

Literature Search

<p>Search strategy</p> <p>CAB Abstracts on the OVID interface</p>	<p>Database: CAB Abstracts <2000 to 2020 Week 46></p> <p>Search Strategy:</p> <p>-----</p> <p>1 ('covid 19' or 'novel coronavirus' or 'sars-cov-2').mp. (2704)</p> <p>2 1 and 202011*.up. (483)</p> <p>*****</p> <p>[mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]</p>
<p>Date of coverage</p>	

Search results

	Date searched	No of items found
CAB Abstracts	24/11/2020	483

References from CAB Abstracts

<1>

Accession Number

20203470881

Author

Rashmi Kishore; Shivram Dhakad; Nazneen Arif; Lalit Dar; Mirdha, B. R.; Richa Aggarwal; Kabra, S. K.

Title

COVID-19: possible cause of induction of relapse of Plasmodium vivax infection.

Source

Indian Journal of Pediatrics; 2020. 87(9):751-752. 5 ref.

Publisher

Springer (India) Private Limited

Location of Publisher

New Delhi

Country of Publication

India

Abstract

This article reports the clinical course and management of a case of COVID-19 co-infection with vivax malaria in a 10-y-old boy, who previously had received incomplete radical cure with primaquine for vivax infection, suggesting a possible role of COVID-19 in inducing current malarial relapse. This boy had been diagnosed with P. vivax infection six months back and had now reactivation of malaria. Relapse rates after P. vivax infection vary geographically from 8 to 80%, with considerable proportion of population harboring dormant but activatable hypnozoites in endemic areas. Exact mechanism causing this activation is though unclear, associated cytokine response with systemic illness has been postulated in P. vivax relapse. COVID-19 leads to a cytokine storm, which is responsible for the more severe manifestations of the disease. Hence, we postulate that the COVID-19 infection, with its cytokine response was responsible for induction of P. vivax relapse in our patient. The hypothesis is based on circumstantial evidence in form of documented malaria in past, a possibility of re-activation in natural course or re-infection cannot be ruled out.

Publication Type

Journal article.

<2>

Accession Number

20203456528

Author

Rahman, M. M.; Md Bodrud-Doza; Griffiths, M. D.; Mamun, M. A.

Title

Biomedical waste amid COVID-19: perspectives from Bangladesh.

Source

Lancet Global Health; 2020. 8(10):e1262-e1262. 7 ref.

Publisher

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

In Bangladesh, despite the introduction of the Medical Waste Management and Processing Rules in 2008, no safe system has yet been developed to manage the health-care waste generated daily in hospitals, clinics, and households. Waste generated inside Bangladeshi hospitals is often collected without any separation by untrained, unprotected, and unaware cleaners, and disposed of in unauthorized places without any separation or proper treatment. Approximately 40,000 informal waste collectors working across the country are at high risk of getting infected by SARS-CoV-2 because they work without adequate protection. There might be a serious risk of spreading SARS-CoV-2 if used masks, gloves, and other personal protective equipment are not managed and disposed of properly. Additionally, household waste (e.g., tissues, masks, gloves) puts waste management workers at increased health risk. In Bangladesh, hospital waste is mainly managed by city corporations, third-party organisations, and non-governmental organizations. However, the capacities of these stakeholders do not comply with the requirements of a proper, environmentally safe medical waste disposal mechanism. A policy-level paradigm shift into a strategic, state-of-the-art medical waste management system is required. Failing to tackle the huge surge in medical waste amid COVID-19 is likely to put Bangladesh at further environmental and public health risk.

Publication Type

Correspondence.

<3>

Accession Number

20203484030

Author

Jones, P.; Comfort, D.

Title

The COVID-19 crisis and sustainability in the hospitality industry.

Source

International Journal of Contemporary Hospitality Management; 2020. 32(10):3037-3050.

Publisher

Emerald Publishing

Location of Publisher

Bingley

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Country of Publication

UK

Abstract

Purpose: This paper offers some reflections on changes in the relationships between sustainability and the hospitality industry following the onset of the Coronavirus Disease 2019 (COVID-19) crisis. (Covid-19 is officially a pandemic, but the term "COVID-19 crisis" is used throughout this paper because the authors feel that it captures the wider impacts of the crisis, rather than just focussing on the disease itself).

Design/methodology/approach: The paper describes the COVID-19 crisis, emphasises the role of hospitality in economic and social life and reviews how the crisis has changed the relationships between sustainability and the hospitality industry. **Findings:** The paper reveals the dramatic effect the crisis has had on sustainability in the hospitality industry. That said, though the crisis has offered a vision of a more sustainable future, this vision may pose a major challenge for the industry and for many of its traditional customers. **Research limitations/implications:** The paper outlines some of the theoretical, operational, strategic and research implications of the crisis for the hospitality industry and for hospitality scholars.

Originality/value: This paper provides a reflective review of changes in the relationships between sustainability and the hospitality industry following the onset of COVID-19.

Publication Type

Journal article.

<4>

Accession Number

20203505233

Author

Xin SiYi; Cheng XueQi; Zhu Bo; Liao XiaoLong; Yang Feng; Song LiNa; Shi Yan; Guan XueFeng; Su RenYi; Wang Jian; Xing LiMin; Xu Xiping; Jin Lin; Liu YanPing; Zhou Wei; Zhang DongWei; Liang Liang; Yu You; Yu Rui

Title

Clinical retrospective study on the efficacy of Qingfei Paidu decoction combined with western medicine for COVID-19 treatment.

Source

Biomedicine & Pharmacotherapy; 2020. 12926 ref.

Publisher

Elsevier Masson SAS

Location of Publisher

Issy-les-Moulineaux

Country of Publication

France

Abstract

Background: Coronavirus disease 2019 (COVID-19)² has emerged as a global pandemic. However, as effective treatments for this disease are still unclear, safe and efficient therapies are urgently needed. Qingfei Paidu decoction (QPD)³ is strongly recommended in the Chinese Novel Coronavirus Pneumonia Diagnosis and Treatment Plan (Provisional 6th Edition). However, clinical research data on the effects of QPD on COVID-19 are scarce. Our study aimed to explore the effects of combined treatment with QPD and Western medicine on COVID-19. Methods: In this study, 63 patients with confirmed COVID-19 were analyzed. During the first 14 days of hospitalization, patients with deteriorating symptoms were administered QPD along with Western medicine therapy (the antiviral medicine selected from interferon, lopinavir, or arbidol). The clinical characteristics and blood laboratory indices (blood routine, inflammatory factors, and multi-organ biochemical indices) were examined, and the total lung severity scores were evaluated in each patient by reviewing chest computed tomography before treatment and at the end of treatment. Results: Before QPD treatment, the combined treatment group showed higher blood C-reactive protein levels and more severe pulmonary inflammation and clinical symptoms than the Western medicine treatment group. Both groups met the discharge criteria after a similar length of hospitalization. At the end of treatment, circulating white blood cells, total lymphocyte count, and glutamic-oxaloacetic transaminase levels improved dramatically in both groups ($P < 0.05$). In contrast, C-reactive protein, creatine kinase, creatine kinase-myocardial band, lactate dehydrogenase, and blood urea nitrogen levels were improved only in the combined treatment group ($P < 0.05$), and C-reactive protein and creatine kinase were the most pronounced ($P < 0.01$). Compared with baseline, at the end of treatment, the proportion of patients with normal values of C-reactive protein, total lymphocyte count, and lactate dehydrogenase were increased in the combined treatment group ($P < 0.05$), whereas no significant difference was observed in the Western medicine treatment group ($P > 0.05$). Conclusion: The combination of QPD with Western medicine demonstrated significant anti-inflammatory effects compared with those of only Western medicine in patients with mild and moderate COVID-19; however, neither mortality nor length of hospitalization was affected. Moreover, the combined treatment tended to mitigate the extent of multi-organ impairment. Long-term randomized controlled trials with follow-up evaluations are required to confirm the results presented here.

Publication Type

Journal article.

<5>

Accession Number

20203509561

Author

Ezeibe, C. C.; Ilo, C.; Ezeibe, E. N.; Oguonu, C. N.; Nwankwo, N. A.; Ajaero, C. K.; Osadebe, N.

Title

Political distrust and the spread of COVID-19 in Nigeria.

Source

Global Public Health; 2020. 15(12):1753-1766. 91 ref.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

While studies have explored how health sector corruption, weak healthcare system, large-scale immune compromised population, misinformation and prevalence of highly congested slums contribute to the spread of COVID-19 in Nigeria, they have glossed over the impact of political distrust on the spread of the virus. This study explores the impact of political distrust on the spread of COVID-19 pandemic in Nigeria. The study utilised qualitative dominant mixed methods approach comprising telephone interviews and a survey of 120 educated Nigerians purposively selected from four COVID-19 most affected states including Lagos, Oyo, Kano and Rivers as well as the Federal Capital Territory, Abuja. The study also relied on secondary data on the spread of COVID-19 in Nigeria sourced from Nigeria Centre for Diseases Control from 27 February to 31st August 2020. The study found that political corruption motivates large-scale political distrust. This undermines public compliance to government protocols, limits the outcomes of government responses to COVID-19 and facilitates the spread of the virus in Nigeria. The paper concludes that improving government accountability in the public sector management is relevant for building public trust, promoting citizens' compliance to COVID-19 safety measure and mitigating the spread of the pandemic in Nigeria and beyond.

Publication Type

Journal article.

<6>

Accession Number

20203509537

Author

Aguirre, A. A.; Catherina, R.; Frye, H.; Shelley, L.

Title

Illicit wildlife trade, wet markets, and COVID-19: preventing future pandemics. (Special Issue: Symposium on coronavirus 2019: social determinants, disparities, and impacts.)

Source

World Medical and Health Policy; 2020. 12(3):256-265. 31 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Although the exact origin of SARS-CoV-2, the etiologic agent of COVID-19, is currently unknown, there is substantial evidence to suggest the source of transmission of the virus occurred within the Wuhan wet market. In these markets, bats and wild animals are frequently sold and stored in close contact. During several of the world's past pandemics, bats were essential to the spread of zoonotic diseases from bat to another animal or to humans directly. Live animal markets create the perfect conditions for novel viruses such as COVID-19 to emerge. This paper suggests that to prevent future pandemics, the sale of exotic animals be banned at wet markets. It also advocates for the integration of the analysis of illicit trade with the study of zoonotic disease transmission and pandemics.

Publication Type

Journal article.

<7>

Accession Number

20203462166

Author

Crew, S.

Title

Food safety risk during the pandemic.

Source

Food Science & Technology; 2020. 34(2):14-17. 4 ref.

Publisher

Institute of Food Science & Technology

Location of Publisher

London

Country of Publication

UK

Abstract

This article reviews the potential food safety challenges presented by SARS-CoV-2 and its impact on the food sector's management and control measures. Hindsight is the only exact science. Only once this

pandemic ends will we be able to fully assess the health, social and economic impact of this global disaster and we should then be able to learn lessons in terms of public health and impact on the global food supply network for any future similar pandemics. In the meantime in our legitimate concern to feed the nation and provide food security, we should be careful that in our haste to provide this much needed food, we do not inadvertently compromise food safety. The management of the COVID-19 situation, decision making, communication, implementation and the review of effectiveness of new and existing measures all need to be carefully organised and controlled.

Publication Type

Journal article.

<8>

Accession Number

20203505747

Author

Anbukkani Subbian; Satinder Kaur; Viral Patel; Anupama Rajanbabu

Title

COVID-19 and its impact on gynaecologic oncology practice in India-results of a nationwide survey.

Source

ecancermedicalsecience; 2020. 14(1067)11 ref.

Publisher

ecancer Global Foundation

Location of Publisher

Bristol

Country of Publication

UK

Abstract

The COVID-19 pandemic sweeping across the world has caused major disruptions in healthcare delivery and practice. A survey was conducted to assess the changes in the care of gynaecologic oncology patients in India. Methods: An online survey enquiring about the patient volumes and surgical load, and changes in practice protocols for endometrial, ovarian, cervical and vulval cancers was conducted in May, 2020. Results: The total number of responses received was 153. Barring duplicates, 148 were analysed. There was a significant drop in gynaecologic oncology patients attending government hospitals as compared to the non-government sector. The drop was not significantly different in areas having low versus high COVID-19 case volumes. The treatment of endometrial cancers remained the same although there was a marked shift from minimal access surgery to conventional surgery. Advanced ovarian cancer was mostly managed by neoadjuvant chemotherapy. Cervical and vulval cancer management remained the same, but radiotherapy protocols were modified by most. Conclusion: Based on clinician responses, it appears that most practices

across India have suffered a fall in patient volumes. The responses from government sectors point towards a bigger hit in this segment of practice. While the management of endometrial cancers and cervical cancers was mostly unchanged, most cases of advanced ovarian cancer received neoadjuvant chemotherapy. Cervical cancer, when managed by chemoradiation, was likely to have altered radiation schedules.

Publication Type

Journal article.

<9>

Accession Number

20203505744

Author

Ravallion, M.

Title

SDG1: the last three percent.

Source

Working Paper - Centre for Global Development; 2020. (527):1-21. 17 ref.

Publisher

Center for Global Development

Location of Publisher

Washington

Country of Publication

USA

Abstract

There is a little-noticed but important difference between the World Bank's original goal for poverty reduction and the subsequent UN Sustainable Development Goal (SDG). While both target the "\$1.90 a day" poverty rate, the Bank's goal was a 3% rate by 2030, while the SDG is to "eradicate" poverty by 2030. Simple linear projections of recorded progress against \$1.90 poverty in the world does suggest that we are on track to attaining the UN's goal. If we can return to the pre- COVID pace of poverty reduction after two or three years, then we should still be roughly on track. However, a closer scrutiny of the pre-COVID data leaves one less optimistic. There are a priori reasons why the last few percent could be harder to reach with current development policies. Consistently with that hypothesis, the paper documents recent (pre-COVID-19) signs of a levelling off in progress for the poorest in East Asia-the star performer regionally over the longer term. This is evident in the region's slower progress recently in both lifting the floor-thus reaching the poorest-and in reducing the poverty rate. This levelling off is also found on average for the 18 developing countries that have reduced their poverty rate from over 10% (around the current global rate) to under 3% during 1981-2017. Similarly to East Asia, progress in reaching the poorest declined once the

last 3% had been reached, though some countries did better than others. Overall, the results suggest that re-turning to "business as usual" post-COVID will not suffice to eradicate extreme poverty.

Publication Type

Journal article.

<10>

Accession Number

20203505738

Author

Okunade, K. S.; Okunowo, A. A.; Ohazurike, E. O.; Anorlu, R. I.

Title

Good clinical practice advice for the management of patients with gynaecological cancer during the COVID-19 pandemic in Nigeria and other resource-constrained countries.

Source

ecancermedicalsecience; 2020. 14(1075)27 ref.

Publisher

ecancer Global Foundation

Location of Publisher

Bristol

Country of Publication

UK

Abstract

The impact of the COVID-19 pandemic on healthcare services in settings with under-resourced health systems such as that of Nigeria is likely to be substantial in the coming months. The gynaecological oncology services still need to be prioritised as an essential core health service. There are increasing concerns from both physicians and patients regarding how to manage patients diagnosed with cancer during this pandemic as evidence suggests a substantial increase in the risk of COVID-19-related deaths amongst patients with cancer. However, we recognise that despite this great challenge, we must continue to provide the highest quality of care to the patients, whereas, at the same time, ensure adequate safety not only for the patients and their families but also for the entire oncology team. We advocate that due to the widespread travel restrictions and inability to refer patients for the highest level of care at this period, centres without radiotherapy facilities as seen in most resource-limited settings should always consider lower level care options such as the use of chemotherapy pending when there is a better access to these facilities. We, therefore, developed this good clinical practice advice to staff of the gynaecological oncology unit in the centre and other resource-constrained settings for the management of patients with gynaecological cancer during the COVID-19 pandemic.

Publication Type

Journal article.

<11>

Accession Number

20203506933

Author

Dipanjan Dey; Varun Tyagi; Santana Saikia

Title

Co-occurrence and co-infection of COVID-19 and Dengue: a serious public health issue.

Source

International Journal of Mosquito Research; 2020. 7(5, Part A):48-52. 40 ref.

Publisher

Innovative Journal Solutions

Location of Publisher

Delhi

Country of Publication

India

Abstract

The prevailing COVID-19 pandemic has created havoc all around the world taking the lives of more than one million people. While the entire world is struggling hard to combat this pandemic; unfortunately, the burden has been further intensified by another fatal mosquito vector borne disease-dengue, particularly in dengue-endemic nations. The shared clinical features like fever, aches, respiratory ailments and so on by both the viral disease has led to the difficulty in their diagnosis and also to distinguish one from the other. In this regard, cases of misdiagnosis due to false positive test result has also been reported in some places. Hence the co-occurrence and co-infection of COVID-19 and dengue is indeed a great threat to public health in dengue endemic nations. This article aims to provide an overview of epidemiology, transmission and shared clinical features of COVID-19 and dengue besides highlighting the issue of misdiagnosis of both under clinical setting. Scientific evidence proving the fact that mosquitoes do not transmit SARS-CoV-2 pathogen has also been discussed. The present scenario of dengue outbreak in India amidst the prevailing COVID-19 pandemic has also been highlighted.

Publication Type

Journal article.

<12>

Accession Number

20203493224

Author

Altieri, M. A.; Nicholls, C. I.

Title

Agroecology and the reconstruction of a post-COVID-19 agriculture.

Source

Journal of Peasant Studies; 2020. 47(5):881-898. 80 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The COVID-19 crisis has created a moment where existing calls for agroecology acquire new relevance. Agroecology provides a path to reconstruct a post-COVID-19 agriculture, one that is able to avoid widespread disruptions of food supplies in the future by territorializing food production and consumption. There are five main areas in which agroecology can point the way to a new post-COVID-19 agriculture: overcoming the pesticide treadmill, enriching nature's matrix, revitalizing small farms, creating alternative animal production systems and enhancing urban agriculture.

Publication Type

Journal article.

<13>

Accession Number

20203490666

Author

Li Bo; Scott, O.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Title

Fake news travels fast: exploring misinformation circulated around Wu Lei's coronavirus case. (Special Issue: Sport and the coronavirus crisis.)

Source

International Journal of Sport Communication; 2020. 13(3):505-513. 29 ref.

Publisher

Human Kinetics

Location of Publisher

Leeds

Country of Publication

UK

Abstract

This commentary analyzes how misinformation related to a coronavirus case of a star soccer player (i.e., Wu Lei) was spread widely on Chinese digital media and accepted by sports fans as the truth. The paper first examines the mechanisms by exploring how misinformation emerged and was disseminated. Then, the paper explores how social media and the fast-growing self-media in China exacerbate tendencies toward misinformation during the news production process, which poses a new threat to legacy media and journalists' profession. The paper concludes by discussing new challenges faced by Chinese sports journalists in the new digital era after COVID-19.

Publication Type

Journal article.

<14>

Accession Number

20203490653

Author

Butryn, T. M.; Masucci, M. A.; Johnson, J. A.

Title

The show must go on: the strategy and spectacle of Dana White's efforts to promote UFC 249 during the coronavirus pandemic. (Special Issue: Sport and the coronavirus crisis.)

Source

International Journal of Sport Communication; 2020. 13(3):381-390. 28 ref.

Publisher

Human Kinetics

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Location of Publisher

Leeds

Country of Publication

UK

Abstract

While most professional sports quickly postponed their seasons due to COVID- 19, the Ultimate Fighting Championship (UFC) took a decidedly contrarian approach as president Dana White continued to promote UFC 249 until pressure forced its cancelation on April 9, 2020. Drawing from work on sport and spectacle and the media as well as sport management scholarship on crisis management, the authors provide a commentary on the mediated spectacle of White's (eventually successful) efforts to promote UFC 249 during the pandemic. Drawing from numerous media sources, they discuss how White sought to control the public narrative in several key ways. The authors further explore how White decried the seriousness of the pandemic while centralizing the UFC's place in the U.S. sporting landscape. Finally, the authors discuss how White's efforts might both help and hinder the UFC as a mainstream sports promotion.

Publication Type

Journal article.

<15>

Accession Number

20203490650

Author

Smith, W. R.

Title

A post-COVID-19 lifestyle sport research agenda: communication, risk, and organizational challenges. (Special Issue: Sport and the coronavirus crisis.)

Source

International Journal of Sport Communication; 2020. 13(3):352-360. 16 ref.

Publisher

Human Kinetics

Location of Publisher

Leeds

Country of Publication

UK

Abstract

The cancellations and postponements of large-scale organized sport competitions provided the first indicators of the impact that COVID-19 would have on society. During the pandemic, sport media reporting has focused on cancellations. Although not receiving as much media attention, "lifestyle sports", such as rock climbing, parkour, BMX, kayaking, or skateboarding, were also impacted by COVID-19 in ways that differ from organized team sports. In this commentary, the author draws upon select media reports and subcultural social media posts to highlight two primary impacts of COVID-19: (a) the civic organizational challenges of limiting lifestyle sport participation and (b) the influence on the social and risk-laden experience of these sports. The article concludes by detailing lifestyle sport stakeholder communication, digital sporting communities, the use of social media for organizing lifestyle sport communities, and sport risk communication as fruitful avenues for future research in a postpandemic lifestyle sports.

Publication Type

Journal article.

<16>

Accession Number

20203490648

Author

Smith, D. K.; Casper, J.

Title

Making an impact: an initial review of U.S. sport league corporate social responsibility responses during COVID-19. (Special Issue: Sport and the coronavirus crisis.)

Source

International Journal of Sport Communication; 2020. 13(3):335-343. 11 ref.

Publisher

Human Kinetics

Location of Publisher

Leeds

Country of Publication

UK

Abstract

COVID-19 has brought about an unprecedented time where a majority of major American sporting organizations have ceased competition. Corporate social responsibility (CSR) actions, historically an avenue for sport organizations to positively impact society, provide a compelling avenue of study during this time. While researchers have observed the role of CSR and crisis communication when the crisis arises from within the organization, there is a need to understand CSR shifts and responses when the crisis is on a societal level. This commentary examines efforts of major U.S. sport league CSR programs (National Basketball Association/Women's National Basketball Association, National Football League, Major League

Baseball, Major League Soccer, and National Hockey League), starting in mid-March when the majority of organizations ceased competition. Data were gathered using a mixed-methods approach of qualitative interviews, secondary research, and social media sentiment analysis. Key findings included the emergence of two different approaches to CSR communication strategies among U.S. sport leagues as well as three clear themes of COVID-19- related communication: educate, assist, and inspire. In addition, this commentary provides an initial glance at consumer response to CSR programs, showing both positive and negative sentiment trends.

Publication Type

Journal article.

<17>

Accession Number

20203490647

Author

Mirabito, T.; Hardin, R.; Pate, J. R.

Title

The fractured messaging of the National Collegiate Athletic Association and its members in response to COVID-19. (Special Issue: Sport and the coronavirus crisis.)

Source

International Journal of Sport Communication; 2020. 13(3):324-334. 43 ref.

Publisher

Human Kinetics

Location of Publisher

Leeds

Country of Publication

UK

Abstract

The sports world's near universal moratorium in response to the COVID-19 pandemic was abrupt and unprecedented. From professional leagues to youth sports, doors were closed to competitions and events to help stop the spread of the coronavirus. The hiatus began at one of the busiest times on the calendar for sport, with the National Basketball Association and National Hockey League seasons concluding; the Women's National Basketball Association and National Football League drafts taking place; Major League Baseball's spring training nearing its conclusion; the Professional Golf Association and Ladies Professional Golf Association Tours starting their seasons; and the National Collegiate Athletic Association's marquee events, the Division-I men's and women's basketball tournaments, set to begin. The suddenness of the interruption was met with a need by the various sport entities to engage their public with information about their respective responses. The statements that emerged on or after March 12 - "the day the sports

world stopped" - were not all the same. Many of the statements, in fact, were quite different. That was especially the case with the National Collegiate Athletic Association, whose governance structure and messaging practices hindered their ability to have a uniform response. The purpose of this essay was to examine the public messaging of sport leagues and organizations and to discuss the effectiveness (or ineffectiveness) of those public statements.

Publication Type

Journal article.

<18>

Accession Number

20203517084

Author

Ghi, T.; Pasquo, E. di; Mekinian, A.; Calza, L.; Frusca, T.

Title

SARS-CoV-2 in pregnancy: why is it better than expected?

Source

European Journal of Obstetrics & Gynecology and Reproductive Biology; 2020. 252:476-478. 15 ref.

Publisher

Elsevier Ireland

Location of Publisher

Shannon

Country of Publication

Irish Republic

Abstract

Since the outbreak of Coronavirus disease in December 2019, information specific to pregnancy remains limited and controversial. Based on data from previous reports, it has been noticed that contrary to prior pandemics such as SARS, MERS and H1N1 and although pregnancy is usually considered as a condition of high susceptibility to viral infections, new SARS-CoV2 infection seems to have a more benign clinical course when affecting pregnant women. We speculate that during pregnancy the physiological "silencing" of the Th1 pro-inflammatory response may blunt the cytokines storm which is thought to play a key-role in the pathogenesis of the severe complications of Covid-19.

Publication Type

Journal article.

<19>

Accession Number

20203515142

Author

Ji LiKai; Wang Na; Ma JingJiao; Cheng YuQiang; Wang HengAn; Sun JianHe; Yan YaXian

Title

Porcine deltacoronavirus nucleocapsid protein species-specifically suppressed IRF7-induced type I interferon production via ubiquitin-proteasomal degradation pathway.

Source

Veterinary Microbiology; 2020. 250

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Coronaviruses (CoVs) is showing obvious interspecies transmission, such as the SARS-CoV, MERS-CoV and SARS-CoV-2. Here, the emerging porcine deltacoronavirus (PDCoV) strain, isolated from Shanghai, China, broadly infects porcine, human and chicken cells in vitro. Previously studies by our group and others have confirmed that PDCoV nucleocapsid (N) protein performs an important role in antagonizing retinoic acid-induced gene I-like receptor (RLR) activation. However, the mechanism of PDCoV N protein suppressing porcine type I IFN production remains unclear, especially the downstream of porcine RLR signaling pathway. In the present study, porcine IRF7 (poIRF7) was identified as the interaction protein of PDCoV N protein through LC-MS/MS. The poIRF7 (268-487aa) was the key region of binding PDCoV N protein. Although IRF7 is a conserved functional protein in species, the PDCoV N protein has been confirmed to interact with only poIRF7 and significantly decrease poIRF7-induced type I IFN production, but not human or chicken IRF7. Furthermore, PDCoV N protein can promote poIRF7 degradation via the ubiquitin-proteasome pathway, which directly increased the K6, K11, and K29-linked polyubiquitination of poIRF7. Lysine 359 of poIRF7 was a key site in PDCoV N protein inducing poIRF7 degradation. Taken together, our results reveal a novel mechanism that PDCoV N protein could species-specifically interact with poIRF7 and then promote its degradation to suppress porcine type I IFN production. The novel findings provide a new insight into PDCoV and other zoonotic coronavirus evading the innate immune response of different species.

Publication Type

Journal article.

<20>

Accession Number

20203518213

Author

Salinas-Escudero, G.; Carrillo-Vega, M. F.; Granados-Garcia, V.; Martinez-Valverde, S.; Toledano-Toledano, F.; Garduno-Espinosa, J.

Title

A survival analysis of COVID-19 in the Mexican population.

Source

BMC Public Health; 2020. 20(1616):(27 October 2020). 31 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: At present, the Americas report the largest number of cases of COVID-19 worldwide. In this region, Mexico is the third country with most deaths (20,781 total deaths). A sum that may be explained by the high proportion of people over 50 and the high rate of chronic diseases. The aim of this analysis is to investigate the risk factors associated with COVID-19 deaths in Mexican population using survival analysis. **Methods:** Our analysis includes all confirmed COVID-19 cases contained in the dataset published by the Epidemiological Surveillance System for Viral Respiratory Diseases of the Mexican Ministry of Health. We applied survival analysis to investigate the impact of COVID-19 on the Mexican population. From this analysis, we plotted Kaplan-Meier curves, and constructed a Cox proportional hazard model. **Results:** The analysis included the register of 16,752 confirmed cases of COVID-19 with mean age 46.55 +/- 15.55 years; 58.02% (n = 9719) men, and 9.37% (n = 1569) deaths. Male sex, older age, chronic kidney disease, pneumonia, hospitalization, intensive care unit admission, intubation, and health care in public health services, were independent factors increasing the risk of death due to COVID-19 (p < 0.001). **Conclusions:** The risk of dying at any time during follow-up was clearly higher for men, individuals in older age groups, people with chronic kidney disease, and people hospitalized in public health services.

