in the treatment of auto-immune conditions, and provided a component in the original rationale for their use in patients with COVID-19, may, in fact, undermine their utility in the context of the treatment of this respiratory viral infection. Specifically, the impact of HCQ on cytokine production and suppression of antigen presentation may have immunologic consequences that hamper innate and adaptive antiviral immune responses for patients with COVID-19. Similarly, the reported in vitro inhibition of viral proliferation is largely derived from the blockade of viral fusion that initiates infection rather than the direct inhibition of viral replication as seen with nucleoside/tide analogs in other viral infections. Given these facts and the growing uncertainty about these agents for the treatment of COVID-19, it is clear that at the very least thoughtful planning and data collection from randomized clinical trials are needed to understand what if any role these agents may have in this disease. In this article, we review the datasets that support or detract from the use of these agents for the treatment of COVID-19 and render a data informed opinion that they should only be used with caution and in the context of carefully thought out clinical trials, or on a case-by-case basis after rigorous consideration of the risks and benefits of this therapeutic approach.

Publication Type

Journal article.

<17>

Accession Number

20203356528

Author

Walker, P. G. T.; Whittaker, C.; Watson, O. J.; Baguelin, M.; Winskill, P.; Hamlet, A.; Djafaara, B. A.; Cucunuba, Z.; Mesa, D. O.; Green, W.; Thompson, H.; Nayagam, S.; Ainslie, K. E. C.; Bhatia, S.; Bhatt, S.; Boonyasiri, A.; Boyd, O.; Brazeau, N. F.; Cattarino, L.; Cuomo-Dannenburg, G.; Dighe, A.; Donnelly, C. A.; Dorigatti, I.; Elsland, S. L. van; Fitzjohn, R.; et al.

Title

The impact of COVID-19 and strategies for mitigation and suppression in low- and middle-income countries.

Source

Science (Washington); 2020. 369(6502):413-422. 61 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

The ongoing coronavirus disease 2019 (COVID-19) pandemic poses a severe threat to public health worldwide. We combine data on demography, contact patterns, disease severity, and health care capacity and quality to understand its impact and inform strategies for its control. Younger populations in lower-income countries may reduce overall risk, but limited health system capacity coupled with closer intergenerational contact largely negates this benefit. Mitigation strategies that slow but do not interrupt transmission will still lead to COVID-19 epidemics rapidly overwhelming health systems, with substantial excess deaths in lower-income countries resulting from the poorer health care available. Of countries that have undertaken suppression to date, lower-income countries have acted earlier. However, this will need to be maintained or triggered more frequently in these settings to keep below available health capacity, with associated detrimental consequences for the wider health, well-being, and economies of these countries.

Publication Type

Journal article.

<18>

Accession Number

20203356523

Author

Karim, Q. A.; Karim, S. S. A.

Title

COVID-19 affects HIV and tuberculosis care.

Source

Science (Washington); 2020. 369(6502):366-368. 15 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

The aim of the article was to examine the effect of COVID-19 on HIV and tuberculosis care. New and ongoing research on HIV and TB prevention and treatment have been severely affected by the COVID-19 epidemic. At the initiation of the lockdown in South Africa, the National Health Research Ethics Committee suspended all medical research, including clinical trials. Research progress on these two conditions has also slowed because several of the country's AIDS and TB researchers are redirecting their efforts to COVID-19. However, COVID-19 research efforts have increased collaboration and created new approaches to speed up therapeutic and vaccine development and testing, which will likely have long-term benefits for medical research beyond COVID-19.

Publication Type

Journal article.

<19>

Accession Number

20203356520

Author

Gao Qiang; Bao LinLin; Mao HaiYan; Wang Lin; Xu KangWei; Yang MinNan; Li YaJing; Zhu Ling; Wang Nan; Lv Zhe; Gao Hong; Ge XiaoQin; Kan Biao; Hu YaLing; Liu JiangNing; Cai Fang; Jiang DeYu; Yin YanHui; Qin ChengFeng; Li Jing; Gong XueJie; Lou XiuYu; Shi Wen; Wu DongDong; Zhang HengMing; et al.

Title

Development of an inactivated vaccine candidate for SARS-CoV-2.

Source

Science (Washington); 2020. 369(6499):77-81. 23 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

The coronavirus disease 2019 (COVID-19) pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has resulted in an unprecedented public health crisis. Because of the novelty of the virus, there are currently no SARS-CoV-2-specific treatments or vaccines available. Therefore, rapid development of effective vaccines against SARS-CoV-2 are urgently needed. Here, we developed a pilot-scale production of PiCoVacc, a purified inactivated SARS-CoV-2 virus vaccine candidate, which induced SARS-CoV-2-specific neutralizing antibodies in mice, rats, and nonhuman primates. These antibodies neutralized 10 representative SARS-CoV-2 strains, suggesting a possible broader neutralizing ability against other strains. Three immunizations using two different doses, 3 or 6 micrograms per dose, provided partial or complete protection in macaques against SARS-CoV-2 challenge, respectively, without observable antibody-dependent enhancement of infection. These data support the clinical development and testing of PiCoVacc for use in humans.

Publication Type

Journal article.

<20>

Accession Number

20203356518

Author

Lamers, M. M.; Beumer, J.; Vaart, J. van der; Knoops, K.; Puschhof, J.; Breugem, T. I.; Ravelli, R. B. G.; Schayck, J. P. van; Mykytyn, A. Z.; Duimel, H. Q.; Donselaar, E. van; Riesebosch, S.; Kuijpers, H. J. H.; Schipper, D.; Wetering, W. J. van de; Graaf, M. de; Koopmans, M.; Cuppen, E.; Peters, P. J.; Haagmans, B. L.; Clevers, H.

Title

SARS-CoV-2 productively infects human gut enterocytes.

Source

Science (Washington); 2020. 369(6499):50-54. 35 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) can cause coronavirus disease 2019 (COVID-19), an influenza-like disease that is primarily thought to infect the lungs with transmission through the respiratory route. However, clinical evidence suggests that the intestine may present another viral target organ. Indeed, the SARS-CoV-2 receptor angiotensin-converting enzyme 2 (ACE2) is highly expressed on differentiated enterocytes. In human small intestinal organoids (hSIOs), enterocytes were readily infected by SARS-CoV and SARS-CoV-2, as demonstrated by confocal and electron microscopy. Enterocytes produced infectious viral particles, whereas messenger RNA expression analysis of hSIOs revealed induction of a generic viral response program. Therefore, the intestinal epithelium supports SARS-CoV-2 replication, and hSIOs serve as an experimental model for coronavirus infection and biology.

Publication Type

Journal article.

<21>

Accession Number

20203352725

Author

Pastorino, B.; Touret, F.; Gilles, M.; Lamballerie, X. de; Charrel, R. N.

Title

Heat inactivation of different types of SARS-CoV-2 samples: what protocols for biosafety, molecular detection and serological diagnostics?

Source

Viruses; 2020. 12(7)22 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Standard precautions to minimize the risk of SARS-CoV-2 transmission implies that infected cell cultures and clinical specimens may undergo some sort of inactivation to reduce or abolish infectivity. We evaluated three heat inactivation protocols (56degreesC-30 min, 60degreesC-60 min and 92degreesC-15 min) on SARS-CoV-2 using (i) infected cell culture supernatant, (ii) virus-spiked human sera (iii) and nasopharyngeal samples according to the recommendations of the European norm NF EN 14476-A2. Regardless of the protocol and the type of samples, a 4 Log10 TCID50 reduction was observed. However, samples containing viral loads > 6 Log10 TCID50 were still infectious after 56degreesC-30 min and 60degreesC-60 min, although infectivity was < 10 TCID50. The protocols 56degreesC-30 min and 60degreesC-60 min had little influence on the RNA copies detection, whereas 92degreesC-15 min drastically reduced the limit of detection, which suggests that this protocol should be avoided for inactivation ahead of molecular diagnostics. Lastly, 56degreesC-30 min

treatment of serum specimens had a negligible influence on the results of IgG detection using a commercial ELISA test, whereas a drastic decrease in neutralizing titers was observed.

Publication Type

Journal article.

<22>

Accession Number

20203353924

Author

Adekunle, A.; Meehan, M.; Rojas-Alvarez, D.; Trauer, J.; McBryde, E.

Title

Delaying the COVID-19 epidemic in Australia: evaluating the effectiveness of international travel bans.

Source

Australian and New Zealand Journal of Public Health; 2020. 44(4):257-259. 7 ref.

Publisher

Wiley

Location of Publisher

Melbourne

Country of Publication

Australia

Abstract

Objective: Following the outbreak of novel Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2), and the disease named COVID-19, in Wuhan, China in late 2019, countries have implemented different interventions such as travel bans to slow the spread of this novel virus. This brief report evaluates the effect of travel bans imposed to prevent COVID-19 importation in the Australian context. Methods: We developed a stochastic meta-population model to capture the global dynamics and spread of COVID-19. By adjusting our model to capture the travel bans imposed globally and in Australia, the predicted COVID-19 cases imported to Australia were evaluated in comparison to observed imported cases. Results: Our modelling results closely

aligned with observed cases in Australia and elsewhere. We observed a 79% reduction in COVID-19 importation and a delay of the COVID-19 outbreak in Australia by approximately one month. Further projection of COVID-19 to May 2020 showed spread patterns depending on the basic reproduction number. Conclusion: Imposing the travel ban was effective in delaying widespread transmission of COVID-19. However, strengthening of the domestic control measures is needed to prevent Australia from becoming another epicentre. Implications for public health: This report has shown the importance of border closure to pandemic control.

Publication Type

Journal article.

<23>

Accession Number

20203367138

Author

Deng JunHua; Jin YiPeng; Liu YuXiu; Sun Jie; Hao LiYing; Bai JingJing; Huang Tian; Lin DeGui; Jin YaPing; Tian KeGong

Title

Serological survey of SARS-CoV-2 for experimental, domestic, companion and wild animals excludes intermediate hosts of 35 different species of animals.

Source

Transboundary and Emerging Diseases; 2020. 67(4):1745-1749. 9 ref.

Publisher

Wiley

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

The pandemic SARS-CoV-2 has been reported in 123 countries with more than 5,000 patients died from it. However, the original and intermediate hosts of the virus remain unknown. In this study, 1,914 serum samples from 35 animal species were used for detection of SARS-CoV-2-specific antibodies using double-antigen sandwich ELISA after validating its specificity and sensitivity. The results showed that no SARS-CoV-2-specific antibodies were detected in above samples which excluded the possibility of 35 animal species as intermediate host for SARS-CoV-2. More importantly, companion animals including pet dogs (including one dog the SARS-CoV-2 patient kept and two dogs which had close contact with it) and cats, street dogs and cats also showed serological negative to SARS-CoV-2, which relieved the public concerns for the pets as SARS-CoV-2 carriers.

Publication Type

Journal article.

<24>

Accession Number

20203367132

Author

Yu Xiao; Sun XiaoDong; Cui Peng; Pan Hao; Lin Sheng; Han RuoBing; Jiang ChenYan; Fang QiWen; Kong DeChuan; Zhu YiYi; Zheng YaXu; Gong XiaoHuan; Xiao WenJia; Mao ShengHua; Jin BiHong; Wu HuanYu; Fu Chen

Title

Epidemiological and clinical characteristics of 333 confirmed cases with coronavirus disease 2019 in Shanghai, China.

Source

Transboundary and Emerging Diseases; 2020. 67(4):1697-1707. 36 ref.

Publisher

Wiley

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

Coronavirus disease 2019 (COVID-19) is an emerging infectious disease first identified in Wuhan City, Hubei Province, China. As of 19 February 2020, there had been 333 confirmed cases reported in Shanghai, China. This study elaborates on the epidemiological and clinical characteristics of COVID-19 based on a descriptive study of the 333 patients infected with COVID-19 in Shanghai for the purpose of probing into this new disease and providing reference. Among the 333 confirmed cases in Shanghai, 172 (51.7%) were males and 161 (48.3%) were females, with a median age of 50 years. 299 (89.8%) cases presented mild symptoms. 139 (41.7%) and 111 (33.3%) cases were infected in Wuhan and Shanghai, respectively. 148 (44.4%) cases once had contact with confirmed cases before onset, while 103 (30.9%) cases had never contacted confirmed cases but they had a sojourn history in Wuhan. The onset date of the first case in Shanghai was 28 December, with the peak appearing on 27 January. The median incubation period of COVID-19 was estimated to be 7.2 days. 207 (62.2%) cases had fever symptoms at the onset, whereas 273 (82.0%) cases experienced fever before hospitalization. 56 (18.6%) adults experienced a decrease in white blood cell and 84 (42.9%) had increased C-reactive protein after onset. Elderly, male and heart disease history were risk factors for severe or critical pneumonia. These findings suggest that most cases experienced fever symptoms and had mild pneumonia. Strengthening the health management of elderly men, especially those with underlying diseases, may help reduce the incidence of severe and critical pneumonia. Time intervals from onset to visit, hospitalization and diagnosis confirmed were all shortened after Shanghai's first-level public health emergency response. Shanghai's experience proves that COVID-19 can be controlled well in megacities.

Publication Type

Journal article.

<25>

Accession Number

20203367111

Author

Li Chun; Ren LinZhu

Title

Recent progress on the diagnosis of 2019 novel coronavirus.

Source

Transboundary and Emerging Diseases; 2020. 67(4):1485-1491. 44 ref.

Publisher

Wiley

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

Coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has become a global pandemic. Therefore, convenient, timely and accurate detection of SARS-CoV-2 is urgently needed. Here, we review the types, characteristics and shortcomings of various detection methods, as well as perspectives for the SARS-CoV-2 diagnosis. Clinically, nucleic acid-based methods are sensitive but prone to false-positive. The antibody-based method has slightly lower sensitivity but higher accuracy. Therefore, it is suggested to combine the two methods to improve the detection accuracy of COVID-19.

Publication Type

Journal article.

<26>

Accession Number

20203366486

Author

Cupertino, G. A.; Carmo Cupertino, M. do; Gomes, A. P.; Braga, L. M.; Siqueira-Batista, R.

Title

COVID-19 and Brazilian indigenous populations.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(2):609-612. 25 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

The newly discovered SARS-CoV-2 is the cause of COVID-19, including severe respiratory symptoms with an important lethality rate and high dissemination capacity. Considering the indigenous people of Brazil, it is feared that COVID-19 will spread to these communities, causing another stage of decimation. Despite advances in indigenous health care in the country, there are still many challenges due to the social vulnerability of this population, whose lands continue to be illegally exploited. Based on these considerations, this article discusses challenges in caring for the indigenous population in the context of the COVID-19 pandemic in Brazil.

Publication Type

Journal article.

<27>

Accession Number

20203366484

Author

Khan, Y. H.; Mallhi, T. H.; Alotaibi, N. H.; Alzarea, A. I.; Alanazi, A. S.; Nida Tanveer; Hashmi, F. K.

Title

Threat of COVID-19 vaccine hesitancy in Pakistan: the need for measures to neutralize misleading narratives.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(2):603-604. 9 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

Immediately after declaring COVID-19 as a pandemic, numerous wild conspiracy theories sprouted through social media. Pakistan is quite vulnerable to such conspiracy narratives and has experienced failures of polio vaccination programs because of such claims. Recently, two well-known political figures raised conspiracy theories against COVID-19 vaccines in Pakistan, stating that COVID-19 is a grand illusion and a conspiracy against Muslim countries. This theory is much discussed in the local community, supporting COVID-19 vaccine hesitancy. We urge healthcare authorities in Pakistan to take necessary measures against such claims before they penetrate to the general community. Anti-vaccine movements could undermine efforts to end the COVID-19 pandemic. We believe that ethical and responsible behavior of mass media, a careful advisory from the Pakistan Electronic Media Regulatory Authority, stern measures from healthcare authorities, effective maneuvers to increase public awareness on COVID-19, vigorous analysis of information by data or communications scientists, and publication of counter opinions from health professionals against such theories will go a long way in neutralizing such misleading claims. Because Pakistan is experiencing a large burden of disease, with a sharp rise in confirmed cases, immediate action is of paramount importance to eradicate any potential barriers to a future COVID-19 vaccination program.

Publication Type

Journal article.

<28>

Accession Number

20203366483

Author

Nachega, J. B.; Mbala-Kingebeni, P.; Otshudiema, J.; Mobula, L. M.; Preiser Wolfgang; Kallay, O.; Michaels-Strasser, S.; Breman, J. G.; Rimoin, A. W.; Nsio, J.; Ahuka-Mundeke, S.; Zumla, A.; Tam-Fum, J. J. M.

Title

Responding to the challenge of the dual COVID-19 and Ebola epidemics in the Democratic Republic of Congo-priorities for achieving control.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(2):597-602. 18 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

As of June 11, 2020, the Democratic Republic of the Congo (DRC) has reported 4,258 COVID-19 cases with 90 deaths. With other African countries, the DRC faces the challenge of striking a balance between easing public health lockdown measures to curtail the spread of SARS-CoV-2 and minimizing both economic hardships for large sectors of the population and negative impacts on health services for other infectious and noninfectious diseases. The DRC recently controlled its tenth Ebola virus disease (EVD) outbreak, but COVID-19 and a new EVD outbreak beginning on June 1, 2020 in the northwest Equateur Province have added an additional burden to health services. Although the epidemiology and transmission of EVD and COVID-19 differ, leveraging the public health infrastructures and experiences from coordinating the EVD response to guide the public health response to COVID-19 is critical. Building on the DRC's 40 years of experience with 10 previous EVD outbreaks, we highlight the DRC's multi-sectoral public health approach to COVID-19, which includes community-based screening, testing, contact-tracing, risk communication, community engagement, and case management. We also highlight remaining challenges and discuss the way forward for achieving control of both COVID-19 and EVD in the DRC.

Publication Type

Journal article.

<29>

Accession Number

20203366480

Author

Seytre, B.

Title

Erroneous communication messages on COVID-19 in Africa.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(2):587-589. 4 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

Adherence of the population to COVID-19 prevention recommendations is crucial to control the epidemic. However, a study of communication messages around COVID-19 in 15 West African countries showed a number of unfounded messages, as well as a lack of communication on critical information to understand the prevention measures being promoted. Incidents of violence that have taken place recently suggest that general mistrust and hostility could grow, similar to the events that occurred during the previous Ebola epidemics. It is therefore urgent to review and revise the COVID-19 communication messages currently used in sub-Saharan Africa.

Publication Type

Journal article.

<30>

Accession Number

20203366479

Author

Alvarez-Risco, A.; Mejia, C. R.; Delgado-Zegarra, J.; Del-Aguila-Arcentales, S.; Arce-Esquivel, A. A.; Valladares-Garrido, M. J.; Portal, M. R. del; Villegas, L. F.; Curioso, W. H.; Sekar, M. C.; Yanez, J. A.

Title

The Peru approach against the COVID-19 infodemic: insights and strategies.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(2):583-586. 40 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

The COVID-19 epidemic has spawned an "infodemic", with excessive and unfounded information that hinders an appropriate public health response. This perspective describes a selection of COVID-19 fake news that originated in Peru and the government's response to this information. Unlike other countries, Peru was relatively successful in controlling the infodemic possibly because of the implementation of prison sentences for persons who created and shared fake news. We believe that similar actions by other countries in collaboration with social media companies may offer a solution to the infodemic problem.

Publication Type

Journal article.

<31>

Accession Number

20203366476

Author

Gutman, J. R.; Lucchi, N. W.; Cantey, P. T.; Steinhardt, L. C.; Samuels, A. M.; Kamb, M. L.; Kapella, B. K.; McElroy, P. D.; Udhayakumar, V.; Lindblade, K. A.

Title

Malaria and parasitic neglected tropical diseases: potential syndemics with COVID-19?

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(2):572-577. 72 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

The COVID-19 pandemic, caused by SARS-CoV-2, have surpassed 5 million cases globally. Current models suggest that low- and middle-income countries (LMICs) will have a similar incidence but substantially lower mortality rate than high-income countries. However, malaria and neglected tropical diseases (NTDs) are prevalent in LMICs, and coinfections are likely. Both malaria and parasitic NTDs can alter immunologic responses to other infectious agents. Malaria can induce a cytokine storm and pro-coagulant state similar to that seen in severe COVID-19. Consequently, coinfections with malaria parasites and SARS-CoV-2 could result in substantially worse outcomes than mono-infections with either pathogen, and could shift the age pattern of severe COVID-19 to younger age-groups. Enhancing surveillance platforms could provide signals that indicate whether malaria, NTDs, and COVID-19 are syndemics (synergistic epidemics). Based on the prevalence of malaria and NTDs in specific localities, efforts to characterize COVID-19 in LMICs could be expanded by adding testing for malaria and NTDs. Such additional testing would allow the determination of the rates of coinfection and comparison of severity of outcomes by infection status, greatly improving the understanding of the epidemiology of COVID-19 in LMICs and potentially helping to mitigate its impact.

Publication Type

Journal article.

<32>

Accession Number

20203366475

Author

Wilder-Smith, A.; Tissera, H.; Ooi EngEong; Coloma, J.; Scott, T. W.; Gubler, D. J.

Title

Preventing dengue epidemics during the COVID-19 pandemic.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(2):570-571. 10 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Publication Type

Journal article.

<33>

Accession Number

20203366472

Author

Beshir, K. B.; Grignard, L.; Hajissa, K.; Mohammed, A.; Nurhussein, A. M.; Ishengoma, D. S.; Lubis, I. N. D.; Drakeley, C. J.; Sutherland, C. J.

Title

Emergence of undetectable malaria parasites: a threat under the radar amid the COVID-19 pandemic?

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(2):558-560. 25 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

Rapid diagnostic tests (RDTs) play a critical role in malaria diagnosis and control. The emergence of Plasmodium falciparum parasites that can evade detection by RDTs threatens control and elimination efforts. These parasites lack or have altered genes encoding histidine-rich proteins (HRPs) 2 and 3, the antigens recognized by HRP2-based RDTs. Surveillance of such parasites is dependent on identifying false-negative RDT results among suspected malaria cases, a task made more challenging during the current pandemic because of the overlap of symptoms between malaria and COVID-19, particularly in areas of low malaria transmission. Here, we share our perspective on the emergence of P. falciparum parasites lacking HRP2 and HRP3, and the surveillance needed to identify them amid the COVID-19 pandemic.

Publication Type

Journal article.

<34>

Accession Number

20203361480

Author

Jamal, T.; Budke, C.

Title

Tourism in a world with pandemics: local-global responsibility and action.

Source

Journal of Tourism Futures; 2020. 6(2):181-188. 31 ref.

Publisher

Emerald Publishing

Location of Publisher

Bingley

Country of Publication

UK

Abstract

Purpose - The purpose of this paper is to provide a swift perspective to JTF readers on the novel coronavirus outbreak that commenced in Wuhan, China in December 2019 and is currently ongoing. The study situates the current outbreak within prior pandemics and offers some directions for research and practice. Swift attention is needed to this event and the future of travel and tourism in a world where disease outbreaks and pandemics will become increasingly frequent due to increased travel and ease of access to destinations worldwide. Design/methodology/approach - This paper draws from published academic research studies, as well as current media sources emerging, as the novel coronavirus situation is unfolding. In addition, the authors draw on the multidisciplinary expertise of the two authors (one based in tourism studies and the other an epidemiologist and public health expert). Findings - This paper captures events on the novel coronavirus, as they are unfolding now, situates this in relation to the research literature on past pandemics like severe acute respiratory syndrome (SARS) and Ebola and draws some important directions to guide research and practice. Research limitations/implications - This is a viewpoint paper and offers some emerging perspectives, issues and challenges arising in relation to the current novel coronavirus outbreak. This is situated more broadly in a large research literature that has been drawn on in a very succinct manner to ground this viewpoint. Future research will need to explore the larger literature. Practical implications - This viewpoint offers the following valuable implications for practice at the local level and the regional/global level: countering misinformation and xenophobia through the communication of accurate facts related to the disease in question (the novel coronavirus in this case) is essential; close collaboration and cooperation between tourism stakeholders (including service providers and destination management organizations) and public health authorities; greater responsibility by residents and tourists to seek out correct scientific facts on the disease and take sensible precautions, as well as exercise care to those suffering the adverse impacts; and global coordination and attention to vulnerable destinations is needed more concretely (recommended in crisis management and recovery studies but not well implemented yet). Social implications - As noted above under practical implications, this viewpoint identified important social implications in terms of inequities and injustices that arise during disease outbreaks like the novel coronavirus and prior outbreaks like SARS and Ebola. These range from discrimination and racism as well as inequities related to managing the impacts on vulnerable destinations whose health facilities may be far from adequate to handle such outbreaks and the challenges of misinformation among visitors and residents that indirectly or directly affect the destination. Originality/value - This viewpoint is being submitted as the novel coronavirus epidemic is unfolding, and it is hoped that sharing it speedily via an open access journal will assist in better managing the research of what will continue to be an increasing future challenge for destinations and societies in a world of mobilities and increasing travel forecast.

Publication Type

Journal article.

<35>

Accession Number

20203367620

Author

Kohan, S.; Rahnemaei, F. A.

Title

Delayed umbilical cord clamping and breastfeeding after childbirth in mothers affected by COVID 19: recommended or not?

Source

European Journal of Obstetrics & Gynecology and Reproductive Biology; 2020. 250:264-264. 7 ref.

Publisher

Elsevier Ireland

Location of Publisher

Shannon

Country of Publication

Irish Republic

Publication Type

Journal article.

<36>

Accession Number

20203361465

Author

Abhinav Sharma; Nicolau, J. L.

Title

An open market valuation of the effects of COVID-19 on the travel and tourism industry. (Curated Collection: Coronavirus.)

Source

Annals of Tourism Research; 2020. 836 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Mounting pressure from the various parties bearing the financial fallout from the COVID-19 pandemic has prompted US policymakers to draft initial economic recovery plans. In this research, an open market valuation approach is used to assess the expected fallout in four major subsectors within the travel industry (airlines, hotels, cruise lines and rental cars) as a path to gauge how pandemic related bailout funds may be prioritized in the travel industry. The results suggest that as a consequence of the pandemic, each of the four industries have experienced a substantial fall in valuation. The drop is significant enough in each industry to warrant concerns about the long-term outlook for each of the industries. What is apparent is, nonetheless, that the most serious concerns pertain to the cruise industry.

Publication Type

Journal article.

<37>

Accession Number

20203363873

Author

Griffith, D. M.; Sharma, G.; Holliday, C. S.; Enyia, O. K.; Valliere, M.; Semlow, A. R.; Stewart, E. C.; Blumenthal, R. S.

Title

Men and COVID-19: a biopsychosocial approach to understanding sex differences in mortality and recommendations for practice and policy interventions.

Source

Preventing Chronic Disease; 2020. 17(7)45 ref.

Publisher

National Center for Chronic Disease Prevention and Health Promotion

Location of Publisher

Washington

Country of Publication

USA

Abstract

Data suggest that more men than women are dying of coronavirus disease 2019 (COVID-19) worldwide, but it is unclear why. A biopsychosocial approach is critical for understanding the disproportionate death rate among men. Biological, psychological, behavioral, and social factors may put men at disproportionate risk of death. We propose a stepwise approach to clinical, public health, and policy interventions to reduce COVID-19-associated morbidity and mortality among men. We also review what health professionals and policy makers can do, and are doing, to address the unique COVID-19-associated needs of men.

Publication Type

Journal article.

<38>

Accession Number

20203360794

Author

Henry, B. F.

Title

Social distancing and incarceration: policy and management strategies to reduce COVID-19 transmission and promote health equity through decarceration. (Special Issue: The COVID-19 pandemic.)

Source

Health Education & Behavior; 2020. 47(4):536-539. 38 ref.

Publisher

Sage Publications

Location of Publisher

Thousand Oaks

Country of Publication

USA

Abstract

Incarcerated people are at disproportionately high risk of contracting COVID-19. Prisons are epicenters for COVID-19 transmission, including to the community. High rates of preexisting health conditions, limited access to quality health care, and inability to social distance make it impossible to reduce the impact of COVID-19 in prisons. Due to a history of compounded social determinants, incarcerated populations are disproportionately composed of people of color and people with stigmatized behavioral health disorders. Rapid decarceration is needed to promote health equity. Historical mass decarceration events demonstrate feasibility to rapidly release large groups of people while maintaining public safety. Iran and Ireland have released substantial portions of their prison populations by transitioning people to home confinement. In the United States and Uganda, some jurisdictions have reduced new incarcerations through policies that decrease arrests. These policies must be globally expanded to contain the epidemic, and its potential health consequences, while addressing health equity.

Publication Type

Journal article.

<39>

Accession Number

20203360785

Author

Singh, J. P.; Anshuman Sewda; Shiv, D. G.

Title

Assessing the knowledge, attitude and practices of students regarding the COVID-19 pandemic.

Source

Journal of Health Management; 2020. 22(2):281-290. 16 ref.

Publisher

Sage Publications India Pvt Ltd

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Introduction: The coronavirus disease (COVID-19) pandemic has impacted everyone, including students. Accurate information about the disease, its spread, preventive measures and government-issued advisories is critical for containing an outbreak. We evaluated the knowledge, attitudes and practices, and the key behavioural determinants of clinical outcomes, among university students. Materials and methods: We conducted a cross-sectional study among IIHMR University students (31 March to 10 April 2020), soon after the nationwide lockdown in India. Through purposive sampling, we enrolled 529 students, who completed a semi-structured questionnaire (44% completion rate). Knowledge level of the participants was assessed using a scoring system, and chi-squared test and t-test were performed to detect significant ($p < 0.05$) differences among various groups. Results: More than 70 per cent of students had good knowledge of COVID-19 symptoms, mode of transmission and preventive measures, and 66 per cent knew about treatment approaches. Social media (83%) and TV (77%) were their primary sources of information. Most students showed a willingness to follow social distancing and lockdown guidelines; however, only 27 per cent perceived the risk of infection. Nearly all students reported compliance with government health advisories. Conclusions: We evaluated COVID-19 awareness and impacts of various information sources on effective outbreak containment. Improved community engagement activities and effective communication are needed during widespread disease outbreaks.

Publication Type

Journal article.

<40>

Accession Number

20203360784

Author

Neetu Purohit; Seema Mehta

Title

Risk communication initiatives amid COVID-19 in India: analyzing message effectiveness of videos on national television.

Source

Journal of Health Management; 2020. 22(2):262-280. 26 ref.

Publisher

Sage Publications India Pvt Ltd

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Communication for all hazards including widespread public health emergencies is a massive task. The crucial element is to reach and cover maximum people in a timely manner. This article is based on a systematic content analysis of videos on coronavirus disease (COVID-19) on National Television by Indian Public Service Broadcaster and Ministry of Health and Family Welfare. A total of 36 videos were telecasted on National Television channel Doordarshan from 3 March to 21 April 2020 in between programme breaks. The article analyses the presentation characteristics of these videos with respect to timing, duration, language, characters, format and key message content of communication videos on COVID-19. The article deliberates about the manner in which the chronology of the communication messages synced with the external events of the trajectory of the pandemic and thereby information-need of the community in India. All the messages which evolved in these videos (real and animated) were built on each other and depicted an information hierarchy (e.g., washing hands to social distancing) which could be viewed as an empowering tool for the community.

The videos were analysed based on the nine constructs of conceptual model of emergency risk communication given by Seeger et al. (2018). The key preventive messages in these videos focused on generating awareness, which was the fundamental necessity in view of the new type of pandemic like COVID-19. The summated scores show that 36 videos were appropriate up to 79 per cent times for the nine constructs, indicating the effectiveness of the messages in communicating the intended message as per the assessed construct. Limitations of the messages were primarily related to the inability to design communication messages with respect to specific understanding, needs and culture of the community.

Publication Type

Journal article.

<41>

Accession Number

20203360783

Author

Anu Sharma; Pankaj Gupta; Rishabh Jha

Title

COVID-19: impact on health supply chain and lessons to be learnt.

Source

Journal of Health Management; 2020. 22(2):248-261. 42 ref.

Publisher

Sage Publications India Pvt Ltd

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Before the imposition of the strict lockdowns and the spread of COVID-19, the disruptions in China caused a ripple effect on the global supply chains. Emphasis has been laid on minimisation of costs and timely delivery

of essential products. In India, as the situation worsens due to the outbreak, we have seen disruptions in the logistics supply chain. There are several reasons attributed to the increase in demand and slowing of the supply. There are several workable solutions available to look into this situation. We should work towards promoting Indian markets and amend policies to help the local workforce lessen the interdependencies of imports on other countries. This will help in strengthening the logistics supply chain in India. This will create employment opportunities and increase the GDP growth.

Publication Type

Journal article.

<42>

Accession Number

20203360781

Author

Manasee Mishra; Piyusha Majumdar

Title

Social distancing during COVID-19: will it change the Indian society?

Source

Journal of Health Management; 2020. 22(2):224-235. 50 ref.

Publisher

Sage Publications India Pvt Ltd

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Social distancing refers to a host of public health measures aimed at reducing social interaction between people based on touch or physical proximity. It is a non-pharmaceutical intervention to slow the spread of infectious diseases in the communities. It becomes particularly important as a community mitigation strategy

before vaccines or drugs become widely available. This essay describes how a protracted adherence to social distancing guidelines could affect the Indian society. Changes are expected in some of the prevalent cultural norms such as personal space and common good. Gender relations within the family are likely to change in favour of greater sharing of domestic responsibilities between men and women. Older adults may particularly experience stress due to social distancing because of their physical dependency and emotional vulnerability. Working patterns are likely to become more flexible and promotive of social distancing. Human interaction based on digital technology is likely to increase. The implications for public health in India due to such changes are also discussed.

Publication Type

Journal article.

<43>

Accession Number

20203360778

Author

Shankar Das

Title

Mental health and psychosocial aspects of COVID-19 in India: the challenges and responses.

Source

Journal of Health Management; 2020. 22(2):197-205. 24 ref.

Publisher

Sage Publications India Pvt Ltd

Location of Publisher

New Delhi

Country of Publication

India

Abstract

The first-ever global outbreak of COVID-19 has been intensely impacting humanity and continues to affect all segments of the population since its origin While dealing with such public health emergencies, the past experiences have testified generalised public fear and anxieties due to uncertainty, fatality, and lack of public health preparedness. The aim of the article is to explore the impact of this unprecedented environment on mental health of individuals and communities in its current magnitude. It will discuss at length some emerging concepts of the causal pathways of mental distress/disorders and suggest strategies to prevent and promote mental health in individuals during this crisis. For the general population at large, the mental health effects of COVID-19 are as important to address as are the physical health effects.

Publication Type

Journal article.

<44>

Accession Number

20203360776

Author

Anoop Khanna

Title

Impact of migration of labour force due to global COVID-19 pandemic with reference to India.

Source

Journal of Health Management; 2020. 22(2):181-191. 31 ref.

Publisher

Sage Publications India Pvt Ltd

Location of Publisher

New Delhi

Country of Publication

India

Abstract

This article discussed some of the important issues regarding the effect of epidemics like COVID-19 on the migrant population. These impacts are most troubling for low-income households, which are less well positioned to cope with earnings losses during a recession, have no alternative earnings and have no social security available. Most of these workers earn little more than a subsistence wage and have no other means to protect their incomes if they lose their jobs. Migrant workers constitute quite a large proportion of such vulnerable population. Millions of migrant workers are anticipated to be left unemployed in India due to the lockdown and subsequent fear of recession. Many of the migrant workers have returned to their villages, and many more are just waiting for the lockdown to be lifted. The risk is particularly higher for those who are working in unorganised sectors, and those who do not have writer contracts, or those whose contracts are at the verge of completion. The lockdown and the subsequent recession are likely to first hit contract workers across many of the industries. On the one hand, lockdowns and social distancing measures are drying up jobs and incomes, whereas they are likely to disrupt agricultural production, transportation systems, and supply chains on the other. This poses a challenge of ensuring food security and controlling already rampant malnutrition, particularly among children, which is likely to result in increased infant and child mortality. There is a need to relook at the national migration policies, which should accommodate the assistance and protection of migrants arriving from, or faced with the prospect of returning to, areas affected by health crises. Also, there is a need to establish resilient food systems that could reduce food insecurity and the pressure to return to origin among migrants.

Publication Type

Journal article.

<45>

Accession Number

20203360775

Author

Monika Chaudhary; Sodani, P. R.; Shankar Das

Title

Effect of COVID-19 on economy in India: some reflections for policy and programme.

Source

Journal of Health Management; 2020. 22(2):169-180. 20 ref.

Publisher

Sage Publications India Pvt Ltd

Location of Publisher

New Delhi

Country of Publication

India

Abstract

The outbreak of COVID-19 brought social and economic life to a standstill. In this study the focus is on assessing the impact on affected sectors, such as aviation, tourism, retail, capital markets, MSMEs, and oil. International and internal mobility is restricted, and the revenues generated by travel and tourism, which contributes 9.2% of the GDP, will take a major toll on the GDP growth rate. Aviation revenues will come down by USD 1.56 billion. Oil has plummeted to 18-year low of $ 22 per barrel in March, and Foreign Portfolio Investors (FPIs) have withdrawn huge amounts from India, about USD 571.4 million. While lower oil prices will shrink the current account deficit, reverse capital flows will expand it. Rupee is continuously depreciating. MSMEs will undergo a severe cash crunch. The crisis witnessed a horrifying mass exodus of such floating population of migrants on foot, amidst countrywide lockdown. Their worries primarily were loss of job, daily ration, and absence of a social security net. India must rethink on her development paradigm and make it more inclusive. COVID 19 has also provided some unique opportunities to India. There is an opportunity to participate in global supply chains, multinationals are losing trust in China. To 'Make in India', some reforms are needed, labour reforms being one of them.

Publication Type

Journal article.

<46>

Accession Number

20203360774

Author

Neeraj Sharma; Zubeda Hasan; Anoop Velayudhan; Emil, M. A.; Mangal, D. K.; Gupta, S. D.

Title

Personal protective equipment: challenges and strategies to combat COVID-19 in India: a narrative review.

Source

Journal of Health Management; 2020. 22(2):157-168. many ref.

Publisher

Sage Publications India Pvt Ltd

Location of Publisher

New Delhi

Country of Publication

India

Abstract

The current outbreak of the coronavirus disease (COVID-19) has become a pandemic. All COVID-19-affected countries in the world are implementing containment interventions and trying their best to fight against the disease to halt the further spread of the infection and to reduce mortality. The public health workforce and healthcare staff in clinical settings are playing a crucial role in the early detection of cases, contact tracing and treatment of patients. The availability of personal protective equipment (PPE) and their consistent, proper use by healthcare providers and public health professionals is a crucial factor in combating any infectious disease in a crisis. The requirement of PPE has exponentially increased, as more and more countries are experiencing the COVID-19 pandemic. The rapid spread of the pandemic has created a temporary shortage of PPE in many countries, including India. The lack of PPE has affected the morale of healthcare workers (HCWs) and other frontline warriors in fighting the coronavirus disease, as more than 22,000 health workers in 56 countries have suffered from COVID-19. Some of them have succumbed to it across all countries, including India (WHO). We have reviewed the available literature to understand the challenges in ensuring adequate availability and consistent use of PPE and the strategies for the rational use of PPE in India. Our study reveals that India has responded swiftly to enhance the accessibility of PPE and put in place strategies for the judicious use of PPE to reduce the incidence of the COVID-19 infection to a bare minimum in healthcare settings. In the present article, we report the current status of COVID-19 among HCWs. We have reviewed the challenges and the surge strategies adopted by India to produce or procure good-quality PPE and supply it to all service delivery points in adequate quantities.

Publication Type

Journal article.

Accession Number

20203360773

Author

Sharma, S. K.; Neeraj Sharma

Title

Hospital preparedness and resilience in public health emergencies at district hospitals and community health centres.

Source

Journal of Health Management; 2020. 22(2):146-156. 13 ref.

Publisher

Sage Publications India Pvt Ltd

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Background: Public health emergencies (PHE) caused by natural hazards spread from one particular locality to adjacent geographic areas and then encompass the entire planet in today's fast global connectivity mode. Each country, including India, has its own set of potential disasters based on the hazards present as well as the unique vulnerabilities of the community and community's preparedness to respond to particular disasters. Currently, human history is observing a very critical time fighting an invisible enemy-COVID-19. Therefore, in this study, we seek to understand the standardised measures of public hospital preparedness and resilience at times of health emergencies, including a pandemic, the most current one being COVID-19. Methods: We conducted a descriptive, cross-sectional study among health officials of district hospitals (DHs) and community health centres (CHCs) of Rajasthan using a semi-structured online questionnaire, with COVID-19 in mind, and sending it to those who had attended a training programme on disaster preparedness in hospitals. Results: In all, questionnaires were sent to 80 health officials of DHs and CHCs, of which 58 responded, with a response rate of 72.5 per cent. We collected responses on public health emergency preparedness, training-related issues, the capacity to deal with emergencies and prior experience in managing an emergency. Conclusion: The resilience and preparedness of DHs and CHCs in Rajasthan appear to be limited. From the studies it has been revealed that proper training and education on disasters like the current COVID-19, which is of significant importance for healthcare workers, is limited to only 37.9 per cent of healthcare workers. It also emerges that the staff members whenever required could mark and perform in the triage area, but the Isolation room haven't got the request facilities and equipped to stabilise a critical patient despite availability of emergency stock of medicine. The stated functional status of DHs and CHCs reveals that the level of emergency preparedness is between low and medium and also varies from hospital to hospital and from CHC

to CHC. Hence, it is time to reassess and upgrade emergency preparedness plans, which include mitigation, preparedness, response and recovery. Federal-, state- and local-level emergency management agencies' functioning has to be effective and well-coordinated with the local level of operation.

Publication Type

Journal article.

<48>

Accession Number

20203363831

Author

Xiao Xiao; Zhu XiaoBin; Fu Shuai; Hu YuGang; Li XiaoNing; Xiao JinSong

Title

Psychological impact of healthcare workers in China during COVID-19 pneumonia epidemic: a multi-center cross-sectional survey investigation.

Source

Journal of Affective Disorders; 2020. 274:405-410. 23 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Since the outbreak of 2019 new coronavirus (COVID-19) pneumonia, healthcare workers (HCW) have suffered psychological stress. The present study is to examine the prevalence of stress, anxiety and depression of HCW in China during the COVID-19 epidemic, and to determine the risk factors predicting psychological morbidities that can be used as psychological intervention targets. Methods: A cross-sectional survey was conducted to investigate the psychological levels of HCW in multiple centers in China. The

prevalence of stress, anxiety and depression were determined by using Perceived Stress Scale (PSS-14) and Hospital Anxiety/Depression scale (HAD). Psychology related factors were evaluated and correlation between job title and contact history was analyzed. Results: We received 958 of effective responses, 73.6% of which were from Wuhan and 67.2% were female participants. 55.1% of respondents had psychological stress that is higher than that of HCW during SARS. 54.2% and 58% of participants had symptoms of anxiety and depression. Stress levels of HCW were different in job titles and years of work experience. Anxiety and depression levels were different between different gender, job titles, degrees of protective measures and levels of contact history. Gender, intermediate title, protective measures and contact history were the independent risk factors for anxiety. Protective measures and contact history were the independent risk factors for depression. Conclusions: The COVID-19 epidemic has induced stress levels for HCW, and high percentages of HCW have anxiety and depression. The situation of HCW is worrying and intervention service is urgent.

Publication Type

Journal article.

<49>

Accession Number

20203363807

Author

Tomassini, L.; Cavagnaro, E.

Title

The novel spaces and power-geometries in tourism and hospitality after 2020 will belong to the 'local'. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):713-719. 18 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The global crisis we have experienced due to the COVID-19 pandemic emergency challenges our perception of the global and local context in which we live, travel, and work. This crisis has spread novel uncertainties and fears about the future of our world, but at the same time, it has also set the ground to rethink the future scenario of tourism and hospitality to bring about a potentially positive transformation after 2020. Such a scenario can be understood in light of the work of Doreen Massey and the pivotal theorisations on 'space' and 'power-geometry' she presented in her book For Space (2005). Massey conceives space as the product of multiple relations, networks, connections, as the dimension of multiplicity, the result of an ongoing making process, and in a mutually constitutive relationship with power. Interweaving Massey's theorisations with a critical examination of the neoliberal capitalism approach to the conceptualization of space, the COVID-19 global crisis prompts us to rethink the space inside and outside of tourism and hospitality by re-focusing on the local dimension of our space as the only guarantee of our own wellbeing, safety, and security. While the global dimension seems more broken than ever, the urgency of belonging to the local is more and more evident. Hence, we propose a critical reflection on the implications of such a scenario in the space of tourism and hospitality, foreseeing a potentially positive transformation in terms of activation of local relations, networks, connections, and multiplicities able to open up such space to multiple novel functions designed not just for tourists and travelers but also for citizens.

Publication Type

Journal article.

<50>

Accession Number

20203363803

Author

Renaud, L.

Title

Reconsidering global mobility - distancing from mass cruise tourism in the aftermath of COVID-19. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):679-689. 28 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The mass cruise tourism industry (MCTI) is inscribed in a neoliberal production of tourism space that promotes the economic, sociocultural and environmental marginalization of cruise destinations. With cruise tourism halted as a result of the COVID-19, but likely to resume in 2021, I question the relevance of this form of tourism and propose future development alternatives aligned with deglobalisation and degrowth of the industry. Power relations with destinations communities can be critiqued using the concepts of global mobility and local mobility to show that the former, imperative for the deployment of mass cruise tourism, is a weakness for the industry in a post-pandemic perspective of reduced mobility. Destinations must use the industry's dependence on global mobility as leverage to transform the balance of power in their favor and promote local mobility. They must embrace radical solutions to take control of their territory to favor a transition from "Growth for development" to "Degrowth for liveability". Host territories, relying on national and regional governance, should gradually ban or restrict the arrival of mega-cruise ships, implement policies that promote the development of a niche cruise tourism industry (NCTI) with small ships and develop a fleet controlled by local actors.

Publication Type

Journal article.

<51>

Accession Number

20203363801

Author

Pernecky, T.

Title

Critical tourism scholars: brokers of hope. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):657-666. 25 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The past four decades of tourism research have demonstrated that the field would be impoverished without recognising the human aspect of scientific inquiry. The contributions made through critical approaches, Indigenous perspectives, qualitative methods and morally instilled concepts such as 'sustainability' or 'community development' have accentuated that tourism scholars are not detached and value-free producers of knowledge. Rather, our gender, ethnicity, personal and political views enter research agendas and actively shape knowledge. Alarmed by a host of social, economic, environmental, political and ethical concerns, and motivated to end injustice, inequality, oppression and discrimination, we also circumnavigate hope. However, researchers' relationships with hope can be problematic, as evidenced by the recent tensions within critical tourism scholarship. In order to examine the extent to which hope ought to be part of tourism research, it is important to engage with the notion of hope seriously and methodically. By drawing on different varieties of hope, it is argued that these can underpin research projects to different degrees, including critical hope, hope-as-utopia, transformative hope, radical hope and pragmatic hope. It is emphasised that hope is connected to critical research in elementary ways and plays a vital role in envisioning a more just, inclusive, sustainable and equitable world. The acknowledgment of hope as part of critical research is particularly valuable amid the COVID-19 pandemic - an event with devastating consequences for communities worldwide. Through a hopeful lens, our momentary loss of tourism may bring with it a renewed appreciation and care, which has been eroded by rampant commodification and comatose consumerism. The hope driving post COVID-19 visions of tourism is argued to lie in more thoughtful and responsible engagement with tourism, and in our ability to positively transform it.

Publication Type

Journal article.

<52>

Accession Number

20203358720

Author

Ballout, R. A.; Sviridov, D.; Bukrinsky, M. I.; Remaley, A. T.

Title

The lysosome: a potential juncture between SARS-CoV-2 infectivity and Niemann-Pick disease type C, with therapeutic implications.

Source

FASEB Journal; 2020. 34(6):7253-7264. 119 ref.

Publisher

John Wiley and Sons, Inc

Location of Publisher

New York

Country of Publication

USA

Abstract

Drug repurposing is potentially the fastest available option in the race to identify safe and efficacious drugs that can be used to prevent and/or treat COVID-19. By describing the life cycle of the newly emergent coronavirus, SARS-CoV-2, in light of emerging data on the therapeutic efficacy of various repurposed antimicrobials undergoing testing against the virus, we highlight in this review a possible mechanistic convergence between some of these tested compounds. Specifically, we propose that the lysosomotropic effects of hydroxychloroquine and several other drugs undergoing testing may be responsible for their demonstrated in vitro antiviral activities against COVID-19. Moreover, we propose that Niemann-Pick disease type C (NPC), a lysosomal storage disorder, may provide new insights into potential future therapeutic targets for SARS-CoV-2, by highlighting key established features of the disorder that together result in an "unfavorable" host cellular environment that may interfere with viral propagation. Our reasoning evolves from previous biochemical and cell biology findings related to NPC, coupled with the rapidly evolving data on COVID-19. Our overall aim is to suggest that pharmacological interventions targeting lysosomal function in general, and those particularly capable of reversibly inducing transient NPC-like cellular and biochemical phenotypes, constitute plausible mechanisms that could be used to therapeutically target COVID-19.

Publication Type

Journal article.

<53>

Accession Number

20203334982

Author

Al-Khikani, F. H. O.; Hameed, R. M.

Title

COVID-19 treatment: possible role of itraconazole as new therapeutic option. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):101-103. 19 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

This article discussed the development and repurposing of itraconazole as an antiviral agent against COVID-19. It suggested the use of the antifungal therapeutics itraconazole (ICZ) in the therapy of COVID-19. It showed antiviral effects against enterovirus 71, suggesting that it has broad-spectrum antiviral efficacy against Picornaviridae. As well as, it showed antiviral activity against some enveloped viral infections such as influenza A virus.

Publication Type

Journal article.

<54>

Accession Number

20203364808

Author

Akbar, A. N.; Gilroy, D. W.

Title

Aging immunity may exacerbate COVID-19.

Source

Science (Washington); 2020. 369(6501):256-257. 15 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

Increased general inflammation in aging inhibits immunity and affects responses to infections. This article examined aging immunity as a risk factor for the progression of COVID-19.

Publication Type

Journal article.

<55>

Accession Number

20203348641

Author

Yu YuanYuan; Li YouJiang; Hu YingYing; Li Bin; Xu Jian

Title

Breastfed 13 month-old infant of a mother with COVID-19 pneumonia: a case report.

Source

International Breastfeeding Journal; 2020. 15(68):(6 August 2020). 22 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: In China, mothers with confirmed or suspected COVID-19 pneumonia are recommended to stop breastfeeding. However, the evidence to support this guidance is lacking. There have been relatively few cases reported about direct breastfeeding an infant by a mother with SARS-CoV-2 pneumonia. Therefore, it is necessary to assess the safety of breastfeeding and the possible protective effects of breast milk on infants. Case presentation: This report analyzes the case of a mother who continued breastfeeding her 13 month-old child when both were diagnosed with confirmed COVID-19 pneumonia. We describe the clinical presentation, diagnosis, treatment, and outcome. The presence of SARS-CoV-2 nucleic acid was determined in maternal serum, breast milk, nasopharyngeal (NP) swabs and feces, and in infant serum, NP swabs and feces. IgM and IgG antibodies against SARS-CoV-2 were assessed in maternal serum and breast milk and in infant serum. SARS-CoV-2 nucleic acid was not detected in the breast milk, and antibodies against SARS-CoV-2 were detected in the mother's serum and milk. Conclusions: The present case further confirms that the possibility of mother-to-child transmission about SARSCoV- 2 via breast milk alone was very small, and breast milk is safe for direct feeding of infants.

Publication Type

Journal article.

<56>

Accession Number

20203324361

Author

Waltenburg, M. A.; Victoroff, T.; Rose, C. E.; Butterfield, M.; Jervis, R. H.; Fedak, K. M.; Gabel, J. A.; Feldpausch, A.; Dunne, E. M.; Austin, C.; Ahmed, F. S.; Tubach, S.; Rhea, C.; Krueger, A.; Crum, D. A.; Vostok, J.; Moore, M. J.; Turabelidze, G.; Stover, D.; Donahue, M.; Edge, K.; Gutierrez, B.; Kline, K. E.; Martz, N.; Rajotte, J. C.; et al.

Title

Update: COVID-19 among workers in meat and poultry processing facilities - United States, April-May 2020.

Source

Morbidity and Mortality Weekly Report; 2020. 69(27):887-892. 9 ref.

Publisher

Epidemiology Program Office, Centers for Disease Control and Prevention (CDC)

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

This article provides updated aggregate data from states regarding the number of meat and poultry processing facilities affected by COVID-19, the number and demographic characteristics of affected workers, and the number of COVID-19-associated deaths among workers, as well as descriptions of interventions and prevention efforts at these facilities. The animal slaughtering and processing industry employs an estimated 525,000 workers in approximately 3,500 facilities nationwide. Combining data on workers with COVID-19 and COVID-19-related deaths identified and reported through May 31 from 23 states (16,233 cases; 86 deaths) with data from an earlier assessment through April 27 (1,125 cases; five deaths) that included data from six states that did not contribute updated data to this report, at least 17,358 cases and 91 COVID-19-related deaths have occurred among U.S. meat and poultry processing workers.

Publication Type

Journal article.

<57>

Accession Number

20203322482

Author

Naeem Shahzad; Irfan Abid; Mirza, W. J.; Iqbal, M. M.

Title

Rapid assessment of COVID-19 suspected cases: a community based approach for developing countries like Pakistan.

Source

Journal of Global Health; 2020. 10(1)14 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

Current global outbreak of COVID-19 has highlighted the inherent gaps in preparedness level and management of the biological disasters notwithstanding the most developed nations of the world. This article discusses the rapid assessment of positive COVID-19 cases in Pakistan. Basing on the discussed factors, the over burdening of the health system can be controlled with a systematic filtering and triage of the suspect cases using the proposed score card, where the parameters discussed have been given due weight to assess the total score of the suspect to filter him/her for a probable test case or otherwise.

Publication Type

Journal article.

<58>

Accession Number

20203325527

Author

Colson, P.; Lagier, J. C.; Baudoin, J. P.; Khalil, J. B.; Scola, B. la; Raoult, D.

Title

Ultrarapid diagnosis, microscope imaging, genome sequencing, and culture isolation of SARS-CoV-2.

Source

European Journal of Clinical Microbiology & Infectious Diseases; 2020. 39(8):1601-1603. 14 ref.

Publisher

Springer-Verlag GmbH

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

The respiratory sample was collected for diagnosis of SARSCoV-2 on February 27, 2020. This nasopharyngeal swab sample arrived at 8:30 pm in our clinical microbiology and virology laboratory at IHU Mediterranee Infection, which has been performing the routine diagnosis of SARS-CoV-2, 24 h a day, 7 days a week since the end of January 2020 for all suspected cases of Covid-19 (the SARS-CoV-2-associated disease). We have tested more than 4084 respiratory samples since January 2020 and until February 19, 2020. We carried out SARSCoV-2 RNA detection by two first-line real-time reverse transcription (RT)-PCR assays, one of which (SpikeP_ps80) was developed in-house as soon as the first SARS-CoV-2 genome (GenBank Accession no. MN908947) was released by Chinese teams (on January 10, 2020). Results of PCR testing of the nasopharyngeal swab sample were provided to clinicians at 11:30 pm. Both PCR tests were positive, with a Ct value of 13 with the "gene E" system. This observation is the proof of concept that from the clinical sample, it was possible to have the result of the PCR in 3 h, to have the genome in 11 h, and to recover using culture in 72 h the viral strain whose availability makes it possible to study drugs with recognized activity including those (hydroxychloroquine and chloroquine) with reported clinical activity, as communicated by Chinese teams. Thus, it shows that we can, in specialized centers, extremely rapidly respond to the emergence of any viral strain pathogenic for humans.

Publication Type

Journal article.

<59>

Accession Number

20203356146

Author

Girish Prayag

Title

Time for reset? COVID-19 and tourism resilience.

Source

Tourism Review International; 2020. 24(2/3):179-184. 36 ref.

Publisher

Cognizant Communication Corporation

Location of Publisher

Putnam Valley

Country of Publication

USA

Abstract

As a rapidly evolving global pandemic, COVID-19 provides several opportunities for tourism researchers to study the resilience of the tourism industry from a socioecological system perspective. Pandemics are not new and, similar to other crises and disasters, can have lasting impacts on individuals, businesses, communities, and nations. This article offers ways to explore how COVID-19 could affect different aspects of tourism resilience, adopting a three-level approach (macro, meso, and micro). While recognizing that these three levels are not necessarily mutually exclusive, interactions between them can be a worthy area of research in itself. This article proposes a research agenda on COVID-19 and tourism system resilience and contributes to further understanding of scale of change (temporal and spatial), impacts, and resilience. The article identifies, for example, resilience of destinations, organizations, and tourists as important areas of future research in

relation to the pandemic. However, theoretical advancements and managerial implications of such research should not be sacrificed at the expense of the opportunities that the context of COVID-19 presents. It is time for reset not only for the tourism industry but also for tourism researchers.

Publication Type

Journal article.

<60>

Accession Number

20203359212

Author

Li YuXi; Li Juan; Zhong DongLing; Zhang Yue; Zhang YongGang; Guo Yan; Clarke, M.; Jin RongJiang

Title

Clinical practice guidelines and experts' consensuses of traditional Chinese herbal medicine for novel coronavirus (COVID-19): protocol of a systematic review.

Source

Systematic Reviews; 2020. 9(170):(03 August 2020). 26 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The World Health Organization declared on March 11, 2020, that the spread of the severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2) has escalated from epidemic into pandemic. As the initial outbreak area, China has taken multiple active measures to deal with the epidemic. Updated versions of diagnosis and treatment guideline for novel coronavirus (COVID-19) patients have been issued, and traditional Chinese herbal medicine has been recommended as a treatment. The objective of this study will be to

summarize the recommendations in current clinical practice guidelines about the use of traditional Chinese herbal medicine for COVID-19 patients. We will also evaluate and report on the methodological and reporting quality of these guidelines. Methods: In this systematic review, we will search for guidelines, expert consensuses, and policy documents published since December 2019 in electronic databases (e.g., PubMed, EMBASE, and Chinese databases) and on websites of governments or organizations (e.g., The National Guideline Clearinghouse [NGC], Guidelines International Network [GIN], National Institute for Health and Clinical Excellence (NICE), Scottish Intercollegiate Guidelines Network [SIGN], and WHO). Eligible documents will be independently selected, and relevant data will be independently extracted by two reviewers. We will also independently evaluate the methodological quality and reporting quality of the included guidelines, using the Appraisal of Guidelines for REsearch & Evaluation (AGREE) II tool and Reporting Items for Practice Guidelines in Healthcare (RIGHT) statement, respectively. Any discrepancies will be discussed and resolved through discussion among the reviewers. We will use the extracted information to summarize their recommendations for traditional Chinese herbal formulae and Chinese patent medicine for COVID-19 patients and to summarize the strength and quality of these recommendations with reference to the results of AGREE II and RIGHT tools. Discussion: This review will summarize the recommendations in current clinical practice guidelines and provide insight into the implementation strategies for traditional Chinese herbal medicine in COVID-19 patients.

Publication Type

Journal article.

<61>

Accession Number

20203358575

Author

Jiang YangYang; Wen Jun

Title

Effects of COVID-19 on hotel marketing and management: a perspective article.

Source

International Journal of Contemporary Hospitality Management; 2020. 32(8):2563-2573.

Publisher

Emerald Publishing

Location of Publisher

Bingley

Country of Publication

UK

Abstract

Purpose: This paper aims to discuss the effects of COVID-19 on hotel marketing and management practices and outlines a three-pronged research agenda to stimulate knowledge development in the hotel sector. Design/methodology/approach: This paper is based on an overview of the relevant literature on hotel marketing and management and the hotel guest behavior. The authors also investigated hospitality service trends to propose a research agenda. Findings: This paper presents a research agenda from three dimensions - artificial intelligence (AI) and robotics, hygiene and cleanliness and health and health care. First, different types of AI (mechanical, thinking and feeling) might open up distinct research streams at the intersection of health crises and hotel management, in light of the COVID-19 pandemic. Additionally, this paper recommends that researchers move beyond typical perspectives on the antecedents and outcomes of hotel hygiene and cleanliness to delve into guests' perceptions of the cleanliness of specific hotel surfaces. Furthermore, a more in-depth analysis is warranted about the evolving relationship between hotels and the health-care sector. Practical implications: The recommended research areas are intended to advance the knowledge base to help hotels recover from the COVID-19 pandemic. The suggested research streams are expected to provide actionable insights to promote the development and sustainability of the hotel sector. Originality/value: This paper appears to be a frontier study, critically examining possible effects of the COVID-19 pandemic on hotel marketing and management practices and how hoteliers may respond to such challenges to recover after this pandemic.

Publication Type

Journal article.

<62>

Accession Number

20203353545

Author

Ren WenLin; Sun, H.; Gao, G. F.; Chen JianXin; Sun SeAn; Zhao RongQing; Gao Guang; Hu YaLin; Zhao Gan; Chen YuXin; Jin Xia; Fang Feng; Chen JingGong; Wang Qi; Gong SiTao; Gao Wen; Sun YuFei; Su JunChi; He AiLiang; Cheng Xin; Li Min; Xia Chenxi; Li MaoHua; Sun Le

Title

Recombinant SARS-CoV-2 spike S1-Fc fusion protein induced high levels of neutralizing responses in nonhuman primates.

Source

Vaccine; 2020. 38(35):5653-5658. 19 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The COVID-19 outbreak has become a global pandemic responsible for over 2,000,000 confirmed cases and over 126,000 deaths worldwide. In this study, we examined the immunogenicity of CHO-expressed recombinant SARS-CoV-2 S1-Fc fusion protein in mice, rabbits, and monkeys as a potential candidate for a COVID-19 vaccine. We demonstrate that the S1-Fc fusion protein is extremely immunogenic, as evidenced by strong antibody titers observed by day 7. Strong virus neutralizing activity was observed on day 14 in rabbits immunized with the S1-Fc fusion protein using a pseudovirus neutralization assay. Most importantly, in <20 days and three injections of the S1-Fc fusion protein, two monkeys developed higher virus neutralizing titers than a recovered COVID-19 patient in a live SARS-CoV-2 infection assay. Our data strongly suggests that the CHO-expressed SARS-CoV-2 S1-Fc recombinant protein could be a strong candidate for vaccine development against COVID-19.

Publication Type

Journal article.

<63>

Accession Number

20203355914

Author

Ahmed, O. B.

Title

Mitigating the spread of COVID-19 in low-income countries.

Source

Scientific Research and Essays; 2020. 15(2):41-44. 24 ref.

Publisher

Academic Journals

Location of Publisher

Lagos

Country of Publication

Nigeria

Abstract

Coronavirus disease 2019 (COVID-19) has become an increasing concern to global health organizations, and may pose major challenges to health care systems in the low-income countries due to the absence of equipment, lack of funding, and insufficient training of healthcare workers. Thus, mitigation measures that involve social distances and personal hygiene may be prioritized. The main objective of this review was to propose guidelines steps that will mitigate the spread of novel emerging COVID-19 in low-income countries. The community mitigation may delay the influenza peak to decrease stress on the health-care system thereby decreasing morbidity and mortality. Social distancing and hygienic practices are among the main community mitigation measures recommended during influenza pandemics. People must separate themselves from others and should regularly wash their hands, avoid touching their face, cover mouth and nose when coughing or sneezing, and clean frequently touched surfaces. Therefore, in the lack of funding in low-income countries, the public health measures can rely on preventive actions such as social distancing and hygienic practices to mitigate the spread of novel emerging COVID-19. In addition, surveillance, accurate screening, and vaccination remain, whenever possible, effective mechanisms of viral control.

Publication Type

Journal article.

<64>

Accession Number

20203335479

Author

Marinelli, K. A.; Lawrence, R. M.

Title

Safe handling of containers of expressed human milk in all settings during the SARS-CoV-2 (COVID-19) pandemic.

Source

Journal of Human Lactation; 2020. 36(3):498-501. 11 ref.

Publisher

Sage Publications

Location of Publisher

Thousand Oaks

Country of Publication

USA

Abstract

With no evidence of virus in human milk, no guidance has been published concerning the disinfection of the outer surfaces of containers of expressed milk during the COVID-19 pandemic. This article discussed the safe handling of containers containing human milk during the COVID-19 pandemic. COVID-19 virus contaminates surfaces from respiratory droplet spread, persisting on some including plastic.Those expressing milk need to wear respiratory masks and practice effective pre-expression hand washing. Containers must be disinfected after milk expression with viricidal agents or appropriate bleach solutions before storage in milk banks, hospital wards, day care centers, or similar locations.

Publication Type

Journal article.

<65>

Accession Number

20203335478

Author

Marinelli, K. A.

Title

International perspectives concerning donor milk banking during the SARS-CoV-2 (COVID-19) pandemic.

Source

Journal of Human Lactation; 2020. 36(3):492-497. 18 ref.

Publisher

Sage Publications

Location of Publisher

Thousand Oaks

Country of Publication

USA

Abstract

The aim of the article was to discuss various perspectives concerning donor milk banking amidst the COVID-19 pandemic.

Publication Type

Journal article.

<66>

Accession Number

20203365378

Author

Niroumand-Jadidi, M.; Bovolo, F.; Bruzzone, L.; Gege, P.

Title

Physics-based bathymetry and water quality retrieval using PlanetScope imagery: impacts of 2020 COVID-19 lockdown and 2019 extreme flood in the Venice lagoon.

Source

Remote Sensing; 2020. 12(15)many ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The recent PlanetScope constellation (130+ satellites currently in orbit) has shifted the high spatial resolution imaging into a new era by capturing the Earth's landmass including inland waters on a daily basis. However, studies on the aquatic-oriented applications of PlanetScope imagery are very sparse, and extensive research is still required to unlock the potentials of this new source of data. As a first fully physics-based investigation, we aim to assess the feasibility of retrieving bathymetric and water quality information from the PlanetScope imagery. The analyses are performed based on Water Color Simulator (WASI) processor in the context of a multitemporal analysis. The WASI-based radiative transfer inversion is adapted to process the PlanetScope imagery dealing with the low spectral resolution and atmospheric artifacts. The bathymetry and total suspended matter (TSM) are mapped in the relatively complex environment of Venice lagoon during two benchmark events: The coronavirus disease 2019 (COVID-19) lockdown and an extreme flood occurred in November 2019. The retrievals of TSM imply a remarkable reduction of the turbidity during the lockdown, due to the COVID-19 pandemic and capture the high values of TSM during the flood condition. The results suggest that sizable atmospheric and sun-glint artifacts should be mitigated through the physics-based inversion using the surface reflectance products of PlanetScope imagery. The physics-based inversion demonstrated high potentials in retrieving both bathymetry and TSM using the PlanetScope imagery.

Publication Type

Journal article.

<67>

Accession Number

20203365372

Author

Sussmann, R.; Rettinger, M.

Title

Can we measure a COVID-19-related slowdown in atmospheric CO2 growth? sensitivity of total carbon column observations.

Source

Remote Sensing; 2020. 12(15)39 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 pandemic is causing projected annual CO2 emission reductions up to -8% for 2020. This approximately matches the reductions required year on year to fulfill the Paris agreement. We pursue the question whether related atmospheric concentration changes may be detected by the Total Carbon Column Observing Network (TCCON), and brought into agreement with bottom-up emission-reduction estimates. We present a mathematical framework to derive annual growth rates from observed column-averaged carbon dioxide (XCO2) including uncertainties. The min-max range of TCCON growth rates for 2012-2019 was [2.00, 3.27] ppm/yr with a largest one-year increase of 1.07 ppm/yr for 2015/16 caused by El Nino. Uncertainties are 0.38 [0.28, 0.44] ppm/yr limited by synoptic variability, including a 0.05 ppm/yr contribution from single-measurement precision. TCCON growth rates are linked to a UK Met Office forecast of a COVID-19-related reduction of -0.32 ppm yr-2 in 2020 for Mauna Loa. The separation of TCCON-measured growth rates vs. the reference forecast (without COVID-19) is discussed in terms of detection delay. A 0.6 [0.4, 0.7]-yr delay is caused by the impact of synoptic variability on XCO2, including a 1-month contribution from single-measurement precision. A hindrance for the detection of the COVID-19-related growth rate reduction in 2020 is the +/-0.57 ppm/yr uncertainty for the forecasted reference case (without COVID-19). Only assuming the ongoing growth rate reductions increasing year-on-year by -0.32 ppm yr-2 would allow a discrimination of TCCON measurements vs. the unperturbed forecast and its uncertainty-with a 2.4 [2.2, 2.5]-yr delay. Using no forecast but the max-min range of the TCCON-observed growth rates for discrimination only leads to a factor

2 longer delay. Therefore, the forecast uncertainties for annual growth rates must be reduced. This requires improved terrestrial ecosystem models and ocean observations to better quantify the land and ocean sinks dominating interannual variability.

Publication Type

Journal article.

<68>

Accession Number

20203365352

Author

Zhang ZhiJie; Arshad, A.; Zhang ChuanRong; Saddam Hussain; Li WeiDong

Title

Unprecedented temporary reduction in global air pollution associated with COVID-19 forced confinement: a continental and city scale analysis.

Source

Remote Sensing; 2020. 12(15)many ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Shortly after the outbreak of the novel infectious disease (COVID-19) started at the end of 2019, it turned into a global pandemic, which caused the lockdown of many countries across the world. Various strict measures were adopted to reduce anthropogenic activities in order to prevent further spread and infection of the disease. In this study, we utilized continental scale remotely sensed data along with city scale in situ air quality observations for 2020 as well as data from the baseline period (2015-2019) to provide an early insight on air

pollution changes in response to the COVID-19 pandemic lockdown, by combining both continental and city scales. For the continental scale analysis, data of NO2, SO2, and O3 were acquired from the ozone monitoring instrument (OMI) and data of aerosol optical depth (AOD) were collected from the moderate resolution imaging spectroradiometer (MODIS). For city scale analysis, data of NO2, CO, PM2.5, O3, and SO2 were derived from ground-based air quality observations. Results from satellite observations at the continental scale showed that concentrations of NO2, SO2, and AOD substantially dropped in 2020 during the lockdown period compared to their averages for the baseline period over all continents, with a maximum reduction of ~33% for NO2 in East Asia, ~41% for SO2 in East Asia, and ~37% for AOD in South Asia. In the case of O3, the maximum overall reduction was observed as ~11% in Europe, followed by ~10% in North America, while a slight increase was found in other study regions. These findings align with ground-based air quality observations, which showed that pollutants such as NO2, CO, PM2.5, and SO2 during the 2020 lockdown period decreased significantly except that O3 had varying patterns in different cities. Specifically, a maximum reduction of ~49% in NO2 was found in London, ~43% in CO in Wuhan, ~38% in PM2.5 in Chennai, and ~48% in SO2 in Beijing. In the case of urban O3, a maximum reduction of ~43% was found in Wuhan, but a significant increase of ~47% was observed in Chennai. It is obvious that restricted human activities during the lockdown have reduced the anthropogenic emissions and subsequently improved air quality, especially across the metropolitan cities.

Publication Type

Journal article.

<69>

Accession Number

20203366519

Author

Elhadi, M.; Msherghi, A.; Alkeelani, M.; Zorgani, A.; Zaid, A.; Alsuyihili, A.; Buzreg, A.; Ahmed, H.; Elhadi, A.; Khaled, A.; Boughididah, T.; Khel, S.; Abdelkabir, M.; Gaffaz, R.; Bahroun, S.; Alhashimi, A.; Biala, M.; Abulmida, S.; Elharb, A.; Abukhashem, M.; Elgzairi, M.; Alghanai, E.; Khaled, T.; Boushi, E.; Saleim, N. B.; et al.

Title

Assessment of healthcare workers' levels of preparedness and awareness regarding COVID-19 infection in low-resource settings.

Source

American Journal of Tropical Medicine and Hygiene; 2020. 103(2):828-833. 29 ref.

Publisher

American Society of Tropical Medicine and Hygiene

Location of Publisher

Deerfield

Country of Publication

USA

Abstract

COVID-19, caused by the SARS-CoV-2 virus, is spreading rapidly worldwide, with devastating consequences for patients, healthcare workers, health systems, and economies. As it reaches low- and middle-income countries, the pandemic puts healthcare workers at high risk and challenges the abilities of healthcare systems to respond to the crisis. This study measured levels of knowledge and preparedness regarding COVID-19 among physicians and nurses. A cross-sectional survey was conducted among healthcare workers in Libya between February 26 and March 10, 2020. We obtained 1,572 valid responses of a possible 2,000 (78.6%) participants from 21 hospitals, of which 65.1% were from physicians and 34.9% from nurses. The majority of participants (70%) used social media as a source of information. A total of 47.3% of doctors and 54.7% of nurses received adequate training on how to effectively use personal protective equipment. Low confidence in managing suspected COVID-19 patients was reported by 83.8% of participants. Furthermore, 43.2% of healthcare workers were aware of proper hand hygiene techniques. Less than 7% of participants received training on how to manage COVID-19 cases, whereas 20.6% of doctors and 26.3% of nurses felt that they were personally prepared for the outbreak. Awareness and preparedness for the pandemic were low among frontline workers during the study. Therefore, an effective educational training program should be implemented to ensure maintenance of appropriate practices during the COVID-19 pandemic.

Publication Type

Journal article.

<70>

Accession Number

20203364615

Author

Parang, K.; El-Sayed, N. S.; Kazeminy, A. J.; Tiwari, R. K.

Title

Comparative antiviral activity of remdesivir and anti-HIV nucleoside analogs against human coronavirus 229E (HCoV-229E).

Source

Molecules; 2020. 25(10)28 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Remdesivir is a nucleotide prodrug that is currently undergoing extensive clinical trials for the treatment of COVID-19. The prodrug is metabolized to its active triphosphate form and interferes with the action of RNA-dependent RNA polymerase of SARS-COV-2. Herein, we report the antiviral activity of remdesivir against human coronavirus 229E (HCoV-229E) compared to known anti-HIV agents. These agents included tenofovir (TFV), 4'-ethynyl-2-fluoro-2'-deoxyadenosine (EFdA), alovudine (FLT), lamivudine (3TC), and emtricitabine (FTC), known as nucleoside reverse-transcriptase inhibitors (NRTIs), and a number of 5'-O-fatty acylated anti-HIV nucleoside conjugates. The anti-HIV nucleosides interfere with HIV RNA-dependent DNA polymerase and/or act as chain terminators. Normal human fibroblast lung cells (MRC-5) were used to determine the cytotoxicity of the compounds. The study revealed that remdesivir exhibited an EC50 value of 0.07 M against HCoV-229E with TC50 of > 2.00 M against MRC-5 cells. Parent NRTIs were found to be inactive against (HCoV-229E) at tested concentrations. Among all the NRTIs and 5'-O-fatty acyl conjugates of NRTIs, 5'-O-tetradecanoyl ester conjugate of FTC showed modest activity with EC50 and TC50 values of 72.8 M and 87.5 M, respectively. These data can be used for the design of potential compounds against other coronaviruses.

Publication Type

Journal article.

<71>

Accession Number

20203320318

Author

Badshah, S. L.; Asad Ullah; Badshah, S. H.; Irshad Ahmad

Title

Spread of novel coronavirus by returning pilgrims from Iran to Pakistan.

Source

Journal of Travel Medicine; 2020. 27(3)5 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

The aim of the article was to discuss the risk of transmission of COVID-19 by returning pilgrims from Iran to Pakistan. Given the lack of extensive testing, it is highly likely that the disease is spreading and the exponential increase in cases will only be recognized by increasing hospital admissions. A country like Pakistan with a population size of 200 million is extremely vulnerable to COVID-19, further compounded by a weak health care infrastructure. A lockdown may be inevitable. A lockdown with enforced social distancing to reduce and even halt community transmission was successful in Wuhan, China.

Publication Type

Journal article.

<72>

Accession Number

20203359018

Author

Pineda, V. S.; Corburn, J.

Title

Disability, urban health equity, and the coronavirus pandemic: promoting cities for all.

Source

Journal of Urban Health: Bulletin of the New York Academy of Medicine; 2020. 97(3):336-341. 30 ref.

Publisher

Springer

Location of Publisher

New York

Country of Publication

USA

Abstract

Persons with disabilities (PWDs) living in cities during the COVID-19 pandemic response may be four times more likely to be injured or die than non-disabled persons, not because of their "vulnerable" position but because urban health policy, planning and practice has not considered their needs. In this article, the adverse health impacts on PWDs during the COVID-19 pandemic reveals the "everyday emergencies" in cities for PWDs and that these can be avoided through more inclusive community planning, a whole-of-government commitment to equal access, and implementation of universal design strategies. Importantly, COVID-19 can place PWDs at a higher risk of infection since some may already have compromised immune and respiratory systems and policy responses, such as social distancing, can lead to life-threatening disruptions in care for those that rely on home heath or personal assistants. Living in cities may already present health-damaging challenges for PWDs, such as through lack of access to services and employment, physical barriers on streets and transportation, and smart-city technologies that are not made universally accessible. We suggest that the current pandemic be viewed as an opportunity for significant urban health reforms on the scale of the sanitary and governance reforms that followed ninetieth century urban epidemics. This perspective offers insights for ensuring the twenty-first century response to COVID-19 focuses on promoting more inclusive and healthy cities for all.

Publication Type

Journal article.

<73>

Accession Number

20203359017

Author

Kinsey, E. W.; Kinsey, D.; Rundle, A. G.

Title

COVID-19 and food insecurity: an uneven patchwork of responses.

Source

Journal of Urban Health: Bulletin of the New York Academy of Medicine; 2020. 97(3):332-335. 15 ref.

Publisher

Springer

Location of Publisher

New York

Country of Publication

USA

Abstract

The aim of the article was to examine the interplay of the COVID-19 pandemic and food insecurity. Many other common food insecurity coping strategies are also challenging amidst COVID-19 public health advisories and restrictions. Prior to this current crisis, food-insecure households have reported numerous techniques for making ends meet, including seeking resources from the charitable food sector (e.g., food pantries, soup kitchens) and relying on social networks for support.

Publication Type

Journal article.