Publication Type

Journal article.

<21>

Accession Number

20203513210

Author

Khalifa, I.; Zhu Wei; Mohammed, H. H. H.; Kunal Dutta; Li ChunMei

Title

Tannins inhibit SARS-CoV-2 through binding with catalytic dyad residues of 3 clpro: an in silico approach with 19 structural different hydrolysable tannins.

Source

Journal of Food Biochemistry; 2020. 44(10)27 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Coronavirus epidemic 2019 (COVID-19), instigated by SARS-CoV-2 virus, is recently raising worldwide and inspiring global health worries. The main 3-chymotrypsin-like cysteine protease (3CLPro) enzyme of SARS-CoV-2, which operates its replication, could be used as a medication discovery point. We therefore theoretically studied and docked the effects of 19 hydrolysable tannins on SARS-CoV-2 by assembling with the catalytic dyad residues of its 3CLpro using molecular operating environment (MOE 09). Results discovered that pedunculagin, tercatatin, and castalin intensely interacted with the receptor binding site and catalytic dyad (Cys145 and His41) of SARS-CoV-2. Our analyses estimated that the top three hits might serve as potential inhibitor of SARS-CoV-2 leading molecules for additional optimization and drug development process to combat COVID-19. This study unleashed that tannins with specific structure could be utilized as natural inhibitors against COVID-19. Practical applications: The 3CLPro controls SARS-CoV-2 copying and manages its life series, which was targeted in case of SARS-CoV and MERS-CoV coronavirus. About 19 hydrolysable tannins were computed against 3CLpro of SARS-CoV-2. Pedunculagin, tercatatin, and castalin interacted with Cys145 and His41 of SARS-CoV-2-3CLpro. Pedunculagin-SARS-CoV-2-3CLpro remain stable, with no obvious fluctuations. We predicted that the understandings gained in the current research may evidence valued for discovering and unindustrialized innovative natural inhibitors for COVID-19 in the nearby future.

Publication Type

Journal article.

<22>

Accession Number

20203517568

Author

Khan, M. M.; Parab, S. R.; Mandar Paranjape

Title

Repurposing 0.5% povidone iodine solution in otorhinolaryngology practice in COVID 19 pandemic.

Source

American Journal of Otolaryngology; 2020. 41(5)22 ref.

Publisher

Elsevier Inc.

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

SARS CoV 2 is very much homologous in structure to SARS CoV. Review of literature suggests the in-vitro virucidal action of povidone iodine in SARS CoV and MERS. The oropharynx and nasopharynx are target sites of SARS CoV 2. A significant proportion of COVID 19 sufferers are asymptomatic, but shedding these viral particles, PVP-I has been shown to be a safe therapy when used as a mouthwash or taken nasally or used during ophthalmic surgeries. Aims: 1. To propose the use of 0.5% Povidone iodine gargles and nasal drops as prerequisite for office based nose and throat examination and procedures during COVID 19 pandemic. 2. To assess tolerability of 0.5% PVP-I in patients and in healthcare workers. Materials and methods: 0.5% PVP-I solution is prepared from commercially available 10% PVP-I solution. Patients were instructed to put 0.5% PVP-I drops in nose and rinse mouth with gargle prior examinations for 30 s. For endoscopic procedure (nasal and throat) nasal douching and gargling to be started one day prior. Douching and rinsing to be repeated just before procedures. Nasal packing with 0.5% PVP-I along with 4% xylocaine/adrenaline solution, tolerability and any allergic reaction noted. Results: The patient and health care workers tolerated the 0.5%. No allergy was noted. Conclusion: We propose the use of 0.5% PVP-I in healthcare workers and their patients to minimise the risk of spread of the disease in addition to the recommended PPE.

Publication Type

Journal article.

<23>

Accession Number

20203517566

Author

Grayson, J. W.; McCormick, J. P.; Thompson, H. M.; Miller, P. L.; Cho DoYeon; Woodworth, B. A.

Title

The SARS-CoV-2 pandemic impact on rhinology research: a survey of the American rhinologic society.

Source

American Journal of Otolaryngology; 2020. 41(5)16 ref.

Publisher

Elsevier Inc.

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

Background: The COVID-19 pandemic has radically shifted healthcare operations within hospitals and universities across the globe. However, the effect of the COVID-19 pandemic on research endeavors and clinical trials is unclear. Background: This study investigates the impact of the COVID-19 pandemic on basic science and clinical research within the rhinology community. Methods: A cross-sectional study was designed utilizing an 8-question survey to identify changes to rhinology research. Questions evaluated the impact of the COVID-19 pandemic on administrative research support and staffing, basic science research, clinical trials and resident research involvement. Results: Seventy-one participants responded to the survey (8.5% response rate). Most respondents noted changes in IACUC/IRB approval (faster, 33%; slower, 31%). Of those who employed laboratory personnel, 64% were able to continue staff employment with full salary. The majority of animal research and in vitro studies were halted (64% and 56%, respectively), but animal care and cell line maintenance were allowed to continue. Clinical trial enrollment was most commonly limited to COVID derived studies (51%). Forty-seven percent of respondents noted increased resident research participation. Conclusion: The rapid spread of the SARS-CoV-2 virus has markedly impacted rhinology-related research. Maintaining safe workplace practices as restrictions are lifted will hopefully mitigate the spread of the virus and allow research productivity to resume.

Publication Type

Journal article.

<24>

Accession Number

20203517560

Author

Smith, D.; Montagne, J.; Raices, M.; Dietrich, A.; Bisso, I. C.; Heras, M. Ias; San Roman, J. E.; Garcia Fornari, G.; Figari, M.

Title

Tracheostomy in the intensive care unit: guidelines during COVID-19 worldwide pandemic.

Source

American Journal of Otolaryngology; 2020. 41(5)35 ref.

Publisher

Elsevier Inc.

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

Purpose: COVID-19 has become a pandemic with significant consequences worldwide. About 3.2% of patients with COVID-19 will require intubation and invasive ventilation. Moreover, there will be an increase in the number of critically ill patients, hospitalized and intubated due to unrelated acute pathology, who will present underlying asymptomatic or mild forms of COVID-19. Tracheostomy is one of the procedures associated with an increased production of aerosols and higher risk of transmission of the virus to the health personnel. The aim of this paper is to describe indications and recommended technique of tracheostomy in COVID-19 patients, emphasizing the safety of the patient but also the medical team involved. Materials and methods: A multidisciplinary group made up of surgeons with privileges to perform tracheostomies, intensive care physicians, infectious diseases specialists and intensive pulmonologists was created to update previous knowledge on performing a tracheostomy in critically ill adult patients (>18 years) amidst the SARS-CoV-2 pandemic in a high-volume referral center. Published evidence was collected using a systematic search and review of published studies. Results: A guideline comprising indications, surgical technique, ventilator settings, personal protective equipment and timing of tracheostomy in COVID-19 patients was developed. Conclusions: A safe approach to performing percutaneous dilational bedside tracheostomy with bronchoscopic guidance is feasible in COVID-19 patients of appropriate security measures are taken and a strict protocol is followed. Instruction of all the health care personnel involves is key to ensure their safety and the patient's favorable recovery.

Publication Type

Journal article.

<25>

Accession Number

20203511384

Author

Pollock, D. D.; Castoe, T. A.; Perry, B. W.; Lytras, S.; Wade, K. J.; Robertson, D. L.; Holmes, E. C.; Boni, M. F.; Pond, S. L. K.; Parry, R.; Carlton, E. J.; Wood, J. L. N.; Pennings, P. S.; Goldstein, R. A.

Title

Viral CpG deficiency provides no evidence that dogs were intermediate hosts for SARS-CoV-2.

Source

Molecular Biology and Evolution; 2020. 37(9):2706-2710. 36 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Due to the scope and impact of the COVID-19 pandemic there exists a strong desire to understand where the SARS-CoV-2 virus came from and how it jumped species boundaries to humans. Molecular evolutionary analyses can trace viral origins by establishing relatedness and divergence times of viruses and identifying past selective pressures. However, we must uphold rigorous standards of inference and interpretation on this topic because of the ramifications of being wrong. Here, we dispute the conclusions of Xia (2020. Extreme genomic CpG deficiency in SARS-CoV-2 and evasion of host antiviral defense. Mol Biol Evol. doi:10.1093/molbev/masa095) that dogs are a likely intermediate host of a SARS-CoV-2 ancestor. We highlight major flaws in Xia's inference process and his analysis of CpG deficiencies, and conclude that there is no direct evidence for the role of dogs as intermediate hosts. Bats and pangolins currently have the greatest support as ancestral hosts of SARS-CoV-2, with the strong caveat that sampling of wildlife species for coronaviruses has been limited.

Publication Type

Journal article.

<26>

Accession Number

20203511382

Author

He WanTing; Ji Xiang; He Wei; Dellicour, S.; Wang ShiLei; Li GaiRu; Zhang LeTian; Gilbert, M.; Zhu HenAn; Xing Gang; Veit, M.; Huang Zhen; Han GuanZhu; Huang YaoWei; Suchard, M. A.; Baele, G.; Lemey, P.; Su Shuo

Title

Genomic epidemiology, evolution, and transmission dynamics of porcine deltacoronavirus.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Source

Molecular Biology and Evolution; 2020. 37(9):2641-2654. many ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The emergence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has shown once again that coronavirus (CoV) in animals are potential sources for epidemics in humans. Porcine deltacoronavirus (PDCoV) is an emerging enteropathogen of swine with a worldwide distribution. Here, we implemented and described an approach to analyze the epidemiology of PDCoV following its emergence in the pig population. We performed an integrated analysis of full genome sequence data from 21 newly sequenced viruses, along with comprehensive epidemiological surveillance data collected globally over the last 15 years. We found four distinct phylogenetic lineages of PDCoV, which differ in their geographic circulation patterns. Interestingly, we identified more frequent intra- and interlineage recombination and higher virus genetic diversity in the Chinese lineages compared with the USA lineage where pigs are raised in different farming systems and ecological environments. Most recombination breakpoints are located in the ORF1ab gene rather than in genes encoding structural proteins. We also identified five amino acids under positive selection in the spike protein suggesting a role for adaptive evolution. According to structural mapping, three positively selected sites are located in the N-terminal domain of the S1 subunit, which is the most likely involved in binding to a carbohydrate receptor, whereas the other two are located in or near the fusion peptide of the S2 subunit and thus might affect membrane fusion. Finally, our phylogeographic investigations highlighted notable South-North transmission as well as frequent long-distance dispersal events in China that could implicate human-mediated transmission. Our findings provide new insights into the evolution and dispersal of PDCoV that contribute to our understanding of the critical factors involved in CoVs emergence.

Publication Type

Journal article.

<27>

Accession Number

20203511367

Author

Weston, S.; Coleman, C. M.; Haupt, R.; Logue, J.; Matthews, K.; Li YiZe; Reyes, H. M.; Weiss, S. R.; Friemana, M. B.

Title

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Broad anti-coronavirus activity of food and drug administration-approved drugs against SARS-CoV-2 in vitro and SARS-CoV in vivo.

Source

Journal of Virology; 2020. 94(21)34 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) emerged in China at the end of 2019 and has rapidly caused a pandemic, with over 20 million recorded COVID-19 cases in August 2020 (<https://covid19.who.int/>). There are no FDA-approved antivirals or vaccines for any coronavirus, including SARS-CoV-2. Current treatments for COVID-19 are limited to supportive therapies and off-label use of FDA-approved drugs. Rapid development and human testing of potential antivirals is urgently needed. Numerous drugs are already approved for human use, and subsequently, there is a good understanding of their safety profiles and potential side effects, making them easier to fast-track to clinical studies in COVID-19 patients. Here, we present data on the antiviral activity of 20 FDA-approved drugs against SARS-CoV-2 that also inhibit SARS-CoV and Middle East respiratory syndrome coronavirus (MERS-CoV). We found that 17 of these inhibit SARS-CoV-2 at non-cytotoxic concentrations. We directly followed up seven of these to demonstrate that all are capable of inhibiting infectious SARS-CoV-2 production. Moreover, we evaluated two of these, chloroquine and chlorpromazine, in vivo using a mouse-adapted SARS-CoV model and found that both drugs protect mice from clinical disease.

Publication Type

Journal article.

<28>

Accession Number

20203511364

Author

Johnson, M. C.; Lyddon, T. D.; Suarez, R.; Salcedo, B.; Lepique, M.; Graham, M.; Ricana, C.; Robinson, C.; Ritter, D. G.

Title

Optimized pseudotyping conditions for the SARS-CoV-2 spike glycoprotein.

Source

Journal of Virology; 2020. 94(21)31 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

The severe acute respiratory syndrome coronavirus 2 (SARS-COV-2) Spike glycoprotein is solely responsible for binding to the host cell receptor and facilitating fusion between the viral and host membranes. The ability to generate viral particles pseudotyped with SARS-COV-2 Spike is useful for many types of studies, such as characterization of neutralizing antibodies or development of fusion-inhibiting small molecules. Here, we characterized the use of a codon-optimized SARS-COV-2 Spike glycoprotein for the generation of pseudotyped HIV-1, murine leukemia virus (MLV), and vesicular stomatitis virus (VSV) particles. The full-length Spike protein functioned inefficiently with all three systems but was enhanced over 10-fold by deleting the last 19 amino acids of the cytoplasmic tail. Infection of 293 FT target cells was possible only if the cells were engineered to stably express the human angiotensin-converting enzyme 2 (ACE2) receptor, but stably introducing an additional copy of this receptor did not further enhance susceptibility. Stable introduction of the Spike-activating protease TMPRSS2 further enhanced susceptibility to infection by 5- to 10-fold. Replacement of the signal peptide of the Spike protein with an optimal signal peptide did not enhance or reduce infectious particle production. However, modifications D614G and R682Q further enhanced infectious particle production. With all enhancing elements combined, the titer of pseudotyped HIV-1 particles reached almost 10⁶ infectious particles/ml. Finally, HIV-1 particles pseudotyped with SARS-COV-2 Spike were successfully used to detect neutralizing antibodies in plasma from coronavirus disease 2019 (COVID-19) patients, but not in plasma from uninfected individuals.

Publication Type

Journal article.

<29>

Accession Number

20203518720

Author

Ozturk, C. N.; Kuruoglu, D.; Ozturk, C.; Rampazzo, A.; Gurunian, R.

Title

Plastic surgery and the COVID-19 pandemic: a review of clinical guidelines.

Source

Annals of Plastic Surgery; 2020. 85(2 Suppl.):S155-S160.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background: A novel coronavirus disease (COVID-19) was first reported in December 2019 in China and was soon declared a pandemic by the World Health Organization. Many elective and nonessential surgeries were postponed worldwide in an effort to minimize spread of disease, as well as to conserve resources. Our goal with this article is to review current practice guidelines in setting of the COVID-19 pandemic, based on available data and literature. Methods: Websites pertaining to surgical and medical societies, and government agencies were reviewed, along with recently published literature to identify recommendations related to COVID-19 and plastic surgery procedures. Results: Clinical practice modifications are recommended during the pandemic in outpatient and perioperative settings. Use of personal protective equipment is critical for aerosol-generating procedures, such as surgery in the head and neck area. Care for trauma and malignancy should continue during the pandemic; however, definitive reconstruction could be delayed for select cases. Specific recommendations were made for surgical treatment of cancer, trauma, and semiurgent reconstructive procedures based on available data and literature. Conclusions: The risk and benefit of each reconstructive procedure should be carefully analyzed in relation to necessary patient care, minimized COVID-19 spread, protection of health care personnel, and utilization of resources. Recommendations in this article should be taken in the context of each institute's resources and prevalence of COVID-19 in the region. It should be emphasized that the guidelines provided are a snapshot of current practices and are subject to change as the pandemic continues to evolve.

Publication Type

Journal article.

<30>

Accession Number

20203519936

Author

Kanwar, A.; Heppler, S.; Kanwar, K.; Brown, C. K.

Title

A survey of COVID-19 preparedness among hospitals in Idaho.

Source

Infection Control and Hospital Epidemiology; 2020. 41(9):1003-1010. 14 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Background: SARS-CoV-2 has been implicated in the largest recorded coronavirus outbreak to date. Initially, most COVID-19 cases were in China, but the virus has spread to more than 184 countries worldwide, and the United States currently has more cases than any other country. Background: With person-to-person spread expanding in the United States, we describe hospital preparedness for managing suspected and confirmed COVID-19 patients. Design: Cross-sectional survey focused on various elements of respiratory disease preparedness. Setting: Critical access hospitals (CAHs) and acute-care hospitals (ACHs) in Idaho. Methods: The electronic survey was sent to infection preventionists (IPs) and nurse administrators in 44 hospitals in Idaho. Results: Overall, 32 (73%) hospitals responded to the survey. Participating facilities reported their preparedness with respect to existing, formalized structures for managing infectious disease incidents-specifically COVID-19-as well as availability of resources, such as isolation rooms and personal protective equipment, for safely managing suspected and confirmed COVID-19 cases. Conclusions: Hospitals covered by the survey had varying levels of preparedness for managing COVID-19 cases, with differences across the various categories of interest in this study. Although the study reveals strengths, including in application of emergency management and infection control frameworks, it also suggests that other areas, such as consistent implementation of federal guidelines and requirements for infection prevention, are potential areas for strengthening preparedness for SARS-CoV-2 and other respiratory pathogens with pandemic potential.

Publication Type

Journal article.

<31>

Accession Number

20203513786

Author

Zahir Izuan Azhar; Chen Xin Wee; Mariam Mohamad; Mohd Shahril, A. S.; Mohamad Rodi Isa; Nurhuda Ismail

Title

COVID-19 review: an epidemiological perspective and Malaysian scenario in handling the pandemic (January - May 2020).

Source

Journal of Clinical and Health Sciences; 2020. 5(1):26-41. many ref.

Publisher

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Universiti Teknologi MARA

Location of Publisher

Sungai Buloh

Country of Publication

Malaysia

Abstract

The pandemic of Coronavirus Disease 2019 (COVID-19) has brought much fear and anxiety worldwide due to the rapid transmission rate and mortality. The exponential surge of COVID-19 cases need to be addressed aggressively to flatten the epidemic curve. This review aims to describe the COVID-19 disease epidemiology and disease transmission, response actions taken by the authorities to control this pandemic and risk communication strategies in Malaysia. A literature search via the ScienceDirect and Google Scholar databases of published articles and official statements from the Ministry of Health, Malaysia from December 2019 to May 2020 was conducted. The first wave of COVID-19 outbreak in Malaysia started in late January involving 22 cases but the second wave involved more cases due to the massive religious gathering that occurred in late February. Malaysia implemented the Movement Control Order (MCO) on 18th March 2020 and other well-coordinated response action plans to prevent community transmission. The reproduction number (R0) was successfully reduced from 3.6 to 0.3 due to the MCO. Malaysia's risk communication strategies that include daily press conference by the Director General of Health and dissemination of information through national television and social media, played a crucial role in dealing with the COVID-19 outbreak. In conclusion, effective response actions and mitigation plans, should be the main priorities to combat this pandemic. The immediate direction will need to be focused on development of vaccines for COVID-19. Future research should study the origin of the virus in animals and the role of comorbidities contributing to poorer prognosis.

Publication Type

Journal article.

<32>

Accession Number

20203519906

Author

Ludwig-Begall, L. F.; Wielick, C.; Dams, L.; Nauwynck, H.; Demeuldre, P. F.; Napp, A.; Laperre, J.; Haubruge, E.; Thiry, E.

Title

The use of germicidal ultraviolet light, vaporized hydrogen peroxide and dry heat to decontaminate face masks and filtering respirators contaminated with a SARS-CoV-2 surrogate virus.

Source

Journal of Hospital Infection; 2020. 106(3):577-584. 25 ref.

Publisher

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: In the context of the ongoing severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic, the supply of personal protective equipment remains under severe strain. To address this issue, re-use of surgical face masks and filtering facepiece respirators has been recommended; prior decontamination is paramount to their re-use. **Aim:** We aim to provide information on the effects of three decontamination procedures on porcine respiratory coronavirus (PRCV)-contaminated masks and respirators, presenting a stable model for infectious coronavirus decontamination of these typically single-use-only products. **Methods:** Surgical masks and filtering facepiece respirator coupons and straps were inoculated with infectious PRCV and submitted to three decontamination treatments, ultraviolet (UV) irradiation, vaporized H₂O₂, and dry heat treatment. Viruses were recovered from sample materials and viral titres were measured in swine testicle cells. **Findings:** UV irradiation, vaporized H₂O₂ and dry heat reduced infectious PRCV by more than three orders of magnitude on mask and respirator coupons and rendered it undetectable in all decontamination assays. **Conclusion:** This is the first description of stable disinfection of face masks and filtering facepiece respirators contaminated with an infectious SARS-CoV-2 surrogate using UV irradiation, vaporized H₂O₂ and dry heat treatment. The three methods permit demonstration of a loss of infectivity by more than three orders of magnitude of an infectious coronavirus in line with the United States Food and Drug Administration policy regarding face masks and respirators. It presents advantages of uncomplicated manipulation and utilization in a BSL2 facility, therefore being easily adaptable to other respirator and mask types.

Publication Type

Journal article.

<33>

Accession Number

20203454413

Title

UNSCN nutrition 45: nutrition in a digital world.

Source

UNSCN News; 2020. (45):122-124.

Publisher

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

Location of Publisher

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Rome

Country of Publication

Italy

Abstract

Mobile-based blockchain solutions are expected to take hold in LMICs. Inclusive implementation of participatory approaches at the community level will be needed to reduce the potential for information inequality (for example, targeted policies that ensure women are not omitted from agricultural digitalization, particularly in rural areas). Inversely, digital technologies also have the potential to tackle the inequity in information access often faced by the poor. Amid disruptions to transport and the social distancing measures put in place in an effort to contain the COVID-19 pandemic, digital solutions have proven once again how relevant and timely they are. Like many other organizations, HarvestPlus has modified its operations in many countries, moving farmer meetings and training sessions to digital platforms. HarvestPlus country teams report the successful use of social platforms, such as WhatsApp, to reach farmers efficiently and cost-effectively, though rigorous research is needed to validate the efficacy of such practices at scale.

Publication Type

Journal article.

<34>

Accession Number

20203520073

Author

Han PengFei; Cai QiXiang; Oda, T.; Zeng Ning; Shan, Y.; Lin XiaoHui; Liu Di

Title

Assessing the recent impact of COVID-19 on carbon emissions from China using domestic economic data.

Source

Science of the Total Environment; 2021. 75045 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The outbreak of coronavirus disease 2019 (COVID-19) has caused tremendous loss to human life and economic decline in China and worldwide. It has significantly reduced gross domestic product (GDP), power generation, industrial activity and transport volume; thus, it has reduced fossil-related and cement-induced carbon dioxide (CO₂) emissions in China. Due to time delays in obtaining activity data, traditional emissions inventories generally involve a 2-3-year lag. However, a timely assessment of COVID-19's impact on provincial CO₂ emission reductions is crucial for accurately understanding the reduction and its implications for mitigation measures; furthermore, this information can provide constraints for modeling studies. Here, we used national and provincial GDP data and the China Emission Accounts and Datasets (CEADs) inventory to estimate the emission reductions in the first quarter (Q1) of 2020. We find a reduction of 257.7 Mt. CO₂ (11.0%) over Q1 2019. The secondary industry contributed 186.8 Mt. CO₂ (72.5%) to the total reduction, largely due to lower coal consumption and cement production. At the provincial level, Hubei contributed the most to the reductions (40.6 Mt) due to a notable decrease of 48.2% in the secondary industry. Moreover, transportation significantly contributed (65.1 Mt), with a change of -22.3% in freight transport and -59.1% in passenger transport compared with Q1 2019. We used a point, line and area sources (PLAS) method to test the GDP method, producing a close estimate (reduction of 10.6%). One policy implication is a change in people's working style and communication methods, realized by working from home and holding teleconferences, to reduce traffic emissions. Moreover, GDP is found to have potential merit in estimating emission changes when detailed energy activity data are unavailable. We provide provincial data that can serve as spatial disaggregation constraints for modeling studies and further support for both the carbon cycle community and policy makers.

Publication Type

Journal article.

<35>

Accession Number

20203520029

Author

Islam, M. S.; Rahman, K. M.; Sun, Y.; Qureshi, M. O.; Abdi, I.; Chughtai, A. A.; Seale, H.

Title

Current knowledge of COVID-19 and infection prevention and control strategies in healthcare settings: a global analysis.

Source

Infection Control and Hospital Epidemiology; 2020. 41(10):1196-1206. 119 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

Objective: In the current absence of a vaccine for COVID-19, public health responses aim to break the chain of infection by focusing on the mode of transmission. We reviewed the current evidence on the transmission dynamics and on pathogenic and clinical features of COVID-19 to critically identify any gaps in the current infection prevention and control (IPC) guidelines. **Methods:** In this study, we reviewed global COVID-19 IPC guidelines by organizations such as the World Health Organization (WHO), the US Centers for Disease Control and Prevention (CDC), and the European Centre for Disease Prevention and Control (ECDC). Guidelines from 2 high-income countries (Australia and United Kingdom) and from 1 middle-income country (China) were also reviewed. We searched publications in English on 'PubMed' and Google Scholar. We extracted information related to COVID-19 transmission dynamics, clinical presentations, and exposures that may facilitate transmission. We then compared these findings with the recommended IPC measures. **Results:** Nosocomial transmission of SARS-CoV-2 in healthcare settings occurs through droplets, aerosols, and the oral-fecal or fecal-droplet route. However, the IPC guidelines fail to cover all transmission modes, and the recommendations also conflict with each other. Most guidelines recommend surgical masks for healthcare providers during routine care and N95 respirators for aerosol-generating procedures. However, recommendations regarding the type of face mask varied, and the CDC recommends cloth masks when surgical masks are unavailable. **Conclusion:** IPC strategies should consider all the possible routes of transmission and should target all patient care activities involving risk of person-to-person transmission. This review may assist international health agencies in updating their guidelines.

Publication Type

Journal article.

<36>

Accession Number

20203488141

Author

Han HeeSup; Al-Ansi, A.; Chua BeeLia; Tariq, B.; Radic, A.; Park SuHyun

Title

The post-coronavirus world in the international tourism industry: application of the theory of planned behavior to safer destination choices in the case of US outbound tourism.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)49 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Switzerland

Abstract

The tourism industry has been seriously suffering from the coronavirus disease (COVID-19) crisis ever since its outbreak. Given this pandemic situation, the major aim of this study is to develop a conceptual framework that clearly explains the US international tourists' post-pandemic travel behaviors by expanding the theory of planned behavior (TPB). By utilizing a quantitative process, the TPB was successfully broadened by incorporating the travelers' perceived knowledge of COVID-19, and it has been deepened by integrating the psychological risk. Our theoretical framework sufficiently accounted for the US tourists' post-pandemic travel intentions for safer international destinations. In addition, the perceived knowledge of COVID-19 contributed to boosting the prediction power for the intentions. The associations among the subjective norm, the attitude, and the intentions are under the significant influence of the tourists' psychological risks regarding international traveling. The comparative criticality of the subjective norm is found. Overall, the findings of this study considerably enhanced our understanding of US overseas tourists' post-pandemic travel decision-making processes and behaviors.

Publication Type

Journal article.

<37>

Accession Number

20203520592

Author

Hou FengSu; Bi FengYing; Jiao Rong; Luo Dan; Song KangXing

Title

Gender differences of depression and anxiety among social media users during the COVID-19 outbreak in China:a cross-sectional study.