<74>

Accession Number

20203355278

Author

Gurpreet Singh; Srinivas, G.; Jyothi, E. K.; Gayatri, L. K.; Rakhal Gaitonde; Biju Soman

Title

Containing the first outbreak of COVID-19 in a healthcare setting in India: the sree chitra experience. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):240-242. 10 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The response to the first health worker case in India and novel strategies adopted in the context of evolving pandemic of COVID-19 is presented here. On the same day of confirmation, institutional COVID cell was established, and contact tracing was started. A total of 184 contacts were identified and quarantined. Hospital services were scaled down, and responsibilities were reassigned. In-house digital platforms were used for daily meetings, contact tracing, line listing, risk stratification, and research. Reverse transcription polymerase chain reaction-based severe acute respiratory syndrome-CoV2 testing facility was established in the institute. All high-risk contacts were given hydroxychloroquine prophylaxis. No secondary cases were found. Hospital preparedness, participatory decision-making through institutional COVID cell, optimal use of in-house digital platforms, and coordination with the state health department and national bodies, including Indian Council of Medical Research, were the supporting factors. Rapidly evolving guidelines, trepidation about the disease, logistic delays, and lack of support systems for people under quarantine were the challenges in the containment exercise.

Publication Type

Journal article.

<75>

Accession Number

20203355277

Author

Harshvardhan Singh; Shailja Sharma

Title

Concerns of frontline doctors in India during COVID-19: a cross-sectional survey. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):237-239. 10 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

A rapid cross-sectional survey was conducted across India among frontline allopathic doctors to know their prime concerns. Four hundred and five responses were received from 16 states and 3 union territories. Among doctors working in COVID-dedicated hospitals, 56.18% are formally trained for the same, and 40.5% of these are satisfied with the training. 47.3% of these have personal protective equipment (PPE) kits, 35.1% have no PPE kits, and 17.6% are not aware of their availability. 31.1% of doctors reported attending to COVID suspects without PPE. 58.1% of institutions have a dedicated task force, 20.3% do not, whereas 21.6% of doctors are not aware of such a task force. Only 21.6% of the participants consider their institution to be fully prepared for COVID. After performing COVID duties, 45.9% are being provided with an alternative place of stay, whereas only 16.2% have been quarantined. In non-COVID institutions, 82.4% of doctors are using protective gear, of these 35.2% procured them on their own.

Publication Type

Journal article.

<76>

Accession Number

20203355274

Author

Kodali, P. B.; Sibasis Hense; Swarajya Kopparty; Kalapala, G. R.; Banashri Haloi

Title

How Indians responded to the Arogya Setu app? (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):228-230.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The mHealth app Arogya Setu can substantially contribute to the containment and management of COVID-19. This study explores the experiences and expectations of Arogya Setu app users by conducting a combined content analysis of their reviews. Five hundred and three most relevant reviews were analyzed using the descriptive statistics and thematic analysis. The reviews are primarily posted in the areas of user acceptance (80%), app usefulness (72.8%), and app features (62.2%). The thematic analysis resulted in four themes: user acceptance, app usefulness, promptness of the Indian Government in bringing the app on time, and concerns and cautions raised by the users. These help in strengthening the app features enabling the real-time data capture and analytics and providing timely information to authorities for better decision-making.

Publication Type

Journal article.

<77>

Accession Number

20203355265

Author

Tambe, M. P.; Parande, M. A.; Tapare, V. S.; Borle, P. S.; Lakde, R. N.; Shelke, S. C.

Title

An epidemiological study of laboratory confirmed COVID-19 cases admitted in a tertiary care hospital of Pune, Maharashtra. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):183-187. 13 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: India has reported more than 70,000 cases and 2000 deaths. Pune is the second city in the Maharashtra state after Mumbai to breach the 1000 cases. Total deaths reported from Pune were 158 with a mortality of 5.7%. To plan health services, it is important to learn lessons from early stage of the outbreak on course of the disease in a hospital setting. Objectives: To describe the epidemiological characteristics of the outbreak of COVID-19 in India from a tertiary care hospital. Methods: This was a hospital-based cross-sectional study which included all admitted laboratory confirmed COVID19 cases from March 31, to April 24, 2020. The information was collected in a predesigned pro forma which included sociodemographic data, duration of stay, family background, outcome, etc., by trained staff after ethics approval. Epi Info7 was used for data analysis. Results: Out of the total 197 cases, majority cases were between the ages of 31-60 years with slight male preponderance. Majority of these cases were from the slums. Breathlessness was the main presenting symptom followed by fever and cough. More than 1/5th of patients were asymptomatic from exposure to admission. The case fatality rate among the admitted cases was 29.4%. Comorbidity was one of the significant risk factors for the progression of disease and death (odds ratio [OR] = 16.8, 95% confidence interval [CI] = 7.0 - 40.1, P < 0.0001). Conclusion: Mortality was higher than the national average of 3.2%; comorbidity was associated with bad prognosis.

Publication Type

Journal article.

<78>

Accession Number

20203355263

Author

Balhara, Y. P. S.; Dheeraj Kattula; Swarndeep Singh; Surekha Chukkali; Rachna Bhargava

Title

Impact of lockdown following COVID-19 on the gaming behavior of college students. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):172-176. 22 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: The uncertainty about the impact of the lockdown in wake of COVID-19 on their future academic and carrier prospects, besides other concerns; makes college students, particularly vulnerable to stress during the COVID-19 pandemic. Gaming has been recognized as a coping mechanism against stress in the previously published literature. Objectives: The current study aimed to assess the gaming behavior of college students during the lockdown following COVID-19. Methods: Data were collected from a cohort of students that constituted the sampling frame of an ongoing project. A total of 393 college students were enrolled. All the eligible students were subsequently contacted through E-mail and WhatsApp messenger and invited to share the details. Results: About half (50.8%) of the participants reported that their gaming behavior had increased, whereas 14.6% reported a decrease in their gaming during the lockdown period. In binary logistic regression analysis, hours of gaming per day (odds ratio [OR] 1.75 [1.29-2.36]), increase in gaming due

to examination related stress (OR 4.96 [1.12-21.98]), and belief that gaming helps managing stress (OR 4.27 [1.65-11.04]), were found to be independently associated with gaming behavior during lockdown period. Conclusion: In the lockdown period following COVID-19 pandemic, the increase in gaming behavior was associated with examination-related stress and the belief that gaming helps combat stress. These observations highlight the need to focus on the coping style of the students to ascertain the likelihood of them engaging in gaming behavior as a coping mechanism against stress.

Publication Type

Journal article.

<79>

Accession Number

20203355261

Author

Arista Lahiri; Jha, S. S.; Saikat Bhattacharya; Soumalya Ray; Arup Chakraborty

Title

Effectiveness of preventive measures against COVID-19: a systematic review of in silico modeling studies in Indian context. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):156-167.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: In the absence of any approved treatment or vaccine against novel Severe Acute Respiratory Syndrome Coronavirus -2 (SARS-CoV-2) infection, Non-Pharmaceutical Interventions (NPIs) are the

cornerstone to prevent the disease, especially in a populous country like India. Objectives: To understand the effectiveness of NPIs reported in the contemporary literatures describing prediction models for prevention of the ongoing pandemic of SARS-CoV-2 specifically in Indian population. Methods: Original research articles in English obtained through keyword search in PubMed, WHO Global Database for COVID19, and pre-print servers were included in the review. Thematic synthesis of extracted data from articles were done. Results: Twenty-four articles were found eligible for the review - four published articles and twenty pre-print articles. Compartmental model was found to be the most commonly used mathematical model; along with exponential, time varying, neural network and cluster kinetic models. Social distancing, specifically lockdown, was the most commonly modelled intervention strategy. Additionally, contact tracing using smartphone application, international travel restriction, increasing hospital/ICU beds, changes in testing strategy were also dealt with. Social distancing along with increasing testing seemed to be effective in delaying the peak of the epidemic and reducing the peak prevalence. Conclusion: Although there is mathematical rationality behind implementation of social distancing measures including lockdown, this study also emphasised the importance of other associated measures like increasing tests and increasing the number of hospital and ICU beds. The later components are particularly important during the social mixing period to be observed after lifting of lockdown.

Publication Type

Journal article.

<80>

Accession Number

20203355257

Author

Sandul Yasobant; Krupali Patel; Deepak Saxena; Falkenberg, T.

Title

COVID-19 in India: making a case for the one health surveillance system. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):135-138. 29 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Pandemics like COVID-19 warrant an urgent implementation of the one health surveillance (OHS) system to the focus on multisectoral, multidisciplinary, multi-institutional, and multispecialty coordination, in all aspects of the response to outbreaks that might involve humans, animals, and their environment. The Indian system so far has evolved in conducting surveillance and monitoring of parameters within the domain of human health, animal health, and the environment, but in silos. This commentary piece provides an opinion to boost the existing surveillance activities for early detection and ways to develop an integrated OHS to prevent future COVID-19 like pandemics in India. It also attempts to provide possible solutions at the interface of human-animal-environment, from the simpler to the complex system integration with the principles of one health.

Publication Type

Journal article.

<81>

Accession Number

20203355256

Author

Sharma, A. K.; Palak Balyan

Title

Air pollution and COVID-19: is the connect worth its weight? (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):132-134.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Primary route of transmission of SARS-CoV-2 among humans is droplets and direct contact. Airborne transmission of this virus is not established conclusively and so is the role of airborne particulate matter. This commentary examines the existing evidence about the role of particulate matter pollutants in SARS-CoV-2 transmission. PM2.5 and other small particulate matter have been shown to carry viable virus particles in the air and incriminated in spread of measles and SARS coronavirus. Empirical evidence has been provided regarding role of air pollution in accelerated transmission of SARS-CoV-2 in Italy as well as Wuhan. Lockdown-related reduction in PM2.5 levels in ambient air may have contributed to reduce transmission of SARS-CoV-2. High PM2.5 levels in the past might have added to SARS-CoV-2 related mortality due to air pollution relate comorbidities. Post-lockdown increase in PM2.5 levels may accelerate covid-19 transmission and can add to the burden of COVID-19 morbidity and mortality.

Publication Type

Journal article.

<82>

Accession Number

20203355254

Author

Nina, P. B.; Dash, A. P.

Title

Hydroxychloroquine as prophylaxis or treatment for COVID-19: what does the evidence say? (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):125-127. 27 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Hydroxychloroquine (HCQ), an antimalarial has been proposed as possible treatment for coronavirus disease-2019 (COVID-19). India has approved the use of HCQ for prophylaxis of asymptomatic health workers treating suspected or confirmed COVID-19 cases, and asymptomatic household contacts of confirmed patients. The U.S. Food and Drug Administration has issued Emergency Use Authorization for the use of HCQ to treat COVID-19 in adolescents and adults. In this review, we go over the available evidence for and against HCQ's use as prophylaxis or treatment for COVID-19, especially in the Indian context.

Publication Type

Journal article.

<83>

Accession Number

20203355247

Author

Baru, R. V.

Title

Health systems preparedness during COVID-19 pandemic: China and India. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):96-98.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

This commentary reviews the health systems preparedness during the COVID-19 epidemic in China and India. It provides insight into how nonmedical measures were employed to contain and control the epidemic in Wuhan which was the epicenter. The methods employed by the Chinese provided the roadmap for the countries as the epidemic became pandemic. It provides contrasts in health system preparedness between China and India.

Publication Type

Journal article.

<84>

Accession Number

20203355246

Author

Anup Banerji

Title

The armed forces medical services response to COVID-19. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):94-95. 4 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The Indian Armed Forces have always responded to the Nation's call and the COVID-19 pandemic response has been no different. On instructions from the Government of India, the Armed Forces Medical Services (AFMS) pitched in right from the initial stages of the epidemic in India as part of a coordinated national response. Be it the execution of medical quarantine for Indian citizens evacuated from China and other COVID affected countries or establishing dedicated and mixed COVID hospitals for its own clientele as well as civilian patients, the AFMS worked in tandem with the national policies. The Armed Forces ensured force preservation and protection of its own troops and families by timely implementation of public health measures, even as it played its designated role in the national strategy. With vision, understanding and clarity, the AFMS continue to lend shoulder to India's response to this global public health challenge.

Publication Type

Journal article.

<85>

Accession Number

20203359597

Author

Shilpi Ghosh; Shatabdi Ghosh

Title

Air quality during COVID-19 lockdown: blessing in disguise.

Source

Indian Journal of Biochemistry & Biophysics; 2020. 57(4):420-430. 32 ref.

Publisher

National Institute of Science Communication and Information Resources, CSIR

Location of Publisher

New Delhi

Country of Publication

India

Abstract

The world at present is facing a gravest health crisis due to the Covid-19 pandemic. To control its unimaginable transmission worldwide lockdown was implemented resulting in economic deterioration but on the other hand betterment of the environment took place. Therefore this study attempted to analyze the quality of air during the lockdown period and infer its outcome to environment and health. 15 empirical research articles, eight (54%), three (20%), two (13%) and two (13%) from Asia, Europe, South America and North America, respectively have been evaluated. From the studies it was inferred that during the lockdown period, in general, there was a trend of decrease in the level of concentrations of PM10, PM2.5, CO, NO, NO2, NH3, NOx, SO2 and increase in the concentration level of O3 in comparison to either the pre-lockdown period or to the previous year(s) records. Marked decrease in the levels of NO, NO2, NOx were noted. Also PM10, PM2.5, SO2 and CO levels were seen to diminish significantly. The main reasons for such decrease were restricted movements of traffic and temporary closure of factories and industries. However, as the thermal power plants were functional during lockdown so improvement of air quality in those areas was not significant. Overall, significant improvement in the air quality was observed during the lockdown which led to better climatic conditions, lesser pollution and improved many seasonal ailments like asthma and other cardio-respiratory issues in people.

Publication Type

Journal article.

<86>

Accession Number

20203356496

Author

Li RuiYun; Pei Sen; Chen Bin; Song YiMeng; Zhang Tao; Yang Wan; Shaman, J.

Title

Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV-2).

Source

Science (Washington); 2020. 368(6490):489-493. 19 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

Estimation of the prevalence and contagiousness of undocumented novel coronavirus [severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2)] infections is critical for understanding the overall prevalence and pandemic potential of this disease. Here, we use observations of reported infection within China, in conjunction with mobility data, a networked dynamic metapopulation model, and Bayesian inference, to infer critical epidemiological characteristics associated with SARS-CoV-2, including the fraction of undocumented infections and their contagiousness. We estimate that 86% of all infections were undocumented [95% credible interval (CI): 82-90%] before the 23 January 2020 travel restrictions. The transmission rate of undocumented infections per person was 55% the transmission rate of documented infections (95% CI: 46-62%), yet, because of their greater numbers, undocumented infections were the source of 79% of the documented cases. These findings explain the rapid geographic spread of SARS-CoV-2 and indicate that containment of this virus will be particularly challenging.

Publication Type

Journal article.

<87>

Accession Number

20203357681

Author

Rothan, H. A.; Stone, S.; Natekar, J.; Kumari, P.; Arora, K.; Kumar, M.

Title

The FDA-approved gold drug auranofin inhibits novel coronavirus (SARS-CoV-2) replication and attenuates inflammation in human cells.

Source

Virology; 2020. 547:7-11. 35 ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

SARS-COV-2 has recently emerged as a new public health threat. Herein, we report that the FDA-approved drug, auranofin, inhibits SARS-COV-2 replication in human cells at low micro molar concentration. Treatment of cells with auranofin resulted in a 95% reduction in the viral RNA at 48 h after infection. Auranofin treatment dramatically reduced the expression of SARS-COV-2-induced cytokines in human cells. These data indicate that auranofin could be a useful drug to limit SARS-CoV-2 infection and associated lung injury due to its antiviral, anti-inflammatory and anti-reactive oxygen species (ROS) properties. Further animal studies are warranted to evaluate the safety and efficacy of auranofin for the management of SARS-COV-2 associated disease.

Publication Type

Journal article.

<88>

Accession Number

20203354577

Author

Raju, E.; Ayeb-Karlsson, S.

Title

COVID-19: how do you self-isolate in a refugee camp?

Source

International Journal of Public Health; 2020. 65(5):515-517. 10 ref.

Publisher

Springer

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The aim of the article was to discuss the public health challenges regarding social isolation and social distancing in a refugee camp. Dhaka and Mumbai are home to about 20 million people each. Clearly however, from what we have seen in Italy and China, population size does not need to imply a larger catastrophe. The COVID-19 pandemic, outlines how social inequality increases the risks for marginalised and vulnerable populations across the world.

Publication Type

Journal article.

<89>

Accession Number

20203360142

Author

McCleery, R. A.; R. J. F., Jr.; Kruger, L. M.; Govender, D.; Ferreira, S. M.

Title

Conservation needs a COVID-19 bailout.

Source

Science (Washington); 2020. 369(6503):515-516. 12 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

This article advocates for future stimulus packages to include funds for wildlife conservation and protected areas amidst the COVID-19 pandemic.

Publication Type

Correspondence.

<90>

Accession Number

20203360140

Author

Laborde, D.; Martin, W.; Swinnen, J.; Vos, R.

Title

COVID-19 risks to global food security.

Source

Science (Washington); 2020. 369(6503):500-502. 17 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

This article presents main threats COVID-19 poses to food security and suggest critical responses that policy-makers should consider to prevent this global health crisis from becoming a global food crisis. It is critical that

agricultural inputs, farms, food processing, and distribution are declared essential and exempted from lockdown measures, so that food can flow in adequate amounts from farm to fork. Health protocols are needed to protect workers in food chains and to help contain COVID-19. Incentives and support for food transport and logistics, including deliveries to needy areas and for the sick, are also important. Likewise, governments should engage with market participants to ensure the smooth functioning of agricultural input markets (seeds, fertilizer, labor, and credits), especially for time-critical inputs for planting and harvesting. Allowing movement of seasonal and migrant labor is also important in many contexts.

Publication Type

Journal article.

<91>

Accession Number

20203367563

Author

Samalavicius, N. E.; Siaulys, R.; Janusonis, V.; Klimasauskiene, V.; Dulskas, A.

Title

Use of 4 robotic arms performing Senhance robotic surgery may reduce the risk of coronavirus infection to medical professionals during COVID-19.

Source

European Journal of Obstetrics & Gynecology and Reproductive Biology; 2020. 251:274-275. 5 ref.

Publisher

Elsevier Ireland

Location of Publisher

Shannon

Country of Publication

Irish Republic

Publication Type

Journal article.

<92>

Accession Number

20203361304

Author

Alsharaydeh, I.; Rawashdeh, H.; Saadeh, N.; Obeidat, B.; Obeidat, N.

Title

Challenges and solutions for maternity and gynecology services during the COVID-19 crisis in Jordan.

Source

International Journal of Gynecology & Obstetrics; 2020. 150(2):159-162. 1 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objective: To describe regional experiences and measures implemented to safely maintain obstetrics and gynecology services during the COVID-19 pandemic at King Abdullah University Hospital in Jordan. Methods: All policies and measures were implemented in keeping with World Health Organization and other international recommendations and guidelines. Results: With concerted effort and a multidisciplinary approach, most maternity and gynecology services were provided and all other training and educating responsibilities were maintained. Conclusion: COVID-19 caused an unprecedented global healthcare crisis. Our institution addressed the challenges and implemented several measures at different levels to maintain services and facilitate the training and teaching of trainees and medical students.

Publication Type

Journal article.

<93>

Accession Number

20203363797

Author

Lapointe, D.

Title

Reconnecting tourism after COVID-19: the paradox of alterity in tourism areas. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):633-638. 19 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

One of the transformations induced by the almost complete halt of tourism due to the COVID-19 pandemic has been a turning of the tourism sectors to a greater orientation towards their host communities. The enclavic tendencies of tourism areas, along with a multilayered approach to alterity gives insight into ongoing changes in the Quebec, Canada, tourism industry that have been enhanced by the COVID-19 pandemic. These changes points to a relinking of tourism to the needs of the host communities as part of a survival strategy in a time when there are no tourists, and could become, in the long run, a resilience strategy. On the other hand, there is a possibility of a reinforcement of the alterity and a further delinking of tourism in a "6 foot-tourism world" where sanitary safety would be at the core of a closed and controlled tourism development.

Publication Type

Journal article.

<94>

Accession Number

20203363796

Author

Ioannides, D.; Gyimothy, S.

Title

The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):624-632. 37 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The COVID-19 pandemic has halted mobility globally on an unprecedented scale, causing the neoliberal market mechanisms of global tourism to be severely disrupted. In turn, this situation is leading to the decline of certain mainstream business formats and, simultaneously, the emergence of others. Based on a review of recent crisis recovery processes, the tourism sector is likely to rebound from this sudden market shock, primarily because of various forms of government interventions. Nevertheless, although policymakers seek to strengthen the resilience of post-pandemic tourism, their subsidies and other initiatives serve to maintain a fundamentally flawed market logic. The crisis has, therefore, brought us to a fork in the road - giving us the perfect opportunity to select a new direction and move forward by adopting a more sustainable path. Specifically, COVID-19 offers public, private, and academic actors a unique opportunity to design and consolidate the transition towards a greener and more balanced tourism. Tourism scholars, for example, can take a leading role in this by redesigning their curriculum to prepare future industry leaders for a more responsible travel and tourism experience.

Publication Type

Journal article.

<95>

Accession Number

20203363793

Author

Hall, C. M.; Scott, D.; Gossling, S.

Title

Pandemics, transformations and tourism: be careful what you wish for. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):577-598. 134 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Disease outbreaks and pandemics have long played a role in societal and economic change. However, the nature of such change is selective, meaning that it is sometimes minimal and, at other times, and change or transformation may be unexpected, potentially even reinforcing contemporary paradigms. A comprehensive overview of pandemics and their effects is provided. This is used to help contextualise the COVID-19 pandemic, its impact on tourism and government, industry and consumer response. Drawing on the available literature, factors that will affect tourism and destination recovery are then identified. Some measures will continue or even expand present growth orientations in tourism while others may contribute to sustainability. It is concluded that that the selective nature of the effects of COVID-19 and the measures to contain it may

lead to reorientation of tourism in some cases, but in others will contribute to policies reflecting the selfish nationalism of some countries. However, the response to planetary limits and sustainable tourism requires a global approach. Despite clear evidence of this necessity, the possibility for a comprehensive transformation of the tourism system remains extremely limited without a fundamental transformation of the entire planet.

Publication Type

Journal article.

<96>

Accession Number

20203363792

Author

Galvani, A.; Lew, A. A.; Sotelo Perez, M.

Title

COVID-19 is expanding global consciousness and the sustainability of travel and tourism. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):567-576. 40 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The sustainable development model has largely failed to address the social and environmental challenges of the 21st century. True sustainability will only occur when it is valued as a part of the taken-for-granted daily life of individuals and cultures across the globe. This has not yet happened because humanity has not evolved a global consciousness quickly enough to match the global advances in telecommunications and transportation

technologies that have created a socially and economically ever-shrinking planet. Travel and tourism contributes to the expansion of global consciousness, although only in a haphazard and unintentional manner. The COVID-19 pandemic is a result of planetary time-space compression and is forcing an expansion in human consciousness that will make humankind better able to address global problems. There will still be considerable diversity on the planet, as now, but the pandemic will stimulate growing numbers of people, businesses and governments to adopt new ways of thinking, behaving and operating that are more closely aligned with the goals of sustainable development. This could be further enhanced if travel and tourism were to adopt the expansion and awakening of global conscious as a fundamental and transformational value in the products and experiences that it offers.

Publication Type

Journal article.

<97>

Accession Number

20203363791

Author

Everingham, P.; Chassagne, N.

Title

Post COVID-19 ecological and social reset: moving away from capitalist growth models towards tourism as Buen Vivir. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):555-566. 34 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Tourism has been one of the industries most highly affected by COVID-19. The COVID-19 global pandemic is an 'unprecedented crisis' and has exposed the pitfalls of a hyper consumption model of economic growth and development. The scale of immediate economic impacts of the COVID-19 pandemic has shattered the myth of 'catch up development' and 'perpetual growth'. The Crisis has brought unintended degrowth, presenting opportunities for an economic and social 'reset'. In terms of long-term thinking post COVID-19, it is time to change the parameters of how we imagine a trajectory going forward, to prefigure possibilities for contesting capitalist imperatives that 'there is no alternative'. In relation to tourism, the pandemic provides an opportunity for reimaging tourism otherwise, away from exploitative models that disregard people, places, and the natural environment, and towards a tourism that has positive impacts. Non-western alternatives to neo-colonial and neoliberal capitalism, such the South American concept of 'Buen Vivir', can help us to shift priorities away from economic growth, towards greater social and environmental wellbeing, and meaningful human connections. Taking a Buen Vivir approach to tourism will continue the degrowth momentum, for transformative change in society within the earth's physical limits. Yet Buen Vivir also redefines the parameters of how we understand 'limits'. In limiting unsustainable practices in development and tourism, a focus on Buen Vivir actually creates growth in other areas, such as social and environmental wellbeing, and meaningful human connection. Buen Vivir can reorient the tourism industry towards localised tourism, and slow tourism because the principles of Buen Vivir require these alternatives to be small-scale, local and benefiting host communities as well as tourists to increase the wellbeing for all.

Publication Type

Journal article.

<98>

Accession Number

20203363790

Author

Edelheim, J.

Title

How should tourism education values be transformed after 2020? (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):547-554. 18 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Values and axiology are necessary components for successful and meaningful tourism education and research. They especially need to be revisited in considering the future of higher education in a COVID-19 world. If transformation means to bring about a substantial change in a positive direction, then the COVID-19 pandemic might be a blessing in disguise for tourism higher education, as a substantial change has been due for quite some time. The transformative powers that education offers are seen in the individual through the internal and external transformations of learners. Higher education holds the promise of transforming society, but it is widely criticized for being too enmeshed in neoliberal values, which weakens it ability to productively equip students with capacities to transform the society they are entering. Education, both generally and more specifically tied to tourism higher education, requires a stronger awareness of lived values and aspirational values to transform how education is carried out. These include, for example, an emphasis on wellbeing indicators over revenue and tourist arrival numbers. All humans act and plan for their futures according to their lived values, but such values are hardly ever overtly acknowledged in research or in daily parlance. The COVID-19 pandemic is stirring up a new search for these lived values in a context where past formulas are failing on a global scale.

Publication Type

Journal article.

<99>

Accession Number

20203363788

Author

Cooper, J. A.; Alderman, D. H.

Title

Cancelling March Madness exposes opportunities for a more sustainable sports tourism economy. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):525-535. 61 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

One of the earliest signals of the severity of the spread of COVID-19 in the United States and other countries was the swift cancelation of many highly prominent amateur and professional sporting events and seasons like the NCAA Division I Men's Basketball Tournament, known as "March Madness." The loss of March Madness is treated as a moment of creative tension, when disruptions can facilitate reflection and lead to positive change. We discuss the economic, socio-cultural, and environmental effects of shuttering the tournament and suggest that an understanding of the impacts of COVID-19 offers an opportunity to bring about an alternative, more sustainable sports tourism economy. The cancellation of March Madness resulted in the loss of millions of dollars in tourism revenue for local economies and deprived traveler-fans of pilgrimages to arenas, important socio-cultural gathering spaces for American basketball fans. However, it also prevented the emission of a sizable quantity of greenhouse gasses based on our carbon footprint calculated from the previous year's tournament. Ultimately, from the disruptive closing down of sport and event tourism, a post-pandemic sports tourism landscape should emerge that takes more seriously the triple-bottom line notion of balancing a reduction of greenhouse gas emissions with the creation and maintenance of resilient local economies all while both acknowledging the important role sport plays in society and keeping tourism actors healthy.

Publication Type

Journal article.

Accession Number

20203363787

Author

Cheer, J. M.

Title

Human flourishing, tourism transformation and COVID-19: a conceptual touchstone. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):514-524. 42 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

As the planet remains in the grips of COVID-19 and amidst enforced lockdowns and restrictions, and possibly the most profound economic downturn since the Great Depression, the resounding enquiry asks - what will the new normal look like? And, in much the same way, tourism aficionados, policy makers and communities are asking a similar question - what will the tourism landscape, and indeed the world, look like after the pandemic? As casualties from the crisis continue to fall by the wayside, the rethinking about what an emergent tourism industry might resemble is on in earnest. Many are hopeful that this wake-up call event is an opportunity to reshape tourism into a model that is more sustainable, inclusive and caring of the many stakeholders that rely on it. And some indicators, though not all, point in that direction. In line with this, the concept of 'human flourishing' offers merits as an alternative touchstone for evaluating the impacts of tourism on host communities. Human flourishing has a long genesis and its contemporary manifestation, pushed by COVID-19 and applied to travel and tourism, further expands the bounds of its application. Human flourishing has the potential to offer more nuanced sets of approaches by which the impact of tourism on host communities might be measured. The challenge remaining is how to develop robust indices to calibrate human flourishing policy successes.

Publication Type

Journal article.

<101>

Accession Number

20203363786

Author

Cave, J.; Dredge, D.

Title

Regenerative tourism needs diverse economic practices. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):503-513. 17 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Calls for a new relationship between tourism and capitalism have intensified as a result of COVID-19. The pandemic has exposed massive vulnerabilities in the tourism operating system, the effects of which have fallen unevenly across different groups and subsectors of tourism. Critics have been quick to point out capitalism's emphasis on resource exploitation, growth and profit is to blame and that tourism destinations have never been encouraged to foster diverse economic practices which would enhance resilient communities and regenerative tourism. The diverse economies framework envisages the co-existence of capitalist, alternative capitalist and non-capitalist practices and provides a pathway to more resilient and regenerative tourism practices in tourism. Tourism industry cases are used to illustrate the innovation inherent in diverse economic practices (enterprise, exchange, labour, transactions, property etc.) and illustrate their natural resilience as a result. Post COVID-19, a regenerative tourism that incorporates diverse economic practices will guide tourism practices worldwide to withstand future exigencies.

Publication Type

Journal article.

<102>

Accession Number

20203363785

Author

Carr, A.

Title

COVID-19, indigenous peoples and tourism: a view from New Zealand. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):491-502. 46 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The COVID-19 pandemic's impact is predicted to be long-lasting with intergenerational impacts for both Indigenous and non-Indigenous peoples. Indigenous peoples offer untapped potential for understanding how we are shaping resilient solutions to COVID-19 and similar threats in the future. In New Zealand, the Maori people occupy diverse leadership and occupational roles throughout society. As a result of the 1840 Treaty of Waitangi (Te Tiriti o Waitangi) they are recognised, through Acts of Parliament, as government partners who work in governance and planning processes, including the COVID-19 response. Such recognition can result in the inclusion of Maori values such as whanaungatanga (kinship and belonging), kaitiakitanga (environmental guardianship and responsibility) and manaakitanga (respect, care, and hospitality) within policy and Acts of Parliament. Maori leaders and spokespeople are stressing that environmental and social welfare needs of all communities should be prioritised as part of the COVID-19 solution and that tourism responses cannot be separated from social needs. Government responses and planning efforts that incorporate diverse cultural

values ensure more equitable futures and positive experiences for tourism providers, travellers and the hosts. In this way Indigenous-informed approaches would positively contribute to transforming business, health and education for a more positive global society.

Publication Type

Journal article.

<103>

Accession Number

20203363784

Author

Brouder, P.

Title

Reset redux: possible evolutionary pathways towards the transformation of tourism in a COVID-19 world. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):484-490. 21 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

With international arrivals surpassing 1.5 billion for the first time in 2019 the long-term evolution of tourism demonstrates prolific path dependence with a decade of growth since the global financial crisis. This latest period of unfettered international tourism development has come to an abrupt end as the impact of COVID-19 has brought the sector to a near standstill. As the world grapples with the realities of the global pandemic there is an opportunity to rethink exactly what tourism will look like for the decades ahead. Key concepts in

evolutionary economic geography, especially path dependence/creation and institutional inertia/innovation, show variations in pathways for travel and tourism in a COVID-19 world. A path that leads to transformation in tourism can be realized if sufficient institutional innovation occurs on both the demand and supply side of tourism that can foster the emergence of new paths. COVID-19 presents a once in a generation opportunity where the institutional pump is primed for transformation. Whether that leads to a radical transformation of the tourism sector remains to be seen, but the imprint it will leave on both the demand and supply of tourism will have long-term, incremental impacts for years to come and ultimately move us closer towards the transformation of tourism.

Publication Type

Journal article.

<104>

Accession Number

20203363783

Author

Benjamin, S.; Dillette, A.; Alderman, D. H.

Title

"We can't return to normal": committing to tourism equity in the post-pandemic age. (Special Issue: Visions of travel and tourism after the global COVID-19 transformation of 2020.)

Source

Tourism Geographies; 2020. 22(3):476-483. 25 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Tourism transformation must bring an actionable focus on equity. A new normal openly recognizes the crises and tensions inhabiting tourism well before the COVID-19 pandemic along with the holistic and integrated nature of a pro-equity agenda. A resilient post-pandemic tourism must be more equitable and just, in terms of how it operates, its effects on people and place, and how we as scholars teach, study and publicly engage the travel industry - particularly in preparing its current and future leaders. A commitment to equity is about making specific changes in practices and decisions at multiple levels, along with growing a wider ethical framework. This pivot of a mindset requires us, as tourists, corporations, and educators to step away from a selfish perspective and critically change our perception and understanding of tourism to a truly equitable focus. Consequently, these actions force us to question the consumerism and capitalistic lens that has contributed to mass growth across the touristic landscape and instead, choose a system that fosters sustainable and equitable growth - which in turn, 'slows down' our ways of consuming the world around us - transforming our values and experiences of what tourism is and should be.

Publication Type

Journal article.

<105>

Accession Number

20203363756

Author

Wiederhold, N. P.; Verweij, P. E.

Title

Aspergillus fumigatus and pan-azole resistance: who should be concerned?

Source

Current Opinion in Infectious Diseases; 2020. 33(4):290-297.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Purpose of review: Although clinical outcomes in the treatment of aspergillosis have markedly improved with the availability of newer triazoles, the development of resistance to these antifungals, especially in Aspergillus fumigatus, is a growing concern. The purpose of this review is to provide an update on azole resistance mechanisms and their epidemiology in A. fumigatus, the clinical implications of azole resistance, and to discuss future treatment options against azole-resistant aspergillosis. Recent findings Resistance may develop through either patient or environmental azole exposure. Environmental exposure is the most prevalent means of resistance development, and these isolates can cause disease in various at-risk groups, which now include those with influenza, and potentially COVID-19. Although current treatment options are limited, newer therapies are in clinical development. These include agents with novel mechanisms of action which have in vitro and in vivo activity against azole-resistant A. fumigatus. Summary Azole-resistant A. fumigatus is an emerging threat that hampers our ability to successfully treat patients with aspergillosis. Certain geographic regions and patient populations appear to be at increased risk for this pathogen. As new patient groups are increasingly recognized to be at increased risk for invasive aspergillosis, studies to define the epidemiology and management of azole-resistant A. fumigatus are critically needed. While treatment options are currently limited, new agents under clinical development may offer hope.

Publication Type

Journal article.

<106>

Accession Number

20203364952

Author

Limalemla Jamir; Sathiyanarayanan, S.; Navyakrishna Naidu; Rakesh Kakkar

Title

Reaching out to the urban underserved for continuum of healthcare during COVID-19 pandemic using available technologies.

Source

National Journal of Community Medicine; 2020. 11(6):271-274. 10 ref.

Publisher

Department of Community Medicine, Surat Municipal Institute of Medical Education and Research

Location of Publisher

Surat

Country of Publication

India

Abstract

Background: India is one of the earliest countries to impose Nationwide Lockdown, restricting movement of people in order to reduce the spread of COVID-19. It has brought a sudden halt to non-COVID-19 health services in terms of consultation, follow-up and access to diagnostics. Objectives: This study was aimed to maintain communication during the COVID-19 lockdown with an underserved community through available and accessible technology. Methods: A total of 32 families residing in the 'containment zone' belonging to a minority community were contacted telephonically and enquired about illnesses during the lockdown, access to healthcare, COVID-19 related practices and concerns. They were sensitized about the soon-to-be launched multi-dimensional mobile based teleconsultation application by the Institute. Results: Expressed health needs were doorstep collection of samples instead of having to venture out to health facilities, availability of emergency and routine health care services. Conclusion: A unique model of teleconsultation benefitting the community is proposed.

Publication Type

Journal article.

<107>

Accession Number

20203364950

Author

Sharma, S. K.; Mudgal, S. K.; Priya Sharma

Title

Healthcare professionals' preparedness for COVID-19 pandemic: a cross-sectional survey in Northern India.

Source

National Journal of Community Medicine; 2020. 11(6):248-253. 16 ref.

Publisher

Department of Community Medicine, Surat Municipal Institute of Medical Education and Research

Location of Publisher

Surat

Country of Publication

India

Abstract

Background: Health care agencies have framed guidelines for healthcare professionals (HCPs) to manage COVID-19 pandemic but still there is paucity of Indian data on HCPs preparedness. Aim: To assess level of perceived preparedness of healthcare professionals against COVID-19. Method: This cross-sectional study included 1218 HCPs (nurses, physicians and technicians) from government and private institutes through convenience sampling technique. Online survey was done to assess preparedness of HCPs against COVID-19, using self-structured questionnaire based on HCPs preparedness checklists released by WHO and CDC. Results: Only 42.4% HCPs considered themselves prepared for donning and doffing of PPE and around 65.8% were confident in providing direct patient care. Gender had significant difference (P < 0.001) on level of perceived preparedness of HCPs. Younger participants shown higher level of preparedness than older participants (P=0.022). Technicians were less prepared with significantly low mean scores 10.36 +/- 2.55 than nurses (11.45 +/- 2.45) and physicians (11.68 +/- 2.17; p=.038). HCPs working in tertiary level institutes had significantly higher mean preparedness scores (11.86 +/- 2.89; P < .001) than those working in primary (10.49+/-2.68) and secondary level institutes (10.57 +/- 2.35). Conclusion: All HCPs should be strongly encouraged for regular participation in training and simulation exercises arranged by institute as continuing education, which may enhance their preparedness against COVID-19 pandemic.

Publication Type

Journal article.

Accession Number

20203351206

Author

Teo KayCheong; Leung, W. C. Y.; Wong YuenKwun; Liu, R. K. C.; Chan, A. H. Y.; Choi, O. M. Y.; Kwok WingMan; Leung KungKi; Tse ManYu; Cheung, R. T. F.; Tsang ChunOn [Tsang, C. O. A.]; Lau KuiKai

Title

Delays in stroke onset to hospital arrival time during COVID-19.

Source

Stroke; 2020. 51(7):2228-2231. 8 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background and Purpose: The current coronavirus disease 2019 (COVID-19) pandemic represents a global public health crisis, disrupting emergency healthcare services. We determined whether COVID-19 has resulted in delays in stroke presentation and affected the delivery of acute stroke services in a comprehensive stroke center in Hong Kong. Methods: We retrospectively reviewed all patients with transient ischemic attack and stroke admitted via the acute stroke pathway of Queen Mary Hospital, Hong Kong, during the first 60 days since the first diagnosed COVID-19 case in Hong Kong (COVID-19: January 23, 2020-March 24, 2020). We compared the stroke onset to hospital arrival (onset-to-door) time and timings of inpatient stroke pathways with patients admitted during the same period in 2019 (pre-COVID-19: January 23, 2019-March 24, 2019). Results: Seventy-three patients in COVID-19 were compared with 89 patients in pre-COVID-19. There were no significant differences in age, sex, vascular risk factors, nor stroke severity between the 2 groups ($P > 0.05$). The median stroke onset-to-door time was 1-hour longer in COVID-19 compared with pre-COVID-19 (154 versus 95 minutes, $P=0.12$), and the proportion of individuals with onset-to-door time within 4.5 hours was significantly lower (55% versus 72%, $P=0.024$). Significantly fewer cases of transient ischemic attack presented to the hospital during COVID-19 (4% versus 16%, $P=0.016$), despite no increase in referrals to the transient ischemic attack clinic. Inpatient stroke pathways and treatment time metrics nevertheless did not differ between the 2 groups ($P > 0.05$ for all comparisons). Conclusions: During the early containment phase of COVID-19, we noted a prolongation in stroke onset to hospital arrival time and a significant reduction in individuals arriving at the hospital within 4.5 hours and presenting with transient ischemic attack. Public education about stroke should continue to be reinforced during the COVID-19 pandemic.

Publication Type

Journal article.

<109>

Accession Number

20203357910

Author

Sam IChing; Chong, J.; Rozainah Kamarudin; Faizatul Lela Jafar; Lee LuMei; Maria Kahar Bador; Chew YeeYean; Tan MawPin; Chan YokeFun

Title

Providing a laboratory diagnostic service for pandemic SARS-CoV-2 in a developing country.

Source

Transactions of the Royal Society of Tropical Medicine and Hygiene; 2020. 114(8):553-555. 5 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This article aims to discuss the provision of a diagnostic laboratory for COVID-19 infection in a Developing Country.

Publication Type

Journal article.

<110>

Accession Number

20203319858

Author

Wang, H.; Mo, P.; Li, G.; Chen, P.; Liu, J.; Wang, H.; Wang, F.; Zhang, Y.; Zhao, Q.

Title

Environmental virus surveillance in the isolation ward of COVID-19.

Source

Journal of Hospital Infection; 2020. 105(2):373-374. 3 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The aim of the article was to evaluate the sites of environmental contamination on a COVID-19 isolation ward. Most sites tested negative for SARS-CoV-2. Negative virus detection in the patients' room may reflect the effectiveness of daily disinfection. However, the drawer at the nurse station had a positive detection; the virus could have been brought to this location by the nurses' frequent journeys in and out to care for the patients. Surprisingly, as the most frequently touched sites in the clean area, the surface of the telephone receiver in the physician office and the press button of the water-free hand sanitizer, had positive virus detection. These findings indicated that daily disinfection should be strengthened in the clean area of isolation ward. Moreover, it is equally important to keep the hands sanitized by using hand sanitizers.

Publication Type

Correspondence.

<111>

Accession Number

20203348095

Author

Chinazzi, M.; Davis, J. T.; Ajelli, M.; Gioannini, C.; Litvinova, M.; Merler, S.; Pastore Y Piontti, A.; Mu KunPeng; Rossi, L.; Sun KaiYuan; Viboud, C.; Xiong XinYue; Yu HongJie; Halloran, M. E.; Longini, M., Jr.; Vespignani, A.

Title

The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak.

Source

Science (Washington); 2020. 368(6489):395-400. 110 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

Motivated by the rapid spread of coronavirus disease 2019 (COVID-19) in mainland China, we use a global metapopulation disease transmission model to project the impact of travel limitations on the national and international spread of the epidemic. The model is calibrated on the basis of internationally reported cases and shows that, at the start of the travel ban from Wuhan on 23 January 2020, most Chinese cities had already received many infected travelers. The travel quarantine of Wuhan delayed the overall epidemic progression by only 3 to 5 days in mainland China but had a more marked effect on the international scale, where case importations were reduced by nearly 80% until mid-February. Modeling results also indicate that sustained 90% travel restrictions to and from mainland China only modestly affect the epidemic trajectory unless combined with a 50% or higher reduction of transmission in the community.

Publication Type

Journal article.

<112>

Accession Number

20203349231

Author

Tse, L. V.; Meganck, R. M.; Graham, R. L.; Baric, R. S.

Title

The current and future state of vaccines, antivirals and gene therapies against emerging coronaviruses.

Source

Frontiers in Microbiology; 2020. 11(April)many ref.

Publisher

Frontiers Media S.A.

Location of Publisher

Lausanne

Country of Publication

Switzerland

Abstract

Emerging coronaviruses (CoV) are constant global public health threats to society. Multiple ongoing clinical trials for vaccines and antivirals against CoVs showcase the availability of medical interventions to both prevent and treat the future emergence of highly pathogenic CoVs in human. However, given the diverse nature of CoVs and our close interactions with wild, domestic and companion animals, the next epidemic zoonotic CoV could resist the existing vaccines and antivirals developed, which are primarily focused on Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) and Middle East Respiratory Syndrome Coronavirus (MERS CoV). In late 2019, the novel CoV (SARS-CoV-2) emerged in Wuhan, China, causing global public health concern. In this review, we will summarize the key advancements of current vaccines and antivirals against SARS-CoV and MERS-CoV as well as discuss the challenge and opportunity in the current SARS-CoV-2 crisis. At the end, we advocate the development of a "plug-and-play" platform technologies that could allow quick manufacturing and administration of broad-spectrum countermeasures in an outbreak setting. We will discuss the potential of AAV-based gene therapy technology for in vivo therapeutic antibody delivery to combat SARS-CoV-2 outbreak and the future emergence of severe CoVs.

Publication Type

Journal article.

<113>

Accession Number

20203343016

Author

Amit Thapa

Title

COVID-19 and the role of neurosurgeons in Nepal.

Source

World Neurosurgery; 2020. 139:629-631. 8 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Background: Despite the panic and chaos that coronavirus disease 2019 (COVID-19) has generated in over 200 countries, the role of neurosurgeons has never been more relevant and challenging. The health system in Nepal was never geared to face an onslaught of an infectious disease. Methods: At Kathmandu Medical College Teaching Hospital, we designated a separate complex for housing COVID-19 suspects to prevent the unaffected from getting exposed. In a few hospitals, existing neurosurgical and medical intensive care units have been converted to isolation intensive care units. A separate roster of doctors, nurses, and allied staff has been drafted to care for these patients to avoid contamination and allow effective quarantine of the staff involved in care. Results: At the directive of the government, all neurosurgical centers postponed routine cases and some have closed their outpatient departments because of the lack of protective gear. All neurosurgical centers have seen drastic reductions in cases. Conclusions: In these challenging times, we neurosurgeons, who are naturally primed and trained to respond and take on challenges in difficult situations, have the ideal opportunity to shine and make a true difference during this pandemic and beyond and be "5-star doctors.".

Publication Type

Journal article.

<114>

Accession Number

20203344265

Author

Muhammad Atif; Iram Malik

Title

COVID-19 and community pharmacy services in Pakistan: challenges, barriers and solution for progress.

Source

Journal of Pharmaceutical Policy and Practice; 2020. 13(33):(15 June 2020). 24 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

In the wake of atrocious rise in COVID-19 cases, developed countries are leveraging a range of community pharmacy services with the goal of improving access to essential medication and healthcare services. While in the developing nations, including Pakistan, pharmacists are unable to perform COVID-19 containment roles in community, since presence of pharmacists at community pharmacy settings and delivery of pharmacy services have historically been plagued by shortcomings at various levels. In this document, we identified these shortcomings which need to be resolved on many fronts. Broadly, a number of intertwined government related, public related, academic curricula and pharmacist related, and drug retailers' related factors refrain community pharmacists from performing and facilitating Pakistan's fragile public and healthcare system in the midst of COVID-19 pandemic. Government led multifaceted approaches are urgently needed to strengthen this unrecognized domain and thereby effectively combat COVID-19 by utilizing community pharmacy services, as evidenced in the developed world. [Note]: Part of this article is published in Pakistan Observer Newspaper; dated (17 May 2020).

Publication Type

Journal article.

<115>

Accession Number

20203344262

Author

Chan HaiYan [Chan, H. Y. A.]; Rutter, V.; Ashiru-Oredope, D.; Tuck, C.; Babar, Z. U. D.

Title

Together we unite: the role of the Commonwealth in achieving universal health coverage through pharmaceutical care amidst the COVID-19 pandemic.

Source

Journal of Pharmaceutical Policy and Practice; 2020. 13(13):(13 May 2020). 56 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The world currently faces unprecedented health challenges as COVID-19 poses a huge threat to health systems, economies and societies as we know it. The events of the current COVID-19 pandemic have further emphasised existing issues within our health systems. There is no better time than now to come together in global solidarity to tackle these evolving threats of COVID-19 pandemic. The Commonwealth is an ideally placed network to tackle these global health challenges, with its wide-reaching networks of governmental, non-governmental and civil society organisations across all continents. Although the biennial Commonwealth Heads of Government Meeting (CHOGM) originally scheduled to take place in Kigali in Rwanda 22-27 June 2020 has been postponed in view of COVID-19, Commonwealth country discussions are continuing, centred

on the CHOGM key theme of 'Delivering a Common Future: Connecting, Innovating, Transforming', and five subthemes of Information and Communications Technology (ICT) and Innovation; Trade; Environment; Governance and the Rule of Law; and Youth. The planned CHOGM and Commonwealth itself provides all members a timely platform to consider innovative ways to connect, innovate and transform healthcare to meet the needs of their populations. This commentary considers these five CHOGM subthemes and how member nations can be supported to achieve universal health coverage through optimising medicines use and outcomes, in the midst of a global pandemic in line with the global health agenda.

Publication Type

Journal article.

<116>

Accession Number

20203340968

Author

Zhou MengYao; Xie XiaoLi; Peng YongGang; Wu MengJun; Deng XiaoZhi; Wu Ying; Xiong LiJing; Shang LiHong

Title

From SARS to COVID-19: what we have learned about children infected with COVID-19.

Source

International Journal of Infectious Diseases; 2020. 96:710-714. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Introduction: Coronaviruses, both SARS-CoV and SARS-CoV-2, first appeared in China. They have certain biological, epidemiological and pathological similarities. To date, research has shown that their genes exhibit 79% of identical sequences and the receptor-binding domain structure is also very similar. There has been extensive research performed on SARS; however, the understanding of the pathophysiological impact of coronavirus disease 2019 (COVID-19) is still limited. Methods: This review drew upon the lessons learnt from SARS, in terms of epidemiology, clinical characteristics and pathogenesis, to further understand the features of COVID-19. Results: By comparing these two diseases, it found that COVID-19 has quicker and wider transmission, obvious family agglomeration, and higher morbidity and mortality. Newborns, asymptomatic children and normal chest imaging cases emerged in COVID-19 literature. Children starting with gastrointestinal symptoms may progress to severe conditions and newborns whose mothers are infected with COVID-19 could have severe complications. The laboratory test data showed that the percentage of neutrophils and the level of LDH is higher, and the number of CD4+ and CD8+T-cells is decreased in children's COVID-19 cases. Conclusion: Based on these early observations, as pediatricians, this review put forward some thoughts on children's COVID-19 and gave some recommendations to contain the disease.

Publication Type

Journal article.

<117>

Accession Number

20203340921

Author

Zhu WanBo; Li XinYuan; Wu YanNing; Xu ChangQing; Li Li; Yang JiaZhao; Fang ShiYuan

Title

Community quarantine strategy against coronavirus disease 2019 in Anhui: an evaluation based on trauma center patients.

Source

International Journal of Infectious Diseases; 2020. 96:417-421. 17 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objective The objective of our study was to introduce community quarantine strategy against coronavirus disease 2019 (COVID-19) in Anhui and evaluate the effectiveness of community quarantine based on trauma center (TC) patients. Method The structure of community quarantine strategy was illustrated. Distribution of injuries among patients in two TCs between January 24, 2020 and February 24, 2020 was described. Multiple linear regression was used to analyze the correlation between the distribution of Injuries in TCs and the number of COVID-19-associated cases. Results A total of 757 TC patients in the two hospitals were enrolled. The number of traffic injuries and outdoor injuries showed a significant decrease in the early stage and began to increase on February 17. The number of indoor injuries neither decreased nor increased. Multiple linear regression analysis revealed a significant correlation between COVID-19-associated cases and traffic and outdoor injuries. Conclusion From the perspective of the injuries in TCs, community quarantine strategy was effectively implemented and significantly slowed the outbreak of COVID-19 in Anhui. However, the implementation and maintenance of the strategy is costly and requires the participation of the entire population.

Publication Type

Journal article.

<118>

Accession Number

20203325936

Author

Daraei, H.; Toolabian, K.; Kazempour, M.; Javanbakht, M.

Title

The role of the environment and its pollution in the prevalence of COVID-19.

Source

Journal of Infection; 2020. 81(2):e168-e169. 15 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The aim of the article was to examine air pollutants and other particulate matter as a risk factor in the prevalence and incidence of COVID-19.

Publication Type

Correspondence.

<119>

Accession Number

20203325930

Author

Furuse, Y.; Oshitani, H.

Title

Association between numbers of "imported cases" and "reported cases in a source country" of COVID-19: January to April 2020 in Japan.

Source

Journal of Infection; 2020. 81(2):e153-e154. 8 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The USA, France, the UK, Spain, Egypt, Philippines, and China were considered sources of >=10 imported cases. To see if we could assess the importation risk of COVID-19 cases, we compared the date of illness onset of the imported cases and the (1) daily number of newly reported cases in a source country, (2) cumulative number of cases in a source country, and (3) ratio of "total number of cases in the past 7 days (when X is a date of interest, we referred data between X-6 and X)" to "total number of cases in a week before that (data between X-13 and X-7)." We call the third indicator "epidemic growth rate." The number of imported COVID-19 cases increased along with the number of newly reported cases in a source county. For the US, France, the UK, and Spain, most imported cases were detected when a source country's daily number of newly reported cases surpassed "1 per 100,000-capita". However, the daily number of newly reported cases did not reach that threshold for Philippines, Egypt, or China as of April 2020. Likewise, whereas a source country's "cumulative" number of cases reached "1 per 100,000-capita" before the increase of imported cases from the US, France, the UK, and Spain, the threshold cannot be used to predict upcoming increases in imported cases from Philippines, Egypt, and China. We also assessed the "epidemic growth rate" as described above. When the value is larger than "1," we can tell the epidemic is exponentially growing. Except for Egypt, the rate exceeded "1" before the increase of imported cases for all countries analyzed in this report. When Egypt reported few cases, exported cases from the country were detected in not only Japan but numerous countries.

Publication Type

Correspondence.

<120>

Accession Number

20203356049

Author

Sayed, A. M.; Alhadrami, H. A.; El-Gendy, A. O.; Shamikh, Y. I.; Belbahri, L.; Hassan, H. M.; Abdelmohsen, U. R.; Rateb, M. E.

Title

Microbial natural products as potential inhibitors of SARS-CoV-2 main protease (Mpro).

Source

Microorganisms; 2020. 8(7)44 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The main protease (Mpro) of the newly emerged severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was subjected to hyphenated pharmacophoric-based and structural-based virtual screenings using a library of microbial natural products (>24,000 compounds). Subsequent filtering of the resulted hits according to the Lipinski's rules was applied to select only the drug-like molecules. Top-scoring hits were further filtered out depending on their ability to show constant good binding affinities towards the molecular dynamic simulation (MDS)-derived enzyme's conformers. Final MDS experiments were performed on the ligand-protein complexes (compounds 1-12, Table S1) to verify their binding modes and calculate their binding free energy. Consequently, a final selection of six compounds (1-6) was proposed to possess high potential as anti-SARS-CoV-2 drug candidates. Our study provides insight into the role of the Mpro structural flexibility during interactions with the possible inhibitors and sheds light on the structure-based design of anti-coronavirus disease 2019 (COVID-19) therapeutics targeting SARS-CoV-2.

Publication Type

Journal article.

<121>

Accession Number

20203351031

Author

Alsoussi, W. B.; Turner, J. S.; Case, J. B.; Zhao HaiYan; Schmitz, A. J.; Zhou, J. Q.; Chen, R. E.; Lei TingTing; Rizk, A. A.; McIntire, K. M.; Winkler, E. S.; Fox, J. M.; Kafai, N. M.; Thackray, L. B.; Hassan, A. O.; Amanat, F.; Krammer, F.; Watson, C. T.; Kleinstein, S. H.; Fremont, D. H.; Diamond, M. S.; Ellebedy, A. H.

Title

A potently neutralizing antibody protects mice against SARS-CoV-2 infection.

Source

Journal of Immunology; 2020. 205(4):915-922. 58 ref.

Publisher

American Association of Immunologists

Location of Publisher

Bethesda

Country of Publication

USA

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is responsible for millions of infections and hundreds of thousands of deaths globally. There are no widely available licensed therapeutics against SARS-CoV-2, highlighting an urgent need for effective interventions. The virus enters host cells through binding of a receptor-binding domain within its trimeric spike glycoprotein to human angiotensin-converting enzyme 2. In this article, we describe the generation and characterization of a panel of murine mAbs directed against the receptor-binding domain. One mAb, 2B04, neutralized wild-type SARS-CoV-2 in vitro with remarkable potency (half-maximal inhibitory concentration of <2 ng/ml). In a murine model of SARS-CoV-2 infection, 2B04 protected challenged animals from weight loss, reduced lung viral load, and blocked systemic dissemination. Thus, 2B04 is a promising candidate for an effective antiviral that can be used to prevent SARS-CoV-2 infection.

Publication Type

Journal article.

<122>

Accession Number

20203353438

Author

Tanvi Shinde; Hansbro, P. M.; Sohal, S. S.; Dingle, P.; Rajaraman Eri; Stanley, R.

Title

Microbiota modulating nutritional approaches to countering the effects of viral respiratory infections including SARS-CoV-2 through promoting metabolic and immune fitness with probiotics and plant bioactives.

Source

Microorganisms; 2020. 8(6)177 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Viral respiratory infections (VRIs) can spread quickly and cause enormous morbidity and mortality worldwide. These events pose serious threats to public health due to time lags in developing vaccines to activate the acquired immune system. The high variability of people's symptomatic responses to viral infections, as illustrated in the current COVID-19 pandemic, indicates the potential to moderate the severity of morbidity from VRIs. Growing evidence supports roles for probiotic bacteria (PB) and prebiotic dietary fiber (DF) and other plant nutritional bioactives in modulating immune functions. While human studies help to understand the epidemiology and immunopathology of VRIs, the chaotic nature of viral transmissions makes it difficult to undertake mechanistic study where the pre-conditioning of the metabolic and immune system could be beneficial. However, recent experimental studies have significantly enhanced our understanding of how PB and DF, along with plant bioactives, can significantly modulate innate and acquired immunity responses to VRIs. Synbiotic combinations of PB and DF potentiate increased benefits primarily through augmenting the production of short-chain fatty acids (SCFAs) such as butyrate. These and specific plant polyphenolics help to regulate immune responses to both restrain VRIs and temper the neutrophil response that can lead to acute respiratory distress syndrome (ARDS). This review highlights the current understanding of the potential impact of targeted nutritional strategies in setting a balanced immune tone for viral clearance and reinforcing homeostasis. This knowledge may guide the development of public health tactics and the application of functional foods with PB and DF components as a nutritional approach to support countering VRI morbidity.

Publication Type

Journal article.

<123>

Accession Number

20203353420

Author

Zeouk, I.; Bekhti, K.; Lorenzo-Morales, J.

Title

From Wuhan to COVID-19 pandemic: an up-to-date review of its pathogenesis, potential therapeutics, and recent advances.

Source

Microorganisms; 2020. 8(6)118 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The emergence of a novel human coronavirus (SARS-CoV-2) causing severe contagious respiratory tract infections presents a serious threat to public health worldwide. To date, there are no specific antiviral agents available for this disease, currently known as COVID-19. Therefore, genomic sequencing and therapeutic clinical trials are being conducted to develop effective antiviral agents. Several reports have investigated FDA-approved drugs as well as in silico virtual screening approaches such as molecular docking and modeling to find novel antiviral agents. Until now, antiparasitic drugs such as chloroquine have shown the most relevant results. Furthermore, there is an urgent need to understand the pathogenesis of this novel coronavirus, its transmission routes, surface survival and evolution in the environment. So far, the scientific community has indicated a possible transmission of COVID-19 via blood transfusion which is challenging in the case of asymptomatic individuals. Protocols for pathogen inactivation are also needed. In this paper, we reviewed recent findings about this life-threatening pandemic.

Publication Type

Journal article.

<124>

Accession Number

20203352716

Author

Osterrieder, N.; Bertzbach, L. D.; Dietert, K.; Abdelgawad, A.; Vladimirova, D.; Kunec, D.; Hoffmann, D.; Beer, M.; Gruber, A. D.; Trimpert, J.

Title

Age-dependent progression of SARS-CoV-2 infection in Syrian hamsters.

Source

Viruses; 2020. 12(7)40 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

In late 2019, an outbreak of a severe respiratory disease caused by an emerging coronavirus, SARS-CoV-2, resulted in high morbidity and mortality in infected humans. Complete understanding of COVID-19, the multi-faceted disease caused by SARS-CoV-2, requires suitable small animal models, as does the development and evaluation of vaccines and antivirals. Since age-dependent differences of COVID-19 were identified in humans, we compared the course of SARS-CoV-2 infection in young and aged Syrian hamsters. We show that virus replication in the upper and lower respiratory tract was independent of the age of the animals. However, older hamsters exhibited more pronounced and consistent weight loss. In situ hybridization in the lungs identified viral RNA in bronchial epithelium, alveolar epithelial cells type I and II, and macrophages. Histopathology revealed clear age-dependent differences, with young hamsters launching earlier and stronger immune cell influx than aged hamsters. The latter developed conspicuous alveolar and perivascular edema, indicating

vascular leakage. In contrast, we observed rapid lung recovery at day 14 after infection only in young hamsters. We propose that comparative assessment in young versus aged hamsters of SARS-CoV-2 vaccines and treatments may yield valuable information, as this small-animal model appears to mirror age-dependent differences in human patients.

Publication Type

Journal article.

<125>

Accession Number

20203353935

Author

Hashemzadeh, A.; Avan, A.; Ferns, G. A.; Khazaei, M.

Title

Vaccines based on virus-like nano-particles for use against Middle East respiratory syndrome (MERS) coronavirus.

Source

Vaccine; 2020. 38(36):5742-5746. 102 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Recent advances in virus-like nanoparticles against Middle East respiratory syndrome-related coronavirus (MERS-CoV) can initiate vaccine production faster for Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), while ensuring the safety, easy administration, and long-term effects. Patients with this viral pathogen suffer from excess mortality. MERS-CoV can spread through bioaerosol transmission from animal or

human sources. The appearance of an outbreak in South Korea sparked off a strong urge to design strategies for developing an effective vaccine since the emergence of MERS-CoV in 2012. Well unfortunately, this is an important fact in virus risk management. The studies showed that virus-like nanoparticles (VLPs) could be effective in its goal of stopping the symptoms of MERS-CoV infection. Besides, due to the genetic similarities in the DNA sequencing of SARS-CoV-2 with MERS-CoV and the first identified severe acute respiratory syndrome (SARS-CoV) in China since 2002/2003, strategic approaches could be used to manage SARS-CoV 2. Gathering the vital piece of information obtained so far could lead to a breakthrough in the development of an effective vaccine against SARS-CoV-2, which is prioritized and focussed by the World Health Organization (WHO). This review focuses on the virus-like nanoparticle that got successful results in animal models of MERS-CoV.

Publication Type

Journal article.

<126>

Accession Number

20203350832

Author

Brann, D. H.; Tsukahara, T.; Weinreb, C.; Lipovsek, M.; Berge, K. van den; Gong BoYing; Chance, R.; MacAulay, I. C.; Chou HsinJung; Fletcher, R. B.; Das, D.; Street, K.; Bezieux, H. R. de; Choi YoonGi; Risso, D.; Dudoit, S.; Purdom, E.; Mill, J.; Hachem, R. A.; Matsunami, H.; Logan, D. W.; Goldstein, B. J.; Grubb, M. S.; Ngai, J.; Datta, S. R.

Title

Non-neuronal expression of SARS-CoV-2 entry genes in the olfactory system suggests mechanisms underlying COVID-19-associated anosmia.

Source

Science Advances; 2020. 6(31)125 ref.

Publisher

American Association for the Advancement of Science

Location of Publisher

Washington

Country of Publication

USA

Abstract

Altered olfactory function is a common symptom of COVID-19, but its etiology is unknown. A key question is whether SARS-CoV-2 (CoV-2) - the causal agent in COVID-19 - affects olfaction directly, by infecting olfactory sensory neurons or their targets in the olfactory bulb, or indirectly, through perturbation of supporting cells. Here we identify cell types in the olfactory epithelium and olfactory bulb that express SARS-CoV-2 cell entry molecules. Bulk sequencing demonstrated that mouse, non-human primate and human olfactory mucosa expresses two key genes involved in CoV-2 entry, ACE2 and TMPRSS2. However, single cell sequencing revealed that ACE2 is expressed in support cells, stem cells, and perivascular cells, rather than in neurons. Immunostaining confirmed these results and revealed pervasive expression of ACE2 protein in dorsally-located olfactory epithelial sustentacular cells and olfactory bulb pericytes in the mouse. These findings suggest that CoV-2 infection of non-neuronal cell types leads to anosmia and related disturbances in odor perception in COVID-19 patients.

Publication Type

Journal article.

<127>

Accession Number

20203336002

Author

Bolourian, A.; Mojtahedi, Z.

Title

Obesity and COVID-19: the mTOR pathway as a possible culprit.

Source

Obesity Reviews; 2020. 21(9)15 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The aim of the article was to examine the interplay of obesity and COVID-19, examining the mTOR pathway as a possible suspect.

Publication Type

Journal article.

<128>

Accession Number

20203344086

Author

Kasturi Devi Kanniah; Nurul Amalin, F. K. Z.; Kaskaoutis, D. G.; Mohd Talib Latif

Title

COVID-19's impact on the atmospheric environment in the Southeast Asia region.

Source

Science of the Total Environment; 2020. 736many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Since its first appearance in Wuhan, China at the end of 2019, the new coronavirus (COVID-19) has evolved a global pandemic within three months, with more than 4.3 million confirmed cases worldwide until mid-May 2020. As many countries around the world, Malaysia and other southeast Asian (SEA) countries have also enforced lockdown at different degrees to contain the spread of the disease, which has brought some positive effects on natural environment. Therefore, evaluating the reduction in anthropogenic emissions due to COVID-19 and the related governmental measures to restrict its expansion is crucial to assess its impacts on air pollution and economic growth. In this study, we used aerosol optical depth (AOD) observations from Himawari-8 satellite, along with tropospheric NO2 column density from Aura-OMI over SEA, and ground-based pollution measurements at several stations across Malaysia, in order to quantify the changes in aerosol and air pollutants associated with the general shutdown of anthropogenic and industrial activities due to COVID-19. The lockdown has led to a notable decrease in AOD over SEA and in the pollution outflow over the oceanic regions, while a significant decrease (27% - 30%) in tropospheric NO2 was observed over areas not affected by seasonal biomass burning. Especially in Malaysia, PM10, PM2.5, NO2, SO2, and CO concentrations have been decreased by 26-31%, 23-32%, 63-64%, 9-20%, and 25-31%, respectively, in the urban areas during the lockdown phase, compared to the same periods in 2018 and 2019. Notable reductions are also seen at industrial, suburban and rural sites across the country. Quantifying the reductions in major and health harmful air pollutants is crucial for health-related research and for air-quality and climate-change studies.

Publication Type

Journal article.

<129>

Accession Number

20203344055

Author

Braga, F.; Scarpa, G. M.; Brando, V. E.; Manfe, G.; Zaggia, L.

Title

COVID-19 lockdown measures reveal human impact on water transparency in the Venice lagoon.

Source

Science of the Total Environment; 2020. 73643 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The lagoon of Venice has always been affected by the regional geomorphological evolution, anthropogenic stressors and global changes. Different morphological settings and variable biogeophysical conditions characterize this continuously evolving system that rapidly responds to the anthropic impacts. When the lockdown measures were enforced in Italy to control the spread of the SARS-CoV-2 infection on March 10th 2020, the ordinary urban water traffic around Venice, one of the major pressures in the lagoon, came to a halt. This provided a unique opportunity to analyse the environmental effects of restrictions to mobility on water transparency. Pseudo true-colour composites Sentinel-2 satellite imagery proved useful for qualitative visual interpretation, showing the reduction of the vessel traffic and their wakes from the periods before and during the SARS-CoV-2 outbreak. A quantitative analysis of suspended matter patterns, based on satellite-derived turbidity, in the absence of traffic perturbations, allowed to focus on natural processes and the residual stress from human activities that continued throughout the lockdown. We conclude that the high water transparency can be considered as a transient condition determined by a combination of natural seasonal factors and the effects of COVID-19 restrictions.

Publication Type

Journal article.

<130>

Accession Number

20203344052

Author

Daughton, C. G.

Title

Wastewater surveillance for population-wide COVID-19: the present and future.

Source

Science of the Total Environment; 2020. 736many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The Covid-19 pandemic (Coronavirus disease 2019) continues to expose countless unanticipated problems at all levels of the world's complex, interconnected society - global domino effects involving public health and safety, accessible health care, food security, stability of economies and financial institutions, and even the viability of democracies. These problems pose immense challenges that can voraciously consume human and capital resources. Tracking the initiation, spread, and changing trends of Covid-19 at population-wide scales is one of the most daunting challenges, especially the urgent need to map the distribution and magnitude of Covid-19 in near real-time. Other than pre-exposure prophylaxis or therapeutic treatments, the most important tool is the ability to quickly identify infected individuals. The mainstay approach for epidemics has long involved the large-scale application of diagnostic testing at the individual case level. However, this approach faces overwhelming challenges in providing fast surveys of large populations. An epidemiological tool developed and refined by environmental scientists over the last 20 years (Wastewater-Based Epidemiology - WBE) holds the potential as a key tool in containing and mitigating Covid-19 outbreaks while also minimizing domino effects such as unnecessarily long stay-at-home policies that stress humans and economies alike. WBE measures chemical signatures in sewage, such as fragment biomarkers from the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), simply by applying the type of clinical diagnostic testing (designed for individuals) to the collective signature of entire communities. As such, it could rapidly establish the presence of Covid-19 infections across an entire community. Surprisingly, this tool has not been widely embraced by epidemiologists or public health officials. Presented is an overview of why and how governments should exercise prudence and begin evaluating WBE and coordinating development of a standardized WBE methodology - one that could be deployed within nationalized monitoring networks to provide intercomparable data across nations.

Publication Type

Journal article.

<131>

Accession Number

20203344036

Author

Zheng Yi; Goh, E.; Wen Jun

Title

The effects of misleading media reports about COVID-19 on Chinese tourists' mental health: a perspective article.

Source

Anatolia; 2020. 31(2):337-340. 14 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The novel coronavirus (COVID-19) has been declared apublic health emergency of international concern by the World Health Organization. This pandemic has since saturated the headlines of major international media channels that disseminate information to global citizens. However, some media coverage of COVID-19 has negatively influenced Chinese travellers' mental health due to the outbreak having been labelled "Chinese virus pandemonium." Key world leaders have also parroted such sensationalism; for example, President Donald Trump called COVID-19 the "Chinese virus". This discriminatory labelling has resulted in violent attacks on Chinese international travellers and students. This perspective article explores how misleading and discriminatory media reports may affect the mental well-being of ethnically Chinese travellers during the global COVID-19 pandemic.

Publication Type

Journal article.

<132>

Accession Number

20203344035

Author

Wen Jun; Aston, J.; Liu XinYi; Ying TianYu

Title

Effects of misleading media coverage on public health crisis: a case of the 2019 novel coronavirus outbreak in China.

Source

Anatolia; 2020. 31(2):331-336. 33 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The coronavirus outbreak in Wuhan, China has sparked a global epidemic, which the World Health Organization declared a public health emergency of international concern on 31st January 2020 (Beijing time). This crisis has attracted intense media attention. Recently, some media outlets inappropriately labelled the coronavirus by race, using such headlines as "Chinese virus pandemonium" and even suggesting "China kids stay home." The biased and misleading coverage presented via Western media channels has incited anger throughout the Chinese community and has placed undue stress upon Chinese individuals living outside China. This postpublished review takes a tourism-focused perspective to examine findings from a quantitative study (Rodriguez-Seijas, Stohl, Hasin, & Eaton, 2015) published in 2015 in JAMA Psychiatry. The current paper highlights the potential impacts of misleading and biased media coverage on Chinese individuals' mental health. Specifically, this work considers perceived racial discrimination stemming from coronavirus as a public health crisis and the effects of such discrimination on individuals of Chinese heritage. Similarly imperative are pertinent effects on country image and destination image with respect to tourism marketing and tourist behaviour during times of crisis. By considering racism in the context of the coronavirus outbreak, this paper identifies potential avenues for relevant research in tourism and hospitality.

Publication Type

Journal article.

<133>

Accession Number

20203349589

Author

Tanvir Abir; Kalimullah, N. A.; Osuagwu, U. L.; Yazdani, D. M. N. A.; Abdullah Al Mamun; Taha Husain; Basak, P.; P. Yukthamarani Permarupan; Agho, K. E.

Title

Factors associated with the perception of risk and knowledge of contracting the SARS-CoV-2 among adults in Bangladesh: analysis of online surveys.

Source

International Journal of Environmental Research and Public Health; 2020. 17(14)36 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

This study investigated the perception and awareness of risk among adult participants in Bangladesh about Coronavirus Disease 2019 (COVID-19). During the lockdown era in Bangladesh at two different time points, from 26-31 March 2020 (early lockdown) and 11-16 May 2020 (late lockdown), two self-administered online surveys were conducted on 1005 respondents (322 and 683 participants, respectively) via social media. To examine risk perception and knowledge-related factors towards COVID-19, univariate and multiple linear regression models were employed. Scores of mean knowledge (8.4 vs. 8.1, p = 0.022) and perception of risk (11.2 vs. 10.6, p < 0.001) differed significantly between early and late lockdown. There was a significant decrease in perceived risk scores for contracting SARS-Cov-2 [beta = -0.85, 95% CI: -1.31, -0.39], while knowledge about SARS-Cov-2 decreased insignificantly [beta = -0.22, 95% CI: -0.46, 0.03] in late lockdown

compared with early lockdown period. Self-quarantine was a common factor linked to increased perceived risks and knowledge of SARS-Cov-2 during the lockdown period. Any e ort to increase public awareness and comprehension of SARS-Cov-2 in Bangladesh will then offer preference to males, who did not practice self-quarantine and are less worried about the propagation of this kind of virus.

Publication Type

Journal article.

<134>

Accession Number

20203346423

Author

Mahato, S.; Srijana Bhattarai; Rakesh Singh

Title

Inequities towards leprosy-affected people: a challenge during COVID-19 pandemic.

Source

PLoS Neglected Tropical Diseases; 2020. 14(7)16 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

The aim of the article was to discuss the health inequalities experienced by people afflicted with leprosy in this time of COVID-19 pandemic. To truly be able to eliminate or eradicate leprosy (highly questionable), there is an absolute need for addressing the underlying social structures that translate into food insecurity, housing insecurity, lack of education, living in poor sanitary conditions, malnutrition or poorly nutritional diets, and living lives with more dignity. The solution is not a vaccine but is social improvements in the lives of those

affected with leprosy or atrisk of becoming infected. Furthermore, creating an enabling environment for continuation of leprosy-related healthcare services should be a priority in countries like Nepal during public health crisis such as the COVID-19 pandemic.

Publication Type

Journal article.

<135>

Accession Number

20203344542

Author

Rugani, B.; Caro, D.

Title

Impact of COVID-19 outbreak measures of lockdown on the Italian Carbon Footprint.

Source

Science of the Total Environment; 2020. 737many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Stringent lockdown measures implemented in Italy to mitigate the spread of COVID-19 are generating unprecedented economic impacts. However, the environmental consequences associated with the temporary shutdown and recovery of industrial and commercial activities are still not fully understood. Using the well-known carbon footprint (CF) indicator, this paper provides a comprehensive estimation of environmental effects due to the COVID-19 outbreak lockdown measures in Italy. Our aim was to quantify the CF associated with the consumption of energy by any economic activity and region in Italy during the lockdown, and then

compare these environmental burdens with the CF calculated for analogous periods from 2015 to 2019 (~March and April). Complementarily, we also conducted a scenario analysis to estimate the post-lockdown CF impact in Italy. A consumption-based approach was applied according to the principles of the established Life Cycle Assessment method. The CF was therefore quantified as a sum of direct and indirect greenhouse gases (GHGs) released from domestically produced and imported energy metabolism flows, excluding the exports. Our findings indicate that the CF in the lockdown period is ~-20% lower than the mean CF calculated for the past. This means avoided GHGs in between ~5.6 and ~10.6 Mt CO2e. Results further suggest that a tendency occurs towards higher impact savings in the Northern regions, on average ~230 kt CO2e of GHGs avoided by province (against ~110-130 kt CO2e in central and Southern provinces). Not surprisingly, these are the utmost industrialized areas of Italy and have been the ones mostly affected by the outbreak. Despite our CF estimates are not free of uncertainties, our research offers quantitative insights to start understanding the magnitude generated by such an exceptional lockdown event in Italy on climate change, and to complement current scientific efforts investigating the relationships between air pollution and the spread of COVID-19.

Publication Type

Journal article.

<136>

Accession Number

20203344521

Author

Siciliano, B.; Dantas, G.; Silva, C. M. da; Arbilla, G.

Title

Increased ozone levels during the COVID-19 lockdown: analysis for the city of Rio de Janeiro, Brazil.

Source

Science of the Total Environment; 2020. 73744 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The first COVID-19 case in Brazil was confirmed on February 25, 2020. Partial lockdown measures came into force in the city of Rio de Janeiro, Brazil, on March 23. While CO and NO2 levels showed significant reductions, PM10 levels were only reduced in the first partial lockdown week. By contrast, ozone levels increased in all studied locations. In this study, the factors leading to this behavior were analyzed. Monitoring data obtained at two automatic monitoring stations showed higher ratios between non-methane hydrocarbons and nitrogen oxides (NMHC/NOx) during the partial lockdown (up to 37.3%). The increase in ozone concentrations during the social distancing measures could be attributed to the increase in NMHC/NOx ratios since atmospheric chemistry in Rio de Janeiro is under VOC-controlled conditions. However, the increase was higher when air masses arrived from the industrial areas, not only because of the higher NMHC/NOx ratios, but also because the reactivity of VOC was highly increased by these air masses, which are rich in aromatic compounds.

Publication Type

Journal article.

<137>

Accession Number

20203342655

Author

Baudron, F.; Liegeois, F.

Title

Fixing our global agricultural system to prevent the next COVID-19.

Source

Outlook on Agriculture; 2020. 49(2):111-118. many ref.

Publisher

Sage Publications Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

While the world's attention is focused on controlling COVID-19, evidence points at the biodiversity crisis as a leading factor in its emergence, and the outbreak of many past emerging infectious diseases. Agriculture is a major driver of biodiversity loss globally. Feeding a growing human population in ways that minimize harm to biodiversity is thus imperative to prevent the next COVID-19. Solutions exist, but the burden of implementing them should not be left to farmers alone, who are mainly small-scale family farmers. Supportive policies and markets are needed, but unlikely to bring about the required changes alone. A global concerted effort similar to the Paris Agreement for climate is probably required.

Publication Type

Journal article.

<138>

Accession Number

20203342639

Author

Sonmez, S.; Apostolopoulos, Y.; Lemke, M. K.; Hsieh YuChin

Title

Understanding the effects of COVID-19 on the health and safety of immigrant hospitality workers in the United States.