Source

BMC Public Health; 2020. 20(1648):(4 November 2020). 52 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Studies have shown that the outbreak of infectious diseases would result in mental health problems. Females are in greater risk for psychological problems than males. The present study

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

investigated gender differences of depression and anxiety and explored associated factors during the COVID-19 epidemic among Chinese social media users. Methods: We recruited 3088 participants through social media cross China. Participants completed sociodemographic and the COVID-19 epidemic related questions, the 2-item Patient Health Questionnaire (PHQ-2), and the 2-item Generalized Anxiety Disorder Scale (GAD-2), the Chinese version of the 10-item Connor-Davidson Resilience Scale. We applied Chi-square test and ANOVA for data description and linear regression analysis for exploring factors associated with depression and anxiety. Results: Of 3063 participants eligible for analysis, the total prevalence of depression and anxiety was 14.14 and 13.25%. Females were experiencing more severe stress and anxiety symptoms, while males showed better resilience to stress. The severity of depression symptoms would decrease with the increase of age resilience, and it would increase if being unemployed, feeling less adapted, being more stressed. The severity of anxiety symptoms would decrease with higher education and better resilience, and it would increase if being female, spending over 60 min on COVID-19 related information, less adapted, and being more stressed. Conclusion: The findings show the increased prevalence of depression and anxiety in Chinese population during the COVID-19 epidemic, and females are experiencing more severe anxiety symptoms than males. As social media is the current main resource of information related to COVID-19, interventions should be implemented to help users to limit the time they spend on social media and to get key information related to the epidemic from authoritative and authentic resource to avoid infodemic and prevent mental health problems.

Publication Type

Journal article.

<38>

Accession Number

20203520577

Author

Jairoun, A. A.; Al-Hemyari, S. S.; Shahwan, M.; El-Dahiyat, F.; Jamshed, S.

Title

Scale validation for the identification of falsified hand sanitizer: public and regulatory authorities perspectives from United Arab Emirates.

Source

BMC Public Health; 2020. 20(1595):(22 October 2020). 23 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Background: Since the time of declaration of global pandemic of COVID-19 by World Health Organization (WHO), falsified hand sanitizers surfaced regularly in markets, posing possible harm to public due to unlisted inclusion of methanol. The current research is an attempt to develop and validate a tool to document falsified hand sanitizer in the UAE community. Method: A descriptive cross-sectional community-based study was conducted among 1280 randomly selected participants. Respondents were sent a web-based electronic link to the survey via email. Content validity, factor analyses and known group validity were used to develop and validate a new scale to identify falsified hand sanitizer. Test-retest reliability, internal consistency, item internal consistency (IIC), and intraclass correlation coefficients (ICCs) were used to assess the reliability of the scale. SPSS version 24 was used to conduct data analysis. Results: A total of 1280 participants were enrolled in the study. The content validity index (CVI) was 0.83 with the final scale of 12 items. The Kaiser-Meyer-Olkin (KMO) value was 0.788, with the Bartlett test of sphericity achieving statistical significance ($p < 0.001$). Our factor analysis revealed a 3-component model. The 3-factor solution was confirmed by PCFA analysis and had associations with good fit values. The PCFA for NFI was 0.970, CFI 0.978, and TLI 0.967. All values were in excess of 0.95, with RMSEA values below 0.06 at 0.03; all of these values indicated a good model fit. The Cronbach's alpha was good overall (0.867). All factors had a Cronbach's alpha value in excess of 0.70. The instrument demonstrated that every item met the IIC correlation standard ≥ 0.40 . The scale displayed good overall ICC statistics of 0.867 (95% CI 0.856-0.877) with statistical significance ($p < 0.001$). The scale's test-retest reliability was assessed through correlation of the falsified hand sanitizer identification score of respondents at the two time points. The test-retest correlation coefficient was 0.770 (p value < 0.01). Participants with post-graduate education were more likely to identify the falsified hand sanitizer compared to those with high school education. ($p < 0.001$). Conclusions: This study developed and validated a new scale for the measurement of falsified hand sanitizer. This is expected to improve and promote collaboration between the health regulators and the public and hereby encourage customer satisfaction and participation.

Publication Type

Journal article.

<39>

Accession Number

20203505084

Author

Adeli, K.; Lippi, G.; Ferrari, M.; Horvath, A. R.; Koch, D.; Sethi, S.; Wang ChengBin

Title

Biosafety measures for preventing infection from COVID-19 in clinical laboratories: IFCC taskforce recommendations. (Special Issue: Critical role of laboratory medicine in the global response to the COVID-19 pandemic.)

Source

Clinical Chemistry and Laboratory Medicine; 2020. 58(7):1053-1062. 59 ref.

Publisher

Walter de Gruyter

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

Coronavirus disease 2019 (COVID-19) is the third coronavirus outbreak that has emerged in the past 20 years, after severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). One important aspect, highlighted by many global health organizations, is that this novel coronavirus outbreak may be especially hazardous to healthcare personnel, including laboratory professionals. Therefore, the aim of this document, prepared by the COVID-19 taskforce of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC), is to provide a set of recommendations, adapted from official documents of international and national health agencies, on biosafety measures for routine clinical chemistry laboratories that operate at biosafety levels 1 (BSL-1; work with agents posing minimal threat to laboratory workers) and 2 (BSL-2; work with agents associated with human disease which pose moderate hazard). We believe that the interim measures proposed in this document for best practice will help minimizing the risk of developing COVID-19 while working in clinical laboratories.

Publication Type

Journal article.

<40>

Accession Number

20203502487

Author

Figueroa, L. M.

Title

Telehealth in Colombia, challenges associated with COVID-19. (SARS-CoV-2 y COVID-19.)

Source

Biomedica; 2020. 40(Suppl. 2):77-79. 13 ref.

Publisher

Instituto Nacional de Salud

Location of Publisher

Bogotá;

Country of Publication

Colombia

Abstract

The COVID-19 pandemic has generated a revolution of such magnitude that no aspect of human life will be the same from now on. The provision of health services and health education are not unrelated to this new normality imposed by the disease, and its consequences have been reflected in the need to use protocols and resources based on virtuality that most of us had not valued in their real dimension. Telehealth and telemedicine will be basic tools for professionals and teachers and it is our obligation to know them, apply them, and innovate to adapt to this reality.

Publication Type

Journal article.

<41>

Accession Number

20203502485

Author

Fernandez-Nino, J. A.; Cubillos, A.; Bojorquez, I.; Rodriguez, M.

Title

Recommendations for the response against COVID-19 in migratory contexts under a closed border: the case of Colombia. (SARS-CoV-2 y COVID-19.)

Source

Biomedica; 2020. 40(Suppl. 2):68-72. 8 ref.

Publisher

Instituto Nacional de Salud

Location of Publisher

Bogotá;

Country of Publication

Colombia

Abstract

Despite the positive response of Colombia's health system to the arrival of Venezuelan migrants, the new challenges that accompany the COVID-19 pandemic have triggered a closed-borders response that runs the risk of encouraging a negative view of migrants and increasing their health risks. This manuscript discusses the recommendations that could be proposed in the case of a country with limited resources such as Colombia to respond to the needs of the Venezuelan mixed migrant flows.

Publication Type

Journal article.

<42>

Accession Number

20203505523

Author

Nebigil, C. G.; Moog, C.; Vagner, S.; Benkirane-Jessel, N.; Smith, D. R.; Desaubry, L.

Title

Flavaglines as natural products targeting eIF4A and prohibitins: from traditional Chinese medicine to antiviral activity against coronaviruses.

Source

European Journal of Medicinal Chemistry; 2020. 20367 ref.

Publisher

Elsevier Masson SAS

Location of Publisher

Issy-les-Moulineaux

Country of Publication

France

Abstract

Flavaglines are cyclopenta[b]benzofurans found in plants of the genus *Aglaia*, several species of which are used in traditional Chinese medicine. These compounds target the initiation factor of translation eIF4A and the scaffold proteins prohibitins-1 and 2 (PHB1/2) to exert various pharmacological activities, including antiviral effects against several types of viruses, including coronaviruses. This review is focused on the antiviral effects of flavaglines and their therapeutic potential against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Publication Type

Journal article.

<43>

Accession Number

20203506780

Author

Parikh Prafulla; Kumar Satyanshu; Banerjee Tuhina; Kode Jyoti; Zunjar Vishwanath; Singh Raghuraj; Nagar, P. S.; Patel Jinal

Title

Prophylactic potential of Indian medicinal plants in the management of influenza like illness especially COVID-19.

Source

Medicinal Plants - International Journal of Phytomedicines and Related Industries; 2020. 12(3):323-337.

Publisher

Society for Conservation and Resource Development of Medicinal Plants

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Influenza viruses are one of the main causes of respiratory tract diseases. There is a need to identify novel natural occurring antiviral molecules due to the startling emergence of resistance to anti-influenza drugs. Several hundred plants have been investigated as potential source of antiviral agents. Phytochemicals from these plants have exhibited antiviral properties either by inhibiting the formation of viral DNA or RNA or inhibiting the activity of viral replication. Influenza viruses and COVID-19 have a similar disease profile collectively known as influenza like illnesses. Prophylactic potential and antiinfluenza properties of phytochemicals from twenty one medicinal plants have been briefly described in the present review. These medicinal plants could be used as a part of safe treatment as well as economically viable strategy for the management of infections against influenza like illness during endemic times.

Publication Type

Journal article.

<44>

Accession Number

20203509812

Author

Golin, R.; Godfrey, C.; Firth, J.; Lee LaNa; Minior, T.; Phelps, B. R.; Raizes, E. G.; Ake, J. A.; Siberry, G. K.

Title

PEPFAR'S response to the convergence of the HIV and COVID-19 pandemics in sub-Saharan Africa.

Source

Journal of the International AIDS Society; 2020. 23(8)31 ref.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Introduction: The COVID-19 pandemic reached the African continent in less than three months from when the first cases were reported from mainland China. As COVID-19 preparedness and response plans were rapidly instituted across sub-Saharan Africa, many governments and donor organizations braced themselves for the unknown impact the COVID-19 pandemic would have in under-resourced settings with high burdens of PLHIV. The potential negative impact of COVID-19 in these countries is uncertain, but is estimated to contribute both directly and indirectly to the morbidity and mortality of PLHIV, requiring countries to leverage existing HIV care systems to propel COVID-19 responses, while safeguarding PLHIV and HIV programme gains. In anticipation of COVID-19-related disruptions, PEPFAR promptly established guidance to rapidly adapt HIV programmes to maintain essential HIV services while protecting recipients of care and staff from COVID-19. This commentary reviews PEPFAR's COVID-19 technical guidance and provides country-specific examples of programme adaptations in sub-Saharan Africa. **Discussion:** The COVID-19 pandemic may pose significant risks to the continuity of HIV services, especially in countries with high HIV prevalence and weak and over-burdened health systems. Although there is currently limited understanding of how COVID-19 affects PLHIV, it is imperative that public health systems and academic centres monitor the impact of COVID-19 on PLHIV. The general principles of the HIV programme adaptation guidance from PEPFAR prioritize protecting the gains in the HIV response while minimizing in-person home and facility visits and other direct contact when COVID-19 control measures are in effect. PEPFAR-supported clinical, laboratory, supply chain, community and data reporting systems can play an important role in mitigating the impact of COVID-19 in sub-Saharan Africa. **Conclusions:** As community transmission of COVID-19 continues and the number of country cases rise, fragile health systems may be strained. Utilizing the adaptive, data-driven programme approaches in facilities and communities established and supported by PEPFAR provides the opportunity to strengthen the COVID-19 response while protecting the immense gains spanning HIV prevention, testing and treatment reached thus far.

Publication Type

Journal article.

<45>

Accession Number

20203509802

Author

Vrazo, A. C.; Golin, R.; Fernando, N. B.; Killam, W. P.; Sharifi, S.; Phelps, B. R.; Gleason, M. M.; Wolf, H. T.; Siberry, G. K.; Srivastava, M.

Title

Adapting HIV services for pregnant and breastfeeding women, infants, children, adolescents and families in resource-constrained settings during the COVID-19 pandemic.

Source

Journal of the International AIDS Society; 2020. 23(9)37 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Introduction: The COVID-19 pandemic has impacted global health service delivery, including provision of HIV services. Countries with high HIV burden are balancing the need to minimize interactions with health facilities to reduce the risk of COVID-19 transmission, while delivering uninterrupted essential HIV prevention, testing and treatment services. Many of these adaptations in resource-constrained settings have not adequately accounted for the needs of pregnant and breastfeeding women, infants, children and adolescents. We propose whole-family, tailored programme adaptations along the HIV clinical continuum to protect the programmatic gains made in services. **Discussion:** Essential HIV case-finding services for pregnant and breastfeeding women and children should be maintained and include maternal testing, diagnostic testing for infants exposed to HIV, index testing for children whose biological parents or siblings are living with HIV, as well as for children/adolescents presenting with symptoms concerning for HIV and comorbidities. HIV self-testing for children two years of age and older should be supported with caregiver and provider education. Adaptations include bundling services in the same visit and providing testing outside of facilities to the extent possible to reduce exposure risk to COVID-19. Virtual platforms can be used to identify vulnerable children at risk of HIV infection, abuse, harm or violence, and link them to necessary clinical and psychosocial support services. HIV treatment service adaptations for families should focus on family based differentiated service delivery models, including community-based ART initiation and multi-month ART dispensing. Viral load monitoring should not be a barrier to transitioning children and adolescents experiencing treatment failure to more effective ART regimens, and viral load monitoring for pregnant and breastfeeding women and children should be prioritized and bundled with other essential services. **Conclusions:** Protecting pregnant and breastfeeding women, infants, children and adolescents from acquiring SARS-CoV-2 while sustaining essential HIV services is an immense global health challenge. Tailored, family friendly programme adaptations for case-finding, ART delivery and viral load monitoring for these populations have the potential to limit SARS-CoV-2 transmission while ensuring the continuity of life-saving HIV case identification and treatment efforts.

Publication Type

Journal article.

<46>

Accession Number

20203502955

Author

Bharti Chawla; Sumit Chawla; Harinder Singh; Romesh Jain; Ishan Arora

Title

Is coronavirus lockdown taking a toll on mental health of medical students? A study using WHOQOL-BREF questionnaire.

Source

Journal of Family Medicine and Primary Care; 2020. 9(10):5261-5266. 13 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Introduction: The Quality of life is a broad-ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs, and their relationship to salient features of their environment. The ongoing COVID-19 pandemic has resulted in many quarantine and isolation measures and lockdown of the nation for the foreseeable future. Although these initiatives are necessary to prevent the spread of coronavirus they may be causing adverse mental health effects. Medical students are backbone and future of the health system and the general public always looks up to them as a role model of society. With this background, this study aims to assess the quality of life among medical students during the lockdown period amid the COVID-19 pandemic. **Material and Methods:** A self-administered, pretested, questionnaire based on World Health Organization Quality of Life: Brief Version (WHOQOL-BREF) standard quality of life was used. For internal reliability and structural validity, Cronbach's alpha coefficient and confirmatory factor analysis (CFA) were calculated, respectively. t-test, one way ANOVA, and Pearson Chi-square test were used. **Results:** The mean scores of domains of the present study were highest for the environmental domain (72.10 +/- 13.0) followed by physical (67.23 +/- 13.74), social (57.13 +/- 20.1), and lowest for the psychological domain (52.10 +/- 17.45). The level of internal consistency was found to be 0.883, which is considered as sufficiently reliable. One-third of the medical students were spending >6 h on-screen, and merely 15.6% were doing physical activity >1 h. **Conclusion:** It was found that during this time of crisis medical students were weaker in the psychological domain of Quality of Life among all the four domains. Physical activity and screen time was an important factor to the QOL of students, and it is likely that students would benefit from increased physical activity and minimizing screen time.

Publication Type

Journal article.

<47>

Accession Number

20203446745

Author

Kalinina, T. S.; Zlenko, D. V.; Kiselev, A. V.; Litvin, A. A.; Stovbun, S. V.

Title

Antiviral activity of the high-molecular-weight plant polysaccharides (Panavir).

Source

International Journal of Biological Macromolecules; 2020. 161:936-938. 19 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This short report is dedicated to the description of the wide antiviral and antibacterial activity of the immune-modulating agent Panavir. Panavir is a high-molecular-weight fraction of the polysaccharides extracted from the shoots of the *Solanum tuberosum*. It demonstrates activity against many types of viruses, including animal coronavirus and also against bacterial infections. These properties look very promising considering the COVID-19 epidemic and allow propose that Panavir would be effective in the therapy of the SARS-CoV-2 infection.

Publication Type

Journal article.

<48>

Accession Number

20203440560

Author

Sorokowski, P.; Groyecka, A.; Kowal, M.; Sorokowska, A.; Bialek, M.; Lebuda, I.; Dobrowolska, M.; Zdybek, P.; Karwowski, M.

Title

Can information about pandemics increase negative attitudes toward foreign groups? A case of COVID-19 outbreak.

Source

Sustainability; 2020. 12(12)47 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Pathogen threat can translate into a willingness to distance oneself from others on a psychological level. Building on this notion, we predicted that the ongoing coronavirus pandemic can affect attitudes toward foreign nationalities. We explored the intergroup consequences of the current epidemiological situation in two studies involving a total of 652 participants. In correlational Study 1, we showed a positive relationship between media exposure in the United Kingdom (UK) and in Poland, and prejudice to four foreign nationalities. Study 2 showed that negative affect toward Italians (i.e., a nation struggling with the most severe COVID-19 outbreak at the time of the study) was indirectly predicted by exposure to news about coronavirus through the increase in anxiety, but this effect was not observed when a generalized measure of prejudice was considered. Overall, our studies revealed that prejudice and anxiety are sensitive to the current epidemiological situation, and our findings suggest that the outbreak of COVID-19 may translate into severe social consequences and increased psychological distancing to nations most affected by the pandemic.

Publication Type

Journal article.

<49>

Accession Number

20203518042

Author

Burhamah, W.; Alkhayyat, A.; Oroszlanyova, M.; Alkenane, A.; Almansouri, A.; Behbehani, M.; Karimi, N.; Jafar, H.; Al-Suwaidan, M.

Title

The psychological burden of the COVID-19 pandemic and associated lockdown measures: experience from 4000 participants.

Source

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: In February 2020 the first cases of COVID-19 were identified in Kuwait. Inevitably as many countries worldwide, the general public were negatively affected by the pandemic. Unemployment, uncertainty, distress, increasing deaths, lockdown measures all of which are potential burdens on mental health. **Aim:** To assess the impact of COVID19 outbreak on mental health in Kuwait, and to explore the potential influencing risk factors. **Methods:** We conducted an online questionnaire-based study in Kuwait between 25th May 2020 to 30th May 2020. Questions were based on demographics, lifestyle during outbreak, depression and anxiety assessment. Total PHQ9 and GAD7 scores were calculated for each responder. **Results:** We had 4132 responders. Most were females (69.31%), married (59.37%), between the age of 21-30 (23.84%) and non-smokers (81.46%). Only (7.96%) had a positive past psychiatric history, (32.04%) had a past history of a chronic medical disease. During the outbreak most of the responders lost their jobs (39.21%) and only (12.83%) were attending work regularly, only (6.82%) worked in the healthcare sector. 59.27% report increased social media use compared to before the lockdown. When asked about their daily time spent following COVID19-related news, most (37.8%) spend more than 2 hours and (7.74%) spend more than 4 hours. The overall prevalence of depressive symptoms was (30.13%) and the prevalence of anxiety symptoms was (25.28%). **Limitations:** In the cross-sectional nature of the study. **Conclusion:** The COVID-19 pandemic caused a burden on mental health. Psychological support and mental health awareness should be implemented and made accessible to all individuals during pandemics.

Publication Type

Journal article.

<50>

Accession Number

20203518023

Author

Zhou YongJie; Wang WenJuan; Sun YanPing; Qian Wei; Liu ZhengKui; Wang Ruoxi; Qi Ling; Yang JieZhi; Song XiuLi; Zhou Xin; Zeng LingYun; Liu TieBang; Li ZeZhi; Zhang XiangYang

Title

The prevalence and risk factors of psychological disturbances of frontline medical staff in China under the COVID-19 epidemic: workload should be concerned.

Source

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF
T: +44 (0) 20 7202 0752
E: library@rcvsknowledge.org
www.rcvsknowledge.org

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: To our best knowledge, this was the first time to investigate the prevalence and risk factors of psychological disturbances, including depression, anxiety, somatization symptoms, insomnia and suicide, among frontline medical staff, who were working with the COVID-10 infected patients directly. Methods: Patient Health Questionnaire Depression (PHQ-9), Generalized Anxiety Disorder Questionnaire scale (GAD-7), Symptom Check List-90 (SCL-90) somatization, Insomnia Severity Index (ISI), and the suicidal module of the Mini International Neuropsychiatric Interview were used for online survey. Results: A total of 606 frontline hospital staff and 1099 general population were recruited. The prevalence of depression, anxiety, somatization symptoms, insomnia, and suicide risk in frontline medical staffs were 57.6%, 45.4%, 12.0%, 32.0% and 13.0%, respectively. Except for suicide risk, the prevalence of other psychological disorders in frontline medical staff were higher than those in general population (all $p < 0.01$). Among the frontline medical staff, the daily working hours were associated with all psychological disturbance (all $p < 0.01$), women with anxiety ($p = 0.02$), body mass index (BMI) with anxiety and insomnia ($p = 0.02$, $p = 0.03$). Age was negatively associated with depression, anxiety, and insomnia (all $p < 0.01$). Finally, years of working and family income were negatively associated with suicide risk ($p = 0.03$, $p < 0.001$). Conclusion: Our study demonstrates that during the outbreak of COVID-19, the frontline medical staff are more likely to suffer from psychological disturbances than general population. It is noticeable that daily working hours are a risk factor for all measured psychological disturbances, and some other variables may be involved in certain psychological disturbances of frontline medical staff.

Publication Type

Journal article.

<51>

Accession Number

20203518016

Author

Tee, M. L.; Tee, C. A.; Anlacan, J. P.; Aligam, K. J. G.; Reyes, P. W. C.; Kuruchittham, V.; Ho, R. C.

Title

Psychological impact of COVID-19 pandemic in the Philippines.

Source

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: The 2019 coronavirus disease (COVID-19) pandemic poses a threat to societies' mental health. This study examined the prevalence of psychiatric symptoms and identified the factors contributing to psychological impact in the Philippines. Methods: A total of 1879 completed online surveys were gathered from March 28-April 12, 2020. Collected data included socio-demographics, health status, contact history, COVID-19 knowledge and concerns, precautionary measures, information needs, the Depression, Anxiety and Stress Scales (DASS-21) and the Impact of Events Scale-Revised (IES-R) ratings. Results: The IES-R mean score was 19.57 (SD=13.12) while the DASS-21 mean score was 25.94 (SD=20.59). In total, 16.3% of respondents rated the psychological impact of the outbreak as moderate-to-severe; 16.9% reported moderate-to-severe depressive symptoms; 28.8% had moderate-to-severe anxiety levels; and 13.4% had moderate-to-severe stress levels. Female gender; youth age; single status; students; specific symptoms; recent imposed quarantine; prolonged home-stay; and reports of poor health status, unnecessary worry, concerns for family members, and discrimination were significantly associated with greater psychological impact of the pandemic and higher levels of stress, anxiety and depression ($p < 0.05$). Adequate health information, having grown-up children, perception of good health status and confidence in doctors' abilities were significantly associated with lesser psychological impact of the pandemic and lower levels of stress, anxiety and depression ($p < 0.05$). Limitations: An English online survey was used. Conclusion: During the early phase of the pandemic in the Philippines, one-fourth of respondents reported moderate-to-severe anxiety and one-sixth reported moderate-to-severe depression and psychological impact. The factors identified can be used to devise effective psychological support strategies.

Publication Type

Journal article.

<52>

Accession Number

20203518001

Author

Abid Hasan Khan; Mst. Sadia Sultana; Sahadat Hossain; Hasan, M. T.; Helal Uddin Ahmed; Md. Tajuddin Sikder

Title

The impact of COVID-19 pandemic on mental health & wellbeing among home-quarantined Bangladeshi students: a cross-sectional pilot study.

Source

Journal of Affective Disorders; 2020. 277:121-128. 43 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: COVID-19 is imposing threat both on physical and mental health since its outbreak. Bangladesh adopted lockdown strategy with potential consequences on day to day life, mental and physical health and this study aims to explore the impact of COVID-19 on mental health and wellbeing among Bangladeshi students. Methods: A cross-sectional study was conducted between 9th and 23rd April 2020 among 505 college and university students. Data was collected by using online questionnaire including DASS 21 and IES. Descriptive analysis and bivariate linear regression were performed to examine the association of variables. Results: 28.5% of the respondents had stress, 33.3% anxiety, 46.92% depression from mild to extremely severe, according to DASS 21 and 69.31% had event-specific distress from mild to severe in terms of severity according to IES. Perceiving physical symptoms as COVID-19 was significantly associated with DASS stress subscale (B = 3.71, 95% CI: 1.01 to 6.40), DASS anxiety subscale (B = 3.95, 95% CI: 1.95 to 5.96), DASS depression subscale (B = 3.82, 95% CI: 0.97 to 6.67) and IES scale (B = 7.52, 95% CI: 3.58 to 11.45). Additionally, fear of infection, financial uncertainty, inadequate food supply, absence of physical exercise and limited or no recreational activity had significant association with stress, anxiety, depression and post-traumatic symptoms. Conclusion: This COVID-19 outbreak imposes psychological consequences on people to a great extent which requires attention from the concerned authorities to cope with this situation mentally. The perception about the outbreak can also play a big role in psychological impact.

Publication Type

Journal article.

<53>

Accession Number

20203519237

Author

Oguzoncul, A. F.; Kurt, O.; Deveci, S. E.

Title

Evaluation of COVID-19-related knowledge, attitudes and practices of physicians working in a medical faculty hospital: an online cross-sectional study from Turkey.

Source

Online Turk Saglik Bilimleri Dergisi; 2020. 5(3):510-518. 12 ref.

Publisher

Sakarya University

Location of Publisher

Sakarya

Country of Publication

Turkey

Abstract

Objective: In this study, it was aimed to evaluate COVID-19-related knowledge, attitudes, and practices (KAP) of the assistant physicians who were taking medical specialty training in a medical faculty hospital. **Materials and Methods:** We performed this cross-sectional study in a university hospital. The universe of the survey was composed of all assistant physicians who were taking medical specialty training in this hospital. **Results:** A total of 264 physicians who were taking medical specialty training, involving 137 (51.9%) women, were included in the study. The mean age of the physicians was found to be 29.7+/-3.5. Besides, 44.3% of the participants have attended a course or seminar in their hospitals regarding COVID-19. The most frequently taken individual measures by physicians were "frequent handwashing," "avoiding physical contact," "not entering the bulk areas," and "changing clothes first after entering the home." The knowledge score of the physicians in the internal branch and physicians attending a course/seminar regarding COVID-19 was significantly higher than those in the surgical branch ($p=0.001$) and those not attending ($p=0.028$), respectively. **Conclusion:** As a result, we observed some deficiencies in the attitudes and practices of physicians. In order to prevent the lack in terms of information, training can be planned to physicians at regular intervals.

Publication Type

Journal article.

<54>

Accession Number

20203513052

Author

Gonzalez, A. J. C.; Montenegro-Idrogo, J. J.; Vadillo, A. R. V.; Torres, M. S.; Matos, I. V.; Delgado, C. P. R.

Title

Hospital-acquired SARS-CoV-2 pneumonia in a person living with HIV.

Source

International Journal of STD & AIDS; 2020. 31(13):1320-1322. 9 ref.

Publisher

Sage Publications Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

We report the case of a 38 year-old man living with well-controlled HIV on antiretroviral therapy who developed cerebellar symptoms and was admitted to hospital for management of an intraventricular cryptococcoma. During his hospital stay he contracted SARS CoV-2 infection within the hospital setting with a fatal outcome.

Publication Type

Journal article.

<55>

Accession Number

20203511178

Author

Gilzad-Kohan, H.; Jamali, F.

Title

Anti-inflammatory properties of drugs used to control COVID-19 and their effects on the renin-angiotensin system and angiotensin-converting enzyme-2.

Source

Journal of Pharmacy & Pharmaceutical Sciences; 2020. 23(2):259-277. 183 ref.

Publisher

Canadian Society for Pharmaceutical Sciences

Location of Publisher

Alberta

Country of Publication

Canada

Abstract

COVID-19 infection is associated with systemic inflammation, and sometimes hyperinflammatory responses with cytokine storm. This plays a major role in COVID-19 severity and poor disease prognosis, even death. Higher levels of inflammatory hallmarks including C-reactive protein, ferritin, D-dimers, and cytokines such as interleukin (IL) -6, IL-10 and tumor necrosis factor- a (TNF-a) have been reported. Many anti-viral drugs have been tried, but none were proven fully effective. Supportive care and management of the complications that are caused mainly by inflammation might be the key to greater survival rates and shorter hospitalization (e.g., the use of remdesivir, lopinavir, ritonavir, umifenovir (arbidol), oseltamivir, ganciclovir, favipiravir, darunavir, hydroxychloroquine, chloroquine, colchicine, azithromycin, anakinra, canakinumab, tocilizumab, siltuximab, sarilumab, Type 1 interferon, interferon beta-1a, interferon a-2b, baricitinib, ruxolitinib, fedratinib, methylprednisolone and dexamethasone). However, the efficacy of these treatments still needs well-planned clinical trials. In such trials, careful attention must be paid to the duration of the treatment, the onset of beneficial effects, and the severity of the disease, otherwise, the outcomes may still remain inconclusive. Herein, we present a review of the current drugs, which are being used in the management of the disease and their anti-inflammatory properties. We also investigated if these drugs directly interact with Angiotensin-Converting Enzyme (ACE 2), which is a crucial component of the virus entry to the cells.