Source

Tourism Management Perspectives; 2020. 35many ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

The U.S. tourism and hospitality workforce is disproportionately represented by immigrants and minorities, particularly in low-wage jobs with adverse work conditions. Immigrant hotel and foodservice workers face excess chronic stress and related syndemic risks, exacerbated by social, political, and economic inequities. COVID-19 has suddenly intensified the stressful and already difficult circumstances of immigrant service sector workers. The travel and tourism sector is one of the hardest hit due to widespread travel restrictions and shelter-in-place orders designed to curb infection spread. Restrictions and lockdowns have devastated tourism-dependent destinations and displaced millions of vulnerable workers, causing them to lose their livelihoods. Compared to the general workforce, a sizeable increase in occupational stress has already been observed in the hospitality/tourism sector over the past 15-20 years. COVID-19 and related fears add further strains on immigrant hotel and foodservice workers, potentially exerting a significant toll on mental and physical health and safety.

Publication Type

Journal article.

<139>

Accession Number

20203342632

Author

Rittichainuwat, B.; Laws, E.; Maunchontham, R.; Rattanaphinanchai, S.; Muttamara, S.; Mouton, K.; Lin YueLing; Suksai, C.

Title

Resilience to crises of Thai MICE stakeholders: a longitudinal study of the destination image of Thailand as a MICE destination.

Source

Tourism Management Perspectives; 2020. 35many ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

The COVID-19 outbreak has changed rapidly the business operation and travel behavior of global communities and calls for research on resilience. This study aims to identify the changing destination image of Thailand as a MICE destination during crises and examine the resilience of Thai MICE stakeholders. A mixed method of qualitative and quantitative design was employed using interviews, observations and questionnaire surveys. A longitudinal study of Thai MICE stakeholders during 14 years revealed that the Buddhist concepts of resilience and Thainess contribute to psychological resilience. Buddhism and Thainess cultivate the concept of crisis concierge. Surveys showed unchanged image of exhibition facilities during the political instability. Thailand's incentive travel benefits from the availability of bleisure (a combination of business and leisure) attractions. Good value for money, Thai hospitality, bleisure attractions, and international standard venues are key resilient factors.

Publication Type

Journal article.

<140>

Accession Number

20203343891

Author

Baqui, P.; Bica, I.; Marra, V.; Ercole, A.; Schaar, M. van der

Title

Ethnic and regional variations in hospital mortality from COVID-19 in Brazil: a cross-sectional observational study.

Source

Lancet Global Health; 2020. 8(8):e1018-e1026. 29 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Brazil ranks second worldwide in total number of COVID-19 cases and deaths. Understanding the possible socioeconomic and ethnic health inequities is particularly important given the diverse population and fragile political and economic situation. We aimed to characterise the COVID-19 pandemic in Brazil and assess variations in mortality according to region, ethnicity, comorbidities, and symptoms. Methods: We conducted a cross-sectional observational study of COVID-19 hospital mortality using data from the SIVEP-Gripe (Sistema de Informacao de Vigilancia Epidemiologica da Gripe) dataset to characterise the COVID-19 pandemic in Brazil. In the study, we included hospitalised patients who had a positive RT-PCR test for severe acute respiratory syndrome coronavirus 2 and who had ethnicity information in the dataset. Ethnicity of participants was classified according to the five categories used by the Brazilian Institute of Geography and Statistics: Branco (White), Preto (Black), Amarelo (East Asian), Indigeno (Indigenous), or Pardo (mixed ethnicity). We assessed regional variations in patients with COVID-19 admitted to hospital by state and by two socioeconomically grouped regions (north and central-south). We used mixed-effects Cox regression survival analysis to estimate the effects of ethnicity and comorbidity at an individual level in the context of regional variation. Findings: Of 99 557 patients in the SIVEP-Gripe dataset, we included 11 321 patients in our study. 9278 (82.0%) of these patients were from the central-south region, and 2043 (18.0%) were from the north region. Compared with White Brazilians, Pardo and Black Brazilians with COVID-19 who were admitted to hospital had significantly higher risk of mortality (hazard ratio [HR] 1.45, 95% CI 1.33-1.58 for Pardo Brazilians; 1.32, 1.15-1.52 for Black Brazilians). Pardo ethnicity was the second most important risk factor (after age) for death. Comorbidities were more common in Brazilians admitted to hospital in the north region than in the central-south, with similar proportions between the various ethnic groups. States in the north had higher HRs compared with those of the central-south, except for Rio de Janeiro, which had a much higher HR than that of the other central-south states. Interpretation: We found evidence of two distinct but associated effects: increased mortality in the north region (regional effect) and in the Pardo and Black populations (ethnicity effect). We speculate that the regional effect is driven by increasing comorbidity burden in regions with lower levels of socioeconomic development. The ethnicity effect might be related to differences in susceptibility to COVID-19 and access to health care (including intensive care) across ethnicities. Our analysis supports an urgent effort on the part of Brazilian authorities to consider how the national response to COVID-19 can better protect Pardo and Black Brazilians, as well as the population of poorer states, from their higher risk of dying of COVID-19.

Publication Type

Journal article.

<141>

Accession Number

20203346940

Author

Abdelhafid, B.; Rachid, A. A.; Sana, E. A.; Mohamed, C.

Title

Lessons from COVID-19 pandemic and the Morocco's success story.

Source

Electronic Physician; 2020. 12(2):7682-7684. 12 ref.

Publisher

Electronic Physician

Location of Publisher

Mashhad

Country of Publication

Iran

Abstract

The COVID-19 pandemic is the most prevailing health crisis of our time. Since its appearance in Asia, the virus has spread to all continents, claiming many victims. Moreover, crisis-to-crisis management has met with huge cost in resources throughout the world. Initial measures taken by Morocco have so far enabled the country to control the scale of the coronavirus pandemic. Nevertheless, a deadly resurgence of the pandemic became possible in the event of a hasty end to containment. To mitigate the effects of the health crisis, all countries need to adopt appropriate strategies to break out of containment. Of course, the lifting of restrictions should not be absolute at the same time for everyone.

Publication Type

Journal article.

<142>

Accession Number

20203343824

Author

Bonyan, R.; Al-Karasneh, A. F.; El-Dahiyat, F.; Jairoun, A. A.

Title

Identification of the awareness level by the public of Arab countries toward COVID-19: cross-sectional study following an outbreak.

Source

Journal of Pharmaceutical Policy and Practice; 2020. 13(43):(15 July 2020). 28 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The novel coronavirus disease 2019 (COVID-19) pandemic is a global challenge. Improving public awareness about preventive measures and disseminating appropriate information about COVID-19 has a critical role in containing the disease. Aim: To evaluate and determine the factors that may affect the level of awareness and responses toward COVID-19 in Arab countries. The study could be helpful in identifying where more public education about COVID-19 is needed. Method: This cross-sectional, online descriptive questionnaire-based study was conducted in February and March 2020. A total of 485 participants from Arabic-speaking countries (Jordan, United Arab Emirates, the Kingdom of Saudi Arabia, Qatar, Palestine, and Egypt) were asked to complete this Arabic-translated survey using social media platforms (Facebook and WhatsApp). Result: In general, there was a good level of awareness of the participants regarding COVID-19. Higher awareness scores were significantly correlated with older participants [odds ratio (OR) 1.019; 95% CI 1.012-1.026], those who attended awareness campaigns [OR 1.212; 95% CI 1.081-1.358], secondary school education holders [OR 1.740; 95% CI 1.096-2.763], higher education diploma holders [OR 2.090; 95% CI 1.297-3.368], university degree holders [OR 1.969; 95% CI 1.265-3.066], those who have post-graduate education

[OR 2.206; 95% CI 1.393-3.493], and healthcare employees [OR 1.259; 95% CI 1.025-1.547]. Conclusions: The COVID-19 pandemic is causing global panic; thus, awareness and practices of preventive measures of COVID-19 should be increased through public educational campaigns, which should be planned in accordance with communities' and countries' attitudes toward COVID-19. Collaborative efforts between ministries of heath and residents of every country should be implemented.

Publication Type

Journal article.

<143>

Accession Number

20203343822

Author

Dzingirai, B.; Matyanga, C. M. J.; Mudzviti, T.; Siyawamwaya, M.; Tagwireyi, D.

Title

Risks to the community pharmacists and pharmacy personnel during COVID-19 pandemic: perspectives from a low-income country.

Source

Journal of Pharmaceutical Policy and Practice; 2020. 13(42):(15 July 2020). 34 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Coronavirus disease 2019 (COVID-19) is an infectious disease that has become a global pandemic. COVID-19 is spreading in Africa, and Zimbabwe has not been spared. The cases in Zimbabwe are mainly from imported cases due to high volume of travellers from the COVID-19 hotspots. In Zimbabwe, local transmission is also

anticipated due to inter- and intracity travelling. Frontline health workers are at risk of infection due to contact with infected people as they discharge their duties. In this setting, the risk to community pharmacists and pharmacy personnel is poorly understood and characterised. This paper looked at the risks of infection that are peculiar to community pharmacy personnel and suggested some recommendations to reduce the risk to COVID-19 infection.

Publication Type

Journal article.

<144>

Accession Number

20203353298

Author

McIver, D. J.; Silithammavong, S.; Theppangna, W.; Gillis, A.; Douangngeun, B.; Khammavong, K.; Singhalath, S.; Duong, V.; Buchy, P.; Olson, S. H.; Keatts, L.; Fine, A. E.; Greatorex, Z.; Gilbert, M.; Lebreton, M.; Saylors, K.; Joly, D. O.; Rubin, E. M.; Lange, C. E.

Title

Coronavirus surveillance of wildlife in the Lao People's Democratic Republic detects viral RNA in rodents.

Source

Archives of Virology; 2020. 165(8):1869-1875. 21 ref.

Publisher

Springer-Wien

Location of Publisher

Vienna

Country of Publication

Austria

Abstract

Coronaviruses can become zoonotic, as in the case of COVID-19, and hunting, sale, and consumption of wild animals in Southeast Asia increases the risk for such incidents. We sampled and tested rodents (851) and other

mammals and found betacoronavirus RNA in 12 rodents. The sequences belong to two separate genetic clusters and are closely related to those of known rodent coronaviruses detected in the region and distantly related to those of human coronaviruses OC43 and HKU1. Considering the close human-wildlife contact with many species in and beyond the region, a better understanding of virus diversity is urgently needed for the mitigation of future risks.

Publication Type

Journal article.

<145>

Accession Number

20203353283

Author

Lima, W. G.; Brito, J. C. M.; Overhage, J.; Nizer, W. S. da C.

Title

The potential of drug repositioning as a short-term strategy for the control and treatment of COVID-19 (SARS-CoV-2): a systematic review.

Source

Archives of Virology; 2020. 165(8):1729-1737. 38 ref.

Publisher

Springer-Wien

Location of Publisher

Vienna

Country of Publication

Austria

Abstract

The novel human coronavirus (SARS-CoV-2), the causative agent of COVID-19, has quickly become a threat to the public health and economy worldwide. Despite the severity of some cases, there are no current pathogen-specific antivirals available to treat the disease. Therefore, many studies have focused on the

evaluation of the anti-SARS-CoV-2 activity of clinically available drugs. Here, we conducted a systematic review to describe the drug repositioning strategy against SARS-CoV-2 and to discuss the clinical impact of this approach in the current pandemic context. The systematic review was performed on March 23, 2020, using PubMed/MEDLINE, Scopus, Cochrane Library, and Biblioteca Virtual de Saude (BVS). The data were summarized in tables and critically analyzed. After the database search, 12 relevant studies were identified as eligible for the review. Among the drugs reported in these studies, 57 showed some evidence of antiviral activity. Antivirals, especially antiretrovirals, are the main class of therapeutic agents evaluated against COVID-19. Moreover, studies have reported the anti-SARS-CoV-2 activity of antitumor (16%; 9/57), antimalarial (7%, 4/57), and antibacterial (5%; 3/57) agents. Additionally, seven pharmacological agents (chloroquine, tetrandrine, umifenovir (arbidol), carrimycin, damageprevir, lopinavir/ritonavir) are in phase IV of clinical trials. Due to the evidence of the anti-SARS-CoV-2 activity of various clinically available agents, drug repositioning stands out as a promising strategy for a short-term response in the fight against the novel coronavirus.

Publication Type

Journal article.

<146>

Accession Number

20203330135

Author

Jaime, P. C.

Title

Special issue: the COVID-19 pandemic: implications for food and nutrition (in)security. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2505-2709. 3 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This special issue contains articles that examine the association of COVID-19 and food security. The impacts of COVID-19 on food and nutrition security will be diversified, since they result from aspects related to risk factors identified thus far for the worst clinical prognosis of coronavirus infection. These include obesity and other chronic diseases, as well as the different forms of malnutrition that are exacerbated in the context of a health emergency.

Publication Type

Journal issue.

<147>

Accession Number

20203293287

Author

Zhang ZuQin; Yao Wei; Wang Yan; Long Cheng; Fu XinMiao

Title

Wuhan and Hubei COVID-19 mortality analysis reveals the critical role of timely supply of medical resources.

Source

Journal of Infection; 2020. 81(1):170-172. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

We collected data for analysis on the officially released cumulative numbers of confirmed, dead and recovered cases (from 23 Jan to 3 Mar 2020) in five geographic regions, i.e., mainland China, Hubei Province, outside Hubei (in China), Wuhan City and outside Wuhan (in Hubei). As of 3 Mar 2020, crude fatality ratios (CFRs) in the above regions are 0.027+/-0.006, 0.035+/-0.007, 0.005+/-0.002, 0.045+/-0.012 and 0.021+/-0.008, respectively, in line with earlier reports. While the mortality rates of COVID-19 outside Hubei and outside Wuhan appear constant over time, the mortality rates in Hubei and Wuhan decline continuously (Fig. 1(A)). Strikingly, the mortality rates in Hubei and Wuhan are well-fitted with the exponential decay mode (R2 being 0.93 and 0.82, respectively; Fig. 1(A) and Table S1), and it is the same forth with that in China (R2 being 0.86) but not with that outside Hubei and outside Wuhan (R2 being 0.39 and 0.32, respectively). Remarkably, we found that the recovery rates of COVID-19 patients in the above regions were all well-fitted with the exponential growth mode (R2 being 0.96, 0.95, 0.95, 0.88 and 0.95, respectively; Fig. 1(B) and Table S1). Such intriguing pattern for the COVID-19 mortality and recovery rates in Wuhan (or Hubei) somehow contradicts traditional epidemiological models wherein both are assumed as constants.

Publication Type

Correspondence.

<148>

Accession Number

20203348150

Author

Gautam, A.; Kaphle, K.; Shrestha, B.; Phuyal, S.

Title

Susceptibility to SARS, MERS, and COVID-19 from animal health perspective.

Source

Open Veterinary Journal; 2020. 10(2):164-177. many ref.

Publisher

Faculty of Veterinary Medicine, University of Tripoli

Location of Publisher

Tripoli

Country of Publication

Libya

Abstract

Viruses are having great time as they seem to have bogged humans down. Severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), and novel coronavirus (COVID-19) are the three major coronaviruses of present-day global human and animal health concern. COVID-19 caused by SARS-CoV-2 is identified as the newest disease, presumably of bat origin. Different theories on the evolution of viruses are in circulation, yet there is no denying the fact that the animal source is the skeleton. The whole world is witnessing the terror of the COVID-19 pandemic that is following the same path of SARS and MERS, and seems to be more severe. In addition to humans, several species of animals are reported to have been infected with these life-threatening viruses. The possible routes of transmission and their zoonotic potentialities are the subjects of intense research. This review article aims to overview the link of all these three deadly coronaviruses among animals along with their phylogenic evolution and cross-species transmission. This is essential since animals as pets or food are said to pose some risk, and their better understanding is a must in order to prepare a possible plan for future havoc in both human and animal health. Although COVID-19 is causing a human health hazard globally, its reporting in animals are limited compared to SARS and MERS. Non-human primates and carnivores are most susceptible to SARS-coronavirus and SARS-CoV-2, respectively, whereas the dromedary camel is susceptible to MERS-coronavirus. Phylogenetically, the trio viruses are reported to have originated from bats and have special capacity to undergo mutation and genomic recombination in order to infect humans through its reservoir or replication host. However, it is difficult to analyze how the genomic pattern of coronaviruses occurs. Thus, increased possibility of new virus-variants infecting humans and animals in the upcoming days seems to be the biggest challenge for the future of the world. One health approach is portrayed as our best way ahead, and understanding the animal dimension will go a long way in formulating such preparedness plans.

Publication Type

Journal article.

<149>

Accession Number

20203343149

Author

Essid, N.; Allouche, M.; Lazzem, M.; Harrath, A. H.; Lamjed Mansour; Saleh Alwasel; Mahmoudi, E.; Beyrem, H.; Boufahja, F.

Title

Ecotoxic response of nematodes to ivermectin, a potential anti-COVID-19 drug treatment.

Source

Marine Pollution Bulletin; 2020. 15749 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

At the end of March 2020, ivermectin was confirmed as a drug for COVID-19 treatment. A significant amount of ivermectin could deposit into sediments of the semi-closed Mediterranean Sea, where three European COVID-19 epicenters are located: Italy, Spain, and France. Meiobenthic nematodes were exposed to three ivermectin doses (1.8 ng.g-1, 9 ng.g-1, and 18 ng.g-1) for 10 days. Ivermectin caused a great reduction in abundance. However, the diversity indices decreased only at high doses. Ivermectin disadvantaged the 1B-Cr-Id functional type (nonselective deposit feeders and nematodes with circular or indistinct amphids) and benefited the 2A-REL-Sp type (epistrate feeders and nematodes with rounded or elongated loop amphids). Thus, Trophic Diversity and Amphideal Diversity index values increased with sedimentary ivermectin enrichment. Large amphideal foveas were more efficient for 2A-REL-Sp nematodes to avoid ivermectin. The responses of the functional type 2A-RELSp and corresponding taxa predict post-COVID-19 environmental concerns and the bioaccumulation of ivermectin in seafoods.

Publication Type

Journal article.

<150>

Accession Number

20203349887

Author

Berno, N. D.; Silva, P. V. da

Title

Consumer profile of fruits and vegetables during quarantine (Pandemia COVID-19). [Portuguese]

Source

Revista Iberoamericana de Tecnologia Postcosecha; 2020. 21(1):1-16. 16 ref.

Publisher

Asociacion Iberoamericana de Tecnologia Postcosecha, S. C.

Location of Publisher

Hermosillo

Country of Publication

Mexico

Abstract

The current scenario of social isolation has resulted in changes in consumer behavior. The objective of the work is to know the profile of the consumer of fruits and vegetables during the quarantine caused by the Covid-19 pandemic. An exploratory research was developed, using a questionnaire structured in 30 questions, available between 04/24/2020 and 05/01/2020. Descriptive analysis was performed of the collected data and clustering analysis for some variables. The questionnaire reached 370 people, most of them women between 26 and 45 years old, married or in a stable relationship, living in Sao Paulo, who live in 3 to 6 people. Most live in municipalities with social isolation above 50%, and reported that they were affected in some way by the quarantine. There was an increase in the number of people who started shopping fortnightly and even monthly, although most continue to buy weekly. There was a drop in purchases at street fair and an increase in purchases directly from the producer and CSA, and purchases started to be via home deliveries. There was a reduction in the number of responses for all fruits and vegetables mentioned after the quarantine, which may imply a slight reduction in the overall purchase of these products. Most said that the hygiene and cleanliness of the place of purchase is better in the quarantine, however, there was an increase in prices. The research carried out in the public reached, shows that there was a change in the personal behavior of the consumer of fruits and vegetables during the quarantine, mainly in the periodicity of purchase, increase in the use of home deliveries, reduction of purchases in street fair and increase in direct purchases with producers.

Publication Type

Journal article.

<151>

Accession Number

20203349844

Author

Wang YingTing; Landeras-Bueno, S.; Hsieh LiEn; Terada, Y.; Kim, K.; Ley, K.; Shresta, S.; Saphire, E. O.; Regla-Nava, J. A.

Title

Spiking pandemic potential: structural and immunological aspects of SARS-CoV-2.

Source

Trends in Microbiology; 2020. 28(8):605-618. 104 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

SARS-Coronavirus-2 (SARS-CoV-2) causes Coronavirus disease 2019 (COVID-19), an infectious respiratory disease causing thousands of deaths and overwhelming public health systems. The international spread of SARS-CoV-2 is associated with the ease of global travel, and societal dynamics, immunologic naivete of the host population, and muted innate immune responses. Based on these factors and the expanding geographic scale of the disease, the World Health Organization (WHO) declared the COVID-19 outbreak a pandemic-the first caused by a coronavirus. In this review, we summarize the current epidemiological status of COVID-19 and consider the virological and immunological lessons, animal models, and tools developed in response to prior SARS-CoV and MERS-CoV outbreaks that can serve as resources for development of SARS-CoV-2 therapeutics and vaccines. In particular, we discuss structural insights into the SARS-CoV-2 spike protein, a major determinant of transmissibility, and discuss key molecular aspects that will aid in understanding and fighting this new global threat.

Publication Type

Journal article.

<152>

Accession Number

20203349821

Author

Kalinsky, K.; Accordino, M. K.; Hosi, K.; Hawley, J. E.; Trivedi, M. S.; Crew, K. D.; Hershman, D. L.

Title

Characteristics and outcomes of patients with breast cancer diagnosed with SARS-Cov-2 infection at an academic center in New York City.

Source

Breast Cancer Research and Treatment; 2020. 182(1):239-242. 3 ref.

Publisher

Springer

Location of Publisher

New York

Country of Publication

USA

Abstract

The aim of the article was to discuss the clinical characteristics of patients with breast cancer that are COVID-19 positive in New York City. In this racially/ethnically diverse population of 27 COVID-19 + patients with BC, the majority (74%) did not require hospitalization, and one male with multiple co-morbidities died. This is of interest, as COVID-19 + males have reported worse outcomes than females. While treatment disruptions occurred in most patients (74%), it is unknown whether this represents a deviation from other patients who develop infections on therapy. While larger series are needed to understand the impact of COVID-19 in patients with breast cancer, these initial data are reassuring that a substantial number recover from their infection.

Publication Type

Correspondence.

<153>

Accession Number

20203349814

Author

Khan, M. I.; Hasan, K. N.; Abu Sufian; Hosen, M. B.; Polol, M. N. I.; Khaleque, M. A.; Rahman, M. M.; Chowdhury, M. S. M.; Hasan Ul-Haider; Razu, M. H.; Mala Khan; Rabbi, M. F.

Title

Reports of coding-complete genome sequences of five 2019 novel coronavirus (SARS-CoV-2) strains isolated in Bangladesh.

Source

Microbiology Resource Announcements; 2020. 9(31)3 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

This study determined five coding-complete genome sequences of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) strains isolated from oropharyngeal swab specimens of Bangladeshi patients who were diagnosed with coronavirus disease 2019 (COVID-19) and had no travel history.

Publication Type

Journal article.

<154>

Accession Number

20203340589

Author

Tripathy, S.; Dassarma, B.; Roy, S.; Chabalala, H.; Matsabisa, M. G.

Title

A review on possible modes of action of chloroquine/hydroxychloroquine: repurposing against SAR-CoV-2 (COVID-19) pandemic.

Source

International Journal of Antimicrobial Agents; 2020. 56(2)77 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Chloroquine (CQ) and its analogue hydroxychloroquine (HCQ) have long been used worldwide as frontline drugs for the treatment and prophylaxis of human malaria. Since the first reported cases in Wuhan, China, in late December 2019, humans have been under threat from coronavirus disease 2019 (COVID-19) caused by the novel coronavirus SARS-CoV-2 (previously known as 2019-nCoV), subsequently declared a pandemic. While the world is searching for expedited approval for a vaccine, which may be only preventative and not a cure, physicians and country leaders are considering several concerted clinical trials suggesting that the age-old antimalarial drugs CQ/HCQ could be a potent therapeutic against COVID-19. Based on accumulating scientific reports, here we highlight the possible modes of action of CQ/HCQ that could justify its use against viral infections. Considering the global health crisis of the COVID-19 pandemic, the option of repurposing old drugs, e.g. CQ/HCQ, particularly HCQ, for the treatment of SARS-CoV-2 infection could be a good choice. CQ/HCQ has diverse modes of action, including alteration of the acidic environment inside lysosomes and late endosomes, preventing endocytosis, exosome release and phagolysosomal fusion, and inhibition of the host cytokine storm. One or more diverse mechanisms might work against viral infections and reduce mortality. As there is no cure for COVID-19, clinical testing of HCQ is urgently required to determine its potency against

SARS-CoV-2, as this is the currently available treatment option. There remains a need to find other innovative drug candidates as possible candidates to enter clinical evaluation and testing.

Publication Type

Journal article.

<155>

Accession Number

20203340586

Author

Mubagwa, K.

Title

Cardiac effects and toxicity of chloroquine: a short update.

Source

International Journal of Antimicrobial Agents; 2020. 56(2)124 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

There is currently increased interest in the use of the antimalarial drugs chloroquine and hydroxychloroquine for the treatment of other diseases, including cancer and viral infections such as coronavirus disease 2019 (COVID-19). However, the risk of cardiotoxic effects tends to limit their use. In this review, the effects of these drugs on the electrical and mechanical activities of the heart as well as on remodelling of cardiac tissue are presented and the underlying molecular and cellular mechanisms are discussed. The drugs can have proarrhythmic as well as antiarrhythmic actions resulting from their inhibition of ion channels, including voltage-dependent Na+ and Ca2+ channels, background and voltage-dependent K+ channels, and

pacemaker channels. The drugs also exert a vagolytic effect due at least in part to a muscarinic receptor antagonist action. They also interfere with normal autophagy flux, an effect that could aggravate ischaemia/reperfusion injury or post-infarct remodelling. Most of the toxic effects occur at high concentrations, following prolonged drug administration or in the context of drug associations.

Publication Type

Journal article.

<156>

Accession Number

20203340585

Author

Song Yang; Zhang Min; Yin Ling; Wang KunKun; Zhou YiYi; Zhou Mi; Lu Yun

Title

COVID-19 treatment: close to a cure? A rapid review of pharmacotherapies for the novel coronavirus (SARS-CoV-2).

Source

International Journal of Antimicrobial Agents; 2020. 56(2)86 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Currently, there is no approved therapy for coronavirus disease 2019 (COVID-19). The World Health Organization (WHO) therefore endorses supportive care only. However, frontline clinicians and researchers have been experimenting with several virus-based and host-based therapeutics since the outbreak of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in China. China's National Health Commission has

issued the first COVID-19 treatment guidelines with therapy suggestions, which has inspired clinical studies worldwide. This review evaluates the major therapeutics. Key evidence from in vitro research, animal models and clinical research in emerging coronaviruses is examined. The antiviral therapies remdesivir, lopinavir/ritonavir and umifenovir, if considered, should be initiated before the peak of viral replication for an optimal outcome. Ribavirin may be beneficial as an add-on therapy but is ineffective as monotherapy. Corticosteroid use should be limited to specific co-morbidities. Intravenous immunoglobulin (IVIg) is not recommended owing to lack of data in COVID-19. The traditional Chinese medicine Xuebijing may benefit patients with complications of bacterial pneumonia or sepsis. The efficacy of interferon is unclear owing to conflicting outcomes in coronavirus studies. Chloroquine and hydroxychloroquine have shown in vitro inhibition of SARS-CoV-2, but studies on their clinical efficacy and whether the benefits outweigh the risk of dysrhythmias remain inconclusive. For patients who develop cytokine release syndrome, interleukin-6 inhibitors may be beneficial.

Publication Type

Journal article.

<157>

Accession Number

20203340580

Author

Perez-Garcia, L. A.; Mejias-Carpio, I. E.; Delgado-Noguera, L. A.; Manzanarez-Motezuma, J. P.; Escalona-Rodriguez, M. A.; Sordillo, E. M.; Mogollon-Rodriguez, E. A.; Hernandez-Pereira, C. E.; Marquez-Colmenarez, M. C.; Paniz-Mondolfi, A. E.

Title

Ivermectin: repurposing a multipurpose drug for Venezuela's humanitarian crisis.

Source

International Journal of Antimicrobial Agents; 2020. 56(2)21 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Ivermectin (IVM) is a robust antiparasitic drug with an excellent tolerance and safety profile. Historically it has been the drug of choice for onchocerciasis and lymphatic filariasis global elimination programs. IVM is an oral insecticide and is a standard treatment against intestinal helminths and ectoparasites. The current humanitarian crisis in Venezuela is a regional public health threat that requires immediate action. The public health system in Venezuela has crumbled because of a 70% shortage of medicines in public hospitals, low vaccination campaigns, and the mass exodus of medical personnel. Herein we discuss the repurposing of IVM to attenuate the burden imposed by the most prevalent neglected tropical diseases (NTDs) in Venezuela, including soil-transmitted helminths, ectoparasites and, possibly, vector-borne diseases, such as malaria. In addition, novel experimental evidence has shown that IVM is active and efficacious in vitro against Chagas disease, Leishmaniases, arboviruses, and SARS-CoV-2. In crisis-hit Venezuela, all these infectious diseases are public health emergencies that have long been ignored and require immediate attention. The versatility of IVM could serve as a powerful tool to tackle the multiple overlapping endemic and emergent diseases that currently affect Venezuela. The repurposing of this multipurpose drug would be a timely therapeutic approach to help mitigate the tremendous burden of NTDs nationwide.

Publication Type

Journal article.

<158>

Accession Number

20203341726

Author

Niazkar, M.; Niazkar, H. R.

Title

COVID-19 outbreak: application of multi-gene genetic programming to country-based prediction models.

Source

Electronic Journal of General Medicine; 2020. 17(5)25 ref.

Publisher

Modestrum LTD, UK

Location of Publisher

London

Country of Publication

UK

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-COV-2) is a novel coronavirus that has infected more than 2,900,000 individuals worldwide. The widespread of coronavirus 2019 (COVID-19) brings about the need for a prediction model to adopt appropriate evidence-based strategies. In this study, multi-gene genetic programming (MGGP), as one of the artificial intelligence models, has been proposed for the first time for predicting the COVID-19 outbreak. Although this is a challenging task due to significant fluctuations of daily confirmed cases, the results achieved by MGGP are promising. To be more specific, the predicted confirmed cases are acceptably close to the observed values for seven countries considered in this study. Thus, MGGP is suggested for developing estimation models of COVID-19. Furthermore, similarities and differences between the proposed prediction models are presented. Finally, it is discussed why a country-based prediction model is recommended.

Publication Type

Journal article.

<159>

Accession Number

20203341725

Author

Bostan, S.; Akbolat, M.; Kaya, A.; Ozata, M.; Gunes, D.

Title

Assessments of anxiety levels and working conditions of health employees working in COVID-19 pandemic hospitals.

Source

Electronic Journal of General Medicine; 2020. 17(5)23 ref.

Publisher

Modestrum LTD, UK

Location of Publisher

London

Country of Publication

UK

Abstract

The study aims to identify health care workers' risk of COVID-19 and to determine employees' views on working conditions and the fight against COVID-19 in general, and to present their concerns. The study utilized a survey form developed by researchers as a data collection tool. The research was conducted on 736 health workers in the Turkish population using the online survey method. Descriptive statistical methods, chi-square analysis, and correlation analysis were used in the analysis of the data. The data was carried out in a 95% confidence range. According to the study's findings, 31.7% of the health care workers involved in the study had contact with 19 cases of COVID-19; 27.3% provided services to patients diagnosed with COVID-19. There is a relationship between the professional groups of health care workers who have been contacted by COVID-19 cases and the professional groups of those who provide services. Among the participants, only 35 people had a diagnostic test, 15 of which were positive for COVID-19 results. Although health care workers find working conditions and authorities to be moderate in tackling COVID-19, their anxiety levels are high. Although health care workers provide services to COVID-19 diagnosed patients, they are not protected against the risk of infection by adequate testing. The risk of transmission threatens more groups of nurses. Considering that COVID-19 is a global threat, measures should be taken to protect health care workers and their families and professional support should be given to address their concerns.

Publication Type

Journal article.

<160>

Accession Number

20203341724

Author

Abdur Rahman; Sathi, N. J.

Title

Knowledge, attitude, and preventive practices toward COVID-19 among Bangladeshi internet users.

Source

Electronic Journal of General Medicine; 2020. 17(5)25 ref.

Publisher

Modestrum LTD, UK

Location of Publisher

London

Country of Publication

UK

Abstract

Introduction: The COVID-19 is currently the most horrible issue around the world as there is no proven vaccine or medicine for this rapidly spreading disease. The only way left to this situation is to slow down or eradicate the spreading by adopting preventing measures. Background: The purpose of the study is to investigate the knowledge, attitude, and preventive practices toward COVID-19 among Bangladeshi internet users. Material and Methods: A total of 441 respondents voluntarily participated in a web-based cross-sectional survey. A structured questionnaire was created using Google Forms and the link was shared through authors' networks. Collected information was analyzed using univariate, bivariate, and multivariate techniques. Results: Respondent of age 30 and above are more optimistic (Adjusted Odds Ratio [AOR] =1.96, 95% Confidence Interval [CI], 1.13 to 3.41; P=0.016) compared to respondent of age 18-29. For 1 unit change in the knowledge score the likelihood of staying home and wearing mask increases by 1.73 (95% CI, 1.43 to 2.09; P<0.01) and 1.54 (95% CI, 1.25 to 1.77; P<0.01) times respectively. From the linear regression analysis, we see that urban residence type (vs. rural, beta=0.274; P=0.024) are significantly associated with higher knowledge scores. Additionally, a significant positive correlation exists between the COVID-19 knowledge score and the preventive practice score (r=0.291, P <0.01). Conclusion: Although knowledge and preventive practices among Bangladeshi internet users are encouraging, this study suggests updated knowledge be provided by healthcare authorities to enhance appropriate preventive practices throughout the COVID-19 outbreak.

Publication Type

Journal article.

<161>

Accession Number

20203322472

Author

Huq, S.; Biswas, R. K.

Title

COVID-19 in Bangladesh: data deficiency to delayed decision.

Source

Journal of Global Health; 2020. 10(1)9 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

The aim of the article was to discuss the prevalence, epidemiology, and delays in diagnosis in COVID-19 in Bangladesh.

Publication Type

Journal article.

<162>

Accession Number

20203322468

Author

Toan Luu Duc Huynh

Title

The COVID-19 containment in Vietnam: what are we doing?

Source

Journal of Global Health; 2020. 10(1)7 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

Vietnam became the first country to halt the SARS spread successfully. Thus, Vietnam is of interest to the epidemic health policies as a case study of successful epidemic containment. The aim of the article was to discuss the successful public health measures Vietnam has undertaken to control and contain COVID-19. Vietnam does not look at COVID-19 as the challenge in violation of the citizens' freedom. What we are learning from the event is the importance of our country's unity.

Publication Type

Journal article.

<163>

Accession Number

20203351199

Author

Zhao Jing; Li Hang; Kung, D.; Fisher, M.; Shen Ying; Liu RenYu

Title

Impact of the COVID-19 epidemic on stroke care and potential solutions.

Source

Stroke; 2020. 51(7):1996-2001. 12 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

BACKGROUND AND PURPOSE: When the coronavirus disease 2019 (COVID-19) outbreak became paramount, medical care for other devastating diseases was negatively impacted. In this study, we investigated the impact of the COVID-19 outbreak on stroke care across China. METHODS: Data from the Big Data Observatory Platform for Stroke of China consisting of 280 hospitals across China demonstrated a significant drop in the number of cases of thrombolysis and thrombectomy. We designed a survey to investigate the major changes during the COVID-19 outbreak and potential causes of these changes. The survey was distributed to the leaders of stroke centers in these 280 hospitals. RESULTS: From the data of Big Data Observatory Platform for Stroke of China, the total number of thrombolysis and thrombectomy cases dropped 26.7% ($P < 0.0001$) and 25.3% ($P < 0.0001$), respectively, in February 2020 as compared with February 2019. We retrieved 227 valid complete datasets from the 280 stroke centers. Nearly 50% of these hospitals were designated hospitals for COVID-19. The capacity for stroke care was reduced in the majority of the hospitals. Most of the stroke centers stopped or reduced their efforts in stroke education for the public. Hospital admissions related to stroke dropped 40%; thrombolysis and thrombectomy cases dropped 25%, which is similar to the results from the Big Data Observatory Platform for Stroke of China as compared with the same period in 2019. Many factors contributed to the reduced admissions and prehospital delays; lack of stroke knowledge and proper transportation were significant limiting factors. Patients not coming to the hospital for fear of virus infection was also a likely key factor. CONCLUSIONS: The COVID-19 outbreak impacted stroke care significantly in China, including prehospital and in-hospital care, resulting in a significant drop in admissions, thrombolysis, and thrombectomy. Although many factors contributed, patients not coming to the hospital was probably the major limiting factor. Recommendations based on the data are provided.

Publication Type

Journal article.

<164>

Accession Number

20203350457

Author

Wen Jun; Qi XiaoMing; Lyon, K. A.; Liang BuQing; Wang XiangYu; Feng DongXia; Huang, J. H.

Title

Lessons from China when performing neurosurgical procedures during the coronavirus disease 2019 (COVID-19) pandemic.

Source

World Neurosurgery; 2020. 138:e955-e960. 7 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Objective: The novel coronavirus disease 2019 (COVID-19) pandemic poses a substantial threat to the health of health care personnel on the front line of caring for patients with COVID-19. The Centers for Medicare and Medicaid Services have announced that all nonessential planned surgeries and procedures should be postponed until further notice and only urgent procedures should proceed. Neurologic surgeries and procedures should not be delayed under the circumstance in which it is essential at saving a life or preserving functioning of the central nervous system. Methods: With the intent to advise the neurosurgery team on how to adequately prepare and safely perform neurosurgical procedures on confirmed and suspected patients with COVID-19, we discuss considerations and recommendations based on the lessons and experience shared by neurosurgeons in China. Results: Perioperative and intraoperative strategies, considerations, as well as challenges arisen under the specific circumstance have been discussed. In addition, a case of a ruptured aneurysm in a suspected patient with COVID-19 is reported. It is advised that all health care personnel who immediately participate in neurosurgical surgeries and procedures for confirmed and suspected patients with COVID-19 should take airborne precautions and wear enhanced personal protective equipment. Conclusions: Following the proposed guidance, urgent neurosurgical surgeries and procedures can be safely performed for the benefit of critical patients with or suspected for COVID-19.

Publication Type

Journal article.

<165>

Accession Number

20203352814

Author

Arpitha, V. S.; Patil, P. S.; Pradeep, N. V.

Title

Assessment of knowledge and practice towards COVID-19 amid inhabitants of Karnataka.

Source

International Journal of Medical Science and Public Health; 2020. 9(5):300-304. 31 ref.

Publisher

International Journal of Medical Science and Public Health

Location of Publisher

Surat

Country of Publication

India

Abstract

Background: COVID-19 outbreak has been declared as pandemic by WHO on March 11, 2020. Globally more than 16 lakh cases have been reported, affecting nearly 195 nations till April 12th 2020. Health authorities have initiated measures to create awareness and to control the spread. Objectives: To assess the Knowledge and practices of general public towards COVID-19. Materials and Methods: A cross sectional study was carried out among general public residing in Karnataka. Online questioner was prepared and circulated in social media and responses were collected during March 2020. Data was analysed using SPSS 23.0, descriptive statistics were calculated. Knowledge scores and practices with socio-demographic profile were done using Independent t test, one-way ANOVA and Chi-square test. Results: A total of 1048 responses were received. Majority were males (61.3%), married (57.4%), of age 20-40 years (79.4%) and held a bachelor degree (53.1%). The mean knowledge score for COVID 19 was 11.7 +/- 2.07. There was a statistically significant difference of knowledge score among various socio-demographic variable like age (P = 0.009), gender (P = 0.001), educational status (P = 0.00) and marital status (P = 0.00). Majority of the study participants preferred

consulting a doctor 964 (91.84%) when they have symptoms like fever and cough. 68 (6.4%) of the study participants had been to crowded places in recent times. 974 (92.9%) and 843 (80.5%) update their knowledge and prefer wearing mask outside the home respectively. Conclusion: More than three-fourth of the participants had adequate knowledge and around 90% of the participants had satisfactory practices towards COVID-19.

Publication Type

Journal article.

<166>

Accession Number

20203344115

Author

Das, O.; Neisiany, R. E.; Capezza, A. J.; Hedenqvist, M. S.; Forsth, M.; Xu Qiang; Jiang Lin; Ji DongXiao; Ramakrishna, S.

Title

The need for fully bio-based facemasks to counter coronavirus outbreaks: a perspective.

Source

Science of the Total Environment; 2020. 73641 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The onset of coronavirus pandemic has sparked a shortage of facemasks in almost all nations. Without this personal protective equipment, healthcare providers, essential workers, and the general public are exposed to the risk of infection. In light of the aforementioned, it is critical to balance the supply and demand for masks.

COVID-19 will also ensure that masks are always considered as an essential commodity in future pandemic preparedness. Moreover, billions of facemasks are produced from petrochemicals derived raw materials, which are non-degradable upon disposal after their single use, thus causing environmental pollution and damage. The sustainable way forward is to utilise raw materials that are side-stream products of local industries to develop facemasks having equal or better efficiency than the conventional ones. In this regard, wheat gluten biopolymer, which is a by-product or co-product of cereal industries, can be electrospun into nanofibre membranes and subsequently carbonised at over 700degreesC to form a network structure, which can simultaneously act as the filter media and reinforcement for gluten-based masks. In parallel, the same gluten material can be processed into cohesive thin films using plasticiser and hot press. Additionally, lanosol, a naturally-occurring substance, imparts fire (V-0 rating in vertical burn test), and microbe resistance in gluten plastics. Thus, thin films of flexible gluten with very low amounts of lanosol (<10 wt%) can be bonded together with the carbonised mat and shaped by thermoforming to create the facemasks. The carbon mat acting as the filter can be attached to the masks through adapters that can also be made from injection moulded gluten. The creation of these masks could simultaneously be effective in reducing the transmittance of infectious diseases and pave the way for environmentally benign sustainable products.

Publication Type

Journal article.

<167>

Accession Number

20203349694

Author

Sallam, M.; Dababseh, D.; Yaseen, A.; Al-Haidar, A.; Ababneh, N. A.; Bakri, F. G.; Mahafzah, A.

Title

Conspiracy beliefs are associated with lower knowledge and higher anxiety levels regarding COVID-19 among students at the university of Jordan.

Source

International Journal of Environmental Research and Public Health; 2020. 17(14)50 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The world has been afflicted heavily by the burden of coronavirus disease 2019 (COVID-19) that overwhelmed health care systems and caused severe economic and educational deficits, in addition to anxiety among the public. The main aim of this study was to evaluate the mutual effects of belief that the pandemic was the result of a conspiracy on knowledge and anxiety levels among students at the University of Jordan (UJ). An electronic-based survey was conducted between 29 March, 2020 and 31 March, 2020. The targeted population involved all undergraduate and postgraduate students from the health, scientific and humanities schools at UJ. Survey sections included 26 items on: socio-demographic information, knowledge and sources of information about the disease, attitude towards the false notion that COVID-19 stemmed from a conspiracy and items to assess the anxiety level among students during the quarantine period. The total number of participants was 1540 students. The mean age of study participants was 22 years and females predominated the study population (n = 1145, 74.4%). The majority of participants perceived the disease as moderately dangerous (n = 1079, 70.1%). Males, Jordanians and participants with lower income were more inclined to feel that COVID-19 is very dangerous. A lower level of knowledge and a higher level of anxiety about COVID-19 were associated with the belief that the disease is part of a conspiracy. Females and participants with lower income were more likely to believe that the disease is related to conspiracy. Belief in conspiracy regarding the origin of COVID-19 was associated with misinformation about the availability of a vaccine and the therapeutic use of antibiotics for COVID-19 treatment. The Ministry of Health in Jordan was the most common source of information about COVID-19 reported by the participants (n = 1018). The false belief that COVID-19 was the result of a global conspiracy could be the consequence of a lower level of knowledge about the virus and could lead to a higher level of anxiety, which should be considered in the awareness tools of various media platforms about the current pandemic.

Publication Type

Journal article.

<168>

Accession Number

20203349681

Author

Wang XiaoXia; Zou Chao; Wang LuQi

Title

Analysis on the temporal distribution characteristics of air pollution and its impact on human health under the noticeable variation of residents' travel behavior: a case of Guangzhou, China.

Source

International Journal of Environmental Research and Public Health; 2020. 17(14)44 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

During the large-scale outbreak of COVID-19 in China, the Chinese government adopted multiple measures to prevent the epidemic. The consequence was that a sudden variation in residents' travel behavior took place. In order to better evaluate the temporal distribution of air pollution, and to effectively explore the influence of human activities on air quality, especially under the special situation, this study was conducted based on the real data from a case city in China from this new perspective. Two case scenarios were constructed, in which the research before the changes of residents' travel behavior was taken as case one, and the research after the changes in residents' travel behavior as case two. The hourly real-time concentrations of PM2.5, PM10, SO2, NO2, CO and O3 that have passed the augmented Dickey-Fuller (ADF) test were employed as a data source. A series of detailed studies have been carried out using the correlation method, entropy weight method and the Air Quality Index (AQI) calculation method. Additionally, the research found that the decrease rate of NO2 concentration is 61.05%, and the decrease rate of PM10 concentration is 53.68%. On the contrary, the average concentration of O3 has increased significantly, and its growth rate has reached to 9.82%. Although the air quality in the first week with fewer travels was in the excellent category, and chief pollutant (CP), as well as excessive pollutant (EP), were not found, as traffic volume increased, it became worse in the second and third weeks. In addition to that, special attention should still be paid to the development trend of O3, as its average hourly concentration has increased. The findings of this study will have some guiding significance for the study of air pollution prevention, cleaner production, and indoor environmental safety issues, especially for the study of abnormal traffic environments where residents' travel behaviors have changed significantly.

Publication Type

Journal article.

<169>

Accession Number

20203349668

Author

Li DiYa; Chaudhary, H.; Zhang Zhe

Title

Modeling spatiotemporal pattern of depressive symptoms caused by COVID-19 using social media data mining.

Source

International Journal of Environmental Research and Public Health; 2020. 17(14)77 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

By 29 May 2020, the coronavirus disease (COVID-19) caused by SARS-CoV-2 had spread to 188 countries, infecting more than 5.9 million people, and causing 361,249 deaths. Governments issued travel restrictions, gatherings of institutions were cancelled, and citizens were ordered to socially distance themselves in an effort to limit the spread of the virus. Fear of being infected by the virus and panic over job losses and missed education opportunities have increased people's stress levels. Psychological studies using traditional surveys are time-consuming and contain cognitive and sampling biases, and therefore cannot be used to build large datasets for a real-time depression analysis. In this article, we propose a CorExQ9 algorithm that integrates a Correlation Explanation (CorEx) learning algorithm and clinical Patient Health Questionnaire (PHQ) lexicon to detect COVID-19 related stress symptoms at a spatiotemporal scale in the United States. The proposed algorithm overcomes the common limitations of traditional topic detection models and minimizes the ambiguity that is caused by human interventions in social media data mining. The results show a strong

correlation between stress symptoms and the number of increased COVID-19 cases for major U.S. cities such as Chicago, San Francisco, Seattle, New York, and Miami. The results also show that people's risk perception is sensitive to the release of COVID-19 related public news and media messages. Between January and March, fear of infection and unpredictability of the virus caused widespread panic and people began stockpiling supplies, but later in April, concerns shifted as financial worries in western and eastern coastal areas of the U.S. left people uncertain of the long-term effects of COVID-19 on their lives.

Publication Type

Journal article.

<170>

Accession Number

20203349655

Author

Xiao HuiDi; Shu Wen; Li MengLong; Li ZiAng; Tao FangBiao; Wu XiaoYan; Yu YiZhen; Meng Heng; Vermund, S. H.; Hu YiFei

Title

Social distancing among medical students during the 2019 coronavirus disease pandemic in China: disease awareness, anxiety disorder, depression, and behavioral activities.

Source

International Journal of Environmental Research and Public Health; 2020. 17(14)36 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Background: During the coronavirus disease (COVID-19) pandemic, harsh social distancing measures were taken in China to contain viral spread. We examined their impact on the lives of medical students. Methods: A nation-wide cross-sectional survey of college students was conducted from 4-12 February 2020. We enrolled medical students studying public health in Beijing and Wuhan to assess their COVID-19 awareness and to evaluate their mental health status/behaviors using a self-administered questionnaire. We used the Patient Generalized Anxiety Disorder-7 and Health Questionnaire-9 to measure anxiety disorders and depression. We used multivariable logistic regression and path analysis to assess the associations between covariates and anxiety disorder/depression. Results: Of 933 students, 898 (96.2%) reported wearing masks frequently when going out, 723 (77.5%) reported daily hand washing with soap, 676 (72.5%) washed hands immediately after arriving home, and 914 (98.0%) reported staying home as much as possible. Prevalence of anxiety disorder was 17.1% and depression was 25.3%. Multivariable logistic regression showed anxiety to be associated with graduate student status (odds ratio (aOR) = 2.0; 95% confidence interval (CI): 1.2-3.5), negative thoughts or actions (aOR = 1.6; 95% CI: 1.4-1.7), and feeling depressed (aOR = 6.8; 95% CI: 4.0-11.7). Beijing students were significantly less likely to have anxiety than those in the Wuhan epicenter (aOR = 0.9; 95% CI: 0.8-1.0), but depression did not di er. Depression was associated with female students (aOR = 2.0; 95% CI: 1.2-3.3), negative thoughts or actions (aOR = 1.7; 95% CI: 1.5-1.9), and anxiety disorder (aOR = 5.8; 95% CI: 3.4-9.9). Path analysis validated these same predictors. Conclusions: Despite medical students' knowledge of disease control and prevention, their lives were greatly affected by social distancing, especially in the Wuhan epicenter. Even well-informed students needed psychological support during these extraordinarily stressful times.

Publication Type

Journal article.

<171>

Accession Number

20203349650

Author

Song LiLi; Wang Yong; Li ZhengLin; Yang Ying; Li Hao

Title

Mental health and work attitudes among people resuming work during the COVID-19 pandemic: a cross-sectional study in China.

Source

International Journal of Environmental Research and Public Health; 2020. 17(14)66 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The unprecedented outbreak of the Coronavirus Disease 2019 (COVID-19) caused an economic downturn and increased the unemployment rate in China. In this context, employees face health and social economic stressors. To assess their mental health (i.e., anxiety, depression, insomnia and somatization) and work attitudes (i.e., work engagement, job satisfaction and turnover intention) as well as the associated factors, we conducted a cross-sectional study among people who resumed work after the Spring Festival holiday during the COVID-19 pandemic. The results show that the prevalence of anxiety, depression, insomnia and somatization among these people was 12.7%, 13.5%, 20.7% and 6.6%, respectively. The major risk factor for mental health was worrying about unemployment, and the main protective factors were psychological strengths (i.e., resilience and optimism). Regarding work attitudes, the percentage of people who felt more satisfied with their job (43.8%) was larger than that of those who felt less satisfied (26.9%), while the percentage of people who thought about quitting their job more frequently (15.7%) was smaller than that of those who considered it less frequently (63.2%). However, work engagement was lower than usual. Similar to the factors associated with mental health, the major risk factor for work attitudes was also worrying about unemployment, and the main protective factors were resilience and optimism. In addition, the nature of the organization, job status, age, position and income changes were also related to these work attitudes. Our findings shed light on the need for organization administrators to be aware of the status of and factors associated with employees' mental health and work attitudes during the COVID-19 pandemic. Policies or interventions could be developed based on our findings.

Publication Type

Journal article.

<172>

Accession Number

20203349643

Author

Mijiritsky, E.; Hamama-Raz, Y.; Liu Feng; Datarkar, A. N.; Mangani, L.; Caplan, J.; Shacham, A.; Kolerman, R.; Mijiritsky, O.; Ben-Ezra, M.; Shacham, M.

Title

Subjective overload and psychological distress among dentists during COVID-19.

Source

International Journal of Environmental Research and Public Health; 2020. 17(14)27 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Psychological distress during the COVID-19 pandemic is not solely limited to SARS-CoV-2 infection. It may also be related to social, cultural, and environmental factors, which may act as additional stressors. The aim of the current study was to explore the association between psychological distress and subjective overload among dentists in different countries, and whether it is associated with COVID-19-related factors. A cross-sectional survey was conducted among 1302 dentists from China, India, Israel, Italy, and the UK, who filled out demographics data, COVID-19-related factor questions, subjective overload, and psychological distress scales. Our findings showed that the positive association between subjective overload and psychological distress was different among countries, suggesting higher rate of intensity in Italy compared to China, India, and Israel (the UK was near significance with China and Israel). The interaction variable of the subjective overload psychological distress was significantly associated with a particular country, with those individuals reporting fear of contracting COVID-19 from patients, fear of their families contracting COVID-19, and receiving enough professional knowledge regarding COVID-19. Given the above, dentists were found to have elevated levels of subjective overload and psychological distress, which differed among the countries, presumably due to certain background issues such as social, cultural, and environmental factors.

Publication Type

Journal article.

<173>

Accession Number

20203349633

Author

Porru, S.; Carta, A.; Monaco, M. G. L.; Verlato, G.; Battaggia, A.; Parpaiola, M.; Cascio, G. lo; Pegoraro, M.; Militello, V.; Moretti, F.; Tardivo, S.

Title

Health surveillance and response to SARS-CoV-2 mass testing in health workers of a large Italian hospital in Verona, Veneto.

Source

International Journal of Environmental Research and Public Health; 2020. 17(14)34 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Italy presented the first largest COVID-19 outbreak outside of China. Veneto currently ranks fourth among the Italian regions for COVID-19 confirmed cases (~19,000). This study presents health surveillance data for SARS-CoV-2 in 6100 health workers (HW) employed in a large public hospital. Workers underwent oropharyngeal and nasopharyngeal swabs, with a total of 5942 participants (97.5% of the population). A total of 11,890 specimens were tested for SARS-CoV-2 infection using PCR, identifying the viral genes E, RdRP, and N. Positive tests were returned for 238 workers (cumulative incidence of 4.0%, similar in both COVID and nonCOVID units). SARS-CoV-2 risk was not affected by gender, age, or job type, whereas work setting and occupation were both predictors of infection. The risk was higher in medical wards (OR 2.7, 95% CI 1.9-3.9) and health services (OR 4.3, 95% CI 2.4-7.6), and lower in surgical wards and administration areas. To our knowledge, this study represents the largest available HW case list swab-tested for SARS-CoV-2, covering almost the total workforce. Mass screening enabled the isolation of HW, improved risk assessment, allowed for close contacts of and infected HW to return to work, provided evidence of SARS-CoV-2 diffusion, and presented solid ground to prevent nosocomial SARS-CoV-2 infections. The ongoing concurrent sero-

epidemiological study aims to enable the improvement of health surveillance to maintain the safety of HWs and the communities they serve.

Publication Type

Journal article.

<174>

Accession Number

20203349629

Author

Pereira, I. G.; Guerin, J. M.; Silva Junior, A. G.; Garcia, G. S.; Piscitelli, P.; Miani, A.; Distante, C.; Goncalves, L. M. G.

Title

Forecasting COVID-19 dynamics in Brazil: a data driven approach.

Source

International Journal of Environmental Research and Public Health; 2020. 17(14)35 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The contribution of this paper is twofold. First, a new data driven approach for predicting the Covid-19 pandemic dynamics is introduced. The second contribution consists in reporting and discussing the results that were obtained with this approach for the Brazilian states, with predictions starting as of 4 May 2020. As a preliminary study, we first used an Long Short Term Memory for Data Training-SAE (LSTM-SAE) network model. Although this first approach led to somewhat disappointing results, it served as a good baseline for testing other ANN types. Subsequently, in order to identify relevant countries and regions to be used for

training ANN models, we conduct a clustering of the world's regions where the pandemic is at an advanced stage. This clustering is based on manually engineered features representing a country's response to the early spread of the pandemic, and the different clusters obtained are used to select the relevant countries for training the models. The final models retained are Modified Auto-Encoder networks, that are trained on these clusters and learn to predict future data for Brazilian states. These predictions are used to estimate important statistics about the disease, such as peaks and number of confirmed cases. Finally, curve fitting is carried out to find the distribution that best fits the outputs of the MAE, and to refine the estimates of the peaks of the pandemic. Predicted numbers reach a total of more than one million infected Brazilians, distributed among the different states, with Sao Paulo leading with about 150 thousand confirmed cases predicted. The results indicate that the pandemic is still growing in Brazil, with most states peaks of infection estimated in the second half of May 2020. The estimated end of the pandemics (97% of cases reaching an outcome) spread between June and the end of August 2020, depending on the states.

Publication Type

Journal article.

<175>

Accession Number

20203349619

Author

Ekpenyong, B.; Obinwanne, C. J.; Ovenseri-Ogbomo, G.; Ahaiwe, K.; Lewis, O. O.; Echendu, D. C.; Osuagwu, U. L.

Title

Assessment of knowledge, practice and guidelines towards the novel COVID-19 among eye care practitioners in Nigeria - a survey-based study.

Source

International Journal of Environmental Research and Public Health; 2020. 17(14)34 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The aim of this study was to explore knowledge, practice of risk and guidelines of the novel corona virus disease (COVID-19) infection among the eye care practitioners and the potential associated factors. A cross-sectional self-administered online survey was distributed via emails and social media networks between 2nd and 18th May 2020 corresponding to the week of the lockdown in Nigeria to eye care practitioners (ECPs). Data for 823 respondents were analyzed. Knowledge and risk practice were categorized as binary outcome and univariate and multivariate linear regression were used to examine the associated factors. The mean score for COVID-19-related knowledge of public health guidelines was high and varied across the ECPs. Ophthalmic Nurses, Ophthalmologists and Optometrists showed higher COVID-19-related knowledge than other ECPs ($p < 0.001$), particularly those working in the private sector. More than 50% of ECPs stated they provided essential services during the COVID-19 lockdown via physical consultation, particularly the Ophthalmologists. Most respondents reported that the guidelines provided by their Association were useful but expressed their lack of confidence in attending to patients during and after the COVID-19 lockdown. Compared to other ECPs in Nigeria, more Ophthalmic Nurses received training in the use of Personal Protective Equipment (PPE). This survey is the first to assess knowledge, attitudes and practice in response to the COVID-19 pandemic in Nigeria. ECPs in Nigeria displayed good knowledge about COVID-19 and provided eye care services during the COVID-19 lockdown in Nigeria, despite the majority not receiving any training on the use of PPEs with concerns over attending to patients. There is need for the government to strengthen health systems by improving and extending training on standard infection prevention and control measures to ECPs for effective control of the pandemic and in the future as essential health workers.

Publication Type

Journal article.

<176>

Accession Number

20203340352

Title

Early trend of imported COVID-19 cases in South Korea. (Special Issue II - Epidemiology and case management of coronavirus disease 2019.)

Source

Osong Public Health and Research Perspectives; 2020. 11(3):140-145. 5 ref.

Publisher

Korea Center for Disease Control and Prevention

Location of Publisher

Chungcheongbuk-do

Country of Publication

Korea Republic

Abstract

This study aimed to observe the initial trend of imported COVID-19 cases in South Korea since the beginning of the outbreak. All imported cases were classified into 5 regions (China, Asia, Europe, Africa, and America) according to travel history and potential exposure to the COVID-19. The list of countries for which confirmed cases had a travel history (single visit, multiple visits) and presented, were used to estimate the potential "exposure countries" of confirmed cases. For better understanding of the overall imported cases, time differences (day) among 3 major steps (symptom onset, entry to South Korea, laboratory confirmation) were measured based on available data. From the first importation of a COVID-19 case on January 20th, a total of 171 imported cases have been officially reported in South Korea as of March 23rd 2020. The overall trend of importation has significantly changed during this period. Importation of confirmed cases were initially from China, and subsequently from other Asian countries. After that, importation from Europe rapidly increased, with importation from America also increasing. One hundred fifteen (81%) were confirmed within 7 days of symptom onset. One Hundred forty three (84.1%) imported cases were confirmed within a week after entry into South Korea. One hundred seven imported cases (75.9%) developed symptoms within 5 days before or after, entry to South Korea. Streamlined processes of detection, subsequent testing, isolation, and treatment by public health authority, was key in minimizing the risk of secondary transmission.

Publication Type

Journal article.

<177>

Accession Number

20203340346

Author

Asita Elengoe

Title

COVID-19 outbreak in Malaysia. (Special Issue II - Epidemiology and case management of coronavirus disease 2019.)

Source

Osong Public Health and Research Perspectives; 2020. 11(3):93-100. 48 ref.

Publisher

Korea Center for Disease Control and Prevention

Location of Publisher

Chungcheongbuk-do

Country of Publication

Korea Republic

Abstract

In 2020 a significant threat to public health emerged. The novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) epidemic outbreak emerged in December 2019 from Wuhan City, Hubei Province, China and spread to the rest of the world. This disease was named COVID-19 by World Health Organization. To date (17th April 2020) a total of 2,230,439 cases of COVID-19; 150,810 cases of deaths and 564,210 recovered cases have been reported worldwide. In this review the SARS-CoV-2 morphology, pathogenic mechanism, similarities and differences between SARS-CoV and Middle East Respiratory Syndrome and severe acute respiratory syndrome, transmission mode, diagnosis, treatment, and preventive measures were investigated. The outbreak of COVID-19 from a Malaysian perspective was explored and mental health care during the COVID-19 outbreak was explored. To date, there is no vaccine or no specific treatment for COVID-19. Therefore, preventive measures are very important to prevent and control the rapid spread of the SARS-CoV-2 virus. Preparedness should be a priority for future pandemic outbreaks.

Publication Type

Journal article.

Accession Number

20203341530

Author

Mehta, H. B.; Ehrhardt, S.; Moore, T. J.; Segal, J. B.; Alexander, G. C.

Title

Characteristics of registered clinical trials assessing treatments for COVID-19: a cross-sectional analysis.

Source

BMJ Open; 2020. 10(6)24 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Objectives: The coronavirus disease 2019 (COVID-19) pandemic has prompted many initiatives to identify safe and efficacious treatments, yet little is known regarding where early efforts have focused. We aimed to characterise registered clinical trials assessing drugs or plasma treatments for COVID-19. Design, setting and participants: Cross-sectional analysis of clinical trials for the treatment of COVID-19 that were registered in the USA or in countries contributing to the WHO's International Clinical Trials Registry Platform. Relevant trial entries of drugs or plasma were downloaded on 26 March 2020, deduplicated, verified with reviews of major medical journals and WHO websites and independently analysed by two reviewers. Main outcome(s): Trial intervention, sponsorship, critical design elements and specified outcomes Results: Overall, 201 clinical trials were registered for testing the therapeutic benefits of 92 drugs or plasma, including 64 in monotherapy and 28 different combinations. Only eight (8.7%) products or combinations involved new molecular entities. The other test therapies had a wide range of prior medical uses, including as antivirals, antimalarials, immunosuppressants and oncology treatments. In 152 trials (75.7%), patients were randomised to treatment or comparator, including 55 trials with some form of blinding and 97 open-label studies. The 49 (24.4%) of trials without a randomised design included 29 single armed studies and 20 trials with some comparison group. Most trial designs featured multiple endpoints. Clinical endpoints were identified in 134 (66.7%) of trials and included COVID-19 symptoms, death, recovery, required intensive care and hospital discharge. Clinical scales were being used in 33 (16.4%) trials, most often measures of oxygenation and critical illness. Surrogate endpoints or biomarkers were studied in 88 (42.3%) of trials, primarily assays of viral load. Although the trials were initiated in more than 17 countries or regions, 100 (49.8%) were registered in China and 78 (37.8%) in the USA. Registered trials increased rapidly, with the number of registered trials doubling from 1 March to 26 March 2020. Conclusions: While accelerating morbidity and mortality from the COVID-19 pandemic has been

paralleled by early and rapid clinical investigation, many trials lack features to optimise their scientific value. Global coordination and increased funding of high-quality research may help to maximise scientific progress in rapidly discovering safe and effective treatments.

Publication Type

Journal article.

<179>

Accession Number

20203344608

Author

Selvam, S.; Muthukumar, P.; Venkatramanan, S.; Roy, P. D.; Bharath, K. M.; Jesuraja, K.

Title

SARS-CoV-2 pandemic lockdown: effects on air quality in the industrialized Gujarat state of India.

Source

Science of the Total Environment; 2020. 73715 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Two weeks after the world health organization described the novel coronavirus (SARS-CoV-2) outbreak as pandemic, the Indian government implemented lockdown of industrial activities and traffic flows across the entire nation between March 24 and May 31, 2020. In this paper, we estimated the improvements achieved in air quality during the lockdown period (March 24, 2020 and April 20, 2020) compared to the pre-lockdown (January 1, 2020 and March 23, 2020) by analyzing PM2.5, PM10, SO2, CO, NO2 and O3 data from nine different air quality monitoring stations distributed across four different zones of the industrialized Gujarat

state of western Indian. The Central Pollution Control Board (CPCB)-Air Quality Index (AQI) illustrated better air qualities during the lockdown with higher improvements in the zones 2 (Ahmedabad and Gandhinagar) and 3 (Jamnagar and Rajkot), and moderate improvements in the zones 1 (Surat, Ankleshwar and Vadodra) and 4 (Bhuj and Palanpur). The concentrations of PM2.5, PM10, and NO2 were reduced by 38-78%, 32-80% and 30-84%, respectively. Functioning of the power plants possibly led to less reduction in CO (3-55%) and the declined emission of NO helped to improve O3 (16-48%) contents. We observed an overall improvement of 58% in AQI for the first four months of 2020 compared to the same interval of previous year. This positive outcome resulted from the lockdown restrictions might help to modify the existing environmental policies of the region.

Publication Type

Journal article.

<180>

Accession Number

20203344604

Author

Haramoto, E.; Malla, B.; Thakali, O.; Kitajima, M.

Title

First environmental surveillance for the presence of SARS-CoV-2 RNA in wastewater and river water in Japan.

Source

Science of the Total Environment; 2020. 737many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Wastewater-based epidemiology is a powerful tool to understand the actual incidence of coronavirus disease 2019 (COVID-19) in a community because severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the etiological agent of COVID-19, can be shed in the feces of infected individuals regardless of their symptoms. The present study aimed to assess the presence of SARS-CoV-2 RNA in wastewater and river water in Yamanashi Prefecture, Japan, using four quantitative and two nested PCR assays. Influent and secondary-treated (before chlorination) wastewater samples and river water samples were collected five times from a wastewater treatment plant and three times from a river, respectively, between March 17 and May 7, 2020. The wastewater and river water samples (200-5000 mL) were processed by using two different methods: the electronegative membrane-vortex (EMV) method and the membrane adsorption-direct RNA extraction method. Based on the observed concentrations of indigenous pepper mild mottle virus RNA, the EMV method was found superior to the membrane adsorption-direct RNA extraction method. SARS-CoV-2 RNA was successfully detected in one of five secondary-treated wastewater samples with a concentration of 2.4 103 copies/L by N_Sarbeco qPCR assay following the EMV method, with sequence confirmation of the qPCR product, whereas all the influent samples were tested negative for SARS-CoV-2 RNA. This result could be attributed to higher limit of detection for influent (4.0 103-8.2 104 copies/L) with a lower filtration volume (200 mL) compared to that for secondary-treated wastewater (1.4 102-2.5 103 copies/L) with a higher filtration volume of 5000 mL. None of the river water samples tested positive for SARS-CoV-2 RNA. Comparison with the reported COVID-19 cases in Yamanashi Prefecture showed that SARS-CoV-2 RNA was detected in the secondary-treated wastewater sample when the cases peaked in the community. This is the first study reporting the detection of SARS-CoV-2 RNA in wastewater in Japan.

Publication Type

Journal article.

<181>

Accession Number

20203342794

Author

Matras, P.; Klek, S.; Folwarski, M.; Zmarzly, A.; Bartoszewska, L.; Cebulski, W.; Jakubczyk, M.; Kamocki, Z.; Klepczyk, K.; Kunecki, M.; Lawinski, M.; Majewska, K.; Matczuk, M.; Matysiak-Lusnia, K.; Sadowski, M.; Sobocki, J.; Sumlet, M.; Szafranski, W.; Szczepanek, K.; Urbanowicz, K.; Zoubek-Wojcik, A.

Title

Home medical nutrition during SARS-CoV-2 pandemic - a position paper.

Source

Clinical Nutrition ESPEN; 2020. 38:196-200. 8 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Background: The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the cause of a worldwide rapidly spreading illness, Coronavirus Disease 2019 (COVID-19). Patients fed enterally and parenterally at home are exposed to the same risk of infection as the general population, but more prone to complications than others. Therefore the guidance for care-givers and care-takers of these patients is needed. Methods: The literature search identified no relevant systematic reviews or studies on the subject. Therefore a panel of 21 experts from 13 home medical nutrition (HMN) centres in Poland was formed. Twenty-three key issues relevant to the management of SARS-CoV-2 infection or COVID-19 in the HMN settings were identified and discussed. Some statements diverge from the available nutrition, surgical or ICU guidelines, some are based on the best available experience. Each topic was discussed and assessed during two Delphi rounds subsequently. Statements were graded strong or weak based on the balance between benefit and harm, resource and cost implications, equity, and feasibility. Results: the panel issued 23 statements, all of them were graded strong. Two scored 85.71% agreement, eleven 95.23%, and ten 100%. The topics were: infection control, enrolment to HMN, logistics and patient information. Conclusions: the position paper present pragmatic statements for HMN to be implemented in places without existing protocols for SARS-CoV-2 pandemic. They represent the state of knowledge available at the moment and may change should new evidence occurs.

Publication Type

Journal article.

<182>

Accession Number

20203340890

Author

Petersen, E.; Wasserman, S.; Lee ShuiShan; Go Unyeong; Holmes, A. H.; Al-Abri, S.; McLellan, S.; Blumberg, L.; Tambyah, P.

Title

COVID-19-we urgently need to start developing an exit strategy.

Source

International Journal of Infectious Diseases; 2020. 96:233-239. 28 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Aim: The purpose of this perspective is to review the options countries have to exit the draconian "lockdowns" in a carefully staged manner. Methods: Experts from different countries experiencing Corona Virus Infectious Disease 2019 (COVID-19) reviewed evidence and country-specific approaches and the results of their interventions. Results: Three factors are essential: 1. Reintroduction from countries with ongoing community transmission; 2. The need for extensive testing capacity and widespread community testing, and 3. An adequate supply of personal protective equipment, PPE, to protect health care workers. Discussed at length are lifting physical distancing, how to open manufacturing and construction, logistics, and the opening of higher educational institutions and schools. The use of electronic surveillance is considered. Conclusion: Each country should decide on the best path forward. However, we can learn from each other, and the approaches are, in reality, very similar.

Publication Type

Journal article.

Accession Number

20203320324

Author

Zhong Ping; Guo SongXue; Chen Ting

Title

Correlation between travellers departing from Wuhan before the Spring Festival and subsequent spread of COVID-19 to all provinces in China.

Source

Journal of Travel Medicine; 2020. 27(3)3 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

The aim of the article was to explore the correlation between travellers departing from Wuhan before the Spring Festival and the extent of amplification of the outbreak of COVID-19 in China. The main destination cities of travellers departing from Wuhan before the Spring Festival were other cities within Hubei province and the cities in the neighboring provinces. A strong correlation between travellers departing from Wuhan before the Spring Festival and the extent of amplification of the outbreak of COVID-19 in China. The timing of the outbreak before the Spring Festival, and the transportation hub located in Wuhan accelerated the spread of COVID-19. Our results indicated that 69.34% of travellers departing from Wuhan travelled to other cities in Hubei Province. These areas also reported the largest number of cases, with a proportion of 54.98%. Travellers departing from Wuhan before the Spring Festival were the main infection source for other cities in China.

Publication Type

Journal article.

<184>

Accession Number

20203320321

Author

Lytras, T.; Dellis, G.; Flountzi, A.; Hatzianastasiou, S.; Nikolopoulou, G.; Tsekou, K.; Diamantis, Z.; Stathopoulou, G.; Togka, M.; Gerolymatos, G.; Rigakos, G.; Sapounas, S.; Tsiodras, S.

Title

High prevalence of SARS-CoV-2 infection in repatriation flights to Greece from three European countries.

Source

Journal of Travel Medicine; 2020. 27(3)4 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

The aim of the article was to report the high prevalence of COVID-19 infection among repatriation flights to Greece from Spain, Turkey, and UK. The results suggest that the ascertainment rate of SARS-CoV-2 infection might be much lower than previously assumed, with a correspondingly lower infection fatality rate. At the same time, the extent of asymptomatic transmission is likely to make mitigation challenging without wide-ranging social distancing measures. Better epidemiological data must be urgently collected, including repeated seroprevalence surveys, to guide further management of this pandemic.

Publication Type

Journal article.

<185>

Accession Number

20203320320

Author

Chiew, C. J.; Li ZongBin; Lee, V. J.

Title

Reducing onward spread of COVID-19 from imported cases: quarantine and 'stay at home' measures for travellers and returning residents to Singapore.

Source

Journal of Travel Medicine; 2020. 27(3)3 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

In Singapore, beginning 28 January 2020, a 14-day 'Stay-Home Notice' (SHN) was imposed on visitors and returning residents from a progressively expanded list of countries where COVID-19 was reported. As of 4 April 2020, more than 60,000 persons were issued SHN in view of their travel history. In the 2 weeks from 18 to 31 March 2020, only 10 secondary cases arose from 207 travellers put on SHN, mostly in the household setting. In contrast, 24 secondary cases arose from 195 travellers before the SHN rules were in place. The 7-day moving average of the interval from symptom onset to isolation for imported cases in Singapore has decreased from 9.0 to 0.9 days. SHN as a form of quarantine has reduced the spread from imported COVID-19 cases in Singapore to the community. Countries looking at similar measures should consider the operational challenges and find appropriate solutions to address them.

Publication Type

Journal article.

<186>

Accession Number

20203325892

Author

Lee YuLin; Liao ChiaHung; Liu PoYu; Cheng ChienYu; Chung MingYi; Liu ChunEng; Chang SuiYuan; Hsueh PoRen

Title

Dynamics of anti-SARS-CoV-2 IgM and IgG antibodies among COVID-19 patients.

Source

Journal of Infection; 2020. 81(2):e55-e58. 8 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Fourteen COVID-19 patients who were treated at six hospitals in Taiwan between January and March 2020 were enrolled in this study. The patients were classified into two groups: symptomatic and asymptomatic/mild symptoms. Of the six patients in the symptomatic group, all had positive anti-SARS-CoV-2 IgG and four had positive anti-SARS-CoV-2 IgM responses. The duration of positive rRT-PCR results ranged from 12 to 46 days. Patients with positive anti-SARS-CoV-2 IgM results seemed to have a short duration of viral shedding. For the eight patients in the asymptomatic/mild symptom group, none had positive anti-SARS-CoV-2 IgM results and three (cases 11-13) had negative anti-SARS-CoV-2 IgG results. The last day of anti-SARS-CoV-2 IgM/IgG testing after the notification of positive rRT-PCR for these three cases was >42 days in case 11, >28 days in case 12, and 13 days in case 13. In case 13, a 30-year-old man was tested with rRT-PCR assay for SARS-CoV-2 due to travel exposure but did not have any related symptoms. His rRT-PCR showed a positive result only on day 1 (cycle threshold [ct] value, 33), but was negative in the three subsequent rRT-PCR tests with an interval of 48 hours. Except case 13, the duration of the presence of SARS-CoV-2 RNA by positive rRT-PCR was generally longer in the asymptomatic/mild symptom group than the symptomatic group.

Publication Type

Correspondence.

<187>

Accession Number

20203354011

Author

Warowicka, A.; Nawrot, R.; Gozdzicka-Jozefiak, A.

Title

Antiviral activity of berberine.

Source

Archives of Virology; 2020. 165(9):1935-1945. 81 ref.

Publisher

Springer-Wien

Location of Publisher

Vienna

Country of Publication

Austria

Abstract

Plants are a rich source of new antiviral, pharmacologically active agents. The naturally occurring plant alkaloid berberine (BBR) is one of the phytochemicals with a broad range of biological activity, including anticancer, anti-inflammatory and antiviral activity. BBR targets different steps in the viral life cycle and is thus a good candidate for use in novel antiviral drugs and therapies. It has been shown that BBR reduces virus replication and targets specific interactions between the virus and its host. BBR intercalates into DNA and inhibits DNA synthesis and reverse transcriptase activity. It inhibits replication of herpes simplex virus (HSV), human cytomegalovirus (HCMV), human papillomavirus (HPV), and human immunodeficiency virus (HIV). This isoquinoline alkaloid has the ability to regulate the MEK-ERK, AMPK/mTOR, and NF-kappaB signaling pathways, which are necessary for viral replication. Furthermore, it has been reported that BBR supports the host immune response, thus leading to viral clearance. In this short review, we focus on the most recent studies on the antiviral properties of berberine and its derivatives, which might be promising agents to be considered in future studies in the fight against the current pandemic SARS-CoV-2, the virus that causes COVID-19.

Publication Type

Journal article.

<188>

Accession Number

20203355276

Author

Vinaytosh Mishra

Title

Factors affecting the adoption of telemedicine during COVID-19. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):234-236. 9 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Novel coronavirus disease (COVID-19) has put restriction of travel, and social distancing has become a new normal. This outbreak of the pandemic has made telemedicine more relevant than ever. The objective of this study is to identify the factors affecting the rate of adoption of telemedicine and effect of the COVID-19 on these factors. The research develops five hypotheses to test the influence of a disease outbreak on the rate of telemedicine adoption. The method used for the study is the Wilcoxon signed-rank test, and the sampling method used for the study is purposive sampling. The respondents were taken from a multispecialty clinic in North India and the sample size for the study is 43. The study concludes that patients are seeing more value in the use of telemedicine during COVID-19. They are more willing to experiment with telemedicine and are not intimidated by the technology related to telemedicine.

Publication Type

Journal article.

<189>

Accession Number

20203355271

Author

Mahima, B. N.; Tiwari, H. K.; Payel Mahapatra; Senthil Amudhan; Rao, G. N.

Title

COVID-19 epidemiology: through the eyes of vernacular newspapers. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):217-220. 3 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Media plays an indispensable role in society to influence health literacy. To document COVID-19 coverage in Kannada daily newspapers, hardcopies of 455 editions were methodically reviewed. Content analysis and data coding of 11 of the possible 60 terms/concepts related to COVID-19 epidemiology, was undertaken. Across dailies, five different dimensions in reporting documented: reporting of statistics - both numbers and manner of reporting, reporting of epidemiological concepts/terms (frequency of use and frequency of reporting), focus of reporting, density of reporting and finally what is not reported which could have been reported (desirable reporting). Numbers were reported as headlines; >25% of listed items were covered; however, 20% of terms not covered would have helped. We looked at "News" as epidemiological information and identified the gaps in reporting. We conclude that vernacular print media in Karnataka has done a commendable job. A media communication plan is urgently needed.