Publication Type

Journal article.

<56>

Accession Number

20203514211

Author

Bertolini, M.; Mutti, M. F.; Barletta, J. A.; Falak, A.; Cuatz, D.; Sisto, A.; Ragusa, M. A.; Claros, N. O. F.; Rolon, M. J.

Title

COVID-19 associated with AIDS-related disseminated histoplasmosis: a case report.

Source

International Journal of STD & AIDS; 2020. 31(12):1222-1224. 13 ref.

Publisher

Sage Publications Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Limited information is available concerning the coexistence of COVID-19 and opportunistic infections in people living with HIV. The possible association of COVID-19 with AIDS-related respiratory diseases should be considered, particularly in patients with advance immunosuppression. We report the case of a male patient with AIDS-related disseminated histoplasmosis associated with COVID-19.

Publication Type

Journal article.

<57>

Accession Number

20203518526

Author

Gao Ming; Yang LiHui; Chen XueFu; Deng YiYu; Yang ShiFang; Xu HanYi; Chen ZiXing; Gao XingLin

Title

A study on infectivity of asymptomatic SARS-CoV-2 carriers.

Source

Respiratory Medicine; 2020. 16915 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: An ongoing outbreak of coronavirus disease 2019 (COVID-19) has spread around the world. It is debatable whether asymptomatic COVID-19 virus carriers are contagious. We report here a case of the asymptomatic patient and present clinical characteristics of 455 contacts, which aims to study the infectivity of asymptomatic carriers. Material and methods: 455 contacts who were exposed to the asymptomatic COVID-19 virus carrier became the subjects of our research. They were divided into three groups: 35 patients, 196 family members and 224 hospital staffs. We extracted their epidemiological information, clinical records, auxiliary examination results and therapeutic schedules. Results: The median contact time for patients was four days and that for family members was five days. Cardiovascular disease accounted for 25% among original diseases of patients. Apart from hospital staffs, both patients and family members were isolated medically. During the quarantine, seven patients plus one family member appeared new respiratory symptoms, where fever was the most common one. The blood counts in most contacts were within a normal range. All CT images showed no sign of COVID-19 infection. No severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infections was detected in 455 contacts by nucleic acid

test. Conclusion: In summary, all the 455 contacts were excluded from SARS-CoV-2 infection and we conclude that the infectivity of some asymptomatic SARS-CoV-2 carriers might be weak.

Publication Type

Journal article.

<58>

Accession Number

20203518516

Author

Lin Liu; Hu KaiYuan; Cai ShuiJiang; Deng Xilong; Shao XinNing; Liang Ying; Wang JiGang; Zhong TianYu; Hu ZhongWei; Lei Ming

Title

Hypoproteinemia is an independent risk factor for the prognosis of severe COVID-19 patients.

Source

Journal of Clinical Biochemistry and Nutrition; 2020. 67(2):126-130. 15 ref.

Publisher

Society for Free Radical Research Japan

Location of Publisher

Kyoto

Country of Publication

Japan

Abstract

Severe patients of the coronavirus disease 2019 (COVID-19) may progress rapidly to critical stage. This study aimed to identify factors useful for predicting the progress. 33 severe COVID-19 patients at the intensive care unit were included in this study. During treatment, 13 patients deteriorated and required further treatment for supporting organ function. The remaining 20 patients alleviated and were transferred to the general wards. The multivariate COX regression analyses showed that hypoproteinemia was an independent risk factor associated with deterioration of severe patients (HR, 0.763; 95% CI, 0.596 to 0.978; $p = 0.033$). The restricted cubic spline indicated that when HR = 1, the corresponding value of albumin is 29.6 g/L. We used the cutoff of 29.6 g/L to divide these patients. Kaplan-Meier curves showed that the survival rate of the high-albumin group was higher than that of the low-albumin group. Therefore, hypoalbuminemia may be an independent risk factor to evaluate poor prognosis of severely patients with COVID-19, especially when albumin levels were below 29.6 g/L.

Publication Type

Journal article.

<59>

Accession Number

20203475488

Author

Zhang WeiTuo; Qian BiYun

Title

Making decisions to mitigate COVID-19 with limited knowledge.

Source

Lancet Infectious Diseases; 2020. 20(10):1121-1122. 4 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

During this urgent phase of the COVID-19 pandemic, decisions at the level of the public health response or clinical management have to be made using the scarce data available. Scientific evidence will be gradually established as a result of ongoing research. However, measures that have good rationale, but for which little data are available (e.g., travel restrictions, lockdowns, and compassionate use of drugs), should also be considered as options and should be assessed and amended in a continuous manner. With regard to hospital treatment of patients with COVID-19, the authors suggested that patients should not be given drugs of unknown efficacy. However, considering that no treatments are known to be effective at present, we believe that off-label or compassionate use of drugs should be considered ethical, especially for patients with life-threatening infections. However, when considering off-label or compassionate use of drugs, the safety profile of the drug should be clear and the clinicians should carefully balance the risk and potential benefit of use—an approach used in the first report of remdesivir use for the treatment of COVID-19.

Publication Type

Correspondence.

<60>

Accession Number

20203475486

Author

Principi, N.; Esposito, S.

Title

Chloroquine or hydroxychloroquine for prophylaxis of COVID-19.

Source

Lancet Infectious Diseases; 2020. 20(10):1118-1118. 5 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Chloroquine is a cheap drug that has been used for decades-predominantly for malaria prophylaxis, for which it had excellent results and good safety and tolerability. Severe adverse events, which mainly involve retinal and psychiatric symptoms, occur only when doses prescribed for malaria are substantially higher than required. Inhibition of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) replication seems essential to reduce the risk of spread and development of COVID-19. SARS-CoV-2 is highly contagious. Most people who live in areas with a high incidence of COVID-19 are apparently healthy, but they can be SARS-CoV-2 negative and healthy or healthy but with asymptomatic infection. In both cases, effective drugs such as chloroquine and its related formulations might prevent infection (i.e., in those who are SARS-CoV-2 negative) or the development of severe symptomatic disease (i.e., in those who are SARS-CoV-2 positive and asymptomatic or with minor symptoms), substantially reducing morbidity and mortality due to COVID-19. The dose used might be the same as that usually administered for malaria treatment given chloroquine inhibited SARS-CoV replication at a 50% effective concentration of 8.8 $\mu\text{mol/L}$. The half-maximal inhibitory concentration (IC50) of chloroquine inhibition of SARS-CoV replication in Vero E6 cells, 8.8 $\mu\text{mol/L}$, is substantially lower than the plasma concentrations that are reached in humans when the drug is prescribed to treat malaria at a dose of 25 mg/kg over 3 days. For long-term prophylaxis, even lower doses could be used. Doses of 3.6 mg/kg, similar to those generally prescribed to treat rheumatoid arthritis, lead to plasma concentrations of 1-3 $\mu\text{mol/L}$ -ie, the same concentration range as the IC50 for SARS-CoV inhibition. Alternatively, hydroxychloroquine could be used, for which even greater efficacy has been reported in in-vitro studies. Prophylaxis could last for the whole duration of an outbreak, and in countries in which malaria is not endemic, there is no risk of negative events associated with the development of resistance to this drug. In countries where malaria is endemic, appropriate monitoring of resistance among *Plasmodium* spp is needed.

Publication Type

Correspondence.

<61>

Accession Number

20203514785

Author

Manish Kumar; Kuroda, K.; Kiran Dhangar

Title

The most eagerly awaited summer of the Anthropocene: a perspective of SARS-CoV-2 decay and seasonal change.

Source

Groundwater for Sustainable Development; 2020. 11

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

To date, the world perhaps has never waited for the summer so impatiently in the entire Anthropocene, owing to the debate whether increasing temperature and humidity will decrease the environmental endurance of SARS-CoV-2. We present the perspective on the seasonal change on SARS-CoV-2 decay and COVID-19 spread. Our arguments are based on: (i) structural similarity of coronavirus with several enteric viruses, and its vulnerability; (ii) reports related to decay of those similar transmissible gastroenteritis viruses (TGEV) like norovirus and (iii) improvement in the human immunity during summer compared to winter. We present reasons why we can be optimistic about the slowdown of corona in the upcoming summer.

Publication Type

Journal article.

<62>

Accession Number

20203511662

Author

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Sekizuka, T.; Kuramoto, S.; Nariai, E.; Taira, M.; Hachisu, Y.; Tokaji, A.; Shinohara, M.; Kishimoto, T.; Itokawa, K.; Kobayashi, Y.; Kadokura, K.; Kamiya, H.; Matsui, T.; Suzuki, M.; Kuroda, M.

Title

SARS-CoV-2 genome analysis of Japanese travelers in Nile River cruise.

Source

Frontiers in Microbiology; 2020. 11(June)9 ref.

Publisher

Frontiers Media S.A.

Location of Publisher

Lausanne

Country of Publication

Switzerland

Abstract

Japan has reported 26 cases of coronavirus disease 2019 (COVID-19) linked to cruise tours on the River Nile in Egypt between March 5 and 15, 2020. Here, we characterized the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) genome of isolates from 10 travelers who returned from Egypt and from patients possibly associated with these travelers. We performed haplotype network analysis of SARS-CoV-2 isolates using genome-wide single-nucleotide variations. Our analysis identified two potential Egypt-related clusters from these imported cases, and these clusters were related to globally detected viruses in different countries.

Publication Type

Journal article.

<63>

Accession Number

20203511603

Author

Nghochuzie, N. N.; Olwal, C. O.; Udoakang, A. J.; Amenga-Etego, L. N. K.; Amambua-Ngwa, A.

Title

Pausing the fight against malaria to combat the COVID-19 pandemic in Africa: is the future of malaria bleak?

Source

Frontiers in Microbiology; 2020. 11(June)26 ref.

Publisher

Frontiers Media S.A.

Location of Publisher

Lausanne

Country of Publication

Switzerland

Abstract

Malaria remains a major global health burden, killing hundreds of thousands annually, especially in sub-Saharan Africa. In 2019, a Phase IV Expanded Programme on Immunization (EPI)-linked malaria vaccine implementation was underway. However, in December 2019, a novel pneumonia condition termed coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), with many clinical, epidemiological, and biological parallels to malaria, was reported in Wuhan, China. COVID-19 is spreading rapidly, and, as of the 3rd of June, 2020, more than 382,507 persons had died from COVID-19. Children under 5 years who suffer high malaria-attributable mortalities are largely asymptomatic for COVID-19. Considering that the malaria burden is highest in low-income tropical countries with little capacity to fund malaria control and eradication programs, the fight against malaria in these regions is likely to be hampered. Access to healthcare has generally been limited, while malaria interventions, such as seasonal malaria chemotherapy and distribution of insecticide-treated bed nets, have been suspended due to lockdowns. Likewise, the repurposing of antimalarials for treatment of COVID-19 shared symptoms and the shift in focus from the production of malaria rapid diagnostic tests (RDTs) to COVID-19 RDTs is a cause for concern in malaria-endemic regions. Children are less affected by the COVID-19 pandemic compared to the elderly. However, due to the fears of contracting SARS-CoV-2, the elderly who are worst affected by COVID-19 may not take children for malaria medication, resulting in high malaria-related mortalities among children. COVID-19 has disproportionately affected developed countries, threatening their donation capacity. These are likely to thwart malaria control efforts in low-income regions. Here, we present perspectives on the collateral impact of COVID-19 on malaria, especially in Africa.

Publication Type

Journal article.

<64>

Accession Number

20203488460

Author

Foldi, M.; Farkas, N.; Kiss, S.; Zadori, N.; Vancsa, S.; Szako, L.; Dembrovszky, F.; Solymar, M.; Bartalis, E.; Szakacs, Z.; Hartmann, P.; Par, G.; Eross, B.; Molnar, Z.; Hegyi, P.; Szentesi, A.

Title

Obesity is a risk factor for developing critical condition in COVID-19 patients: a systematic review and meta-analysis.

Source

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Obesity Reviews; 2020. 21(10)58 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The disease course of COVID-19 varies from asymptomatic infection to critical condition leading to mortality. Identification of prognostic factors is important for prevention and early treatment. We aimed to examine whether obesity is a risk factor for the critical condition in COVID-19 patients by performing a meta-analysis. The review protocol was registered onto PROSPERO (CRD42020185980). A systematic search was performed in five scientific databases between 1 January and 11 May 2020. After selection, 24 retrospective cohort studies were included in the qualitative and quantitative analyses. We calculated pooled odds ratios (OR) with 95% confidence intervals (CIs) in meta-analysis. Obesity was a significant risk factor for intensive care unit (ICU) admission in a homogenous dataset (OR=1.21, CI: 1.002-1.46; I²=0.0%) as well as for invasive mechanical ventilation (IMV) (OR=2.05, CI: 1.16-3.64; I²=34.86%) in COVID-19. Comparing body mass index (BMI) classes with each other, we found that a higher BMI always carries a higher risk. Obesity may serve as a clinical predictor for adverse outcomes; therefore, the inclusion of BMI in prognostic scores and improvement of guidelines for the intensive care of patients with elevated BMI are highly recommended.

Publication Type

Journal article.

<65>

Accession Number

20203520855

Author

Jin WeiHua; Zhang WenJing; Mitra, D.; McCandless, M. G.; Sharma, P.; Tandon, R.; Zhang FuMing; Linhardt, R. J.

Title

The structure-activity relationship of the interactions of SARS-CoV-2 spike glycoproteins with glucuronomannan and sulfated galactofucan from *Saccharina japonica*.

Source

International Journal of Biological Macromolecules; 2020. 163:1649-1658. 73 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The SARS-CoV-2 spike glycoproteins (SGPs) and human angiotensin converting enzyme 2 (ACE2) are the two key targets for the prevention and treatment of COVID-19. Host cell surface heparan sulfate (HS) is believed to interact with SARS-CoV-2 SGPs to facilitate host cell entry. In the current study, a series of polysaccharides from *Saccharina japonica* were prepared to investigate the structure-activity relationship on the binding abilities of polysaccharides (oligosaccharides) to pseudotype particles, including SARS-CoV-2 SGPs, and ACE2 using surface plasmon resonance. Sulfated galactofucan (SJ-D-S-H) and glucuronomannan (Gn) displayed strongly inhibited interaction between SARS-CoV-2 SGPs and heparin while showing negligible inhibition of the interaction between SARS-CoV-2 SGPs and ACE2. The IC50 values of SJ-D-S-H and Gn in blocking heparin SGP binding were 27 and 231 nM, respectively. NMR analysis showed that the structure of SJ-D-S-H featured with a backbone of 1, 3-linked α -L-Fucp residues sulfated at C4 and C2/C4 and 1, 3-linked α -L-Fucp residues sulfated at C4 and branched with 1, 6-linked β -D-galacto-biose; Gn had a backbone of alternating 1, 4-linked β -D-GlcAp residues and 1, 2-linked α -D-Manp residues. The sulfated galactofucan and glucuronomannan showed strong binding ability to SARS-CoV-2 SGPs, suggesting that these polysaccharides might be good candidates for preventing and/or treating SARS-CoV-2.

Publication Type

Journal article.

<66>

Accession Number

20203509162

Author

Prasad, V.; Sy, J. M.

Title

Building momentum for tobacco control in the Western Pacific region. (Special Issue: Progress of tobacco control in the Western Pacific Region.)

Source

Asian Pacific Journal of Cancer Prevention (APJCP); 2020. 21(S1):1-2. 10 ref.

Publisher

Asian Pacific Organization for Cancer Prevention

Location of Publisher

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Tehran

Country of Publication

Iran

Abstract

The tobacco epidemic is a significant global public health threat, killing more than eight million people a year around the world. Although the average rate of tobacco use in the Western Pacific Region (WPR) is declining over time in accordance with global trends, the region is experiencing the slowest decline of all six WHO regions. Around 12% of boys aged 13-15 and 4% of girls in the same age group are current tobacco users in WPR. The fact that nearly six million children use tobacco products at the young age of 13-15 is cause for concern. With the COVID-19 pandemic affecting many countries globally, now is an opportune time to reduce tobacco use. Tobacco data collection, which is the focus of this special supplement, plays a key role in understanding the magnitude, patterns, determinants and consequences of tobacco use and exposure. Good monitoring tracks the extent and character of the tobacco epidemic and indicates how best to tailor policies. The findings and lessons from this special supplement provide a welcome contribution to the progress made in global tobacco control and a testament to the efforts and dedication of countries across the Western Pacific Region to fighting the tobacco epidemic.

Publication Type

Journal article.

<67>

Accession Number

20203502210

Author

Li Han; Sun LiPing; Li Na; Xue Fei; Liu Jie; Huo Feng; Zhang YiQuan

Title

Control of infection of medical team assisting Wuhan during COVID-19 epidemic. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(17):2566-2569. 12 ref.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To explore the control of infection in living places of medical teams assisting Wuhan during COVID-19 epidemic so as to offer help and reference for members of the medical teams. **METHODS:** The plans and measures for control of infection in working and living places of the medical teams were formulated based on the etiological and epidemiological characteristics of SARS-CoV-2 as well as national guidelines for diagnosis, treatment, control and prevention. **RESULTS:** The regulations, flow charts and plans have been formulated, involving the medical teams' responsibilities in prevention and control of infection, on-duty and off-duty flow charts and daily living management of team members, active health monitoring, emergency treatment of fever patients, and cleaning and disinfection of living places.

CONCLUSION: The prevention and control of infection in the living places is one of the key links to prevent the infection in the team members and the spread of the epidemic, and the medical teams must pay great attention to and rigidly put the infection control measures into practice.

Publication Type

Journal article.

<68>

Accession Number

20203506510

Author

Philavong, C.; Pruvot, M.; Reinharz, D.; Mayxay, M.; Khammavong, K.; Milavong, P.; Rattnavong Sayapeth; Horwood, P. F.; Dussart, P.; Douangneun, B.; Theppangna, W.; Fine, A. E.; Robinson, M. T.; Newton, P. N.

Title

Perception of health risks in Lao market vendors.

Source

Zoonoses and Public Health; 2020. 67(7):796-804. 48 ref.

Publisher

Wiley

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

Wet markets are a critical part of South-East Asian culture and economy. However, their role in circulation and transmission of both endemic and emerging disease is a source of concern in a region considered a hotspot of disease emergence. In the Lao People's Democratic Republic (Lao PDR, Laos), live and dead wild animals are frequently found in wet markets, despite legislation against the bushmeat trade. This is generally considered to increase the risk of disease transmission and emergence, although whether or not wildlife vendors themselves have indeed increased incidence of zoonotic disease has rarely been assessed.

In preparation for a future longitudinal study of market vendors investigating vendors' exposure to zoonotic pathogens, we conducted a pilot survey of Lao market vendors of wildlife meat, livestock meat and vegetables, to identify demographic characteristics and potential control groups within markets. We also investigated baseline risk perception for infectious diseases among market vendors and assessed the association between risk perception and risk mitigation behaviours. The surveys conducted with 177 vendors revealed similar age, sex, ethnic background and geographical origin between vendor types, but differences in professional background and work history for livestock meat vendors. The perception of disease risk was very low across all vendors, as was the reported use of personal protective equipment, and the two appeared unrelated. Personal risk discounting and assumptions about transmission routes may explain this lack of association. This information will help inform the development of future research, risk communication and risk mitigation policy, especially in the light of the COVID-19 pandemic.

Publication Type

Journal article.

<69>

Accession Number

20203519080

Author

Tanu Singhal; Sweta Shah; Reshma Naik; Amreen Kazi; Pooja Thakkar

Title

Prevalence of COVID-19 antibodies in healthcare workers at the peak of the pandemic in Mumbai, India: a preliminary study.

Source

Indian Journal of Medical Microbiology; 2020. 38(3):461-463. 15 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Healthcare worker (HCW) infections due to COVID-19 are of serious consequence. Testing for antibodies against COVID-19 in HCWs has been previously recommended. We conducted a serosurvey in HCWs at a private hospital in Mumbai which is treating COVID patients. A total of 244 HCWs were tested. The prevalence of infection in asymptomatic HCWs was 4.3% and in previously symptomatic untested HCWs was 70%. We recommend that HCWs with a previous history of COVID symptoms who were not

tested/tested negative by reverse transcription-polymerase chain reaction should be tested for antibodies at least 2 weeks after onset of symptoms.

Publication Type

Journal article.

<70>

Accession Number

20203519046

Author

Pawar, S. D.; Kode, S. S.; Keng, S. S.; Tare, D. S.; Priya Abraham

Title

Steps, implementation and importance of quality management in diagnostic laboratories with special emphasis on coronavirus disease-2019.

Source

Indian Journal of Medical Microbiology; 2020. 38(3):243-251. 29 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

A well-established and functional quality management system is an integral part of any diagnostic laboratory. It assures the reliability and standards of the laboratory function. A pandemic situation such as that caused by the influenza H1N1 2009 virus or the recent severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) increases the demands on the public health system, and the need to build, upgrade and expand the number of diagnostic laboratories. The Coronavirus disease-19 (COVID-19) pandemic caused by the SARS-CoV-2 unleashed a public health emergency of an unprecedented scale. The need has been highlighted for the accreditation of tests relating to COVID-19 by the National Accreditation Board for Testing and Calibration Laboratories (NABL) or any agencies approved by the World Health Organization (WHO) or Indian Council of Medical Research. The implementation of quality system in diagnostic laboratories would ensure accurate, reliable and efficient test results at par with the international standards. The functional aspects of a laboratory such as a well-defined organogram, standard operating procedures, good laboratory practices, quality controls, human resources, equipment management, reagents, inventory of records, proper communication need to be addressed to assure quality. Biosafety considerations should include the guidelines laid out by the WHO, the Institutional Biosafety Committee and the Department of Biotechnology, Government of India for carrying out diagnostic work in the

laboratory. Currently, there are 1922 laboratories, operational for COVID-19 diagnosis in India. Considering the urgency of testing, the NABL has expedited the process of accreditation and issued accreditation to 818 laboratories. The adherence to the practicable aspects of quality described in this article would help in establishing quality in COVID-19 testing laboratories.

Publication Type

Journal article.

<71>

Accession Number

20203519025

Author

Mohammadzadeh, F.; Noghabi, A. D.; Khosravan, S.; Bazeli, J.; Armanmehr, V.; Paykani, T.

Title

Anxiety severity levels and coping strategies during the COVID-19 pandemic among people aged 15 years and above in gonabad, Iran.

Source

Archives of Iranian Medicine; 2020. 23(9):633-638. 38 ref.

Publisher

Academy of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

Background: The coronavirus disease 2019 (COVID-19) outbreak is a global health problem. It is necessary to provide evidence on its unprecedented psychological effects to develop effective psychological interventions. The current study aims to determine the anxiety severity level, coping strategies, and influencing factors in response to the COVID-19 pandemic among people aged 15 years and above in Gonabad, Iran. **Methods:** We conducted a cross-sectional survey via online questionnaires between February and March 2020. We evaluated the anxiety severity levels and coping strategies using the Corona Disease Anxiety Scale (CDAS) and Coping Inventory for Stressful Situations-Short Form (CISS-SF), respectively. Multinomial and ordinal logistic regression models were used to identify the predictors of coping strategies and anxiety. **Results:** Totally, 500 people completed the questionnaires (response rate: 73%). Of them, 53.4% (95% confidence interval [CI]: 48.9%- 57.8%) suffered moderate to severe levels of anxiety. More than half of the respondents (52.0%; 95% CI: 47.5%-56.4%) utilized emotional-based or avoidant coping strategies. People with no academic education (odds ratio [OR]: 2.16; 95% CI: 1.41- 3.31) and without physical exercise (OR: 2.04; 95% CI: 1.22-3.33) preferred emotional-based coping instead of

problem-based coping strategy. Female gender (OR: 1.60, 95% CI: 1.13-2.28), underlying medical conditions (OR: 2.52, 95% CI: 1.65-3.87), and emotional-based coping (OR: 4.06, 95% CI: 2.76-5.99) were associated with higher severity levels of anxiety. Conclusion: The severity of anxiety during the COVID-19 pandemic was significant among participants. Further attention is needed to enhance the mental health of the vulnerable population during the COVID-19 pandemic. Our findings also identified some factors related to the severity level of anxiety related to COVID-19 that could help formulate better psychological interventions.

Publication Type

Journal article.

<72>

Accession Number

20203517166

Author

Gonzalez Lazaro, P.; Lomas Meneses, A.; Val Zaballos, F. del; Morandeira Rivas, A.

Title

Ischemic colitis and short bowel disease due to coronavirus disease 2019 (COVID 19).

Source

Clinical Nutrition ESPEN; 2020. 40:406-407. 3 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

COVID-19 has spread worldwide, with more than 2.5 million cases and over 80,000 deaths reported by the end of April 2020. In addition to pulmonary symptoms, gastrointestinal symptoms have been increasingly recognized as part of the disease spectrum. COVID-19-associated coagulopathy has recently emerged as a major component of the disease, leading to high morbidity and mortality. Ischemic colitis has been reported to be associated with a hypercoagulable state, However few cases have been reported of COVID-19 associated with ischemic colitis. We would like to report a case of a 53 year old man with medical history of type 2 diabetes, and hypercholesterolemia, with ishchemic colitis as first manifestation of infection of COVID 19.

Publication Type

Journal article.

<73>

Accession Number

20203517137

Author

Bedock, D.; Bel Lassen, P.; Mathian, A.; Moreau, P.; Couffignal, J.; Ciangura, C.; Poitou-Bernert, C.; Jeannin, A. C.; Mosbah, H.; Fadlallah, J.; Amoura, Z.; Oppert, J. M.; Faucher, P.

Title

Prevalence and severity of malnutrition in hospitalized COVID-19 patients.

Source

Clinical Nutrition ESPEN; 2020. 40:214-219. 20 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Background & aims: Nutritional knowledge in patients with SARS-Cov2 infection (COVID-19) is limited. Our objectives were: i to assess malnutrition in hospitalized COVID-19 patients, ii to investigate the links between malnutrition and disease severity at admission, iii to study the impact of malnutrition on clinical outcomes such as transfer to an intensive care unit (ICU) or death. Methods: Consecutive patients hospitalized in a medicine ward at a university hospital were included from March 21st to April 24th 2020 (n = 114, 60.5% males, age: 59.9 +/- 15.9 years). Nutritional status was defined using Global Leadership Initiative on Malnutrition (GLIM) criteria. Clinical, radiological and biological characteristics of COVID-19 patients were compared according to the presence of malnutrition. Logistic regression was used to assess associations between nutritional parameters and unfavourable outcomes such as transfer to intensive care unit (ICU) or death. Results: The overall prevalence of malnutrition was 42.1% (moderate: 23.7%, severe: 18.4%). The prevalence of malnutrition reached 66.7% in patients admitted from ICU. No significant association was found between nutritional status and clinical signs of COVID-19. Lower albumin levels were associated with a higher risk of transfer to ICU (for 10 g/l of albumin, OR [95%CI]: 0.31 [0.1; 0.7]; p < 0.01) and this association was independent of age and CRP levels. Conclusions: COVID-19 in medical units dedicated to non-intensive care is associated with a high prevalence of malnutrition, especially for patients transferred from ICU. These data emphasize the importance of early nutritional screening in these patients to adapt management accordingly.

Publication Type

Journal article.

<74>

Accession Number

20203514059

Author

Mitaka, H.; Perlman, D. C.; Javaid, W.; Salomon, N.

Title

Putative invasive pulmonary aspergillosis in critically ill patients with COVID-19: an observational study from New York City.

Source

Mycoses; 2020. 63(12):1368-1372. 14 ref.

Publisher

Wiley

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

Background: Critically ill patients with coronavirus disease-2019 (COVID-19) are at the theoretical risk of invasive pulmonary aspergillosis (IPA) due to known risk factors. Patients/Methods: We aimed to describe the clinical features of COVID-19-associated pulmonary aspergillosis at a single centre in New York City. We performed a retrospective chart review of all patients with COVID-19 with *Aspergillus* isolated from respiratory cultures. Results: A total of seven patients with COVID-19 who had one or more positive respiratory cultures for *Aspergillus fumigatus* were identified, all of whom were mechanically ventilated in the ICU. Four patients were classified as putative IPA. The median age was 79 years, and all patients were male. The patients had been mechanically ventilated for a mean of 6.8 days (range: 1-14 days) before *Aspergillus* isolation. Serum galactomannan level was positive for only one patient. The majority of our cases received much higher doses of glucocorticoids than the dosage with a proven mortality benefit. All four patients died. Conclusions: Vigilance for secondary fungal infections will be needed to reduce adverse outcomes in critically ill patients with COVID-19.

Publication Type

Journal article.

<75>

Accession Number

20203517121

Author

Goncalves, T. J. M.; Goncalves, S. E. A. B.; Guarnieri, A.; Risegado, R. C.; Guimaraes, M. P.; Freitas, D. C. de; Razuk-Filho, A.; Benedito, P. B.; Parrillo, E. F.

Title

Prevalence of obesity and hypovitaminosis D in elderly with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Source

Clinical Nutrition ESPEN; 2020. 40:110-114. 41 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Background & aim: Verify the prevalence of hypovitaminosis D and obesity in elderly patients infected by new coronavirus. The patients developed severe symptoms and were admitted in intensive care unit (ICU) to receive invasive ventilation due to diagnosis of acute respiratory distress syndrome (ARDS). **Methods:** A cross-sectional descriptive study composed of elderly (age ≥ 60 years) admitted to the ICU. Were collected demographic (sex, age), anthropometric data, presence of comorbidities (hypertension, diabetes, heart disease, lung, neurological and oncological diseases), severity score in ICU (SAPS III), PaO₂/FiO₂ ratio, analysis of C-reactive protein (CRP) and serum dosage of 25-hydroxy vitamin D (25 OHD) in the first day of hospitalization to identify elderly with hypovitaminosis D (low values < 30 ng/mL). The diagnosis of obesity in elderly was determined by calculating the body mass index (BMI) ≥ 30 kg/m². **Results:** A total of 176 elderly met the inclusion criteria. 54% were elderly men and mean age of 72.9 \pm 9.1 years. The median BMI was 30.5 (28.1-33) kg/m² with 68.7% having a nutritional diagnosis of obesity and 15.3% had BMI ≥ 35 kg/m². The most prevalent comorbidities were hypertension (72.2%) and diabetes (40.9%). Prevalence of hypovitaminosis D with values of 25 OHD < 30 ng/mL, < 20 ng/mL and < 10 ng/mL was 93.8%, 65.9% and 21% respectively. The prevalence of hypovitaminosis D (< 30 ng/mL) in obese elderly was 94.2%. There was a negative and significant bivariate correlation between BMI and levels of 25 OHD ($r = -0.15$; $p = 0.04$). **Conclusion:** Hypovitaminosis D and obesity in elderly have a high prevalence in critically ill patients in ICU infected by the new coronavirus. Laboratory investigation of vitamin D becomes important, especially in obese elderly patients.

Publication Type

Journal article.

<76>

Accession Number

20203517117

Author

Fooladi, S.; Matin, S.; Mahmoodpoor, A.

Title

Copper as a potential adjunct therapy for critically ill COVID-19 patients.

Source

Clinical Nutrition ESPEN; 2020. 40:90-91. 12 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

COVID-19 is a major health problem affecting all people worldwide and has a high mortality rate especially in critically ill patients. Although much is known about its different clinical symptoms, there are significant knowledge gaps about its pathology and cellular responses to the virus. Copper plays an essential role in respiration, immune function and free-radical defense. Despite its important action in physiochemical properties, only small amount of copper is presented in biological fluid, none of which presents as free ion form that readily affirms its depletion in critically ill patients. Recent studies confirmed its anti-viral capacity. Closer understanding of copper signaling, its vulnerability, method of assessment and interpretation, administration route and dosage opens up new perspectives regarding therapeutic copper administration against critically ill COVID-19 patients. So, it seems that physicians should consider copper insufficiency in their critically ill COVID-19 patients. However, an attention should be paid to copper toxicity and estimating the adverse responses depending on copper dose or severity of copper limitation, as well as the duration of copper misbalance.

Publication Type

Journal article.

<77>

Accession Number

20203518388

Author

Tao QuYuan; Du JiaXin; Li XianTao; Zeng JingYan; Tan Bo; Xu JianHua; Lin WenJia; Chen XinLin

Title

Network pharmacology and molecular docking analysis on molecular targets and mechanisms of Huashi Baidu formula in the treatment of COVID-19.

Source

Drug Development and Industrial Pharmacy; 2020. 46(8):1345-1353. 55 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Purpose: Huashi Baidu formula (HSBDF) was developed to treat the patients with severe COVID-19 in China. The purpose of this study was to explore its active compounds and demonstrate its mechanisms against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) through network pharmacology and molecular docking. Methods: All the components of HSBDF were retrieved from the pharmacology database of TCM system. The genes corresponding to the targets were retrieved using UniProt and GeneCards database. The herb-compound-target network was constructed by Cytoscape. The target protein-protein interaction network was built using STRING database. The core targets of HSBDF were analyzed by Gene Ontology (GO) and Kyoto Encyclopedia of Genes and Genomes (KEGG). The main active compounds of HSBDF were docked with SARS-CoV-2 and angiotensin converting enzyme II (ACE2). Results: Compound-target network mainly contained 178 compounds and 272 corresponding targets. Key targets contained MAPK3, MAPK8, TP53, CASP3, IL6, TNF, MAPK1, CCL2, PTGS2, etc. There were 522 GO items in GO enrichment analysis ($p < .05$) and 168 signaling pathways ($p < .05$) in KEGG, mainly including TNF signaling pathway, PI3K-Akt signaling pathway, NOD-like receptor signaling pathway, MAPK signaling pathway, and HIF-1 signaling pathway. The results of molecular docking showed that baicalein and quercetin were the top two compounds of HSBDF, which had high affinity with ACE2. Conclusion: Baicalein and quercetin in HSBDF may regulate multiple signaling pathways through ACE2, which might play a therapeutic role on COVID-19.

Publication Type

Journal article.

<78>

Accession Number

20203512179

Author

Mordecai, G. J.; Hewson, I.

Title

Coronaviruses in the sea.

Source

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

Publisher

Frontiers Media S.A.

Location of Publisher

Lausanne

Country of Publication

Switzerland

Abstract

Interest in coronaviruses because of the 2019 novel coronavirus (SARS-CoV-2) pandemic has generated concern about their occurrence and persistence in aquatic habitats. Coronaviruses are not quantitatively significant constituents of marine viroplankton. Members of the Nidovirales (to which human coronaviruses belong) infect marine mammals, teleosts and possibly invertebrates, and human coronaviruses may persist in marine plankton receiving wastewater effluent. However, virions likely experience significant particle and infectivity decay rates in surface seawater, similar to other enveloped RNA viruses.

Publication Type

Journal article.

<79>

Accession Number

20203518312

Author

Lamouroux, A.; Attie-Bitach, T.; Martinovic, J.; Leruez-Ville, M.; Ville, Y.

Title

Evidence for and against vertical transmission for severe acute respiratory syndrome coronavirus 2.

Source

American Journal of Obstetrics and Gynecology; 2020. 223(1):91.e1-91.e4.

Publisher

Mosby Inc.

Location of Publisher

St. Louis

Country of Publication

USA

Abstract

COVID-19 can severely affect pregnant women Furthermore, issues regarding vertical transmission of severe acute respiratory syndrome coronavirus 2 are emerging. In patients and neonates who are showing symptoms of coronavirus disease 2019, real-time polymerase chain reaction of nasal and throat swabs, sputum, and feces is performed to detect the presence of severe acute respiratory syndrome coronavirus 2. In addition, real-time polymerase chain reaction of vaginal swabs, amniotic fluid, placenta, cord blood, neonatal blood, or breast milk for the detection of severe acute respiratory syndrome coronavirus 2 did not show substantial results. Viremia was present in 1% of adult patients who were showing symptoms of coronavirus disease 2019. Here, we reviewed 12 articles published between Feb. 10, 2020, and April 4, 2020, that reported on 68 deliveries and 71 neonates with maternal infection in the third trimester of pregnancy. To determine whether infection occurred congenitally or perinatally, perinatal exposure, mode of delivery, and time interval from delivery to the diagnosis of neonatal infection were considered. Neonates with severe acute respiratory syndrome coronavirus 2 infection are usually asymptomatic. In 4 cases, a diagnostic test for severe acute respiratory syndrome coronavirus 2 infection was performed within 48 hours of life. Furthermore, detection rates of real-time polymerase chain reaction and the interpretation of immunoglobulin M and immunoglobulin G antibodies levels in cord and neonatal blood were discussed in relation with the immaturity of the fetal and neonatal immune system.

Publication Type

Journal article.

<80>

Accession Number

20203518301

Author

Qiu Lin; Morse, A.; Di Wen; Song Lei; Kong BeiHua; Wang ZeHua; Lang JingHe; Chai WenZhao; Zhu Lan

Title

Management of gynecology patients during the coronavirus disease 2019 pandemic: Chinese expert consensus.

Source

American Journal of Obstetrics and Gynecology; 2020. 223(1):3-8. 11 ref.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Publisher

Mosby Inc.

Location of Publisher

St. Louis

Country of Publication

USA

Abstract

Since December 2019, the outbreak of novel coronavirus disease 2019 became a major epidemic threat in China and later spread worldwide. During the coronavirus disease 2019 outbreak in mainland China, the Chinese Obstetricians and Gynecologists Association distributed guidelines regarding the care of gynecologic patients. These guidelines were developed by the Department of Obstetrics and Gynecology at the Peking Union Medical College Hospital and represent an effort to integrate infection control strategy and promote professionalism in medical practice. The guidelines represent collaboration with experts from 31 provinces and autonomous regions of mainland China over 2 weeks' time. With the implementation of these guidelines, no nosocomial infections of coronavirus disease 2019 have been identified at the Peking Union Medical College Hospital. We think these guidelines might be helpful to departments of obstetrics and gynecology internationally during these unprecedented times. In our guidelines, we describe basic infection precaution principles, an epidemiologic screening tool, prioritization of surgical procedures, and operating room requirements. Using these principles, we then review the management of gynecologic patients during the coronavirus disease 2019 epidemic in the outpatient and operative and nonoperative inpatient settings and in clinical trials.

Publication Type

Journal article.

<81>

Accession Number

20203512144

Author

Clementi, N.; Criscuolo, E.; Diotti, R. A.; Ferrarese, R.; Castelli, M.; Dagna, L.; Burioni, R.; Clementi, M.; Mancini, N.

Title

Combined prophylactic and therapeutic use maximizes hydroxychloroquine anti-SARS-CoV-2 effects in vitro.

Source

Frontiers in Microbiology; 2020. 11(July)16 ref.

Publisher

Frontiers Media S.A.

Location of Publisher

Lausanne

Country of Publication

Switzerland

Abstract

While the SARS-CoV-2 pandemic is heavily hitting the world, it is of extreme importance that significant in vitro observations guide the quick set up of clinical trials. In this study, we evidence that the anti-SARS-CoV2 activity of a clinically achievable hydroxychloroquine concentration is maximized only when administered before and after the infection of Vero E6 and Caco-2 cells. This suggests that only a combined prophylactic and therapeutic use of hydroxychloroquine may be effective in limiting viral replication in patients.

Publication Type

Journal article.

<82>

Accession Number

20203519594

Author

Durak, V. A.; Gunay, S.; Sigirli, D.; Akova, B.; Armagan, E.

Title

COVID-19 pandemic and anxiety related factors in patients treated in the emergency department.

Source

Signa Vitae; 2020. 16(2):167-174. 30 ref.

Publisher

Pharmamed Mado Ltd

Location of Publisher

Zagreb

Country of Publication

Croatia

Abstract

Aims: A novel coronavirus, now known as SARS-CoV-2019, suddenly emerged in Wuhan, China and within threemonths of the initial outbreak, the virus had spread rapidly to neighboring countries causing a

pandemic. After the first case was announced, emergency departments were immediately reorganized as pandemic clinics. Special areas with maximum precautions were designed to evaluate patients. The majority of studies on this pandemic have focused on the treatment of respiratory symptoms and comorbidities in intensive care units. In this study, we sought to determine those factors that contributed to the anxiety level during the COVID-19 pandemic using the 'State' subscale of State-Trait Anxiety Inventory (STAI-S). Methods: A survey was performed in the emergency department by using an online questionnaire which consisted of demographic variables, questions about the opinions and behaviors of patients during the pandemic, diagnostic test results for COVID-19, and treatment methods. Results: There was a statistically significant difference between employment status ($p < 0.001$), monthly income ($p < 0.001$), the food consumption changes during the pandemic period ($p = 0.001$) and the estimated end-date for the COVID-19 pandemic ($p < 0.001$) and total STAI-S points. Conclusions: Our study has identified factors which significantly increase anxiety during the COVID-19 pandemic and identified those individuals who may benefit from psychiatric and social support.

Publication Type

Journal article.

<83>

Accession Number

20203516490

Author

Sadia Shakeel; Hina Rehman; Mohammad Azmi Hassali; Faraz Hashmi

Title

Knowledge, attitude and precautionary practices towards COVID-19 among healthcare professionals in Karachi, Pakistan.

Source

Journal of Infection in Developing Countries; 2020. 14(10):1117-1124. 40 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

Introduction: With the increase in the incidence rate of COVID-19, healthcare professionals (HCPs) being at the frontline of the outbreak response are at higher risk of getting exposure and suffering from the infection. The present study aimed to evaluate the knowledge, attitude, and precautionary practices of HCPs towards COVID-19. **Methodology:** The current study was a descriptive, cross-sectional, online study

directed to the HCPs working in a metropolitan city of Karachi, during February 2020 and March 2020 using a self-administered questionnaire. A systematic random sampling approach was adopted. Results: A total of 286 completed surveys were incorporated in the investigation with a response rate of 74.28%. The median (interquartile range, IQR) knowledge score was 18.79 (17.64-19.57). Physicians were found to be more knowledgeable (OR: 1.32, 95% CI: 0.17-4.26, $p = 0.003$) as compared to other HCPs. Similarly, the HCPs working in private work settings (OR: 1.94, 95% CI: 1.54-2.79, $p=0.001$), having more experience (OR = 1.82; 95% CI = 1.64-2.78; $p < 0.005$) were found to be more well-informed than HCPs working in public sector (OR = 0.81; 95% CI = 0.63-0.72; $p = 0.004$). The correlation between the knowledge and attitude of respondents was found to be significantly correlated (correlation coefficient: 0.13, $p < 0.005$). Conclusions: The findings of the study revealed that HCPs were well conversant and have an optimistic attitude towards COVID-19. Further contemplates are required to evaluate the understanding of HCPs at a national level so that viable mediations could be planned to combat this pandemic.

Publication Type

Journal article.

<84>

Accession Number

20203516487

Author

Sufia Islam; Fouzia Mannan; Tahiya Islam; Sabera Rahman; Liza, S. S.; Chisti, M. J.; Islam, R.

Title

COVID-19 pandemic: how is Bangladesh coping with the rapid spread of coronavirus infection?

Source

Journal of Infection in Developing Countries; 2020. 14(10):1098-1105. 43 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

The novel coronavirus has become a global risk because of its massive transmission and high rates of mutation. Efficient clinical management remains a challenge in combatting the severe acute respiratory syndrome caused by this virulent strain. This contagious disease is new to the people of Bangladesh. The country is at high risk of spreading the coronavirus infection particularly because of its high population density. Significant morbidity and mortality have been observed for the quick transmission of this virus since March 8, 2020. The basic objective of this article is to analyze the preparedness of Bangladesh, given

its constraints and limitations, to cope with the rapid spread of COVID-19 infection. In doing so, it summarizes the origin of coronavirus, epidemiology, mode of transmission, diagnosis, treatment, prevention and control of the disease. Although many steps have been taken by the Government and the private sector of Bangladesh to create awareness about measures needed to prevent the deadly infections, many people are unaware of and reluctant to accept the prescribed rules. Inadequacy of diagnostic facilities and limitations of clinical care and health care services were major constraints faced in treating COVID-19 infected people in Bangladesh. Greater compliance by the people in following the suggested measures may help reduce the rapid spread of the disease and overcome the challenges faced by this pandemic.

Publication Type

Journal article.

<85>

Accession Number

20203516486

Author

Talal Qadah

Title

Knowledge and attitude among healthcare workers towards COVID-19: a cross sectional study from Jeddah City, Saudi Arabia.

Source

Journal of Infection in Developing Countries; 2020. 14(10):1090-1097. 37 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

Introduction: The emergence of the new Coronavirus disease 2019 (COVID-19) has caused a major impact on global health system. This cross-sectional study was designed to appraise the knowledge and attitude of healthcare workers towards COVID-19 and find out their understanding about clinical aspects of the infection. **Methodology:** A total number of 1023 of healthcare workers responded to an online questionnaire and provided their data between February and March, 2020 in Jeddah city, Western province, Saudi Arabia. The questionnaire was distributed to physicians, nurses, pharmacists, technical staff and administrative staff working in clinical settings. **Results:** Results revealed that mean scores for knowledge and attitude were 20.793 +/- 2.436 and 4.744 +/- 0.297 respectively. More than 88% of

participants displayed positive knowledge and attitude towards COVID-19. Knowledge data showed that social media and the workplace, were the main sources of information for the majority of respondents. Approximately 99.12% of respondents were aware of the viral pandemic, and the causative agent. Statistically significant association was found when compared the demographic characteristics with the mean knowledge while no statistical significance was observed when compared demographic characteristics with the mean attitude score except with marital status. Conclusion: This study showed that healthcare workers had sufficient knowledge and positive attitude towards COVID-19. However, hospital staff should be periodically given sufficient training to effectively cope with such outbreaks in the future.

Publication Type

Journal article.

<86>

Accession Number

20203516485

Author

Donadu, M. G.; Pizzi, A. R.; Zeppilli, P.

Title

COVID-19, indications for professional football teams and referees training resumption.

Source

Journal of Infection in Developing Countries; 2020. 14(10):1084-1089. 6 ref.

Publisher

Open Learning on Enteric Pathogens (OLOEP)

Location of Publisher

Sassari

Country of Publication

Italy

Abstract

These indications were drawn up by the Federal Medical-Scientific Commission (FIGC Commission), supplemented for the necessary time by some experts on the subject; currently they are intended to grant the highest achievable guarantee level to protect the health of players, referees and all professionals involved in case of resumption of collective training (Document dated 18 April 2020). They were designed to minimize the risk of contagion were thus based on the fact that during that phase of SARS-COV-2 virus pandemic (COVID-19) and in the absence of an effective vaccine, the zero-contagion risk did not exist and does not exist to date. Those guidelines have been updated on the basis of ongoing medical-scientific evidence, taking into account the indications given by the Technical-Scientific Committee and the opinion of the Italian Football Federation representatives, during a meeting that took place on May 7 and was

transmitted to FIGC on May 11, 2020; these indications are to be considered stringent and binding for the purposes of sport training resumption.

Publication Type

Journal article.

<87>

Accession Number

20203516467

Author

Chen Min; An Wei; Xia Fei; Yang Ping; Li KuangYu; Zhou Qin; Fang ShaSha; Liao YaLing; Xu Xin; Liu JiaLin; Liu ShiGuo; Qin Tao; Zhang JianJun; Wei Wei; Zhang YaFang; Zhang GuoWei; Zhang MingWei

Title

Clinical characteristics of rehospitalized patients with COVID-19 in China. (Special Issue: New coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VI.)

Source

Journal of Medical Virology; 2020. 92(10):2146-2151. 14 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

This study aims to observe the clinical characteristics of recovered patients from Coronavirus Disease 2019 (COVID-19) with positive in reverse transcription-polymerase chain reaction (RT-PCR) or serum antibody. The profile, clinical symptoms, laboratory outcomes, and radiologic assessments were extracted on 11 patients, who tested positive for COVID-19 with RT-PCR or serum antibody after discharged and was admitted to Hubei No. 3 People's Hospital of Jiangnan University for a second treatment in March 2020. The average interval time between the first discharge and the second admission measured 16.00 +/- 7.14 days, ranging from 6 to 27 days. In the second hospitalization, one patient was positive for RT-PCR and serum antibody immunoglobulin M (IgM)-immunoglobulin G (IgG), five patients were positive for both IgM and IgG but negative for RT-PCR. Three patients were positive for both RT-PCR and IgG but negative for IgM. The main symptoms were cough (54.55%), fever (27.27%), and feeble (27.27%) in the second hospitalization. Compared with the first hospitalization, there were significant decreases in gastrointestinal symptoms (5 vs 0, P = .035), elevated levels of both white blood cell count (P = .036) and lymphocyte count (P = .002), remarkably decreases in C-reactive protein and serum amyloid A (P < .05) in the second hospitalization. Additionally, six patients' chest computed tomography (CT) exhibited notable

improvements in acute exudative lesions. There could be positive results for RT-PCR analysis or serum IgM-IgG in discharged patients, even with mild clinical symptoms, however, their laboratory outcomes and chest CT images would not indicate the on-going development in those patients.

Publication Type

Journal article.

<88>

Accession Number

20203516452

Author

Qiu ChengFeng; Deng ZiWei; Xiao Qian; Shu YuanLu; Deng Ye; Wang HongQiang; Liao Xin; Liu HuiWen; Zhou DingHui; Zhao Xiang; Zhou JianLiang; Wang Jin; Shi ZhiHua; Long Da

Title

Transmission and clinical characteristics of coronavirus disease 2019 in 104 outside-Wuhan patients, China. (Special Issue: New coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VI.)

Source

Journal of Medical Virology; 2020. 92(10):2027-2035. 16 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Cases of coronavirus disease 2019 (COVID-19) emigrating from Wuhan escalated the risk of spreading the disease in other cities. This report focused on outside-Wuhan patients to assess the transmission and clinical characteristics of this illness. Contact investigation was conducted on each patient who was admitted to the assigned hospitals in Hunan Province (geographically adjacent to Wuhan) from 22 January to 23 February 2020. Cases were confirmed by the polymerase chain reaction test. Demographic, clinical, and outcomes were collected and analyzed. Of the 104 patients, 48 (46.15%) were cases who immigrated from Wuhan; 93 (89.42%) had a definite contact history with infection. Family clusters were the major body of patients. Transmission along the chain of three "generations" was observed. Five asymptomatic infected cases were found and two of them infected their relatives. Mean age was 43 (range, 8-84) years, and 49 (47.12%) were male. The median incubation period was 6 (range, 1-32) days, which of 8 patients ranged from 18 to 32 days, 96 (92.31%) were discharged, and 1 (0.96%) died. The average hospital stay was 10 (range, 8-14) days. Family but not community transmission became the main body of infections in the two

centers, suggesting the timely control measures after the Wuhan shutdown worked well. Asymptomatic transmission demonstrated here warned us that it may lead to the widespread of COVID-19. A 14-day quarantine may need to be prolonged.

Publication Type

Journal article.

<89>

Accession Number

20203516450

Author

Liu ShihFeng; Kuo NaiYing; Kuo HoChang

Title

Three Taiwan's domestic family cluster infections of coronavirus disease 2019. (Special Issue: New coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VI.)

Source

Journal of Medical Virology; 2020. 92(10):2011-2018. 35 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Since the first case of coronavirus disease 2019 (COVID-19) was identified in Taiwan 2020.01.21. Several family cluster infections were found later. This study aimed to report family cluster infections and observe subsequent development. We collected domestic family cluster infections among COVID-19 confirmed cases from 21 January 2020 to 16 March 2020. There were three domestic family clusters infections in this period. The first cluster was cases 19 to 23. The infectious source was a Taiwanese passenger from Zhejiang. The second cluster was cases 24 to 26 and the third cluster was cases 27 to 32. The infectious sources of the latter clusters are currently uncertain. All contacts of three clusters have been isolated and no new confirmed cases have been identified to date. Some measures which have reduced the spread of these three clusters included: First, high suspicion of COVID-19 for unexplained pneumonia is very important for early detection. Second, immediate epidemic investigation is taken especially COVID-19 is infectious during the incubation period. Third, when the second and third clusters could not find infectious sources, CECC's press conference let the public know immediately the epidemic situation, so that people could raise their awareness and seek medical treatment or quarantine.

Publication Type

Journal article.

<90>

Accession Number

20203516446

Author

Li BaoZhu; Cao NvWei; Zhou HaoYue; Chu Xiujie; Ye DongQing

Title

Strong policies control the spread of COVID-19 in China. (Special Issue: New coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VI.)

Source

Journal of Medical Virology; 2020. 92(10):1980-1987. 22 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The coronavirus disease 2019 (COVID-19) outbreak in Wuhan, Hubei Province, China, affecting more than 200 countries and regions. This study aimed to predict the development of the epidemic with specific interventional policies applied in China and evaluate their effectiveness. COVID-19 data of Hubei Province and the next five most affected provinces were collected from daily case reports of COVID-19 on the Health Committee official website of these provinces. The number of current cases, defined as the number of confirmed cases minus the number of cured cases and those who have died, were examined in this study. A modified susceptible-exposed-infectious-removed (SEIR) model was used to assess the effects of interventional policies on the epidemic. In this study, 28 January was day 0 of the model. The results of the modified SEIR model showed that the number of current cases in Hubei and Zhejiang provinces tended to be stabilized after 70 days and after 60 days in the four other provinces. The predicted number of current cases without policy intervention was shown to far exceed that with policy intervention. The estimated number of COVID-19 cases in Hubei Province with policy intervention was predicted to peak at 51 222, whereas that without policy intervention was predicted to reach 157 721. Based on the results of the model, strong interventional policies were found to be vital components of epidemic control. Applying such policies is likely to shorten the duration of the epidemic and reduce the number of new cases.

Publication Type

Journal article.

<91>

Accession Number

20203516444

Author

Ma QingXia; Shan Hu; Zhang ChuanMei; Zhang HongLiang; Li GuiMei; Yang RuiMei; Chen JiMing

Title

Decontamination of face masks with steam for mask reuse in fighting the pandemic COVID-19: experimental supports. (Special Issue: New coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VI.)

Source

Journal of Medical Virology; 2020. 92(10):1971-1974. 11 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The coronavirus disease 2019 pandemic caused by the novel coronavirus SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) has claimed many lives worldwide. Wearing medical masks (MMs) or N95 masks ([N95 Ms] namely N95 respirators) can slow the virus spread and reduce the infection risk. Reuse of these masks can minimize waste, protect the environment, and help solve the current imminent shortage of masks. Disinfection of used masks is needed for their reuse with safety, but improper decontamination can damage the blocking structure of masks. In this study, we demonstrated using the avian coronavirus of infectious bronchitis virus to mimic SARS-CoV-2 that MMs and N95 Ms retained their blocking efficacy even after being steamed on boiling water for 2 hours. We also demonstrated that three brands of MMs blocked over 99% viruses in aerosols. The avian coronavirus was completely inactivated after being steamed for 5 minutes. Altogether, this study suggested that MMs are adequate for use on most social occasions and both MMs and N95 Ms can be reused for a few days with steam decontamination between use.

Publication Type

Journal article.

<92>

Accession Number

20203516443

Author

Wu WenZhi; Zhang Yan; Wang Pu; Zhang Li; Wang GuiXiang; Lei GuangHui; Xiao Qiang; Cao XiaoChen; Bian YueRan; Xie SiMiao; Huang Fei; Luo Na; Zhang JingYuan; Luo MingYan

Title

Psychological stress of medical staffs during outbreak of COVID-19 and adjustment strategy. (Special Issue: New coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VI.)