Publication Type

Journal article.

<190>

Accession Number

20203355269

Author

Dkhar, S. A.; Ruqia Quansar; Saleem, S. M.; Khan, S. M. S.

Title

Knowledge, attitude, and practices related to COVID-19 pandemic among social media users in J&k, India. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):205-210. 4 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: A series of measures have been suggested to reduce Covid-19 infection, including knowledge training for prevention and control, isolation, disinfection, classified protections at different degrees in infection areas, and protection of confirmed cases. Objectives: We conducted this study with an aim to assess the knowledge, attitude and practice among the general population regarding COVID-19. Methods: This was a cross-sectional study carried out by the Department of Community Medicine, Government Medical College, Srinagar in the month of April 2020. The questionnaire had four segments to collect data regarding social-demographic details, knowledge regarding Covid-19, attitude and practice based questions. The questionnaire was shared via social media applications like face book and Whatsapp to reach the target population.

Continuous variables were summarized as frequency and percentage. All the analysis was done using Microsoft Excel 2016. Among participants who responded, 1252 (82%) were in the age group of 18-40 years and 912 (60%) from urban areas. Results: A total of 934 (61%) respondents had heard details on COVID-19 from the social media, 1358 (89%) knew all ways of coronavirus transmission, 602 (40%) felt that COVID-19 is a serious disease, 1184 (78%) responded that they totally agree with the lockdown decision, and 1296 (85%) responded that lockdown is helping in reducing the number of cases. The majority, i.e. 1318 (87%), followed advisories and reported washing hands with soap and water regularly, 1108 (73%) reported regularly wearing masks, 1344 (89%) reported following lockdown guidelines, and 1306 (87%) reported maintaining social distancing. The respondents exhibited good knowledge, positive attitude, and sensible practices regarding COVID-19. Conclusion: Our study showed that the respondents have exhibited good knowledge, positive attitude and sensible practices regarding covid-19 during the pandemic.

Publication Type

Journal article.

<191>

Accession Number

20203355268

Author

Chandu, V. C.; Srinivas Pachava; Viswanath Vadapalli; Yamuna Marella

Title

Development and initial validation of the COVID-19 anxiety scale. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):201-204. 11 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: Safeguarding the psychological well-being of the public is also an integral component of fighting COVID-19. However, there is limited availability of psychometric measures to document COVID-19-related anxiety among the general public. Objectives: This study was aimed at developing a validated scale to measure COVID-19-related anxiety. Methods: Three hundred and seven subjects from different gender, educational categories participated in the study. Exploratory factor analysis for the determination of factor structure, Pearson's correlation test, and Kruskal-Wallis ANOVA were employed in data analysis using SPSS version 20 software. Results: COVID-19 Anxiety Scale (CAS) demonstrated a two-component structure identified as: "fear of social interaction;" "illness anxiety." The final scale with seven items demonstrated good internal consistency reliability (Cronbach's Alpha 0.736). CAS exhibited good construct validity showing moderately negative correlation (Pearson's r = -0.417) with the self-rated mental health and resulted in higher scores among individuals with lower educational qualification (Kruskal-Wallis ANOVA chi2 [2, 303] = 38.01; P = 0.001). Conclusion: CAS is a rapidly administrable, valid, and reliable tool that can be used to measure COVID-19-related anxiety among the Indian population.

Publication Type

Journal article.

<192>

Accession Number

20203355264

Author

Badrilal Meghwal; Shyambhavee Behera; Dhariwal, A. C.; Deepak Saxena; Singh, R.; Sanjiv Kumar

Title

Insights from COVID-19 cluster containment in Bhilwara district, Rajasthan. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):177-182. 18 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: In March 2020, a healthcare professional from a renowned private hospital, in the textile city of Bhilwara, Rajasthan, reported clustering of cases of pneumonia amongst doctors and paramedical staff suspected to be due to COVID-19. The basis of suspicion was clinico-eco-epidemiologic-radiological findings as, by that time, about 20 COVID19 cases were reported from the state of Rajasthan including a big Italian group of tourists who travelled extensively in Rajasthan, including Udaipur city. Objectives: The current study presents the field experience of the Central and the State Rapid Response Teams (RRTs) in the cluster containment at Bhilwara. Methods: The information regarding the sociodemographic profile of the cases was provided by the Senior Medical Officer In-charge. The containment strategy was modeled under 6 pillars. Google Maps was used for preparing spot map. Results: Immediate public health actions of cluster containment including contact tracing, quarantine, and isolation were initiated using epidemiological approach of mapping the cluster and taking care of reservoir of infection by the District Public Health Team supported by Multidisciplinary Rapid Response Team. This was supplemented by strict enforcement of lock down in the District taking care of daily need of the community by the leadership of administration with very strong intersectoral co-ordination (locally called "ruthless containment"). Conclusion: The forthcoming challenge resides in re-establishment of inter-district and inter-state travel, which can become a risk of re-entry of the new cases, which needs to be taken care of, with the help of stringent administrative measures and screening at all points of entry. The team in Bhilwara needs to remain vigilant to pick up any imported cases early before local transmission establishes.

Publication Type

Journal article.

<193>

Accession Number

20203355249

Author

Chatterjee, P. K.

Title

Community preparedness for COVID-19 and frontline health workers in Chhattisgarh. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):102-104. 15 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

At the end of April 2020, there had already been three million cases of COVID-19 in the world pandemic. Chhattisgarh might expect 90,000 diagnosed cases of COVID-19 in the end. The first step taken in March was to ensure a simple checklist of activities that needed to continue. Handbills were given with the basic information on the symptoms and what to do in the community. In urban areas, the lockdown affected the poorer section of the society, especially who are not having BPL card and no other means of availing necessary eatables. Issues that arose affecting regular activities such as tuberculosis and immunization. Residents of informal settlements are also vulnerable during any COVID-19 responses. Frontline workers such as Mitanins in the community are an important asset in the capacity building and preparedness strategies.

Publication Type

Journal article.

<194>

Accession Number

20203355248

Author

Rajeev Sadanandan

Title

Kerala's response to COVID-19. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):99-101.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The response of Kerala state to COVID-19, led by the health department, was nested in larger social mobilization. Kerala has developed a strong government health system. Learning from managing the Nipah outbreaks, Kerala took effective prevention measures early. Local governments, actively involved in public health in Kerala, played an active role in controlling the epidemic and in cushioning the impact on the poor. Transparency in information and willingness of the government to take the people into confidence has contributed to enhancing trust in the government. These strengths will stand Kerala in good stead as it prepares to manage the next wave of COVID-19 infections.

Publication Type

Journal article.

<195>

Accession Number

20203355245

Author

Sundararaman, T.

Title

Health systems preparedness for COVID-19 pandemic. (Special Issue: Covid-19 pandemic.)

Source

Indian Journal of Public Health; 2020. 64(6 (Suppl.)):91-93. 10 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Some nations in the world and some states in India have had more success in containing this pandemic. Recent efforts in strengthening the health sector have focused largely on reforms in modes of financing, but as the pandemic brings home to us, the main challenge in India remains the challenge of the organization of public services using a health systems understanding. A close to community comprehensive primary health care, quality assurance, and planned excess capacity in public health systems, a more robust disease surveillance systems that can integrate data on new outbreaks and the indigenous technological capacity to scale up innovation and manufacture of essential health commodities are some of our most important requirements for both epidemic preparedness and response.

Publication Type

Journal article.

<196>

Accession Number

20203351499

Author

Choudhury, P. R.; Ghosh, R. K.; Sumita Sindhi

Title

COVID-19 crisis, pandemic resilience and linkages to land: an exposition.

Source

Working Paper - Indian Institute of Management, Ahmedabad; 2020. (2020-05-01):12 pp. 29 ref.

Publisher

Indian Institute of Management (IIM)

Location of Publisher

Ahmedabad

Country of Publication

India

Abstract

For a COVID-19 like pandemic, the Achilles heel is an unsuspecting villain - rapid and global land use changes. The way governments, businesses and communities see, relate to and use land, not only influences the outbreak but also determines their impact on humanity and development. Drawing upon empirical evidences from epidemiology and land governance, this article argues why the current situation implores the need to focus on the interaction between land use and global diseases. Apart from dwelling on causal links, we discuss the externalities that industrial, urban and rural development in India are poised to face because of the pandemic's potential impact on land, biodiversity and wildlife habitat, property rights and housing. We also underline reform options for policy and practice, that must be discussed and acted upon.

Publication Type

Bulletin.

<197>

Accession Number

20203353898

Author

Lu ManMan; Liu QiuGe; Wang XiaoBo; Zhang JiaLin; Zhang Xin; Shi Da; Liu JianBo; Shi HongYan; Chen JianFei; Feng Li

Title

Development of an indirect ELISA for detecting porcine deltacoronavirus IgA antibodies.

Source

Archives of Virology; 2020. 165(4):845-851. 30 ref.

Publisher

Springer-Wien

Location of Publisher

Vienna

Country of Publication

Austria

Abstract

Porcine deltacoronavirus (PDCoV) is a novel coronavirus that can cause vomiting and watery diarrhea in pigs and death in piglets. Since PDCoV was first detected in 2009 in Hong Kong, the prevalence of PDCoV has increased in recent years, resulting in serious economic losses to the swine industry. The coronavirus spike (S) protein is an antigen that has been demonstrated to contain epitopes that induce neutralizing antibodies. The presence of serum and milk IgA antibodies against pathogens that replicate primarily on mucosal surfaces is important for mucosal immunity. Here, an indirect anti-PDCoV IgA antibody enzyme-linked immunosorbent assay (PDCoV S1 IgA ELISA) using the purified S1 portion of S protein as the coating antigen was developed to detect PDCoV IgA antibodies in serum and sow's milk. A receiver operating characteristic (ROC) curve analysis showed high specificity and sensitivity of the PDCoV-S1-IgA-ELISA based on samples confirmed by IFA. Anti-PDCoV IgA antibodies in 152 serum samples and 65 milk samples collected from six farms that had experienced diarrhea outbreaks within previous last two years were detected by this assay, and 62.5% of the serum samples and 100% of the milk samples were positive for PDCoV. The indirect ELISA method established in this study will provide a convenient tool for measurement of serum and milk IgA levels against PDCoV in pig herds, rapid detection of PDCoV infection in pigs, and evaluation of the immunogenicity of vaccines.

Publication Type

Journal article.

<198>

Accession Number

20203347079

Author

Han Hui; Wu Bo; Song YaJing; Jia JiaoJiao

Title

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

Source

Disease Surveillance; 2020. 35(6):464-466. 9 ref.

Publisher

Editorial Board of Disease Surveillance

Location of Publisher

Beijing

Country of Publication

China

Abstract

In May 2020, a total of 61 infectious diseases were reported globally, affecting 218 countries and regions. Except for influenza, the top five infectious diseases affecting greatest number of countries and regions were COVID-19 (217), dengue fever (22), measles (16), Zika virus disease (14) and Chikungunya fever (13). The top three infectious diseases with highest case fatality rates were Ebola virus disease (65.8%), Lassa fever (19.4%) and COVID-19 (6.2%). The top five infectious diseases with greatest number of deaths were COVID-19, dengue fever, measles, cholera and Lassa fever. The prevalent infectious diseases in Asia were COVID-19 and dengue fever, the prevalent infectious diseases in Africa were COVID-19, Ebola virus disease, cholera, yellow fever, Lassa fever and measles, the prevalent infectious diseases in America were COVID-19, dengue fever, Zika virus disease and Chikungunya fever, the prevalent infectious diseases in Europe were COVID-19 and measles.

Publication Type

Journal article.

<199>

Accession Number

20203348788

Author

Pereira, A.; Cruz-Melguizo, S.; Adrien, M.; Fuentes, L.; Marin, E.; Forti, A.; Perez-Medina, T.

Title

Breastfeeding mothers with COVID-19 infection: a case series.

Source

International Breastfeeding Journal; 2020. 15(69):(8 August 2020). 41 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The first reports of the Chinese experience in the management of newborns of mothers with SARSCoV 2 infection did not recommend mother-baby contact or breastfeeding. At present, the most important International Societies, such as WHO and UNICEF, promote breastfeeding and mother-baby contact as long as adequate measures to control COVID-19 infection are followed. In cases where maternal general health conditions impede direct breastfeeding or in cases of separation between mother and baby, health organizations encourage and support expressing milk and safely providing it to the infants. Methods: A series of 22 case studies of newborns to mothers with COVID-19 infection from March 14th to April 14th, 2020 was conducted. Mothers and newborns were followed for a median period of 1.8 consecutive months. Results: Out of 22 mothers, 20 (90.9%) chose to breastfeed their babies during hospital admission. Timely initiation and skin to skin contact at delivery room was performed in 54.5 and 59.1%, respectively. Eighty two percent of newborns to mothers with COVID-19 were fed with breast milk after 1 month, decreasing to 77% at 1.8 months. Six of 22 (37.5%) mothers with COVID-19 required transitory complementary feeding until exclusive breastfeeding was achieved. During follow-up period, there were no major complications, and no neonates were infected during breastfeeding. Conclusions: Our experience shows that breastfeeding in newborns of mothers with COVID-19 is safe with the adequate infection control measures to avoid mother-baby contagion. Supplementing feeding with pasteurized donor human milk or infant formula may be effective, until exclusive breastfeeding is achieved.

Publication Type

Journal article.

<200>

Accession Number

20203342547

Author

Ker, A. P.

Title

Risk management in Canada's agricultural sector in light of COVID-19. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):251-258. 1 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

The unexpected introduction and spread of COVID-19 has presented significant challenges for every aspect of Canadian society. Although the food and agricultural sector is positioned better than most, there are many risks that will need to be managed in the coming months. The suite of Federal-Provincial-Territorial Business Risk Management (BRM) programs delivered under the Canadian Agricultural Policy framework are meant to assist farmers in managing risks; however, there are no corresponding specialized programs for agribusinesses. The underlying structure of the BRM program was developed decades ago and certainly not with any thought to the possibility of a global pandemic. This article considers to what extent the BRM program and, more broadly, government programming will assist farmers in managing new risks. By default, the article is speculative in nature given that we are currently at the onset of the pandemic in Canada.

Publication Type

Journal article.

<201>

Accession Number

20203342546

Author

Lawley, C.

Title

Potential impacts of COVID-19 on Canadian farmland markets. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):245-250. 2 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Evidence from the past 50 years suggests that changes in Canadian farmland values are influenced by farming returns, real interest rates, and exchange rates. Residential and commercial development also affects the value of farmland close to major urban centers. The COVID-19 economic shutdown is expected to reduce crop and livestock returns, which will put downward pressure on farmland values. The magnitude of this downward pressure will depend on the extent and the length of the recession. The evolution of interest rates over the next months and years could have a significant impact on farmland values. Historically, low real interest rates have coincided with higher farmland values, whereas high real interest rates have caused significant reductions in farmland values. The development value of farmland close to major cities could be negatively impacted by a sharp downturn in residential and commercial property markets.

Publication Type

Journal article.

<202>

Accession Number

20203342545

Author

Gray, R. S.

Title

Agriculture, transportation, and the COVID-19 crisis. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):239-243. 7 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

In this short paper, I assess how COVID-19-related disruptions in transportation services, as well as new demands for transportation services, could impact Canadian agricultural supply chains. The brief analysis reveals that agricultural access to bulk ocean freight, rail movement, and trucking has generally improved in the pandemic, bolstered by the reduced demand for these transportation services by other sectors of the economy. The intermodal containerized movement of grains and food products has seen some disruption from the lack of empty containers in North America. The widespread consumer adoption of physical distancing measures has vastly increased the demand for retail food pickup and delivery services to the point where these services are being rationed by long wait times. From a policy perspective, there is an apparent need for (a) continued supply chain monitoring and industry engagement, (b) the proactive development of strategies to deal with absenteeism and other potential threats to the supply chain, and (c) an assessment of the economic and health merits of providing additional public resources to provide greater access to grocery pickup and delivery services.

Publication Type

Journal article.

<203>

Accession Number

20203342544

Author

Larue, B.

Title

Labor issues and COVID-19. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):231-237. 19 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

The COVID-19 pandemic has prompted Canada and several other countries to impose an economic shutdown to prevent a deadly public health crisis from becoming much deadlier. In the agriculture and food sector, several hundred thousand restaurant workers have lost their jobs. The rise in unemployment, the closing of restaurants and schools, and social distancing have triggered demand reductions for certain commodities and foods and demand increases for others, bringing along changes in demand for inputs including labor. Canadian employers of temporary foreign workers (TFWs) are facing delays and additional constraints in recruiting, but so have US and European employers of TFWs. Rising food security concerns are making protectionist trade policies popular. Domestic and foreign firms may export less and do more foreign direct investment, inducing trade in jobs.

Publication Type

Journal article.

<204>

Accession Number

20203342541

Author

Orden, D.

Title

Resilience test of the North American food system. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):215-217. 2 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

This article assesses the resilience of the North American food system in the context of the coronavirus pandemic in the immediate, medium, and long run. Focus is on the United States. The immediate consequence is substantial disruption of agricultural markets and falling prices, but systemic breakdown of the system is unlikely. Existing farm programs and emergency legislation will support U.S. farmers. Medium term, supply is likely to be strong, while pandemic-related disruptions in the developing world remain uncertain. Long term, the path forward under the fragility the pandemic has underscored is stronger international institutions and cooperation.

Publication Type

Journal article.

<205>

Accession Number

20203342540

Author

Rude, J.

Title

COVID-19 and the Canadian cattle/beef sector: some preliminary analysis. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):207-213. 18 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Canada's cattle/beef sector has already weathered a shock after a 2003 case of BSE resulted in closed borders and industry restructuring. Now, the sector has to adjust to similar shocks due to COVID-19. This paper examines the supply chain from the consumer up to the cow-calf producer by considering consumer reactions, labor market constraints, and supply response. A quarterly market model of North American cattle and beef markets is used to examine price and revenue impacts associated with the market disruptions. Depending on the scenario, there is considerable price and revenue suppression at all levels of the market.

Publication Type

Journal article.

<206>

Accession Number

20203342539

Author

McEwan, K.; Marchand, L.; Shang, M.; Bucknell, D.

Title

Potential implications of COVID-19 on the Canadian pork industry. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):201-206. 16 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Canada and the United States have strong economic ties and form part of an integrated North American pork industry. Canada's pork industry is export-oriented, and the United States represents a key market for both live pigs and pork. Pork value chain stakeholders include input suppliers, pig producers, transportation companies, slaughter plants, wholesalers, and retailers. There are three overriding areas of concern for the Canadian pork industry with respect to potential impacts of the current pandemic (COVID-19). The first is Canada/US trade and the ability to continue exporting Canadian live pigs and pork to the United States. The second is labor and the impact of potential absenteeism on all sectors of the pork value chain. The third is global trade, because Canada's pork industry relies heavily on exporting pork to markets around the world.

Publication Type

Journal article.

<207>

Accession Number

20203342538

Author

Weersink, A.; Massow, M. von; McDougall, B.

Title

Economic thoughts on the potential implications of COVID-19 on the Canadian dairy and poultry sectors. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):195-200. 14 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

The dumping of milk, the offering of hospitality size goods in grocery stores, and the closure of processing facilities are examples of the disruptions caused by the pandemic to the dairy, poultry, and egg sectors. These supply management sectors, however, are more resilient to the impacts of COVID-19 than other sectors as producers are generally more financially stable, losses are pooled, and production/marketing efforts are coordinated.

Publication Type

Journal article.

<208>

Accession Number

20203342537

Author

Richards, T. J.; Rickard, B.

Title

COVID-19 impact on fruit and vegetable markets. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):189-194. 22 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Canadian fruit and vegetable markets were significantly impacted by the spread of the novel coronavirus SARS-CoV-2 (and COVID-19 disease), beginning in March 2020. Due to the closure of restaurants, bars, and schools, produce growers and distributors were forced to shift supplies almost entirely from the foodservice to the retail channel. Shippers reported labor and logistical constraints in making the change, but the fresh produce supply chain remained robust. In the long term, we expect lasting changes in consumers' online food-purchasing habits, heightened constraints on immigrant labor markets, and tighter concentration in fresh produce distribution and perhaps retailing.

Publication Type

Journal article.

<209>

Accession Number

20203342536

Author

Brewin, D. G.

Title

The impact of COVID-19 on the grains and oilseeds sector. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):185-188. 10 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

While downstream distribution and demand is likely to be hampered by the labor and income effects of COVID-19, Canada is expected to produce over 88 million tons of grains and oilseeds in 2020. Canadians have valid concerns about delays related to their changing needs as millions move their purchases from food services to retail groceries, but they should not worry about our overall supply of calories. Despite some shortages, the supply chains for flour and cooking oil are not likely to be blocked for an extended period. Learning from the coordinated needs of the BSE crisis in the beef sector, the federal government developed Value Chain Roundtables in 2003, including one for grains. These roundtables bring together government and industry to tackle the issues that face each sector's major needs, including food safety, transportation infrastructure, and market access. A working group made up of various roundtable members was set up specifically to deal with COVID-19-related supply chain challenges. This gives both industry and government a venue to attack any choke point or breakdown within our agrifood supply chains - the exact response we need at this time. A preestablished forum for discussion of critical issues at these roundtables, assuming the right players are active and present, cannot hurt, but it would useful for future planners and researchers if the federal government could clarify any positive impact they have.

Publication Type

Journal article.

<210>

Accession Number

20203342535

Author

Vercammen, J.

Title

Information-rich wheat markets in the early days of COVID-19. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):177-184. 2 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

This paper uses the information implicit in commodity futures and options prices to infer market beliefs about the impact of early-stages COVID-19 on commodity market fundamentals. The particular commodity examined is soft red winter (SRW) wheat, and the timeframe is early February to late March 2020. The analysis highlights various adjustments in the cash and futures price of SRW wheat in light of surging short-run demand from consumer hoarding of staple food products, and a weakening long-run market from growing wheat stocks and an emerging global recession. This split is causing the forward curve to flatten and basis levels to invert. The change over time in the price of options on wheat futures reveals increased price volatility in response to growing uncertainty about the COVID-19 impacts. Similarly, changes in the skewness of the option's volatility smile illustrate a shift in traders' perception about risk in the right versus left tail of the price distribution.

Publication Type

Journal article.

<211>

Accession Number

20203342534

Author

Hobbs, J. E.

Title

Food supply chains during the COVID-19 pandemic. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):171-176. 14 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

This paper provides an early assessment of the implications of the COVID-19 pandemic for food supply chains and supply chain resilience. The effects of demand-side shocks on food supply chains are discussed, including consumer panic buying behaviors with respect to key items, and the sudden change in consumption patterns away from the food service sector to meals prepared and consumed at home. Potential supply-side disruptions to food supply chains are assessed, including labor shortages, disruptions to transportation networks, and "thickening" of the Canada-U.S. border with respect to the movement of goods. Finally, the paper considers whether the COVID-19 pandemic will have longer-lasting effects on the nature of food supply

chains, including the growth of the online grocery delivery sector, and the extent to which consumers will prioritize "local" food supply chains.

Publication Type

Journal article.

<212>

Accession Number

20203342533

Author

Hailu, G.

Title

Economic thoughts on COVID-19 for Canadian food processors. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):163-169. 19 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

In this paper, I explore the potential effects of the COVID-19 pandemic on Canadian food processors. First, COVID-19 may have an impact on food processing economic activities because of supply and demand shocks. Second, the impact of COVID-19 on food processing may depend on the type of products and the size of the processors. The effects of measures taken by the government to flatten the epidemiological curve on the economic activities of the food processing sector are uncertain.

Publication Type

Journal article.

<213>

Accession Number

20203342532

Author

Goddard, E.

Title

The impact of COVID-19 on food retail and food service in Canada: preliminary assessment. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):157-161. 13 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

COVID-19 has imposed a series of unique challenges on the food retail and food service sectors in Canada. Almost overnight, the roughly 30% of the food dollar that Canadians have been spending on food away from home has shifted to retail.

Publication Type

Journal article.

<214>

Accession Number

20203342531

Author

Cranfield, J. A. L.

Title

Framing consumer food demand responses in a viral pandemic. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):151-156. 4 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

In this paper I explore several issues related to how the COVID-19 pandemic might impact consumer demand for food. These impacts relate to the structure of preferences in the context of a pandemic, income and time constraints, and price effects. Discussion includes accounting for differential impacts of COVID-19 on demand for food across sociodemographic characteristics, and several high-level issues and observations related to where and how consumers shop and what they buy. My own thinking leads me to conclude that demand-side factors will account for most of the changes we see in retail food market. These demand-side effects will be dominated by income effects, the opportunity cost of time, and longer planning horizons on the part of consumers.

Publication Type

Journal article.

<215>

Accession Number

20203342530

Author

Deaton, B. J.; Deaton, B. J.

Title

Food security and Canada's agricultural system challenged by COVID-19. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):143-149. 20 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

The effect of COVID-19 on Canadian food security is examined from two different perspectives. COVID-19 creates a unique "income shock" that is expected to increase the prevalence of household food insecurity. This food insecurity can be measured by utilizing the Canadian Community Health Survey (CCHS). More fundamentally, COVID-19 heightens household concern about the capacity of the Canadian food system to ensure food availability. Despite surges in demand and supply chain disruptions, we currently do not observe broad, rapid appreciation in food prices. This suggests that there is an adequate supply of food for the near term. There is less certainty over intermediate and longer time periods because so many factors are in flux, particularly the rate of increases in sicknesses and deaths across the country and globally. Data on these health factors and elements of the food supply chain are needed to predict beyond a short time frame. In this regard, we discuss three ongoing considerations - ease of capital flows, international exchange, and maintaining transportation - that will help ensure food availability in the longer run.

Publication Type

Journal article.

<216>

Accession Number

20203342529

Author

Ker, A. P.; Cardwell, R.

Title

Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):139-258.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

This special issue consists of 18 short articles dealing with issues regarding COVID-19 and the Canadian agricultural and food sectors. These articles were invited and are unique in that they offer speculative expert thoughts. Summarizing the articles, the biggest concerns at the onset of the pandemic for the Canadian agricultural and food sector appear, in no particular order, to be (i) availability of labour; (ii) thickening of the border; (iii) declines in consumer income; and (iv) worsening of food insecurity in some populations.

Publication Type

Journal issue.

<217>

Accession Number

20203349990

Author

Cret&tail;u, R. C.; Hont&tail;us, A. C.; Alecu, I. I.; Smedescu, D.; Stefan, P.

Title

Analysis of the ecotourist profile before the COVID-19 crisis and post-crisis forecasts.

Source

Scientific Papers Series - Management, Economic Engineering in Agriculture and Rural Development; 2020. 20(2):191-198. 13 ref.

Publisher

University of Agronomic Sciences and Veterinary Medicine of Bucharest

Location of Publisher

Bucharest

Country of Publication

Romania

Abstract

During this period, world tourism is experiencing the biggest crisis, after the Second World War - the crisis generated by the coronavirus pandemic. Reservations were canceled, the accommodation and public catering units were closed, the flights were also canceled. The losses are valued at hundreds of billions of dollars, many tourism or service companies went bankrupt and employees lost their jobs. Our study was done before this crisis, but it becomes even more current, for the post-crisis period, when tourists and owners of tourism units will have to focus on nature, ecological tourism. The work we are proposing is the result of a study by university professors and master students from the Management and Agro-tourism specialty at the University of Agronomic Sciences and Veterinary Medicine of Bucharest. Based on research into their behavior, preferences and motivation, it has emerged that an ecotourist is characterized by a high level of education and training, above average income and willing to spend more in a destination during a stay extended.

Publication Type

Journal article.

<218>

Accession Number

20203340699

Author

Deeks, J. J.; Dinnes, J.; Takwoingi, Y.; Davenport, C.; Spijker, R.; Taylor-Phillips, S.; Adriano, A.; Beese, S.; Dretzke, J.; Ruffano, L. F. di; Harris, I. M.; Price, M. J.; Dittrich, S.; Emperador, D.; Hooft, L.; Leeflang, M. M.; Bruel, A. van den

Title

Antibody tests for identification of current and past infection with SARS-CoV-2.

Source

Cochrane Database of Systematic Reviews; 2020. (6)

Publisher

Wiley

Location of Publisher

Chichester

Country of Publication

UK

Abstract

Background: The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus and resulting COVID-19 pandemic present important diagnostic challenges. Several diagnostic strategies are available to identify current infection, rule out infection, identify people in need of care escalation, or to test for past infection and immune response. Serology tests to detect the presence of antibodies to SARS-CoV-2 aim to identify previous SARS-CoV-2 infection, and may help to confirm the presence of current infection. Objectives: To assess the diagnostic accuracy of antibody tests to determine if a person presenting in the community or in primary or secondary care has SARS-CoV-2 infection, or has previously had SARS-CoV-2 infection, and the accuracy of antibody tests for use in seroprevalence surveys. Search methods: We undertook electronic searches in the Cochrane COVID-19 Study Register and the COVID-19 Living Evidence Database from the University of Bern, which is updated daily with published articles from PubMed and Embase and with preprints from medRxiv and

bioRxiv. In addition, we checked repositories of COVID-19 publications. We did not apply any language restrictions. We conducted searches for this review iteration up to 27 April 2020. Selection criteria: We included test accuracy studies of any design that evaluated antibody tests (including enzyme-linked immunosorbent assays, chemiluminescence immunoassays, and lateral flow assays) in people suspected of current or previous SARS-CoV-2 infection, or where tests were used to screen for infection. We also included studies of people either known to have, or not to have SARS-CoV-2 infection. We included all reference standards to define the presence or absence of SARS-CoV-2 (including reverse transcription polymerase chain reaction tests (RT-PCR) and clinical diagnostic criteria). Data collection and analysis: We assessed possible bias and applicability of the studies using the QUADAS-2 tool. We extracted 22 contingency table data and present sensitivity and specificity for each antibody (or combination of antibodies) using paired forest plots. We pooled data using random-effects logistic regression where appropriate, stratifying by time since post-symptom onset. We tabulated available data by test manufacturer. We have presented uncertainty in estimates of sensitivity and specificity using 95% confidence intervals (CIs). Main results: We included 57 publications reporting on a total of 54 study cohorts with 15,976 samples, of which 8526 were from cases of SARS-CoV-2 infection. Studies were conducted in Asia (n = 38), Europe (n = 15), and the USA and China (n = 1). We identified data from 25 commercial tests and numerous in-house assays, a small fraction of the 279 antibody assays listed by the Foundation for Innovative Diagnostics. More than half (n = 28) of the studies included were only available as preprints. We had concerns about risk of bias and applicability. Common issues were use of multi-group designs (n = 29), inclusion of only COVID-19 cases (n = 19), lack of blinding ofthe index test(n = 49) and reference standard (n = 29), differential verification (n = 22), and the lack of clarity about participant numbers, characteristics and study exclusions (n = 47). Most studies (n = 44) only included people hospitalised due to suspected or confirmed COVID-19 infection. There were no studies exclusively in asymptomatic participants. Two-thirds of the studies (n = 33) defined COVID-19 cases based on RT-PCR results alone, ignoring the potential for false-negative RT-PCR results. We observed evidence of selective publication of study findings through omission of the identity of tests (n = 5). We observed substantial heterogeneity in sensitivities of IgA, IgM and IgG antibodies, or combinations thereof, for results aggregated across different time periods post-symptom onset (range 0% to 100% for all target antibodies). We thus based the main results of the review on the 38 studies that stratified results by time since symptom onset. The numbers of individuals contributing data within each study each week are small and are usually not based on tracking the same groups of patients over time. Pooled results for IgG, IgM, IgA, total antibodies and IgG/IgM all showed low sensitivity during the first week since onset of symptoms (all less than 30.1%), rising in the second week and reaching their highest values in the third week. The combination of IgG/IgM had a sensitivity of 30.1% (95% CI 21.4 to 40.7) for 1 to 7 days, 72.2% (95% CI 63.5 to 79.5) for 8 to 14 days, 91.4% (95% CI 87.0 to 94.4) for 15 to 21 days. Estimates of accuracy beyond three weeks are based on smaller sample sizes and fewer studies. For 21 to 35 days, pooled sensitivities for IgG/IgM were 96.0% (95% CI 90.6 to 98.3). There are insufficient studies to estimate sensitivity of tests beyond 35 days post-symptom onset. Summary specificities (provided in 35 studies) exceeded 98% for all target antibodies with confidence intervals no more than 2 percentage points wide. False-positive results were more common where COVID-19 had been suspected and ruled out, but numbers were small and the difference was within the range expected by chance. Assuming a prevalence of 50%, a value considered possible in healthcare workers who have suffered respiratory symptoms, we would anticipate that 43 (28 to 65) would be missed and 7 (3 to 14) would be falsely positive in 1000 people undergoing IgG/IgM testing at days 15 to 21 post-symptom onset. At a prevalence of 20%, a likely value in surveys in high-risk settings, 17 (11 to 26) would be missed per 1000 people tested and 10

(5 to 22) would be falsely positive. At a lower prevalence of 5%, a likely value in national surveys, 4 (3 to 7) would be missed per 1000 tested, and 12 (6 to 27) would be falsely positive. Analyses showed small differences in sensitivity between assay type, but methodological concerns and sparse data prevent comparisons between test brands.

Publication Type

Journal article.

<219>

Accession Number

20203341863

Author

Sun NiuNiu; Wei LuoQun; Shi SuLing; Jiao DanDan; Song RunLuo; Ma LiLi; Wang HongWei; Wang Chao; Wang ZhaoGuo; You YanLi; Liu ShuHua; Wang HongYun

Title

A qualitative study on the psychological experience of caregivers of COVID-19 patients.

Source

AJIC - American Journal of Infection Control; 2020. 48(6):592-598. 31 ref.

Publisher

Elsevier Inc.

Location of Publisher

St. Louis

Country of Publication

USA

Abstract

Background: The coronavirus disease 2019 (COVID-19) is spreading rapidly, bringing pressure and challenges to nursing staff. Background: To explore the psychology of nurses caring for COVID-19 patients. Methods: Using a phenomenological approach, we enrolled 20 nurses who provided care for COVID-19 patients in the First Affiliated Hospital of Henan University of Science and Technology from January 20, to February 10, 2020.

The interviews were conducted face-to-face or by telephone and were analysed by Colaizzi's 7-step method. Results: The psychological experience of nurses caring for COVID-19 patients can be summarized into 4 themes. First, negative emotions present in early stage consisting of fatigue, discomfort, and helplessness was caused by high-intensity work, fear and anxiety, and concern for patients and family members. Second, self-coping styles included psychological and life adjustment, altruistic acts, team support, and rational cognition. Third, we found growth under pressure, which included increased affection and gratefulness, development of professional responsibility, and self-reflection. Finally, we showed that positive emotions occurred simultaneously with negative emotions. Conclusions: During an epidemic outbreak, positive and negative emotions of the front-line nurses interweaved and coexisted. In the early stage, negative emotions were dominant and positive emotions appeared gradually. Self-coping styles and psychological growth played an important role in maintaining mental health of nurses.

Publication Type

Journal article.

<220>

Accession Number

20203341856

Author

Ajaz Ahmad; Alkharfy, K. M.; Ziyad Alrabiah; Abdulaziz Alhossan

Title

Saudi Arabia, pharmacists and COVID-19 pandemic.

Source

Journal of Pharmaceutical Policy and Practice; 2020. 13(41):(11 July 2020). 23 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The latest outbreak of Covid-19 pandemic has placed a significant effect on health care system around the world. This article discusses the role of pharmacists in Saudi Arabia during the current Covid-19 pandemic. Pharmacists are an important part of everyday healthcare in Saudi Arabia. Pharmacists helped to protect the public from Covid-19 pandemic disease by participating in various initiatives including health education and promotion, medication dispensing, medication reconciliation, medication and patient counselling, training for self-management in current outbreak and emergency preparedness. Full utilization of skills of pharmacists boosted the safety response of Saudi Arabia to Covid-19 pandemic.

Publication Type

Journal article.

<221>

Accession Number

20203322508

Author

Valente, E. P.; Damasio, L. C. V. da C.; Luz, L. S.; Pereira, M. F. da S.; Lazzerini, M.

Title

COVID-19 among health workers in Brazil: the silent wave.

Source

Journal of Global Health; 2020. 10(1)19 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

The aim of the article was to discuss the prevalence, incidence, and epidemiology of COVID-19 among health care workers in Brazil.

Publication Type

Journal article.

<222>

Accession Number

20203350028

Author

Beia, S. I.; Bran, M.; Petrescu, I.; Beia, V. E.; Dinu, M.

Title

Food fraud incidents: findings from the latest Rapid Alert System for Food and Feed (RASFF) report.

Source

Scientific Papers Series - Management, Economic Engineering in Agriculture and Rural Development; 2020. 20(2):45-52. 18 ref.

Publisher

University of Agronomic Sciences and Veterinary Medicine of Bucharest

Location of Publisher

Bucharest

Country of Publication

Romania

Abstract

Food fraud remains an ever-existing issue, and especially in the context of the current COVID-19 crisis. Along with the recession that followed this pandemics, as well as lacking food supplies in some regions, criminal organizations around the world are trying to further expand their financial gains by means of various forms of food fraud, either counterfeiting, labeling or lack of adequate documentation. The present paper begins with a short theorization on food fraud and finishes with an analysis of the latest Rapid Alert System for Food and Feed report, in order to capture the essence of food fraud incidents that have occurred since May 2019 until

present: the most frequent subject of incidents and degree of impact, their nature, along with the products mostly affected. Our results show that food fraud incidents consisted mostly of lacking documentation pertaining to each food product. While animal hides and certain poisonous substances have been detected only in certain cases, their importance is not be ignored in terms of public health.

Publication Type

Journal article.

<223>

Accession Number

20203351243

Author

Ing, A. J.; Cocks, C.; Green, J. P.

Title

COVID-19: in the footsteps of Ernest Shackleton.

Source

Thorax; 2020. 75(8):693-694. 2 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

We describe what we believe is the first instance of complete COVID-19 testing of all passengers and crew on an isolated cruise ship during the current COVID-19 pandemic. Of the 217 passengers and crew on board, 128 tested positive for COVID-19 on reverse transcription-PCR (59%). Of the COVID-19-positive patients, 19% (24) were symptomatic; 6.2% (8) required medical evacuation; 3.1% (4) were intubated and ventilated; and the mortality was 0.8% (1). The majority of COVID-19-positive patients were asymptomatic (81%, 104 patients). We

conclude that the prevalence of COVID-19 on affected cruise ships is likely to be significantly underestimated, and strategies are needed to assess and monitor all passengers to prevent community transmission after disembarkation.

Publication Type

Journal article.

<224>

Accession Number

20203351204

Author

Qin Chuan; Zhou LuoQi; Hu ZiWei; Yang Sheng; Zhang ShuoQi; Chen Man; Yu HaiHan; Tian DaiShi; Wang Wei

Title

Clinical characteristics and outcomes of COVID-19 patients with a history of stroke in Wuhan, China.

Source

Stroke; 2020. 51(7):2219-2223. 8 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background and Purpose: Information on stroke survivors infected with coronavirus disease 2019 (COVID-19) is limited. The aim of this study was to describe specific clinical characteristics and outcomes of patients with COVID-19 with a history of stroke. Methods: All the confirmed cases of COVID-19 at Tongji Hospital from January 27 to March 5, 2020, were included in our cohort study. Clinical data were analyzed and compared between patients with and without a history of stroke. Results: Of the included 1875 patients with COVID-19,

50 patients had a history of stroke. The COVID-19 patients with medical history of stroke were older with more comorbidities, had higher neutrophil count, and lower lymphocyte and platelet counts than those without history of stroke. The levels of D-dimers, cardiac troponin I, NT pro-brain natriuretic peptide, and interleukin-6 were also markedly higher in patients with history of stroke. Stroke survivors who underwent COVID-19 developed more acute respiratory distress syndrome and received more noninvasive mechanical ventilation. Data from propensity-matched analysis indicated a higher proportion of patients with COVD-19 with a history of stroke were admitted to the intensive care unit requiring mechanical ventilation and were more likely to be held in the unit or die, compared with non-stroke history COVID-19 patients. Conclusions: Patients with COVID-19 with a history of stroke had more severe clinical symptoms and poorer outcomes compared with those without a history of stroke.

Publication Type

Journal article.

<225>

Accession Number

20203354840

Author

Sinsky, C.; Linzer, M.

Title

Practice and policy reset post-COVID-19: reversion, transition, or transformation? Commentary examines possible policy and practice changes for health professionals, regulators, and payers after the COVID-19 pandemic.

Source

Health Affairs; 2020. 39(8):1405-1411. 46 ref.

Publisher

People-to-People Health Foundation, Project Hope

Location of Publisher

Bethesda

Country of Publication

USA

Abstract

Clinical care in the United States has been transformed during the coronavirus disease 2019 (COVID-19) pandemic. To support these changes, regulators and payers have temporarily modified long-standing policies, recognizing the need for a trade-off between the costs and benefits of oversight during times of crisis. Specifically, there has been a heightened receptivity to the importance of preserving physicians' and other health care professionals' time, cognitive bandwidth, and emotional reserve for the direct care of patients, instead of squandering these resources on low-value tasks and frustrating technology. Instead of reflexively reverting to past practices and policies, there is now an opportunity to take advantage of the lessons of COVID-19 for the further transformation of health care to achieve Quadruple Aim outcomes (better care for individuals, better health for the population, better experience for clinicians, and lower costs). We outline some of the policy and practice changes that we believe should endure after the crisis has passed, and we recommend using similar logic during noncrisis times to make additional changes to further reduce administrative burden, and thus improve patient care.

Publication Type

Journal article.

<226>

Accession Number

20203339320

Author

Wei GuangYue

Title

Food safety issues related to wildlife have not been taken seriously from SARS to COVID-19.

Source

Environmental Research; 2020. 1865 ref.

Publisher

Elsevier Inc

Location of Publisher

Orlando

Country of Publication

USA

Abstract

17 years after the outbreak of SARS, the 2019-nCoV broke out in December 2019. It's an unprecedented huge challenge and disaster for people all over the world. According to Web of Science database, The author found that 95,724 virology papers have been published in the past 17 years, 68,632 of which are supported by fund (71.7%). Meanwhile, 50,567 papers related to food safety have been published in the past 17 years, 28,165 of which are supported by fund (55.7%%). It seems that people's safety and global stability are greatly guaranteed. However, whether SARS or 2019-nCoV, scientists were targeting wildlife, the author found that only 515 studies on food safety related to wildlife have been published worldwide in the past 17 years. After SARS, the whole world did not pay enough attention to food safety related to wildlife.

Publication Type

Journal article.

<227>

Accession Number

20203333168

Author

Park SunHee

Title

Personal protective equipment for healthcare workers during the COVID-19 pandemic.

Source

Infection and Chemotherapy; 2020. 52(2):165-182. 97 ref.

Publisher

Korean Society of Infectious Diseases and Korean Society of Chemotherapy

Location of Publisher

Seoul

Country of Publication

Korea Republic

Abstract

The coronavirus disease (COVID-19) pandemic has posed a challenge for healthcare systems, and healthcare workers (HCWs) are at high risk of exposure. Protecting HCWs is of paramount importance to maintain continuous patient care and keep healthcare systems functioning. Used alongside administrative and engineering control measures, personal protective equipment (PPE) is the last line of defense and the core component of protection. Current data suggest that severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is mainly transmitted through respiratory droplets and close contact. Airborne transmission may occur during aerosol-generating procedures. However, the modes of transmission still remain uncertain, especially regarding the possibility of airborne transmission when aerosolgenerating procedures are not performed. Thus, there are some inconsistencies in the respiratory protective equipment recommended by international and national organizations. In Korea, there have been several modifications to PPE recommendations offering options in choosing PPE for respiratory and body protection, which confuses HCWs; they are often unsure what to wear and when to wear it. The choice of PPE is based on the risk of exposure and possible modes of transmission. The level of protection provided by PPE differs based on standards and test methods. Thus, understanding them is the key in selecting the proper PPE. This article reviews evidence on the mode of SARS-CoV-2 transmission, compares the current PPE recommendations of the World Health Organization with those in Korea, and discusses standard requirements and the proper selection of PPE.

Publication Type

Journal article.

<228>

Accession Number

20203333165

Author

Kim Tark

Title

Improving preparedness for and response to coronavirus disease 19 (COVID-19) in long-term care hospitals in Korea.

Source

Infection and Chemotherapy; 2020. 52(2):133-141. 26 ref.

Publisher

Korean Society of Infectious Diseases and Korean Society of Chemotherapy

Location of Publisher

Seoul

Country of Publication

Korea Republic

Abstract

Clusters of coronavirus disease 2019 (COVID-19) in long-term care facilities (LTCFs) have been widely reported in Korea and around the world. COVID-19 has a high mortality rate, and older patients and those with underlying diseases are at particularly high risk of being infected. Outbreaks in LTCFs, where many high-risk patients reside, result in the occupation of beds meant for severely ill patients and even death in many patients. Long-term care hospitals (LTCH) are major LTCFs in Korea. Therefore, it is very important to protect patients in LTCHs from COVID-19. The reality is that preparedness for COVID-19 in LTCHs is inadequate, and there are barriers to improvements in preparedness. Through institutional improvement and policy support, the government should help healthcare personnel and LTCHs improve installation and raise the level of knowledge of infection prevention and control. With these improvement, prevention, surveillance, and screening for COVID-19 should be done and a response system to the COVID-19 outbreak should be established. There are many challenges that must be overcome to meet the goals proposed in this article. This may be possible only with a spirit of solidarity and cooperation of government, public and private healthcare facilities.

Publication Type

Journal article.

<229>

Accession Number

20203333153

Author

Renzo, L. di; Gualtieri, P.; Cinelli, G.; Bigioni, G.; Soldati, L.; Attina, A.; Bianco, F. F.; Caparello, G.; Camodeca, V.; Carrano, E.; Ferraro, S.; Giannattasio, S.; Leggeri, C.; Rampello, T.; Presti, L. lo; Tarsitano, M. G.; Lorenzo, A. de

Title

Psychological aspects and eating habits during COVID-19 home confinement: results of EHLC-COVID-19 Italian online survey.

Source

Nutrients; 2020. 12(7)44 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 pandemic has had a huge impact on the population with consequences on lifestyles. The aim of the study was to analyse the relationship between eating habits, mental and emotional mood. A survey was conducted online during social isolation, from 24 April to 18 May 2020, among the Italian population. A total of 602 interviewees were included in the data analysis. A high percentage of respondents experienced a depressed mood, anxious feelings, hypochondria and insomnia (61.3%, 70.4%, 46.2% and 52.2%). Almost half of the respondents felt anxious due to the fact of their eating habits, consumed comfort food and were inclined to increase food intake to feel better. Age was inversely related to dietary control (OR = 0.971, p = 0.005). Females were more anxious and disposed to comfort food than males ($p < 0.001$; $p < 0.001$). A strength of our study was represented by the fact that the survey was conducted quickly during the most critical period of the Italian epidemic lockdown. As the COVID-19 pandemic is still ongoing, our data need to be confirmed and investigated in the future with larger population studies.

Publication Type

Journal article.

Accession Number

20203333100

Author

Charoenngam, N.; Holick, M. F.

Title

Immunologic effects of vitamin D on human health and disease.

Source

Nutrients; 2020. 12(7)199 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Vitamin D is responsible for regulation of calcium and phosphate metabolism and maintaining a healthy mineralized skeleton. It is also known as an immunomodulatory hormone. Experimental studies have shown that 1,25-dihydroxyvitamin D, the active form of vitamin D, exerts immunologic activities on multiple components of the innate and adaptive immune system as well as endothelial membrane stability. Association between low levels of serum 25-hydroxyvitamin D and increased risk of developing several immune-related diseases and disorders, including psoriasis, type 1 diabetes, multiple sclerosis, rheumatoid arthritis, tuberculosis, sepsis, respiratory infection, and COVID-19, has been observed. Accordingly, a number of clinical trials aiming to determine the efficacy of administration of vitamin D and its metabolites for treatment of these diseases have been conducted with variable outcomes. Interestingly, recent evidence suggests that some individuals might benefit from vitamin D more or less than others as high inter-individual difference in broad gene expression in human peripheral blood mononuclear cells in response to vitamin D supplementation has been observed. Although it is still debatable what level of serum 25-hydroxyvitamin D is optimal, it is advisable to increase vitamin D intake and have sensible sunlight exposure to maintain serum 25-hydroxyvitamin D at least 30 ng/mL (75 nmol/L), and preferably at 40-60 ng/mL (100-150 nmol/L) to achieve the optimal overall health benefits of vitamin D.

Publication Type

Journal article.

<231>

Accession Number

20203337402

Author

Barati, F.; Pouresmaieli, M.; Ekrami, E.; Asghari, S.; Ziarani, F. R.; Mamoudifard, M.

Title

Potential drugs and remedies for the treatment of COVID-19: a critical review.

Source

Biological Procedures Online; 2020. 22(15):(23 July 2020). 132 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

COVID-19 disease with a high rate of contagious and highly nonspecific symptoms, is an infectious disease caused by a newly discovered coronavirus. Most people who fall sick with COVID-19 will experience mild to moderate symptoms such as respiratory symptoms, cough, dyspnea, fever, and viral pneumonia and recover without any special cure. However, some others need special and emergency treatment to get rid of this widespread disease. Till now, there are numbers of proposed novel compounds as well as standards therapeutics agent existed for other conditions seems to have efficacy against the 2019-nCoV. Some which are being tested for MERS-CoV and SARS-CoV are validated that could be also efficient against this new coronavirus. However, there are currently no effective specific antivirals or drug combinations introduced for 2019-nCoV specifically that be supported by high-level evidence. The main purpose of this paper is to review typical and ongoing treatments for coronavirus disease including home remedies, herbal medicine, chemical drugs, plasma therapy, and also vaccinies. In this regards, famous herbal medicines and common chemical drugs which are routinely to be prescribed for patients are introduced. Moreover, a section is assigned to the drug interactions and some outdated drugs which have been proved to be inefficient. We hope that this work could pave the way for researchers to develop faster and more reliable methods for earlier treatment of patients and rescue more people.

Publication Type

Journal article.

<232>

Accession Number

20203332462

Author

Weissman, R. S.; Klump, K. L.; Rose, J.

Title

Conducting eating disorders research in the time of COVID-19: a survey of researchers in the field.

Source

International Journal of Eating Disorders; 2020. 53(7):1171-1181. 18 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The COVID-19 pandemic has impacted research around the globe and required shuttering of research programs and the implementation of procedural adjustments to ensure safety. This study sought to document COVID-19's impact on eating disorders (ED) research, which may be particularly susceptible to such disruptions, given its focus on individuals who are physically and emotionally vulnerable. We invited ED researchers from editorial boards and scientific organizations to complete a quantitative/qualitative survey about: COVID-19's current and future impact on ED research; areas of concern about research disruptions; and effective strategies for conducting and supporting research during and after COVID-19. Among 187 participants, many had moved studies online and/or shutdown part of their research. Across position types (permanent, 52.7%; temporary, 47.3%), participants reported high concern about data collection, recruitment,

and securing future funding. Those holding temporary positions reported significantly greater concern about COVID-19's impact on their career and greater stress than participants in permanent positions. Strategies for dealing with research disruptions included: employing technology; reprioritizing goals/tasks; and encouraging collaboration. Results underscore the high levels of stress and disruption caused by COVID-19. We echo calls by our respondents for support for early career scholars and advocacy for additional resources for research and scientists.

Publication Type

Journal article.

<233>

Accession Number

20203332461

Author

Rodgers, R. F.; Lombardo, C.; Cerolini, S.; Franko, D. L.; Omori, M.; Fuller-Tyszkiewicz, M.; Linardon, J.; Courtet, P.; Guillaume, S.

Title

The impact of the COVID-19 pandemic on eating disorder risk and symptoms.

Source

International Journal of Eating Disorders; 2020. 53(7):1166-1170. 42 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The current COVID-19 pandemic has created a global context likely to increase eating disorder (ED) risk and symptoms, decrease factors that protect against EDs, and exacerbate barriers to care. Three pathways exist by

which this pandemic may exacerbate ED risk. One, the disruptions to daily routines and constraints to outdoor activities may increase weight and shape concerns, and negatively impact eating, exercise, and sleeping patterns, which may in turn increase ED risk and symptoms. Relatedly, the pandemic and accompanying social restrictions may deprive individuals of social support and adaptive coping strategies, thereby potentially elevating ED risk and symptoms by removing protective factors. Two, increased exposure to ED-specific or anxiety-provoking media, as well as increased reliance on video conferencing, may increase ED risk and symptoms. Three, fears of contagion may increase ED symptoms specifically related to health concerns, or by the pursuit of restrictive diets focused on increasing immunity. In addition, elevated rates of stress and negative affect due to the pandemic and social isolation may also contribute to increasing risk. Evaluating and assessing these factors are key to better understanding the impact of the pandemic on ED risk and recovery and to inform resource dissemination and targets.

Publication Type

Journal article.

<234>

Accession Number

20203332460

Author

Phillipou, A.; Meyer, D.; Neill, E.; Tan, E. J.; Toh WeiLin; Rheenen, T. E. van; Rossell, S. L.

Title

Eating and exercise behaviors in eating disorders and the general population during the COVID -19 pandemic in Australia: initial results from the COLLATE project.

Source

International Journal of Eating Disorders; 2020. 53(7):1158-1165. 17 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Objective: Emerging evidence suggests that the coronavirus (COVID-19) pandemic may be negatively impacting mental health. The impact on eating and exercise behaviors is, however, currently unknown. This study aimed to identify changes in eating and exercise behaviors in an Australian sample among individuals with an eating disorder, and the general population, amidst the COVID-19 pandemic outbreak. Method: A total of 5,469 participants, 180 of whom self-reported an eating disorder history, completed questions relating to changes in eating and exercise behaviors since the emergence of the pandemic, as part of the COLLATE (COvid-19 and you: mentaL heaLth in AusTralia now survEy) project; a national survey launched in Australia on April 1, 2020. Results: In the eating disorders group, increased restricting, binge eating, purging, and exercise behaviors were found. In the general population, both increased restricting and binge eating behaviors were reported; however, respondents reported less exercise relative to before the pandemic. Discussion: The findings have important implications for providing greater monitoring and support for eating disorder patients during the COVID-19 pandemic. In addition, the mental and physical health impacts of changed eating and exercise behaviors in the general population need to be acknowledged and monitored for potential long-term consequences.

Publication Type

Journal article.

<235>

Accession Number

20203332459

Author

Matheson, B. E.; Bohon, C.; Lock, J.

Title

Family-based treatment via videoconference: clinical recommendations for treatment providers during COVID-19 and beyond.

Source

International Journal of Eating Disorders; 2020. 53(7):1142-1154. many ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The necessity to employ distance-based methods to deliver on-going eating disorder care due to the novel coronavirus (COVID-19) pandemic represents a dramatic and urgent shift in treatment delivery. Yet, TeleHealth treatments for eating disorders in youth have not been adequately researched or rigorously tested. Based on clinical experience within our clinic and research programs, we aim to highlight the common challenges clinicians may encounter in providing family-based treatment (FBT) via TeleHealth for children and adolescents with anorexia nervosa and bulimia nervosa. We also discuss possible solutions and offer practical considerations for providers delivering FBT in this format. Additional research in TeleHealth treatment for eating disorders in youth may lead to improved access, efficiency, and effectiveness of FBT delivered via videoconferencing.

Publication Type

Journal article.

<236>

Accession Number

20203332458

Author

Waller, G.; Pugh, M.; Mulkens, S.; Moore, E.; Mountford, V. A.; Carter, J.; Wicksteed, A.; Maharaj, A.; Wade, T. D.; Wisniewski, L.; Farrell, N. R.; Raykos, B.; Jorge, S.; Evans, J.; Thomas, J. J.; Osenk, I.; Paddo, C.; Bohrer, B.; Anderson, K.; Turn, H.; Hildebrandt, T.; Xanidis, N.; Smit, V.

Title

Cognitive-behavioral therapy in the time of coronavirus: clinician tips for working with eating disorders via telehealth when face-to-face meetings are not possible.

Source

International Journal of Eating Disorders; 2020. 53(7):1132-1141. 24 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Objective: The coronavirus pandemic has led to a dramatically different way of working for many therapists working with eating disorders, where telehealth has suddenly become the norm. However, many clinicians feel ill equipped to deliver therapy via telehealth, while adhering to evidence-based interventions. This article draws together clinician experiences of the issues that should be attended to, and how to address them within a telehealth framework. Method: Seventy clinical colleagues of the authors were emailed and invited to share their concerns online about how to deliver cognitive-behavioral therapy for eating disorders (CBT-ED) via telehealth, and how to adapt clinical practice to deal with the problems that they and others had encountered. After 96 hr, all the suggestions that had been shared by 22 clinicians were collated to provide timely advice for other clinicians. Results: A range of themes emerged from the online discussion. A large proportion were general clinical and practical domains (patient and therapist concerns about telehealth; technical issues in implementing telehealth; changes in the environment), but there were also specific considerations and clinical recommendations about the delivery of CBT-ED methods. Discussion: Through interaction and sharing of ideas, clinicians across the world produced a substantial number of recommendations about how to use telehealth to work with people with eating disorders while remaining on track with evidence-based practice. These are shared to assist clinicians over the period of changed practice.

Publication Type

Journal article.

<237>

Accession Number

20203336737

Author

Elhadi, M.; Msherghi, A.

Title

COVID-19 and civil war in Libya: the current situation.

Source

Pathogens and Global Health; 2020. 114(5):230-231. 6 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The aim of the article was to discuss the ongoing COVID-19 pandemic amidst the war in Libya. Libya still has an ongoing civil war despite the calls for a ceasefire to prevent a humanitarian crisis. Provincial forces are highly encouraged to come together to address the hazard presented by COVID-19 in Libya to save lives and prevent catastrophic events.

Publication Type

Journal article.

<238>

Accession Number

20203331724

Author

Musa, S. S.; Zhao Shi; Wang, M. H.; Habib, A. G.; Mustapha, U. T.; He DaiHai

Title

Estimation of exponential growth rate and basic reproduction number of the coronavirus disease 2019 (COVID-19) in Africa.

Source

Infectious Diseases of Poverty; 2020. 9(96):(16 July 2020). 24 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Since the first case of coronavirus disease 2019 (COVID-19) in Africa was detected on February 14, 2020, the cumulative confirmations reached 15 207 including 831 deaths by April 13, 2020. Africa has been described as one of the most vulnerable region with the COVID-19 infection during the initial phase of the outbreak, due to the fact that Africa is a great commercial partner of China and some other EU and American countries. Which result in large volume of travels by traders to the region more frequently and causing African countries face even bigger health threat during the COVID-19 pandemic. Furthermore, the fact that the control and management of COVID-19 pandemic rely heavily on a country's health care system, and on average Africa has poor health care system which make it more vulnerable indicating a need for timely intervention to curtail the spread. In this paper, we estimate the exponential growth rate and basic reproduction number (R0) of COVID-19 in Africa to show the potential of the virus to spread, and reveal the importance of sustaining stringent health measures to control the disease in Africa. Methods: We analyzed the initial phase of the epidemic of COVID-19 in Africa between 1 March and 13 April 2020, by using the simple exponential growth model. We examined the publicly available materials published by the WHO situation report to show the potential of COVID-19 to spread without sustaining strict health measures. The Poisson likelihood framework is adopted for data fitting and parameter estimation. We modelled the distribution of COVID-19 generation interval (GI) as Gamma distributions with a mean of 4.7 days and standard deviation of 2.9 days estimated from previous work, and compute the basic reproduction number. Results: We estimated the exponential growth rate as 0.22 per day (95% CI: 0.20-0.24), and the basic reproduction number, R0, as 2.37 (95% CI: 2.22-2.51) based on the assumption that the exponential growth starting from 1 March 2020. With an R0 at 2.37, we quantified the instantaneous transmissibility of the outbreak by the time-varying effective reproductive number to show the potential of COVID-19 to spread across African region. Conclusions: The initial growth of COVID-19 cases in Africa was rapid and showed large variations across countries. Our estimates should be useful in preparedness planning against further spread of the COVID-19 epidemic in Africa.

Publication Type

Journal article.

<239>

Accession Number

20203312414

Author

Puerto, C. B. del; Baptista, M. L. C.

Title

Necropolis in front of Covid-19 pandemic: tourist scenario. (Edição Especial: COVID-19.) [Portuguese]

Source

Rosa dos Ventos; 2020. 12(3)10 ref.

Publisher

Universidade de Caxias do Sul

Location of Publisher

Caxias do Sul

Country of Publication

Brazil

Abstract

This article brings the historical context of the cemeteries and their use in the tourist activity, as well as changes due to the Covid-19 pandemic. This text seeks to highlight the challenges of perceiving the cemetery and tourism carried out in necropolises, in view of the calamity in world health. A contextualization is made about the cemeteries and their peculiarities allying with the tourist practice. The test methodology is in line with the discussions made at Amorcomtur! Study Group on Communication, Tourism, Lovingness and Autopoiesis, in the Postgraduate Program in Tourism and Hospitality [UCS], its theoretical assumptions and methodological proposals. It associates research already carried out on the theme, with contemporary discussions, which signal for the transformations of the tourist ecosystem connected to cemeteries. It is marked by the exponential growth of burials and changes in the environment, also from the point of view of tourism. It is understood that tourism in necropolises also needs to be rethought for possible new post-pandemic configurations.

Publication Type

Journal article.

<240>

Accession Number

20203343021

Author

Fontanella, M. M.; Maria, L. de; Zanin, L.; Saraceno, G.; Bergamo, L. T. di; Servadei, F.; Bipin Chaurasia; Olivi, A.; Vajkoczy, P.; Schaller, K.; Cappabianca, P.; Doglietto, F.

Title

Neurosurgical practice during the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic: a worldwide survey.

Source

World Neurosurgery; 2020. 139:e818-e826. 39 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Background and Objective: The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic has consistently changed medical practice throughout specialties, regardless of their contribution in facing the disease itself. We surveyed neurosurgeons worldwide to investigate the situation they are experiencing. Methods: A 17-question, web-based survey was administered to neurosurgeons worldwide through the World Federation of Neurosurgical Societies and the Neurosurgery Cocktail from March 28 to April 5, 2020, by web link or e-mail invitation. Questions were divided into 3 subgroups: general information, health system organization, and institutional plans for the SARS-CoV-2 outbreak. Collected data were initially elaborated using SurveyMonkey software. Country-specific data were extracted from the World Health Organization website. Statistical analysis was performed using R, version 3.6.3. Results: Of the 446 respondents, most were from Italy (20%), India (19%), and Pakistan (5%). Surgical activity was significantly reduced in most centers

(79%) and dedicated in-hospital routes were created for patients with SARS-CoV-2 (58%). Patient screening was performed only when there were symptoms (57%) and not routinely before surgery (18%). The preferred methods included a nasopharyngeal swab and chest radiograph. Health professionals were rarely screened (20%) and sometimes, even if SARS-CoV-2 positive, were asked to work if asymptomatic (26%). Surgical planning was changed in most institutions (92%), whereas indications were modified for nonurgent procedures (59%) and remained unchanged for subarachnoid hemorrhages (85%). Conclusions: Most neurosurgeons worldwide reported work reorganization and practices that respond to current international guidelines. Differences in practice might be related to the perception of the pandemic and significant differences in the health systems. Sharing data and experiences will be of paramount importance to address the present moment and challenges in the near future.

Publication Type

Journal article.

<241>

Accession Number

20203341135

Author

Khalilov, R.; Hosainzadegan, M.; Eftekhari, A.; Hasanzadeh, A.; Zadegan, H. H.; Nasibova, A.

Title

Necessity of different countries to deal with similar phenomena of COVID-19 Coronavirus.

Source

Advances in Biology & Earth Sciences; 2019. 4(1):5-11. 4 ref.

Publisher

Jomard Publishing

Location of Publisher

Baku

Country of Publication

Azerbaijan

Abstract

The new outbreak of the Covid-19 virus from Wuhan, China, has shown to the world that a nanometer-sized biological particle can disrupt the entire health related and subsequently the economy, and even political relationships and infrastructures of countries. It may seem optimistic that such phenomenons should not magnify to the public because of intense fear and horror that creates, but on the other hand, illness mortality is almost as widespread as a war of attrition in all countries. In addition, its high mortality rate, even among physicians and nurses, suggests that a strange biological event with high genetic diversity has occurred at an unbelievably high transmission rate (Chen et al., 2020; Guo et al., 2020; Ji et al., 2020; Zhou et al., 2020). What was most clear to us at the time was that there was no consensus and scientific policy on the agreement in dealing with the virus. Different countries initially ordered a local and regional quarantine or even the whole country by hasty decisions, vice versa, in some countries; the decision was to permit the virus freely contaminate the sensitive humans until to be controlled by herd immunity. Therefore, different countries have adopted their own approaches to this issue. However, what to do? Alternatively, was it possible to make good scientific decisions based on the development of diagnostic and laboratory infrastructures, especially in the field of biological weapons or similar events? Perhaps the question should be asked this way. Are there well-developed laboratory, therapeutic, and hygienic infrastructures for such emerging biological phenomena in all countries? Given that, a few months after the outbreak and despite previous knowledge of the coronavirus family by scientific societies, its diagnostic kits and other rapid diagnostics are still deficient. Certainly, officials and decision makers in the health ministries should plan for a more scientific and practical approaches in dealing with similar issues in the future. In this regard, it should be noted that there is a need for reference laboratories with all the modern diagnostic facilities and techniques.

Publication Type

Journal article.

<242>

Accession Number

20203340408

Author

Gautret, P.; Lagier, J. C.; Parola, P.; Hoang, van T.; Meddeb, L.; Mailhe, M.; Doudier, B.; Courjon, J.; Giordanengo, V.; Vieira, V. E.; Tissot Dupont, H.; Honore, S.; Colson, P.; Chabriere, E.; Scola, B. la; Rolain, J. M.; Brouqui, P.; Raoult, D.

Title

Hydroxychloroquine and azithromycin as a treatment of COVID-19: results of an open-label non-randomized clinical trial. (Special Issue: COVID-19 therapeutic and prevention.)

Source

International Journal of Antimicrobial Agents; 2020. 56(1)23 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Background: Chloroquine and hydroxychloroquine have been found to be efficient on SARS-CoV-2, and reported to be efficient in Chinese COV-19 patients. We evaluate the effect of hydroxychloroquine on respiratory viral loads. Patients and methods: French Confirmed COVID-19 patients were included in a single arm protocol from early March to March 16th, to receive 600 mg of hydroxychloroquine daily and their viral load in nasopharyngeal swabs was tested daily in a hospital setting. Depending on their clinical presentation, azithromycin was added to the treatment. Untreated patients from another center and cases refusing the protocol were included as negative controls. Presence and absence of virus at Day6-post inclusion was considered the end point. Results: Six patients were asymptomatic, 22 had upper respiratory tract infection symptoms and eight had lower respiratory tract infection symptoms. Twenty cases were treated in this study and showed a significant reduction of the viral carriage at D6-post inclusion compared to controls, and much lower average carrying duration than reported in the litterature for untreated patients. Azithromycin added to hydroxychloroquine was significantly more efficient for virus elimination. Conclusion: Despite its small sample size, our survey shows that hydroxychloroquine treatment is significantly associated with viral load reduction/disappearance in COVID-19 patients and its effect is reinforced by azithromycin.

Publication Type

Journal article.

<243>

Accession Number

20203340984

Author

Roberton, T.; Carter, E. D.; Chou, V. B.; Stegmuller AngelaR; Jackson, B. D.; Tam, Y.; Sawadogo-Lewis, T.; Walker, N.

Title

Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study.

Source

Lancet Global Health; 2020. 8(7):e901-e908. 30 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: While the COVID-19 pandemic will increase mortality due to the virus, it is also likely to increase mortality indirectly. In this study, we estimate the additional maternal and under-5 child deaths resulting from the potential disruption of health systems and decreased access to food. Methods: We modelled three scenarios in which the coverage of essential maternal and child health interventions is reduced by 9.8-51.9% and the prevalence of wasting is increased by 10-50%. Although our scenarios are hypothetical, we sought to reflect real-world possibilities, given emerging reports of the supply-side and demand-side effects of the pandemic. We used the Lives Saved Tool to estimate the additional maternal and under-5 child deaths under each scenario, in 118 low-income and middle-income countries. We estimated additional deaths for a single month and extrapolated for 3 months, 6 months, and 12 months. Findings: Our least severe scenario (coverage reductions of 9.8-18.5% and wasting increase of 10%) over 6 months would result in 253 500 additional child deaths and 12 200 additional maternal deaths. Our most severe scenario (coverage reductions of 39.3-51.9% and wasting increase of 50%) over 6 months would result in 1 157 000 additional child deaths and 56 700 additional maternal deaths. These additional deaths would represent an increase of 9.8-44.7% in under-5 child deaths per month, and an 8.3-38.6% increase in maternal deaths per month, across the 118 countries. Across our three scenarios, the reduced coverage of four childbirth interventions (parenteral administration of uterotonics, antibiotics, and anticonvulsants, and clean birth environments) would account for approximately 60% of additional maternal deaths. The increase in wasting prevalence would account for 18-23% of additional child deaths and reduced coverage of antibiotics for pneumonia and neonatal sepsis and of oral rehydration solution for diarrhoea would together account for around 41% of additional child deaths. Interpretation: Our estimates are based on tentative assumptions and represent a wide range of outcomes.

Nonetheless, they show that, if routine health care is disrupted and access to food is decreased (as a result of unavoidable shocks, health system collapse, or intentional choices made in responding to the pandemic), the increase in child and maternal deaths will be devastating. We hope these numbers add context as policy makers establish guidelines and allocate resources in the days and months to come.

Publication Type

Journal article.

<244>

Accession Number

20203340936

Author

Shen MingWang; Peng ZhiHang; Guo YuMing; Rong LiBin; Li Yan; Xiao YanNi; Zhuang GuiHua; Zhang Lei

Title

Assessing the effects of metropolitan-wide quarantine on the spread of COVID-19 in public space and households.

Source

International Journal of Infectious Diseases; 2020. 96:503-505. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Hubei province in China has completed cycle of quarantine-resumption in 23rd Janauary and 8th April 2020, providing a unique opportunity as for now to assess its intervention impact and the pattern of SARS-COV-2 transmission during the quarantine period. In this study, we evaluate the impact of the metropolitan-wide quarantine on the trend and transmission route of the COVID-19 epidemic in Hubei, China. The intervention

reduces more than 70% of new infections in both households and the public space, as well as the deaths caused by COVID-19 pneumonia. Household transmission is the dominant route of disease spread regardless of quarantine. This will provide important evidence and scientific insights to other worldwide countries that are currently under quarantine.

Publication Type

Journal article.

<245>

Accession Number

20203340915

Author

Rainisch, G.; Undurraga, E. A.; Chowell, G.

Title

A dynamic modeling tool for estimating healthcare demand from the COVID19 epidemic and evaluating population-wide interventions.

Source

International Journal of Infectious Diseases; 2020. 96:376-383. 39 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: Public health officials need tools to assist in anticipating the healthcare resources required to confront the SARS-COV-2 pandemic. We constructed a modeling tool to aid active public health officials to estimate healthcare demand from the pandemic in their jurisdictions and to evaluate the potential impact of population-wide social-distancing interventions. Methods: The tool uses an SEIR compartmental model to

project the pandemic's local spread. Users input case counts, healthcare resources, and select intervention strategies to evaluate. Outputs include the number of infections and deaths with and without intervention, and the demand for hospital and critical care beds and ventilators relative to existing capacity. We illustrate the tool using data from three regions of Chile. Results: Our scenarios indicate a surge in COVID-19 patients could overwhelm Chilean hospitals by June, peaking in July or August at six to 50 times the current supply of beds and ventilators. A lockdown strategy or combination of case isolation, home quarantine, social distancing of individuals >70 years, and telework interventions may keep treatment demand below capacity. Conclusions:Aggressive interventions can avert substantial morbidity and mortality from COVID-19. Our tool permits rapid evaluation of locally-applicable policy scenarios and updating of results as new data become available.

Publication Type

Journal article.

<246>

Accession Number

20203307356

Author

Srimathi, R.; Raja, M. K. M. M.; Kathiravan, M. K.

Title

In silico screening of traditional herbal medicine derived chemical constituents for possible potential inhibition against SARS-CoV-2.

Source

Journal of Natural Remedies; 2020. 20(2):79-88. 24 ref.

Publisher

Informatics Publishing Limited

Location of Publisher

Bangalore

Country of Publication

India

Abstract

The outbreak of SARS-CoV-2 has initiated an exploration to find an efficient anti-viral agent. From the previous scientific studies of traditional herbal medicines like garlic, ginger, onion, turmeric, chilli, cinchona and pepper, 131 chemical constituents were identified. The filtered search of drug-like-molecules searched using Datawarrior resulted in 13 active constituents (apoquinine, catechin, cinchonidine, cinchonine, cuprediene, epicatechin, epiprocurcumenol, epiquinine, procurcumenol, quinidine, quinine, zedoaronediol, procurcumadiol) showed no mutagenic, carcinogenic or toxic properties. In silico study of these 13 compounds with the best binding affinity towards SARS-CoV-2 protease was carried out. The ligands were subjected to molecular docking using Autodock Vina. Epicatechin and apoquine showed highest binding affinity of -7 and -7.5kcal/mol while catechin and epicatechin showed four hydrogen bond interactions. It is interesting and worth noticing the interaction of GLU166 residue with the ligand in most of the constituents. The effectiveness of catechin and epicatechin as an antiviral agent could be tested against COVID-19.

Publication Type

Journal article.

<247>

Accession Number

20203301698

Author

Zhou PengCheng; Huang ZeBing; Xiao YinZong; Huang Xun; Fan XueGong

Title

Protecting Chinese healthcare workers while combating the 2019 novel coronavirus.

Source

Infection Control and Hospital Epidemiology; 2020. 41(6):745-746. 6 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

The aim of the article was to discuss preventive measures on how to protect the frontline health care workers in China during the ongoing COVID-19 pandemic.

Publication Type

Correspondence.

<248>

Accession Number

20203339194

Author

Hashem, A. M.; Alghamdi, B. S.; Algaissi, A. A.; Alshehri, F. S.; Abdullah Bukhari; Alfaleh, M. A.; Memish, Z. A.

Title

Therapeutic use of chloroquine and hydroxychloroquine in COVID-19 and other viral infections: a narrative review.

Source

Travel Medicine and Infectious Disease; 2020. 35171 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The rapidly spreading Coronavirus Disease (COVID-19) pandemic, caused by the severe acute respiratory syndrome coronavirus (SARS-CoV-2), represents an unprecedented serious challenge to the global public health community. The extremely rapid international spread of the disease with significant morbidity and

mortality made finding possible therapeutic interventions a global priority. While approved specific antiviral drugs against SARS-CoV-2 are still lacking, a large number of existing drugs are being explored as a possible treatment for COVID-19 infected patients. Recent publications have re-examined the use of Chloroquine (CQ) and/or Hydroxychloroquine (HCQ) as a potential therapeutic option for these patients. In an attempt to explore the evidence that supports their use in COVID-19 patients, we comprehensively reviewed the previous studies which used CQ or HCQ as an antiviral treatment. Both CQ and HCQ demonstrated promising in vitro results, however, such data have not yet been translated into meaningful in vivo studies. While few clinical trials have suggested some beneficial effects of CQ and HCQ in COVID-19 patients, most of the reported data are still preliminary. Given the current uncertainty, it is worth being mindful of the potential risks and strictly rationalise the use of these drugs in COVID-19 patients until further high quality randomized clinical trials are available to clarify their role in the treatment or prevention of COVID-19.

Publication Type

Journal article.

<249>

Accession Number

20203339193

Author

Olsen, M.; Campos, M.; Lohning, A.; Jones, P.; Legget, J.; Bannach-Brown, A.; McKirdy, S.; Alghafri, R.; Tajouri, L.

Title

Mobile phones represent a pathway for microbial transmission: a scoping review.

Source

Travel Medicine and Infectious Disease; 2020. 3582 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Mobile phones have become an integral part of modern society. As possible breeding grounds for microbial organisms, these constitute a potential global public health risk for microbial transmission. Background: Scoping review of literature examining microbial's presence on mobile phones in both health care (HC) and community settings. Methods: A search (PubMed&GoogleScholar) was conducted from January 2005-December 2019 to identify English language studies. Studies were included if samples from mobile phones were tested for bacteria, fungi, and/or viruses; and if the sampling was carried out in any HC setting, and/or within the general community. Any other studies exploring mobile phones that did not identify specific microorganisms were excluded. Results: A total of 56 studies were included (from 24 countries). Most studies identified the presence of bacteria (54/56), while 16 studies reported the presence of fungi. One study focused solely on RNA viruses. Staphylococcus aureus, and Coagulase-Negative Staphylococci were the most numerous identified organisms present on mobile phones. These two species and Escherichia coli were present in over a third of studies both in HC and community samples. Methicillin-resistant S. aureus, Acinetobacter sp., and Bacillus sp. were present in over a third of the studies in HC settings. Conclusions: While this scoping review of literature regarding microbial identification on mobile phones in HC and community settings did not directly address the issue of SARS-CoV-2 responsible for COVID-19, this work exposes the possible role of mobile phones as a 'Trojan horse' contributing to the transmission of microbial infections in epidemics and pandemics.

Publication Type

Journal article.

<250>

Accession Number

20203339185

Author

Millett, G. A.; Jones, A. T.; Benkeser, D.; Baral, S.; Mercer, L.; Beyrer, C.; Honermann, B.; Lankiewicz, E.; Mena, L.; Crowley, J. S.; Sherwood, J.; Sullivan, P. S.

Title

Assessing differential impacts of COVID-19 on black communities.