Source

Journal of Medical Virology; 2020. 92(10):1962-1970. 36 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

COVID-19 has a significant impact on public health and poses a challenge to medical staffs, especially to front-line medical staffs who are exposed to and in direct contact with patients. To understand the psychological stress status of medical staffs during the outbreak of COVID-19, random sample questionnaire survey was conducted among 2110 medical staffs and 2158 college students in all provinces of China through a questionnaire, which was compiled and completed through the Questionnaire Star platform relying on Wechat, QQ, and other social software. The differences in psychological stress status of different groups were compared through the analysis of the questionnaire. Results revealed that in all provinces of China, medical staffs scored significantly higher on all items of psychological stress than college students ($P < .001$). In Wuhan, medical staffs scored significantly higher than college students in all items of psychological stress ($P < .001$). While among medical staffs, the group in Wuhan area scored significantly higher than the group outside Wuhan on the following items: "Thought of being in danger," "The possibility of self-illness," "Worrying about family infection" ($P < .05$), "Poor sleep quality," "Needing psychological guidance," and "Worrying about being infected" ($P < .01$) in the Psychological Stress Questionnaire, but on the item "Confidence in the victory of the epidemic," the group in Wuhan area scored significantly lower than the group outside Wuhan ($P < .05$). The emotion, cognition, physical, and mental response of front-line medical staff showed obvious "exposure effect", which calls for a psychological crisis intervention strategy that can be helpful.

Publication Type

Journal article.

<93>

Accession Number

20203516440

Author

Li YouJiang; Hu YingYing; Yu YuanYuan; Zhang XiaoDong; Li Bin; Wu JianGuo; Li JunYu; Wu YingPing; Xia XiaoPing; Tang HuiNa; Xu Jian

Title

Positive result of SARS-CoV-2 in faeces and sputum from discharged patients with COVID-19 in Yiwu, China. (Special Issue: New coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VI.)

Source

Journal of Medical Virology; 2020. 92(10):1938-1947. 23 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Background: With the effective prevention and control of COVID-19 in China, the number of cured cases has increased significantly. Further monitoring of the disease prognosis and effective control of the "relapse" of the epidemic has become the next focus of work. This study analysed the clinical prognosis of discharged COVID-19 patients by monitoring their SAR-CoV-2 nucleic acid status, which provided a theoretical basis for medical institutions to formulate discharge standards and follow-up management for COVID-19 patients. Methods: We included 13 discharged COVID-19 patients who were quarantined for 4 weeks at home. The patient's daily clinical signs were recorded and sputum and faecal specimens were regularly sent for detection of SARS-CoV-2 nucleic acid. Results: The time between initial symptoms and meeting discharge criteria was 18 to 44 days with an average of 25 +/- 6 days. The faecal samples of two patients still tested positive after meeting the discharge criteria and the sputum samples of four patients returned positive 5 to 14 days after discharge. The rate of the recurring positive test result in samples from the respiratory system was 31% (4/13). Conclusion: Under the present discharge criteria, the high presence of SARS-CoV-2 nucleic acid in faecal and respiratory samples of discharged COVID-19 patients indicates potential infectivity. Therefore, we suggest that faecal virus nucleic acid should be tested as a routine monitoring index for COVID-19 and a negative result be added to the criteria. Simultaneously, we should strengthen the regular follow-up of discharged patients with continuous monitoring of the recurrence of viral nucleic acid.

Publication Type

Journal article.

<94>

Accession Number

20203510294

Author

Li HongYue; Zhao ChaoYue; Zhang YuHang; Yuan Fei; Zhang Qi; Shi XuanLing; Zhang LinQi; Qin ChengFeng; Zheng AiHua

Title

Establishment of replication-competent vesicular stomatitis virus-based recombinant viruses suitable for SARS-CoV-2 entry and neutralization assays.

Source

Emerging Microbes and Infections; 2020. 9(2269-2277):2269-2277. 30 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Replication-competent vesicular stomatitis virus (VSV)-based recombinant viruses are useful tools for studying emerging and highly pathogenic enveloped viruses in level 2 biosafety facilities. Here, we used a replication-competent recombinant VSVs (rVSVs) encoding the spike (S) protein of SARS-CoV-2 in place of the original G glycoprotein (rVSV-eGFP-SARS-CoV-2) to develop a high-throughput entry assay for SARS-CoV-2. The S protein was incorporated into the recovered rVSV-eGFP-SARS-CoV-2 particles, which could be neutralized by sera from convalescent COVID-19 patients. The recombinant SARS-CoV-2 also displayed entry characteristics similar to the wild type virus, such as cell tropism and pH-dependence. The neutralizing titers of antibodies and sera measured by rVSV-eGFP-SARS-CoV-2 were highly correlated with those measured by wild-type viruses or pseudoviruses. Therefore, this is a safe and convenient screening tool for SARS-CoV-2, and it may promote the development of COVID-19 vaccines and therapeutics.

Publication Type

Journal article.

<95>

Accession Number

20203516438

Author

Shi XiuDong; Lu Yang; Li Rong; Tang YanLin; Shi NanNan; Song FengXiang; Shan Fei; Chen GuoChao; Song PengRui; Shi YuXin

Title

Evaluation of antiviral therapies for coronavirus disease 2019 pneumonia in Shanghai, China. (Special Issue: New coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VI.)

Source

Journal of Medical Virology; 2020. 92(10):1922-1931. 30 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The aim of our study was to evaluate the therapeutic effect of antiviral drugs on coronavirus disease 2019 (COVID-19) pneumonia. Patients confirmed with COVID-19 pneumonia were enrolled and divided into seven groups according to the treatment option. Information including age, sex, and duration from illness onset to admission, clinical manifestations, and laboratory data at admission, and length of hospital stay were evaluated. The chest computed tomography (CT) imaging obtained at admission and after a 5-day treatment cycle were assessed. The clinical symptoms and laboratory tests at discharge were also assessed. At admission, no significant differences were found among the groups, including the duration from illness onset to admission, clinical symptoms, and main laboratory results. No significant differences were found among the groups in terms of the proportion of patients with pneumonia resolution ($P = .151$) after treatment or the length of hospital stay ($P = .116$). At discharge, 7 of 184 (4%) patients had a mild cough while their other symptoms had disappeared, and the proportion of patients with abnormal liver function and with increased leukocytes, neutrophils or erythrocyte sedimentation rate among the 184 patients were close to those at admission. According to the results, the inclusion of antiviral drugs in therapeutic regimens based on symptomatic treatment had no significant additional impact on the improvement in COVID-19 patients. In addition, the results of chest CT imaging, clinical manifestations, and laboratory tests at discharge were not completely consistent.

Publication Type

Journal article.

<96>

Accession Number

20203510278

Author

Schloer, S.; Brunotte, L.; Goretzko, J.; Mecate-Zambrano, A.; Korthals, N.; Gerke, V.; Ludwig, S.; Rescher, U.

Title

Targeting the endolysosomal host-SARS-CoV-2 interface by clinically licensed functional inhibitors of acid sphingomyelinase (FIASMA) including the antidepressant fluoxetine.

Source

Emerging Microbes and Infections; 2020. 9(2245-2255):2245-2255. 43 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The Coronavirus Disease 2019 (COVID-19) pandemic caused by the Severe Acute Respiratory Syndrome Related Coronavirus 2 (SARS-CoV-2) is a global health emergency. As only very limited therapeutic options are clinically available, there is an urgent need for the rapid development of safe, effective, and globally available pharmaceuticals that inhibit SARS-CoV-2 entry and ameliorate COVID-19 severity. In this study, we explored the use of small compounds acting on the homeostasis of the endolysosomal host-pathogen interface, to fight SARS-CoV-2 infection. We find that fluoxetine, a widely used antidepressant and a functional inhibitor of acid sphingomyelinase (FIASMA), efficiently inhibited the entry and propagation of SARS-CoV-2 in the cell culture model without cytotoxic effects and also exerted potent antiviral activity against two currently circulating influenza A virus subtypes, an effect which was also observed upon treatment with the FIASMA amiodarone and imipramine. Mechanistically, fluoxetine induced both impaired endolysosomal acidification and the accumulation of cholesterol within the endosomes. As the FIASMA group consists of a large number of small compounds that are well-tolerated and widely used for a broad range of clinical applications, exploring these licensed pharmaceuticals may offer a variety of promising antivirals for host-directed therapy to counteract enveloped viruses, including SARS-CoV-2.

Publication Type

Journal article.

<97>

Accession Number

20203510277

Author

Meyer, B.; Reimerink, J.; Torriani, G.; Brouwer, F.; Godeke, G. J.; Yerly, S.; Hoogerwerf, M.; Vuilleumier, N.; Kaiser, L.; Eckerle, I.; Reusken, C.

Title

Validation and clinical evaluation of a SARS-CoV-2 surrogate virus neutralisation test (sVNT).

Source

Emerging Microbes and Infections; 2020. 9(2394-2403):2394-2403. 27 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

To understand SARS-CoV-2 immunity after natural infection or vaccination, functional assays such as virus neutralising assays are needed. So far, assays to detect SARS-CoV-2 neutralising antibodies rely on cell-culture based infection assays either using wild type SARS-CoV-2 or pseudotyped viruses. Such assays are labour-intensive, require appropriate biosafety facilities and are difficult to standardize. Recently, a new surrogate virus neutralisation test (sVNT) was described that uses the principle of an ELISA to measure the neutralisation capacity of anti-SARS-CoV-2 antibodies directed against the receptor binding domain. Here, we performed an independent evaluation of the robustness, specificity and sensitivity on an extensive panel of sera from 269 PCR-confirmed COVID-19 cases and 259 unmatched samples collected before 2020 and compared it to cell-based neutralisation assays. We found a high specificity of 99.2 (95%CI: 96.9-99.9) and overall sensitivity of 80.3 (95%CI: 74.9-84.8) for the sVNT. Clinical sensitivity increased between early (< 14 days post symptom onset or post diagnosis, dpos/dpd) and late sera (>14 dpos/dpd) from 75.0 (64.7-83.2) to 83.1 (76.5-88.1). Also, higher severity was associated with an increase in clinical sensitivity. Upon comparison with cell-based neutralisation assays we determined an analytical sensitivity of 74.3 (56.4-86.9) and 98.2 (89.4-99.9) for titres ≥ 10 to < 40 and ≥ 40 to < 160 , respectively. Only samples with a titre ≥ 160 were always positive in the sVNT. In conclusion, the sVNT can be used as an additional assay to determine the immune status of COVID-19 infected or vaccinated individuals but its value needs to be assessed for each specific context.

Publication Type

Journal article.

<98>

Accession Number

20203510215

Author

Ruiz-Real, J. L.; Nievas-Soriano, B. J.; Uribe-Toril, J.

Title

Has COVID-19 gone viral? An overview of research by subject area.

Source

Health Education & Behavior; 2020. 47(6):861-869. 24 ref.

Publisher

Sage Publications

Location of Publisher

Thousand Oaks

Country of Publication

USA

Abstract

When a pandemic outbreak occurs, it seems logical that related scientific production should increase substantially; however, it is important to recognize its interdisciplinary usefulness to find a solution to the problem. The main aim of this research is to analyse the main keywords of the scientific research about COVID-19, by subject area. To discover the influence of certain terms and their transferability, synergies, and future trends, a cluster analysis of the keywords was performed. The results show that Health Sciences dominate the publications with 88.23% of the total volume. As expected, the largest volume of research was dedicated to medical aspects of the disease, like experimental treatments, its physiopathology, or its respiratory syndrome. However, other fields, like Social Sciences (6.07%), Technology (2.68%), Physical Sciences (1.95%), and Arts and Humanities (1.08%), also played an important role in research on COVID-19.

Publication Type

Journal article.

<99>

Accession Number

20203514529

Author

Temmam, S.; Barbarino, A.; Maso, D.; Behillil, S.; Enouf, V.; Huon, C.; Jaraud, A.; Chevallier, L.; Backovic, M.; Perot, P.; Verwaerde, P.; Tiret, L.; Werf, S. van der; Eloit, M.

Title

Absence of SARS-CoV-2 infection in cats and dogs in close contact with a cluster of COVID-19 patients in a veterinary campus.

Source

One Health; 2020. 1024 ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which originated in Wuhan, China, in 2019, is responsible for the COVID-19 pandemic. It is now accepted that the wild fauna, probably bats, constitute the initial reservoir of the virus, but little is known about the role pets can play in the spread of the disease in human communities, knowing the ability of SARS-CoV-2 to infect some domestic animals. In this cross-sectional study, we tested the antibody response in a cluster of 21 domestic pets (9 cats and 12 dogs) living in close contact with their owners (belonging to a veterinary community of 20 students) in which two students tested positive for COVID-19 and several others (n = 11/18) consecutively showed clinical signs (fever, cough, anosmia, etc.) compatible with COVID-19 infection. Although a few pets presented many clinical signs indicative for a coronavirus infection, no antibodies against SARS-CoV-2 were detectable in their blood one month after the index case was reported, using an immunoprecipitation assay. These original data can serve a better evaluation of the host range of SARS-CoV-2 in natural environment exposure conditions.

Publication Type

Journal article.

<100>

Accession Number

20203514526

Author

Her Minyoung

Title

Repurposing and reshaping of hospitals during the COVID-19 outbreak in South Korea.

Source

One Health; 2020. 1010 ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

During the extensive outbreak of coronavirus disease 2019 (COVID-19) in South Korea, many strategies in the hospital setting, such as stratified patient care, the assignment of hospitals/beds by a task force team, and the establishment of dedicated COVID-19 hospitals, dedicated COVID-19 emergency centers, COVID-19 community facilities, and respiratory care split hospitals, were adopted to mitigate community transmission and prevent nosocomial infection. Most of these strategies were used during the Middle East Respiratory syndrome outbreak and were applied again successfully during the COVID-19 outbreak. The reallocation of health care capacity, repurposing of hospitals, and close collaboration between the government and the health care committee might have been the key to successfully addressing the crisis of COVID-19 given the shortage of health care resources.

Publication Type

Journal article.

<101>

Accession Number

20203514521

Author

Humboldt-Dachroeden, S.; Rubin, O.; Sylvester Frid-Nielsen, S.

Title

The state of One Health research across disciplines and sectors - a bibliometric analysis.

Source

One Health; 2020. 1035 ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

There is a growing interest in One Health, reflected by the rising number of publications relating to One Health literature, but also through zoonotic disease outbreaks becoming more frequent, such as Ebola, Zika virus and COVID-19. This paper uses bibliometric analysis to explore the state of One Health in academic literature, to visualise the characteristics and trends within the field through a network analysis of citation patterns and bibliographic links. The analysis focuses on publication trends, co-citation network of scientific journals, co-citation network of authors, and co-occurrence of keywords. The bibliometric analysis showed an increasing interest for One Health in academic research. However, it revealed some thematic and disciplinary shortcomings, in particular with respect to the inclusion of environmental themes and social science insights pertaining to the implementation of One Health policies. The analysis indicated that there is a need for more applicable approaches to strengthen intersectoral collaboration and knowledge sharing. Silos between the disciplines of human medicine, veterinary medicine and environment still persist. Engaging researchers with different expertise and disciplinary backgrounds will facilitate a more comprehensive perspective where the human-animal-environment interface is not researched as separate entities but as a coherent whole. Further, journals dedicated to One Health or interdisciplinary research provide scholars the possibility to publish multifaceted research. These journals are uniquely positioned to bridge between fields, strengthen interdisciplinary research and create room for social science approaches alongside of medical and natural sciences.

Publication Type

Journal article.

<102>

Accession Number

20203514517

Author

Wang KeWei; Gao Jie; Song XiaoXiao; Huang Jiang; Wang Hua; Wu XiaoLong; Yuan QinFang; Li XiaoShan; Cheng Feng; Cheng Yang

Title

Fangcang shelter hospitals are a One Health approach for responding to the COVID-19 outbreak in Wuhan, China.

Source

One Health; 2020. 1030 ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Abstract

In February 2020, the exponential growth of COVID-19 cases in Wuhan city posed a huge economic burden to local medical systems. Consequently, Wuhan established Fangcang Shelter hospitals as a One Health approach for responding to and containing the COVID-19 outbreak by isolating and caring for mild-to-moderate cases. However, it is unclear to what degree the hospitals contained COVID-19. This study performed an interrupted time series analysis to compare the number of new confirmed cases of COVID-19 before and after the operation of Fangcang Shelter hospitals. The initial number of confirmed cases in Wuhan increased significantly by 68.54 cases per day prior to February 4, 2020. Compared with the number of cases noted 20 days before the use of Fangcang Shelter hospitals, a sustained reduction in the number of confirmed cases (trend change, -125.57; $P < 0.0001$) was noted 41 days after the use of the hospitals. Immediate-level changes were observed for confirmed cases (level change, 725.97; $P = 0.025$). These changes led to an estimated 5148 fewer confirmed cases ($P < 0.0001$). According to the mean confirmed cases of 395.71 per day before the intervention, we estimated that Wuhan had advanced the terminal phase of COVID-19 by 13 days. Furthermore, immediately after introduction of Fangcang Shelter Hospitals on February 5, the reproduction number dropped rapidly, from a pre-introduction rate of 4.0 to 2.0. The Fangcang Shelter hospitals most likely reversed the epidemic trend of COVID-19 while a containment strategy was implemented in Wuhan. In a One Health perspective, Fangcang Shelter hospitals, with their functions of isolation and treatment of confirmed COVID-19 patients, engaging professionals from many disciplines, such as medicine, engineering, architecture, psychology, environmental health, and social sciences. The results of this study provide a valuable reference for health policy makers in other countries.

Publication Type

Journal article.

<103>

Accession Number

20203514510

Author

Lorusso, A.; Calistri, P.; Mercante, M. T.; Monaco, F.; Portanti, O.; Marcacci, M.; Camma, C.; Rinaldi, A.; Mangone, I.; Pasquale, A. di; Iommarini, M.; Mattucci, M.; Fazii, P.; Tarquini, P.; Mariani, R.; Grimaldi, A.; Morelli, D.; Migliorati, G.; Savini, G.; Borrello, S.; D'Alterio, N.

Title

A "One-Health" approach for diagnosis and molecular characterization of SARS-CoV-2 in Italy.

Source

One Health; 2020. 1023 ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

The current pandemic is caused by a novel coronavirus (CoV) called SARS-CoV-2 (species Severe acute respiratory syndrome-related coronavirus, subgenus Sarbecovirus, genus Betacoronavirus, family Coronaviridae). In Italy, up to the 2nd of April 2020, overall 139,422 confirmed cases and 17,669 deaths have been notified, while 26,491 people have recovered. Besides the overloading of hospitals, another issue to face was the capacity to perform thousands of tests per day. In this perspective, to support the National Health Care System and to minimize the impact of this rapidly spreading virus, the Italian Ministry of Health involved the Istituti Zooprofilattici Sperimentali (IZSs), Veterinary Public Health Institutes, in the diagnosis of SARS-CoV-2 by testing human samples. The Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise is currently testing more than 600 samples per day and performing whole genome sequencing from positive samples. Sequence analysis of these samples suggested that different viral variants may be circulating in Italy, and so in Abruzzo region. CoVs, and related diseases, are well known to veterinarians since decades. The experience that veterinarians operating within the Public Health system gained in the control and characterization of previous health issues of livestock and poultry including avian flu, bluetongue, foot and mouth disease, responsible for huge economic losses, is certainly of great help to minimize the impact of this global crisis.

Publication Type

Journal article.

<104>

Accession Number

20203518863

Author

Cuadrado, A.; Pajares, M.; Benito, C.; Jimenez-Villegas, J.; Escoll, M.; Fernandez-Gines, R.; Garcia Yague, A. J.; Lastra, D.; Manda, G.; Rojo, A. I.; Dinkova-Kostova, A. T.

Title

Can activation of NRF2 be a strategy against COVID-19?

Source

Trends in Pharmacological Sciences; 2020. 41(9):598-610. 118 ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Acute respiratory distress syndrome (ARDS) caused by SARS-CoV-2 is largely the result of a dysregulated host response, followed by damage to alveolar cells and lung fibrosis. Exacerbated proinflammatory cytokines release (cytokine storm) and loss of T lymphocytes (leukopenia) characterize the most aggressive presentation. We propose that a multifaceted anti-inflammatory strategy based on pharmacological activation of nuclear factor erythroid 2 p45-related factor 2 (NRF2) can be deployed against the virus. The strategy provides robust cytoprotection by restoring redox and protein homeostasis, promoting resolution of inflammation, and facilitating repair. NRF2 activators such as sulforaphane and bardoxolone methyl are already in clinical trials. The safety and efficacy information of these modulators in humans, together with their well-documented cytoprotective and anti-inflammatory effects in preclinical models, highlight the potential of this armamentarium for deployment to the battlefield against COVID-19.

Publication Type

Journal article.

<105>

Accession Number

20203518843

Author

Schuch, F. B.; Bulzing, R. A.; Meyer, J.; Vancampfort, D.; Firth, J.; Stubbs, B.; Grabovac, I.; Willeit, P.; Tavares, V. D. O.; Calegari, V. C.; Deenik, J.; Lopez-Sanchez, G. F.; Veronese, N.; Caperchione, C. M.; Sadarangani, K. P.; Abufaraj, M.; Tully, M. A.; Smith, L.

Title

Associations of moderate to vigorous physical activity and sedentary behavior with depressive and anxiety symptoms in self-isolating people during the COVID-19 pandemic: a cross-sectional survey in Brazil.

Source

Psychiatry Research; 2020. 29228 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This is a cross-sectional study evaluating the associations of self-reported moderate to vigorous physical activity, and sedentary behavior with depressive, anxiety, and co-occurring depressive and anxiety

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

symptoms (D&A) in self-isolating Brazilians during the COVID-19 pandemic. Depressive and anxiety symptoms were collected using the Beck Depression and Anxiety Inventories (BDI and BAI). Among the 937 participants (females=72.3%), those performing ≥ 30 min/day of moderate to vigorous or ≥ 15 min/day of vigorous physical activity had lower odds of prevalent depressive, anxiety, and co-occurring D&A symptoms. Those spending ≥ 10 h/day sedentary were more likely to have depressive symptoms.

Publication Type

Journal article.

<106>

Accession Number

20203518819

Author

Li ZhenYu; Ge Jingwu; Yang MeiLing; Feng JianPing; Qiao Mei; Jiang RiYue; Bi JiangJiang; Zhan GaoFeng; Xu XiaoLin; Wang Long; Zhou Qin; Zhou ChenLiang; Pan YinBing; Liu ShiJiang; Zhang HaiWei; Yang JianJun; Zhu Bin; Hu YiMin; Hashimoto KenJi; Jia Yan; Wang HaoFei; Wang Rong; Liu CunMing; Yang Chun

Title

Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control.

Source

Brain, Behavior and Immunity; 2020. 88:916-919.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Since December 2019, more than 79,000 people have been diagnosed with infection of the Corona Virus Disease 2019 (COVID-19). A large number of medical staff was sent to Wuhan city and Hubei province to aid COVID-19 control. Psychological stress, especially vicarious traumatization caused by the COVID-19 pandemic, should not be ignored. To address this concern, the study employed a total of 214 general public and 526 nurses (i.e., 234 front-line nurses and 292 non-front-line nurses) to evaluate vicarious traumatization scores via a mobile app-based questionnaire. Front-line nurses are engaged in the process of providing care for patients with COVID-19. The results showed that the vicarious traumatization scores for front-line nurses including scores for physiological and psychological responses, were significantly lower than those of non-front-line nurses ($P < 0.001$). Interestingly, the vicarious traumatization scores of the general public were significantly higher than those of the front-line nurses ($P < 0.001$); however, no

statistical difference was observed compared to the scores of non-front-line nurses ($P > 0.05$). Therefore, increased attention should be paid to the psychological problems of the medical staff, especially non-front-line nurses, and general public under the situation of the spread and control of COVID-19. Early strategies that aim to prevent and treat vicarious traumatization in medical staff and general public are extremely necessary.

Publication Type

Journal article.

<107>

Accession Number

20203511927

Author

Hingle, M. D.; Shanks, C. B.; Parks, C.; Prickitt, J.; Rhee, K. E.; Wright, J.; Hiller-Venegas, S.; Yaroch, A. L.

Title

Examining equitable online federal food assistance during the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2): a case study in 2 regions.

Source

Current Developments in Nutrition; 2020. 4(10)12 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

The USDA Supplemental Nutrition Assistance Program (SNAP) provides food and financial assistance to food-insecure individuals and families. In the midst of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic, SNAP benefits evolved. Policy changes and federal legislation expanded SNAP eligibility, raised benefit levels, and introduced program waivers that enabled online ordering to reduce participants' exposure to community-acquired SARS-CoV-2. Although rapid expansion of SNAP benefits in the online space represents significant progress for federal food assistance, changes also introduced unforeseen partiality in how benefits and services were accessed and utilized, as illustrated by 2 populations and regions in the early months of the SARS-CoV-2 pandemic: low-income older adults in rural Alabama and low-income Hispanic adults in urban California. Opportunities exist to build on the recent progress in SNAP, while also ensuring continued inclusiveness of eligible persons. Efforts should be informed by evidence that supports equitable access to federal food assistance.

Publication Type

Journal article.

<108>

Accession Number

20203511908

Author

Biancatelli, R. M. L. C.; Berrill, M.; Catravas, J. D.; Marik, P. E.

Title

Quercetin and vitamin C: an experimental, synergistic therapy for the prevention and treatment of SARS-CoV-2 related disease (COVID-19).

Source

Frontiers in Immunology; 2020. 11(June)135 ref.

Publisher

Frontiers Media S.A.

Location of Publisher

Lausanne

Country of Publication

Switzerland

Abstract

Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) represents an emergent global threat which is straining worldwide healthcare capacity. As of May 27th, the disease caused by SARS-CoV-2 (COVID-19) has resulted in more than 340,000 deaths worldwide, with 100,000 deaths in the US alone. It is imperative to study and develop pharmacological treatments suitable for the prevention and treatment of COVID-19. Ascorbic acid is a crucial vitamin necessary for the correct functioning of the immune system. It plays a role in stress response and has shown promising results when administered to the critically ill. Quercetin is a well-known flavonoid whose antiviral properties have been investigated in numerous studies. There is evidence that vitamin C and quercetin co-administration exerts a synergistic antiviral action due to overlapping antiviral and immunomodulatory properties and the capacity of ascorbate to recycle quercetin, increasing its efficacy. Safe, cheap interventions which have a sound biological rationale should be prioritized for experimental use in the current context of a global health pandemic. We present the current evidence for the use of vitamin C and quercetin both for prophylaxis in high-risk populations and for the treatment of COVID-19 patients as an adjunct to promising pharmacological agents such as Remdesivir or convalescent plasma.

Publication Type

Journal article.

<109>

Accession Number

20203520175

Author

Silva, P. G. da; Mesquita, J. R.; Sao Jose Nascimento, M. de; Ferreira, V. A. M.

Title

Viral, host and environmental factors that favor anthroozoonotic spillover of coronaviruses: an opinionated review, focusing on SARS-CoV, MERS-CoV and SARS-CoV-2.

Source

Science of the Total Environment; 2021. 750many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Environmental factors play a key role in the zoonotic transmission of emerging pathogenic viruses as mankind is constantly disturbing wildlife's ecosystems usually by cutting down forests to build human settlements or by catching wild animals for food, which deprives the viruses of their natural hosts and gives them opportunity to infect humans. In December 2019, a new coronavirus emerged from bats and was named SARS-CoV-2 by the International Committee for Taxonomy of Viruses, and the disease it causes named COVID-19 by the World Health Organization. Disease outbreaks such as SARS in 2002-2003, MERS in 2012 and the current COVID-19 pandemic are the result of higher mutation rates of coronaviruses and their unique capacity for genetic recombination, resulting in adaptations that make them more suitable to cross the species barriers and infect other species. This ability for host switching and interspecies infection is often attributed to the great diversity of these viruses, which is a result of viral and host factors such as the low fidelity of their RNA-dependent RNA polymerase, the high frequency of their homologous RNA recombination, and the adaptation of the S protein to bind host receptors like the angiotensin converting enzyme 2 (ACE2) in the case of SARS-CoV and SARS-CoV-2, and dipeptidyl peptidase 4 (DDP4) in MERS-CoV. This review presents an overview of the zoonotic transmission of SARS, MERS and COVID-19, focusing on the viral, host and environmental factors that favor the spillover of these viruses into humans, as well as the biological and ecological factors that make bats the perfect animal reservoir of infection for these viruses.

Publication Type

Journal article.

<110>

Accession Number

20203520138

Author

Wu QingRu; Tang Yi; Wang Long; Wang ShuXiao; Han DeMing; Ouyang DaiWei; Jiang YueQi; Xu Peng; Xue ZhiGang; Hu JingNan

Title

Impact of emission reductions and meteorology changes on atmospheric mercury concentrations during the COVID-19 lockdown.

Source

Science of the Total Environment; 2021. 75039 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Controlling anthropogenic mercury emissions is an ongoing effort and the effect of atmospheric mercury mitigation is expected to be impacted by accelerating climate change. The lockdown measures to restrict the spread of Coronavirus Disease 2019 (COVID-19) and the following unfavorable meteorology in Beijing provided a natural experiment to examine how air mercury responds to strict control measures when the climate becomes humid and warm. Based on a high-time resolution emission inventory and generalized additive model, we found that air mercury concentration responded almost linearly to the changes in mercury emissions when excluding the impact of other factors. Existing pollution control and additional lockdown measures reduced mercury emissions by 16.7 and 12.5 kg/d during lockdown, respectively, which correspondingly reduced the concentrations of atmospheric mercury by 0.10 and 0.07 ng/m³. Emission reductions from cement clinker production contributed to the largest decrease in atmospheric mercury, implying potential mitigation effects in this sector since it is currently the number one emitter in China. However, changes in meteorology raised atmospheric mercury by 0.41 ng/m³. The increases in relative humidity (9.5%) and temperature (1.2degreesC) significantly offset the effect of emission reduction by 0.17 and 0.09 ng/m³, respectively, which highlights the challenge of air mercury control in humid and warm weather and the significance of understanding mercury behavior in the atmosphere and at atmospheric interfaces, especially the impact from relative humidity.

Publication Type

Journal article.

<111>

Accession Number

20203522592

Author

Choi Shinwoo; Hong JooYoung; Kim YongJe; Park Hyejoon

Title

Predicting psychological distress amid the COVID-19 pandemic by machine learning: discrimination and coping mechanisms of Korean immigrants in the U.S.

Source

International Journal of Environmental Research and Public Health; 2020. 17(17)68 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The current study examined the predictive ability of discrimination-related variables, coping mechanisms, and sociodemographic factors on the psychological distress level of Korean immigrants in the U.S. amid the COVID-19 pandemic. Korean immigrants (both foreign-born and U.S.-born) in the U.S. above the age of 18 were invited to participate in an online survey through purposive sampling. In order to verify the variables predicting the level of psychological distress on the final sample from 42 states (n=790), the Artificial Neural Network (ANN) analysis, which is able to examine complex non-linear interactions among variables, was conducted. The most critical predicting variables in the neural network were a person's resilience, experiences of everyday discrimination, and perception that racial discrimination toward Asians has increased in the U.S. since the beginning of the COVID-19 pandemic.

Publication Type

Journal article.

<112>

Accession Number

20203522527

Author

Fan ZhiYu; Zhan QingMing; Yang Chen; Liu HuiMin; Zhan Meng

Title

How did distribution patterns of particulate matter air pollution (PM_{2.5} and PM₁₀) change in China during the COVID-19 outbreak: a spatiotemporal investigation at Chinese city-level.

Source

International Journal of Environmental Research and Public Health; 2020. 17(17)63 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Due to the suspension of traffic mobility and industrial activities during the COVID-19, particulate matter (PM) pollution has decreased in China. However, rarely have research studies discussed the spatiotemporal pattern of this change and related influencing factors at city-scale across the nation. In this research, the clustering patterns of the decline rates of PM_{2.5} and PM₁₀ during the period from 20 January to 8 April in 2020, compared with the same period of 2019, were investigated using spatial autocorrelation analysis. Four meteorological factors and two socioeconomic factors, i.e., the decline of intra-city mobility intensity (dIMI) representing the effect of traffic mobility and the decline rates of the secondary industrial output values (drSIOV), were adopted in the regression analysis. Then, multi-scale geographically weighted regression (MGWR), a model allowing the particular processing scale for each independent variable, was applied for investigating the relationship between PM pollution reductions and influencing factors. For comparison, ordinary least square (OLS) regression and the classic geographically weighted regression (GWR) were also performed. The research found that there were 16% and 20% reduction of PM_{2.5} and PM₁₀ concentration across China and significant PM pollution mitigation in central, east, and south regions of China. As for the regression analysis results, MGWR outperformed the other two models, with R² of 0.711 and 0.732 for PM_{2.5} and PM₁₀, respectively. The results of MGWR revealed that the two socioeconomic factors had more significant impacts than meteorological factors. It showed that the reduction of traffic mobility caused more relative declines of PM_{2.5} in east China (e.g., cities in Jiangsu), while it caused more relative declines of PM₁₀ in central China (e.g., cities in Henan). The reduction of industrial operation had a strong relationship with the PM₁₀ drop in northeast China. The results are crucial for understanding how the decline pattern of PM pollution varied spatially during the COVID-19 outbreak, and it also provides a good reference for air pollution control in the future.

Publication Type

Journal article.

<113>

Accession Number

20203520605

Author

Paykani, T.; Zimet, G. D.; Esmaeili, R.; Khajedaluae, A. R.; Khajedaluae, M.

Title

Perceived social support and compliance with stay-at-home orders during the COVID-19 outbreak: evidence from Iran.

Source

BMC Public Health; 2020. 20(1650):(4 November 2020). 41 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Strong evidence demonstrates that social support plays a key role in facilitating preventive health behaviors. The aim of the current study was to assess the effects of perceived social support on compliance with stay-at-home orders in response to a COVID-19 outbreak during the Persian New Year (Nowruz) holydays, since Nowruz holidays of 2020 coincided with the peak of the coronavirus epidemic in Iran. Methods: This cross-sectional survey was carried out based on phone interviews of 1073 adults aged over 18 years from 4 to 12 April 2020 in Mashhad, Khorasan-Razavi Province, as the second largest city of Iran. A systematic random sampling was carried out using fixed phone number lists provided by Telecommunication Company of Khorasan-Razavi Province. Phone interviews were carried out by trained interviewers from the Iranian Students Polling Agency (ISPA) at various times of the day. The survey included sociodemographic questions, perceived social support scale (MSPSS) and questions about self-isolation during the Nowruz holiday. Statistical analysis included Chi-square test, Mann-Whitney test and multivariate logistic regression. Results: 20.5% of participants reported poor compliance with stay at home orders during the first 2 weeks of Nowruz. Clear social gradients were not found in stay-at-home compliance. When controlling socio-demographic factors, perceived social support, interestingly, both fostered and hindered people's compliance with stay at home orders, depending on the source of support from family members (OR = .874, 95% CI = .803, .950, $p < .005$), friends (OR = 1.147, 95% CI = 1.076, 1.222, $p < .001$) and a significant other person (OR = .926, 95% CI = .849, 1.010, $p = .084$). Conclusions: Public health messaging may need to emphasize the role that friends and families can play in helping to protect those in their friendship/family groups by promoting compliance with social distancing. Further in-depth studies are recommended to evaluate how this kind of messaging can most effectively encourage people to engage in social distancing practices.

Publication Type

Journal article.

<114>

Accession Number

20203505197

Author

Chen Jian; Wang YongKui; Gao Yuan; Hu LingSan; Yang JiangWei; Wang JianRu; Sun WenJie; Liang ZhiQiang; Cao YeMin; Cao YongBing

Title

Protection against COVID-19 injury by qingfei paidu decoction via anti-viral, anti-inflammatory activity and metabolic programming.

Source

Biomedicine & Pharmacotherapy; 2020. 12945 ref.

Publisher

Elsevier Masson SAS

Location of Publisher

Issy-les-Moulineaux

Country of Publication

France

Abstract

Qingfei Paidu decoction (QFPD), a multi-component herbal formula, has been widely used to treat COVID-19 in China. However, its active compounds and mechanisms of action are still unknown. Firstly, we divided QFPD into five functional units (FUs) according to the compatibility theory of traditional Chinese medicine. The corresponding common targets of the five FUs were all significantly enriched in Go Ontology (oxidoreductase activity, lipid metabolic process, homeostatic process, etc.), KEGG pathways (steroid biosynthesis, PPAR signaling pathway, adipocytokine signaling pathway, etc.), TTD diseases (chronic inflammatory diseases, asthma, chronic obstructive pulmonary Disease, etc.), miRNA (MIR183), kinase (CDK7) and TF (LXR). QFPD contained 257 specific targets in addition to HCoV, pneumonia and ACE2 co-expression proteins. Then, network topology analysis of the five components-target-pathway-disease networks yielded 67 active ingredients. In addition, ADMET estimations showed that 20 compounds passed the stringent lead-like criteria and in silico drug-likeness test with high gastrointestinal absorption and the median lethal dose (LD50 > 1600 mg/kg). Moreover, 4 specific ingredients (M3, S1, X2 and O2) and 5 common ingredients (MS1, MX16, SX1, WO1 and XO1) of QFPD presented good molecular docking score for 2019-nCov structure and non-structure proteins. Finally, drug perturbation of COVID-19 network robustness showed that all five FUs may protect COVID-19 independently, and target 8 specifically expressed drug-attacked nodes which were related to the bacterial and viral responses, immune system, signaling transduction, etc. In conclusion, our new FUNP analysis showed that QFPD had a protection effect on COVID-19 by regulating a complex molecular network with safety and efficacy. Part of the mechanism was associated with the regulation of anti-viral, anti-inflammatory activity and metabolic programming.

Publication Type

<115>

Accession Number

20203509451

Author

Tan ChuenWen; Ho LiamPock; Kalimuddin, S.; Cherng PeiZhi [Cherng, P. Z. B.]; Teh YiiEan; Thien SiewYee; Wong HeiMan; Tern JieWen [Tern, J. W. P.]; Chandran, M.; Chay WaiMun [Chay, W. M. J.]; Nagarajan, C.; Sultana, R.; Low GuekHong [Low, G. H. J.]; Ng HengJoo

Title

Cohort study to evaluate the effect of vitamin D, magnesium, and vitamin B12 in combination on progression to severe outcomes in older patients with coronavirus (COVID-19).

Source

Nutrition; 2020. 79/8010 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Objectives: The aim of this study was to determine clinical outcomes of older patients with coronavirus (COVID-19) who received a combination of vitamin D, magnesium, and vitamin B12 (DMB) compared with those who did not. We hypothesized that fewer patients administered this combination would require oxygen therapy, intensive care support, or a combination of both than those who did not. **Methods:** This was a cohort observational study of all consecutive hospitalized patients ≥ 50 y of age with COVID-19 in a tertiary academic hospital. Before April 6, 2020, no patients received the (DMB) combination. After this date, patients were administered 1000 IU/d oral vitamin D3, 150 mg/d oral magnesium, and 500 mcg/d oral vitamin B12 upon admission if they did not require oxygen therapy. Primary outcome was deterioration leading to any form of oxygen therapy, intensive care support, or both. **Results:** Between January 15 and April 15, 2020, we identified 43 consecutive patients ≥ 50 y of age with COVID-19. Seventeen patients received DMB before onset of primary outcome and 26 patients did not. Baseline demographic characteristics between the two groups were significantly different by age. In univariate analysis, age and hypertension had a significant influence on outcome. After adjusting for age or hypertension separately in a multivariate analysis, the intervention group retained protective significance. Fewer treated patients than controls required initiation of oxygen therapy during hospitalization (17.6 vs 61.5%, $P = 0.006$). DMB exposure was associated with odds ratios of 0.13 (95% confidence interval [CI], 0.03-0.59) and 0.20 (95% CI, 0.04-0.93) for oxygen therapy, intensive care support, or both on univariate and multivariate analyses,

respectively. Conclusions: A vitamin D/magnesium/vitamin B12 combination in older COVID-19 patients was associated with a significant reduction in the proportion of patients with clinical deterioration requiring oxygen support, intensive care support, or both. This study supports further larger randomized controlled trials to ascertain the full benefit of this combination in ameliorating the severity of COVID-19.

Publication Type

Journal article.

<116>

Accession Number

20203509441

Author

Sukkar, S. G.; Bassetti, M.

Title

Induction of ketosis as a potential therapeutic option to limit hyperglycemia and prevent cytokine storm in COVID-19.

Source

Nutrition; 2020. 79/8052 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

The severe form of coronavirus disease 19 (COVID-19) is characterized by cytokine storm syndrome (CSS) and disseminated intravascular coagulation (DIC). Diabetes, obesity, and hypertension have, as minor common denominators, chronic low-grade inflammation and high plasma myeloperoxidase levels, which could be linked to pulmonary phagocytic hyperactivation and CSS. The hyperactivation of M1 macrophages with a proinflammatory phenotype, which is linked to aerobic glycolysis, leads to the recruitment of monocytes, neutrophils, and platelets from circulating blood and plays a crucial role in thrombo-inflammation (as recently demonstrated in COVID-19) through the formation of neutrophil extracellular traps and monocyte-platelet aggregates, which could be responsible for DIC. The modulation of glucose availability for activated M1 macrophages by means of a eucaloric ketogenic diet (EKD) could represent a possible metabolic tool for reducing adenosine triphosphate production from aerobic glycolysis in the M1 macrophage phenotype during the exudative phase. This approach could reduce the overproduction of cytokines and, consequently, the accumulation of neutrophils, monocytes, and platelets from the blood. Second, an EKD could be advantageous for the metabolism of anti-inflammatory M2 macrophages because

these cells predominantly express oxidative phosphorylation enzymes and are best fed by the oxidation of fatty acids in the mitochondria. An EKD could guarantee the availability of free fatty acids, which are an optimal fuel supply for these cells. Third, an EKD, which could reduce high lactate formation by macrophages due to glycolysis, could favor the production of interferon type I, which are inhibited by excessive lactate production. From a practical point of view, the hypothesis, in addition to being proven in clinical studies, must obviously take into account the contraindications of an EKD, particularly type 1 or 2 diabetes treated with drugs that can cause hypoglycemia, to avoid the risk for side effects of the diet.

Publication Type

Journal article.

<117>

Accession Number

20203509431

Author

Feyaerts, A. F.; Luyten, W.

Title

Vitamin C as prophylaxis and adjunctive medical treatment for COVID-19?

Source

Nutrition; 2020. 79/8074 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Severe acute respiratory syndrome coronavirus 2 causes the potentially fatal coronavirus disease 2019 (COVID-19). Already during the outbreak of the severe acute respiratory syndrome coronavirus 1, the use of vitamin C was suggested. Many patients with severe COVID-19 have elevated levels of the mediators interleukin-6 and endothelin-1. These mediators may explain the age dependence of COVID-19 pneumonia, the preponderance of male and obese or hypertensive patients, as well as of persons of color and smokers. There is clear evidence that vitamin C in high doses can reduce these mediators. Vitamin C is cheap and safe. Hence, using a relatively low dose of vitamin C as prophylaxis, and in cases of severe COVID-19, an (intravenous) high-dose regimen may be beneficial. Ongoing clinical trials are expected to provide more definitive evidence.

Publication Type

Journal article.

<118>

Accession Number

20203509423

Author

Terruzzi, I.; Senesi, P.

Title

Does intestinal dysbiosis contribute to an aberrant inflammatory response to severe acute respiratory syndrome coronavirus 2 in frail patients?

Source

Nutrition; 2020. 79/8094 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

In a few months, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection has become the main health problem worldwide. Epidemiologic studies revealed that populations have different vulnerabilities to SARS-CoV-2. Severe outcomes of the coronavirus disease 2019 (COVID-19) with an increased risk of death are observed in patients with metabolic syndrome, as well as diabetic and heart conditions (frail population). Excessive proinflammatory cytokine storm could be the main cause of increased vulnerability in this frail population. In patients with diabetes and/or heart disease, a low inflammatory state is often associated with gut dysbiosis. The increase amount of microbial metabolites (i.e., trimethylamine N-oxide and lipopolysaccharide), which generate an inflammatory microenvironment, is probably associated with an improved risk of severe illness from COVID-19. Nutritional interventions aimed at restoring the gut microbial balance could represent preventive strategies to protect the frail population from COVID-19. This narrative review presents the possible molecular mechanisms by which intestinal dysbiosis that enhances the inflammatory state could promote the spread of SARS-CoV-2 infection. Some nutritional strategies to counteract inflammation in frail patients are also analyzed.

Publication Type

Journal article.

<119>

Accession Number

20203505666

Author

Shimabuku, R. L.; Delgado, C. A.; Nakachi, G.; Teruya, A. A.; Velasquez, P. M.

Title

Double burden of excess weight and anemia in Latin American children up to 2019.

Source

Tohoku Journal of Experimental Medicine; 2020. 252(2):159-168. many ref.

Publisher

Tohoku University Medical Press

Location of Publisher

Sendai

Country of Publication

Japan

Abstract

The double burden of malnutrition is the coexistence of two different conditions, mainly reflected as excess or deficit in weight. Anemia is a specific nutritional deficit not always included in the double burden assessment. We reviewed overweight and/or obesity (OW/OB) and anemia studies from Latin-American Children over the last ten years up to 2019. Two authors evaluated the MEDLINE, SCOPUS, and LILACS databases. A scale of ten questions was used to assess the risk of bias in prevalence studies. Fourteen studies were selected. The population studies' size ranged from 147 to 20,342 children with different socioeconomic backgrounds, such as urban, peri-urban and rural settings, socio-economic status, schooling, population (ethnic minorities and indigenous), and environmental differences (sea level or high altitude). The prevalence of OW/OB ranged from 4.9% to 42%. The prevalence of anemia was from 3.4% to 67%. The double burden, including OW/OB and anemia, ranged from 0.7% to 67%. A higher prevalence of excess weight and anemia was found in rural and high altitude above sea level environments, extreme poverty, low education level, and indigenous communities. These heterogeneous data, before the 2020 (COVID-19 pandemic), reflect the vast inequities between countries and within each country. Food insecurity linked to poverty and the induced change in eating habits and lifestyles threaten optimal child nutrition in ongoing and future scenarios. The existence of OW/OB and anemia and their simultaneous coexistence in the community, home, and individual levels, indicates that interventions should be comprehensive to face the double burden of malnutrition.

Publication Type

Journal article.

<120>

Accession Number

20203505661

Author

Nidhi Kaicker; Imai, K. S.; Raghav Gaiha

Title

Severity of the COVID-19 pandemic in India. The case of three states: Maharashtra, Jharkhand and Meghalaya.

Source

Global Development Institute (GDI) Working Paper; 2020. (2020-047):37 pp. 28 ref.

Publisher

University of Manchester

Location of Publisher

Manchester

Country of Publication

UK

Abstract

This is the first econometric analysis of the severity of the Covid-19 pandemic measured using two related but distinct measures of mortality up to 21 June 2020. One is the Cumulative Severity Ratio (CSR) and the other is the Daily Severity Ratio (DSR). The CSR measures the additional pressure on India's fragile and ill-equipped healthcare system, the DSR helps monitor the progression of fatalities. Another important contribution of this analysis is the use of rigorous econometric methodology: random-effects models and Hausman-Taylor models. Although the rationales vary, they yield a large core of robust results. The specifications are rich and comprehensive, despite heavy data constraints. The factors associated with the CSR and DSR include(lagged) Covid-19 cases, income, age, gender, multi-morbidity, urban population density, lockdown phases within three states, Maharashtra, Jharkhand and Meghalaya, and weather, including temperature and rainfall and their interactions with the two state dummies. Given the paucity of rigorous econometric analyses, our study yields policy insights of considerable significance.

Publication Type

Bulletin.

<121>

Accession Number

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

20203497911

Author

Vannoni, M.; McKee, M.; Semenza, J. C.; Bonell, C.; Stuckler, D.

Title

Using volunteered geographic information to assess mobility in the early phases of the COVID-19 pandemic: a cross-city time series analysis of 41 cities in 22 countries from March 2nd to 26th 2020.

Source

Globalization and Health; 2020. 16(85):(23 September 2020). 26 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Objectives: Restricting mobility is a central aim for lowering contact rates and preventing COVID-19 transmission. Yet the impact on mobility of different non-pharmaceutical countermeasures in the earlier stages of the pandemic is not well-understood. **Design:** Trends were evaluated using Citymapper's mobility index covering 2nd to 26th March 2020, expressed as percentages of typical usage periods from 0% as the lowest and 100% as normal. China and India were not covered. Multivariate fixed effects models were used to estimate the association of policies restricting movement on mobility before and after their introduction. Policy restrictions were assessed using the Oxford COVID-19 Government Response Stringency Index as well as measures coding the timing and degree of school and workplace closures, transport restrictions, and cancellation of mass gatherings. **Setting:** 41 cities worldwide. **Main outcome measures:** Citymapper's mobility index. **Results:** Mobility declined in all major cities throughout March. Larger declines were seen in European than Asian cities. The COVID-19 Government Response Stringency Index was strongly associated with declines in mobility ($r = -0.75$, $p < 0.001$). After adjusting for time-trends, we observed that implementing non-pharmaceutical countermeasures was associated with a decline of mobility of 10.0% for school closures (95% CI: 4.36 to 15.7%), 15.0% for workplace closures (95% CI: 10.2 to 19.8%), 7.09% for cancelling public events (95% CI: 1.98 to 12.2%), 18.0% for closing public transport (95% CI: 6.74 to 29.2%), 13.3% for restricting internal movements (95% CI: 8.85 to 17.8%) and 5.30% for international travel controls (95% CI: 1.69 to 8.90). In contrast, as expected, there was no association between population mobility changes and fiscal or monetary measures or emergency healthcare investment. **Conclusions:** Understanding the effect of public policy on mobility in the early stages is crucial to slowing and reducing COVID-19 transmission. By using Citymapper's mobility index, this work provides the first evidence about trends in mobility and the impacts of different policy interventions, suggesting that closure of public transport, workplaces and schools are particularly impactful.

Publication Type

Journal article.

<122>

Accession Number

20203492946

Author

McAloose, D.; Laverack, M.; Wang LeYi; Killian, M. L.; Caserta, L. C.; Yuan FangFeng; Mitchell, P. K.; Queen, K.; Mauldin, M. R.; Cronk, B. D.; Bartlett, S. L.; Sykes, J. M.; Zec, S.; Stokol, T.; Ingerman, K.; Delaney, M. A.; Fredrickson, R.; Ivancic, M.; Jenkins-Moore, M.; Mozingo, K.; Franzen, K.; Bergeson, N. H.; Goodman, L.; Wang HaiBin; Fang Ying; et al.

Title

From people to Panthera: natural SARS-CoV-2 infection in tigers and lions at the Bronx zoo.

Source

mBio; 2020. 11(5)42 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

Despite numerous barriers to transmission, zoonoses are the major cause of emerging infectious diseases in humans. Among these, severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), and ebolaviruses have killed thousands; the human immunodeficiency virus (HIV) has killed millions. Zoonoses and human-to-animal cross-species transmission are driven by human actions and have important management, conservation, and public health implications. The current SARS-CoV-2 pandemic, which presumably originated from an animal reservoir, has killed more than half a million people around the world and cases continue to rise. In March 2020, New York City was a global epicenter for SARS-CoV-2 infections. During this time, four tigers and three lions at the Bronx Zoo, NY, developed mild, abnormal respiratory signs. We detected SARS-CoV-2 RNA in respiratory secretions and/or feces from all seven animals, live virus in three, and colocalized viral RNA with cellular damage in one. We produced nine whole SARS-CoV-2 genomes from the animals and keepers and identified different SARS-CoV-2 genotypes in the tigers and lions. Epidemiologic and genomic data indicated human-to-tiger transmission. These were the first confirmed cases of natural SARS-CoV-2 animal infections in the United States and the first in nondomestic species in the world. We highlight disease transmission at a nontraditional interface and provide information that contributes to understanding SARS-CoV-2 transmission across species.

Publication Type

Journal article.

<123>

Accession Number

20203492945

Author

Morrison, J. H.; Miller, C.; Bankers, L.; Cramer, G.; Wang LinFa; Poeschla, E. M.

Title

A potent postentry restriction to primate lentiviruses in a yinpterochiropteran bat.

Source

mBio; 2020. 11(5)79 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

Bats are primary reservoirs for multiple lethal human viruses, such as Ebola, Nipah, Hendra, rabies, severe acute respiratory syndrome coronavirus (SARSCoV), Middle East respiratory syndrome-related coronavirus (MERS-CoV), and, most recently, SARS-CoV-2. The innate immune systems of these immensely abundant, anciently diverged mammals remain insufficiently characterized. While bat genomes contain many endogenous retroviral elements indicative of past exogenous infections, little is known about restrictions to extant retroviruses. Here, we describe a major postentry restriction in cells of the yinpterochiropteran bat *Pteropus alecto*. Primate lentiviruses (HIV-1, SIVmac) were potently blocked at early life cycle steps, with up to 1,000-fold decreases in infectivity. The block was specific, because nonprimate lentiviruses such as equine infectious anemia virus and feline immunodeficiency virus were unimpaired, as were foamy retroviruses. Interspecies heterokaryons demonstrated a dominant block consistent with restriction of incoming viruses. Several features suggested potential TRIM5 (tripartite motif 5) or myxovirus resistance protein 2 (MX2) protein restriction, including postentry action, cyclosporine sensitivity, and reversal by capsid cyclophilin A (CypA) binding loop mutations. Viral nuclear import was significantly reduced, and this deficit was substantially rescued by cyclosporine treatment. However, saturation with HIV-1 virus-like particles did not relieve the restriction at all. *P. alecto* TRIM5 was inactive against HIV-1 although it blocked the gammaretrovirus N-tropic murine leukemia virus. Despite major divergence in a critical N-terminal motif required for human MX2 activity, *P. alecto* MX2 had anti-HIV activity. However, this did not quantitatively account for the restriction and was independent of and synergistic with an additional CypA-dependent restriction. These results reveal a novel, specific restriction to primate lentiviruses in the Pteropodidae and advance understanding of bat innate immunity.

Publication Type

Journal article.

<124>

Accession Number

20203518150

Author

Carretero Gomez, J.; Mafe Nogueroles, M. C.; Garrachon Vallo, F.; Escudero Alvarez, E.; Macia Botejara, E.; Miramontes Gonzalez, J. P.

Title

Inflammation, malnutrition, and SARS-CoV-2 infection: a disastrous combination. [Spanish]

Source

Revista Clinica Espanola; 2020. 220(8):511-517. 30 ref.

Publisher

Elsevier Espana, S. L.

Location of Publisher

Barcelona

Country of Publication

Spain

Abstract

SARS-CoV-2 infection is associated with a high risk of malnutrition, mainly due to increased nutritional requirements and the presence of a severe and universal inflammatory state. Associated symptoms contribute to hyporexia, which perpetuates the negative nutritional balance. Furthermore, dysphagia, especially post-intubation, worsens and makes intake unsafe. This risk is greater in elderly and multimorbid patients. Inflammation to varying degrees is the common link between COVID-19 and the onset of malnutrition, and it is more correct to refer to disease-related malnutrition (DRM). DRM worsens the poor prognosis of SARS-CoV-2 infection, especially in the most severe cases. Therefore, it is necessary to identify and treat people at risk early, avoiding overexposure and direct contact with the patient. We cannot forget the role that a healthy diet plays in both prevention and recovery after discharge.

Publication Type

Journal article.

<125>

Accession Number

20203518125

Author

Munjal, T.; Kavanagh, K. R.; Ezzibdeh, R. M.; Valdez, T. A.

Title

The impact of COVID-19 on global disparities in surgical training in pediatric otolaryngology.

Source

International Journal of Pediatric Otorhinolaryngology; 2020. 13813 ref.

Publisher

Elsevier Science Ireland Ltd.

Location of Publisher

Shannon

Country of Publication

Irish Republic

Abstract

Objective: To assess global trends in otolaryngologic and non-otolaryngologic education in response to COVID-19, specifically with regard to surgical simulation and personnel reallocation needs in case of patient demand. Study design: Online survey. Methods: A multiple-choice survey regarding operative caseload and impact on resident education was sent to Otolaryngology residents and Pediatric Otolaryngology faculty globally. The survey was open for responses for ten days in March 2020. Results: A total of 96 completed surveys were received across 22 countries. 87.5% of respondents reported that no supplementary operative education is being provided. Despite 71.43% of responses indicating that simulation was useful for all levels of residents, 20.95% of responses indicated that simulation is not possible at their institution, with the majority of these being skewed toward responses from South America. Conclusion: Despite the majority of respondents stating that simulation was helpful, there were disparities in access to simulation seen across countries. The results inform the need for a coordinated effort to expand educational efforts outside of the operating room and clinical environment. A major limitation of this study is the low domestic response rate.

Publication Type

Journal article.

<126>

Accession Number

20203518110

Author

Kligerman, M. P.; Lamour, S.; Okerosi, S.

Title

Challenges facing otolaryngologists in low- and middle-income countries during the COVID-19 pandemic.

Source

International Journal of Pediatric Otorhinolaryngology; 2020. 13819 ref.

Publisher

Elsevier Science Ireland Ltd.