Source

Annals of Epidemiology; 2020. 47:37-44.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Purpose: Given incomplete data reporting by race, we used data on COVID-19 cases and deaths in U.S. counties to describe racial disparities in COVID-19 disease and death and associated determinants. Methods: Using publicly available data (accessed April 13, 2020), predictors of COVID-19 cases and deaths were compared between disproportionately (>=13%) black and all other (<13% black) counties. Rate ratios were calculated, and population attributable fractions were estimated using COVID-19 cases and deaths via zero-inflated negative binomial regression model. National maps with county-level data and an interactive scatterplot of COVID-19 cases were generated. Results: Nearly 90% of disproportionately black counties (656/677) reported a case and 49% (330/677) reported a death versus 81% (1987/2465) and 28% (684/2465), respectively, for all other counties. Counties with higher proportions of black people have higher prevalence of comorbidities and greater air pollution. Counties with higher proportions of black residents had more COVID-19 diagnoses (Rate Ratio (RR): 1.24, 95% confidence interval: 1.17-1.33) and deaths (RR: 1.18, 95% confidence interval: 1.00-1.40), after adjusting for county-level characteristics such as age, poverty, comorbidities, and epidemic duration. COVID-19 deaths were higher in disproportionally black rural and small metro counties. The population attributable fraction of COVID-19 diagnosis due to lack of health insurance was 3.3% for counties with less than 13% black residents and 4.2% for counties with greater than or equal to 13% black residents. Conclusions: Nearly 20% of U.S. counties are disproportionately black, and they accounted for 52% of COVID-19 diagnoses and 58% of COVID-19 deaths nationally. County-level comparisons can both inform COVID-19 responses and identify epidemic hot spots. Social conditions, structural racism, and other factors elevate risk for COVID-19 diagnoses and deaths in black communities.

Publication Type

Journal article.

Accession Number

20203336003

Author

Akoumianakis, I.; Filippatos, T.

Title

The renin-angiotensin-aldosterone system as a link between obesity and coronavirus disease 2019 severity.

Source

Obesity Reviews; 2020. 21(9)99 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Coronavirus disease 2019 (COVID-19), caused by the severe acute respiratory distress coronavirus 2 (SARS-CoV2), is a rapidly evolving pandemic challenging the world and posing unprecedented public health issues. Current data show that COVID-19 is associated with increased disease severity in individuals with obesity. Obesity is usually associated with dysregulated renin-angiotensin-aldosterone (RAAS) axis. RAAS has also been implicated in acute lung injury as well as myocardial injury and has thus attracted interest as a potential regulator of COVID-19 severity. Whilst research all over the world is still struggling to provide a detailed characterization of the biology of SARS-CoV2 and its associated disease profile, it has become evident that SARS-CoV2 uses the membrane-bound form of angiotensin-converting enzyme 2 (ACE2) as a receptor for cell internalization. ACE2 is a protective component of the RAAS axis and is downregulated after SARS-CoV2 infection. The RAAS axis could thus be a link between obesity and COVID-19 severity; therefore, more accurate understanding of the underlying mechanisms would be needed with the hope of proposing efficient therapeutic interventions.

Publication Type

Journal article.

<252>

Accession Number

20203336001

Author

Rychter, A. M.; Zawada, A.; Ratajczak, A. E.; Dobrowolska, A.; Krela-Kazmierczak, I.

Title

Should patients with obesity be more afraid of COVID-19?

Source

Obesity Reviews; 2020. 21(9)96 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

COVID-19 crisis has lasted since the late 2019 to the present day. The severity of the disease is positively correlated with several factors, such as age and coexisting diseases. Furthermore, obesity is increasingly considered as a yet another risk factor, particularly, because it has been observed that people suffering from excessive body weight may experience a more severe course of COVID-19 infection. On the basis of current research, in our nonsystematic review, we have investigated the extent to which obesity can affect the SARS-CoV-2 course and identify the potential mechanisms of the disease. We have also described the role of proper nutrition, physical activity and other aspects relevant to the management of obesity.

Publication Type

Journal article.

<253>

Accession Number

20203337267

Author

Chen, J.; Kelley, W. J.; Goldstein, D. R.

Title

Role of aging and the immune response to respiratory viral infections: potential implications for COVID-19.

Source

Journal of Immunology; 2020. 205(2):313-320. 122 ref.

Publisher

American Association of Immunologists

Location of Publisher

Bethesda

Country of Publication

USA

Abstract

Aging impairs immunity to promote diseases, especially respiratory viral infections. The current COVID-19 pandemic, resulting from SARS-CoV-2, induces acute pneumonia, a phenotype that is alarmingly increased with aging. In this article, we review findings of how aging alters immunity to respiratory viral infections to identify age-impacted pathways common to several viral pathogens, permitting us to speculate about potential mechanisms of age-enhanced mortality to COVID-19. Aging generally leads to exaggerated innate immunity, particularly in the form of elevated neutrophil accumulation across murine and large animal studies of influenza infection. COVID-19 patients who succumb exhibit a 2-fold increase in neutrophilia, suggesting that exaggerated innate immunity contributes to age-enhanced mortality to SARS-CoV-2 infection. Further investigation in relevant experimental models will elucidate the mechanisms by which aging impacts respiratory viral infections, including SARS-CoV-2. Such investigation could identify therapies to reduce the suffering of the population at large, but especially among older people, infected with respiratory viruses.

Publication Type

Journal article.

<254>

Accession Number

20203337243

Author

Zhai XiaoFeng; Sun JiuMeng; Yan ZiQing; Zhang Jie; Zhao Jin; Zhao ZongZheng; Gao Qi; He WanTing; Veit, M.; Su Shuo

Title

Comparison of severe acute respiratory syndrome coronavirus 2 spike protein binding to ACE2 receptors from human, pets, farm animals, and putative intermediate hosts.

Source

Journal of Virology; 2020. 94(15)43 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

The emergence of a novel coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), resulted in a pandemic. Here, we used X-ray structures of human ACE2 bound to the receptor-binding domain (RBD) of the spike protein (S) from SARS-CoV-2 to predict its binding to ACE2 proteins from different animals, including pets, farm animals, and putative intermediate hosts of SARS-CoV-2. Comparing the interaction sites of ACE2 proteins known to serve or not serve as receptors allows the definition of residues important for binding. From the 20 amino acids in ACE2 that contact S, up to 7 can be replaced and ACE2 can still function as the SARS-CoV-2 receptor. These variable amino acids are clustered at certain positions, mostly at the periphery of the binding site, while changes of the invariable residues prevent S binding or infection of the respective animal. Some ACE2 proteins even tolerate the loss or acquisition of N-glycosylation sites located near the S interface. Of note, pigs and dogs, which are not infected or are not effectively infected and have only a few changes in the binding site, exhibit relatively low levels of ACE2 in the respiratory tract. Comparison of the RBD of S of SARS-CoV-2 with that from bat coronavirus strain RaTG13 (Bat-CoV-RaTG13) and pangolin coronavirus (Pangolin-CoV) strain hCoV-19/pangolin/Guangdong/1/2019 revealed that the latter contains only one substitution, whereas Bat-CoV-RaTG13 exhibits five. However, ACE2 of pangolin exhibits seven changes relative to human ACE2, and a similar number of substitutions is present in ACE2 of bats, raccoon dogs, and civets, suggesting that SARS-CoV-2 may not be especially adapted to ACE2 of any of its

putative intermediate hosts. These analyses provide new insight into the receptor usage and animal source/origin of SARS-CoV-2.

Publication Type

Journal article.

<255>

Accession Number

20203335373

Author

Davanzo, R.; Moro, G.; Sandri, F.; Agosti, M.; Moretti, C.; Mosca, F.

Title

Breastfeeding and coronavirus disease-2019: ad interim indications of the Italian society of neonatology endorsed by the Union of European Neonatal & Perinatal Societies.

Source

Maternal and Child Nutrition; 2020. 16(3)many ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The recent COVID-19 pandemic has spread to Italy with heavy consequences on public health and economics. Besides the possible consequences of COVID-19 infection on a pregnant woman and the fetus, a major concern is related to the potential effect on neonatal outcome, the appropriate management of the mother-newborn dyad, and finally the compatibility of maternal COVID-19 infection with breastfeeding. The Italian Society on Neonatology (SIN) after reviewing the limited scientific knowledge on the compatibility of breastfeeding in the COVID-19 mother and the available statements from Health Care Organizations has

issued the following indications that have been endorsed by the Union of European Neonatal & Perinatal Societies (UENPS). If a mother previously identified as COVID-19 positive or under investigation for COVID-19 is asymptomatic or paucisymptomatic at delivery, rooming-in is feasible, and direct breastfeeding is advisable, under strict measures of infection control. On the contrary, when a mother with COVID-19 is too sick to care for the newborn, the neonate will be managed separately and fed fresh expressed breast milk, with no need to pasteurize it, as human milk is not believed to be a vehicle of COVID-19. We recognize that this guidance might be subject to change in the future when further knowledge will be acquired about the COVID-19 pandemic, the perinatal transmission of SARS-CoV-2, and clinical characteristics of cases of neonatal COVID-19.

Publication Type

Journal article.

<256>

Accession Number

20203335340

Author

King, M. T.

Title

Say no to bat fried rice: changing the narrative of coronavirus and Chinese food.

Source

Food and Foodways; 2020. 28(3):237-249. 32 ref.

Publisher

Routledge

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

The fear of Chinese food in the United States has risen with the advent of COVID-19, amidst widespread news reports pinpointing a wildlife wet market in Wuhan, China as the origin site of the novel coronavirus. Although scientific evidence for the exact pathway of zoonotic transmission is not yet conclusive, racist, anti-Chinese memes were quick to circulate, including a T-shirt design posted on social media by an art director at Lululemon, which featured an image of "bat fried rice" with the words "No Thank You" in chopstick font on the sleeves. It is important to address the facts of wildlife trade and consumption in China, but it is equally crucial to fight back against racist characterizations of Chinese food as "bat fried rice" with a different kind of Instagrammable image. I have taught an undergraduate seminar on the cultural history of Chinese food at the University of North Carolina at Chapel Hill for the past eight years, and this year, one of my students shared a photograph of a Chinese family celebrating the New Year in one of her assignments. This image distilled everything I associate with Chinese food-the joy of gathering with family-and stands as a powerful rebuke to the narrative of fear and disgust, replacing it instead with a vision of Chinese food as familiar source of comfort.

Publication Type

Journal article.

<257>

Accession Number

20203332263

Author

Lal, S.; Gossum, A. van; Joly, F.; Bozzetti, F.; Cuerda, C.; Lamprecht, G.; Mundi, M. S.; Staun, M.; Szczepanek, K.; Wanten, G.; Wheatley, C.; Pironi, L.

Title

Considerations for the management of home parenteral nutrition during the SARS-CoV-2 pandemic: a position paper from the home artificial nutrition and chronic intestinal failure special interest group of ESPEN.

Source

Clinical Nutrition; 2020. 39(7):1988-1991. 13 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The management of patients with chronic intestinal failure requiring home parenteral nutrition has been and will continue to be impaired during the SARS-CoV-2 pandemic. Multidisciplinary intestinal failure teams may have to adapt their clinical approaches to home care, outpatient care as well as hospital admission and discharge in order to keep this vulnerable group of patients as safe and well as possible during the unprecedented challenges that countries are facing during the pandemic. Equally, it is important that expert advice from intestinal failure teams is available when home parenteral nutrition (HPN)-dependent patients require admission with SARS-CoV-2 infection. The Home Artificial Nutrition & Chronic Intestinal Failure Special Interest Group of the European Society for Clinical Nutrition and Metabolism (ESPEN) has developed a position paper to outline areas for intestinal failure teams to consider when managing patients with chronic intestinal failure during the SARS-CoV-2 pandemic.

Publication Type

Journal article.

<258>

Accession Number

20203335339

Author

Abiral, B.; Atalan-Helicke, N.

Title

Trusting food supply chains during the pandemic: reflections from Turkey and the U.S.

Source

Food and Foodways; 2020. 28(3):226-236. 15 ref.

Publisher

Routledge

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

We share in this reflection a selection of our own daily experiences and observations from Turkey and the U.S. of how Covid-19 has affected people's relationship to shopping for food. We aim to show the multiple shifts that occurred in the mechanisms of trust that used to define how food is procured. We illustrate how disruptions in conventional and alternative food supply chains in both countries have had different effects on consumers. Our experiences, when juxtaposed, suggest that even in the case of abundance of food supply, shorter food supply chains prove to be more resilient against disruptions during the pandemic.

Publication Type

Journal article.

<259>

Accession Number

20203335338

Author

Montefrio, M. J. F.

Title

Interrogating the "productive" home gardener in a time of pandemic lockdown in the Philippines.

Source

Food and Foodways; 2020. 28(3):216-225. 15 ref.

Publisher

Routledge

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

Interest in home gardening has burgeoned since governments around the world imposed lockdowns to suppress the spread of SARS-CoV-2. This essay reflects on the growth of home gardens in the locked-down Philippines by analyzing discourses in two home gardening interest groups in Facebook. A particularly salient discourse revolves around the notion of being a "productive" home gardener in a time of pandemic. While the "productive" home gardener discourse appears to be benign and even ideal, overemphasizing it disregards the nuances of class dynamics in home gardening. It also risks idealizing the role of the individual gardener as the solution to the crisis, thereby downplaying the importance of addressing broader structural issues in crisis management and food provisioning. In this essay, the author argues that home gardeners should move beyond the productivity discourse and instead focus on growing communities that are committed to inclusivity, while also acknowledging and supporting other initiatives that target structural issues.

Publication Type

Journal article.

<260>

Accession Number

20203332243

Author

Pietrobelli, A.; Pecoraro, L.; Ferruzzi, A.; Heo MoonSeong; Faith, M.; Zoller, T.; Antoniazzi, F.; Piacentini, G.; Fearnbach, S. N.; Heymsfield, S. B.

Title

Effects of COVID-19 lockdown on lifestyle behaviors in children with obesity living in Verona, Italy: a longitudinal study.

Source

Obesity; 2020. 28(8):1382-1385. 7 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Objective: The aim of this study was to test the hypothesis that youths with obesity, when removed from structured school activities and confined to their homes during the coronavirus disease 2019 pandemic, will display unfavorable trends in lifestyle behaviors. Methods: The sample included 41 children and adolescents with obesity participating in a longitudinal observational study located in Verona, Italy. Lifestyle information including diet, activity, and sleep behaviors was collected at baseline and 3 weeks into the national lockdown during which home confinement was mandatory. Changes in outcomes over the two study time points were evaluated for significance using paired t tests. Results: There were no changes in reported vegetable intake; fruit intake increased (P=0.055) during the lockdown. By contrast, potato chip, red meat, and sugary drink intakes increased significantly during the lockdown (P value range, 0.005 to < 0.001). Time spent in sports activities decreased by 2.30 (SD 4.60) h/wk (P=0.003), and sleep time increased by 0.65 (SD 1.29) h/d (P=0.003). Screen time increased by 4.85 (SD 2.40) h/d (P < 0.001). Conclusions Recognizing these adverse collateral effects of the coronavirus disease 2019 pandemic lockdown is critical in avoiding depreciation of weight control efforts among youths afflicted with excess adiposity. Depending on duration, these untoward lockdown effects may have a lasting impact on a child's or adolescent's adult adiposity level.

Publication Type

Journal article.

<261>

Accession Number

20203332242

Author

Zbinden-Foncea, H.; Francaux, M.; Deldicque, L.; Hawley, J. A.

Title

Does high cardiorespiratory fitness confer some protection against proinflammatory responses after infection by SARS-CoV-2?

Source

Obesity; 2020. 28(8):1378-1381. 35 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) originated in China in late 2019 and has since spread rapidly to every continent in the world. This pandemic continues to cause widespread personal suffering, along with severe pressure on medical and health care providers. The symptoms of SARS-CoV-2 and the subsequent prognosis are worsened in individuals who have preexisting comorbidities prior to infection by the virus. Individuals with obesity or overweight, insulin resistance, and diabetes typically have chronic low-grade inflammation characterized by increased levels of several proinflammatory cytokines and the inflammasome; this state predisposes to greater risk for infection along with more adverse outcomes. Here, we consider whether a high level of cardiorespiratory fitness induced by prior exercise training may confer some innate immune protection against COVID-19 by attenuating the "cytokine storm syndrome" often experienced by "at risk" individuals.

Publication Type

Journal article.

<262>

Accession Number

20203332241

Author

Thomas, D. M.; Sturdivant, R.; Dhurandhar, N. V.; Debroy, S.; Clark, N.

Title

A primer on COVID-19 mathematical models.

Source

Obesity; 2020. 28(8):1375-1377. 10 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

The aim of the article was to present mathematical models that predict the incidence, prevalence, and epidemiology of COVID-19. Including the differential effects of COVID-19 on individuals with obesity into both projection and forecasting models by separating each compartment into normal weight and obesity populations will be key to understanding the population-wide impacts of COVID-19 on obesity. Obesity researchers can apply both types of models to evaluate prevention and treatment strategies for COVID-19 in persons with obesity.

Publication Type

Journal article.

<263>

Accession Number

20203294111

Author

Stern, L. D.; Waikar, S.

Title

Time to expand access and utilization of home dialysis: lessons from the COVID-19 pandemic.

Source

Mayo Clinic Proceedings; 2020. 95(7):1323-1324. 5 ref.

Publisher

Mayo Foundation for Medical Education and Research

Location of Publisher

Rochester

Country of Publication

USA

Abstract

In response to COVID-19, several strategies are being adopted by hemodialysis units, including cohorting of patients with suspected COVID-19 infections, or establishment of COVID-19-only dialysis units. Outside of major cities, this is unlikely to be easily adopted across the country. What, then, could be done to prevent COVID-19 or future pandemics from endangering hundreds of thousands of hemodialysis patients and staff? We believe that greater adoption of home dialysis technologies could avert such disasters in the future. Home dialysis therapies are uniquely poised to help some of the most vulnerable patients to be at lower risk for contracting COVID-19. Home dialysis modalities include peritoneal dialysis and home hemodialysis, and typically require 1 to 2 clinic visits per month, even via telemedicine, rather than in-person visits 3 times per week. Unfortunately, these modalities are significantly underutilized within the United States for a number of reasons, including lack of training and education on the part of nephrologists, lack of education for patients, and insufficient support in the home for treatments. In the United States, only 7.7% of prevalent dialysis patients in 2017 were treated with peritoneal dialysis, and fewer than 2% of prevalent patients were treated with home hemodialysis. Several countries have been much more effective in implementing home dialysis, with the highest utilizers being Hong Kong (82%), the Jalisco region of Mexico (51%), and New Zealand (30%).

Publication Type

Journal article.

<264>

Accession Number

20203339663

Author

Karalis, V.; Ismailos, G.; Karatza, E.

Title

Chloroquine dosage regimens in patients with COVID-19: safety risks and optimization using simulations. (Special Issue: Safety & Covid-19.)

Source

Safety Science; 2020. 12937 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Currently no specific medicinal treatment exists against the new SARS-CoV2 and chloroquine is widely used, since it can decrease the length of hospital stay and improve the evolution of the associated COVID-19 pneumonia. However, several safety concerns have been raised from chloroquine use due to the lack of essential information regarding its dosing. The aim of this study is to provide a critical appraisal of the safety information regarding chloroquine treatment and to apply simulation techniques to unveil relationships between the observed serious adverse events and overdosing, as well as to propose optimized dosage regimens. The dose related adverse events of chloroquine are unveiled and maximum tolerated doses and concentration levels are quoted. Among others, treatment with chloroquine can lead to severe adverse effects like prolongation of the QT interval and cardiomyopathy. In case of chloroquine overdosing, conditions similar to those produced by SARS-CoV2, such as pulmonary oedema with respiratory insufficiency and circulatory collapse, can be observed. Co-administration of chloroquine with other drugs for the treatment of COVID-19 patients, like azithromycin, can further increase the risk of QT prolongation and cardiomyopathy. For elder patients there is a high risk for toxicity and dose reduction should be made. This study unveils the risks of some widely used dosing regimens and binds the observed serious adverse events with dosing. Based on simulations, safer alternative dosage regimens are proposed and recommendations regarding chloroquine dosing are made.

Publication Type

Journal article.

<265>

Accession Number

20203339660

Author

Iacus, S. M.; Natale, F.; Santamaria, C.; Spyratos, S.; Vespe, M.

Title

Estimating and projecting air passenger traffic during the COVID-19 coronavirus outbreak and its socio-economic impact. (Special Issue: Safety & Covid-19.)

Source

Safety Science; 2020. 12912 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Due to the coronavirus global crisis, most countries have put in place restrictive measures in order to confine the pandemia and contain the number of casualties. Among the restrictive measures, air traffic suspension is certainly quite effective in reducing the mobility on the global scale in the short term but it also has high socio-economic impact on the long and short term. The main focus of this study is to collect and prepare data on air passengers traffic worldwide with the scope of analyze the impact of travel ban on the aviation sector. Based on historical data from January 2010 till October 2019, a forecasting model is implemented in order to set a reference baseline. Making use of airplane movements extracted from online flight tracking platforms and on-line booking systems, this study presents also a first assessment of recent changes in flight activity around the world as a result of the COVID-19 pandemic. To study the effects of air travel ban on aviation and in turn its socio-economic, several scenarios are constructed based on past pandemic crisis and the observed flight volumes. It turns out that, according to these hypothetical scenarios, in the first Quarter of 2020 the impact of aviation losses could have negatively reduced World GDP by 0.02% to 0.12% according to the observed data and, in the worst case scenarios, at the end of 2020 the loss could be as high as 1.41-1.67% and job losses may reach the value of 25-30 millions. Focusing on EU27, the GDP loss may amount to 1.66-1.98% by the end of 2020 and the number of job losses from 4.2 to 5 millions in the worst case scenarios. Some countries will be more affected than others in the short run and most European airlines companies will suffer

from the travel ban. We hope that these preliminary results may be of help for informed policy making design of exit strategies from this global crisis.

Publication Type

Journal article.

<266>

Accession Number

20203339659

Author

Haghani, M.; Bliemer, M. C. J.; Goerlandt, F.

Title

The scientific literature on coronaviruses, COVID-19 and its associated safety-related research dimensions: a scientometric analysis and scoping review. (Special Issue: Safety & Covid-19.)

Source

Safety Science; 2020. 129many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The COVID-19 global pandemic has generated an abundance of research quickly following the outbreak. Within only a few months, more than a thousand studies on this topic have already appeared in the scientific literature. In this short review, we analyse the bibliometric aspects of these studies on a macro level, as well as those addressing Coronaviruses in general. Furthermore, through a scoping analysis of the literature on COVID-19, we identify the main safety-related dimensions that these studies have thus far addressed. Our findings show that across various research domains, and apart from the medical and clinical aspects such as

the safety of vaccines and treatments, issues related to patient transport safety, occupational safety of healthcare professionals, biosafety of laboratories and facilities, social safety, food safety, and particularly mental/psychological health and domestic safety have thus far attracted most attention of the scientific community in relation to the COVID-19 pandemic. Our analysis also uncovers various potentially significant safety problems caused by this global health emergency which currently have attracted only limited scientific focus but may warrant more attention. These include matters such as cyber safety, economic safety, and supply-chain safety. These findings highlight why, from an academic research perspective, a holistic interdisciplinary approach and a collective scientific effort is required to help understand and mitigate the various safety impacts of this crisis whose implications reach far beyond the bio-medical risks. Such holistic safety-scientific understanding of the COVID-19 crisis can furthermore be instrumental to be better prepared for a future pandemic.

Publication Type

Journal article.

<267>

Accession Number

20203333471

Author

Tekle Airgecho Lobie; Tesfaye, D.; Abrham, A.

Title

A narrative synthesis on COVID-19 risks and concerns in developing countries: the case of Ethiopia.

Source

Journal of Public Health and Epidemiology; 2020. 12(2):86-97.

Publisher

Academic Journals

Location of Publisher

Lagos

Country of Publication

Nigeria

Abstract

In this review, we addressed risk factors for the spread of COVID-19 in the perspective of developing countries, and necessary measures to be undertaken to minimize or control its consequential crisis. Databases such as MEDLINE, PubMed, EMBASE, CINAHL, Web of Science, Scopus and websites of WHO, CDC, and ECDC were searched for relevant information and a narrative analysis approach was followed. As of April 10, 2020, there were a total of 1,674,967 cases and 101,483 deaths from COVID-19 in 210 countries, territories and two international conveyances around the world. During the same period Ethiopia has reported 64 confirmed cases, three deaths and four recoveries. Despite efforts being made to reduce most destinations, international flight especially to and from COVID-19 most hit countries were potential source of virus to the country. Large family size, low prevalence of the soap-based hand-washing practice, poor living conditions and social gatherings are among the main possible risk factors. On the other hand, limited health systems' capacity in terms of trained workforce, medical supplies, diagnostic facilities, and intensive care units are possible challenges to control the pandemic. The current meagre testing capacity in the country that focuses only on suspected symptomatic cases while the virus is reportedly transmits from asymptomatic cases may result in a catastrophe due to its hidden spread in the community. For countries with weak economies, focusing their efforts on preventive measures is the best and yet cost-effective strategy. Some preventive efforts should focus on community health education about physical distancing, hand hygiene, use of personal protective equipment, self-isolation and quarantine in the context of the local situation. It is crucial to enhance self-reporting and community-based family level care to the symptomatic cases and their contacts. Additional care needs to be in place during burial ceremonies of the unavoidably dead bodies to prevent further contamination. The socio-psychological consequences of COVID-19 need to be given appropriate consideration to avoid unnecessary discrimination, stigma and social destructions. Finally, coordinated efforts to increase contact tracing, isolation, testing and treating needs to be strengthened through national and international collaborations.

Publication Type

Journal article.

<268>

Accession Number

20203333925

Author

Namayandeh, S. M.

Title

Vitamin D and coronavirus disease (COVID-19); is deficiency and maintenance supplementation therapy necessary?

Source

Journal of Nutrition and Food Security; 2020. 5(3):187-191. 28 ref.

Publisher

Shahid Sadoughi University of Medical Sciences

Location of Publisher

Yazd

Country of Publication

Iran

Abstract

Vitamin D is a fat soluble vitamin with a well-known general metabolism and actions in bone structure and immune system regulation. Vitamin D exhibits direct antimicrobial activities against a spectrum of microbes, including Gram-positive and Gram-negative bacteria, enveloped and non-enveloped viruses, as well as fungi. An observational study showed that concentrations of 38 ng/ml or more were associated with a significant more than twofold reduction in the risk of developing acute respiratory syndrome (17% vs. 45%). Some clinical trials on vitamin D showed a decrease in incidence and severity of the Coronavirus Disease 2019 (COVID-19). To achieve the optimum vitamin D3 levels, approximately half of the population should take at least 2000-5000 iu/d of vitamin D3. Various loading doses were proposed for achieving a 25(OH)D concentration of 30 ng/ml. A study reported that to achieve the concentration of 40-60 ng/ml a weekly or fort nightly dose totaling 100,000-200,000 iu over 8 weeks (1800 or 3600 iu/d) as loading should be prescribed. Approximately about half the people, using 5000 iu/d of vitamin D3 or 30,000-35,000 iu/wk would increase 25(OH)D concentration to 40 ng/ml and 6235-7248 iu/d can ensure that 97.5% of the people have concentrations > 20 ng/ml. Well-designed human clinical studies over the dosage and combination of micronutrients such as vitamin C and D and Zinc in different populations are required to substantiate the benefits of micronutrient supplementation against infection.

Publication Type

Journal article.

<269>

Accession Number

20203319617

Author

Koehler, P.; Cornely, O. A.; Bottiger, B. W.; Dusse, F.; Eichenauer, D. A.; Fuchs, F.; Hallek, M.; Jung, N.; Klein, F.; Persigehl, T.; Rybniker, J.; Kochanek, M.; Boll, B.; Shimabukuro-Vornhagen, A.

Title

COVID-19 associated pulmonary aspergillosis.

Source

Mycoses; 2020. 63(6):528-534. 12 ref.

Publisher

Wiley

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

Objectives: Patients with acute respiratory distress syndrome (ARDS) due to viral infection are at risk for secondary complications like invasive aspergillosis. Our study evaluates coronavirus disease 19 (COVID-19) associated invasive aspergillosis at a single centre in Cologne, Germany. Methods: A retrospective chart review of all patients with COVID-19 associated ARDS admitted to the medical or surgical intensive care unit at the University Hospital of Cologne, Cologne, Germany. Results: COVID-19 associated invasive pulmonary aspergillosis was found in five of 19 consecutive critically ill patients with moderate to severe ARDS. Conclusion: Clinicians caring for patients with ARDS due to COVID-19 should consider invasive pulmonary aspergillosis and subject respiratory samples to comprehensive analysis to detect co-infection.

Publication Type

Journal article.

<270>

Accession Number

20203344054

Author

Rosa, G. la; Iaconelli, M.; Mancini, P.; Ferraro, G. B.; Veneri, C.; Bonadonna, L.; Lucentini, L.; Suffredini, E.

Title

First detection of SARS-CoV-2 in untreated wastewaters in Italy.

Source

Science of the Total Environment; 2020. 736

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Several studies have demonstrated the advantages of environmental surveillance through the monitoring of sewage for the assessment of viruses circulating in a given community (wastewater-based epidemiology, WBE). During the COVID-19 public health emergency, many reports have described the presence of SARS-CoV-2 RNA in stools from COVID-19 patients, and a few studies reported the occurrence of SARS-CoV-2 in wastewaters worldwide. Italy is among the world's worst-affected countries in the COVID-19 pandemic, but so far there are no studies assessing the presence of SARS-CoV-2 in Italian wastewaters. To this aim, twelve influent sewage samples, collected between February and April 2020 from Wastewater Treatment Plants in Milan and Rome, were tested adapting, for concentration, the standard WHO procedure for Poliovirus surveillance. Molecular analysis was undertaken with three nested protocols, including a newly designed SARS-CoV-2 specific primer set. SARS-CoV-2 RNA detection was accomplished in volumes of 250 ml of wastewaters collected in areas of high (Milan) and low (Rome) epidemic circulation, according to clinical data. Overall, 6 out of 12 samples were positive. One of the positive results was obtained in a Milan wastewater sample collected a few days after the first notified Italian case of autochthonous SARS-CoV-2. The study confirms that WBE has the potential to be applied to SARS-CoV-2 as a sensitive tool to study spatial and temporal trends of virus circulation in the population.

Publication Type

Journal article.

<271>

Accession Number

20203340286

Author

Ain Umaira Shah; Syafiqah Nur Azrie Safri; Rathedevi Thevadas; Nor Kamariah Noordin; Azmawani Abd Rahman; Zamberi Sekawi; Aini Ideris; Mohamed Thariq Hameed Sultan

Title

COVID-19 outbreak in Malaysia: actions taken by the Malaysian government.

Source

International Journal of Infectious Diseases; 2020. 97:108-116. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Coronavirus disease 2019 (COVID-19), a novel pneumonia disease originating in Wuhan, was confirmed by the World Health Organization on January 12, 2020 before becoming an outbreak in all countries. Outbreak situation: A stringent screening process at all airports in Malaysia was enforced after the first case outside China was reported in Thailand. Up to April 14, 2020, Malaysia had reported two waves of COVID-19 cases, with the first wave ending successfully within less than 2 months. In early March 2020, the second wave occurred, with worrying situations. Actions taken: The Government of Malaysia enforced a Movement Control Order starting on March 18, 2020 to break the chain of COVID-19. The media actively spread the hashtag #stayhome. Non-governmental organizations, as well as prison inmates, started to produce personal protective equipment for frontliners. Various organizations hosted fundraising events to provide essentials mainly to hospitals. A provisional hospital was set up and collaborations with healthcare service providers were granted, while additional laboratories were assigned to enhance the capabilities of the Ministry of Health. Economic downturn: An initial financial stimulus amounting to RM 20.0 billion was released in February 2020, before the highlighted PRIHATIN Package, amounting to RM 250 billion, was announced.

The PRIHATIN Package has provided governmental support to society, covering people of various backgrounds from students and families to business owners.

Publication Type

Journal article.

<272>

Accession Number

20203340272

Author

Buonsenso, D.; Cinicola, B.; Raffaelli, F.; Sollena, P.; Iodice, F.

Title

Social consequences of COVID-19 in a low resource setting in Sierra Leone, West Africa.

Source

International Journal of Infectious Diseases; 2020. 97:23-26. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Economical and psychological consequences of the lockdown in low-resource setting in rural Africa are unknown. We drafted a survey in order to address the social impact of COVID-19 lockdown on a rural village in Sierra Leone. The survey developed by the study group and translated in the local language, distributed to the householders of the village on April 13th and responses collected on April 14th, when Sierra Leone was on day 11 of lockdown. The questions aimed to assess in the community the following items: age group, main activities before lockdown, change in income and ability to feed the family during lockdown, anxiety during lockdown. 78 householders (100% of Bureh Town) replied. All, expect one, declared a 51-80% (19.2%) to 81-

100% (79.4%) reduction of weekly income compared with the pre-lockdown period, declaring difficulties in providing food for the family members (82%), and anxiety (60%). Our analyses showed that people lost their jobs and have difficulties in providing food for their families.

Publication Type

Journal article.

<273>

Accession Number

20203340244

Author

Xiang BoQi; Li PeiNing; Yang XinHui; Zhong ShuYi; Manyande, A.; Feng MaoHui

Title

The impact of novel coronavirus SARS-CoV-2 among healthcare workers in hospitals: an aerial overview.

Source

AJIC - American Journal of Infection Control; 2020. 48(8):915-917. 13 ref.

Publisher

Elsevier Inc.

Location of Publisher

St. Louis

Country of Publication

USA

Abstract

The ongoing outbreak of COVID-19, caused by the novel coronavirus SARS-CoV-2, places healthcare workers at an increased risk of infection as they are in close contact with patients. In this article, we report an overview of cases of infected healthcare workers in China and Italy during the early periods of the COVID-19 epidemic. China's coronavirus response highlights the importance of implementing effective public health strategies. The authorities worldwide therefore, need to be extremely cautious when they implement stringent protective measures that safeguard healthcare workers in hospitals and counteract the threats created by the pandemic.

Publication Type

Journal article.

<274>

Accession Number

20203340243

Author

Wu SongJie; Wang Ying; Jin XueLan; Tian Jia; Liu JianZhong; Mao YiPing

Title

Environmental contamination by SARS-CoV-2 in a designated hospital for coronavirus disease 2019.

Source

AJIC - American Journal of Infection Control; 2020. 48(8):910-914. 22 ref.

Publisher

Elsevier Inc.

Location of Publisher

St. Louis

Country of Publication

USA

Abstract

Background: Coronavirus disease 2019 (COVID-19) is characterized by risk of nosocomial transmission; however, the extent of environmental contamination and its potential contribution of environmental contamination to SARS-CoV-2 transmission are poorly understood. This study aimed to investigate whether environmental contamination may play a role in SARS-CoV-2 transmission. Methods: Air samples were collected by natural precipitation, and environmental surface samples were collected by conventional surface swabbing. SARS-CoV-2 RNA detection was performed using reverse transcription polymerase chain reaction. Results: Viral RNA was not detected in the 44 air samples. The positive rates in 200 environmental surface samples in medical areas (24.83%) was higher than that in living quarters (3.64%), with a significant difference (P < .05). The positive rates were 25.00% and 37.50% for the general isolation ward and intensive care unit,

respectively, and no significant difference was observed between them (P = .238). The top 5 sampling sites with a positive rate in medical areas were beepers (50.00%), water machine buttons (50.00%), elevator buttons (42.86%), computer mouses (40.00%), and telephones (40.00%). Conclusions: Most of the touchable surfaces in the designated hospital for COVID-19 were heavily contaminated, suggesting that the environment is a potential medium of disease transmission. These results emphasize the need for strict environmental surface hygiene practices and enhanced hand hygiene to prevent the spread of the virus.

Publication Type

Journal article.

<275>

Accession Number

20203340238

Author

Xiang Yi; Song QiFa; Gu WenZhen

Title

Decontamination of surgical face masks and N95 respirators by dry heat pasteurization for one hour at 70degreesC.

Source

AJIC - American Journal of Infection Control; 2020. 48(8):880-882. 15 ref.

Publisher

Elsevier Inc.

Location of Publisher

St. Louis

Country of Publication

USA

Abstract

Background: The need for protective masks greatly exceeds their global supply during the current COVID-19 pandemic. Methods: We optimized the temperature used in the dry heat pasteurization method to destroy

pathogens and decontaminate masks while retaining their filtering capacity. Results: The current study showed that dry heat at both 60degreesC and 70degreesC for 1 hour could successfully kill 6 species of respiratory bacteria and one fungi species, and inactivate the H1N1 indicator virus. After being heated at 70degreesC for 1, 2, and 3 hours, the N95 respirators and surgical face masks showed no changes in their shape and components. The filtering efficiency of bacterial aerosol for N95 respirators were 98%, 98%, and 97% after being heated for 1, 2, and 3 hour, respectively, all of which were over the 95% efficiency required and similar to the value before being heated (99%). The filtering efficiency for surgical face masks was 97%, 97%, and 96% for 1, 2, and 3 hours of heating, respectively, all of which were also similar to the value before being heated (97%). Conclusions: This method can be used at home and can significantly resolve the current shortage of masks.

Publication Type

Journal article.

<276>

Accession Number

20203340237

Author

Ryu ByungHan; Cho Younghwa; Cho OhHyun; Hong SunIn; Kim Sunjoo; Lee Seungjun

Title

Environmental contamination of SARS-CoV-2 during the COVID-19 outbreak in South Korea.

Source

AJIC - American Journal of Infection Control; 2020. 48(8):875-879. 17 ref.

Publisher

Elsevier Inc.

Location of Publisher

St. Louis

Country of Publication

USA

Abstract

Objectives: Although contact precaution is generally recommended in situations where coronavirus disease 2019 (COVID-19) is suspected, there is limited evidence on environmental contamination of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Therefore, we conducted environmental surveillance on SARS-CoV-2 contamination in 2 different healthcare settings. Methods: Viral contamination was investigated on the environment of 2 hospitals that had admitted 13 COVID-19 patients. In hospital A, 5 patients with pneumonia occupied negative pressure rooms. In hospital B, 8 asymptomatic patients shared 2 common 4-bed rooms. Most rooms were poorly cleaned or disinfected. Environmental swab were collected from inside and outside the rooms and were tested using real-time RT-PCR for the detection of SARS-CoV-2. Results: In hospital A, SARS-CoV-2 was detected in 10 of 57 (17.5%) samples from inside the rooms including the Ambu bag and infusion pump. Two samples obtained at more than 2 m from the patients showed positive results. In hospital B, 3 of 22 (13.6%) samples from inside the rooms were positive. Areas outside the rooms, such as the anteroom, corridor, and nursing station, were all negative in both hospitals. Conclusions: Hospital surfaces surrounding patients were contaminated by SARS-CoV-2. Our findings support the value of strict contact precaution, routine cleaning, and disinfection in the management of COVID-19 patients.

Publication Type

Journal article.

<277>

Accession Number

20203342685

Author

Indini, A.; Aschele, C.; Cavanna, L.; Clerico, M.; Daniele, B.; Fiorentini, G.; Fioretto, L.; Giordano, M.; Montesarchio, V.; Ortega, C.; Pinotti, G.; Scanni, A.; Zamagni, C.; Blasi, L.; Grossi, F.

Title

Reorganisation of medical oncology departments during the novel coronavirus disease-19 pandemic: a nationwide Italian survey.

Source

European Journal of Cancer; 2020. 132:17-23. 7 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The novel severe acute respiratory syndrome coronavirus-2 pandemic is a global health problem, which started to affect China by the end of 2019. In Europe, Italy has faced this novel disease entity (named novel coronavirus disease [COVID-19]) first and severely. COVID-19 represents a significant hurdle for public health services and a potential harm for patients with cancer. The Collegio Italiano dei Primari Oncologi Medici (CIPOMO) is an Italian association of head physicians in oncology departments, which promotes working and research activities in oncology on a national basis. In the midst of the epidemic in Italy, the CIPOMO promoted a national survey aiming to evaluate the impact of COVID-19 on clinical activity of oncologists and the implementation of containment measures of COVID-19 diffusion. Overall, 122 head physicians participated in this survey, with a homogeneous distribution on the national territory. Results show that the following measures for oncologic patients have been promptly implemented through the whole country: use of protective devices, triage of patients accessing the hospital, delay of non-urgent visits and use of telemedicine. Results of this survey suggest that Italian oncology departments have promptly set a proactive approach to the actual emergency. Oncologists need to preserve the continuum of care of patients, as the benefit of ensuring a well-delivered anti-cancer treatment plan outweighs the risk of COVID-19 infection. International cooperation is an important starting point, as heavily affected nations can serve as an example to find out ways to safely preserve health activity during the pandemic.

Publication Type

Journal article.

<278>

Accession Number

20203322114

Author

Zenker, S.; Kock, F.

Title

The coronavirus pandemic - a critical discussion of a tourism research agenda.

Source

Tourism Management; 2020. 8144 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Unquestionable, the coronavirus (Covid-19) pandemic is one of the most impactful events of the 21st century and has tremendous effects on tourism. While many tourism researchers worldwide are currently 'Covid-19 research gap spotting', we call for more deliberateness and rigor. While we agree that the coronavirus pandemic is unique and relevant to research, we argue that not all effects are worth researching or novel to us. Previous research on crises and disasters do show similar patterns and existing theories can often very well explain the current phenomena. Thus, six illustrative examples are shown how a research agenda could look like. This includes parts where theoretical explanations from tourism are missing, as well as where we think existing knowledge might be subject to a tourism paradigm-shift due to the coronavirus pandemic.

Publication Type

Journal article.

<279>

Accession Number

20203287634

Author

Nahandi, M. Z.; Shahrokhi, H.; Farhang, S.; Somi, M. H.

Title

Virtual social networks and mental health intervention for medical staff during the COVID-19 outbreak in the Islamic Republic of Iran.

Source

Eastern Mediterranean Health Journal; 2020. 26(5):497-498. 4 ref.

Publisher

World Health Organization, Regional Office for the Eastern Mediterranean

Location of Publisher

Cairo

Country of Publication

Egypt

Abstract

This brief article discusses the timely mental health intervention for medical staff caring for patients affected by COVID-19 in Iran. Despite the support interventions, mental health care for health professionals is still not a consideration in Iranian national guidelines on COVID-19.

Publication Type

Journal article.

<280>

Accession Number

20203320757

Author

Zhao Shi; Zhuang ZiAn; Cao PeiHua; Ran JinJun; Gao DaoZhou; Lou YiJun; Yang Lin; Cai YongLi; Wang WeiMing; He DaiHai; Wang MaggieH.

Title

Quantifying the association between domestic travel and the exportation of novel coronavirus (2019-nCoV) cases from Wuhan, China in 2020: a correlational analysis.

Source

Journal of Travel Medicine; 2020. 27(2)10 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

This article quantified the association between the domestic travel load and the number of cases exported from Wuhan to other city-clusters in mainland China. Results showed that a statistically significant positive association between the load of passengers multiplied by the local infectivity in Wuhan and the number of cases reported outside Wuhan, with an estimate that per 100 cases increase in the daily number of newly reported cases in Wuhan together with per 100 persons increase in the daily number of passengers departed Wuhan were likely to cause a 16.25%.

Publication Type

Journal article.

<281>

Accession Number

20203337057

Author

Yan-Jun Li; Jiao-Shan Chen; Jin Zhao; Zi-Yu Wen; Cai-Jun Sun

Title

Homology analysis of ACE2 among different species and its implications for the host range of 2019-nCoV. [Chinese]

Source

Chinese Journal of Zoonoses; 2020. 36(7):525-529. 25 ref.

Publisher

Chinese Journal of Zoonoses

Location of Publisher

Fuzhou

Country of Publication

China

Abstract

In order to explore the possibility of cross-species transmission of 2019-nCoV between human and animals, the homology of angiotensin-converting enzyme 2(ACE2)receptor among different species were analyzed. The amino acid sequences of ACE2 in different species were downloaded from NCBI and analyzed by BLAST, iTOL and MEGA 7 software. The results showed that the full-length amino acid sequence of ACE2 (1-805) was highly homologous in mammals, especially in non-human primates. Comparing with the full-length amino acid sequence of ACE2, the recognition rate with ACE2-PD of human (peptidase domain 19-615, which binds to the S protein of 2019-nCoV) was further improved in cats and ruminants, while bats was declined. Alignment of 20 key amino acids (interface amino acids) directly interacting with S protein in ACE2 protein showed that the interface amino acid sequence of rhesus monkey was identical to that of human, while that of ruminants (cattle, sheep) and cats was similar to that of human. In conclusion, the primates can be used as good animal infection models, ruminants (cattle, sheep) and cats may also be potentially infected with 2019-nCoV. Therefore. It suggest that the etiological and serological detection of 2019-nCoV among animals should be actively promoted.

Publication Type

Journal article.

<282>

Accession Number

20203337015

Author

Busch, G.; Bayer, E.; Gunarathne, A.; Holker, S.; Iweala, S.; Jurkenbeck, K.; Lemken, D.; Mehlhose, C.; Ohlau, M.; Risius, A.; Rubach, C.; Schutz, A.; Ullmann, K.; Spiller, A.

Title

Shopping and eating behavior as well as resilience of the food system from the perspective of the population: results of a study during the corona pandemic in April 2020. [German]

Source

Diskussionspapiere - Department fur Agrarokonomie und Rurale Entwicklung, Universitat Gottingen; 2020. (2003):59 pp. many ref.

Publisher

Institut fur Agrarokonomie der Universitat Gottingen

Location of Publisher

Göttingen

Country of Publication

Germany

Abstract

In an online survey of the population of Germany that was representative of age, gender, education and regional distribution and conducted between 9 and 20 April 2020, i.e. at the high point of the 'lock-down' in the course of the Coronavirus pandemic in Germany, 947 consumers were asked about their risk perceptions, shopping, eating and cooking behaviour as well as the resistance of the food system to the crisis. The survey was designed as a panel study with a total of three survey waves, with the same people being interviewed several times. The results of the first survey wave are presented in this report.

Publication Type

Bulletin.

<283>

Accession Number

20203337009

Author

Egger, E. M.; Jones, S.; Justino, P.; Manhique, I.; Santos, R.

Title

Africa's lockdown dilemma high poverty and low trust.

Source

WIDER Working Papers; 2020. (76):20 pp. 43 ref.

Publisher

UNU World Institute for Development Economics Research (UNU/WIDER)

Location of Publisher

Helsinki

Country of Publication

Finland

Abstract

The primary policy response to suppress the spread of COVID-19 in high-income countries has been to lock down large sections of the population. However, there is growing unease that blindly replicating these policies might inflict irreparable damage to poor households and foment social unrest in developing countries. We investigate this concern using Afrobarometer data from 2019 for 30 sub-Saharan African countries. We create a multidimensional index of lockdown readiness based on living conditions and explore its relationship with forms of trust and the potential for social unrest. The index reveals that just 6.8 per cent of households overall and 12.2 per cent in urban areas meet all conditions for a lockdown. We further show that weak readiness is not offset by high levels of social trust, which can be vital for effective public health interventions. As such, strict lockdown policies may not only be difficult to enforce, but also heighten the risks of conflict.

Publication Type

Bulletin.

<284>

Accession Number

20203337008

Author

Egger, E. M.; Salvucci, V.; Tarp, F.

Title

Evolution of multidimensional poverty in crisis-ridden Mozambique.

Source

WIDER Working Papers; 2020. (69):26 pp. 34 ref.

Publisher

UNU World Institute for Development Economics Research (UNU/WIDER)

Location of Publisher

Helsinki

Country of Publication

Finland

Abstract

Mozambique experienced important reduction in the poverty rate until recently, before two major natural disasters hit and the country started suffering from a hidden debt scandal with associated economic slowdown. As the last available national household expenditure survey is from 2014/15, just before these crises unfolded, there is need for a poverty assessment based on alternative data sources, especially since the COVID-19 crisis is now hitting the country. In this paper, we study the evolution of multidimensional poverty in Mozambique using the Demographic and Health Surveys/Malaria Indicator Survey data. Using both the standard Alkire-Foster multidimensional poverty index and the first-order dominance (FOD) method, we find that the poverty reduction trend observed between 2009-11 and 2015 halted between 2015 and 2018. Meanwhile, the number of poor people increased, mainly in rural areas and in the central provinces. Importantly, the poorest provinces did not improve their rankings over time, and between 2015 and 2018, no progress took place for most areas and provinces, as measured by the FOD approach.

Publication Type

Bulletin.

<285>

Accession Number

20203337007

Author

Bell, C.

Title

COVID-19: mortality, future years lost, and demographic structure: Italy and Kenya compared.

Source

WIDER Working Papers; 2020. (60):14 pp. 16 ref.

Publisher

UNU World Institute for Development Economics Research (UNU/WIDER)

Location of Publisher

Helsinki

Country of Publication

Finland

Abstract

COVID-19 causes extremely high mortality among the old. This motivates a comparison of the losses of future lifetime years and future lifetime years of work ensuing from a hypothetical 25,000 excess deaths in Italy, whose affluent population is one of the world's oldest, with those in Kenya, whose population is one of the most youthful and poor. If Italy's excess mortality profile were scaled up three-fold and then came to pass in Kenya, the aggregate loss of future lifetime working years would be slightly higher than Italy's, whereas the aggregate number of deaths and the loss of future lifetime years would be only about one third of Italy's-with all aggregate losses scaleable. Italy's profile implies a loss of 9.9 years of expected future life for each death and 1.8 years of expected working life, both scale-invariant within wide limits. For Kenya, the corresponding estimates are 14.0 and 8.2 years. Vaccines and debt relief apart, these findings suggest that donors might do better to concentrate on the old enemies malaria, HIV/AIDS, and diseases of childhood.

Publication Type

Bulletin.

<286>

Accession Number

20203338286

Author

Jendrny, P.; Schulz, C.; Twele, F.; Meller, S.; Kockritz-Blickwede, M. von; Osterhaus, A. D. M. E.; Ebbers, J.; Pilchova, V.; Pink, I.; Welte, T.; Manns, M. P.; Fathi, A.; Ernst, C.; Addo, M. M.; Schalke, E.; Volk, H. A.

Title

Scent dog identification of samples from COVID-19 patients - a pilot study.

Source

BMC Infectious Diseases; 2020. 20(536):(23 July 2020). 20 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: As the COVID-19 pandemic continues to spread, early, ideally real-time, identification of SARS-CoV-2 infected individuals is pivotal in interrupting infection chains. Volatile organic compounds produced during respiratory infections can cause specific scent imprints, which can be detected by trained dogs with a high rate of precision. Methods: Eight detection dogs were trained for 1 week to detect saliva or tracheobronchial secretions of SARS-CoV-2 infected patients in a randomised, double-blinded and controlled study. Results: The dogs were able to discriminate between samples of infected (positive) and non-infected (negative) individuals with average diagnostic sensitivity of 82.63% (95% confidence interval [CI]: 82.02-83.24%) and specificity of 96.35% (95% CI: 96.31-96.39%). During the presentation of 1012 randomised samples, the dogs achieved an overall average detection rate of 94% (+/-3.4%) with 157 correct indications of positive, 792 correct rejections of negative, 33 incorrect indications of negative or incorrect rejections of 30 positive sample presentations. Conclusions: These preliminary findings indicate that trained detection dogs can identify respiratory secretion samples from hospitalised and clinically diseased SARS-CoV-2 infected individuals by discriminating between samples from SARS-CoV-2 infected patients and negative controls. This data may form the basis for the reliable screening method of SARS-CoV-2 infected people.

Publication Type

Journal article.

<287>

Accession Number

20203332077

Author

Gribble, K.; Mathisen, R.; Ververs, M. T.; Coutsoudis, A.

Title

Mistakes from the HIV pandemic should inform the COVID-19 response for maternal and newborn care.

Source

International Breastfeeding Journal; 2020. 15(67):(25 July 2020). 37 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: In an effort to prevent infants being infected with SARS-CoV-2, some governments, professional organisations, and health facilities are instituting policies that isolate newborns from their mothers and otherwise prevent or impede breastfeeding. Weighing of risks is necessary in policy development: Such policies are risky as was shown in the early response to the HIV pandemic where efforts to prevent mother to child transmission by replacing breastfeeding with infant formula feeding ultimately resulted in more infant deaths. In the COVID-19 pandemic, the risk of maternal SARS-CoV-2 transmission needs to be weighed against the protection skin-to-skin contact, maternal proximity, and breastfeeding affords infants. Conclusion: Policy makers and practitioners need to learn from the mistakes of the HIV pandemic and not undermine breastfeeding in the COVID-19 pandemic. It is clear that in order to maximise infant health and wellbeing, COVID-19 policies should support skin-to-skin contact, maternal proximity, and breastfeeding.

Publication Type

Journal article.

Accession Number

20203339468

Author

Li Shuai; Ji XiaoXia; Yang Bo; Xu Meng; Zhang YuanShu

Title

Gene cloning and sequence analysis of angiotensin converting enzyme 2 (ACE2) in China Sheldrake duck. [Chinese]

Source

Acta Veterinaria et Zootechnica Sinica; 2020. 51(7):1597-1606. 24 ref.

Publisher

Institute of Animal Science, Chinese Academy of Agricultural Sciences

Location of Publisher

Beijing

Country of Publication

China

Abstract

Since the discovery of angiotensin-converting enzyme 2 (ACE2), its pathophysiological functions, especially as functional receptors for coronaviruses such as SARS and COVID-19, have shown great potential.To clarify the gene sequence and structure of different species can provide a basis for the study of the mechanism of coronavirus infection. In this experiment, RT-PCR and Western blot were firstly used to detect the presence of ACE2 in different tissues of China Sheldrake duck. Then the homologous cloning and PCR technology were used to amplify the complete ORF sequence of the China Sheldrake duck ACE2 gene, and then TA cloned into pMD-19T. The vector was sequenced, and the obtained sequence was analyzed by bioinformatics. The expression of ACE2 gene and protein in heart, liver, lung, kidney and other tissues was confirmed. Gene cloning results showed that the full-length CDS sequence of the China Sheldrake duck ACE2 gene was 2 435 bp, encoding 805 amino acid residues, and its nucleotide sequence and amino acid sequence homology with human ACE2 were 66.2% and 66.4%, respectively, and on different branches of the evolutionary tree. Analysis of the 18 key amino acid residues related to the binding of the SARS virus S protein in humans found that except for the 330th and 353th amino acids, the rest were different from humans. Structural analysis revealed that the duck ACE2 was a type I transmembrane protein with multiple N-glycosylation sites. The study obtained the complete ORF sequence and related basic data of the ACE2 gene of China Sheldrake duck for the first time. The obtained sequence had been uploaded to GenBank and successfully included. The results provided a theoretical basis for the functional study of ACE2 on ducks.

Publication Type

Journal article.

<289>

Accession Number

20203330156

Author

Lima, L. de O.; Silva, M. R. F. da; Cruz, P. J. S. C.; Pekelman, R.; Pulga, V. L.; Dantas, V. L. de A.

Title

Perspectives of popular education in health and its thematic group at the Brazilian association of public health (ABRASCO).

Source

Ciencia & Saude Coletiva; 2020. 25(7):2737-2742. 5 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Popular Education in Health (PEH) is a field of knowledge and practices permeated by listening, dialogue, and action. With a set of national experiences and productions, it is a political-pedagogical movement that articulates forces from various social and popular segments, health workers, educators, and researchers in collective health, among other actors. Supported by authors such as Paulo Freire and Victor Valla, among others, PEH has been strengthened in the dimensions of training, participation, management, and health care. Despite the dismantling experienced today in the Brazilian public scene, the PEH Thematic Group (TG) of the Brazilian Association of Public Health (ABRASCO) has been helping to foster, design, and express the voicing of the construction and development of participatory educational and democratic processes in Brazil. This paper showcases the experiences and elaborations of the TG members through the report of the collegiate coordination center members of the last administrations, a period of changes in the political, social, economic,

educational and health scenarios, including the influence of the current planetary crisis brought about by the effects of COVID-19, especially in the Brazilian society.

Publication Type

Journal article.

<290>

Accession Number

20203330149

Author

Saliba Moimaz, S. A.; Santos, L. F. P. dos; Saliba, T. A.; Saliba, N. A.; Saliba, O.

Title

Health surveillance: public water supply fluoridation in 40 municipalities of Sao Paulo, Brazil. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2653-2662. 39 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Since fluoridation of water is an established public health measure for the prevention of dental caries and considering that monitoring of the method is crucial to its success, this study aimed to analyze the results of the analysis of the fluorine content of public water supply of 40 municipalities in the state of Sao Paulo, from November 2004 to December 2016. Samples were analyzed monthly using the potentiometric method. Of the 32,488 samples, 50.94% contained fluoride levels within the recommended range. In 2004, it was verified that 21 cities (52.50%) had mean levels within the recommended parameter, increasing to 32 cities (80.00%) in

2016. It was observed that 15 municipalities that initially had levels of fluoride below 0.55 mgF/L in their water supply adjusted to adequate levels during the project. In the first year of the study, 47.76% of the samples had values in the recommended range, which increased to 58.22% in 2016. Most of the municipalities adjusted the levels of fluoride in their waters over the years, evidencing the performance of heterocontrol programs as important strategies that assist in the monitoring of the method and have significant participation in the control of the water quality supplied to the population.

Publication Type

Journal article.

<291>

Accession Number

20203330147

Author

Sabry, S. D.; Carioca, A. A. F.; Arruda, S. P. M.; Adriano, L. S.; Sampaio, H. A. de C.

Title

Cross-cultural adaptation and evaluation of the psychometric properties of the emotional appetite questionnaire among Portuguese-speaking women. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.) [Portuguese]

Source

Ciencia & Saude Coletiva; 2020. 25(7):2633-2643. 43 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Obesity and its determinants have been the topic of broad research. Emotional appetite, defined as the tendency to overeat in response to negative emotions, is among these determinants. Some instruments were created to measure this construct, the Emotional Appetite Questionnaire (EMAQ) being one of them. The objective of this study was to perform cross-cultural adaptation and evaluation of psychometric properties of EMAQ among Portuguese-speaking women. Methodological research was carried out by translation, back-translation and cross-cultural adaptation of the instrument. A study was conducted with 450 women, through cross-cultural adaptation and evaluation of the instrument's psychometric properties (validity and reliability). The internal consistency of the instrument was measured using Cronbach's Alpha and stability was checked by means of test-retest. The instrument showed good internal consistency and intraclass correlation. The interviewees did not mention changes in food consumption linked to positive emotions and situations. There was a tendency towards reduction in emotional appetite when subjected to negative emotions and situations. The Portuguese EMAQ (QUEAPEM) was considered a reliable instrument, easy to apply and administer, to assess emotional appetite in the Portuguese language.

Publication Type

Journal article.

<292>

Accession Number

20203330138

Author

Epifanio, S. B. O.; Silveira, J. A. C. da; Menezes, R. C. E. de; Marinho, P. M.; Brebal, K. M. de M.; Longo-Silva, G.

Title

Time-series analysis of the consumption of sweetened soft drinks among adults in Brazil: 2007 to 2014. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.) [Portuguese]

Source

Ciencia & Saude Coletiva; 2020. 25(7):2529-2540. 51 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The scope of this article is to analyze the time-series trend and factors associated with the consumption of soft drinks or packaged fruit juices among adults in Brazil. It is a study based on secondary data from the System of Surveillance of Risk Factors and Protection for Chronic Diseases by Telephone Survey conducted among Brazilian adults between 2007 and 2014. The consumption frequency and intensity (number of cups or cans per week) of soda or packaged juice was checked. Socio-demographic and behavioral data were the independent variables. The time-series trend of annual consumption was evaluated by means of Linear Regression. The factors (age, sex, region, work, schooling and TV screen time) associated with the consumption of these beverages were investigated by Poisson regression. There was a 32.7% reduction in soft drink or packaged juice consumption between 2007 and 2014. Factors associated with higher consumption were: male sex (p=0.000); 18-29 year-age-range (p=0.000); residence in the central-west, southeast and southern regions (p=0.000); lower schooling (p=0.616); being employed (p=0.007) and more than 3 hours of TV screen time per day (p=0.000). The analyses describe a downward trend in the consumption of soda or packaged fruit juice among adults in Brazil from 2007 to 2014.

Publication Type

Journal article.

<293>

Accession Number

20203293281

Author

Wang JannTay; Lin YouYu; Chang SuiYuan; Yeh ShiouHwei; Hu BorHsian; Chen PeiJer; Chang ShanChwen

Title

The role of phylogenetic analysis in clarifying the infection source of a COVID-19 patient.

Source

Journal of Infection; 2020. 81(1):158-160. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Here we present a COVID-19 patient whose infection source could not be completely clarified initially, and later was illuminated by using the phylogenetic analysis of the isolated virus. This 66-year-old Taiwanese woman was well before. She traveled to Dubai from January 29 to February 10, 2020, and Egypt from February 11 to February 21, 2020. When she stayed in Egypt, she ever participated an eight-day tourism on a Nile cruise boat. She returned to Taiwan via an international airline on February 21, 2020. She began to suffer from general malaise, myalgia, cold sweating, productive cough, and sore throat since February 18, 2020. The most interesting point of this patient is where she contracted her COVID-19. By history, she is more likely to contract SARS-CoV-2 infection while travelling abroad. To clarify this argument, more virologic studies were conducted. Virus whole genome sequencing was conducted for the SARS-CoV-2 isolate (NTU03) from her throat swab collected on March 2, 2020. Based on the results of whole genome sequencing and phylogenetic analysis, NTU03 belongs to clade A2a, in which all other of the reported case patients were currently either from Europe or travelled to Europe recently according to the information provided by the laboratories who submitted the clade A2a sequences to the Global Initiative on Sharing All Influenza Data (GISAID). None of the previously submitted sequences of viruses isolated from Taiwan were assigned to clade A2a or A2.

Publication Type

Correspondence.

<294>

Accession Number

20203339994

Author

Wang Qiang; Su Min

Title

A preliminary assessment of the impact of COVID-19 on environment - A case study of China.

Source

Science of the Total Environment; 2020. 72834 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The coronavirus disease (COVID-19) is seriously threatening world public health security. Currently, >200 countries and regions have been affected by the epidemic, with the number of infections and deaths still increasing. As an extreme event, the outbreak of COVID-19 has greatly damaged the global economic growth and caused a certain impact on the environment. This paper takes China as a case study, comprehensively evaluating the dynamic impact of COVID-19 on the environment. The analysis results indicate that the outbreak of COVID-19 improves China's air quality in the short term and significantly contributes to global carbon emission reduction. However, in the long run, there is no evidence that this improvement will continue. When China completely lifts the lockdown and resumes large-scale industrial production, its energy use and greenhouse gas (GHG) emissions are likely to exceed the level before the event. Moreover, COVID-19 significantly reduces the concentration of nitrogen dioxide (NO2) in the atmosphere. The decline initially occurred near Wuhan and eventually spread to the whole country. The above phenomenon shows that the decreasing economic activities and traffic restrictions directly lead to the changes of China's energy consumption and further prevent the environment from pollution. The results in this study support the fact that strict quarantine measures can not only protect the public from COVID-19, but also exert a positive impact on the environment. These findings can provide a reference for other countries to assess the influence of COVID-19 on the environment.

Publication Type

Journal article.

<295>

Accession Number

20203339975

Author

Saeida Saadat; Deepak Rawtani; Hussain, C. M.

Title

Environmental perspective of COVID-19.

Source

Science of the Total Environment; 2020. 72828 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The outbreak of COVID-19 has caused concerns globally. On 30 January WHO has declared it as a global health emergency. The easy spread of this virus made people to wear a mask as precautionary route, use gloves and hand sanitizer on a daily basis that resulted in generation of a massive amount of medical wastes in the environment. Millions of people have been put on lockdown in order to reduce the transmission of the virus. This epidemic has also changed the people's life style; caused extensive job losses and threatened the sustenance of millions of people, as businesses have shut down to control the spread of virus. All over the world, flights have been canceled and transport systems have been closed. Overall, the economic activities have been stopped and stock markets dropped along with the falling carbon emission. However, the lock down of the COVID-19 pandemic caused the air quality in many cities across the globe to improve and drop in water pollutions in some parts of the world.

Publication Type

Journal article.

<296>

Accession Number

20203339960

Author

Shubham Sharma; Zhang MengYuan; Anshika; Gao JingSi; Zhang HongLiang; Kota, S. H.

Title

Effect of restricted emissions during COVID-19 on air quality in India.

Source

Science of the Total Environment; 2020. 72822 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The effectiveness and cost are always top factors for policy-makers to decide control measures and most measures had no pre-test before implementation. Due to the COVID-19 pandemic, human activities are largely restricted in many regions in India since mid-March of 2020, and it is a progressing experiment to testify effectiveness of restricted emissions. In this study, concentrations of six criteria pollutants, PM10, PM2.5, CO, NO2, ozone and SO2 during March 16th to April 14th from 2017 to 2020 in 22 cities covering different regions of India were analysed. Overall, around 43, 31, 10, and 18% decreases in PM2.5, PM10, CO, and NO2 in India were observed during lockdown period compared to previous years. While, there were 17% increase in O3 and negligible changes in SO2. The air quality index (AQI) reduced by 44, 33, 29, 15 and 32% in north, south, east, central and western India, respectively. Correlation between cities especially in northern and eastern regions improved in 2020 compared to previous years, indicating more significant regional transport than previous years. The mean excessive risks of PM reduced by ~52% nationwide due to restricted activities in lockdown period. To eliminate the effects of possible favourable meteorology, the WRF-AERMOD model system was also applied in Delhi-NCR with actual meteorology during the lockdown period and an un-favourable event in early November of 2019 and results show that predicted PM2.5 could increase by only 33% in unfavourable meteorology. This study gives confidence to the regulatory bodies that even during unfavourable meteorology, a significant improvement in air quality could be expected if strict execution of air quality control plans is implemented.

Publication Type

Journal article.

<297>

Accession Number

20203339941

Author

Zambrano-Monserrate, M. A.; Ruano, M. A.; Sanchez-Alcalde, L.

Title

Indirect effects of COVID-19 on the environment.

Source

Science of the Total Environment; 2020. 72824 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This research aims to show the positive and negative indirect effects of COVID-19 on the environment, particularly in the most affected countries such as China, USA, Italy, and Spain. Our research shows that there is a significant association between contingency measures and improvement in air quality, clean beaches and environmental noise reduction. On the other hand, there are also negative secondary aspects such as the reduction in recycling and the increase in waste, further endangering the contamination of physical spaces (water and land), in addition to air. Global economic activity is expected to return in the coming months in most countries (even if slowly), so decreasing GHG concentrations during a short period is not a sustainable way to clean up our environment.

Publication Type

Journal article.

<298>

Accession Number

20203334984

Author

Aarthy Marimuthu; Venkateswaran, P. P.; Balaji Ramraj

Title

Effective risk communication - an essential strategy in combating covid19 pandemic - report from Tamil Nadu, a South Indian state. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):107-110. 10 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Risk communication is one of the eight core principles of pandemic preparedness by International health regulations, which is essential to prepare for, respond to and recover from serious public health hazards like emerging infectious diseases. Covid-19 being a novel disease, generates intense fear, misinformation, and rumors confusing both authorities and the population, thereby creating the necessity for prompt information. The communicator, when imparting or exchanging information, should be clear about the message, target audience, conveying medium, and the effect it will produce. Effective communication can minimize the spread of disease, limit the impact, and ultimately save lives. Risk communication is not a last-minute additive to publicize decisions. It should be an integral part of preparedness planning for effective risk management and has to be translated into action. The risk communication strategies should be analyzed as the situation evolves, reviewed and changed if needed, as different populations and affected groups may require different strategies.

Publication Type

Journal article.

<299>

Accession Number

20203334983

Author

Kishor, M.; Vikas Menon; Vinay, H. R.; Bhise, M. C.; Isaac, M.; Suhas Chandran; Ajay Kumar; Naresh Nebhinani; Ravi Gupta; Dere, S. S.; Anil Kakunje; Bharathi, G.; Ashok, M. V.; Anil Nischal

Title

COVID-19 pandemic highlights the need to reconsider psychiatry training of Indian medical graduate. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):104-106. 13 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

In the middle of COVID-19 crisis in India and the psychological impact on millions of peoples, is it time to reconsider psychiatry training for Indian medical graduate under the new competency-based curriculum? India has one of the highest numbers of medical colleges in the world and also has over a million doctors, including MBBS graduates working at the primary health-care centers who are important pillars for health-care delivery. In a major drawback that also plagued the earlier curriculum, the new competency-based curriculum has not incorporated a single mandatory skill in psychiatry which a medical trainee has to demonstrate to become doctor. Mental health and the COVID-19 pandemic are interlinked in a complex manner. Hence, millions are likely to have mental health consequences. With no skill required in psychiatry as

a must for a medical trainee to become an MBBS doctor, the mental health services during or aftermath of a disaster are severely compromised and need urgent reconsideration under the new curriculum.

Publication Type

Journal article.

<300>

Accession Number

20203334980

Author

Kirthana, V.; Venkataiah, B.; Murthy, M. R. N.

Title

COVID 19 in ayurvedic perspective. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):91-96. 15 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The age-old science of Ayurveda has many secrets hidden within. The coronavirus disease is a novel disease, as indicated by its nomenclature also. The plural medical system approach is being implemented to combat the disease. There are many references in the ayurvedic textbooks/classics/Samhitas about janapadodwamsa or epidemics in the age of gods and the management of such epidemics or janapadodwamsa can also be evidenced in the classics of Ayurveda. The principles of Ayurveda can be applied for both preventive and curative aspects of disease. The practical knowledge and the knowledge about the stage of the disease are essential to bridge the ayurvedic principles with the preventive and curative aspects of the disease. The

efficiency of ayurvedic drugs is known by practice. However, new drugs can be formulated with a combination of drugs. The search for new drugs and new preventive practices in an integrated approach is what the approach is to be to tackle the novel virus. In this regard, the current paper aims to bridge the preventive aspects of COVID 19 with respect to various stages of disease in ayurvedic aspect.

Publication Type

Journal article.

<301>

Accession Number

20203334977

Author

Nilakantam, S. R.; Kishor, M.; Dayananda, M.; Amogha Shree

Title

Novel coronavirus - 19 pandemic impact on private health-care services with special focus on factors determining its utilization: Indian scenario. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):77-80. 9 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The novel coronavirus disease (COVID-19) outbreak, caused by severe acute respiratory syndrome coronavirus 2, has rapidly escalated into a global pandemic which leads to declaration of national health emergency in several countries and is having a profound impact on private health-care systems globally including India in unprecedented manner. However, the impacts are very serious, especially on global

economics and health care due to COVID-19 pandemic. During this pandemic, private hospitals and clinics are experiencing a reduction of in patient footfalls due to nationwide lockdown and several other factors as well which are leading to inadequate utilization of health-care services by the patients and decrease in medical services volumes which resulted in acute economic crisis. In this article, various factors that caused a significant reduction in utilization rates of private health-care systems such as hospitals and clinics were outlined and discussed.

Publication Type

Journal article.

<302>

Accession Number

20203334972

Author

Kishor, M.; Deeksha Ekanand

Title

Structured action plan for mental and behavioral preparedness against virus COVID19 outbreak in India (SAMBAV Bharath): proposal for augmenting mental health services. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):55-57. 7 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The world Health Organization (WHO) has designated the novel coronavirus outbreak (COVID19) as a pandemic. It is estimated that 125 million to 250 million people in India will be affected and 70% of humanity is likely to be infected within 1 year. The psychological impact can be from stress or economic-socio-occupational disruption, and people may suffer from fear of infection, anger, anxiety, depression, suicidal ideation, increased substance use, or relapse of psychiatric disorders. This can be of great concern for India, which already has high mental health morbidity but the lowest number of mental health experts, according to the WHO. Hence, it is imperative to consider the empowerment of available human resources. Here, we propose a structured action plan for mental and behavioral preparedness against virus COVID 19 disaster currently but virtually for any disaster in the country (SAMBAV Bharath). It designed to enable people by providing online training for individuals as mental health facilitators, who can assist the needy during and aftermath of the disaster.

Publication Type

Journal article.

<303>

Accession Number

20203334971

Author

Debanjan Banerjee; Vijayakumar, H. G.; Rao, T. S. S.

Title

"Watching the watchmen:" mental health needs and solutions for the health-care workers during the coronavirus disease 2019 pandemic. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):51-54. 22 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The coronavirus disease 2019 (COVID-19) has emerged as a global public health threat. As international borders are sealed, economies slashed, and billions quarantined at their homes to prevent the spread of infection, this pandemic has affected society at large, having a long-lasting psychological impact, more than ever. Certain vulnerable groups are more susceptible to this trauma. These include the health-care workers, one of the prominent frontline force against COVID-19. Their mental health needs are not only limited to work pressure, burnout, frustration, and guilt toward the family but also a constant fear of infection, health anxiety, paranoia, and depressive disorders. Complex posttraumatic stress and grief can be the added compounding factors leading to absenteeism and decreased efficiency. This commentary reviews the evidence for the various mental-health care needs of these frontline workers and highlights the possible solutions during such a biological disaster.

Publication Type

Journal article.

<304>

Accession Number

20203334969

Author

Ashoka, H. G.; Venkatesh, C. R.; Smitha, M. C.; Nandhini, S. H.

Title

Hydroxychloroquine prophylaxis against coronavirus disease-19: knowledge and practice among health-care professionals. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):38-42. 15 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

INTRODUCTION: The Indian Council of Medical Research recommended chemoprophylaxis with hydroxychloroquine (HCQ) for asymptomatic health-care professionals (HCPs) treating coronavirus disease-19 (COVID-19). This questionnaire study was aimed at assessing the knowledge and the practice of HCPs on the use of HCQ for prophylaxis of COVID-19. OBJECTIVE: The objective was to assess the knowledge and practice of HCQ prophylaxis among HCPs. MATERIALS AND METHODS: This was a cross-sectional study targeting HCPs involved in the management of suspected/confirmed COVID-19. The data were obtained by convenience sampling, collected by a structured tested online questionnaire. Descriptive statistics and inferential statistics such as Chi-square analysis and Fisher's exact analysis and Mann-Whitney U-test were used. RESULTS: Among 135 study participants, about 76% were male and 26% were female, and the mean age was 37 years (standard deviation: 10.35). About 64.5% of the participants took HCQ prophylaxis, and 67.8% among them got an electrocardiogram. Thirty-two percent were using proper personal protective equipments (PPEs) and 11% were unaware of the use of appropriate PPEs. Apprehension associated with HCQ adverse effects in those who were suggested (70%) ($P = 0.002$) and made mandatory (33.3%) ($P < 0.001$) by their institutions ($P < 0.001$) was statistically significant. About 67.8% did not experience side effects. Gastrointestinal side effects were most common. Majority of the study participants who took HCQ prophylaxis were consultant doctors directly involved in patient care (71.2%) ($P = 0.018$). CONCLUSIONS: Knowledge and practice with HCQ prophylaxis for COVID-19 was not adequate among the HCPs, and appraisal on proper HCQ dose and need for adequate PPEs and provision of the same could mitigate the false sense of security with HCQ prophylaxis alone.

Publication Type

Journal article.

<305>

Accession Number

20203334968

Author

Thomas, J. J.; Praveen Kulkarni; Kumar, D. S.; Prakash, B.; Murthy, M. R. N.

Title

COVID-19 infodemic: unveiling the root causes through public perspectives. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):31-37. 10 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

INTRODUCTION: The novel coronavirus pandemic raises great concern due to its spread and collateral effects on the society. Nearly 30,000 cases are reported from India by the beginning of May 2020. The current pandemic is associated with a sudden surge of false information termed as infodemic. This study attempts to understand the root causes of COVID-19 infodemic. METHODS: This cross-sectional online study was conducted from April 20, 2020, to April 30, 2020, to collect information on the possible causes of COVID-19 infodemic. A fishbone diagram was developed from the data through iterative process to illustrate the root causes of the infodemic. RESULTS: The total of 179 people responded to the online survey. Among them, 99 were health-care professionals and 75 were representatives of the general public. The mean age of the respondents was 28.93 +/- 9.99 years. The root causes for the COVID-19 infodemic were classified into five domains, namely, social media-associated causes, behavioral aspects, the novelty of the virus and related challenges, causes due to lacunae in policies and health systems, and difficulties in the verification of information. CONCLUSION: A comprehensive action plan has to be developed to contain the infodemic through adequate education of all stakeholders, warnings and legal actions, improvements in policy and health systems. The authorities should brainstorm to design activities that contain the spread of false information through social media at the origin itself.

Publication Type

Journal article.

Accession Number

20203334967

Author

Saha, A. K.

Title

Laboratory testing in human coronaviruses. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):24-30. 48 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

After 2002-2003 severe acute respiratory syndrome coronavirus (SARS-CoV) epidemic, 2012-2013 Middle East respiratory syndrome coronavirus epidemic, ultimately COVID-19 pandemic started in December 2019 and still is going on steadily affecting millions and millions of people taking the precious life of more than one and half millions of people throughout the world, the highest affected country being the United States followed by Italy, France, and so on. Remembering the methods of spreading of infection by droplets and aerosol, high infectivity of this organism, at the same time near absence of biosafety in highly populated areas in the world and the presence of large number of asymptomatic or very minimally symptomatic patients various methods of detection approved by the Food and Drug Administration or different national health organizations, such as rapid antigen test and reverse transcriptase polymerase chain reaction methods, should be started for detection of an infected person for treatment.

Publication Type

Journal article.

<307>

Accession Number

20203334966

Author

Supriya Bevinakoppamath; Ramachandra, S. C.; Prashant Akila

Title

An insight into the use of transgenic animal models for conducting research on coronavirus. (Special Issue: COVID-19: supporting scientific surge.)

Source

International Journal of Health and Allied Sciences; 2020. 9(Suppl. 1):18-23. 36 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Novel coronavirus, severe acute respiratory syndrome coronavirus (SARS-CoV2) outbreak, which is a causal agent for coronavirus disease-19 (COVID-19), has gotten a pandemic in a very short timeframe and represents a global health threat. Since this virus crossed species boundaries, it has put the whole humanity at risk for the infection. We may expect to see the emergence of many other novel coronaviruses like this in future. It is of vital importance that effective standardized care protocols for serious cases are globally recommended to tackle the COVID-19 pandemic. As of now, there are no clinically approved vaccines for COVID-19, but the Phase1 vaccine development approach is on the way. In future, we may expect a dozen vaccines but to test the vaccines and to understand their role, animal models which reflect the clinical symptoms, replication of the virus and disease pathology as in the humans are in great demand. The vaccine development for SARS-CoV2 would depend on the immunological data collected from the severe acute respiratory syndrome coronavirus (SARS-CoV) that emerged late in 2003. Because the SARS-CoV and newly emerged SARS-CoV2 share ninety percent of sequence homology, previously used transgenic animal models to study the spread of the virus and the therapeutic response could be used for the development of systematic therapeutic drugs for SARS-CoV2. Here, in this review, we have summarized some of the animal models which were considered from the previous studies on SARS-CoV and the comparison between these animal models could be a good consideration for further developments in the treatment of COVID-19.

Publication Type

Journal article.

<308>

Accession Number

20203331822

Author

Kalligeros, M.; Shehadeh, F.; Mylona, E. K.; Benitez, G.; Beckwith, C. G.; Chan, P. A.; Mylonakis, E.

Title

Association of obesity with disease severity among patients with coronavirus disease 2019.

Source

Obesity; 2020. 28(7):1200-1204. 19 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Objective: The aim of this study was to explore the potential association of obesity and other chronic diseases with severe outcomes, such as intensive care unit (ICU) admission and invasive mechanical ventilation (IMV), in patients hospitalized with coronavirus disease 2019 (COVID-19). Methods: This study analyzed a retrospective cohort of 103 patients hospitalized with COVID-19. Demographic data, past medical history, and hospital course were collected and analyzed. A multivariate logistic regression analysis was implemented to examine associations. Results: From February 17 to April 5, 103 consecutive patients were hospitalized with COVID-19. Among them, 44 patients (42.7%) were admitted to the ICU, and 29 (65.9%) required IMV. The prevalence of obesity was 47.5% (49 of 103). In a multivariate analysis, severe obesity (BMI >= 35 kg/m2) was associated with ICU admission (adjusted odds ratio [aOR]: 5.39, 95% CI: 1.13-25.64). Moreover, patients who required IMV were more likely to have had heart disease (aOR: 3.41, 95% CI: 1.05-11.06), obesity (BMI = 30-34.9 kg/m2; aOR: 6.85, 95% CI: 1.05-44.82), or severe obesity (BMI >= 35 kg/m2; aOR: 9.99, 95% CI: 1.39-

71.69). Conclusions: In our analysis, severe obesity (BMI >= 35 kg/m2) was associated with ICU admission, whereas history of heart disease and obesity (BMI >= 30 kg/m2) were independently associated with the use of IMV. Increased vigilance and aggressive treatment of patients with obesity and COVID-19 are warranted.

Publication Type

Journal article.

<309>

Accession Number

20203331821

Author

Simonnet, A.; Chetboun, M.; Poissy, J.; Raverdy, V.; Noulette, J.; Duhamel, A.; Labreuche, J.; Mathieu, D.; Pattou, F.; Jourdain, M.

Title

High prevalence of obesity in severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) requiring invasive mechanical ventilation.

Source

Obesity; 2020. 28(7):1195-1199. 19 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Objective: The COVID-19 pandemic is rapidly spreading worldwide, notably in Europe and North America where obesity is highly prevalent. The relation between obesity and severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) has not been fully documented. Methods: This retrospective cohort study analyzed the relationship between clinical characteristics, including BMI, and the requirement for invasive

mechanical ventilation (IMV) in 124 consecutive patients admitted in intensive care for SARS-CoV-2 in a single French center. Results: Obesity (BMI > 30) and severe obesity (BMI > 35) were present in 47.6% and 28.2% of cases, respectively. Overall, 85 patients (68.6%) required IMV. The proportion of patients who required IMV increased with BMI categories (P < 0.01, chi2 test for trend), and it was greatest in patients with BMI > 35 (85.7%). In multivariate logistic regression, the need for IMV was significantly associated with male sex (P < 0.05) and BMI (P < 0.05), independent of age, diabetes, and hypertension. The odds ratio for IMV in patients with BMI > 35 versus patients with BMI < 25 was 7.36 (1.63-33.14; P = 0.02). Conclusions: The present study showed a high frequency of obesity among patients admitted in intensive care for SARS-CoV-2. Disease severity increased with BMI. Obesity is a risk factor for SARS-CoV-2 severity, requiring increased attention to preventive measures in susceptible individuals.

Publication Type

Journal article.

<310>

Accession Number

20203331820

Author

Ryan, P. M.; Caplice, N. M.

Title

Is adipose tissue a reservoir for viral spread, immune activation, and cytokine amplification in coronavirus disease 2019?

Source

Obesity; 2020. 28(7):1191-1194.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19), the worst pandemic in more than a century, has claimed >125,000 lives worldwide to date. Emerging predictors for poor outcomes include advanced age, male sex, preexisting cardiovascular disease, and risk factors including hypertension, diabetes, and, more recently, obesity. This article posits new obesity-driven predictors of poor COVID-19 outcomes, over and above the more obvious extant risks associated with obesity, including cardiometabolic disease and hypoventilation syndrome in intensive care patients. This article also outlines a theoretical mechanistic framework whereby adipose tissue in individuals with obesity may act as a reservoir for more extensive viral spread, with increased shedding, immune activation, and cytokine amplification. This paper proposes studies to test this reservoir concept with a focus on specific cytokine pathways that might be amplified in individuals with obesity and COVID-19. Finally, this paper underscores emerging therapeutic strategies that might benefit subsets of patients in which cytokine amplification is excessive and potentially fatal.

Publication Type

Journal article.

<311>

Accession Number

20203331819

Author

Kruglikov, I. L.; Scherer, P. E.

Title

The role of adipocytes and adipocyte-like cells in the severity of COVID-19 infections.

Source

Obesity; 2020. 28(7):1187-1190. 21 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Coronavirus disease-2019 (COVID-19), caused by the highly pathogenic severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), demonstrates high morbidity and mortality caused by development of a severe acute respiratory syndrome connected with extensive pulmonary fibrosis. In this Perspective, we argue that adipocytes and adipocyte-like cells, such as pulmonary lipofibroblasts, may play an important role in the pathogenic response to SARS-CoV-2. Expression of angiotensin-converting enzyme 2 (the functional receptor for SARS-CoV) is upregulated in adipocytes of patients with obesity and diabetes, which turns adipose tissue into a potential target and viral reservoir. This may explain why obesity and diabetes are potential comorbidities for COVID-19 infections. Similar to the recently established adipocyte-myofibroblast transition, pulmonary lipofibroblasts located in the alveolar interstitium and closely related to classical adipocytes demonstrate the ability to transdifferentiate into myofibroblasts that play an integral part of pulmonary fibrosis. This may significantly increase the severity of the local response to SARS-CoV-2 in the lung. To reduce the severity and mortality associated with COVID-19, we propose to probe for the clinical response to thiazolidinediones, peroxisome proliferator activated receptor gamma agonists that are well-known antidiabetic drugs. Thiazolidinediones are able to stabilize lipofibroblasts in their "inactive" state, preventing the transition to myofibroblasts and thereby reducing the development of pulmonary fibrosis and stimulating its resolution.

Publication Type

Journal article.

<312>

Accession Number

20203331818

Author

Baidal, J. A. W.; Chang, J.; Hulse, E.; Turetsky, R.; Parkinson, K.; Rausch, J. C.

Title

Zooming toward a telehealth solution for vulnerable children with obesity during coronavirus disease 2019.

Source

Obesity; 2020. 28(7):1184-1186. 13 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Health inequities exist throughout the life course, resulting in racial/ethnic and socioeconomic disparities in obesity and obesity-related health complications. Obesity and its comorbidities appear to be linked to coronavirus disease 2019 (COVID-19) mortality. Approaches to reduce obesity in the time of COVID-19 closures are urgently needed and should start early in life. In New York City, a telehealth pediatric weight-management collaborative spanning NewYork-Presbyterian, Columbia University Vagelos College of Physicians and Surgeons, and Weill Cornell Medicine was developed during COVID-19 with show rates from 76% to 89%. To stave off the impending exacerbation of health disparities related to obesity risk factors in the aftermath of the COVID-19 pandemic, effective interventions that can be delivered remotely are urgently needed among vulnerable children with obesity. Challenges in digital technology access, social and linguistic differences, privacy security, and reimbursement must be overcome to realize the full potential of telehealth for pediatric weight management among low-income and racial/ethnic-minority children.

Publication Type

Journal article.

<313>

Accession Number

20203331817

Author

Krukowski, R. A.; Ross, K. M.

Title

Measuring weight with electronic scales in clinical and research settings during the coronavirus disease 2019 pandemic.

Source

Obesity; 2020. 28(7):1182-1183. 9 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

The aim of the article was to describe electronic scales (e-scales) and provide guidance on how clinicians/researchers might best implement e-scales in their clinical practice or research studies to remotely measure weight during the COVID-19 pandemic. Although e-scales can be particularly helpful for managing the move to telehealth services in response to COVID-19, there are also other potential benefits to research and clinical practice. For example, e-scales allow for weight measurement without requiring individuals to attend frequent appointments and thus may help to reduce burden and lower attrition rates. Outcomes collected via e-scales may also be more precise than clinic weights because individuals can weigh in the same standard conditions (as described earlier) on specified days, rather than having data collection windows that may span particularly sensitive times like the holidays.

Publication Type

Journal article.

<314>

Accession Number

20203331816

Author

Pearl, R. L.

Title

Weight stigma and the "quarantine-15".

Source

Obesity; 2020. 28(7):1180-1181. 10 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

The aim of the article was to discuss the interplay between social stigma in body weight and quarantine during the COVID-19 pandemic.

Publication Type

Journal article.

<315>

Accession Number

20203331815

Author

Malavazos, A. E.; Romanelli, M. M. C.; Bandera, F.; Iacobellis, G.

Title

Targeting the adipose tissue in COVID-19.

Source

Obesity; 2020. 28(7):1178-1179. 10 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

This article shows that almost 72% of those in critical care units had either overweight or obesity, suggesting the impact of obesity in seriously ill COVID-19 patients. Hence, the role of the adipose tissue during infectious diseases, such as COVID-19, could be important. If obesity represents a predictor for poor prognosis or higher rate of complications in SARS-Cov-2 patients, it is still a modifiable risk factor. Therapeutic actions targeting the adipose tissue may be considered to reduce the burden of COVID-19.

Publication Type

Journal article.

<316>

Accession Number

20203331814

Author

Carter, S. J.; Baranauskas, M. N.; Fly, A. D.

Title

Considerations for obesity, vitamin D, and physical activity amid the COVID-19 pandemic.

Source

Obesity; 2020. 28(7):1176-1177. 10 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

As the biomedical community races to disentangle the unknowns associated with severe acute respiratory syndrome coronavirus 2, the virus responsible for causing coronavirus disease, the link between diminished immune function and individuals with obesity raises important questions about the possibility for greater viral pathogenicity in this population. Increased adiposity may undermine the pulmonary microenvironment wherein viral pathogenesis and immune cell trafficking could contribute to a maladaptive cycle of local inflammation and secondary injury. A further challenge to those with obesity during the current pandemic may involve vitamin D deficiency or insufficiency. In the interest of personal and public health, we caution decision- and policy makers alike not to pin all hope on a proverbial "silver bullet." Until further breakthroughs emerge, we should remember that modifiable lifestyle factors such as diet and physical activity should not be marginalized. Decades of empirical evidence support both as key factors promoting health and wellness.

Publication Type

Journal article.

<317>

Accession Number

20203315199

Author

Anderson, P. O.

Title

Breastfeeding and respiratory antivirals: coronavirus and influenza.

Source

Breastfeeding Medicine; 2020. 15(3):128-128. 5 ref.

Publisher

Mary Ann Liebert, Inc.

Location of Publisher

New Rochelle

Country of Publication

USA

Abstract

The aim of the article was to report the concurrence of COVID-19 and influenza, and breastfeeding as a potential mode of transmission of the disease.

Publication Type

Journal article.

<318>

Accession Number

20203340060

Author

Aditi Bhardwaj; Sunil, C. G.

Title

Role of community resilience in fighting COVID-19: lessons from participatory conservation economies in Kerala, India.

Source

Indian Forester; 2020. 146(6):570-572. 18 ref.

Publisher

Indian Forester

Location of Publisher

Dehradun

Country of Publication

India

Publication Type

Journal article.

<319>

Accession Number

20203340043

Author

Dina Nath Tewari

Title

Sustainable forest management and avoiding pandemic crisis.

Source

Indian Forester; 2020. 146(6):475-478. 7 ref.

Publisher

Indian Forester

Location of Publisher

Dehradun

Country of Publication

India

Abstract

Forests are a unique gift from nature to man. They are the most biologically-diverse ecosystem on land and home of more than 75% of terrestrial species of animals, birds, plants and insects. They store about 296 Giga ton of carbon and counter climate change. They conserve soil, fix nitrogen and add organic matter to improve soil fertility. Forested watersheds and wetlands supply 75% of fresh water. They clean air and water, provide critical wildlife habitat, and make the planet a healthier place to live. Deforestation, climate change, poaching of wildlife, capturing them and their illegal world trade are worrisome. Due to the consumption and exposure of meat from the "wet market" or unnatural reproduction of animals, their deadly viruses are spreading in humans by spreading global epidemics. In the years 2003 to 2019, three global epidemics were encountered. The Covid-19 epidemic has disturbed the entire world. To avoid global epidemics in the future, sustainable forest management and allowing wildlife to live in the forests is absolutely necessary for public welfare.

Publication Type

Journal article.

<320>

Accession Number

20203340036

Author

Imran Ali; Alharbi, O. M. L.

Title

COVID-19: disease, management, treatment, and social impact.

Source

Science of the Total Environment; 2020. 728many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

COVID-19 was originated from Wuhan city of Hubei Province in China in December 2019. Since then it has spread in more than 210 countries and territories. It is a viral disease due to the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) virus. The patients show flu-like symptoms with a dry cough, sore throat, high fever, and breathing problems. The disease due to SARS-CoV-2 was named as COVID-19. About 2.2 million people have been infected with more than 0.15 million deaths globally. The United States of America is the most affected country with the highest patients of about 0.7 million. Despite great efforts, there is no treatment of this disease. However, prevention and management are the best options. This article describes SARS-CoV-2, disease, prevention and management, treatment and social impact on society. It was analyzed that a combination of antiviral drugs with hydroxyl-chloroquine and azithromycin (with the consultation of a medical practitioner) may be the best option to treat the patients, depending on the patient's conditions and symptoms. However, Unani therapy may be useful along with allopathic treatment. It is urgently advised and requested that all the persons should follow the preventive measures, managements

and quarantine strictly without any religious discrepancy otherwise the situation may be the worst. Also, there is an urgent requirement to educate our new generation for science and technology to fight against any such disaster in future; if any. There is no need to be panic and proper prevention and management are essential to combat this disease. This article may be useful to create awareness among the public, to prevent, manage and treat COVID-19.

Publication Type

Journal article.

<321>

Accession Number

20203340034

Author

Indranil Chakraborty; Prasenjit Maity

Title

COVID-19 outbreak: migration, effects on society, global environment and prevention.

Source

Science of the Total Environment; 2020. 72825 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The COVID-19 pandemic is considered as the most crucial global health calamity of the century and the greatest challenge that the humankind faced since the 2nd World War. In December 2019, a new infectious respiratory disease emerged in Wuhan, Hubei province, China and was named by the World Health Organization as COVID-19 (coronavirus disease 2019). A new class of corona virus, known as SARS-CoV-2

(severe acute respiratory syndrome coronavirus 2) has been found to be responsible for occurrence of this disease. As far as the history of human civilization is concerned there are instances of severe outbreaks of diseases caused by a number of viruses. According to the report of the World Health Organization (WHO as of April 18 2020), the current outbreak of COVID-19, has affected over 2164111 people and killed more than 146,198 people in more than 200 countries throughout the world. Till now there is no report of any clinically approved antiviral drugs or vaccines that are effective against COVID-19. It has rapidly spread around the world, posing enormous health, economic, environmental and social challenges to the entire human population. The coronavirus outbreak is severely disrupting the global economy. Almost all the nations are struggling to slow down the transmission of the disease by testing & treating patients, quarantining suspected persons through contact tracing, restricting large gatherings, maintaining complete or partial lock down etc. This paper describes the impact of COVID-19 on society and global environment, and the possible ways in which the disease can be controlled has also been discussed therein.

Publication Type

Journal article.

<322>

Accession Number

20203340033

Author

Sadia Nikhat; Mohammad Fazil

Title

Overview of COVID-19; its prevention and management in the light of Unani medicine.

Source

Science of the Total Environment; 2020. 728many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Since December 2019, a respiratory pandemic named as coronavirus disease 2019 (Covid-19) caused by a new coronavirus named as SARS-CoV-2, has taken the world by storm. The symptoms are fever, malaise, and cough which resolve in a few days in most cases; but may progress to respiratory distress and organ failure. Transmission is through droplet infection or fomites, but other modes such as airborne transmission and oro-fecal transmission are also speculated. Research is underway to develop effective vaccines and medicines for the disease. In such a scenario, we present the measures described in Unani system of medicine for health protection during epidemics. Unani is a traditional system of medicine developed during the middle ages, which employs natural drugs of herbal, animal and mineral origin for treatment. In Unani medicine, during an epidemic, apart from isolation and quarantine, three measures are of utmost importance, (i) purification of surroundings using certain herbal drugs as fumigants or sprays, (ii) health promotion and immune-modulation, and (iii) use of health-protecting drugs and symptom-specific drugs. Drugs such as loban (Styrax benzoides W. G. Craib), sandroos (Hymenaea verrucosa Gaertn.) za'fran (Crocus sativus L.), vinegar etc. are prescribed in various forms. Scientific researches on these drugs reveal the presence of a number of pharmacologically active substances, which may provide a new insight into the management of infections and epidemics.

Publication Type

Journal article.

<323>

Accession Number

20203340026

Author

Muhammad, S.; Long XingLe; Salman, M.

Title

COVID-19 pandemic and environmental pollution: a blessing in disguise?

Source

Science of the Total Environment; 2020. 72812 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

In late 2019, a novel infectious disease with human to human transmission (COVID-19) was identified in Wuhan China, which now has turned into a global pandemic. Countries all over the world have implemented some sort of lockdown to slow down its infection and mitigate it. Lockdown due to COVID-19 has drastic effects on social and economic fronts. However, this lockdown also has some positive effect on natural environment. Recent data released by NASA (National Aeronautics and Space Administration) and ESA (European Space Agency) indicates that pollution in some of the epicenters of COVID-19 such as Wuhan, Italy, Spain and USA etc. has reduced up to 30%. This study compiled the environmental data released by NASA and ESA before and after the coronavirus pandemic and discusses its impact on environmental quality.

Publication Type

Journal article.

<324>

Accession Number

20203340012

Author

Sachin Minhas

Title

Could India be the origin of next COVID-19 like epidemic?

Source

Science of the Total Environment; 2020. 72810 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The COVID-19 global pandemic is not even over yet but it has already taught us a lot of lessons - the hard way. The vast majority of the global community has blamed the Chinese Illegal wildlife markets for the origin of this pandemic. Through careful scientific analysis, I have explained in this article that we don't need such wildlife markets for these kinds of outbreaks to occur in the future. I have also explained how India which is the second-most populous country in the world, could be the origin of the next outbreak, even though such wildlife markets are either very rare or do not exist at all in India.

Publication Type

Journal article.

<325>

Accession Number

20203340596

Author

Homolak, J.; Kodvanj, I.

Title

Widely available lysosome targeting agents should be considered as potential therapy for COVID-19.

Source

International Journal of Antimicrobial Agents; 2020. 56(2)76 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

While the coronavirus disease 2019 (COVID-19) pandemic advances, the scientific community continues to struggle in the search for treatments. Several improvements have been made, including discovery of the clinical efficacy of chloroquine (CQ) in patients with COVID-19, but effective treatment protocols remain elusive. In the search for novel treatment options, many scientists have used the in-silico approach to identify compounds that could interfere with the key molecules involved in entrance, replication or dissemination of severe acute respiratory syndrome coronavirus-2. However, most of the identified molecules are not available as pharmacological agents at present, and assessment of their safety and efficacy could take many months. This review took a different approach based on the proposed pharmacodynamic model of CQ in COVID-19. The main mechanism of action responsible for the favourable outcome of patients with COVID-19 treated with CQ seems to be related to a pH-modulation-mediated effect on endolysosomal trafficking, a characteristic of chemical compounds often called 'lysosomotropic agents' because of the physico-chemical properties that enable them to diffuse passively through the endosomal membrane and undergo protonation-based trapping in the lumen of the acidic vesicles. This review discusses lysosomotropic and lysosome targeting drugs that are already in clinical use and are characterized by good safety profiles, low cost and wide availability. Some of these drugs -particularly azithromycin and other macrolides, indomethacin and some other non-steroidal anti-inflammatory drugs, proton pump inhibitors and fluoxetine - could provide additional therapeutic benefits in addition to the potential antiviral effect that is still to be confirmed by well-controlled clinical trials. As some of these drugs have probably been used empirically in the treatment of COVID-19, it is hoped that colleagues worldwide will publish patient data to enable evaluation of the potential efficacy of these agents in the clinical context, and rapid implementation in therapeutic protocols if they are shown to have a beneficial effect on clinical outcome.

Publication Type

Journal article.

Accession Number

20203340592

Author

Yu Ran; Chen Liang; Lan Rong; Shen Rong; Li Peng

Title

Computational screening of antagonists against the SARS-CoV-2 (COVID-19) coronavirus by molecular docking.

Source

International Journal of Antimicrobial Agents; 2020. 56(2)40 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

In the current spread of novel coronavirus (SARS-CoV-2), antiviral drug discovery is of great importance. AutoDock Vina was used to screen potential drugs by molecular docking with the structural protein and non-structural protein sites of new coronavirus. Ribavirin, a common antiviral drug, remdesivir, chloroquine and luteolin were studied. Honeysuckle is generally believed to have antiviral effects in traditional Chinese medicine. In this study, luteolin (the main flavonoid in honeysuckle) was found to bind with a high affinity to the same sites of the main protease of SARS-CoV-2 as the control molecule. Chloroquine has been proved clinically effective and can bind to the main protease; this may be the antiviral mechanism of this drug. The study was restricted to molecular docking without validation by molecular dynamics simulations. Interactions with the main protease may play a key role in fighting against viruses. Luteolin is a potential antiviral molecule worthy of attention.

Publication Type

Journal article.

<327>

Accession Number

20203340591

Author

Fantini, J.; Chahinian, H.; Yahi, N.

Title

Synergistic antiviral effect of hydroxychloroquine and azithromycin in combination against SARS-CoV-2: what molecular dynamics studies of virus-host interactions reveal.

Source

International Journal of Antimicrobial Agents; 2020. 56(2)40 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

The emergence of SARS-coronavirus-2 (SARS-CoV-2) has led to a global pandemic disease referred to as coronavirus disease 19 (COVID-19). Hydroxychloroquine (CLQ-OH)/azithromycin (ATM) combination therapy is currently being tested for the treatment of COVID-19, with promising results. However, the molecular mechanism of action of this combination is not yet established. Using molecular dynamics (MD) simulations, this study shows that the drugs act in synergy to prevent any close contact between the virus and the plasma membrane of host cells. Unexpected molecular similarity is shown between ATM and the sugar moiety of GM1, a lipid raft ganglioside acting as a host attachment cofactor for respiratory viruses. Due to this mimicry, ATM interacts with the ganglioside-binding domain of SARS-CoV-2 spike protein. This binding site shared by ATM and GM1 displays a conserved amino acid triad Q-134/F-135/N-137 located at the tip of the spike protein. CLQ-OH molecules are shown to saturate virus attachment sites on gangliosides in the vicinity of the primary coronavirus receptor, angiotensin-converting enzyme-2 (ACE-2). Taken together, these data show that ATM is directed against the virus, whereas CLQ-OH is directed against cellular attachment cofactors. We conclude that both drugs act as competitive inhibitors of SARS-CoV-2 attachment to the host-cell membrane. This is consistent with a synergistic antiviral mechanism at the plasma membrane level, where therapeutic intervention is likely to be most efficient. This molecular mechanism may explain the beneficial effects of CLQ-OH/ATM combination therapy in patients with COVID-19. Incidentally, the data also indicate that the conserved Q-134/F-135/N-137 triad could be considered as a target for vaccine strategies.

Publication Type

Journal article.

<328>

Accession Number

20203323189

Author

Sung Heungsup; Yoo CheonKwon; Han MyungGuk; Lee SangWon; Lee Hyukmin; Chun Sail; Lee WeeGyo; Min WonKi

Title

Preparedness and rapid implementation of external quality assessment helped quickly increase COVID-19 testing capacity in the Republic of Korea.

Source

Clinical Chemistry; 2020. 66(7):979-981. 5 ref.

Publisher

American Association for Clinical Chemistry

Location of Publisher

Washington

Country of Publication

USA

Abstract

The article discusses factors that contribute to the rapid implementation of testing in South Korea. The key factors in this rapid expansion of testing capacity were the establishment of an emergency use authorization (EUA) system, an external quality assessment (EQA), and the collaboration between the public and private sectors. In conclusion, preparedness and rapid implementation of EQA have supported the rapid expansion of COVID-19 testing capacity in South Korea. Owing to the increasing diagnostic capacity, our nation was able to slow down the COVID-19 epidemic without enforcing city-wide lockdowns or collapse of the national healthcare system. The quality of COVID-19 diagnostic testing was ensured by the Korean Laboratory Accreditation Program and the EQA programs.

Publication Type

Correspondence.

<329>

Accession Number

20203322469

Author

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

Title

Tackling COVID-19: can the African continent play the long game?

Source

Journal of Global Health; 2020. 10(1)28 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

Despite improvements in surveillance, preparedness planning and clinical/laboratory capacity across Africa, a lot still needs to be done to boost the continent's response to the COVID-19 pandemic. This article tackles the public health response of Africa during the COVID-19 pandemic. Strict implementation of physical distancing strategies, establishment of broad-based regional collaborations, improved health diplomacy and greater government expenditure on health are suggested approaches to mitigate the effect of COVID-19 on Africa.

Publication Type

Journal article.

<330>

Accession Number

20203339202

Author

Wang KeWei; Gao Jie; Wang Hua; Wu XiaoLong; Yuan QinFang; Guo FeiYu; Zhang ZhiJie; Cheng Yang

Title

Epidemiology of 2019 novel coronavirus in Jiangsu Province, China after wartime control measures: a population-level retrospective study.

Source

Travel Medicine and Infectious Disease; 2020. 3520 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: A novel coronavirus emerged in China in December 2019, and human-to-human transmission was previously identified. This study aimed to compare the epidemiological characteristics in Jiangsu Province and assess whether so-called wartime control measures changed the trend of coronavirus disease 2019 (COVID-19) in the province. Methods: Epidemiological data were obtained from the websites of China's Bureau of Health and the People's Government of Jiangsu Province and informal online sources from January 22 to February 20, 2020. Results: The cumulative number of patients in Jiangsu Province (over 79 million people) was 613. The number of daily confirmed new cases reached the inflection point on January 31 with the maximum of 39 cases. The temporal number of patients peaked from January 29 to February 9. The proportion of confirmed cases who were residents or travelers to Hubei Province was 100.0%-58.8% before January 31 and then gradually declined. The proportion of close contacts increased gradually from January 27 to February 17. The geographical distribution of COVID-2019 cases showed that all 13 cites reported confirmed new cases after only five days of the first confirmed new case in Suzhou. The cases were concentrated in Nanjing, Suzhou, and Xuzhou with a high population density (over eight million people). The epidemiological features of COVID-2019 cases in Wuxi, Jiangsu showed that seven confirmed cases were tourists from others areas beyond Hubei Province. The longest incubation period of COVID-2019 was 19 days based on the onset of laboratory-confirmed cases. Conclusion: The number of daily confirmed new cases in Jiangsu Province peaked around January 31 and then declined. This result emphasized that wartime control measures, such as

putting cities on lockdown to limit population mobility in Jiangsu Province, resulted in dramatic reductions in COVID-19 cases.

Publication Type

Journal article.

<331>

Accession Number

20203333024

Author

Pellegrini, M.; Ponzo, V.; Rosato, R.; Scumaci, E.; Goitre, I.; Benso, A.; Belcastro, S.; Crespi, C.; Michieli, F. de; Ghigo, E.; Broglio, F.; Bo, S.

Title

Changes in weight and nutritional habits in adults with obesity during the "lockdown" period caused by the COVID-19 virus emergency.

Source

Nutrients; 2020. 12(7)28 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Our aim is evaluating the changes in weight and dietary habits in a sample of outpatients with obesity after 1 month of enforced lockdown during the COVID-19 pandemic in Northern Italy. In this observational retrospective study, the patients of our Obesity Unit were invited to answer to a 12-question multiple-choice questionnaire relative to weight changes, working activity, exercise, dietary habits, and conditions potentially impacting on nutritional choices. A multivariate regression analysis was performed to evaluate the associations

among weight/BMI changes and the analyzed variables. A total of 150 subjects (91.5%) completed the questionnaire. Mean self-reported weight gain was 1.5 kg ($p < 0.001$). Lower exercise, self-reported boredom/solitude, anxiety/depression, enhanced eating, consumption of snacks, unhealthy foods, cereals, and sweets were correlated with a significantly higher weight gain. Multiple regression analyses showed that increased education (inversely, beta = -1.15; 95%CI -2.13, -0.17, $p = 0.022$), self-reported anxiety/depression (beta = 1.61; 0.53, 2.69, $p = 0.004$), and not consuming healthy foods (beta = 1.48; 0.19, 2.77, $p = 0.026$) were significantly associated with increased weight gain. The estimated direct effect of self-reported anxiety/depression on weight was 2.07 kg (1.07, 3.07, $p < 0.001$). Individuals with obesity significantly gained weight 1 month after the beginning of the quarantine. The adverse mental burden linked to the COVID-19 pandemic was greatly associated with increased weight gain.

Publication Type

Journal article.

<332>

Accession Number

20203337381

Author

Ding Yi; Zhu XiaoJing; Hao LiLing; Zhao MengYao; Hua Qiang; An FaLiang

Title

Bioactive indolyl diketopiperazines from the marine derived endophytic Aspergillus versicolor DY180635.

Source

Marine Drugs; 2020. 18(7)37 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Four new indolyl diketopiperazines, aspamides A-E (1-4) and two new diketopiperazines, aspamides F-G (5-6), along with 11 known diketopiperazines and intermediates were isolated from the solid culture of Aspergillus versicolor, which is an endophyte with the sea crab (Chiromantes haematocheir). Further chiral high-performance liquid chromatography resolution gave enantiomers (+)- and (-)-4, respectively. The structures and absolute configurations of compounds 1-6 were determined by the comprehensive analyses of nuclear magnetic resonance (NMR), high-resolution mass spectrometry (HR-MS), and electronic circular dichroism (ECD) calculation. All isolated compounds were selected for the virtual screening on the coronavirus 3-chymoretpsin-like protease (Mpro) of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), and the docking scores of compounds 1-2, 5, 6, 8 and 17 were top among all screened molecules, may be helpful in fighting with Corona Virus Disease-19 (COVID-19) after further studies.

Publication Type

Journal article.

<333>

Accession Number

20203338565

Author

Wei YiPing; Zeng WeiBiao; Huang XiangYun; Li JunYu; Qiu XingTing; Li HuaDong; Liu DingHua; He ZhaoFeng; Yao WenZhong; Huang Ping; Li Chao; Zhu Min; Zhong ChunLan; Zhu XingEn; Liu JianSheng

Title

Clinical characteristics of 276 hospitalized patients with coronavirus disease 2019 in Zengdu District, Hubei Province: a single-center descriptive study.

Source

BMC Infectious Diseases; 2020. 20(549):(29 July 2020). 34 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: We aimed to report the epidemiological and clinical characteristics of hospitalized patients with coronavirus disease-19 (COVID-19) in Zengdu District, Hubei Province, China. Methods: Clinical data on COVID-19 inpatients in Zengdu Hospital from January 27 to March 11, 2020 were collected; this is a community hospital in an area surrounding Wuhan and supported by volunteer doctors. All hospitalized patients with COVID-19 were included in this study. The epidemiological findings, clinical features, laboratory findings, radiologic manifestations, and clinical outcomes of these patients were analyzed. The patients were followed up for clinical outcomes until March 22, 2020. Severe COVID-19 cases include severe and critical cases diagnosed according to the seventh edition of China's COVID-19 diagnostic guidelines. Severe and critical COVID-19 cases were diagnosed according to the seventh edition of China's COVID-19 diagnostic guidelines. Results: All hospitalized COVID-19 patients, 276 (median age: 51.0 years), were enrolled, including 262 non-severe and 14 severe patients. The proportion of patients aged over 60 years was higher in the severe group (78.6%) than in the non-severe group (18.7%, $p < 0.01$). Approximately a quarter of the patients (24.6%) had at least one comorbidity, such as hypertension, diabetes, or cancer, and the proportion of patients with comorbidities was higher in the severe group (85.7%) than in the non-severe group (21.4%, $p < 0.01$). Common symptoms included fever (82.2% [227/276]) and cough (78.0% [218/276]). 38.4% (106/276) of the patients had a fever at the time of admission. Most patients (94.9% [204/276]) were cured and discharged; 3.6% (10/276) deteriorated to a critical condition and were transferred to another hospital. The median COVID-19 treatment duration and hospital stay were 14.0 and 18.0 days, respectively. Conclusions: Most of the COVID-19 patients in Zengdu had mild disease. Older patients with underlying diseases were at a higher risk of progression to severe disease. The length of hospital-stay and antiviral treatment duration for COVID-19 were slightly longer than those in Wuhan. This work will contribute toward an understanding of COVID-19 characteristics in the areas around the core COVID-19 outbreak region and serve as a reference for decision-making for epidemic prevention and control in similar areas.

Publication Type

Journal article.

<334>

Accession Number

20203335411

Author

Barrocas, A.; Schwartz, D. B.; Hasse, J. M.; Seres, D. S.; Mueller, C. M.

Title

Ethical framework for nutrition support resource allocation during shortages: lessons from COVID-19.

Source

Nutrition in Clinical Practice; 2020. 35(4):599-605. 24 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The coronavirus disease 2019 (COVID-19) pandemic has impacted all aspects of our population. The "Troubling Trichotomy" of what can be done technologically, what should be done ethically, and what must be done legally is a reality during these unusual circumstances. Recent ethical considerations regarding allocation of scarce resources, such as mechanical ventilators, have been proposed. These can apply to other disciplines such as nutrition support, although decisions regarding nutrition support have a diminished potential for devastating outcomes. The principal values and goals leading to an ethical framework for a uniform, fair, and objective approach are reviewed in this article, with a focus on nutrition support. Some historical aspects of shortages in nutrition supplies and products during normal circumstances, as well as others during national crises, are outlined. The development and implementation of protocols using a scoring system seems best addressed by multidisciplinary ethics and triage committees with synergistic but disparate functions. Triage committees should alleviate the burdens of unilateral decisions by the healthcare team caring for patients. The treating team should make every attempt to have patients and the public at large update or execute/develop advance directives. Legal considerations, as the third component of the Troubling Trichotomy, are of some concern when rationing care. The likelihood that criminal or civil charges could be brought against individual healthcare professionals or institutions can be minimized, if fair protocols are uniformly applied and deliberations well documented.

Publication Type

Journal article.

<335>

Accession Number

20203337870

Author

Roy, N. D.; Tomycho, O.; Charles, K.

Title

The impact of the COVID-19 pandemic on price disparities and fluctuations of shallots in traditional markets.

Source

Russian Journal of Agricultural and Socio-Economic Sciences; 2020. 7(103):113-119. 21 ref.

Publisher

iVolga Press

Location of Publisher

Orel

Country of Publication

Russia

Abstract

Horticultural food commodities such as shallots are a staple and strategic commodity in Indonesia which is affected by the covid-19 pandemic situation. This study is to answer the pattern of price movements and disparities, as well as the level of fluctuations in the price of shallots due to the covid-19 pandemic in traditional markets in Kupang and Surabaya. Kupang NTT as the recipient of shallots supplies from Surabaya, East Java. Using time-series data of the shallot prices for the period of June 2016 - March 2020 to see disparities and fluctuations, which analyzed using graphics and coefficient of variation (CV). The results of the analysis found that the disparity and fluctuations of the price of shallots between the periods of June 2016 - March 2020, showed a movement that continues to increase, but with a fluctuating increase. Price disparity and fluctuation in Kupang is higher than in Surabaya. This difference is in addition to the seasonal factor also because Surabaya is one of the main suppliers of shallots to Kupang. So that the prices sensitively will rise if there is a disruption in distribution (supply). This seems clear when the initial enactment of social distancing and panic buying took place. Market operations and policies to improve efficiency in the distribution of trade in goods need attention.

Publication Type

Journal article.

<336>

Accession Number

20203331692

Author

Zhang GuQin; Pan HuaQin; Hu XingXing; He ShaoJun; Chen YiFei; Wei ChaoJie; Ni Lan; Zhang LiPing; Cheng ZhenShun; Yang Jiong

Title

The role of isolation rooms, facemasks and intensified hand hygiene in the prevention of nosocomial COVID-19 transmission in a pulmonary clinical setting.

Source

Infectious Diseases of Poverty; 2020. 9(104):(23 July 2020). 18 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

From December 25, 2019 to January 31, 2020, 33 cases of the coronavirus disease 2019 (COVID-19) were identified in the Department of Respiratory and Critical Care Medicine of Zhongnan Hospital of Wuhan University, China, yet none of the affiliated HCWs was infected. Here we analyzed the infection control measures used in three different departments in the Zhongnan Hospital of Wuhan University and correlated the measures with the corresponding infection data of HCWs affiliated with these departments. We found that three infection control measures, namely the isolation of the presumed positive patients, the use of facemasks and intensified hand hygiene play important roles in preventing nosocomial transmission of COVID-19.

Publication Type

Journal article.

<337>

Accession Number

20203335998

Author

Cinti, S.; Graciotti, L.; Giordano, A.; Valerio, A.; Nisoli, E.

Title

COVID-19 and fat embolism: a hypothesis to explain the severe clinical outcome in people with obesity.

Source

International Journal of Obesity; 2020. 44(8):1800-1802. 26 ref.

Publisher

Nature Publishing Group

Location of Publisher

London

Country of Publication

UK

Publication Type

Journal article.

<338>

Accession Number

20203335997

Author

Demidowich, A. P.; Levine, J. A.; Apps, R.; Cheung, F. K.; Chen JinGuo; Fantoni, G.; Patel, T. P.; Yanovski, J. A.

Title

Colchicine's effects on metabolic and inflammatory molecules in adults with obesity and metabolic syndrome: results from a pilot randomized controlled trial.

Source

International Journal of Obesity; 2020. 44(8):1793-1799. 29 ref.

Publisher

Nature Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Objective: Recent clinical trials have demonstrated that colchicine may have metabolic and cardiovascular and benefits in at-risk patients; however, the mechanisms through which colchicine may improve outcomes are still unclear. We sought to examine colchicine's effects on circulating inflammatory and metabolic molecules in adults with obesity and metabolic syndrome (MetS). Methods: Blood samples were collected pre- and post-intervention during a double-blind randomized controlled trial in which 40 adults with obesity and MetS were randomized to colchicine 0.6 mg or placebo twice-daily for 3 months. Serum samples were analyzed for 1305 circulating factors using the SomaScan Platform. The Benjamini-Hochberg procedure was used to adjust the false discovery rate (FDR) for multiple testing. Results: At baseline, age (48.0 +/- 13.8 vs. 44.7 +/- 10.3 years) and BMI (39.8 +/- 6.4 vs. 41.8 +/- 8.2 kg/m2) were not different between groups. After controlling for the FDR, 34 molecules were significantly changed by colchicine. Colchicine decreased concentrations of multiple inflammatory molecules, including C-reactive protein, interleukin 6, and resistin, in addition to vascular-related proteins (e.g., oxidized low-density lipoprotein receptor, phosphodiesterase 5A). Conversely, relative to placebo, colchicine significantly increased concentrations of eight molecules including secreted factors associated with metabolism and anti-thrombosis. Conclusions: In adults with obesity, colchicine significantly affected concentrations of proteins involved in the innate immune system, endothelial function and atherosclerosis, uncovering new mechanisms behind its cardiometabolic effects. Further research is warranted to investigate whether colchicine's IL-6 suppressive effects may be beneficial in COVID-19.

Publication Type

Journal article.

<339>

Accession Number

20203335996

Author

Chiappetta, S.; Sharma, A. M.; Bottino, V.; Stier, C.

Title

COVID-19 and the role of chronic inflammation in patients with obesity.

Source

International Journal of Obesity; 2020. 44(8):1790-1792. 22 ref.

Publisher

Nature Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Coronavirus disease 2019 (COVID-19) and the risk of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) poses a particular risk to people living with preexisting conditions that impair immune response or amplify pro-inflammatory response. Low-grade chronic systemic inflammation, common in people with obesity, is associated with the development of atherosclerosis, type 2 diabetes, and hypertension, well known comorbidities that adversely affect the outcomes of patients with COVID-19. Risk stratification based on the Edmonton Obesity Staging System (EOSS), which classifies obesity based on the presence of medical, mental, and/or functional complications rather than on body mass index (BMI), has been shown to be a better predictor of all-cause mortality and it may well be that EOSS stages may better describe the risk of hyperinflammation in patients with COVID-19 infection. Analyzing a group of metabolic ill patients with obesity (EOSS 2 and 3), we found an increased interleukin-6 and linear regression analysis showed a positive correlation with C-reactive protein (CRP) (p = 0.014) and waist-to-hip-ratio (WHR) (p = 0.031). Physicians should be aware of these findings in patients with COVID-19 infection. Early identification of possible hyperinflammation could be fundamental and should guide decision making regarding hospitalization, early respiratory support, and therapy with immunosuppression to improve mortality.

Publication Type

Journal article.

<340>

Accession Number

20203335995

Author

Hu Xiang; Pan XiaoQiong; Zhou Wei; Gu XueJiang; Shen FeiXia; Yang Bo; Hu Zhen

Title

Clinical epidemiological analyses of overweight/obesity and abnormal liver function contributing to prolonged hospitalization in patients infected with COVID-19.

Source

International Journal of Obesity; 2020. 44(8):1784-1789. 22 ref.

Publisher

Nature Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Background/objectives: During the 2019 coronavirus disease (COVID-19) outbreak, obesity may contribute to COVID-19 transmission and deterioration. In addition, many patients with COVID-19 infection have suffered liver damage which might contribute to a worse prognosis. We conducted a clinical epidemiological analysis to investigate the association of overweight/obesity and abnormal liver function (ALF) with hospitalized duration in patients infected with COVID-19. Subjects/methods: Fifty-eight patients with diagnosed COVID-19 (22 women & 36 men; average age: 49.2 +/- 13.1 yr) were included, and their clinical data were collected at The Second Affiliated and Yuying Children's Hospital of Wenzhou Medical University, Zhejiang. Overweight/obesity was determined as body mass index (BMI) >=24 kg/m2, ALF was determined as alanine

aminotransferase >40 U/L, and prolonged hospitalization was lasting more than the median value of the hospitalized days (19 days) in this population. Results: The proportions of prolonged hospitalization were elevated in patients with overweight/obesity and ALF compared with those without overweight/obesity (62.1% versus 26.1%, P = 0.010) and those without ALF (70.6% versus 41.5%, P = 0.043). Kaplan-Meier analysis showed that the hospitalized duration was increased from the patients with neither overweight/obesity nor ALF to those with either overweight/obesity or ALF, and to those with both of overweight/obesity and ALF (mean with 95% confidence interval: 16.4 [14.5-18.3] versus 25.3 [21.6-29.1] versus 28.3 [24.6-32.0], P for trend = 0.001). Being discharged from hospital in time was inversely and independently associated with BMI (hazard ratio [HR] = 0.75, 95% CI: 0.63-0.90, P for trend = 0.002) and ALT (HR = 0.95, 95% CI: 0.92-0.99, P for trend = 0.007). Conclusions: Present findings suggested that overweight/obesity and/or ALF contributed to predicting a probability of prolonged hospitalization in patients with COVID-19 infection, to whom extra attentions and precautions should be paid during clinical treatments.

Publication Type

Journal article.

<341>

Accession Number

20203342299

Author

Bashir, M. F.; Ma BenJiang; Bilal; Komal, B.; Bashir, M. A.; Farooq, T. H.; Iqbal, N.; Madiha Bashir

Title

Correlation between environmental pollution indicators and COVID-19 pandemic: a brief study in californian context.

Source

Environmental Research; 2020. 18724 ref.

Publisher

Elsevier Inc

Location of Publisher

Orlando

Country of Publication

USA

Abstract

In December 2019, the novel coronavirus COVID-19 outbreak was first detected in Wuhan Hubei province, China. The April 24, 2020, the Centers for Disease Control and Preventions (CDC) has confirmed more than 39,000 cases, including >1800 deaths. California's Governor Gavin Newsom ordered mandatory stay at home after World Health Organization (WHO) declared COVID-19 as a global pandemic in early March. We have evaluated the correlation between environmental pollution determinants and the COVID-19 outbreak in California by using the secondary published data from the Centers for Disease Control and the Environmental Pollution Agency (EPA). We employed Spearman and Kendall correlation tests to analyze the association of PM 2.5, PM 10, SO2, NO2, Pb, VOC, and CO with COVID-19 cases in California. Our findings indicate that environmental pollutants such as PM10, PM2.5, SO2, NO2, and CO have a significant correlation with the COVID-19 epidemic in California. Overall, our study is a useful supplement to encourage regulatory bodies to promote changes in environmental policies as pollution source control can reduce the harmful effects of environmental pollutants.

Publication Type

Journal article.

<342>

Accession Number

20203342294

Author

Anser, M. K.; Zahid Yousaf; Khan, M. A.; Nassani, A. A.; Alotaibi, S. M.; Abro, M. M. Q.; Xuan Vinh Vo; Khalid Zaman

Title

Does communicable diseases (including COVID-19) may increase global poverty risk? a cloud on the horizon.

Source

Environmental Research; 2020. 187many ref.

Publisher

Elsevier Inc

Location of Publisher

Orlando

Country of Publication

USA

Abstract

Coronavirus epidemic can push millions of people in poverty. The shortage of healthcare resources, lack of sanitation, and population compactness leads to an increase in communicable diseases, which may increase millions of people add in a vicious cycle of poverty. The study used the number of factors that affect poverty incidence in a panel of 76 countries for a period of 2010-2019. The dynamic panel GMM estimates show that the causes of death by communicable diseases, chemical-induced carbon and fossil fuel combustion, and lack of access to basic hand washing facilities menace to increase poverty headcounts, whereas, an increase in healthcare expenditures substantially decreases poverty headcounts across countries. Further, the results show the U-shaped relationship between economic growth and poverty headcounts, as economic growth first decreases and later increase poverty headcount due to rising healthcare disparities among nations. The causality estimates show that lack of access to basic amenities lead to increase of communicable diseases including COVID-19 whereas chemical-induced carbon and fossil fuel emissions continue to increase healthcare expenditures and economic growth in a panel of selected countries. The rising healthcare disparities, regional conflicts, and public debt burden further 'hold in the hand' of communicable diseases that push millions of people in the poverty trap.

Publication Type

Journal article.

<343>

Accession Number

20203342289

Author

Domingo, J. L.; Rovira, J.

Title

Effects of air pollutants on the transmission and severity of respiratory viral infections.

Source

Environmental Research; 2020. 187many ref.

Publisher

Elsevier Inc

Location of Publisher

Orlando

Country of Publication

USA

Abstract

Particulate matter, sulfur dioxide, nitrogen oxides, ozone, carbon monoxide, volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs) are among the outdoor air pollutants that are major factors in diseases, causing especially adverse respiratory effects in humans. On the other hand, the role of respiratory viruses in the pathogenesis of severe respiratory infections is an issue of great importance. The present literature review was aimed at assessing the potential effects of air pollutants on the transmission and severity of respiratory viral infections. We have reviewed the scientific literature regarding the association of outdoor air pollution and respiratory viruses on respiratory diseases. Evidence supports a clear association between air concentrations of some pollutants and human respiratory viruses interacting to adversely affect the respiratory system. Given the undoubted importance and topicality of the subject, we have paid special attention to the association between air pollutants and the transmission and severity of the effects caused by the coronavirus named SARS-CoV-2, which causes the COVID-19. Although to date, and by obvious reasons, the number of studies on this issue are still scarce, most results indicate that chronic exposure to air pollutants delays/complicates recovery of patients of COVID-19 and leads to more severe and lethal forms of this disease. This deserves immediate and in-depth experimental investigations.

Publication Type

Journal article.

<344>

Accession Number

20203340321

Author

Xiao YanNi; Tang Biao; Wu JianHong; Cheke, R. A.; Tang SanYi

Title

Linking key intervention timing to rapid decline of the COVID-19 effective reproductive number to quantify lessons from Mainland China.

Source

International Journal of Infectious Diseases; 2020. 97:296-298. 7 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

COVID-19 outbreak in China and linked to dates in 2020 when different interventions were enacted. From a maximum of 3.98 before the lockdown in Wuhan City, the values of Rt declined to below 1 by the second week of February, after the construction of hospitals dedicated to COVID-19 patients. The Rt continued to decline following additional measures in line with the policy of "early detection, early report, early quarantine, and early treatment." The results provide quantitative evaluations of how intervention measures and their timings succeeded, from which lessons can be learned by other countries dealing with future outbreaks.

Publication Type

Journal article.

<345>

Accession Number

20203340320

Author

Miyamae, Y.; Hayashi, T.; Yonezawa, H.; Fujihara, J.; Matsumoto, Y.; Ito, T.; Tsubota, T.; Ishii, K.

Title

Duration of viral shedding in asymptomatic or mild cases of novel coronavirus disease 2019 (COVID-19) from a cruise ship: a single-hospital experience in Tokyo, Japan.

Source

International Journal of Infectious Diseases; 2020. 97:293-295. 14 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which is the cause of novel coronavirus disease 2019 (COVID-19), was first reported in Wuhan, China, and now has spread across the world as a global pandemic. The propagation from asymptomatic polymerase chain reaction (PCR)-positive individuals represents a complicating factor in the efforts to control the COVID-19 pandemic. We examined the course of PCR assays and the duration of viral shedding in 23 asymptomatic or mild COVID-19 patients from the cruise ship who were admitted to our hospital. Among these 23 cases, the median duration of viral shedding was 19 days (range, 6-37 days) from initial viral detection. Eight cases (35%) had another positive PCR result after testing negative once. Although the duration of viral shedding was approximately three weeks, the infectivity and transmissibility period from asymptomatic and mild COVID-19 cases is unclear. Further studies are needed to determine how long such asymptomatic and mild COVID-19 cases have infectivity.

Publication Type

Journal article.

Accession Number

20203340315

Author

Rutayisire, E.; Nkundimana, G.; Mitonga, H. K.; Boye, A.; Nikwigize, S.

Title

What works and what does not work in response to COVID-19 prevention and control in Africa.

Source

International Journal of Infectious Diseases; 2020. 97:267-269. 13 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Since the emergence of the COVID-19 pandemic in December 2019 in Wuhan, China, there have been nearly 6,663,304 confirmed cases of COVID-19, including 392,802 deaths, worldwide as of 10:00 CEST 06 June 2020. In Africa, 152,442 COVID-19 cases and 4334 deaths have been reported as of 02 June 2020. The five countries with the highest commutative number of cases in Africa are South Africa, Egypt, Nigeria, Algeria, and Ghana. Africa, and the rest of world, has had to swiftly undertake the necessary measures to protect the continent from irreversible effects of the COVID-19 pandemic that is claiming lives and destroying livelihoods. The lower number of COVID-19 cases in most African countries is attributed to inadequate health systems, low-to-absent testing capacity, poor reporting systems, and insufficient numbers of medical staff. The COVID-19 pandemic poses a great threat to most African countries, from cities to rural areas, and has created a strong demand on already scarce resources. Intense mobilization of additional resources is required to implement established emergency contingency measures. Measures to prevent the spread of COVID-19 include closure of borders and restricting movement of people within a country; this has resulted in the tourism sector being adversely affected by the loss of income. Cooperative prevention and control measures are one of the promising solutions to deplete the spread of COVID-19 on the continent.

Publication Type

Journal article.

Accession Number

20203342774

Author

Brasiel, P. G. de A.

Title

The key role of zinc in elderly immunity: a possible approach in the COVID-19 crisis.

Source

Clinical Nutrition ESPEN; 2020. 38:65-66. 20 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Background & aims: The COVID-19 infection can lead to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), mainly affecting patients aged 60 and older. Preliminary data suggest that the nutritional status can change the course of the infection, and on the matter, zinc is crucial for growth, development, and the maintenance of immune function. In the absence of treatment for this virus, there is an urgent need to find alternative methods that can contribute to control of disease. The aim of this paper is to establish the relation between zinc and COVID-19. Methods and results: From the prior scientific knowledge, we have performed a review of the literature and examine the role of zinc in immune function in the infection by COVID-19. Our findings are that the zinc as an anti-inflammatory agent may help to optimize immune function and reduce the risk of infection. Conclusions: Zinc supplementation can be a useful strategy to reduce the global burden of infection in the elderly, there is a need the increased reporting to improve our understanding of COVID-19 and the care of affected patients.

Publication Type

Journal article.

<348>

Accession Number

20203342735

Author

Pati, S.; Houston, T.

Title

Assessing the risk of seizures with chloroquine or hydroxychloroquine therapy for COVID-19 in persons with epilepsy.

Source

Epilepsy Research; 2020. 16510 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: The goal of this systematic review is to assess the published literature for seizure risk with chloroquine or hydroxychloroquine therapy in persons with and without epilepsy. With the COVID-19 pandemic, there is a desperate need for treatment against the SARS CoV-2 virus. Chloroquine or hydroxychloroquine is one proposed medication that has received substantial public attention. However, the package insert states that these medications may provoke seizures in patients with epilepsy, and this has resulted in increased questions and anxiety in the epilepsy community. Methods: PubMed (1970 to March 27, 2020) and the Embase (1970 to March 27, 2020) were searched with the terms chloroquine or hydroxychloroquine and seizure or epilepsy, convulsions, or status epilepticus. Selected studies were reviewed, and the adverse drug reaction was classified. Results: Only eleven out of 31 studies were deemed eligible for systematic analysis. For chloroquine, eligible studies were- one prospective study(n = 109), two case series(n = 6), and six case reports. The dose of chloroquine ranged between 100-500 mg/day, except in one patient with a seizure, who was after taking 1000 mg. For hydroxychloroquine, there was one prospective observational study(n = 631) and one case report. The clinical trials failed to find any significant relation between seizures and chloroquine or hydroxychloroquine. Conclusion: Although the package insert describes an increased risk of seizure, the systematic review highlights that such a statement is not supported by class I evidence. Clinicians, therefore, need to understand that data regarding this specific topic is limited to case series and case reports. There is no substantial evidence to suggest that these medications can increase seizure risk.

Publication Type

Journal article.

<349>

Accession Number

20203340887

Author

Quadri, S. A.

Title

COVID-19 and religious congregations: implications for spread of novel pathogens.

Source

International Journal of Infectious Diseases; 2020. 96:219-221. 15 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The COVID-19 pandemic is ravaging the world. A principal preventive strategy is practicing social distancing. Congregations of the faithful at the local and transnational levels are strongly recommended by several world religions and religious orders, however, a gathering of large numbers of people in close approximation could be fertile ground for the spread of novel pathogens. The refusal to suspend such gatherings could lead to potential widespread dispersal of infections.

Publication Type

Journal article.

<350>

Accession Number

20203340885

Author

Hinjoy, S.; Tsukayama, R.; Chuxnum, T.; Masunglong, W.; Sidet, C.; Kleeblumjeak, P.; Onsai, N.; Iamsirithaworn, S.

Title

Self-assessment of the Thai Department of Disease Control's communication for international response to COVID-19 in the early phase.

Source

International Journal of Infectious Diseases; 2020. 96:205-210. 23 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: This study aimed to assess the Thailand Department of Disease Control's (DDC) early responses to COVID-19 in respect to communication with the international community and to identify the manner of Thailand's response during public health emergencies. Methods: Documents and international response communication from 4-31 January 2020 were reviewed and dates of responses were collected for descriptive analysis. A questionnaire was submitted to the DDC officers responsible for international coordination. A meeting to identify responses was held to evaluate the self-assessed capacities of the Department's international communication. Results: Thailand began the COVID-19 screening protocol on 3 January 2020. International correspondence subsequently occurred continually either through the ASEAN or International Health Regulations (IHR) mechanisms. The total score of communication for international response was 88.9%. For IHR reporting duties, the median duration to respond was 2.49 hours. Official news was sent within a mean of 9.18 hours and the English daily situation reports were always uploaded onto the official website within 24 hours. Conclusions: This study provided a benchmark for international coordination and

communication capacities and also identified areas for improvement during public health emergencies, such as the need to identify English-speaking spokespeople to communicate at an international level.

Publication Type

Journal article.

<351>

Accession Number

20203340883

Author

Abbara, A.; Rayes, D.; Fahham, O.; Alhiraki, O. A.; Khalil, M.; Alomar, A.; Tarakji, A.

Title

Coronavirus 2019 and health systems affected by protracted conflict: the case of Syria.

Source

International Journal of Infectious Diseases; 2020. 96:192-195. 35 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Introduction: Two thirds of countries globally are unprepared to respond to a health emergency as per the International Health Regulations (2005), with conflict-affected countries like Syria being particularly vulnerable. Political influences on outbreak preparedness, response and reporting may also adversely affect control of SARS-CoV-2 in Syria. Syria reported its first case on 22 March 2020; however, concerns were raised that this was delayed and that underreporting continues. Discussion: Syria's conflict has displaced more than half of its pre-war population, leaving 6.7 million people internally displaced. The consequent overcrowding - with insufficient water, sanitation and healthcare (including laboratory capacity) - could lead to conditions that are

ideal for spread of SARS-CoV-2 in Syria. Political changes have led to the formation of at least three health systems within Syria's borders, each with its own governance, capacity and planning. This fragmentation, with little interaction between them, could lead to poor resource allocation and adversely affect control. As such, COVID-19 could overwhelm the health systems (particularly intensive care capacity), leading to high deaths across the population, particularly for the most vulnerable such as detainees. Conclusions: Locally implementable interventions that rapidly build WASH and health system capacity are required across Syria to ensure early detection and management of COVID-19 cases.

Publication Type

Journal article.

<352>

Accession Number

20203328404

Author

Shi XiangYing; Zhang XiaoChuan; Xiao LingYun; Li, B. V.; Liu JinMei; Yang FangYi; Zhao Xiang; Cheng Chen; Lu Zhi

Title

Public perception of wildlife consumption and trade during the COVID-19 outbreak. [Chinese]

Source

Biodiversity Science; 2020. 28(5):630-643. 21 ref.

Publisher

Biodiversity Science

Location of Publisher

Beijing

Country of Publication

China

Abstract

The COVID-19 pandemic has drawn great attention to the potential public health risks associated with the consumption and trade of wildlife. To inform legislative revision and policy changes, we conducted a web-based survey of the general public, attracting 74,040 responses. The survey examined public support for revising legislation and policy related to wildlife consumption and trade management. The results and analysis revealed: (1) The overwhelming majority (> 90%) of constituents supported more stringent policy and legislation on wildlife consumption, trade, and commercial exhibitions. (2) The consumption of wildlife is likely to fall due to COVID-19. (3) People that engaged either directly or indirectly in wildlife-related industries showed less support for more stringent policy and legislation on wildlife consumption and trade. Based on these results and concerns for public health security, a ban on wildlife consumption and revised legislation by the Standing Committee of the National People's Congress was widely supported, particularly among educated, urban respondents.

Publication Type

Journal article.

<353>

Accession Number

20203328400

Author

Han BenFeng; Zhou Xin; Zhang Xue

Title

Verification of virus identity and host association using genomics technology. [Chinese]

Source

Biodiversity Science; 2020. 28(5):587-595. 48 ref.

Publisher

Biodiversity Science

Location of Publisher

Beijing

Country of Publication

China

Abstract

Genomics technology, especially metagenomic sequencing, has played an important role in identifying and tracing unknown viruses. While classical methods in virus taxonomy rely on phenotypic traits, the metagenomics pipeline assembles new virus genomes from short nucleotide fragments without the need for any a priori reference sequences. This new technology increases the efficiency in identifying viruses and hosts associated with those viruses. This is particularly useful in identifying viruses that can cause epidemics. One current challenge in accomplishing this, is the ability to trace the original and intermediate viral hosts. To do this, a comprehensive virus sequence library characterized by definite host information is needed. Unfortunately, such information is still limited. As wild and stock animals are main sources for pathogenic viruses, an extensive survey of the global virome is vitally important to help identify and prevent zoonotic epidemics. This review summarizes the application of genomics technologies in the identification of viruses and the hosts associated with those viruses, using the outbreak of SARS-CoV-2 as an example. We also address intrinsic drawbacks of current methodologies as well as the incompleteness of available virus libraries. We propose the necessity and feasibility in constructing a comprehensive virus database with host association that emphasizes the diversity of viruses and their interactions with other organisms.

Publication Type

Journal article.

<354>

Accession Number

20203329646

Author

Huang Rui; Zhu Li; Xue LeYang; Liu LongGen; Yan XueBing; Wang Jian; Zhang Biao; Xu TianMin; Ji Fang; Zhao Yun; Cheng Juan; Wang YinLing; Shao HuaPing; Hong ShuQin; Cao Qi; Li ChunYang; Zhao XiangAn; Zou Lei; Sang DaWen; Zhao HaiYan; Guan XinYing; Chen XiaoBing; Shan Chun; Xia Juan; Chen YuXin; et al.

Title

Clinical findings of patients with coronavirus disease 2019 in Jiangsu province, China: a retrospective, multi-center study.

Source

PLoS Neglected Tropical Diseases; 2020. 14(5)25 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Limited data are available for clinical characteristics of patients with coronavirus disease 2019 (COVID-19) outside Wuhan. This study aimed to describe the clinical characteristics of COVID-19 and identify the risk factors for severe illness of COVID-19 in Jiangsu province, China. Clinical data of hospitalized COVID-19 patients were retrospectively collected in 8 hospitals from 8 cities of Jiangsu province, China. Clinical findings of COVID-19 patients were described and risk factors for severe illness of COVID-19 were analyzed. By Feb 10, 2020, 202 hospitalized patients with COVID-19 were enrolled. The median age of patients was 44.0 years (interquartile range, 33.0-54.0). 55 (27.2%) patients had comorbidities. At the onset of illness, the common symptoms were fever (156 [77.2%]) and cough (120 [59.4%]). 66 (32.7%) patients had lymphopenia. 193 (95.5%) patients had abnormal radiological findings. 11 (5.4%) patients were admitted to the intensive care unit and none of the patients died. 23 (11.4%) patients had severe illness. Severe illness of COVID-19 was independently associated with body mass index (BMI) >= 28 kg/m2 (odds ratio [OR], 9.219; 95% confidence interval [CI], 2.731 to 31.126; P<0.001) and a known history of type 2 diabetes (OR, 4.326; 95% CI, 1.059 to 17.668; P = 0.041). In this case series in Jiangsu Province, COVID-19 patients had less severe symptoms and had better outcomes than the initial COVID-19 patients in Wuhan. The BMI >= 28 kg/m2 and a known history of type 2 diabetes were independent risk factors of severe illness in patients with COVID-19.

Publication Type

Journal article.

<355>

Accession Number

20203329642

Author

Miller, M. J.; Loaiza, J. R.; Takyar, A.; Gilman, R. H.

Title

COVID-19 in Latin America: novel transmission dynamics for a global pandemic?

Source

PLoS Neglected Tropical Diseases; 2020. 14(5)26 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

The COVID-19 virus expanded from China into Western Asia, Europe, and North America, impacting many of the world's wealthiest countries. Brazil reported Latin America's first case in late February 2020, and in less than a month, over 7,000 COVID-19 cases have been confirmed among nearly every country and territory in Latin America and the Caribbean (LAC). The LAC outbreak appears to be about two weeks behind the United States and Canada and about three to four weeks behind Western Europe. Thus, the global COVID-19 pandemic is entering a new phase, not only expanding beyond primarily temperate Northern Hemisphere countries into the tropics but also spreading to a geopolitical region marked by significantly worse poverty, water access and sanitation, and distrust in public governance (Fig 1). We believe that these aspects of the Latin American context are likely to substantially affect the transmission dynamics and scope of the COVID-19 outbreak in LAC, with potential implications for the trajectory of the global pandemic.

Publication Type

Journal article.

<356>

Accession Number

20203320319

Author

Linh Dinh; Phuc Dinh; Phuong D M Nguyen; Duy H N Nguyen; Thang Hoang

Title

Vietnam's response to COVID-19: prompt and proactive actions.

Source

Journal of Travel Medicine; 2020. 27(3)4 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

The aim of the article was to report the public health action of Vietnam in controlling the spread of COVID-19, thus despite being as a low-middle income and populous country with 95 million people, it has kept the outbreak under control since the first cases were confirmed more than 2 months ago. These positive outcomes result from prompt, proactive actions of the government and collective efforts of the public. Unlike affluent Asian countries with GDP per capita of 20-fold higher, Vietnam could not afford a community-wide testing program. Instead, Vietnam has focused on cost-effective measures. At the center of its active case finding are extensive contact tracing and health declaration for all. In combination with case isolation, mass quarantine and mass masking, these measures control infections at source, even asymptomatic cases. It is the early recognition of the outbreak, swiftly adaptive actions, production line of medical essentials and PPEs and the public's cooperation that make these strategies feasible.

Publication Type

Journal article.

<357>

Accession Number

20203320316

Author

Ebrahim, S. H.; Memish, Z. A.

Title

Saudi Arabia's drastic measures to curb the COVID-19 outbreak: temporary suspension of the Umrah pilgrimage.

Source

Journal of Travel Medicine; 2020. 27(3)4 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

The aim of the article was to discuss the public health actions of Saudi Arabia to prevent and control COVID-19, among of which is the suspension of the Umrah pilgrimage which contains an immense possibility in the transmission of the virus.

Publication Type

Journal article.

<358>

Accession Number

20203320311

Author

Liu XiuCheng; Zhang DianAn; Sun Teng; Li Xiang; Zhang Hao

Title

Containing COVID-19 in rural and remote areas: experiences from China.

Source

Journal of Travel Medicine; 2020. 27(3)10 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

The aim of the article was to examine the measures in rural areas in China to contain and control COVID-19. Rural and remote populations are vulnerable populations that deserve preparedness planning now before it is too late. Active case detection and enhanced surveillance must start now, be it in rural and remote areas of the USA or Europe, amongst minorities, or be it rural populations in Africa and Asia. WHO and the global community needs to develop strategies for implementing COVID-19 measures appropriate to rural settings.

Publication Type

Journal article.

<359>

Accession Number

20203322705

Author

Eka Jusup Singka; Innes Ericca

Title

Hajj health management in Indonesia.

Source

Medical Journal of Indonesia; 2020. 29(2):117-119. 2 ref.

Publisher

Medical Journal of Indonesia

Location of Publisher

Jakarta Pusat

Country of Publication

Indonesia

Abstract

The aim of the article was to discuss the implementation of health protection measures for the Hajj during the COVID-19 pandemic in Indonesia.

Publication Type

Journal article.

<360>

Accession Number

20203308457

Author

Gao Feng; Zheng KennethI; Wang XiaoBo; Sun QingFeng; Pan KeHua; Wang TingYao; Chen YongPing; Targher, G.; Byrne, C. D.; George, J.; Zheng MingHua

Title

Obesity is a risk factor for greater COVID-19 severity.

Source

Diabetes Care; 2020. 43(7):e72-e74. 6 ref.

Publisher

The American Diabetes Association

Location of Publisher

Washington

Country of Publication

USA

Abstract

We investigated the association between obesity and COVID-19 severity of illness among patients with laboratory-confirmed SARS-CoV-2 infection. We enrolled adult patients with COVID-19 from three hospitals in China between 17 January 2020 and 11 February 2020. Seventy-five patients were diagnosed as obese (i.e., case subjects). The mean age of patients was 48 years, and 62.7% were male. Twenty-nine patients (19.3%) had diabetes; obese patients were more likely to have diabetes than those without obesity. Notably, obese patients also had a longer hospital stay and a greater proportion had severe COVID-19 compared with nonobese patients. There was a clear dose-effect relationship between increasing values of BMI and the proportion of patients with severe COVID-19. In the logistic regression analyses, the presence of obesity was associated with an approximately threefold increased risk of having severe COVID-19. Notably, the association between obesity (or increasing BMI values) and greater COVID-19 severity remained significant even after adjusting for age, sex, smoking status, hypertension, diabetes, and dyslipidemia.

Publication Type

Journal article.

<361>

Accession Number

20203336435

Author

Alon, T.; Kim MinKi; Lagakos, D.; VanVuren, M.

Title

How should policy responses to the COVID-19 pandemic differ in the developing world?

Source

IED Discussion Paper Series - Institute for Economic Development, Boston University; 2020. (350):46 pp. 47 ref.

Publisher

Institute for Economic Development, Boston University

Location of Publisher

Boston

Country of Publication

USA

Abstract

The COVID-19 pandemic has already led to dramatic policy responses in most advanced economies, and in particular sustained lockdowns matched with sizable transfers to much of the workforce. This paper provides a preliminary quantitative analysis of how aggregate policy responses should differ in developing countries. To do so we build an incomplete-markets macroeconomic model with epidemiological dynamics that features several of the main economic and demographic distinctions between advanced and developing economies relevant for the pandemic. We focus in particular on differences in population structure, fiscal capacity, healthcare capacity, the prevalence of "hand-to-mouth" households, and the size of the informal sector. The model predicts that blanket lockdowns are generally less effective in developing countries at reducing the welfare costs of the pandemic, saving fewer lives per unit of lost GDP. Age-specific lockdown policies, on the other hand, may be even more potent in developing countries, saving more lives per unit of lost output than in advanced economies.

Publication Type

Bulletin.

<362>

Accession Number

20203334556

Author

Wayne, A. S.; Rozanski, E. A.

Title

Cataloguing the response by emergency veterinary hospitals during the COVID-19 pandemic via weekly surveys.

Source

Journal of Veterinary Emergency and Critical Care; 2020. 30(4):493-497. 6 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Background: The COVID-19 pandemic has presented veterinary emergency hospitals with unique challenges. Rapid online surveys represent an efficient way of collating responses to rapidly shifting circumstances. Methods: Fifty, 24-h small animal emergency veterinary hospital representatives were recruited to participate in weekly surveys in April 2020 to catalog changes due to COVID-19 pandemic. Key findings: The majority of emergency veterinary hospitals surveyed reported significant changes to day-to-day operations as a result of the COVID-19 pandemic. Significance: Reporting of weekly survey results provides useful information on how emergency veterinary hospitals with similar challenges are responding to the COVID-19 pandemic.

Publication Type

Journal article.

<363>

Accession Number

20203332674

Author

Genkin, A. S.; Mikheev, A. A.

Title

Influence of coronavirus crisis on food industry economy.

Source

Foods and Raw Materials; 2020. 8(2):204-215. 33 ref.

Publisher

Kemerovo Institute of Food Science and Technology (University)

Location of Publisher

Kemerovo

Country of Publication

Russia

Abstract

Recently, there has been a very rapid accumulation of empirical data of economic indicators of the food crisis associated with the coronavirus pandemic. The purpose of this article was to develop a set of measures aimed at minimizing the negative economic impact of the coronavirus crisis (CVC) both at the national and international levels. All these presupposed solving the following tasks. Having studied the nature of the crisis, we found out that it had the greatest impact on such components of food sector as transport, logistic chains, and human resources. We revealed that, first of all, such areas of the economy as fisheries and agricultural production of fruits and vegetables were affected by the crisis. It is obvious that it will also adversely affect small farmers, seasonal and migrant workers, etc. The work proposes the most effective public measures against the negative impact of CVC on the global economy. In particular, we examined the scenario of (possibly temporary) nationalization of operators of critical infrastructure to produce planned critical goods or services. The developed set of measures included limitation of the workers' rights and freedoms by imposing to them labor duties, or replacing them with military ones, limiting the price of strategic goods, and organizing their consumption and distribution. Possible triggers for the implementation of such a scenario in the agricultural sector are offered, as well as mechanisms of protecting and supporting groups of economic agents affected by CVC are proposed.

Publication Type

Journal article.

<364>

Accession Number

20203342069

Author

Sicard, P.; Marco, A. de; Agathokleous, E.; Feng ZhaoZhong; Xu XiaoBin; Paoletti, E.; Dieguez Rodriguez, J. J.; Calatayud, V.

Title

Amplified ozone pollution in cities during the COVID-19 lockdown.

Source

Science of the Total Environment; 2020. 735many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The effect of lockdown due to coronavirus disease (COVID-19) pandemic on air pollution in four Southern European cities (Nice, Rome, Valencia and Turin) and Wuhan (China) was quantified, with a focus on ozone (O3). Compared to the same period in 2017-2019, the daily O3 mean concentrations increased at urban stations by 24% in Nice, 14% in Rome, 27% in Turin, 2.4% in Valencia and 36% in Wuhan during the lockdown in 2020. This increase in O3 concentrations is mainly explained by an unprecedented reduction in NOx emissions leading to a lower O3 titration by NO. Strong reductions in NO2 mean concentrations were observed in all European cities, ~53% at urban stations, comparable to Wuhan (57%), and ~65% at traffic stations. NO declined even further, ~63% at urban stations and ~78% at traffic stations in Europe. Reductions in PM2.5 and PM10 at urban stations were overall much smaller both in magnitude and relative change in Europe (~8%) than in Wuhan (~42%). The PM reductions due to limiting transportation and fuel combustion in institutional and commercial buildings were partly offset by increases of PM emissions from the activities at home in some of the cities. The NOx concentrations during the lockdown were on average 49% lower than those at weekends of the previous years in all cities. The lockdown effect on O3 production was ~10% higher than the weekend effect in Southern Europe and 38% higher in Wuhan, while for PM the lockdown had the same effect as weekends in Southern Europe (~6% of difference). This study highlights the challenge of reducing the formation of secondary pollutants such as O3 even with strict measures to control primary pollutant emissions. These results are relevant for designing abatement policies of urban pollution.

Publication Type

Journal article.

<365>

Accession Number

20203340134

Author

Sakellariou, D.; Malfitano, A. P. S.; Rotarou, E. S.

Title

Disability inclusiveness of government responses to COVID-19 in South America: a framework analysis study.

Source

International Journal for Equity in Health; 2020. 19(131):(03 August 2020). 37 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Disabled people are particularly exposed to the risks of COVID-19, as well as to the measures taken to address it, and their impact. The aim of the study was to examine the disability-inclusiveness of government responses to COVID-19 in four South American Countries: Argentina, Brazil, Chile, and Peru. Methods: We conducted documentary research, using framework analysis to analyse reports, legislation, decrees, and other official documents that communicated measures taken in response to the pandemic, published from February 1st until May 22nd, 2020. We included documents reporting measures that affected disabled people either directly (measures specifically designed for disabled people) or indirectly (measures for the general population). We developed an analytical framework based on recommendations for disability-inclusive response to COVID-19 published by the Economic Commission for Latin America and the Carribean, the World Health Organisation, and other international organisations. Results: We analysed 72 documents. The findings highlight that while some positive measures were taken, the needs of disabled people were not fully considered. Several countries published recommendations for a disability-inclusive response to COVID-19, without ensuring their translation to practice. All countries took at least some steps to ensure access to financial support, health, and education for disabled people, but at the same time they also implemented policies that had a detrimental impact on disabled people. The populations that are most exposed to the impacts of COVID-19, including disabled people living in institutional care, were protected in several cases only by recommendations rather by legislation. Conclusions: This study illustrates how the official government responses taken by four countries in the region - while positive, in several aspects - do not fully address the

needs of disabled people, thus further disadvantaging them. In order to ensure response to COVID - 19 is disability inclusive, it is necessary to translate recommendations to practice, consider disabled people both in mainstream policy and in disability-specific measures, and focus on the long-term reconstruction phase.

Publication Type

Journal article.

<366>

Accession Number

20203342543

Author

Kerr, W. A.

Title

The COVID-19 pandemic and agriculture: short- and long-run implications for international trade relations. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):225-229. 13 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

The COVID-19 pandemic has put unprecedented strain on food supply chains. Given the ever-increasing degree of globalization, those supply chains very often stretch across international borders. In the short run, countries have largely been working to keep those supply chains intact and operating efficiently so that panic buying is cooled and shifts in consumption habits arising from personal isolation can be accommodated. Once the crisis has passed, based on what has been learned regarding the international food system's

resilience, governments may wish to strengthen institutions that govern international trade. On the other hand, based on their COVID-19 experience, governments may feel that they are too dependent on foreign sources of supply and may wish to reverse the impacts of globalization on their food systems. As a result, they may become increasingly isolationist, eschewing international cooperation. Which of these opposing forces will prevail may depend on the paths economies follow after the disequilibrium precipitated by the pandemic.

Publication Type

Journal article.

<367>

Accession Number

20203342542

Author

Barichello, R.

Title

The COVID-19 pandemic: anticipating its effects on Canada's agricultural trade. (Special Issue: COVID-19 and the Canadian agriculture and food sectors: thoughts from the pandemic onset.)

Source

Canadian Journal of Agricultural Economics; 2020. 68(2):219-224. 16 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

With the deep recession now forecast for the world economy, trade can be expected to fall even more steeply. Agricultural trade will be less significantly affected, being insulated by its relatively low income elasticities of demand. However, a drop in the range of 12%-20% in real trade value should be expected.

Canada can be expected to share in this, but, within agricultural exports, cereals will be least affected. This minimal expected impact to cereals stems partly from the risk of wheat export bans by Russia and Kazakhstan, due to increases in wheat prices. Livestock, pulses, and horticulture exporters can be expected to face a larger decline in trade prospects and revenues. An equally large threat, along with falling incomes in our trade partners, is their policy responses, particularly the potential increase in import restrictions. These may take the form of more costly inspections, tightened SPS and food safety regulations, and protectionist measures from competing domestic producers.

Publication Type

Journal article.

<368>

Accession Number

20203341852

Author

Rizou, M.; Galanakis, I. M.; Aldawoud, T. M. S.; Galanakis, C. M.

Title

Safety of foods, food supply chain and environment within the COVID-19 pandemic.

Source

Trends in Food Science & Technology; 2020. 102:293-299. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: The COVID-19 pandemic has generated a new era in the world while we still figure out the consequences in different aspects of our daily life. The food supply chain and the food industry do not

comprise an exception. Scope and approach: This review summarizes the possible transmission ways of COVID-19 through the foods, food supply chain, surfaces, and environment before exploring the development of corresponding detection tools of SARS-CoV-2. For the time being, the possibility of transmission through the food sector is considered negligible, and tracing of SARS-CoV-2 in working environments is not considered as a priority by public authorities. However, the adverse effects on the environment, food systems, and people along the food supply chain are already evident. Key findings and conclusions: As long as we move from farm to fork, more safety measures are needed since more people (and subsequently more potential sources of infection) are involved in the process. The need for developing respective bioanalytical protocols for food and environmental safety applications to adapt in the post-lockdown period is also highlighted.

Publication Type

Journal article.

<369>

Accession Number

20203341824

Author

Singh, J. A.; Ravinetto, R.

Title

COVID-19 therapeutics: how to sow confusion and break public trust during international public health emergencies.

Source

Journal of Pharmaceutical Policy and Practice; 2020. 13(47):(24 July 2020). 56 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Since SARS-CoV2 was declared a Public Health Emergency of International Concern, those tasked with the stewardship of public health at a global, regional, and local level-policymakers, politicians, scientists, drug regulators, health officials, professional associations, journal editors, publishers, and clinicians-have displayed rushed decisions and lapses in judgment in their handling of chloroquine and hydroxychloroquine as potential COVID-19 therapeutics and prophylactics. These lapses merit noting as they hold lessons for how the guardians of medicines regulation and public health can inadvertently sow confusion and damage public trust.

Publication Type

Journal article.

<370>

Accession Number

20203341817

Author

Costa, F. A. da; Lee, V.; Leite, S. N.; Murillo, M. D.; Menge, T.; Antoniou, S.

Title

Pharmacists reinventing their roles to effectively respond to COVID-19: a global report from the international pharmacists for anticoagulation care taskforce (iPACT).

Source

Journal of Pharmaceutical Policy and Practice; 2020. 13(12):(17 June 2020). 10 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

SARS-CoV2 is dramatically impacting the global population. Worldwide, pharmacists are changing their roles and being increasingly recognized for their role as essential service providers. This commentary provides some examples collected from Asia, Europe, the Americas and Africa, ranging from essential services to meet human rights basic needs, extended generalist services developed to ensure continuity of care and supply of essential medicines to the development of differentiated extended responsibilities in emergency care. All examples were collected using a network of pharmacists from 27 countries, representing various areas of pharmacy practice, education and research and outreaching to include patient advocates. Selected services illustrate good practice, capability to adapt and contribution to universal health coverage. Above all, it demonstrates the commitment and innovation of the pharmaceutical workforce in the fight against COVID-19.

Publication Type

Journal article.

<371>

Accession Number

20203329472

Author

Horacio Faccini, J. L.; Ribeiro Luz, H.; McIntosh, D.; Bahia Labruna, M.

Title

Tick-borne rickettsioses in Brazil: what lessons can be learned from the COVID-19 pandemic.

Source

Brazilian Journal of Veterinary Parasitology; 2020. 29(3)16 ref.

Publisher

Colegio Brasileiro de Parasitologia Veterinaria

Location of Publisher

São Paulo

Country of Publication

Brazil

Abstract

In this commentary, the authors highlight the importance of basic research in the field of public health regarding the recent pandemic Covid-19, using tick-borne rickettsioses as an example. In addition, they alert politicians, government officials and managers of research funding agencies to increase the allocated financial resources to enhance basic research on public health in Brazil.

Publication Type

Journal article.

<372>

Accession Number

20203322507

Author

Singh, D. R.; Sunuwar, D. R.; Adhikari, B.; Szabo, S.; Padmadas, S. S.

Title

The perils of COVID-19 in Nepal: implications for population health and nutritional status.

Source

Journal of Global Health; 2020. 10(1)15 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

There is a growing concern that the long-term extension of lockdown strategy can severely affect the health and nutrition security of the poor and vulnerable population in Nepal. This article discussed the population health implications and nutritional status of vulnerable populations in Nepal afflicted with COVID-19. As the uncertainty associated with COVID-19 looms large, an effective health intervention would be to train and

devolve responsibility to primary health care providers to provide treatment, referral, follow-up, and mental health counseling, targeting those at high risk including pregnant women, children and elderly.

Publication Type

Journal article.

<373>

Accession Number

20203322504

Author

Dhabaan, G. N.; Al-Soneidar, W. A.; Al-Hebshi, N. N.

Title

Challenges to testing COVID-19 in conflict zones: Yemen as an example.

Source

Journal of Global Health; 2020. 10(1)9 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

Testing COVID-19 in conflict zones is challenging both logistically and financially. While reverse-transcriptase PCR remains the most sensitive method for early diagnosis of COVID-19, employing it for large-scale testing in resourcelimited settings is not possible. This article discusses the public health challenges in the diagnosis for COVID-19 in Yemen. It is advisable that future international aid and resources be directed towards providing immunological assays. Antigen detection kits, supplemented with antibodies tests, are more suitable to detect early cases of infection in conflict areas as they do not require extensive technical expertise or laboratory facilities.

Publication Type

Journal article.

<374>

Accession Number

20203333101

Author

Moghaddam, A.; Heller, R. A.; Sun Qian; Seelig, J.; Cherkezov, A.; Seibert, L.; Hackler, J.; Seemann, P.; Diegmann, J.; Pilz, M.; Bachmann, M.; Minich, W. B.; Schomburg, L.

Title

Selenium deficiency is associated with mortality risk from COVID-19.

Source

Nutrients; 2020. 12(7)49 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

SARS-CoV-2 infections underlie the current coronavirus disease (COVID-19) pandemic and are causative for a high death toll particularly among elderly subjects and those with comorbidities. Selenium (Se) is an essential trace element of high importance for human health and particularly for a well-balanced immune response. The mortality risk from a severe disease like sepsis or polytrauma is inversely related to Se status. We hypothesized that this relation also applies to COVID-19. Serum samples (n = 166) from COVID-19 patients (n = 33) were collected consecutively and analyzed for total Se by X-ray fluorescence and selenoprotein P (SELENOP) by a validated ELISA. Both biomarkers showed the expected strong correlation ($r = 0.7758$, $p < 0.001$), pointing to an insufficient Se availability for optimal selenoprotein expression. In comparison with

reference data from a European cross-sectional analysis (EPIC, n = 1915), the patients showed a pronounced deficit in total serum Se (mean +/- SD, 50.8 +/- 15.7 vs. 84.4 +/- 23.4 g/L) and SELENOP (3.0 +/- 1.4 vs. 4.3 +/- 1.0 mg/L) concentrations. A Se status below the 2.5th percentile of the reference population, i.e., [Se] < 45.7 g/L and [SELENOP] < 2.56 mg/L, was present in 43.4% and 39.2% of COVID samples, respectively. The Se status was significantly higher in samples from surviving COVID patients as compared with non-survivors (Se; 53.3 +/- 16.2 vs. 40.8 +/- 8.1 g/L, SELENOP; 3.3 +/- 1.3 vs. 2.1 +/- 0.9 mg/L), recovering with time in survivors while remaining low or even declining in non-survivors. We conclude that Se status analysis in COVID patients provides diagnostic information. However, causality remains unknown due to the observational nature of this study. Nevertheless, the findings strengthen the notion of a relevant role of Se for COVID convalescence and support the discussion on adjuvant Se supplementation in severely diseased and Se-deficient patients.

Publication Type

Journal article.

<375>

Accession Number

20203331709

Author

Zhang XueYan; Huang HaoJie; Zhuang DongLin; Nasser, M. I.; Yang MingHua; Zhu Ping; Zhao MingYi

Title

Biological, clinical and epidemiological features of COVID-19, SARS and MERS and AutoDock simulation of ACE2.

Source

Infectious Diseases of Poverty; 2020. 9(99):(20 July 2020). 56 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The outbreak of coronavirus disease 2019 (COVID-19) has caused a public catastrophe and global concern. The main symptoms of COVID-19 are fever, cough, myalgia, fatigue and lower respiratory tract infection signs. Almost all populations are susceptible to the virus, and the basic reproduction number (R0) is 2.8-3.9. The fight against COVID-19 should have two aspects: one is the treatment of infected patients, and the other is the mobilization of the society to avoid the spread of the virus. The treatment of patients includes supportive treatment, antiviral treatment, and oxygen therapy. For patients with severe acute respiratory distress syndrome (ARDS), extracorporeal membrane oxygenation (ECMO) and circulatory support are recommended. Plasma therapy and traditional Chinese medicine have also achieved good outcomes. This review is intended to summarize the research on this new coronavirus, to analyze the similarities and differences between COVID-19 and previous outbreaks of severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS) and to provide guidance regarding new methods of prevention, diagnosis and clinical treatment based on autodock simulations. Methods: This review compares the multifaceted characteristics of the three coronaviruses including COVID-19, SARS and MERS. Our researchers take the COVID-19, SARS, and MERS as key words and search literatures in the Pubmed database. We compare them horizontally and vertically which respectively means concluding the individual characteristics of each coronavirus and comparing the similarities and differences between the three coronaviruses. Results: We searched for studies on each outbreak and their solutions and found that the main biological differences among SARS-CoV-2, SARS-CoV and MERS-CoV are in ORF1a and the sequence of gene spike coding protein-S. We also found that the types and severity of clinical symptoms vary, which means that the diagnosis and nursing measures also require differentiation. In addition to the common route of transmission including airborne transmission, these three viruses have their own unique routes of transmission such as fecal-oral route of transmission COVID-19. Conclusions: In evolutionary history, these three coronaviruses have some similar biological features as well as some different mutational characteristics. Their receptors and routes of transmission are not all the same, which makes them different in clinical features and treatments. We discovered through the autodock simulations that Met124 plays a key role in the efficiency of drugs targeting ACE2, such as remdesivir, chloroquine, ciclesonide and niclosamide, and may be a potential target in COVID-19.

Publication Type

Journal article.

Accession Number

20203331707

Author

Zou HuaChun; Shu YueLong; Feng TieJian

Title

How Shenzhen, China avoided widespread community transmission: a potential model for successful prevention and control of COVID-19.

Source

Infectious Diseases of Poverty; 2020. 9(89):(10 July 2020). 7 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Shenzhen is a city of 22 million people in south China that serves as a financial and trade center for East Asia. The city has extensive ties to Hubei Province, the first reported epicenter of the coronavirus disease 2019 (COVID-19) outbreak in the world. Initial predictions suggested Shenzhen would experience a high number of COVID-19 cases. These predictions have not materialized. As of 31 March 2020 Shenzhen had only 451 confirmed cases of COVID-19. Contact tracing has shown that no cases were the result of community transmission within the city. While Shenzhen did not implement a citywide lockdown like Wuhan, it did put into place a rapid response system first developed after the severe acute respiratory syndrome (SARS) epidemic in 2003. In the wake of the 2003 SARS outbreak, Shenzhen health authority created a network for surveillance and responding to novel respiratory infections, including pneumonia of unknown causes (PUC). The network rapidly detected mass discussion about PUC and immediately deployed emergency preparedness, quarantine for close contacts of PUC. Five early actions (early detection, early reporting, early diagnosis, early isolation, and early treatment) and four centralized responses (centralized coordination by experts, centralized allocation of resources, centralized placement of patients, and centralized provision of treatment) ensured effective prevention and control. Tripartite working teams comprising community cadres, medical personnel and police were formulated to conduct contact tracing at each neighborhood and residential community. Incorporation of mobile technology, big data, and artificial intelligence into COVID-19 response increased accessibility to health services, reduced misinformation and minimized the impact of fake news. Shenzhen's unique experience in successfully controlling the COVID-19 outbreak may be a useful model for countries and regions currently experiencing rapid spread of the virus.

Publication Type

Journal article.

<377>

Accession Number

20203316222

Author

Gumusgul, C.; Ersoy, A.; Gumusgul, O.

Title

Investigation of amateur and professional athlete's Novel Coronavirus (COVID-19) anxiety - aspect of managerial decision. [Turkish]

Source

Sportif Bakis: Spor ve Egitim Bilimleri Dergisi; 2020. 7(Suppl. 1):26-37. 25 ref.

Publisher

Sportif Baks&tail;: Spor ve Egitim Bilimleri Dergisi

Location of Publisher

Kutahya

Country of Publication

Turkey

Abstract

Cases because of the Novel Coronavirus (COVID 19), experienced in the sports community, may cause athletes, technical teams, employees, and professionals to experience coronavirus anxiety. Accordingly, this study aimed to examine the anxiety of Novel Coronavirus (Covid-19) in terms of amateur and professional athletes. Two hundred fifty-six active athletes (187 males and 69 females) who studied at the Faculty of Sport Sciences, Kutahya Dumlupinar University, voluntarily participated in this research. The Novel Coronavirus (COVID-19) Anxiety Scale developed by Tekkursun ve Demir et al. (2020) was used in the research. Parametric tests, as T-Test and One Way ANOVA tests were applied. According to the results, significant differences were determined according to gender, athletes level, roommate during the pandemic ($p<0.05$). However, according to exercising at home, there was no statistically significant difference following the news of coronavirus in social media and age variables ($p>0.05$). According to the findings obtained, it is thought that the Novel Coronavirus (Covid-19) anxiety experienced by athletes, whether or not there is a branch of sports that

requires contact, will be observed in athletes in different variables and this will be reflected in the preparation process in training and performance in the field and that the athletes may be in aggressive behaviors in psychological pressure. In this process, it was considered essential to examine the athletes' concerns when deciding to postpone some leagues given by the federations to register or cancel as they did from the pandemic process. In this context, some findings were revealed.

Publication Type

Journal article.

<378>

Accession Number

20203319861

Author

Yatmo, Y. A.; Atmodiwirjo, P.; Harahap, M. M. Y.

Title

Hand touches on the surfaces of a healthcare waiting area.

Source

Journal of Hospital Infection; 2020. 105(2):383-385. 8 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The aim of the article was to observe the occurrences of hand touches on 26 object surfaces consisting of doors, chairs, and horizontal working surfaces in a waiting area of a "puskesmas", a type of healthcare facility in Indonesia. The results indicate that there are certain parts of object surfaces most likely to be touched by the users, and this seems to relate to the users' activities. The door surface areas most likely to be touched

were the door handles and their surrounding areas, the door panels, the door frames, the side of the door panels, and the nearby wall. These touches occurred when the users opened or closed the door, leaned on or stood near the door, and when the children played around the door. The waiting chair surface areas most likely to be touched were the front edge of the seat, the area between connected seats, the top surface of the armrest, and the edge of the backrest. These touches occurred during the healthcare service activities, such as during the measurement of patient blood pressure or when the staff wrote on the medical cards or handed them to the patient. During a pandemic, reducing the risk of disease transmission could be supported by minimizing mutual touches on environmental surfaces in public areas. This study indicates that there are particular areas of surfaces on which hand touches most likely occurred.

Publication Type

Correspondence.

<379>

Accession Number

20203319857

Author

Kim, Y. J.; Jeong, Y. J.; Kim, S. H.; Kim, Y. J.; Lee, S. Y.; Kim, T. Y.; Choi, M. S.; Ahn, J. H.

Title

Preparedness for COVID-19 infection prevention in Korea: a single-centre experience.

Source

Journal of Hospital Infection; 2020. 105(2):370-372. 8 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The article presents the preparedness for COVID-19 infection prevention at Incheon St. Mary's Hospital. The hospital has 900 beds and 24 negative-pressure rooms: five in the emergency department, 10 in the intensive care unit (ICU) and nine on hospital wards. To date, from 1105 cases (859 in the moderate-risk zone and 246 in the high-risk zone), 1026 suspected patients have undergone PCR testing for the presence of COVID-19, and no confirmed cases have been identified at the hospital. COVID-19 is an ongoing pandemic. Appropriate infection control measures, as well as early recognition of suspected transmittable disease and effective public health measures, are required to prevent its spread.

Publication Type

Correspondence.

<380>

Accession Number

20203319811

Author

Wu, X.; Zhou, H.; Wu, X.; Huang, W.; Jia, B.

Title

Strategies for qualified triage stations and fever clinics during the outbreak of COVID-2019 in the county hospitals of Western Chongqing.

Source

Journal of Hospital Infection; 2020. 105(2):128-129. 7 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The aim of the article was to report the strategies for makeshift qualified triage stations and fever clinics during the outbreak of COVID-19 in the 37 county hospitals of Western Chongqing. The importance of a triage station and fever clinic can not be overemphasized during the contagious disease outbreak in terms of timely patient management and minimizing the risk of nosocomial transmission. Thus, thanks to qualified triage stations and fever clinics together with community isolation, quarantine, medical support, COVID-2019 has been rapidly and well controlled in all of the counties in Western Chongqing.

Publication Type

Journal article.

<381>

Accession Number

20203326105

Author

Khosrawipour, V.; Lau Hien; Khosrawipour, T.; Kocbach, P.; Ichii, H.; Bania, J.; Mikolajczyk, A.

Title

Failure in initial stage containment of global COVID-19 epicenters. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): Part-IV.)

Source

Journal of Medical Virology; 2020. 92(7):863-867. 17 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

With multiple virus epicenters, COVID-19 has been declared a pandemic by the World Health Organization. Consequently, many countries have implemented different policies to manage this crisis including curfew and

lockdown. However, the efficacy of individual policies remains unclear with respect to COVID-19 case development. We analyzed available data on COVID-19 cases of eight majorly affected countries, including China, Italy, Iran, Germany, France, Spain, South Korea, and Japan. Growth rates and doubling time of cases were calculated for the first 6 weeks after the initial cases were declared for each respective country and put into context with implemented policies. Although the growth rate of total confirmed COVID-19 cases in China has decreased, those for Japan have remained constant. For European countries, the growth rate of COVID-19 cases considerably increased during the second time interval. Interestingly, the rates for Germany, Spain, and France are the highest measured in the second interval and even surpass the numbers in Italy. Although the initial data in Asian countries are encouraging with respect to case development at the initial stage, the opposite is true for European countries. Based on our data, disease management in the 2 weeks following the first reported cases is of utmost importance.

Publication Type

Journal article.

<382>

Accession Number

20203326103

Author

Qazi, A.; Javaria Qazi; Khulla Naseer; Muhammad Zeeshan; Hardaker, G.; Maitama, J. Z.; Haruna, K.

Title

Analyzing situational awareness through public opinion to predict adoption of social distancing amid pandemic COVID-19. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): Part-IV.)

Source

Journal of Medical Virology; 2020. 92(7):849-855. 43 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

COVID-19 pandemic has affected over 100 countries in a matter of weeks. People's response toward social distancing in the emerging pandemic is uncertain. In this study, we evaluated the influence of information (formal and informal) sources on situational awareness of the public for adopting health-protective behaviors such as social distancing. For this purpose, a questionnaire-based survey was conducted. The hypothesis proposed suggests that adoption of social distancing practices is an outcome of situational awareness which is achieved by the information sources. Results suggest that information sources, formal (P = .001) and informal (P = 0.007) were found to be significantly related to perceived understanding. Findings also indicate that social distancing is significantly influenced by situational awareness, P = .000. It can, therefore, be concluded that an increase in situational awareness in times of public health crisis using formal information sources can significantly increase the adoption of protective health behavior and in turn contain the spread of infectious diseases.

Publication Type

Journal article.

<383>

Accession Number

20203326100

Author

Samea Khan; Khan, M.; Khizra Maqsood; Tanveer Hussain; Noor-ul-Huda; Muhammad Zeeshan

Title

Is Pakistan prepared for the COVID-19 epidemic? A questionnaire-based survey. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): Part-IV.)

Source

Journal of Medical Virology; 2020. 92(7):824-832. 12 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

COVID-19 is a pandemic that began in China in December 2019. World health organization (WHO) has expressed fears that Pakistan might emerge as the next epicenter of this pandemic. We hypothesize that at present the Pakistani masses are not prepared to face any threat of a looming epidemic. The main aim of this study was to evaluate the basic knowledge of educational and health care workers (HCWs) regarding COVID-19, its control, and prevention. Knowledge about origin, symptoms, and spread of viral infection was assessed. In this cross-sectional survey, a self-designed questionnaire was distributed among 302 HCWs including physicians (10.9%), nurses (1.32%), lab staff (1.65%), and academic individuals including faculty and students (86.42%) of different organizations. Results were analyzed using the chi2 test. Obtained results validate our null hypothesis that Pakistani masses are not well aware of the COVID-19 and strategies for the prevention and control of infection. The study concluded that individuals belonging to the front-line workers and high literacy groups are not prepared for the alarming situation in the country. Effectual implementation of infection control programs should be practiced, and it depends on awareness, training, and cooperation of individuals.

Publication Type

Journal article.

<384>

Accession Number

20203328588

Author

Puca, E.; Civljak, R.; Arapovic Urica; Popescu, C.; Christova, I.; Raka, L.; Cana, F.; Miranovic, V.; Karageorgopoulos, D.; Bas, E.; Paglietti, B.; Barac, A.

Title

Short epidemiological overview of the current situation on COVID-19 pandemic in Southeast European (SEE) countries.

Source

Journal of Infection in Developing Countries; 2020. 14(5):433-437. 38 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

We are living in times where a viral disease has brought normal life in much of the world to a halt. The novel coronavirus known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) causing coronavirus disease 2019 (COVID-19) started in December 2019 in Wuhan, China initially and in a short time crossed the European borders. After mitigating the epidemic in China, Italy became one of the most COVID-19 affected countries worldwide. International travelers are important sources of infectious diseases and a possible source of epidemic. Due to its political, geographic, and cultural similarities, Italy is one of the main economic partners of Southeast European (SEE) countries. Our data show that infection in index cases in all 11 SEE countries was travel-related with Italy being a source country for 8/11 countries. After the first case identifications on February 25, the number of cases in SEE countries is continually rising reaching the total number of 15,612 with 565 fatal cases and overall case fatality ratio (CFR) of 3.6 (median 3.8, range 0.8-5.5) by April 10, 2020. At a time when the COVID-19 pandemic is approaching its peak, apart from the problems with treatment of the disease and care for critically ill patients, there are other equally important problems, such as organization of outbreak response, provision of health care, lack of hospital personnel, disruption of personal protective equipment supply chains and health care workers (HCWs) protection. But what is more important is the heroic behavior of the HCWs who are showing their humanity by disregarding their lives.

Publication Type

Journal article.

Accession Number

20203328587

Author

Andrew, M.; Searle, S. D.; McElhaney, J. E.; McNeil, S. A.; Clarke, B.; Rockwood, K.; Kelvin, D. J.

Title

COVID-19, frailty and long-term care: implications for policy and practice.

Source

Journal of Infection in Developing Countries; 2020. 14(5):428-432. 29 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

Older adults have been disproportionately affected by the COVID-19 pandemic, with many outbreaks occurring in Long Term Care Facilities (LTCFs). We discuss this vulnerability among LTCF residents using an ecological framework, on levels spanning from the individual to families andcaregivers, institutions, health services and systems, communities, and contextual government policies. Challenges abound for fully understanding the burden of COVID-19 in LTCF, including differences in nomenclature, data collection systems, cultural differences, varied social welfare models, and (often) under-resourcing of the LTC sector. Registration of cases and deaths may be limited by testing capacity and policy, record-keeping and reporting procedures. Hospitalization and death rates may be inaccurate depending on atypical presentations and whether or not residents' goals of care include escalation of care and transfer to hospital. Given the important contribution of frailty, use of the Clinical Frailty Scale (CFS) is discussed as a readily implementable measure, as are lessons learned from the study of frailty in relation to influenza. Biomarkers hold emerging promise in helping to predict disease severity and address the puzzle of why some frail LTCF residents are resilient to COVID-19, either remaining test-negative despite exposure or having asymptomatic infection, while others experience the full range of illness severity including critical illness and death. Strong and coordinated surveillance and research focused on LTCFs and their frail residents is required. These efforts should include widespread assessment of frailty using feasible and readily implementable tools such as the CFS, and rigorous reporting of morbidity and mortality in LTCFs.

Publication Type

Journal article.

<386>

Accession Number

20203325483

Author

El-Zoghby, S. M.; Soltan, E. M.; Salama, H. M.

Title

Impact of the COVID-19 pandemic on mental health and social support among adult Egyptians.

Source

Journal of Community Health; 2020. 45(4):689-695. 29 ref.

Publisher

Springer

Location of Publisher

New York

Country of Publication

USA

Abstract

The psychological impact of outbreaks on individuals includes an intense and wide range of psychiatric morbidities. People are likely to experience feelings as; worry about being infected or getting sick, increased self-blame, and helplessness. This study aimed to assess the impact of COVID-19 on mental health and social support among Egyptian adults during the period of the pandemic. This is a cross-sectional observational study using an anonymous online questionnaire. The survey was conducted through a link shared on social networking sites. It was conducted from 2 May 2020 to 9 May 2020. The general populations of the Egyptian adults were included by using convenience and snowball sampling technique (510 adults). Impact Event scale mean 34.3 +/- 15. About 211 (41.4%) suffered a severe impact. There was an increase in stress from work in 174 (34.1%), financial stress in 284 (55.7%), and stress from home in 320 (62.7%). Half of them felt horrified and helpless in 275 (53.9%), and 265 (52%) respectively, while 338 (66.3%) felt apprehensive. only 24.2% reported increased support from friends, while increased support from family members in 207 (40.6%). 46.5% shared their feelings with family members, while 176 (34.5%) shared with others. Caring for family members' feelings increased in 330 (64.7%). Age and rural residency were negative predictors for the impact of event score, while female gender or presence of chronic condition was a positive predictor for the impact of event score. Covid-19 pandemic has a great psychological impact on adult Egyptians and affected social support.

Publication Type

Journal article.

<387>

Accession Number

20203325482

Author

Aker, S.; Midik, O.

Title

The views of medical faculty students in Turkey concerning the COVID-19 pandemic.

Source

Journal of Community Health; 2020. 45(4):684-688. 14 ref.

Publisher

Springer

Location of Publisher

New York

Country of Publication

USA

Abstract

The aim of this study was to elicit the views of medical faculty students regarding the COVID-19 pandemic. This descriptive study was performed with Ondokuz Mays University Medical Faculty students on 24-27 March, 2020. The Medical Faculty currently has 2051 students. A questionnaire was used as a data collection tool. For that purpose, the authors designed a questionnaire specifically for this research via the "Google Forms" web. This consisted of 40 open- and close-ended questions. The questionnaire was completed by 1375 (67.1%) students. Accordingly, 52.4% of medical students reported feeling mentally unwell. Although 50.8% of medical students reported generally/usually obtaining information about COVID-19 through the social media, 82.0% did not trust information/messages arriving through the social media and WhatsApp. We found that 86.7% of students regarded frequent hand washing as the most important means of protection against COVID-19, and

19.3% of students did not regard the COVID-19 pandemic as a severe public health problem for Turkey at that moment. In addition, 61.6% of students stated that a suppression strategy involving tight restrictions need to be applied to being the pandemic under control in Turkey. Use can be made of medical students in the transmission of accurate information during the COVID-19 pandemic. Students can be excellent activists on these subjects in countries in which medical education is suspended. Measures therefore need to be taken concerning the transmission of up to date and accurate information to medical students.

Publication Type

Journal article.

<388>

Accession Number

20203325455

Author

Dilbag Singh; Vijay Kumar; Vaishali; Manjit Kaur

Title

Classification of COVID-19 patients from chest ct images using multi-objective differential evolution-based convolutional neural networks.

Source

European Journal of Clinical Microbiology & Infectious Diseases; 2020. 39(7):1379-1389. 46 ref.

Publisher

Springer-Verlag GmbH

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

Early classification of 2019 novel coronavirus disease (COVID-19) is essential for disease cure and control. Compared with reverse-transcription polymerase chain reaction (RT-PCR), chest computed tomography (CT)

imaging may be a significantly more trustworthy, useful, and rapid technique to classify and evaluate COVID-19, specifically in the epidemic region. Almost all hospitals have CT imaging machines; therefore, the chest CT images can be utilized for early classification of COVID-19 patients. However, the chest CT-based COVID-19 classification involves a radiology expert and considerable time, which is valuable when COVID-19 infection is growing at rapid rate. Therefore, an automated analysis of chest CT images is desirable to save the medical professionals' precious time. In this paper, a convolutional neural networks (CNN) is used to classify the COVID-19-infected patients as infected (+ve) or not (-ve). Additionally, the initial parameters of CNN are tuned using multi-objective differential evolution (MODE). Extensive experiments are performed by considering the proposed and the competitive machine learning techniques on the chest CT images. Extensive analysis shows that the proposed model can classify the chest CT images at a good accuracy rate.

Publication Type

Journal article.

<389>

Accession Number

20203325435

Author

Zhao XiaoXuan; Jiang YuePeng; Zhao Yang; Xi HongYan; Liu Chang; Qu Fan; Feng XiaoLing

Title

Analysis of the susceptibility to COVID-19 in pregnancy and recommendations on potential drug screening.

Source

European Journal of Clinical Microbiology & Infectious Diseases; 2020. 39(7):1209-1220. 106 ref.

Publisher

Springer-Verlag GmbH

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

To analyze the susceptibility of SARS-CoV-2 in pregnancy and the drugs that can be used to treat pregnancy with COVID-19, so as to provide evidence for drug selection in clinic. By reviewing the existing literature, this paper analyzes the susceptibility of pregnant women to virus, especially to SARS-CoV-2, from the aspects of anatomical, reproductive endocrine and immune changes during pregnancy and screens effective and fetal-safe treatments from the existing drugs. The anatomical structure of the respiratory system is changed during pregnancy, and the virus transmitted by droplets and aerosols is more easily inhaled by pregnant women and is difficult to remove. Furthermore, the prognosis is worse after infection when compared with non-pregnancy women. And changes in reproductive hormones and immune systems during pregnancy collectively make them more susceptible to certain infections. More importantly, angiotensin-converting enzyme (ACE)-2, the SARS-CoV-2 receptor, has been proven highly increased during pregnancy, which may contribute to the susceptibility to SARS-CoV-2. When it comes to treatment, specific drugs for COVID-19 have not been found at present, and taking old drugs for new use in treating COVID-19 has become an emergency method for the pandemic. Particularly, drugs that show superior maternal and fetal safety are worthy of consideration for pregnant women with COVID-19, such as chloroquine, metformin, statins, lobinavir/ritonavir, glycyrrhizic acid, and nanoparticle-mediated drug delivery (NMDD), etc. Pregnant women are susceptible to COVID-19, and special attention should be paid to the selection of drugs that are both effective for maternal diseases and friendly to the fetus. However, there are still many deficiencies in the study of drug safety during pregnancy, and broad-spectrum, effective and fetal-safe drugs for pregnant women need to be developed so as to cope with more infectious diseases in the future.

Publication Type

Journal article.

<390>

Accession Number

20203320430

Author

Capobianchi, M. R.; Rueca, M.; Messina, F.; Giombini, E.; Carletti, F.; Colavita, F.; Castilletti, C.; Lalle, E.; Bordi, L.; Vairo, F.; Nicastri, E.; Ippolito, G.; Gruber, C. E. M.; Bartolini, B.

Title

Molecular characterization of SARS-CoV-2 from the first case of COVID-19 in Italy.

Source

Clinical Microbiology and Infection; 2020. 26(7):954-956. 5 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

On January 29, 2020, two Chinese spouses (patient 1, female; patient 2, male), coming to Italy as tourists from Hubei province, were hospitalized at the National Institute for Infectious Diseases "L. Spallanzani", Rome, with fever and respiratory symptoms. A virus isolate was obtained (in a Vero E6 cell line) from the sputum of patient 1, with cytopathic effects evident 24 h post-inoculation. At the time of writing, virus isolation from the nasopharyngeal swab sample collected from patient 2 was not successful, likely due to the lower viral load (higher cycle threshold value, 24.56 in the real-time RT-PCR), therefore no further analysis was performed on the virus detected in patient 2. Considering the consensus sequences, two non-synonymous changes with respect to the Wuhan-Hu-1 NCBI Reference Genome (Accession number: MN908947.3) were observed in the sequence from the clinical sample from patient 1: G11083T, leading to L3606F change in Orf1a, and G26144T, leading to G251V change in Orf3a. One additional synonymous substitution in Orf1a (A2269T) was detected in the isolate but not in the corresponding clinical sample. All variants were confirmed by Sanger sequencing. Considering the analysis of genomic variability, several intra-sample variants were observed in both the isolate and the clinical sample, but only the positions with a minimum coverage of 20 reads were considered. Intra-sample assessment of overall virus genome variability resulted in 1.27 10-4 and 1.02 10-4 nucleotide substitutions per site for the isolate and the clinical sample, respectively. Only two variable positions were observed with a frequency >10% in the clinical sample, both in Orf1a: A2269T (13.73%, coverage: 51x), synonymous for amino acid A668, and G7388A (13.21%, coverage: 53x), leading to amino acid change (A2375T). Interestingly, the frequency of variants at position 2269 was different in the isolate, being T dominant over A in 72% of reads (coverage: 119 582x), accounting for the difference resulting in the consensus sequences.

Publication Type

Correspondence.

<391>

Accession Number

20203289723

Author

Myers, J. F.; Snyder, R. E.; Porse, C. C.; Tecle, S.; Lowentha, P.; Danforth, M. E.; Powers, E.; Kamali, A.; Jain, S.; Fritz, C. L.; Chai, S. J.

Title

Identification and monitoring of international travelers during the initial phase of an outbreak of COVID-19 - California, February 3-March 17, 2020.

Source

Morbidity and Mortality Weekly Report; 2020. 69(19):599-602. 6 ref.

Publisher

Epidemiology Program Office, Centers for Disease Control and Prevention (CDC)

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

To reduce introductions of COVID-19 into the United States, travelers from selected countries were screened upon entry, and their contact information forwarded to states for monitoring. During February 3-March 17, 2020, California received, corrected, and transmitted information on 11,574 travelers to local health jurisdictions for follow-up. Three travelers were matched to three of the 26,182 patients with COVID-19 reported to California by April 15. Monitoring travelers was labor-intensive and limited by incomplete information, volume of travelers, and potential for asymptomatic transmission. Health departments need to weigh the resources needed for monitoring against those needed for implementing mitigation activities during the COVID-19 pandemic.

Publication Type

Journal article.

<392>

Accession Number

20203325952

Author

Lansbury, L.; Lim, B.; Baskaran, V.; Lim WeiShen

Title

Co-infections in people with COVID-19: a systematic review and meta-analysis.

Source

Journal of Infection; 2020. 81(2):266-275. 67 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: In previous influenza pandemics, bacterial co-infections have been a major cause of mortality. We aimed to evaluate the burden of co-infections in patients with COVID-19. Methods: We systematically searched Embase, Medline, Cochrane Library, LILACS and CINAHL for eligible studies published from 1 January 2020 to 17 April 2020. We included patients of all ages, in all settings. The main outcome was the proportion of patients with a bacterial, fungal or viral co-infection. Results: Thirty studies including 3834 patients were included. Overall, 7% of hospitalised COVID-19 patients had a bacterial co-infection (95% CI 3-12%, n=2183, I2=92.2%). A higher proportion of ICU patients had bacterial co-infections than patients in mixed ward/ICU settings (14%, 95% CI 5-26, I2=74.7% versus 4%, 95% CI 1-9, I2= 91.7%). The commonest bacteria were Mycoplasma pneumonia, Pseudomonas aeruginosa and Haemophilus influenzae. The pooled proportion with a viral co-infection was 3% (95% CI 1-6, n=1014, I2=62.3%), with Respiratory Syncytial Virus and influenza A the commonest. Three studies reported fungal co-infections. Conclusions: A low proportion of COVID-19 patients have a bacterial co-infection; less than in previous influenza pandemics. These findings do not support the routine use of antibiotics in the management of confirmed COVID-19 infection.

Publication Type

Journal article.

<393>

Accession Number

20203322838

Author

Xia HaiYue; Gao WenXiu; Huang XuLin; Zhang GuiDi

Title

Investigation on awareness of prevention and control of COVID-19 among medical students. [Chinese]

Source

China Tropical Medicine; 2020. 20(7):682-684. 16 ref.

Publisher

Editorial Department of China Tropical Medicine

Location of Publisher

Haikou

Country of Publication

China

Abstract

Objective: To explore the awareness of prevention and control of COVID-19 among medical students, aimed to provide theoretical support for the follow-up health education. Methods: A cross-sectional study used WeChat group joint questionnaire star was carried out in 589 medical students from Medical College of Shaoguan University to inquiry the awareness of prevention and control of COVID-19 with a self-made questionnaire titled "The awareness of epidemic disease prevention and control (taking COVID-19 as an example)". The t-test was used to compare the basic cognition of different genders after scoring the basic cognition questions of COVID-19. Results: A generally satisfied result of medical students toward COVID-19 coginition was observed, and there was no gender difference. Almost all students believe that less going out (100%) and wearing masks (97.79%) are effective measures to prevention and control of COVID-19, and most of them (87.93%) take the initiative to learn how to wear masks. Conclusion: Medical students have a good awareness of the prevention and control of COVID-19. The publicity and education of the government and institutions are timely and effective.

Publication Type

Journal article.

<394>

Accession Number

20203294137

Author

Sagarika Kamath; Rajesh Kamath; Prajwal Salins

Title

COVID-19 pandemic in India: challenges and silver linings.

Source

Postgraduate Medical Journal; 2020. 96(1137):422-423. 8 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

India faces multiple major challenges on the COVID-19 front. It is densely populated: 464 people/km2 compared with Italy's 206, Spain's 91, Iran's 52 and the USA's 36. It has a huge population: 1380 million (USA 330 million, Iran 83 million, Italy 60 million, Spain 46 million). Before the 21-day lockdown imposed from 25 March, mathematical modelling put the number of expected cases in India between 300 million and 500 million by July end, with a peak somewhere in April and/or May of 100 million cases, with 10 million (10%) requiring hospitalization, 5 million recovering, 5 million needing critical care and 1 to 2.5 million deaths. The COVID-19-induced 21-day lockdown has put more strain on an economy that was already experiencing declining growth and increased joblessness. More than 75% of India's substantial 100 million migrant workers have lost their jobs overnight. India has just 0.8 doctors per 1000 population as against Italy's 4.1, China's 1.8,

Spain's 4.1, Iran's 1.1 and the USA's 2.6. India has just 0.7 hospital beds per 1000 population as against Italy's 3.4, Spain's 3, Iran's 1.5 and the USA's 2.9. In the wake of a tsunami of COVID-19 cases requiring hospitalization, this manpower and infrastructure are going to prove inadequate. There is some hope in India that the avalanche will not come. This hope stems from two silver linings: the weather and the age demographic of the population. There is some evidence that the COVID-19 virus is weather and humidity sensitive. The spread of outbreaks of COVID-19 suggest a preference for cooler and drier climates. As the COVID-19 story of death and economic destruction unspools over the next few months, Indians will be hoping that the two silver linings deliver some respite.

Publication Type

Correspondence.

<395>

Accession Number

20203330389

Author

Ni XiaoPing; Xing YuBin; Suo JiJiang; Yao HongWu; Liu YunXi

Title

Characteristics and effects of microbial aerosols in healthcare settings. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(8):1183-1190.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

Transmission patterns of infectious pathogens in healthcare settings include contact transmission, droplet transmission and airborne transmission. A large number of studies indicated that the droplet transmission and contact transmission were the major transmission patterns of Corona Virus Disease 2019(COVID-19). Recently, the routes of transmission regarding 'aerosol transmission is possible under the condition of long exposure to high concentrations of aerosols in a relatively closed environment' and 'because SARS-CoV-2 can be isolated in faeces and urine, attention should be paid to aerosol or contact transmission caused by fecal and urine pollution to the environment' were added to the 'Diagnosis and Treatment of COVID-19'(Trial Edition 6 and 7) released by National Health Commission. The transmission routes of infectious pathogens in healthcare settings, 3 classification methods of airborne transmission, especially the definition, generation, survival, transmission, function and control of aerosols, were reviewed.

Publication Type

Journal article.

<396>

Accession Number

20203330385

Author

Wu YingHong; Cao Yang; Gao Yan; Jiang RongMeng; Kuang JiQiu; Zhang Jun; Guo JiaZhen; Li Jing; Liu Kun; Yang XueSong; Yang YanQiu

Title

Research on documentary standards for safety and protection of medical staff during Corona Virus Disease 2019 epidemic and current status. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(8):1161-1166.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To investigate the protection standards of medical staff in Beijing and analyze the current status of infection in the medical staff during Corona Virus Disease 2019(COVID-19) epidemic so as to provide constructive advice for scientific, standardized and safe prevention and control of the epidemic. METHODS: The laws, regulations, guidelines and standards for protection of medical staff that were released by the country were teased out, the guiding principles for individual protection of the regional medical staff were made completed, and the current status of consumption of individual protective supplies and the problems were investigated by means of onsite survey and interview with staff. RESULTS: There was lack of detailed policies regarding the protection of medical staff in China. A series of documents were urgently issued during the epidemic, which needed to be sorted out based on the actual conditions. The result of the survey showed that among 20 medical institutions, most of them were equipped with protective equipment according to the risk at exposure to infection. CONCLUSION: It is necessary to accelerate the construction of occupational safety system of medical staff and the development of standard system of protective supplies in China, protect the medical staff on the basis of the risk of exposure, strengthen the regional management and avoid the excessive use of personal protective equipment.

Publication Type

Journal article.

<397>

Accession Number

20203330384

Author

Shen YuanQing; Ke ChunJin; Yang ChunGuang; Li WenGang; Hu ZhiQuan

Title

A case-control study on 2019-nCoV infection-related factors among medical staff in Wuhan Tongji Hospital. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(8):1157-1160.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To investigate the infection status and relevant factors of novel coronavirus (2019-nCoV) among medical staff. METHODS: In-service medial staff of Tongji Hospital who had onset of disease and had been detected the 2019-nCoV infection through a throat swab nucleic acid test before Feb. 9, 2020 were retrospectively analyzed. Medical staff with onset from Jan. 15, 2020 to Feb. 8, 2020 were selected as the infection group, and the same number of uninfected medical staff in Tongji Hospital were selected as the uninfected group based on age and the risk of work department as mathcing factors. The demographics, clinical characteristics and medications were reviewed through electronic medical record system queries and telephone interviews and analyzed between the two groups. RESULTS: A total of 158 medical staff of Wuhan Tongji Hospital were included in this study, 79 cases in the infected group and 79 cases in the uninfected group, including 62 males and 96 females. The infection rate of medical staff in high-risk departments was about 6.26%, while that of medical staff in non high-risk departments was about 0.98%. The difference between the two groups was statistically significant ($P<0.05$). Twenty-six patients (32.91%) in the infection group were given took antiviral drugs in prophylaxis, 46 patients (58.22%) in the uninfected group, the difference was statistically significant($P<0.05$). Multivariate logistic regression analysis showed that the effect of oral antiviral drugs on covid-19 infection of mecial staff was significant ($P<0.05$). There were 4 cases of severe pneumonia in infected patients, with the average age of 51.8 years old, and the average age of 75 non-severe patients was 38.2 years old. There was a significant difference in age ($P<0.05$). CONCLUSION: Compared with non high risk departments, medical staff in high-risk departments are more susceptible to infection with 2019-nCov, and it is recommended to strengthen preventive measures. Prophylactic oral antiviral drugs are the protective factors for medical staff to be infected 2019-nCov, and provides a basis for the selection of preventive medication for high-risk groups. The elderly patients are susceptible to severe pneumonia.

Publication Type

Journal article.

<398>

Accession Number

20203330381

Author

Zheng Ling; Xiao ChunJian; Chen Fei; Xiao YongHong

Title

Design of a smart monitoring system for quarantine of close contacts of 2019-nCoV infection based on blockchain and internet of things technology. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(8):1141-1146.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To develop a smart monitoring system for quarantine of close contacts of 2019-nCoV based on blockchain and internet of things technology. METHODS: The locations and physiological data of the quarantine people were collected through the internet of things equipment, the blockchain was employed to ensure security of information, and the analysis and monitoring were implemented via smart contract. RESULTS: The data of the quarantine people were collected by using the internet of things device, the information was integrated and formatted with the use of master device and then was transmitted to the smart contract of the blockchain, which could compare and analyze based on a predetermined threshold and then display the alert to the quarantine people and the epidemic prevention center, and at the same time, the smart contract would generate an event to be stored in the blockchain and stored in the electronic health record linked to the blockchain, which kept the data secure. CONCLUSION: The system enables effective real-time monitoring of the quarantine people on the premise of protecting the privacy and security of the people.

Publication Type

Journal article.

<399>

Accession Number

20203330379

Author

Du MingMei; Suo JiJiang; Yan ZhongQiang; Yao HongWu; Bai YanLing; Liu BoWei; Li Lu; Xie LiJun; Ren ShiWang; Gao Yan; Liu YunXi

Title

Strategies for prevention and control of nosocomial infection in a tertiary general hospital during novel coronavirus infection epidemic. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(8):1131-1134.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To explore the development of strategies for prevention and control of nosocomial novel coronavirus(2019-nCoV) infection during prevention, control and treatment of 2019-nCoV infection epidemic in a tertiary general hospital so as to provide scientific basis for development of prevention and control strategies. METHODS: Based on the principles of 'control of the sources of infection, cutting off the transmission routes, protection of the vulnerable people', the hospital put forward the strategies for prevention and control and specific measures with the respect of 'management of people, management of articles, management of workflow', including the establishment of emergency prevention and control organization system, stress on professional advantages of disease prevention and control department, enhancement of management of outpatient and emergency departments, management of hospitalized patients and management of various personnel, formulation of procedures for diagnosis, treatment, prevention and control, environmental cleaning and disinfection, personnel training and enhancement of logistics support. RESULTS: The hospital offered scientific and reasonable reception procedures for all of the patients and ensures the physical and mental health of the medical staff, and neither the medical staff nor the hospitalized patients had COVID-19. CONCLUSION: The study of the strategies for prevention and control of COVID-19 may provide guidance for prevention and control of nosocomial infection in general hospitals during the epidemic.

Publication Type

Journal article.

<400>

Accession Number

20203330378

Author

Guo LiPing; Wang YingLi; Zhu RuiFang; Yao Yao; Wang QianRu; Li Gang; Song LiJie; Wang WeiHua; Wang Ying; Zheng AiHui; Liu Cong; Wu YingHong; Wang QiAng; Xu Qian; Cui Yong; Cao Bin

Title

Practical strategies for prevention and control of nosocomial infection in COVID-19 designated hospitals in Wuhan. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(8):1125-1130.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To share the practical strategies for reducing the risk of transmission of 2019-nCoV in COVID-19 designated hositals in Wuhan. METHODS: The scientific and executive orientations of the plans, measures and processes that were put forward and implemented during the prevention and control of nosocomial SARS-CoV-2 infection. RESULTS: The three key links for prevention and control of the epidemic in the crucial stage were as the following: to construct the organizational management system and institutional system of prevention and control of nosocomial infection during emergency period, to standardize the spatial layout of isolation accompanied by identification and management of patients, to adequately protect the occupational health and safety of medical staff by implementing standard precautions and prevention measures for respiratory infectious diseases. CONCLUSION: At present, it is the crutical time for prevention and control of

the epidemic, and the prevention and control of nosocomial infection has great significance in raising treatment rate and cure rate and reducing incidence of nosocmial infection and mortality rate.

Publication Type

Journal article.

<401>

Accession Number

20203330319

Author

Zhang Ting; Wang DongMei; Sun JiaoJiao; Peng Fei

Title

The tips for nursing of the patients with severe COVID-19. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(10):1503-1506.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

It is a great challenge for the care of critically ill patients with COVID-19, the clinical data of 26 critically ill patients with COVID-19 who were treated in the Wuhan Hankou Hospital from Dec 2019 to Jan 2020, including surveillance of illness condition, oxygen therapy nursing, nutrition support, complications nursing, skin nursing and catheter nursing, were reviewed in the article, the experience of care of the patients was summarized so as to provide reference for medical staff.

Publication Type

Journal article.

<402>

Accession Number

20203330318

Author

Zhang XiuYue

Title

The international standards of PPE for COVID-19. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(10):1499-1502.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

There were some of medical staff who were infected during the early stage of outbreak of Corona Virus Disease 2019(COVID-19), the emergence of infection in medical staff and shortage of protective supplies around the globe have become the international concerns.As for the guidelines for use of personal protective equipment(PPE) in prevention and control of COVID-19 issued by many countries, the reasonable selection, proper use, enhancement of training for use of PPE and behavioral management in restricted use zone were the key points to make PPE give play of protective effect. The limitations of PPE should be recognized, the basic principles for reasonable use of PPE by medical staff who perform high-risk procedures and treat the confirmed or suspected COVID-19 cases, recommended types of PPE and methods of proper use were observed and compared between China and WHO, America and the UK; the basic principles for reasonable use based on risk assessment of infection in medical staff were put forward, and the PPE should be reasonably

selected and used so as to meet the requirements of standard precautions, additional precautions based on transmission routes, and airborne isolation precautions that may occur during aerosol-generating procedures.

Publication Type

Journal article.

<403>

Accession Number

20203330316

Author

Chen Ping; Sun QiDi; Chen Wei; Wang Hao; Chen XueE; Zhao ChenHao; Di-Xiong Xu

Title

Countermeasures for prevention and control of infection in patients and medical staff of specialized hospital of COVID-19. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(10):1490-1493.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To systematically evaluate the effectiveness of the countermeasure for prevention and control of Corona virus disease 2019 (COVID-19) in the hospital based on practical experience of first medical team of the Army Medical University to support Hubei in a specialized hospital of COVID-19. METHODS: The strategies and programs for prevention and control of nosocomial infection were put forward in response to the difficulties and weak links in prevention and control of nosocomial infection in the specialized hospital and based on the requirements for the isolation of source of infection, cutting off transmission routes,

epidemiological theoretical basis for protection of susceptible population and evidence-based practice. RESULTS: The innovative strategies and targeted programs were formulated in the specialized hospital of COVID-19 during the epidemic, featuring the people-oriented, protection of susceptible population, innovative strategy for joint prevention and control, detailed personal protection, cleaning and disinfection of mobile cabin hospitals, environmental cleaning and disinfection and management of various personnel. CONCLUSION: The specialized hospital of COVID-19 has achieve the goal of 'win the battle, zero case of infection'. The most fundamental efforts for making those achievements are focusing on the people-oriented, taking targeted and effective strategies for prevention and control of nosocomial infection and rigidly implementing comprehensive measures for prevention and control of nosocomial infection.

Publication Type

Journal article.

<404>

Accession Number

20203330314

Author

Li Ling; Zhang Qun

Title

Strategies for management of different types of air conditioners in a general hospital during COVID-19 epidemic. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(10):1480-1484.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To analyze the various air-conditioning systems and explore the proper use and reasonable management of air-conditioning systems during the COVID-19 epidemic so as to prevent the transmission of virus through air-conditioning systems. METHODS: The types of the air conditioners that were commonly used in hospitals, including all fresh air-conditioning system, mixed air-conditioning system, fan coil plus fresh air system, purification air conditioner, split air conditioner, multi-line conditioners and precision air conditioner, were comprehensively analyzed, the diagrams of working principles were drawn, and the working principles were explored so as to specify the applicable workplace and analyze the advantages and the disadvantages. RESULTS: There were a variety of air-conditioning systems in hospitals, and each system had its advantages and disadvantages. During the outbreak of epidemic, all fresh air conditioning system, fan coil plus fresh air conditioning system, multi-line air conditioning system, split air conditioning system and precision air conditioning system could be used in principle, but the frequency of cleaning and disinfection had to be strengthened. The mixed air conditioning system was firstly stopped from use.In response to the patients with suspected infection who were supposed to underwent emergency surgery, the purification air conditioning system should be firstly applied in negative pressure operating room, and the air conditioning systems, including laminar flow and ventilation, should be turned off if the condition did not exist. CONCLUSION: It is necessary for the administrative staff of the hospital to put forward the strategies for comprehensive management of air conditioning systems on basis of the specific operation modes of the air conditioning systems, forge a closed-loop management system for planning, implementation, inspection and disposal and finally establish a safe, reasonable, and efficient management mode so as to effectively prevent the airborne cross infection.

Publication Type

Journal article.

<405>

Accession Number

20203330313

Author

Zhang YongDong; Xi AiQi; Zhuo Ma; Duo Jie; Yang ZhengPing; Gu YuHai; Bao HaiHua; Huang LiCheng

Title

Epidemiological characteristics and characteristics of infection of 18 confirmed cases of Corona virus disease 2019 in Qinghai Province, China. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(10):1475-1479.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To investigate the epidemiological characteristics and characteristics of infection of 18 confirmed and cured cases of Corona virus disease 2019(COVID-19) so as to summarize the experience of prevention and control for the next stage. METHODS: The epidemiological and clinical data were retrospectively collected from the confirmed COVID-19 cases who were hospitalized in Qinghai province from Jan 24,2020 to Feb 5, 2020, and the demographic information, onset symptoms, aggregation, test results, infection and clinical outcomes of the cases were analyzed. RESULTS: The median age of the patients was 32 years old, 12 cases (66.67%) were males, and 14 cases(77.78%) were Hui Chinese; 15 cases (83.33%) were imported, 10 (55.56%) of whom were engaged in catering industry and were their family members in Wuhan, 3 (16.67%) were the cases of second generation. Among the clinical types for admitted diagnosis, the normal type (88.88%) was dominant, and fever (61.11%) and cough (55.56%) were the predominant clinical manifestations for primary diagnosis. CT imaging was characterized by the changes of ground-glass opacity, 11 cases (61.11%) were the bilateral lung lesions, the average length of hospital stay was 13.88 days. The peripheral blood lymphocytes and eosinophils counts of 3 critically severe cases were found to be lower than the normal in the primary diagnosis. CONCLUSION: The imported cases, family aggregation cases and normal type cases are dominant among the confirmed cases; the cases of Qinghai domicile who were engaged in catering industry and their children were dominant among the imported cases. The peripheral blood lymphocytes and eosinophils counts were lower than the normal levels at the primary diagnosis, indicating that the illness condition might progress towards the severe and critical type. The mild cases who were asymptomatic might become a major source of infection in the community. The province was the second one across the country where all of the patients with COVID-19 were discharged, which was closely related to the factors such as small total number of the cases and the normal type of cases without underlying diseases.

Publication Type

Journal article.

<406>

Accession Number

20203330311

Author

Lu JianJun; Si Xiang; Yi Hui; Wang RuiZhi; Wu JianFeng; Huang JianQiang; Zhu QingTang; Liu DaYue

Title

Problems and coping strategies for control of infection in individuals and residences of medical teams giving support to Wuhan during COVID-19 epidemic. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(10):1463-1467.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To investigate the status of awareness of infection control in individuals and residences of Guangdong medical team members giving counterpart support to Wuhan during COVID-19 and formulate working guidelines targeting to existing problems so as to prevent infection in the individuals and residences of the medical teams. METHODS: A questionnaire survey was conducted for 142 medical team members who came from the First Affiliated Hospital of Sun Yat-sen University and gave support to Wuhan, focusing on the degree of awareness of the knowledge regarding to prevention and control of 2019-nCoV infection in individuals and residences, as well as the influencing factors for the infection. RESULTS: A total of 142 team members were involved in the survey, with 122 valid questionnaires retrieved; 87.70% of the team members were familiar with or knew about the knowledge regarding to prevention and control of 2019-nCoV infection in individuals and residences, and 12.30% of the team members were only at an understanding level. As for the influencing factors for infection, the team members were quite familiar with the influencing factors for individual infection such as hand hygiene and use of protective equipment like mask but were less familiar with the influencing factors for infection in the residences such as zoning for control of infection and environmental cleaning and disinfection, and the team members paid excessive attention to the use of air conditioners. CONCLUSION: The medical team is a population at high risk of 2019-nCoV infection, and the residence of the medical team is the place at high risk of infection.It is of great significance to strengthen the

training of infection control and formulate well-performed and feasible working guidelines in the epidemic area so as to prevent the infection in the individuals and residences of the medical teams.

Publication Type

Journal article.

<407>

Accession Number

20203330309

Author

Huang Jing; Cui Can; Cai Chao; Hu ZhongJie; Xiang HaiPing; Zhao LanXiang; Jin RongHua

Title

Strategies for prevention and control of COVID-19 in medical institutions. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(10):1452-1457.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To rapidly establish a prevention and control system in response to the epidemic so as to reduce the risk of infection in medical staff during diagnosis and treatment of patients with confirmed COVID-19, other patients and their family members. METHODS: The strategies for prevention and control of nosocomial infection that were carried out during the treatment of the COVID-19 patients, including personnel management, material management, process management and execution supervision, were summarized and analyzed. RESULTS: The working group on prevention and control of the epidemic ran efficiently, the classification of the personnel in medical institutions, classification and division management, scientific

assessment of usage amount of protective equipment, reasonable allocation and surveillance of epidemiological history and symptoms covered all the patients and working staff of the entire hospital, the construction was combined with the working process, the control line was effectively implemented, and the status of implementation of the measures was rigidly checked out. CONCLUSION: The scientific implementation of the prevention and control strategies maintains orderly diagnosis and treatment of the patients with COVID-19 and effectively prevent hospital-acquired COVID-19.

Publication Type

Journal article.

<408>

Accession Number

20203330308

Author

Liu WeiPing; Hai YunTing; Yang YongFang; Zhang Kai; Wang Meng; Bao Huan; Ren Wei; Yang LiFang; Li HaoXue

Title

Practice and thinking on prevention and control of Corona Virus Disease 2019 in Inner Mongolia People's Hospital. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(10):1446-1451.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To analyze the strategies for prevention and control of Corona Virus Disease 2019 (COVID-19) based on the practical experience of prevention and control of nosocomial infection so as to provide reference for the formulation and improvement of programs for prevention and control of COVID-19 in hospitals. METHODS: Close attention was paid to the dynamic condition of the epidemic, the programs for prevention and control of COVID-19 were formulated based on the related national laws and regulations for prevention and treatment of infectious diseases and normative documents released by health administrative departments in combination with the practice of prevention and control of nosocomial infection in Inner Mongolia People's Hospital, and the practical experience was summarized. RESULTS: The prevention and control programs involving the organizational guarantee, training of all staff, implementation of related prevention and control measures and social responsibility were formulated. In the practical work, there were problems in pre-inspection and triage, mastery of key points of process of putting on and taking off protective equipment, layout process and disposal of medical waste, and they needed to be rectified. CONCLUSION: In response to COVID-19 epidemic, it is the primary step for prevention and control of nosocomial infection to strengthen the pre-examination and triage work, the key step to properly select personal protective equipment and rigidly follow the procedure of putting on and taking off, and the quality control and supervision are effective for prevention and control of nosocomial infection.

Publication Type

Journal article.

<409>

Accession Number

20203328397

Author

Jiang ZhiGang; Jiang JianPing; Wang YueZhao; Zhang, E.; Zhang YanYun; Cai Bo

Title

Significance of country red lists of endangered species for biodiversity conservation. [Chinese]

Source

Biodiversity Science; 2020. 28(5):558-565. 38 ref.

Publisher

Biodiversity Science

Location of Publisher

Beijing

Country of Publication

China

Abstract

Both the IUCN Red List of Endangered Species and country red lists of endangered species assess the risk of extinction of species, the former being a global assessment whereas the latter provides regional assessments. The IUCN Red List of Endangered Species alerts the world to the status of endangered species, and also serves as a database of global biodiversity. Country red lists, on the other hand, ascertain the status of species in particular countries, filling knowledge gaps in the former. The two lists are thus complementary to each other. However, insufficient attention has been paid to date to country red lists of endangered species. Country-level red lists should be given greater attention for at least the following reasons: (1) a sovereign country is the main authority for taking conservation action in regard to wildlife species within its boundaries based on the level of endangerment (conservation status) of the species; (2) for endemic species in a country, the country red list status constitutes its global status; (3) for species whose ranges cross national borders, the country's red list status reflects the survival status of the species in the country; (4) combined with the IUCN global red list, the country red list provides a basis from which to consider the establishment of transnational protected areas, the protection of important habitats for migratory species, and the protection of international migration corridors; (5) the category of "Regional Extinction" is unique to country/regional red lists of endangered species, providing an indication of the danger of extinction of the species at the country level; and (6) country red lists of endangered species can provide updated information on the inventory, classification, distribution and status of species in the country. Yet, the importance of country red lists is often overlooked under many different circumstances. Following onset of the global COVID-19 pandemic, however, people's outlook in China has been changing in regard to the relationship between humans and wildlife. Consequently, China will be amending national laws on wildlife protection, epidemic prevention, and the List of State Key Protected Wild Animal Species, in order to better prevent and control emerging zoonoses. The status of wildlife species included in the country red list of endangered species should be one of the defining elements for identifying and updating species on the List of State Key Protected Wild Animal Species in China. Thus, it is critical to recognize the significance of the country red list of endangered species at this special moment in time.

Publication Type

Journal article.

<410>

Accession Number

20203325270

Author

Vijayan, P.

Title

Challenges in the midst of the COVID-19 pandemic.

Source

Economic and Political Weekly; 2020. 55(24)

Publisher

Sameeksha Trust

Location of Publisher

Mumbai

Country of Publication

India

Abstract

The COVID-19 pandemic has necessitated a rethinking of the contours of state intervention, especially in social sectors like health. The argument for rolling back the state has become questionable even among mainstream commentators. Kerala's experience shows how public investment in healthcare and a participatory mode of governance with empowered local governments can help in pandemic mitigation. A truly federal set-up with shared responsibilities between the centre and states is better suited to deal with situations like the present one rather than a centralised system.

Publication Type

Journal article.

<411>

Accession Number

20203325264

Author

Avinash Kumar; Manish Kumar

Title

Marginalised migrants and Bihar as an area of origin.

Source

Economic and Political Weekly; 2020. 55(24)

Publisher

Sameeksha Trust

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Outmigration from Bihar in search of livelihood has been normalised over several decades, with Bihar being one of the topmost states of origin for the migrants. Unemployment rate in Bihar remains higher than the country average. Agriculture has become unviable over the years due to low yields, increasing landlessness and lack of financial support by the state. The return migration to the state in the wake of COVID-19 necessitates that the state generate farm and non-farm employment to address the crisis situation.

Publication Type

Journal article.

<412>

Accession Number

20203326459

Author

Wei LiFeng; Sha ZhuoWa; Wang Ying; Zhang GangYu; Jia HaoNan; Zhou ShuAng; Li YuanHeng; Wang YaMeng; Liu Chao; Jiao MingLi; Sun ShuFan; Wu QunHong

Title

Willingness and beliefs associated with reporting travel history to high-risk coronavirus disease 2019 epidemic regions among the Chinese public: a cross-sectional study.

Source

BMC Public Health; 2020. 20(1164):(25 July 2020). 25 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The Coronavirus Disease 2019 (COVID-19) that first occurred in Wuhan, China, is currently spreading throughout China. The majority of infected patients either traveled to Wuhan or came into contact with an infected person from Wuhan. Investigating members of the public with a travel history to Wuhan became the primary focus of the Chinese government's epidemic prevention and control measures, but several instances of withheld histories were uncovered as localized clusters of infections broke out. This study investigated the public's willingness and beliefs associated with reporting travel history to high-risk epidemic regions, to provide effective suggestions and measures for encouraging travel reporting. Methods: A cross-sectional study was conducted online between February 12 and 19, 2020. Descriptive analysis, chi-squared test, and Fisher's exact test were used to identify socio-demographic factors and beliefs associated with reporting, as well as their impact on the willingness to report on travel history to high-risk epidemic regions. Results: Of the 1344 respondents, 91 (6.77%) expressed an inclination to deliberately withhold travel history. Those who understood the benefits of reporting and the legal consequences for deliberately withholding information, showed greater willingness to report their history ($P < 0.05$); conversely, those who believed reporting would stigmatize them and feared being quarantined after reporting showed less willingness to report ($P < 0.05$). Conclusions: As any incident of withheld history can have unpredictable outcomes, the proportion of people who deliberately withhold information deserves attention. Appropriate public risk communication and public advocacy strategies should be implemented to strengthen the understanding that reporting on travel history facilitates infection screening and prompt treatment, and to decrease the fear of potentially becoming quarantined after reporting. Additionally, social support and policies should be established, and measures should be taken to alleviate stigmatization and discrimination against potential patients and reporters of travel history. Reinforcing the legal accountability of withholding travel history and strengthening systematic community monitoring are the measures that China is currently taking to encourage reporting on travel

history to high-risk epidemic regions. These nonpharmaceutical interventions are relevant for countries that are currently facing the spread of the epidemic and those at risk of its potential spread.

Publication Type

Journal article.

<413>

Accession Number

20203323335

Author

Millan-Onate, J.; Millan, W.; Mendoza, L. A.; Sanchez, C. G.; Fernandez-Suarez, H.; Bonilla-Aldana, D. K.; Rodriguez-Morales, A. J.

Title

Successful recovery of COVID-19 pneumonia in a patient from Colombia after receiving chloroquine and clarithromycin.

Source

Annals of Clinical Microbiology and Antimicrobials; 2020. 19(16):(24 April 2020). many ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: COVID-19 pandemics is a challenge for public health and infectious diseases clinicians, especially for the therapeutical approach that is not yet adequately defined. Amid this situation, investigational agents are being used, including chloroquine. We report here the clinical features and therapeutic course of the first reported patient with confirmed COVID-19 pneumonia that recovered in Colombia, after the use of chloroquine and clarithromycin. Case presentation: A 34-year-old male, returning from Spain, presented with

complaints of fever, and cough, and class-II obesity, being hospitalized. The respiratory viruses and bacteria tested by FilmArray PCR were negative. Two days later, clarithromycin was started because the patient was suspected as community-acquired pneumonia. At the third day, the rRT-PCR confirmed the SARS-CoV-2 infection. A day later, chloroquine was started because of that. His chest computed tomography was performed and showed bilateral multifocal ground-glass opacities with consolidation, which suggested viral pneumonia as a differential diagnosis. Progressively his clinical condition improved and at day 9, patient rRT-PCR for SARS-CoV-2 became negative. The patient was discharged and isolated at home per 14 days. Conclusions: Our patient improved significantly. This and other COVID-19 cases are urgently demanding results from clinical trials that support evidence-based therapeutical approaches to this pandemic and the clinical management of patients, especially those at critical care.

Publication Type

Journal article.

<414>

Accession Number

20203320242

Author

Jean ShioShin; Lee PingIng; Hsueh PoRen

Title

Treatment options for COVID-19: the reality and challenges.

Source

Journal of Microbiology, Immunology and Infection; 2020. 53(3):436-443. 72 ref.

Publisher

Elsevier Taiwan LLC

Location of Publisher

Taipei

Country of Publication

Taiwan

Abstract

An outbreak related to the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was first reported in Wuhan, China in December 2019. An extremely high potential for dissemination resulted in the global coronavirus disease 2019 (COVID-19) pandemic in 2020. Despite the worsening trends of COVID-19, no drugs are validated to have significant efficacy in clinical treatment of COVID-19 patients in large-scale studies. Remdesivir is considered the most promising antiviral agent; it works by inhibiting the activity of RNA-dependent RNA polymerase (RdRp). A large-scale study investigating the clinical efficacy of remdesivir (200 mg on day 1, followed by 100 mg once daily) is on-going. The other excellent anti-influenza RdRp inhibitor favipiravir is also being clinically evaluated for its efficacy in COVID-19 patients. The protease inhibitor lopinavir/ritonavir (LPV/RTV) alone is not shown to provide better antiviral efficacy than standard care. However, the regimen of LPV/RTV plus ribavirin was shown to be effective against SARS-CoV in vitro. Another promising alternative is hydroxychloroquine (200 mg thrice daily) plus azithromycin (500 mg on day 1, followed by 250 mg once daily on day 2-5), which showed excellent clinical efficacy on Chinese COVID-19 patients and anti-SARS-CoV-2 potency in vitro. The roles of teicoplanin (which inhibits the viral genome exposure in cytoplasm) and monoclonal and polyclonal antibodies in the treatment of SARS-CoV-2 are under investigation. Avoiding the prescription of non-steroidal anti-inflammatory drugs, angiotensin converting enzyme inhibitors, or angiotensin II type I receptor blockers is advised for COVID-19 patients.

Publication Type

Journal article.

<415>

Accession Number

20203320227

Author

Sheng WangHuei; Ko WenChien; Huang YhuChering; Hsueh PoRen

Title

SARS-CoV-2 and COVID-19.

Source

Journal of Microbiology, Immunology and Infection; 2020. 53(3):363-364. 8 ref.

Publisher

Elsevier Taiwan LLC

Location of Publisher

Taipei

Country of Publication

Taiwan

Publication Type

Journal article.

<416>

Accession Number

20203323860

Author

Top, K. A.; MacArtney, K.; Bettinger, J. A.; Tan, B.; Blyth, C. C.; Marshall, H. S.; Vaudry, W.; Halperin, S. A.; McIntyre, P.

Title

Active surveillance of acute paediatric hospitalisations demonstrates the impact of vaccination programmes and informs vaccine policy in Canada and Australia.

Source

Eurosurveillance; 2020. 25(25)71 ref.

Publisher

European Centre for Disease Prevention and Control

Location of Publisher

Stockholm

Country of Publication

Sweden

Abstract

Sentinel surveillance of acute hospitalisations in response to infectious disease emergencies such as the 2009 influenza A(H1N1)pdm09 pandemic is well described, but recognition of its potential to supplement routine public health surveillance and provide scalability for emergency responses has been limited. We summarise the achievements of two national paediatric hospital surveillance networks relevant to vaccine programmes and emerging infectious diseases in Canada (Canadian Immunization Monitoring Program Active; IMPACT from 1991) and Australia (Paediatric Active Enhanced Disease Surveillance; PAEDS from 2007) and discuss opportunities and challenges in applying their model to other contexts. Both networks were established to enhance capacity to measure vaccine preventable disease burden, vaccine programme impact, and safety, with their scope occasionally being increased with emerging infectious diseases' surveillance. Their active surveillance has increased data accuracy and utility for syndromic conditions (e.g. encephalitis), pathogen-specific diseases (e.g. pertussis, rotavirus, influenza), and adverse events following immunisation (e.g. febrile seizure), enabled correlation of biological specimens with clinical context and supported responses to emerging infections (e.g. pandemic influenza, parechovirus, COVID-19). The demonstrated long-term value of continuous, rather than incident-related, operation of these networks in strengthening routine surveillance, bridging research gaps, and providing scalable public health response, supports their applicability to other countries.

Publication Type

Journal article.

<417>

Accession Number

20203323857

Author

Barr, I. G.; Rynehart, C.; Whitney, P.; Druce, J.

Title

SARS-CoV-2 does not replicate in embryonated hen's eggs or in MDCK cell lines.

Source

Eurosurveillance; 2020. 25(25)13 ref.

Publisher

European Centre for Disease Prevention and Control

Location of Publisher

Stockholm

Country of Publication

Sweden

Abstract

The advent of COVID-19, has posed a risk that human respiratory samples containing human influenza viruses may also contain SARS-CoV-2. This potential risk may lead to SARS-CoV-2 contaminating conventional influenza vaccine production platforms as respiratory samples are used to directly inoculate embryonated hen's eggs and continuous cell lines that are used to isolate and produce influenza vaccines. We investigated the ability of these substrates to propagate SARS-CoV-2 and found that neither could support SARS-CoV-2 replication.

Publication Type

Journal article.

<418>

Accession Number

20203320753

Author

Bogoch, I. I.; Watts, A.; Thomas-Bachli, A.; Huber, C.; Kraemer, M. U. G.; Khan, K.

Title

Article navigationpneumonia of unknown aetiology in Wuhan, China: potential for international spread via commercial air travel.

Source

Journal of Travel Medicine; 2020. 27(2)5 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

There is currently an outbreak of pneumonia of unknown aetiology in Wuhan, China. Although there are still several unanswered questions about this infection, we evaluate the potential for international dissemination of this disease via commercial air travel should the outbreak continue.

Publication Type

Journal article.

<419>

Accession Number

20203321971

Author

Ouattara, N.; Kone, C. M.; Xiong XuePing

Title

Impact of COVID-19 on cashew price and cashew producers' income in Cote d'Ivoire: a case study in five departments.

Source

Journal of Agricultural Science (Toronto); 2020. 12(8):117-128. 35 ref.

Publisher

Canadian Center of Science and Education

Location of Publisher

Toronto

Country of Publication

Canada

Abstract

In Cote d'Ivoire, cashew has become an important cash crop. Nevertheless, Cote d'Ivoire's cashew relies on the international market, with more than 90% of the production exported as raw nuts. The 2020 commercialization campaign started a few days after the outbreak of COVID-19 in China, which spread worldwide. This work assesses the impact of this pandemic on the cashew price and cashew producers' income in Cote d'Ivoire. We used the cashew price database over ten weeks in five cashew production areas and an interview-guided to collect the data. We used the Producer Price Index (PPI), descriptive statistic, and theoretical analysis of the income forecasting for data analysis. Results reveal that the lack of funds resulting from the fear of investors has caused a gradual drop in prices since February. This decrease has been more severe when restriction measures have been enforced. The purchase of cashews even stopped in some localities of the study areas. Compared to the first week of the campaign, the COVID-19 pandemic has reduced cashew producer income hugely to 50% in the sixth week and to 37.5% in the ninth and tenth weeks of our observation. Nonetheless, institutional factors such as the lack of control have also contributed to prices decrease. As recommendations, in the short-run, some resilience strategies such as subsidizing the local cashew market should be set up by the authorities. In the mid-term, the country should strengthen the cashew commercialization chain. In long-run, the local cashew transformation should be prioritized instead of raw nuts commercialization.

Publication Type

Journal article.

<420>

Accession Number

20203321954

Author

Turnsek, M.; Brumen, B.; Rangus, M.; Gorenak, M.; Mekinc, J.; Stuhec, T. L.

Title

Perceived threat of COVID-19 and future travel avoidance: results from an early convenient sample in Slovenia.

Source

Academica Turistica; 2020. 13(1):3-19. many ref.

Publisher

Univerza na Primorskem

Location of Publisher

Portorož

Country of Publication

Slovenia

Abstract

The present study provides a snapshot of Slovenian tourists' perceptions in a historically unique point of time - the early days of the COVID-19-related lockdown. Based on an online survey performed in March and April 2020 the study provides first insights into Slovenian tourists' perceived threats of COVID-19 on two dimensions: severity and susceptibility; how this depends on their demography and past travel experience and what, in this specific point in time, they think about future travel avoidance. The results have shown that age affects the two measured dimensions of perceived threat and future travel avoidance, but only with women. Furthermore, people who have travelled the most in the past express the least likelihood of avoidance to travel due to the COVID-19 pandemic. Those who are more educated, on the other hand, perceive higher risk, yet education has no role in their expressed future travel avoidance. The results, moreover, show that the moral obligation towards taking care of others might be a highly important element in the success factor of COVID-19 measures and thus future appeals by the tourism industry. Finally, the results show that we cannot easily predict how the general population will behave regarding their future travel avoidance since the opinions are not polarised in the extremes. This does indicate, however, that tourists will be susceptible to the context-specific factors of future travel decisions, such as assurances of health safety provided by the tourism industry.

Publication Type

Journal article.

<421>

Accession Number

20203330153

Author

Barbosa, L. D.; Sousa, L. K. M.; Schott, E.; Rezende, F. A. C.; Ribeiro, A. Q.; Priore, S. E.; Carmo Castro Franceschini, S. do

Title

Household availability of food based on the new classification of food and nutritional (in)security. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.) [Portuguese]

Source

Ciencia & Saude Coletiva; 2020. 25(7):2701-2709. 26 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The scope of this research was to characterize the household availability of food based on the classification adopted in the new Brazilian food guide and to analyze its relationship with food (in)security. It involved a population-based, cross-sectional study conducted in 95 households in the State of Tocantins. Food (in)security was evaluated by means of the Brazilian Food Insecurity Scale. The household availability of food in the last 30 days was recorded and, subsequently, food was classified as in natura and/or minimally processed, processed and ultra-processed according to the new Brazilian food guide. The prevalence of food insecurity was 55.79%. It was found that the foods of the in natura and ultra-processed groups contributed the most to the household availability of food. There was a positive and significant relationship between the food security and food availability rates: milk, animal fat, canned food and cheese bread. The prevalence of food insecurity was high in this population group. In households with a higher level of food security, the availability of milk, animal fat, canned goods and cheese bread was significantly higher.

Publication Type

Journal article.

Accession Number

20203330152

Author

Castro Morais, D. de; Lopes, S. O.; Priore, S. E.

Title

Evaluation indicators of food and nutritional insecurity and associated factors: systematic review. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.) [Portuguese]

Source

Ciencia & Saude Coletiva; 2020. 25(7):2687-2700. 105 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The scope of this paper was to systematically investigate the indicators used in the evaluation of food and nutritional insecurity and associated factors in Brazilian studies. After selection in the databases using search terms and reverse search, 89 articles were included. The majority of the articles evaluated food and nutritional insecurity according to the indicator of perception, using the Brazilian Scale of Food Insecurity (83.1%), the American Scale (5.62%) and isolated questions (2.25%). The other articles evaluated the presence of malnutrition among children (1.12%), expenditure on food (1.12%), adult-equivalent dietary intake (1.12%), protocols (2.25%), and prediction models (2.25%). Food and nutritional insecurity (measured by the different indicators) was associated with socioeconomic and demographic factors, health and lifestyle conditions, food consumption and nutritional status, based on families, specific age groups, beneficiaries of government programs, among others, as sample units. The majority of the studies merely evaluated the food dimension of the insecurity, thereby increasing the difficulty in evaluating this complex situation.

Publication Type

Journal article.

<423>

Accession Number

20203330151

Author

Schott, E.; Rezende, F. A. C.; Priore, S. E.; Ribeiro, A. Q.; Franceschini, S. do C. C.

Title

Methodologies for assessing the household food availability in the context of food (in)security: a systematic review. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2677-2685. 36 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This article aims to identify the methods used to assess household food availability in studies on food and nutritional security and to discuss its methodological aspects. Systematic review elaborated according to the PRISMA method. We searched at PubMed; Scielo and Lilacs databases, and studies that used methods of assessing the availability of food at home were included. In the end, 19 papers composed the review. Food availability was predominantly assessed for a seven days period and from a single data measurement. Other variables were also observed in the studies, such as socio-demographic data and expenditure on food. Among the limitations to assess the food availability at home, we can highlight the difficulty in measuring the food distribution among family members and the lack of information on the variability of this availability. Such assessment can be improved by investigating the strengths and weaknesses of the instruments for greater detail and accuracy of the information. We recommend the development and validation of specific instruments capable of effectively measure the food availability at the household level.

Publication Type

Journal article.

<424>

Accession Number

20203330150

Author

Demetrio, F.; Teles, C. A. de S.; Santos, D. B. dos; Pereira, M.

Title

Food insecurity in pregnant women is associated with social determinants and nutritional outcomes: a systematic review and meta-analysis. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2663-2676. 41 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The association between FI, social determinants, and nutritional outcomes for pregnant women are analyzed. A systematic review was conducted through a search of articles in five electronic databases. Social determinants (race, education, participation in social programs) and nutritional status (pre-gestational BMI, gestational weight gain, anemia) were analyzed in relation to the FI situation. For each article, the frequency of food insecurity was collected in order to calculate the summary measure, prevalence ratio (PR). 26 articles were selected. An elevated occurrence of FI was associated with black pregnant women (PR: 1.83, 95% CI 1.08-3.10), participation in social protection programs (PR = 1.43, 1.02-2.01), and with low education levels on the part of pregnant women (PR = 2.73, 1.68-4.43). FI increased the chances of being overweight (PR = 1.57, 95% CI = 1.29-1.91) and obese (PR = 1.47, 95% CI = 1.15-1.87) in pregnant women, as well as excessive weight gain (PR = 1.42, 95% CI = 1.10-1.82) and inadequate weight gain (PR = 1.47; 95% CI = 1.09-1.97) during pregnancy. Anemia was not associated with FI. Social inequities are associated with food and nutritional insecurity in pregnant women.

Publication Type

Journal article.

<425>

Accession Number

20203330148

Author

Dias, D. F.; Melanda, F. N.; Santos, E. S. dos; Andrade, S. M. de; Mesas, A. E.; Gonzalez, A. D.

Title

Teachers on temporary employment contracts reveal more frequent consumption of pre-prepared food. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.) [Portuguese]

Source

Ciencia & Saude Coletiva; 2020. 25(7):2645-2652. 26 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The scope of this article is to analyze the eating behavior of schoolteachers according to the type of employment contract. Interviews were conducted at 20 public state schools in Londrina, State of Parana, between 2012 and 2013. Of the 978 teachers interviewed, 672 (68.7%) had permanent employment contracts and 306 (31.3%) were on temporary employment contracts. High frequencies of recommended eating behaviors - consumption of fruit, vegetables and/or vegetables and removing visible fat from red meat - were observed in teachers with a permanent employment contract. On the other hand, teachers with temporary employment contracts revealed a high frequency of non-recommended eating behaviors with consumption of pre-prepared foods and packaged drinks or sodas. It was highlighted that a high frequency of consumption of pre-prepared foods was statistically associated with the type of employment contract irrespective of sociodemographic, lifestyle and health status factors.

Publication Type

Journal article.

<426>

Accession Number

20203330146

Author

Passos, J. A.; Vasconcellos-Silva, P. R.; Santos, L. A. da S.

Title

Cycles of attention to fad diets and internet search trends by Google trends. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2615-2631. 81 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This work aimed at identifying, describing and analyzing news content associated with Google search cycles linked to eight types of diet: ketogenic; moon; protein; soup; detox; points; paleo; and Dukan. They were selected because they were pointed out by Google Trends (GT) as the most often associated with the term "diet". The content of sites linked to the highest search peaks was pointed out by Google News. The volume of search attempts for diets was estimated by the GT with region filters (Brazil) and theme (Health) considering the period from 01/01/2012 to 01/01/2017. Results: hits portray ephemeral cycles, with hundreds of peaks and declining interest in the eight fad diets. The emphasis is on guidelines for quick weight loss in favor of optimal health as a proxy for an esthetic ideal. The scale of the risks associated with the more restrictive diets is often

quoted and validated by expert information. The exposure and influence of the opinion of celebrities reporting their dietary experiences stand out. Contrary to the ideal of moderation, variety, and balance, fad diets portray the pressure for food self-control as a resource for building an idealized body typified by celebrity images.

Publication Type

Journal article.

<427>

Accession Number

20203330145

Author

Maas, N. M.; Mendoza-Sassi, R. A.; Meucci, R. D.; Cesar, J. A.

Title

Food insecurity in rural families in the extreme south of Brazil. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2605-2614. 32 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This study aimed to track the prevalence of Food Insecurity (FI) and to study associated factors in households with children, women and older adults in the rural area of the city of Rio Grande, RS. This is a cross-sectional population-based study, with systematic sampling of 80% of permanently inhabited households. A short version of the Brazilian Scale of Food Insecurity (EBIA) was employed. The associated factors included data

referring to the head of the household, as well as data referring to the household. The levels of prevalence and prevalence ratios and their respective confidence intervals were calculated for food insecurity through Poisson regression with robust variance. Of the 1,627 domiciles interviewed, 26% were in an FI situation, and households that included three populations were higher. The most affected domiciles were those in which the head of the household had less than four years of schooling, with more residents, without animal husbandry, belonging to the lowest income quartile and receiving family grants ("Bolsa Familia" Program). This study showed the relevance and magnitude of the FI problem in the rural region of Rio Grande since knowledge about the actual FI prevalence of this region is unknown.

Publication Type

Journal article.

<428>

Accession Number

20203330144

Author

Aliaga, M. A.; Ribeiro, M. S.; Santos, S. M. C. dos; Trad, L. A. B.

Title

Participatory food and nutrition security assessment in a community of Salvador, Brazil. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2595-2604. 48 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This paper addresses a Food and Nutrition Security (FNS) participatory assessment developed together with community leaders and residents in Salvador city, Bahia, Brazil. Our reflection aims to analyze this research - including design, data generated, and its use - discussing the concept of FNS and its existing assessment methods. Secondary data were found to be difficult to access or of little utility to local activists. The household survey designed and used by the participants characterized the food and nutrition insecurity situation in vulnerable areas of the community, in a dialogue with national and socioeconomic indicators, evidencing robust data. First of all, the relevance of participatory approaches stood out: while the results show how much FNS is intricately embedded into a broader social vulnerability context, they show how critical it is to consider FNS research as a political instrument and the knowledge it produces as a power-related instrument. In this sense, FNS assessment is established as an emancipatory process, indissociable from the action and social change actors.

Publication Type

Journal article.

<429>

Accession Number

20203330143

Author

Silveira, V. N. da C.; Padilha, L. L.; Frota, M. T. B. A.

Title

Malnutrition and associated factors among quilombola children under 60 months of age in two cities of the state of Maranhao, Brazil. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2583-2594. 34 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Objective: To evaluate the prevalence of malnutrition in children under 60 months of age living in quilombo remnant communities of two municipalities in the state of Maranhao and their associated factors. Methods: This is a cross-sectional study conducted with a sample of 372 children in August 2015. Socioeconomic, demographic, maternal and child information were collected. The anthropometry followed the one proposed by the World Health Organization. Height-for-age and weight-for-height rates were calculated using Anthro software version 3.2.2. Poisson regression was performed with a robust variance for the association of malnutrition with the studied variables, using Stata software version 14.0. Results: Child malnutrition was high for height-for-age (15.1%) and weight-for-height (7%). Children whose mothers had a short height (< 1.497 m) were more likely to have height-for-age deficits ($p < 0.05$). No variables were statistically associated with low weight-for-height. Conclusion: Child malnutrition persists as a public health problem in vulnerable regions, and maternal factors such as low maternal height may explain the short stature of the children. The need for actions to address this nutritional deviation is pointed out.

Publication Type

Journal article.

<430>

Accession Number

20203330142

Author

Batista, D. R. R.; Rodrigues, P. R. M.; Souza, A. M.; Sichieri, R.; Muraro, A. P.

Title

Nutritional status of children of Haitian descent and their demographic, socioeconomic and health characteristics in Cuiaba, State of Mato Grosso (MT), Brazil. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.) [Portuguese]

Source

Ciencia & Saude Coletiva; 2020. 25(7):2571-2582. 42 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The scope of this study was to analyze the distribution of anthropometric variables according to demographic, socioeconomic, and health characteristics among children of Haitian descent between 0 and 5 years of age living in Cuiaba-MT. It consists of a cross-sectional and census-based study with data collected between August 2016 and February 2017. The dependent variables were body mass index (BMI) and height-for-age z-score, using Student's t-Test and ANOVA in the statistical analysis. A total of 67 children, 73.2% to 24 months of age and 34.3% being male, were evaluated. There was a significant proportion of families with per capita income of less than 1/4 of the minimum wage (65.6%), with no home monitoring for the family health strategy (88.1%), and long working hours for mothers (43.3%). The onset of prenatal care until the third month of pregnancy and female sex were associated with higher BMI averages. For height-for-age, an association with lower mean values was found for households with more than one resident per room, higher age range of the child, and child-care in daycare centers. Thus, although few factors have an association with the anthropometric indications evaluated, it is necessary to consider the precarious socioeconomic conditions in which these children find themselves.

Publication Type

Journal article.

<431>

Accession Number

20203330141

Author

Freitas, L. G. de; Cortes, M. A. P.; Stein, C.; Cousin, E.; Faustino-Silva, D. D.; Hilgert, J. B.

Title

Dietary intake quality and associated factors in one year-old children seen by primary healthcare services. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2561-2570. 31 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The purpose of this paper was to analyze the food intake quality in one year-old children seen by a primary healthcare (PHC) service. This is a cross-sectional studied nested within a child oral health cohort study which collected data regarding children born in 2013 and monitored in Porto Alegre for two years. We applied a questionnaire on maternal variables and frequency of pediatric appointments, weight and height measurements, and children's food intake. To that end, a score was generated based on the points assigned according to SISVAN (meaning 'food and nutrition monitoring system', run by the Brazilian Ministry of Health). A multivariate model was calculated using Poisson regression with robust variance. The sample comprised 249 children. We found 30.5% (76) of poor/regular dietary quality, which in the multivariate model was associated to the guardian's educational background, considering up to incomplete high school (PR = 2.14, CI95% = 1.03-4.44) and complete high school (PR = 1.70, CI95% = 0.81-3.54), as well as their failure to see a dentist (PR = 2.54, CI95% = 1.33- 4.84) or having seen one before the age of four months (PR = 1.94, CI95% = 1.01-3.72). It is our conclusion that failing to see a dentist within the first year of life and lower maternal schooling negatively impact on children's dietary quality.

Publication Type

Journal article.

Accession Number

20203330140

Author

Caivano, S. dos A.; Domene, S. M. A.

Title

Consensus among experts on healthy eating and diet quality index. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2551-2560. 32 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The article aims to achieve a consensus about Healthy Eating and Diet Quality Index to enable a validation study on the Diet Quality Index. Experts were identified among authors of articles published from 2010 to 2015 that presented the key worlds healthy eating index and diet quality index. The query was carried out by combining the Delphi technique with the Likert method. To determine a consensus, at least three of the following criteria had to be met: minimum score in each statement (>= 3,00); standard deviation (< 1,5); frequency of agreement (>= 51%) and differences between interquartile ranges (< 1,0). Topics regarding Highly palatable foods, oilseeds, and Meat and eggs did not arrived at a consensus in the first round. Experts proposed new themes: Gluten, Meal frequency, Alcohol consumption, and Including nutrients in the diet quality index. Although quality and risk markers in diet are periodically studied, it was only possible to reach consensus on subjects such as fruits, vegetables, milk and dairy products, legumes, and oilseeds as quality markers after theoretical justification. Processed and ready-to-eat foods, highly palatable foods, excessive sweets and fats, and alcohol were readily identified as risk factors.

Publication Type

Journal article.

Accession Number

20203330139

Author

Levy, J.; Miranda, A. A. M.; Teixeira, J. A.; Carli, E. de; Bensenor, I. J. M.; Lotufo, P. A.; Marchioni, D. M. L.

Title

Magnesium intake in a longitudinal study of adult health: associated factors and the main food sources. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2541-2550. 48 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This study aimed to identify the sociodemographic and lifestyle factors associated with magnesium intake and describe the main food sources in the Brazilian Longitudinal Study of Adult Health (ELSA-Brazil). This observational, cross-sectional study was conducted using the baseline data from the ELSA-Brazil (2008-2010). Associations between usual magnesium intake and sociodemographic and lifestyle factors were analyzed using multiple linear regression. Food sources were identified by calculating the percentage contribution of each FFQ item to the amount of magnesium provided by all foods. The analysis was performed using Stata software (version 12), assuming a statistical significance level of 5%. The top food sources to magnesium intake were as follows: beans, oats, nuts, white rice, orange, French bread, cooked fish, boneless meat, whole milk, and whole wheat bread. There were positive associations between magnesium intake and female sex; age >=60 years; self-reported black, indigenous, or brown skin colors; per capita income >=3 minimum wages, and moderate or vigorous physical activity levels. Sociodemographic and lifestyle factors were associated with magnesium intake among the evaluated individuals.

Publication Type

Journal article.

<434>

Accession Number

20203330137

Author

Oliveira, M. S. da S.; Santos, L. A. da S.

Title

Dietary guidelines for Brazilian population: an analysis from the cultural and social dimensions of food. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.)

Source

Ciencia & Saude Coletiva; 2020. 25(7):2519-2528. 53 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This article analyzes the social and cultural dimensions of food addressed in the dietary guidelines of the second edition of the Dietary Guideline for the Brazilian Population (DGBP) in contrast to its first edition. This is a qualitative study. We employ the Pecheutian discourse analysis. The study universe is the first and second edition of DGBP. Data analysis used three steps: identification of similar and different texts of these materials; elucidation of the social and cultural dimensions of food in these materials; and systematic analysis with contrasting emerging discourses in both DGBPs. We emphasize that in the second edition the theoretical references-epidemiological, clinical, sociological, anthropological studies, and popular knowledge-and the use of the NOVA food classification favored the development of more holistic dietary guidelines that address food and eating patterns, culinary practices, the act of eating and the commensality. It is concluded that the second editions of DGPB allows health professionals and the population an understanding of food as something concrete in the life of individuals and collectivity, extrapolating its physiological and biological dimension.

Publication Type

Journal article.

<435>

Accession Number

20203330136

Author

Aulestia-Guerrero, E. M.; Capa-Mora, E. D.

Title

An overview of South American food insecurity. (Special Issue: The Covid-19 pandemic: implications for food and nutrition (in)security.) [Spanish]

Source

Ciencia & Saude Coletiva; 2020. 25(7):2507-2517. 60 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The scope of this study is to examine the status of Food Insecurity (FI) in each country included in the South American community. To achieve this and considering that it is a current and multifactorial problem, its four pillars were analyzed: food availability, access, stability and use. As a result, it is observed that the misuse of food is the most likely cause of FI in the South American community, however, the lack of availability and inaccessibility of food causes great concern in certain states of the subregion. The most probable origin is the inadequate promotion of good eating habits, in addition to misguided policies that hinder the correct production and/or motivation of the peasants to continue carrying out their activities in agriculture. This problem needs to be addressed as soon as possible as, although it originates in not having the money and/or the necessary nutritional habits, it leads to serious health problems for the inhabitants. The consensus reached is that it is important to enhance policies to eradicate FI in South America, starting with support for food production, and following that up with nutritional interventions that improve the dietary habits of the inhabitants.

Publication Type

Journal article.

<436>

Accession Number

20203331345

Author

Iser, B. P. M.; Sliva, I.; Raymundo, V. T.; Poleto, M. B.; Schuelter-Trevisol, F.; Bobinski, F.

Title

Suspected COVID-19 case definition: a narrative review of the most frequent signs and symptoms among confirmed cases.

Source

Epidemiologia e Servicos de Saude; 2020. 29(3)30 ref.

Publisher

Ministerio de Saude

Location of Publisher

Brasilia

Country of Publication

Brazil

Abstract

Objective: to describe the most frequent signs and symptoms of infection by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Methods: this is a narrative literature review carried out in April 2020; the search was performed on electronic databases and complemented with a manual review of the references of the selected papers and Brazilian Ministry of Health publications. Results: the spectrum of clinical disease was wide; fever, coughing and dyspnea were the most frequent signs/symptoms, however, they may not be present, thus hindering case definition; gastrointestinal symptoms and loss of taste or smell have been reported among mild cases; dyspnea was frequent among severe and fatal cases. Conclusion: considering the

scarcity of diagnostic tests and the diversity of symptoms, health services should use a sensitive case definition, in order to adopt appropriate surveillance, prevention and treatment actions.

Publication Type

Journal article.

<437>

Accession Number

20203331334

Author

Marinelli, N. P.; Albuquerque, L. P. de A.; Sousa, I. D. B. de; Batista, F. M. de A.; Mascarenhas, M. D. M.; Rodrigues, M. T. P.

Title

Evolution of indicators and service capacity at the beginning of the COVID-19 epidemic in Northeast Brazil, 2020.

Source

Epidemiologia e Servicos de Saude; 2020. 29(3)28 ref.

Publisher

Ministerio de Saude

Location of Publisher

Brasilia

Country of Publication

Brazil

Abstract

Objective: to describe the evolution of indicators and capacity for health care in the initial phase of the COVID-19 epidemic in the Northeast region of Brazil. Methods: this was a descriptive study based on COVID-19 case epidemiological bulletins released by the Ministry of Health up until April 1st, 2020. The incidence rate, lethality and number of cumulative daily cases were calculated. Results: 1,005 confirmed cases of COVID-19 were identified, most of them in Ceara and Bahia states. The incidence rate was 1.8/100,000 inhabitants and

lethality was 2.7%. Ceara was the state with the highest number of cases, with 29.6 new cases per day on average. Average intensive care bed availability in the Northeast region (1.04/10,000 inhab.) was below the national average (2.8/10,000 inhab.). Conclusion: the indicators suggest that COVID-19 impact is heterogeneous and signal the challenges for health systems in the Northeast Region.

Publication Type

Journal article.

<438>

Accession Number

20203293258

Author

Sun ShuangYi; Yu KeTing; Xie Zhen; Pan XiaoTing

Title

China empowers internet hospital to fight against COVID-19.

Source

Journal of Infection; 2020. 81(1):e67-e68. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Internet hospitals have reduced the surge of patients into physical hospitals, preventing potential cross-infection in China. It ensures the constant medical services for the public,especially patients with chronic diseases and ensure the constant medical services for the public, especially patients with chronic diseases. This innovative medical mode can help other countries to fight against the COVID-19.

Publication Type

Correspondence.

<439>

Accession Number

20203314908

Author

Panova, I. O.

Title

Tourism during a pandemic: implications and prospects. [Ukrainian]

Source

Business Inform; 2020. (5):226-232. 15 ref.

Publisher

Inzhek Publishing House

Location of Publisher

Kharkiv

Country of Publication

Ukraine

Abstract

The article is aimed at researching possible changes in the tourism sector after the end of the pandemic caused by coronavirus. It is noted that even today the countries have begun to take important steps to overcome the emerging problems. The restrictive measures, which have been imposed almost all over the world, and especially the closure of interstate borders, have caused significant damage to the tourism industry. During this period, some airlines were on the verge of bankruptcy, millions of people lost their jobs or had to stop working. Hotels, restaurants, travel companies, shops need immediate government support, due to the financial consequences of the crisis. The budgets of the EU Member States suffered billions in losses. The Committee on Transport and Tourism of the European Parliament has proposed to prepare a special plan to help the tourism business in the near future. Health, safety and protection of guests,

employees and business partners should be the most important priorities in each country, regardless of the extent of the damage caused by coronavirus. The need to introduce special certificates, which will ensure that the institutions that received them, fully comply with the highest standards of safety, hygiene, cleanliness, and in the case of coronavirus detection, the guest will be provided with all necessary medical care. After the stabilization of the situation due to the pandemic, people will continue to travel. Places with a safer epidemiological situation will be a priority. In addition, most tourists will seek to make their holiday as cheap as possible, choosing more budget holiday destinations, accommodation and transportation. It is also important that travel companies and related industries take all necessary measures to protect travelers during the entire tour. The stabilization of the tourism sector is directly related to the recovery of the entire economy of the country.

Publication Type

Journal article.

<440>

Accession Number

20203328164

Author

Courtemanche, C.; Garuccio, J.; Le Anh; Pinkston, J.; Yelowitz, A.

Title

Strong social distancing measures in the United States reduced the COVID-19 growth rate.

Source

Health Affairs; 2020. 39(7):1237-1246. 31 ref.

Publisher

People-to-People Health Foundation, Project Hope

Location of Publisher

Bethesda

Country of Publication

USA

Abstract

State and local governments imposed social distancing measures in March and April 2020 to contain the spread of the novel coronavirus disease (COVID-19). These measures included bans on large social gatherings; school closures; closures of entertainment venues, gyms, bars, and restaurant dining areas; and shelter-in-place orders. We evaluated the impact of these measures on the growth rate of confirmed COVID-19 cases across US counties between March 1, 2020, and April 27, 2020. An event study design allowed each policy's impact on COVID-19 case growth to evolve over time. Adoption of government-imposed social distancing measures reduced the daily growth rate of confirmed COVID-19 cases by 5.4 percentage points after one to five days, 6.8 percentage points after six to ten days, 8.2 percentage points after eleven to fifteen days, and 9.1 percentage points after sixteen to twenty days. Holding the amount of voluntary social distancing constant, these results imply that there would have been ten times greater spread of COVID-19 by April 27 without shelter-in-place orders (ten million cases) and more than thirty-five times greater spread without any of the four measures (thirty-five million cases). Our article illustrates the potential danger of exponential spread in the absence of interventions, providing information relevant to strategies for restarting economic activity.

Publication Type

Journal article.

<441>

Accession Number

20203326234

Author

C&tail;aliskan, F.; Dost, B.

Title

The evaluation of knowledge, attitudes, depression and anxiety levels among emergency physicians during the COVID-19 pandemic.

Source

Signa Vitae; 2020. 16(1):163-171. 17 ref.

Publisher

Pharmamed Mado Ltd

Location of Publisher

Zagreb

Country of Publication

Croatia

Abstract

Background: The outbreak of COVID-19 has put enormous physical and psychological pressure on emergency physicians. The purpose of this study is to evaluate the levels of anxiety, depression, and related factors in this group during the COVID-19 pandemic. Materials and Methods: After obtaining ethics committee approval, we gathered the data for this descriptive study using an online questionnaire from March 14-20, 2020, from 290 emergency physicians in health care settings in Turkey. Results: The 290 emergency physicians who participated in the study had a high level of knowledge about COVID-19. According to their Hospital Anxiety Depression Scale (HADS) scores, depression was detected in 108 participants (62%) while anxiety was detected in 103 participants (35.5%), with the median depression and anxiety scores found to be 8 (0-21) and 7 (0-21), respectively. As to the requirement of a 14-day quarantine for an emergency physician performing an intubation, a statistically significant difference was found among job titles (p = 0.039). Conclusion: This study emphasizes the importance of recognizing psychological trauma caused by providing care during the COVID-19 pandemic and the necessity of providing psychological support for the protection of emergency physicians' mental health.

Publication Type

Journal article.

<442>

Accession Number

20203322499

Author

Sheikh, A.; Sheikh, A.; Sheikh, Z.; Dhami, S.; Sridhar, D.

Title

What's the way out? Potential exit strategies from the COVID-19 lockdown.

Source

Journal of Global Health; 2020. 10(1)31 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

The aim of the article was to describe UK's exit strategy after the lockdown amidst the COVID-19 pandemic. The UK needs to pursue a gradual phased relaxation of lockdown measures beginning with easing restrictions on outdoor activities; this needs to be coupled by an aggressive test, trace and isolate strategy, continuous surveillance and a willingness to temporarily tighten lockdown restrictions as required.

Publication Type

Journal article.

<443>

Accession Number

20203322493

Author

Cheng WeiBin; Marley, G.; Liao HuiPeng; Tang WeiMing

Title

Civil society's response to emerging public health events in China.

Source

Journal of Global Health; 2020. 10(1)10 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

The aim of the article was to discuss the civil society's response against the emerging public health emergencies in China. The engagement of civil societies in assisting the control and prevention efforts, supporting medical staff on the frontlines, and aiding the vulnerable groups most seriously impacted by the lockdowns in Hubei and other areas during COVID-19 outbreak reflects the evolution of civil societies in China.

Publication Type

Journal article.

<444>

Accession Number

20203322492

Author

Wong, J.; Koh WeeChian; Fathi Alikhan, M.; Aziz, A. B. Z. A.; Naing Lin

Title

Responding to COVID-19 in Brunei Darussalam: lessons for small countries.

Source

Journal of Global Health; 2020. 10(1)11 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

The aim of the article was to report the public health preparedness and response of Brunei Darussalam amidst the ongoing COVID-19 pandemic.

Publication Type

Journal article.

<445>

Accession Number

20203322481

Author

Primorac, D.; Matisiae, V.; Molnar, V.; Bahtijareviae, Z.; Polasek, O.

Title

Pre-season football preparation in the era of COVID-19: croatian football association model.

Source

Journal of Global Health; 2020. 10(1)15 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

The aim of the article was to report the pre-season public health preparation of football teams and athletes amidst the ongoing COVID-19 pandemic in Croatia.

Publication Type

Journal article.

<446>

Accession Number

20203288620

Author

Alves, S. M. C.; Ramos, E. M. B.; Delduque, M. C.

Title

Lockdown by court order: an (un)necessary measure? (Thematic Section: Covid-19.)

Source

Cadernos de Saude Publica; 2020. 36(6)15 ref.

Publisher

Escola Nacional de Saude Publica

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This article reports the backdrop for the first declaration of a lockdown in Brazil, in the cities of Sao Luis, Sao Jose de Ribamar, Paco do Lumiar, and Raposa, all located in the state of Maranhao, under a court order issued on April 30, 2020. The order responded to a claim filed by the local Public Prosecutor, based on the following factors 4: total occupation of ICU beds dedicated exclusively to COVID-19 in the state public healthcare network; lack of transparency of this same information in the public networks in the above-mentioned cities; provision for lockdown in the Ministry of Health's Epidemiological Bulletin as a non-pharmacological measure; and the need to ensure the collective health through legal measures. The lockdown creates a series of obligations for various government levels and agencies. It was not known in advance whether such measures could be organized and supported on such short notice by the respective public administrations. The enforcement of total lockdown requires interaction with other areas of government besides health, such as public security, social protection, and communications in order to plan a set of measures capable of providing adequate backup and economic and social support for the affected

population, in addition to the lockdown's efficacy per se. All this makes the lockdown operation highly complex, and the Judiciary Branch may not be able to adequately assess it in advance.

Publication Type

Journal article.

<447>

Accession Number

20203324877

Title

Economic impact of COVID-19.

Source

Sylwan; 2020. 164(5)

Publisher

Polskie Towarzystwo Lesne

Location of Publisher

Warsaw

Country of Publication

Poland

Abstract

This article focuses on the economic impact of Covid-19. It also reviews recent trends and updates aimed at further understanding the problem of coronaviruses. The article is divided into several chapters, each of which deals with the most important aspects. The first section describes the methods of investigation of this infection. The second part examines the theory of the epidemic and crisis, how exactly the coronavirus affected the economy of countries. Then it is told when the virus appeared, where, how the disease occurred in the infected, etc., i.e. its history of development. The fourth Chapter describes the economic impact of Covid-19 on countries and how It can affect the further development of the state. The fifth section focuses on the impact on the production of various manufacturers ₩' products, as well as provides examples of the most famous companies affected by Covid-19. What follows is a problem faced by the entire population, namely how the coronavirus affected employment. The seventh Chapter reflects the impact on exports, which

countries have stopped exporting their products, as well as the production of which has stopped, and the eighth-on imports, which territories have stopped purchasing, previously purchased goods, and for what reason.

Publication Type

Journal article.

<448>

Accession Number

20203321790

Author

Verity, R.; Okell, L. C.; Dorigatti, I.; Winskill, P.; Whittaker, C.; Imai, N.; Cuomo-Dannenburg, G.; Thompson, H.; Walker, P. G. T.; Fu Han; Dighe, A.; Griffin, J. T.; Baguelin, M.; Bhatia, S.; Boonyasiri, A.; Cori, A.; Cucunuba, Z.; Fitzjohn, R.; Gaythorpe, K.; Green, W.; Hamlet, A.; Hinsley, W.; Laydon, D.; Nedjati-Gilani, G.; Riley, S.; et al.

Title

Estimates of the severity of coronavirus disease 2019: a model-based analysis.

Source

Lancet Infectious Diseases; 2020. 20(6):669-677. 28 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: In the face of rapidly changing data, a range of case fatality ratio estimates for coronavirus disease 2019 (COVID-19) have been produced that differ substantially in magnitude. We aimed to provide robust estimates, accounting for censoring and ascertainment biases. Methods: We collected individual-case data for patients who died from COVID-19 in Hubei, mainland China (reported by national and provincial

health commissions to Feb 8, 2020), and for cases outside of mainland China (from government or ministry of health websites and media reports for 37 countries, as well as Hong Kong and Macau, until Feb 25, 2020). These individual-case data were used to estimate the time between onset of symptoms and outcome (death or discharge from hospital). We next obtained age-stratified estimates of the case fatality ratio by relating the aggregate distribution of cases to the observed cumulative deaths in China, assuming a constant attack rate by age and adjusting for demography and age-based and location-based under-ascertainment. We also estimated the case fatality ratio from individual line-list data on 1334 cases identified outside of mainland China. Using data on the prevalence of PCR-confirmed cases in international residents repatriated from China, we obtained age-stratified estimates of the infection fatality ratio. Furthermore, data on age-stratified severity in a subset of 3665 cases from China were used to estimate the proportion of infected individuals who are likely to require hospitalisation. Findings: Using data on 24 deaths that occurred in mainland China and 165 recoveries outside of China, we estimated the mean duration from onset of symptoms to death to be 17.8 days (95% credible interval [CrI] 16.9-19.2) and to hospital discharge to be 24.7 days (22.9-28.1). In all laboratory confirmed and clinically diagnosed cases from mainland China (n=70 117), we estimated a crude case fatality ratio (adjusted for censoring) of 3.67% (95% CrI 3.56-3.80). However, after further adjusting for demography and under-ascertainment, we obtained a best estimate of the case fatality ratio in China of 1.38% (1.23-1.53), with substantially higher ratios in older age groups (0.32% [0.27-0.38] in those aged <60 years vs 6.4% [5.7-7.2] in those aged >=60 years), up to 13.4% (11.2-15.9) in those aged 80 years or older. Estimates of case fatality ratio from international cases stratified by age were consistent with those from China (parametric estimate 1.4% [0.4-3.5] in those aged <60 years [n=360] and 4.5% [1.8-11.1] in those aged >=60 years [n=151]). Our estimated overall infection fatality ratio for China was 0.66% (0.39-1.33), with an increasing profile with age. Similarly, estimates of the proportion of infected individuals likely to be hospitalised increased with age up to a maximum of 18.4% (11.0-37.6) in those aged 80 years or older. Interpretation: These early estimates give an indication of the fatality ratio across the spectrum of COVID-19 disease and show a strong age gradient in risk of death.

Publication Type

Journal article.

<449>

Accession Number

20203333099

Author

Niles, M. T.; Bertmann, F.; Belarmino, E. H.; Wentworth, T.; Biehl, E.; Neff, R.

Title

The early food insecurity impacts of COVID-19.

Source

Nutrients; 2020. 12(7)44 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

COVID-19 has disrupted food access and impacted food insecurity, which is associated with numerous adverse individual and public health outcomes. To assess these challenges and understand their impact on food security, we conducted a statewide population-level survey using a convenience sample in Vermont from 29 March to 12 April 2020, during the beginning of a statewide stay-at-home order. We utilized the United States Department of Agriculture six-item validated food security module to measure food insecurity before COVID-19 and since COVID-19. We assessed food insecurity prevalence and reported food access challenges, coping strategies, and perceived helpful interventions among food secure, consistently food insecure (pre-and post-COVID-19), and newly food insecure (post COVID-19) respondents. Among 3219 respondents, there was nearly a one-third increase (32.3%) in household food insecurity since COVID-19 ($p < 0.001$), with 35.5% of food insecure households classified as newly food insecure. Respondents experiencing a job loss were at higher odds of experiencing food insecurity (OR 3.06; 95% CI, 2.114-0.46). We report multiple physical and economic barriers, as well as concerns related to food access during COVID-19. Respondents experiencing household food insecurity had higher odds of facing access challenges and utilizing coping strategies, including two-thirds of households eating less since COVID-19 ($p < 0.001$). Significant differences in coping strategies were documented between respondents in newly food insecure vs. consistently insecure households. These findings have important potential impacts on individual health, including mental health and malnutrition, as well as on future healthcare costs. We suggest proactive strategies to address food insecurity during this crisis.

Publication Type

Journal article.

<450>

Accession Number

20203331698

Author

Li XueZheng; Jin Feng; Zhang JianGuo; Deng YunFeng; Shu Wei; Qin JingMin; Ma Xin; Pang Yu

Title

Treatment of coronavirus disease 2019 in Shandong, China: a cost and affordability analysis.

Source

Infectious Diseases of Poverty; 2020. 9(78):(29 June 2020). 25 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Coronavirus disease 2019 (COVID-19) is now a global public threat. Given the pandemic of COVID-19, the economic impact of COVID-19 is essential to add value to the policy-making process. We retrospectively conducted a cost and affordability analysis to determine the medical costs of COVID-19 patients in China, and also assess the factors affecting their costs. Methods: This analysis was retrospectively conducted in Shandong Provincial Chest Hospital between 24 January and 16 March 2020. The total direct medical expenditures were analyzed by cost factors. We also assessed affordability by comparing the simulated out-of-pocket expenditure of COVID-19 cases relative to the per capita disposable income. Differences between groups were tested by student t test and Mann-Whitney test when appropriate. A multiple logistic regression model was built to determine the risk factors associated with high cost. Results: A total of 70 COVID-19 patients were included in the analysis. The overall mean cost was USD 6827 per treated episode. The highest mean cost was observed in drug acquisition, accounting for 45.1% of the overall cost. Total mean cost was significantly higher in patients with pre-existing diseases compared to those without preexisting diseases. Pre-existing diseases and the advanced disease severity were strongly associated with higher cost. Around USD 0.49 billion were expected for clinical manage of COVID-19 in China. Among rural households, the proportions of health insurance coverage should be increased to 70% for severe cases, and 80% for critically ill cases to avoid catastrophic health expenditure. Conclusions: Our data demonstrate that clinical management of COVID-19 patients incurs a great financial burden to national health insurance. The cost for drug acquisition is the major contributor to the medical cost, whereas the risk factors for higher cost

are pre-existing diseases and severity of COVID-19. Improvement of insurance coverage will need to address the barriers of rural patients to avoid the occurrence of catastrophic health expenditure.

Publication Type

Journal article.

<451>

Accession Number

20203332883

Author

Gortazar, C.; Fuente, J. de la

Title

COVID-19 is likely to impact animal health.

Source

Preventive Veterinary Medicine; 2020. 18024 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Responses to the ongoing COVID-19 pandemic have included travel bans and social distancing with "shelter in place" orders, resulting in sudden changes in human activity and subsequent effects on the global and national economy. We speculate that animal health will likely be impacted by COVID-19 through the immediate consequences of sudden human confinement and inactivity, and through the long-term consequences of the upcoming economic crisis on farmer livelihoods and veterinary service capacities. We expect the COVID-19 pandemic and the subsequent economic crisis to impact negatively on the control of diseases that are already present in Europe, as well as on the European capacity to prevent and respond in a

timely manner to new and emerging animal diseases. We also expect an increased attention to the animal health implications of coronavirus infections in animals. Mechanisms explaining these outcomes include increased wildlife-livestock contacts due to human confinement; disruption of ongoing testing schemes for endemic diseases; lower disease surveillance efforts; and lower capacity for managing populations of relevant wildlife reservoirs. The main mitigation action consists in adapting animal health management strategies to the available resources.

Publication Type

Journal article.

<452>

Accession Number

20203318555

Author

Mousavi, S. M.; Anjomshoa, M.

Title

COVID-19 in Yemen: a crisis within crises.

Source

International Journal for Equity in Health; 2020. 19(120):(11 July 2020). 14 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Yemen is suffering deadly airstrikes and heavy bombardment since March 2015 which has created one of the most severe humanitarian crises worldwide. In this miserable situation, several communicable diseases have massively re-emerged including cholera, diarrhea, dengue, and measles, as a result of weapons used during

the years of war according to geospatial patterns of the infected cases. According to the world health organization (WHO), only 51% of health care facilities across the country are fully functional, mainly due to the war. The fragile health system has extremely limited capacity to adopt and implement effective preparedness and response measures to the COVID-19 outbreak. The first and most imperative step to combat COVID-19 in Yemen is ending the devastating war without delay and terminating the land, sea and air blockade imposed by the coalition. International humanitarian organizations should also dedicate a high level joint action to implement a series of well-coordinated measures emphasizing both whole-of-government and whole-of-society approach to protect Yemenis' right in life and health.

Publication Type

Journal article.

<453>

Accession Number

20203319733

Author

Hase, R.; Kurita, T.; Muranaka, E.; Sasazawa, H.; Mito, H.; Yano, Y.

Title

A case of imported COVID-19 diagnosed by PCR-positive lower respiratory specimen but with PCR-negative throat swabs.

Source

Infectious Diseases; 2020. 52(6):423-426. 10 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

A 35-year-old woman presented with fever and mild diarrhoea without any respiratory symptoms 9 days after travelling to Japan from Wuhan, China. Her computed tomography scan revealed pneumonia. The first polymerase chain reaction (PCR) test on throat swab for the novel corona virus upon admission was negative. Therefore, she was treated for community-acquired pneumonia, but fever persisted. On hospital day 5, PCR test on induced sputum was positive, but a second polymerase chain reaction test on throat swab remained negative. She was discharged, fully recovered, on hospital day 12. A lower respiratory tract specimen should be obtained for better diagnosis of corona virus disease 2019, even in the absence of respiratory symptoms for patients with significant travel or exposure history.

Publication Type

Journal article.

<454>

Accession Number

20203326097

Author

Chu JiaoJiao; Yang Nan; Wei YanQiu; Yue HuiHui; Zhang FengQin; Zhao JianPing; He Li; Sheng GaoHong; Chen Peng; Li Gang; Wu SiSi; Zhang Bo; Zhang Shu; Wang CongYi

Title

Clinical characteristics of 54 medical staff with COVID-19: a retrospective study in a single center in Wuhan, China. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): Part-IV.)

Source

Journal of Medical Virology; 2020. 92(7):807-813. 11 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

In December 2019, an outbreak of the severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2) infection occurred in Wuhan, and rapidly spread to worldwide, which has attracted many people's concerns about the patients. However, studies on the infection status of medical personnel is still lacking. A total of 54 cases of SARS-Cov-2 infected medical staff from Tongji Hospital between 7 January and 11 February 2020 were analyzed in this retrospective study. Clinical and epidemiological characteristics were compared between different groups by statistical method. From 7 January to 11 February 2020, 54 medical staff of Tongji Hospital were hospitalized due to coronavirus disease 2019 (COVID-19). Most of them were from other clinical departments (72.2%) rather than emergency department (3.7%) or medical technology departments (18.5%). Among the 54 patients with COVID-19, the distribution of age had a significant difference between non-severe type and severe/critical cases (median age: 47 years vs 38 years; P = .0015). However, there was no statistical difference in terms of gender distribution and the first symptoms between theses two groups. Furthermore, we observed that the lesion regions in SARS-Cov-2 infected lungs with severe-/critical-type of medical staff were more likely to exhibit lesions in the right upper lobe (31.7% vs 0%; P = .028) and right lung (61% vs 18.2%; P = .012). Based on our findings with medical staff infection data, we suggest training for all hospital staff to prevent infection and preparation of sufficient protection and disinfection materials.

Publication Type

Journal article.

<455>

Accession Number

20203326096

Author

Wan SuXin; Xiang Yi; Fang Wei; Zheng Yu; Li BoQun; Hu YanJun; Lang ChunHui; Huang DaoQiu; Sun QiuYan; Xiong Yan; Huang Xia; Lv JingLong; Luo YaLing; Shen Li; Yang HaoRan; Huang Gu; Yang RuiShan

Title

Clinical features and treatment of COVID-19 patients in northeast Chongqing. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): Part-IV.)

Source

Journal of Medical Virology; 2020. 92(7):797-806. 24 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The outbreak of the novel coronavirus in China (SARS-CoV-2) that began in December 2019 presents a significant and urgent threat to global health. This study was conducted to provide the international community with a deeper understanding of this new infectious disease. Epidemiological, clinical features, laboratory findings, radiological characteristics, treatment, and clinical outcomes of 135 patients in northeast Chongqing were collected and analyzed in this study. A total of 135 hospitalized patients with COVID-19 were enrolled. The median age was 47 years (interquartile range, 36-55), and there was no significant gender difference (53.3% men). The majority of patients had contact with people from the Wuhan area. Forty-three (31.9%) patients had underlying disease, primarily hypertension (13 [9.6%]), diabetes (12 [8.9%]), cardiovascular disease (7 [5.2%]), and malignancy (4 [3.0%]). Common symptoms included fever (120 [88.9%]), cough (102 [76.5%]), and fatigue (44 [32.5%]). Chest computed tomography scans showed bilateral patchy shadows or ground glass opacity in the lungs of all the patients. All patients received antiviral therapy (135 [100%]) (Kaletra and interferon were both used), antibacterial therapy (59 [43.7%]), and corticosteroids (36 [26.7%]). In addition, many patients received traditional Chinese medicine (TCM) (124 [91.8%]). It is suggested that patients should receive Kaletra early and should be treated by a combination of Western and Chinese medicines. Compared to the mild cases, the severe ones had lower lymphocyte counts and higher plasma levels of Pt, APTT, d-dimer, lactate dehydrogenase, PCT, ALB, C-reactive protein, and aspartate aminotransferase. This study demonstrates the clinic features and therapies of 135 COVID-19 patients. Kaletra and TCM played an important role in the treatment of the viral pneumonia. Further studies are required to explore the role of Kaletra and TCM in the treatment of COVID-19.

Publication Type

Journal article.

<456>

Accession Number

20203326084

Author

Lung Jrhau; Lin YuShih; Yang YaoHsu; Chou YuLun; Shu LiHsin; Cheng YuChing; Te Liu Hung; Wu ChingYuan

Title

The potential chemical structure of anti-SARS-CoV-2 RNA-dependent RNA polymerase. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): Part-III.)

Source

Journal of Medical Virology; 2020. 92(6):693-697. 17 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

An outbreak of coronavirus disease 2019 (COVID-19) occurred in Wuhan and it has rapidly spread to almost all parts of the world. For coronaviruses, RNA-dependent RNA polymerase (RdRp) is an important polymerase that catalyzes the replication of RNA from RNA template and is an attractive therapeutic target. In this study, we screened these chemical structures from traditional Chinese medicinal compounds proven to show antiviral activity in severe acute respiratory syndrome coronavirus (SARS-CoV) and the similar chemical structures through a molecular docking study to target RdRp of SARS-CoV-2, SARS-CoV, and Middle East respiratory syndrome coronavirus (MERS-CoV). We found that theaflavin has a lower idock score in the catalytic pocket of RdRp in SARS-CoV-2 (-9.11 kcal/mol), SARS-CoV (-8.03 kcal/mol), and MERS-CoV (-8.26 kcal/mol) from idock. To confirm the result, we discovered that theaflavin has lower binding energy of -8.8 kcal/mol when it docks in the catalytic pocket of SARS-CoV-2 RdRp by using the Blind Docking server. Regarding contact modes, hydrophobic interactions contribute significantly in binding and additional hydrogen bonds were found between theaflavin and RdRp. Moreover, one pi-cation interaction was formed between theaflavin and Arg553 from the Blind Docking server. Our results suggest that theaflavin could be a potential SARS-CoV-2 RdRp inhibitor for further study.

Publication Type

Journal article.

<457>

Accession Number

20203326070

Author

Angeletti, S.; Benvenuto, D.; Bianchi, M.; Giovanetti, M.; Pascarella, S.; Ciccozzi, M.

Title

COVID-2019: the role of the nsp2 and nsp3 in its pathogenesis. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): Part-III.)

Source

Journal of Medical Virology; 2020. 92(6):584-588. 22 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Last December 2019, a new virus, named novel Coronavirus (COVID-2019) causing many cases of severe pneumonia was reported in Wuhan, China. The virus knowledge is limited and especially about COVID-2019 pathogenesis. The Open Reading Frame 1ab (ORF1ab) of COVID-2019 has been analyzed to evidence the presence of mutation caused by selective pressure on the virus. For selective pressure analysis fast-unconstrained Bayesian approximation (FUBAR) was used. Homology modelling has been performed by SwissModel and HHPred servers. The presence of transmembrane helical segments in Coronavirus ORF1ab non structural protein 2 (nsp2) and nsp3 was tested by TMHMM, MEMSAT, and MEMPACK tools. Three-dimensional structures have been analyzed and displayed using PyMOL. FUBAR analysis revealed the presence of potential sites under positive selective pressure ($P < .05$). Position 723 in the COVID-2019 has a serine instead a glycine residue, while at aminoacidic position 1010 a proline instead an isoleucine. Significant ($P < .05$) pervasive negative selection in 2416 sites (55%) was found. The positive selective pressure could account for some clinical features of this virus compared with severe acute respiratory syndrome (SARS) and Bat SARS-like CoV. The stabilizing mutation falling in the endosome-associated-protein-like domain of the nsp2 protein could account for COVID-2019 high ability of contagious, while the destabilizing mutation in nsp3 proteins could suggest a potential mechanism differentiating COVID-2019 from SARS. These data could

be helpful for further investigation aimed to identify potential therapeutic targets or vaccine strategy, especially in the actual moment when the epidemic is ongoing and the scientific community is trying to enrich knowledge about this new viral pathogen.

Publication Type

Journal article.

<458>

Accession Number

20203326065

Author

Li YanChao; Bai WanZhu; Hashikawa, T.

Title

The neuroinvasive potential of SARS-cov2 may play a role in the respiratory failure of COVID-19 patients. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): Part-III.)

Source

Journal of Medical Virology; 2020. 92(6):552-555. 43 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Following the severe acute respiratory syndrome coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV), another highly pathogenic coronavirus named SARS-CoV-2 (previously known as 2019-nCoV) emerged in December 2019 in Wuhan, China, and rapidly spreads around the world. This virus shares highly homological sequence with SARS-CoV, and causes acute, highly lethal pneumonia

coronavirus disease 2019 (COVID-19) with clinical symptoms similar to those reported for SARS-CoV and MERS-CoV. The most characteristic symptom of patients with COVID-19 is respiratory distress, and most of the patients admitted to the intensive care could not breathe spontaneously. Additionally, some patients with COVID-19 also showed neurologic signs, such as headache, nausea, and vomiting. Increasing evidence shows that coronaviruses are not always confined to the respiratory tract and that they may also invade the central nervous system inducing neurological diseases. The infection of SARS-CoV has been reported in the brains from both patients and experimental animals, where the brainstem was heavily infected. Furthermore, some coronaviruses have been demonstrated able to spread via a synapse-connected route to the medullary cardiorespiratory center from the mechanoreceptors and chemoreceptors in the lung and lower respiratory airways. Considering the high similarity between SARS-CoV and SARS-CoV2, it remains to make clear whether the potential invasion of SARS-CoV2 is partially responsible for the acute respiratory failure of patients with COVID-19. Awareness of this may have a guiding significance for the prevention and treatment of the SARS-CoV-2-induced respiratory failure.

Publication Type

Journal article.

<459>

Accession Number

20203328401

Author

Li BinbinV

Title

Creating synergy between biodiversity conservation and human health - one health. [Chinese]

Source

Biodiversity Science; 2020. 28(5):596-605. 44 ref.

Publisher

Biodiversity Science

Location of Publisher

Beijing

Country of Publication

China

Abstract

With the pandemic of COVID-19, the linkage between wildlife, biodiversity and human health has drawn tremendous attention from the public. In the recent 20 years, there has been growing interest from the international community to understand how biodiversity influences human health, which has become one of the crucial directions to promote biodiversity conservation and research. At the same time, One Health, as a new concept and framework, promotes interdisciplinary research and action to improve the health of humans, animals and the environment altogether. This concept has been adopted and promoted by various countries and international organizations, including the Convention on Biological Conservation. This paper summarizes major pathways of how biodiversity influences human health, the definition and history of One Health, the incorporation of One Health into the biodiversity conservation agenda. In the end, using the One Health framework, this paper suggests ways to improve China's current wildlife management system to reduce the probability of potential public health crisis. This paper also identifies some key research gaps in enhancing the role of biodiversity in protecting human health. The implementation of One Health in China should emphasize the importance of biodiversity research and conservation. By integrating research on landscape ecology, community and species interactions, climate change impacts, land-cover and land-use change with that on human health, One Health can improve its efficiency in addressing risks of public health and environmental health. At the same time, China should invest more resources in wildlife management, reinforce the linkage between biodiversity conservation and human health, and prevent and control epidemics from their very beginning.

Publication Type

Journal article.

<460>

Accession Number

20203329650

Author

Hui Han; Bo Wu; Jia JiaoJiao; Song YaJing

Title

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

Source

Disease Surveillance; 2020. 35(5):372-374. 8 ref.

Publisher

Editorial Board of Disease Surveillance

Location of Publisher

Beijing

Country of Publication

China

Abstract

In April 2020, a total of 61 infectious diseases were reported globally, affecting 214 countries and regions. Except for influenza, the top five infectious diseases affecting greatest number of countries and regions were Novel coronavirus disease 2019(COVID-19)(214), measles (30), dengue fever (19), poliomyelitis (12) and rubella (9). The top four infectious diseases with highest case fatality rates were Ebola virus disease (65.8%), Middle East respiratory syndrome (34.2%), Lassa fever (19.0%) and COVID-19 (7.0%). 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, Middle East respiratory syndrome and dengue fever, the prevalent infectious diseases in Africa were COVID-19, Ebola virus disease, 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 and measles.

Publication Type

Journal article.

<461>

Accession Number

20203320317

Author

S. Candido, D. da; Watts, A.; Abade, L.; Kraemer, M. U. G.; Pybus, O. G.; Croda, J.; Oliveira, W. de; Khan, K.; Sabino, E. C.; Faria, N. R.

Title

Routes for COVID-19 importation in Brazil.

Source

Journal of Travel Medicine; 2020. 27(3)5 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

The aim of the study was to report the importation of COVID-19 cases in Brazil by analyzing data on airline travellers to Brazil in 2019, who departed from countries that had reported local cases of COVID-19 transmission by 5 March 2020. This information provides insights into which Brazilian cities are most at risk for SARS-CoV-2 importation. To better understand the potential for SARS-CoV-2 introductions to Brazil, the relative risk of COVID-19 introduction to Brazilian cities was estimated by taking into account SARS-CoV-2 incidence per international traveller arriving at an airport in Brazil. It is estimated that 54.8% of all imported cases would be expected to come from travellers infected in Italy and 9.3% and 8.3% of the cases would be from travellers infected in China and France, respectively. The route Italy-Sao Paulo was estimated to comprise 24.9% of total infected travellers flying to Brazil during this period. Moreover, it is estimated that Italy has been the source location for five of the top 10 importation routes for infected travellers into Brazil based on the current epidemiological scenario.

Publication Type

Journal article.

<462>

Accession Number

20203325882

Author

Ye GuangMing; Lin HuaLiang; Chen Song; Wang ShiChan; Zeng ZhiKun; Wang Wei; Zhang ShiYu; Rebmann, T.; Li YiRong; Pan ZhenYu; Yang ZhongHua; Wang Ying; Wang FuBing; Qian ZhengMin; Wang XingHuan

Title

Environmental contamination of SARS-CoV-2 in healthcare premises.

Source

Journal of Infection; 2020. 81(2):e1-e5. 12 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: A large number of healthcare workers (HCWs) were infected by SARS-CoV-2 during the ongoing outbreak of COVID-19 in Wuhan, China. Hospitals are significant epicenters for the human-to-human transmission of the SARS-CoV-2 for HCWs, patients, and visitors. No data has been reported on the details of hospital environmental contamination status in the epicenter of Wuhan. Methods: We collected 626 surface swabs within the Zhongnan Medical Center in Wuhan in the mist of the COVID-19 outbreak between February 7 - February 27, 2020. Dacron swabs were aseptically collected from the surfaces of 13 hospital function zones, five major objects, and three major PPE. The SARS-CoV-2 RNAs were detected by reverse transcription-PCR. Results: The most contaminated zones were the intensive care unit specialized for taking care of novel coronavirus pneumonia (NCP) (31.9%), Obstetric Isolation Ward specialized for pregnant women with NCP (28.1%), and Isolation Ward for NCP (19.6%). We classified the 13 zones into four contamination levels. The most contaminated objects were self-service printers (20.0%), desktop/keyboard (16.8%), and doorknob (16.0%). Both hand sanitizer dispensers (20.3%) and gloves (15.4%) were the most contaminated PPE. Conclusion: Our findings emphasize the urgent need to ensure adequate environmental cleaning, strengthen infection prevention training, and improve infection prevention among HCWs during the outbreak of COVID-19.

Publication Type

Journal article.

<463>

Accession Number

20203325848

Author

Kan Mengquing; Zhou JiHe

Title

How do colleges and universities respond to COVID-19: the experience of Chengdu Sport University.

Source

Asia-Pacific Journal of Public Health; 2020. 32(4):170-171. 5 ref.

Publisher

Sage Publications Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Since the outbreak of Covid-19 infectious pneumonia in Wuhan, China, in January 2019, it has rapidly spread to 31 provinces (autonomous regions and municipalities) across the country within 3 months. Chengdu Sport University is the only physical education institution in Southwest China. During the epidemic period, the university actively responded to the call of the government and issued response measures as soon as possible to achieve the goal of zero infection among teachers and students. This article describes in detail how to deal with the new coronavirus in colleges and universities during the epidemic.

Publication Type

Journal article.

<464>

Accession Number

20203325845

Author

Dreisbach, J. L.

Title

Vietnamese public health practices in the advent of the COVID-19 pandemic: lessons for developing countries.

Source

Asia-Pacific Journal of Public Health; 2020. 32(4):163-164. 6 ref.

Publisher

Sage Publications Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The 2019 coronavirus disease (COVID-19) presents a great challenge to developing countries with limited access to public health measures in grassroots communities. The World Health Organization lauded the Vietnamese government for its proactive and steady investment in health facilities that mitigate the risk of the infectious disease in Vietnam. This short communication presents cases that could benchmark public health policies in developing countries.

Publication Type

Journal article.

<465>

Accession Number

20203325844

Author

Duc Minh Duong; Vui Thi Le; Bui Thi Thu Ha

Title

Controlling the COVID-19 pandemic in Vietnam: lessons from a limited resource country.

Source

Asia-Pacific Journal of Public Health; 2020. 32(4):161-162. 3 ref.

Publisher

Sage Publications Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The lessons learned from Vietnam, a country that the world acclaimed for its management of the fight against COVID-19, could stand out as an example of how to do more with less. The Vietnamese government has acted swiftly at the very early stage of the pandemic with a focus on containment efforts and extensive public health measures, particularly (1) the commitment from the government with a multisectoral approach; (2) a timely, accurate, and transparent risk communication; (3) active surveillance and intensive isolation/quarantine operation, case management with tracing all new arrivals and close contact up to three clusters; and (4) suspension of flights, shutting schools, and all nonessential services.

Publication Type

Journal article.

<466>

Accession Number

20203325842

Author

Khadijah Abid; Yashfika Abdul Bari; Maryam Younas; Sehar Tahir Javaid; Abira Imran

Title

Progress of COVID-19 epidemic in Pakistan.

Source

Asia-Pacific Journal of Public Health; 2020. 32(4):154-156. 5 ref.

Publisher

Sage Publications Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The outbreak of corona virus initiated as pneumonia of unknown cause in December 2019 in Wuhan, China, which has been now spreading rapidly out of Wuhan to other countries. On January 30, 2020, the World Health Organization (WHO) declared coronavirus outbreak as the sixth public health emergency of international concern (PHEIC), and on March 11, 2020, the WHO announced coronavirus as pandemic. Coronavirus is thought to be increasing in Pakistan. The first case of coronavirus was reported from Karachi on February 26, 2020, with estimated populace of Pakistan as 204.65 million. Successively, the virus spreads into various regions nationwide and has currently become an epidemic. The WHO has warned Pakistan that the country could encounter great challenge against the outbreak of coronavirus in the coming days. This short communication is conducted to shed light on the epidemic of coronavirus in the country. It would aid in emphasizing the up-to-date situation in a nutshell and the measures taken by the health sector of Pakistan to abate the risk of communication.

Publication Type

Journal article.

<467>

Accession Number

20203322704

Author

Mansyur, M.

Title

Hajj health istithaah amid the COVID-19 pandemic.

Source

Medical Journal of Indonesia; 2020. 29(2):115-117. 9 ref.

Publisher

Medical Journal of Indonesia

Location of Publisher

Jakarta Pusat

Country of Publication

Indonesia

Abstract

The aim of the article was to examine the state of Hajj amidst the COVID-19 pandemic.

Publication Type

Journal article.

<468>

Accession Number

20203323990

Author

Li ChunYang; Ji Fang; Wang Liang; Wang LiPing; Hao JunGui; Dai MingJia; Liu Yan; Pan XiuCheng; Fu JuanJuan; Li Li; Yang GuangDe; Yang JianYe; Yan XueBing; Gu Bing

Title

Asymptomatic and human-to-human transmission of SARS-CoV-2 in a 2-family cluster, Xuzhou, China.

Source

Emerging Infectious Diseases; 2020. 26(7):1626-1628. 7 ref.

Publisher

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

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

We report epidemiologic, laboratory, and clinical findings for 7 patients with 2019 novel coronavirus disease in a 2-family cluster. Our study confirms asymptomatic and human-to-human transmission through close contacts in familial and hospital settings. These findings might also serve as a practical reference for clinical diagnosis and medical treatment.

Publication Type

Journal article.

<469>

Accession Number

20203323975

Author

Kwok KinOn; Li KinKit; Chan HenryHoHin; Yi YuanYuan; Tang Arthur; Wei WanIn; Wong SamuelYeungShan

Title

Community responses during early phase of COVID-19 epidemic, Hong Kong.

Source

Emerging Infectious Diseases; 2020. 26(7):1575-1579. 10 ref.

Publisher

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

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

During the early phase of the coronavirus disease epidemic in Hong Kong, 1,715 survey respondents reported high levels of perceived risk, mild anxiety, and adoption of personal-hygiene, travel-avoidance, and social-distancing measures. Widely adopted individual precautionary measures, coupled with early government actions, might slow transmission early in the outbreak.

Publication Type

Journal article.

<470>

Accession Number

20203323973

Author

Olsen, S. J.; Chen MengYu; Liu YuLun; Witschi, M.; Ardoin, A.; Calba, C.; Mathieu, P.; Masserey, V.; Maraglino, F.; Marro, S.; Penttinen, P.; Robesyn, E.; Pukkila, J.

Title

Early introduction of severe acute respiratory syndrome Coronavirus 2 into Europe.

Source

Emerging Infectious Diseases; 2020. 26(7):1567-1570. 8 ref.

Publisher

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

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

Early infections with severe acute respiratory syndrome coronavirus 2 in Europe were detected in travelers from Wuhan, China, in January 2020. In 1 tour group, 5 of 30 members were ill; 3 cases were laboratory confirmed. In addition, a healthcare worker was infected. This event documents early importation and subsequent spread of the virus in Europe.

Publication Type

Journal article.

<471>

Accession Number

20203323960

Author

Lin, C.; Braund, W. E.; Auerbach, J.; Chou JihHaw; Teng JuHsiu; Tu PiKuei; Mullen, J.

Title

Policy decisions and use of information technology to fight COVID-19, Taiwan.

Source

Emerging Infectious Diseases; 2020. 26(7):1506-1512. 24 ref.

Publisher

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

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

Because of its proximity to and frequent travelers to and from China, Taiwan faces complex challenges in preventing coronavirus disease (COVID-19). As soon as China reported the unidentified outbreak to the World

Health Organization on December 31, 2019, Taiwan assembled a taskforce and began health checks onboard flights from Wuhan. Taiwan's rapid implementation of disease prevention measures helped detect and isolate the country's first COVID-19 case on January 20, 2020. Laboratories in Taiwan developed 4-hour test kits and isolated 2 strains of the coronavirus before February. Taiwan effectively delayed and contained community transmission by leveraging experience from the 2003 severe acute respiratory syndrome outbreak, prevalent public awareness, a robust public health network, support from healthcare industries, cross-departmental collaborations, and advanced information technology capacity. We analyze use of the National Health Insurance database and critical policy decisions made by Taiwan's government during the first 50 days of the COVID-19 outbreak.

Publication Type

Journal article.

<472>

Accession Number

20203323955

Author

Salazar, P. M. de; Niehus, R.; Taylor, A.; Buckee, C. O.; Lipsitch, M.

Title

Identifying locations with possible undetected imported severe acute respiratory syndrome Coronavirus 2 cases by using importation predictions.

Source

Emerging Infectious Diseases; 2020. 26(7):1465-1469. 8 ref.

Publisher

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

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

Cases of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection exported from mainland China could lead to self-sustained outbreaks in other countries. By February 2020, several countries were reporting imported SARS-CoV-2 cases. To contain the virus, early detection of imported SARS-CoV-2 cases is critical. We used air travel volume estimates from Wuhan, China, to international destinations and a generalized linear regression model to identify locations that could have undetected imported cases. Our model can be adjusted to account for exportation of cases from other locations as the virus spreads and more information on importations and transmission becomes available. Early detection and appropriate control measures can reduce the risk for transmission in all locations.

Publication Type

Journal article.

<473>

Accession Number

20203319595

Author

Wang, X.; Fang, J.; Zhu, Y.; Chen, L.; Ding, F.; Zhou, R.; Ge, L.; Wang, F.; Chen, Q.; Zhang, Y.; Zhao, Q.

Title

Clinical characteristics of non-critically ill patients with novel coronavirus infection (COVID-19) in a Fangcang Hospital.

Source

Clinical Microbiology and Infection; 2020. 26(8):1063-1068. 17 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: To describe the clinical characteristics of patients in a Fangcang Hospital. Methods: Non-critically ill individuals with positive SARS-CoV-2 RT-PCR tests admitted between 7 February and 12 February 2020 to Dongxihu Fangcang Hospital, which was promptly constructed because of the rapid, exponential increase in COVID-19 patients in Wuhan, China, were included; clinical course through to 22 February was recorded. Results: A total of 1012 non-critically ill individuals with positive SARS-CoV-2 RT-PCR tests were included in the study. Thirty (of 1012, 3.0%) individuals were asymptomatic on admission. During hospitalization, 16 of 30 (53.3%) asymptomatic individuals developed different symptoms. Fourteen of 1012 patients (1.4%) remained asymptomatic from exposure to the end of follow up, with a median duration of 24 days (interquartile range 22-27). Fever (761 of 1012, 75.2%) and cough (531 of 1012, 52.4%) were the most common symptoms. Small patchy opacities (355 of 917, 38.7%) and ground-glass opacities (508 of 917, 55.4%) were common imaging manifestations in chest CT scans. One hundred patients (9.9%) were transferred to designated hospitals due to aggravation of illness. Diarrhoea emerged in 152 of 1012 patients (15.0%). Male, older age, diabetes, cardiovascular diseases, chills, dyspnoea, So2 value of <=93%, white blood cell counts of >10 109/L and large consolidated opacities on CT images were all risk factors for aggravation of illness. Conclusions: Non-critically ill individuals had different clinical characteristics from critically ill individuals. Asymptomatic infections only accounted for a small proportion of COVID-19. Although with a low incidence, diarrhoea was observed in patients with COVID-19, indicating the possibility of faecal-oral transmission.

Publication Type

Journal article.

<474>

Accession Number

20203319583

Author

Rodrigo, C.; Fernando, S. D.; Rajapakse, S.

Title

Clinical evidence for repurposing chloroquine and hydroxychloroquine as antiviral agents: a systematic review.

Source

Clinical Microbiology and Infection; 2020. 26(8):979-987. 42 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Repurposing hydroxychloroquine (HCQ) and chloroquine (CQ) as antiviral agents is a re-emerging topic with the advent of new viral epidemics. Aims: To summarize evidence from human clinical studies for using HCQ or CQ as antiviral agents for any viral infection. Sources: PubMed, EMBASE, Scopus, Web of Science for published studies without time or language restrictions; Cochrane Clinical Trial Registry and Chinese Clinical Trials Registry for trials registered after 2015; MedRxiv for preprints within the last 12 months. Content: Study eligibility criteria were interventional and prospective observational studies (with or without a control group). Participants were adults and children with a confirmed viral infection. Interventions included the use of CQ or HCQ as antiviral agent in one or more groups of the study. Two authors independently screened abstracts, and all authors agreed on eligible studies. A meta-analysis was planned if studies were available which were similar in terms of participants, intervention, comparator and outcomes. Nineteen studies (including two preprints) were eligible (HIV 8, HCV 2, dengue 2, chikungunya 1, COVID-19 6). Nine and ten studies assessed CQ and HCQ respectively. Benefits of either drug for viral load suppression in HIV are inconsistent. CQ is ineffective in curing dengue (high-certainty evidence) and may have little or no benefit in curing chikungunya (low-certainty evidence). The evidence for COVID-19 infection is rapidly evolving but at this stage we are unsure whether either CQ or HCQ has any benefit in clearing viraemia (very-low-certainty evidence). Implications: Using HCQ or CQ for HIV/HCV infections is now clinically irrelevant as other effective antivirals are available for viral load suppression (HIV) and cure (HCV). There is no benefit of CQ in dengue, and the same conclusion is likely for chikungunya. More evidence is needed to confirm whether either HCQ or CQ is beneficial in COVID-19 infection.

Publication Type

Journal article.

<475>

Accession Number

20203318815

Author

Bennett, N. J.; Finkbeiner, E. M.; Ban, N. C.; Belhabib, D.; Jupiter, S. D.; Kittinger, J. N.; Mangubhai, S.; Scholtens, J.; Gill, D.; Christie, P.

Title

The COVID-19 pandemic, small-scale fisheries and coastal fishing communities.

Source

Coastal Management; 2020. 48(4):336-347. 59 ref.

Publisher

Taylor & Francis

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

The COVID-19 pandemic has rapidly spread around the world with extensive social and economic effects. This editorial focuses specifically on the implications of the pandemic for small-scale fishers, including marketing and processing aspects of the sector, and coastal fishing communities, drawing from news and reports from around the world. Negative consequences to date have included complete shut-downs of some fisheries, knock-on economic effects from market disruptions, increased health risks for fishers, processors and communities, additional implications for marginalized groups, exacerbated vulnerabilities to other social and environmental stressors, and increased Illegal, Unreported and Unregulated fishing. Though much of the news is dire, there have been some positive outcomes such as food sharing, the revival of local food networks, increases in local sales through direct marketing and deliveries, collective actions to safeguard rights, collaborations between communities and governments, and reduced fishing pressure in some places. While the crisis is still unfolding, there is an urgent need to coordinate, plan and implement effective short- and long-term responses. Thus, we urge governments, development organizations, NGOs, donors, the private sector, and researchers to rapidly mobilize in support of small-scale fishers, coastal fishing communities, and associated civil society organizations, and suggest actions that can be taken by each to help these groups respond to the COVID-19 pandemic.

Publication Type

Journal article.

<476>

Accession Number

20203328210

Author

Hebert, C.; Dagenais, C.; Sween-Cadieux, E. M.; Ridde, V.

Title

Video as a public health knowledge transfer tool in Burkina Faso: a mixed evaluation comparing three narrative genres.

Source

PLoS Neglected Tropical Diseases; 2020. 14(6)82 ref.

Publisher

Public Library of Sciences (PLoS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

Background: The dengue virus is endemic in many low- and middle-income countries. In Burkina Faso, the proportion of fevers that could be due to dengue is growing. In 2013, a dengue epidemic spread there, followed by other seasonal outbreaks. Dengue is often confused with malaria, and health workers are not trained to distinguish between them. Three training videos using different narrative genres were tested with nursing students from two institutions in Ouagadougou: journalistic, dramatic and animated video. The study aimed to determine if video is an effective knowledge transfer tool, if narrative genre plays a role in knowledge acquisition, and which narrative elements are the most appreciated. Methodology: A mixed method research design was used. The relative effectiveness of the videos was verified through a quasi-experimental quantitative component with a comparison group and post-test measurements. A qualitative component identified participants' perceptions regarding the three videos. Data were drawn from a knowledge test (n = 482), three focus groups with health professionals' students (n = 46), and individual interviews with health professionals (n = 10). Descriptive statistics and single-factor variance analysis were produced. A thematic analysis was used to analyse qualitative data. Principal findings: Results showed that all three videos led to significant rates of knowledge improvement when compared with the comparison group

(p <0.05): 12.31% for the journalistic video, 20.58% for the dramatic video, and 18.91% for the animated video. The dramatic and animated videos produced a significantly higher increase in knowledge than did the journalistic video with respectively 8.27% (p = 0.003) and 6.59% (p = 0.029) and can be considered equivalent with a difference of 1.68% (p = 0.895). Thematic analysis also revealed that these two videos were considered to be better knowledge transfer tools. Four key aspects are important to consider for a video to be effective: (1) transmitting information in a narrative form, (2) choosing good communicators, (3) creating a visual instrument that reinforces the message and (4) adapting the message to the local context. Conclusions: Video has proven to be an effective and appreciated knowledge transfer and training tool for health professionals, but the narrative genre of the videos can influence knowledge acquisition. The production of other videos should be considered for training or updating health professionals and their narrative genre taken into consideration. The actual context of constant circulation of new diseases, such as COVID-19, reaffirms the need to train health professionals.

Publication Type

Journal article.

<477>

Accession Number

20203326311

Author

Trapani Junior, A.; Vanhoni, L. R.; Silveira, S. K.; Marcolin, A. C.

Title

Childbirth, puerperium and abortion care protocol during the COVID-19 pandemic.

Source

Revista Brasileira de Ginecologia e Obstetricia; 2020. 42(6):349-355. 32 ref.

Publisher

Federacao Brasileira das Sociedades de Ginecologia e Obstetricia

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

The new coronavirus (severe acute respiratory syndrome-related coronavirus 2, SARSCoV-2) is a virus that causes a potentially serious respiratory disease that has spread in several countries, reaching humans in all age groups, including pregnant women. The purpose of this protocol is to provide technical and scientific support to Brazilian obstetricians regarding childbirth, postpartum and abortion care during the pandemic.

Publication Type

Journal article.

<478>

Accession Number

20203322582

Author

Abhishek Tiwari; Manar, M. K.; Singh, S. K.; Udit Mohan; Kanchan Panday; Uday Mohan

Title

Traditions & customs of ancient Indian culture and their role in COVID 19 pandemic prevention and control.

Source

Indian Journal of Community Health; 2020. 32(2):317-323. 32 ref.

Publisher

Indian Association of Preventive and Social Medicine, Uttar Pradesh and Uttarakhand (IAPSMUPUK) State Chapter

Location of Publisher

Etawah

Country of Publication

India

Abstract

The truth of COVID 19 Pandemic is that it has already changed the demography of many countries, still changing the Climate & Environment and will continue to change the Global Economy for quite some time. The simple good personal hygiene and physical distancing measures were identified as one of the most effective protections against COVID 19. The Indian way of living has many scientific principles inherited in it to combat infectious diseases. We follow the Sanatan Sanskriti concepts traditionally, sometimes not even realizing the rationale behind it. This article tries to explore the correlation between the preventive measures and our traditional Sanatan practices. The pandemic has shaken the globe and time has come to rethink and move back to basics of our ancient traditions for a sustainable future. There is a need to promote our cultural practices and avoid running behind the ultra-modern ways of living so that the world learns to combat and live with the COVID 19.

Publication Type

Journal article.

<479>

Accession Number

20203322561

Author

Lau LincolnLeehang; Hung, N.; Joygo, D.; Ferma, J.; Choi, M.; Dodd, W.; Wei, X.

Title

Knowledge, attitudes and practices of COVID-19 among income-poor households in the Philippines: a cross-sectional study. (Research Theme: COVID-19 pandemic.)

Source

Journal of Global Health; 2020. 10(1)50 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

Background: The presence of COVID-19 in low- and middle-income countries (LMICs) is raising important concerns about effective pandemic response and preparedness in the context of fragile health systems and the pervasiveness of misinformation. The objective of this study was to gain an understanding of how COVID-19 was perceived by households experiencing extreme poverty in the Philippines. Methods: This study was conducted in partnership with International Care Ministries (ICM), a Philippine-based non-governmental organization (NGO) that runs a poverty-alleviation program called Transform targeted towards extreme low-income households. We integrated knowledge, attitudes, and practices (KAP) questions into ICM's cross-sectional program monitoring and evaluation systems from February 20 through March 13, 2020. Frequencies and proportions were calculated to describe the respondents' responses, and the Kruskal-Wallis test and binomial logistic regression were undertaken to determine the socio-demographic characteristics associated with COVID-19 KAPs. Results: In total, 2224 respondents from 166 communities in rural, urban and coastal settings were surveyed. Although the survey was administered during the earlier stages of the pandemic, 94.0% of respondents had already heard of COVID-19. Traditional media sources such as television (85.5%) and radio (56.1%) were reported as the main sources of information about the virus. Coughing and sneezing were identified as a transmission route by 89.5% of respondents, while indirect hand contact was the least commonly identified transmission route, recognized by 72.6% of respondents. Handwashing was identified by 82.2% of respondents as a preventive measure against the virus, but social distancing and avoiding crowds were only identified by 32.4% and 40.6%, respectively. Handwashing was the most common preventive practice in response to COVID-19, adopted by 89.9% of respondents. A greater number of preventive measures were taken by those with more knowledge of potential transmission routes. Conclusions: There is a need for targeted health education as a response strategy to COVID-19 in low-income settings, and it is important that strategies are contextually relevant. Understanding KAPs among populations experiencing extreme poverty will be important as tailored guidance for public health response and communication strategies are developed for LMICs.

Publication Type

Journal article.

<480>

Accession Number

20203322560

Author

Bach Xuan Tran; Men Thi Hoang; Hai Quang Pham; Chi Linh Hoang; Huong Thi Le; Latkin, C. A.; Ho, C. S. H.; Ho, R. C. M.

Title

The operational readiness capacities of the grassroots health system in responses to epidemics: implications for COVID-19 control in Vietnam. (Research Theme: COVID-19 pandemic.)

Source

Journal of Global Health; 2020. 10(1)31 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

Background: There is a paucity of data on the operational readiness capacities of the grassroots health system in Vietnam while it plays a vital role as a first-line defense against health emergencies, including the coronavirus disease (COVID-19). This study, therefore, aims to assess the operational readiness capacities of the grassroots health system in response to epidemics and provides implications for controlling COVID-19 in Vietnam. Methods: An online cross-sectional study using the respondent-driven sampling technique was conducted with 6029 health professionals and medical students in Vietnam from December 2019 to February 2020. The operational readiness capacities of the health system were assessed by the sufficiency of health professionals, administrative and logistics staffs, equipment and facilities, and general capacity of health professionals. Kruskal-Wallis test, Fisher exact test and chi2 test were employed to identify the differences among variables. Tobit and censored regression models were operated to determine associated factors. Results: The operational readiness capacities of the grassroots health system for four assessed criteria were at moderate levels, ranging from 6.3 to 6.8 over 10. In Vietnam, the grassroots health system in rural areas, in the South, and at the district level were more likely to be vulnerable compared to their counterparts. Conclusions: According to empirical data, this study reveals the vulnerability of the grassroots health system in Vietnam and provides the rationality of prompt and vigorous actions of the Vietnamese Government against COVID-19. Findings also offer useful insights for effective strategies to strengthen the grassroots health system in the long term. In the short term, practicing precautionary measures and mobilizing human resources, as well as medical equipment, are needed to successfully contain COVID-19 in Vietnam.

Publication Type

Journal article.

<481>

Accession Number

20203322559

Author

Ding ZhuQing; Xie LingLing; Guan AnChen; Huang DanDan; Mao ZongFu; Liang XiaoHui

Title

Global COVID-19: warnings and suggestions based on experience of China. (Research Theme: COVID-19 pandemic.)

Source

Journal of Global Health; 2020. 10(1)35 ref.

Publisher

Edinburgh University Global Health Society

Location of Publisher

Edinburgh

Country of Publication

UK

Abstract

Background: Corona Virus Disease 2019 (COVID-19) is spreading around the world currently, seriously threatening people's health and global security as an international public health emergency. The objective of this study is to summarize China's countermeasures and experience in response to the COVID-19 emergence in order to serve as a warning for the global COVID-19 prevention and control, and further provide some suggestions for global fighting to COVID-19. Methods: Content analysis, expert consultation, and high frequency word analysis were applied in this study. Relevant data and information were collected from official websites, the experience accumulated in China during the fighting to the novel coronavirus, and suggestions from some experts. Results: As of March 29, 2020, China had accumulated 82419 confirmed diagnoses, and the mortality rate was 4.01%; in the mean time, the global had accumulated 596042 confirmed diagnoses, and the mortality rate was 4.76%. Although the mortality of COVID-19 was not so high, its harmfulness couldn't be ignored. Ten facts during COVID-19 epidemic in China were summarized in the study, including: the COVID-19 is highly contagious and can be spread through many channels; although elderly people and people with underlying diseases are susceptible, young people can also be victims; isolation is the most effective way to

reduce the risk of COVID-19, and secondary disasters induced by COVID-19 should be emphasized in advance. High frequent words of experts' suggestions mainly includes: material, prevention and control, pathogeny, propaganda, education, hygiene, technology, medical care, overall planning, policy, panic, etc. The main concerns of experts are from four aspects: publicity and education, various subjects, medical materials and law construction. Conclusions: COVID-19 is a new infectious disease worldwide, and its infectious source, transmission route, susceptible population, and therapy are not clear. In the face of the COVID-19 epidemic, no country can stand alone to maintain its own safety. People from all over the world should put aside their difference in ideology, religious belief, politics, economy, and culture, and only by global cooperation and globally unified actions, can we successfully overcome COVID-19 in the end.

Publication Type

Journal article.

<482>

Accession Number

20203199003

Author

Ghulam Nabi; Rabeea Siddique; Ali, A.; Khan, S.

Title

Preventing bat-born viral outbreaks in future using ecological interventions.

Source

Environmental Research; 2020. 18516 ref.

Publisher

Elsevier Inc

Location of Publisher

Orlando

Country of Publication

USA

Abstract

This article discussed how bats naturally host pathogenic viruses having epidemic and pandemic potentials and how deforestation and expanding human population increase bat-human interactions. Recommendations such as halting bat consumption, trade, and higher surveillance are recommended to stop future outbreaks.

Publication Type

Journal article.

<483>

Accession Number

20203304447

Title

Considerations for infection prevention and control measures on public transport in the context of COVID-19.

Source

Considerations for infection prevention and control measures on public transport in the context of COVID-19; 2020. :4 pp. 13 ref.

Publisher

European Centre for Disease Prevention and Control

Location of Publisher

Stockholm

Country of Publication

Sweden

Abstract

This document provides advice on personal protective measures on public transport (e.g. bus, metro, train, commuter boats) amidst the ongoing COVID-19 pandemic.

Publication Type

Miscellaneous.