Location of Publisher

Shannon

Country of Publication

Irish Republic

Abstract

The COVID-19 pandemic poses significant challenges for otolaryngologists practicing in low- and middle-income countries (LMICs). This commentary highlights some of the particular challenges in low resource settings, including limited testing, insufficient personal protective equipment, small numbers of surgeons, and competing socio-economic demands. The commentary focuses on specific examples from around the world to draw attention to these challenges and also highlight examples of success and innovation. Amidst the crisis an opportunity exists for otolaryngologists from around the world to share resources, ideas, and innovations to best serve patients and improve the health system globally for the future.

Publication Type

Journal article.

<127>

Accession Number

20203519374

Author

Ye ChanYuan; Zhang ShanYan; Zhang XiaoLi; Cai Huan; Gu JueQing; Lian JiangShan; Lu YingFeng; Jia HongYu; Hu JianHua; Jin CiLiang; Yu GuoDong; Zhang YiMin; Sheng JiFang; Yang YiDa

Title

Impact of comorbidities on patients with COVID-19: a large retrospective study in Zhejiang, China. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VII.)

Source

Journal of Medical Virology; 2020. 92(11):2821-2829. 28 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19) has become a serious public health problem worldwide. Here, we stratified COVID-19 patients based on their comorbidities to assess their risk of serious adverse outcomes. We collected 856 hospitalized cases diagnosed with COVID-19 from 17 January to 7 February 2020, in Zhejiang Province, and analyzed their comorbidities and composite endpoint (including admission to intensive care unit owing to disease progression, shock, invasive ventilation, and death) to determine the relationship between comorbidities and adverse outcomes. The median age of patients was 46 (36-56) years; 439 (51.3%) were men, 242 (28.3%) had comorbidities, and 152 (17.8%) had two or more comorbidities. The most common comorbidity was hypertension (142 [16.6%]), followed by diabetes (64 [7.5%]). Of the 856 patients, there are 154 (18.0%) severe cases. Thirty-two (3.7%) reached composite endpoints, of which 22 (9.1%) were from the comorbidity group and 10 (1.6%) from the non-comorbidity group ($P < .001$). After adjusting for age and gender status, the risk of reaching the composite endpoint was higher in the group with comorbidity than in that without comorbidity (hazard ratio [HR] 3.04, 95% confidence interval [CI]: 1.40-6.60). HR values for patients with one, two, and three or more comorbidities were 1.61 (95% CI: 0.44-5.91), 3.44 (95% CI: 1.31-9.08), and 6.90 (95% CI: 2.69-17.69), respectively. COVID-19 patients with comorbidities had worse clinical outcomes as compared with those without any comorbidity. The higher the number of comorbidities, the greater was the risk of serious adverse outcomes.

Publication Type

Journal article.

<128>

Accession Number

20203519358

Author

Qin Lu; Li XiaoChen; Shi Jing; Yu MuQing; Wang Ke; Tao Yu; Zhou Ying; Zhou Min; Xu ShuYun; Wu Bo; Yang ZhenYu; Zhang Cong; Yue JunQing; Cheng ChongSheng; Liu XianSheng; Xie Min

Title

Gendered effects on inflammation reaction and outcome of COVID-19 patients in Wuhan. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VII.)

Source

Journal of Medical Virology; 2020. 92(11):2684-2692. 37 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Background: The rapid outbreak of coronavirus disease 2019 (COVID-19) has turned into a public health emergency of international concern. Epidemiological research has shown that sex is associated with the severity of COVID-19, but the underlying mechanism of sex predisposition remains poorly understood. We aim to study the gendered differences in inflammation reaction, and the association with severity and mortality of COVID-19. **Methods:** In this retrospective study, we enrolled 548 COVID-19 inpatients from Tongji Hospital from 26 January to 5 February 2020, and followed up to 3 March 2020. Epidemiological, demographic and clinical features, and inflammatory indexes were collected and compared between males and females. The Cox proportional hazard regression model was applied to identify the gendered effect on mortality of COVID-19 after adjusting for age, comorbidity, and smoking history. The multiple linear regression method was used to explore the influence of sex on inflammation reaction. **Results:** Males had higher mortality than females did (22.2% vs 10.4%), with a hazard ratio of 1.923 (95% confidence interval, 1.181-3.130); elder age and comorbidity were significantly associated with decrease of COVID-19 patients. Excess inflammation reaction was related to severity of COVID-19. Male patients had greater inflammation reaction, with higher levels of interleukin 10, tumor necrosis factor- α , lactose dehydrogenase, ferritin, and hyper-sensitive C-reactive protein, but a lower lymphocyte count than females adjusted by age and comorbidity. **Conclusions:** Sex, age, and comorbidity are critical risk factors for mortality of COVID-19. Excess innate immunity and proinflammation activity, and deficiency in adaptive immunity response promote males, especially elder males, to develop a cytokine storm, causing potential acute respiratory distressed syndrome, multiple organ failure and decrease.

Publication Type

Journal article.

<129>

Accession Number

20203519332

Author

Dzinamarira, T.; Dzobo, M.; Chitungo, I.

Title

COVID-19: a perspective on Africa's capacity and response. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VII.)

Source

Journal of Medical Virology; 2020. 92(11):2465-2472. 60 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Global powerhouses with tried and tested health systems have struggled to contain the COVID-19 pandemic. One is left to wonder what will be left of Africa, the second most populous continent after Asia, which is torn by civil wars, hunger, and diseases like AIDS and TB and, in recent years, the Ebola Virus Disease (EVD). The majority of countries' health systems, already dependent on donor aid, are ill-equipped and under-resourced to deal with the raging pandemic. There is a lack of isolation and intensive care infrastructure, ventilators, and financial resources to bankroll the fight against COVID-19 pandemic. However, there is some cause for optimism, for example, in West Africa where infrastructure like diagnostic testing facilities, intensive care units, surveillance, and systems for reporting emergencies used during the EVD outbreak of 2013-2016 can be leveraged to fight the COVID-19 pandemic. Further, a number of African countries have responded swiftly by activating the necessary political and financial tools to combat the pandemic. Technical support from continental bodies like the Africa Centers for Disease Control and global development partners has improved the capacity of the continent to handle the pandemic. In this article, the authors unpack, review, and share a perspective on Africa's capacity to contain and control the COVID-19 pandemic and review the current response.

Publication Type

Journal article.

<130>

Accession Number

20203519330

Author

Chen JiMing; Sun YingXue; Chen JiWang

Title

Potential for elimination of SAR-CoV-2 through vaccination as inspired by elimination of multiple influenza viruses through natural pandemics or mass vaccination. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VII.)

Source

Journal of Medical Virology; 2020. 92(11):2453-2457. 22 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

The ongoing pandemic of coronavirus disease 2019 (COVID-19) caused by the novel virus severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has claimed many lives worldwide. To combat the pandemic, multiple types of vaccines are under development with unprecedented rapidity. Theoretically, future vaccination against COVID-19 may fall into long-term costly guerrilla warfare between SARS-CoV-2 and humans. Elimination of SARS-CoV-2 through vaccination to avoid the potential long-term costly guerrilla warfare, if possible, is highly desired and worth intensive consideration. Human influenza pandemics emerging in 1957, 1968, and 2009 established strong global herd immunity and led to the elimination of three human influenza viruses, which circulated worldwide for years before the pandemics. Moreover, both clade 7.2 of subtype H5 highly pathogenic avian influenza virus and subtype H7N9 avian influenza virus circulated in poultry in China for years, and they have been virtually eliminated through mass vaccination in recent years. These facts suggest that the rapid establishment of global herd immunity through mass vaccination using an appropriate vaccine could eliminate SARS-CoV-2. The coming 2 years are a golden time for elimination through vaccination, which requires tremendous national and international collaboration. This review also prioritizes the efficacy of vaccines for COVID-19 and elucidates the importance of the development of more live vaccines for COVID-19.

Publication Type

Journal article.

<131>

Accession Number

20203519328

Author

Palmieri, B.; Vadala, M.; Roncati, L.; Garelli, A.; Scandone, F.; Bondi, M.; Cermelli, C.

Title

The long-standing history of *Corynebacterium parvum*, immunity, and viruses. (Special issue on new coronavirus (2019-nCoV or SARS-CoV-2) and the outbreak of the respiratory illness (COVID-19): part-VII.)

Source

Journal of Medical Virology; 2020. 92(11):2429-2439. many ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

We report a review of all the experimental and clinical studies performed in the last 60 years on the antiviral activity of inactivated *Corynebacterium parvum* (*Cutibacterium acnes*). This bacterium has been originally investigated and used for its oncolytic properties linked to immunomodulating activity, but the interest to successfully prevent and treat bacterial, fungal, and viral infections and lethality, uprising the innate immunity barriers produced many experimental models and very few clinical studies. The dramatic defenseless situation due to impending CoViD-19 pandemic claims to exhume and highlight this aspecific strategy in preventive and therapeutic settings; as a matter of fact, no new or mutated virus can potentially escape to this strong innate immune surveillance strengthened by adequate *C. parvum* protocols.

Publication Type

Journal article.

<132>

Accession Number

20203511240

Author

Zhang ZiYing; Wang Jing; Chai MingZhen; Yang Wu

Title

Effect of strengthening nosocomial infection control on distribution of pathogenic bacteria in hospital during coronavirus disease 2019 epidemic. [Chinese]

Source

Academic Journal of Second Military Medical University; 2020. 41(9):980-983. 10 ref.

Publisher

Editorial Department of Academic Journal of Second Military Medical University

Location of Publisher

Shanghai

Country of Publication

China

Abstract

Objective: To explore the effect of strengthening nosocomial infection control measures on reducing the distribution of pathogenic bacteria in hospital environment during the outbreak of coronavirus disease 2019 (COVID-19), so as to provide support for epidemic prevention and safety. **Methods:** A total of 160 sampling sites (45 by plate sedimentation method and 115 by swab method) were randomly selected as the control group before strengthening nosocomial infection control measures (from Dec. 21, 2019 to Jan. 21, 2020). After strengthening the measures (from Jan. 24 to Feb. 24, 2020), 160 sampling sites (64 by plate sedimentation method and 96 by swab method) were selected as the observation group. The changes of pathogenic bacteria distribution in the hospital environment before and after strengthening nosocomial infection control measures were compared. **Results:** Before strengthening nosocomial infection control measures, 39 (24.4%) of 160 sampling sites were positive for pathogenic bacterial colonies, including seven (15.6%) positive in 45 by plate sedimentation method and 32 (27.8%) positive in 115 by swab method. After strengthening nosocomial infection control measures, 18 (11.2%) of 160 sampling sites were positive, including four (6.2%) positive in 64 by plate sedimentation method and 14 (14.6%) positive in 96 by swab method. Statistical analysis showed that there was no significant difference in the positive rate of pathogenic bacteria by plate sedimentation method after strengthening nosocomial infection control measures than that before strengthening nosocomial infection control measures. However, the positive rates of swab method and total pathogenic bacterial colonies were both significantly lower than those before strengthening nosocomial infection control measures ($P=0.020$ and 0.002). The pathogenic bacterial colony number sampled by plate sedimentation method after strengthening nosocomial infection control measures was (0.69 ± 0.09) CFU/cm², which was similar when compared with that before strengthening nosocomial infection control measures ($[0.85\pm 0.15]$ CFU/cm²). The pathogenic bacterial colony number sampled by swab method after strengthening nosocomial infection control measures was (0.19 ± 0.06) CFU per plate, which was significantly lower than that before strengthening nosocomial infection control measures ($[0.32\pm 0.08]$ CFU per plate) ($P=0.001$). **Conclusion:** During the outbreak of COVID-19, strengthening disinfection and improving disinfection quality can effectively reduce the pathogenic bacterial colonies in the hospital environment, reducing the risk of infection exposure of medical staff.

Publication Type

Journal article.

<133>

Accession Number

20203511239

Author

Jin TingYan; Wang MaoMao; Liu Yan; Li DongMei

Title

Effectiveness of anti-pressure protective mask for medical personnel fighting against coronavirus disease 2019. [Chinese]

Source

Academic Journal of Second Military Medical University; 2020. 41(9):976-979. 10 ref.

Publisher

Editorial Department of Academic Journal of Second Military Medical University

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Location of Publisher

Shanghai

Country of Publication

China

Abstract

Objective: To evaluate the effectiveness of anti-pressure protective mask for medical personnel fighting against the coronavirus disease 2019 (COVID-19). Methods: Convenience sampling method was used to select 120 military frontline anti-epidemic medical personnel supporting Wuhan medical team from Jan. 26 to Feb. 24, 2020, and they were evenly divided into blank group, control group and observation group. The blank group did not use anti-pressure dressings, the control group wore face protection equipments after using hydrocolloid dressings, and the observation group wore face protection equipments after using anti-pressure protective mask. At the end of the intervention, the facial comfort, facial pressure injuries, and adverse effects were compared between the three groups. Results: At the end of the intervention, the facial comfort score was 6.00 (6.00, 7.00) in the blank group, 5.00 (4.00, 5.00) in the control group, and 1.00 (0.50, 2.00) in the observation group, with significant differences found among the three groups ($H=97.392$, $P < 0.001$). According to the further inference of the rank mean, the blank group had the largest facial comfort rank mean (96.68), while the observation group had the smallest facial comfort rank mean (20.88). At the end of the intervention, three cases (7.5%, 3/40) in the blank group had no facial injury, 28 cases (70.0%, 28/40) had facial pressure injury at stage 1, and nine cases (22.5%, 9/40) at stage 2; 27 cases (67.5%, 27/40) in the control group had no facial injury and 13 cases (32.5%, 13/40) had facial pressure injury at stage 1; 37 cases (92.5%, 37/40) in the observation group had no facial injury and three cases (7.5%, 3/40) had facial pressure injury at stage 1. There was significant difference in the incidence of facial pressure injuries among the three groups ($\chi^2=71.863$, $P < 0.001$). The observation group had the lowest facial pressure injury rate among the three groups. There was no skin allergic reaction in the three groups and none of them was infected with COVID-19. Conclusion: Anti-pressure protective mask can effectively reduce the incidence of facial pressure injuries and improve the facial comfort when wearing facial protective equipment, and it can be used for protecting frontline anti-epidemic medical personnel.

Publication Type

Journal article.

<134>

Accession Number

20203511236

Author

Liu Ying; Yin QianLan; Cai WenPeng; Deng WenXi; Dong Wei

Title

Risk perception characteristics and influencing factors of frontline medical staff during the coronavirus disease 2019 epidemic. [Chinese]

Source

Publisher

Editorial Department of Academic Journal of Second Military Medical University

Location of Publisher

Shanghai

Country of Publication

China

Abstract

Objective: To explore the risk perception characteristics and influencing factors of frontline medical staff during the coronavirus disease 2019 (COVID-19) epidemic, so as to provide effective reference for correctly perceiving the risk, improving stress-coping skills and maintaining mental health during the high-risk and high-intensity combat against the COVID-19 epidemic. **Methods:** A risk perception questionnaire based on the context of COVID-19 epidemic was used to investigate the risk perception level of 181 frontline medical staff fighting against COVID-19 epidemic. Nonparametric test was used to compare the demographic factors and risk perception dimensions. Logistic regression analysis was used to predict the effect of demographic factors on the risk perception level of frontline medical staff. **Results:** During the COVID-19 epidemic, the overall risk perception score of the frontline medical staff was 36.39 ± 8.59 , and the scoring rate was 60.65%. The top three dimensions with the highest scoring rate were physical function risk, organization risk and personal safety risk. The score of frontline medical staff in Hubei province was higher than that outside Hubei province ($Z = -2.180, P < 0.05$) and the score of medical technicians (doctors and technicians) was higher than that of nurses ($Z = -3.039, P < 0.01$). The location of frontline medical staff could significantly predict the overall risk perception ($P < 0.05$). **Conclusion:** During the COVID-19 epidemic, the risk perception of frontline medical staff has been found at the medium level, with the risk perception degree of frontline medical staff in Hubei province being higher than that outside Hubei province and the risk perception degree of medical technicians being higher than that of nurses. The location of frontline medical staff can predict their risk perception.

Publication Type

Journal article.

<135>

Accession Number

20203511235

Author

Wang JunXue; Yu LeCheng; Li HaiFeng; Han Li; Tan Qing; Fan ShanHong; Chen Wei; Wei Bo; Wang ChangJun; Zhang HongYan; Xu ZhengMei

Title

Infection control in coronavirus disease 2019 wards of Wuhan Huoshenshan Hospital. [Chinese]

Source

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Academic Journal of Second Military Medical University; 2020. 41(9):947-952. 10 ref.

Publisher

Editorial Department of Academic Journal of Second Military Medical University

Location of Publisher

Shanghai

Country of Publication

China

Abstract

This paper summarizes the infection control practice in coronavirus disease 2019 (COVID-19) wards of Wuhan Huoshenshan Hospital. By closely focusing on the three key elements of infectious diseases and strictly following the general prevention principles, we implement systematic management, including ward design, personnel management, disinfection measures, protection management, diagnosis and treatment path, clinical specimens, re-disinfection of medical equipment and clearance of garbage. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) nucleic acid was detected in samples from critical patients and their surrounding environments, so as to identify the possible contamination path to guide the prevention and control. During the mission, the systematic and meticulous infection control management in the wards effectively controlled cross infections, ensured the effective and safe treatment of COVID-19 patients, with no medical staff infections occurred, providing references for infection control of wards in similar epidemics in the future.

Publication Type

Journal article.

<136>

Accession Number

20203511233

Author

Ding CuiLing; Zhao Ping; Qi ZhongTian

Title

Bat-related coronavirus. [Chinese]

Source

Academic Journal of Second Military Medical University; 2020. 41(9):935-940. 34 ref.

Publisher

Editorial Department of Academic Journal of Second Military Medical University

Location of Publisher

Shanghai

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Country of Publication

China

Abstract

The outbreak of coronavirus disease 2019 (COVID-19) in Dec. 2019 sounded another alarm for human being, with the first being the outbreak of severe acute respiratory syndrome (SARS) in 2003. Researchers found that the natural host of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the pathogen of COVID-19, may be the *Rhinolophus sinicus*. There have been four outbreaks of coronaviruses (severe acute respiratory syndrome coronavirus [SARS-CoV], Middle East respiratory syndrome coronavirus [MERS-CoV], swine acute diarrhea syndrome coronavirus [SADS-CoV] and SARS-CoV-2) worldwide since the beginning of 21st century, and they have caused huge threats and losses to human health, public health, economic development, and social stability. A large amount of evidence suggests that the natural host of all these four coronaviruses may be bats. This article reviews the species and global geographic distribution of bat-related coronaviruses, and the above-mentioned four coronaviruses causing severe outbreaks.

Publication Type

Journal article.

<137>

Accession Number

20203513634

Author

Falces-Romero, I.; Ruiz-Bastian, M.; Diaz-Pollan, B.; Maseda, E.; Garcia-Rodriguez, J.

Title

Isolation of *Aspergillus* spp. in respiratory samples of patients with COVID-19 in a Spanish tertiary care hospital.

Source

Mycoses; 2020. 63(11):1114-1148. 10 ref.

Publisher

Wiley

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

Background Invasive pulmonary aspergillosis (IPA) is a complication of respiratory bacterial and viral infections such as coronavirus disease 2019 (COVID-19). Patients/Methods In University Hospital La Paz

(Madrid, Spain), we reviewed the clinical and demographic characteristics of 10 patients with positive severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) PCR and *Aspergillus* spp. isolate in respiratory samples. We also recovered results of galactomannan tests in serum and/or bronchoalveolar lavage (BAL) samples. Results Eight male and two female from 51 to 76 years were recovered. They had reported risk factors to develop IPA (haematological malignancies, immunosuppression, diabetes, obesity, intensive care unit stay, among others). Azole susceptible *Aspergillus fumigatus* was isolated in nine patients and *Aspergillus nidulans* was isolated in one patient. Only one case was classified as probable aspergillosis, seven cases as putative aspergillosis, and two cases were not classifiable. Eight patients received antifungal treatment. Seven patients died (70%), two are still inpatient due to nosocomial infections and one was discharged referred to another institution. Conclusions This clinical entity has high mortality, and therefore, it should be performed surveillance with early galactomannan tests and cultures in respiratory samples in order to improve the outcome of the patients with this condition.

Publication Type

Journal article.

<138>

Accession Number

20203517935

Author

Cipriani, A.; Zorzi, A.; Ceccato, D.; Capone, F.; Parolin, M.; Donato, F.; Fioretto, P.; Pesavento, R.; Previato, L.; Maffei, P.; Saller, A.; Avogaro, A.; Sarais, C.; Gregori, D.; Iliceto, S.; Vettor, R.

Title

Arrhythmic profile and 24-hour QT interval variability in COVID-19 patients treated with hydroxychloroquine and azithromycin.

Source

International Journal of Cardiology; 2020. 316:280-284. 21 ref.

Publisher

Elsevier Science Publishers B.V, Biomedical Division

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Background: Hydroxychloroquine and azithromycin combination therapy is often prescribed for coronavirus disease 2019 (COVID-19). Electrocardiographic (ECG) monitoring is warranted because both medications cause corrected QT-interval (QTc) prolongation. Whether QTc duration significantly varies during the day, potentially requiring multiple ECGs, remains to be established. Methods: We performed 12-

lead ECGs and 12-lead 24-h Holter ECG monitoring in all patients aged <80 years admitted to our medical unit for COVID-19, in oral therapy with hydroxychloroquine (200 mg, twice daily) and azithromycin (500 mg, once daily) for at least 3 days. A group of healthy individuals matched for age and sex served as control. Results: Out of 126 patients, 22 (median age 64, 82% men) met the inclusion criteria. ECG after therapy showed longer QTc-interval than before therapy (450 vs 426 ms, $p = .02$). Four patients had a QTc ≥ 480 ms: they showed higher values of aspartate aminotransferase (52 vs 30 U/L, $p = .03$) and alanine aminotransferase (108 vs 33 U/L, $p < .01$) compared with those with QTc < 480 ms. At 24-h Holter ECG monitoring, 1 COVID-19 patient and no control had ≥ 1 run of non-sustained ventricular tachycardia ($p = .4$). No patients showed "R on T" premature ventricular beats. Analysis of 24-h QTc dynamics revealed that COVID-19 patients had higher QTc values than controls, with no significant hourly variability. Conclusion: Therapy with hydroxychloroquine and azithromycin prolongs QTc interval in patients with COVID-19, particularly in those with high levels of transaminases. Because QTc duration remains stable during the 24 h, multiple daily ECG are not recommendable.

Publication Type

Journal article.

<139>

Accession Number

20203514817

Author

Anwar Khursheed; Shamshad Alam; Tyagi, V. K.; Nagpure, A. S.; Khan, A. A.; Gaur, R. Z.; Sanyogita Singh; Bhattacharya, P.; Santanu Mukherjee; Manish Kumar

Title

Future liasing of the lockdown during COVID-19 pandemic: the dawn is expected at hand from the darkest hour.

Source

Groundwater for Sustainable Development; 2020. 11

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The lockdown during COVID-19 pandemic has converted the world into new experimental laboratories, which may reveal temporal or spatial comparative analysis data. However, some startling information is gathered in terms of reduced premature mortality cases associated with air and water quality

improvement, enhanced e-learning on a broader platform, work from home, and successful e-health. The decline in vehicular density on roads and congestion leads to reduced energy consumption and associated greenhouse gases (GHG) and other pollutants emission. The lockdown has also been identified as a possible emergency measure to combat severe air pollution episodes. Similarly, industrial pollution has been recognized as one of the primary causes of water resource pollution and would, therefore, bring change in policy vis-a-vis groundwater pollution control. Our findings suggest that the results of successful e-learning and work from home would be a permanent shift from conventional modes in the near future due to a drastic reduction in socio-economic cost. Our critical analysis also highlights that with such temporary lockdown measures acute/chronic ill-effects of anthropogenic perturbations on planet earth can be effectively estimated through sociocultural, socioeconomical and socio-political/sociotechnological nexus.

Publication Type

Journal article.

<140>

Accession Number

20203512991

Author

Wang Hui

Title

HIV care during the coronavirus disease-2019 pandemic in Shenzhen, China.

Source

Current Opinion in HIV and AIDS; 2020. 15(6):341-344. 10 ref.

Publisher

Lippincott Williams & Wilkins

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

Purpose of review: Due to the stringent measures including quarantine of infected individuals and social distancing, the COVID-19 pandemic has posted great challenges for HIV-1 care in China. In this mini-review, I will discuss the situation in Shenzhen city as a window of China to reflect our strategies in fighting the concurrent HIV/AIDS and COVID-19 pandemics. Recent findings: Prevention of nosocomial infection, minimizing the follow-up visits to the hospital, maintaining the delivery of PreP/PEP services and testing for SARS-Cov-2 and HIV when someone have fever or respiratory symptoms were the four major approaches to maintain uninterrupted HIV care in Shenzhen. None of 15 000 PLWH seeking HIV care at Shenzhen were diagnosed with COVID-19 during this pandemic. Summary: This article share the experience unprecedented

from Shenzhen. We have to adapt our care and service to continue to engage PLWH to avoid poor outcomes. More research is needed to know the long-term implications of pandemic for the health of PLWH.

Publication Type

Journal article.

<141>

Accession Number

20203457937

Author

Chiscano-Camon, L.; Ruiz-Rodriguez, J. C.; Ruiz-Sanmartin, A.; Roca, O.; Ferrer, R.

Title

Vitamin C levels in patients with SARS-CoV-2-associated acute respiratory distress syndrome.

Source

Critical Care; 2020. 24(522):(26 August 2020). 5 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

This article hypothesized that ARDS coronavirus disease 2019 (COVID-19) patients may present vitamin C deficiency. This is the first study to analyze the levels of vitamin C in patients with SARS-CoV-2-associated ARDS. Our study revealed that vitamin C levels are undetectable in more than 90% of the patients included. The mechanisms of this significant reduction in vitamin C are uncertain. We hypothesized that several mechanisms, such as increased metabolic consumption due to the enhanced inflammatory response, glomerular hyperfiltration, dialysis, decreased gastrointestinal absorption, or decreased recycling of dehydroascorbate to ascorbic acid, may be involved. Moreover, vitamin C may have implications for treatment of COVID-19-associated ARDS. Indeed, one preclinical study showed that vitamin C increased resistance to infection caused by coronavirus. Moreover, other clinical studies that included surgical patients and patients with pneumonia showed encouraging results in terms of decreased incidence and severity of lung injury and mortality. In this cohort of patients with COVID-19-associated ARDS, the levels of vitamin C are extremely low. Despite the limited generalization of these results, the authors think these findings might stimulate clinicians to measure vitamin C levels in COVID-19 patients to describe the real impact of this alteration.

Publication Type

Journal article.

<142>

Accession Number

20203509295

Author

Madewell, Z. J.

Title

Arboviruses and their vectors.

Source

Southern Medical Journal; 2020. 113(10):520-523. 61 ref.

Publisher

Southern Medical Association

Location of Publisher

Birmingham

Country of Publication

USA

Abstract

Arthropod-transmitted viruses (arboviruses) pose important public health challenges worldwide, and continue to do so even while the world is contending with the 2019 coronavirus disease (COVID-19) pandemic. The novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is spread by contact with respiratory droplets from infected individuals. Arboviruses pose a different threat to humanity because of their efficient transmission by our formidable health adversary, the mosquito. There is no evidence that mosquitoes are vectors for SARS-CoV-2 or the two structurally related viruses causing SARS or Middle East respiratory syndrome. There are > 500 recognized arboviruses worldwide, 150 of which are known to cause human disease.

Publication Type

Journal article.

<143>

Accession Number

20203509231

Author

Furtado, R. H. M.; Berwanger, O.; Fonseca, H. A.; Correa, T. D.; Ferraz, L. R.; Lapa, M. G.; Zampieri, F. G.; Veiga, V. C.; Azevedo, L. C. P.; Rosa, R. G.; Lopes, R. D.; Avezum, A.; Manoel, A. L. O.; Piza, F. M. T.; Martins, P. A.; Lisboa, T. C.; Pereira, A. J.; Olivato, G. B.; Dantas, V. C. S.; Milan, E. P.; Gebara, O. C. E.; Amazonas, R. B.; Oliveira, M. B.; Soares, R. V. P.; Moia, D. D. F.; et al.

Title

Azithromycin in addition to standard of care versus standard of care alone in the treatment of patients admitted to the hospital with severe COVID-19 in Brazil (COALITION II): a randomised clinical trial.

Source

Lancet (British edition); 2020. 396(10256):959-967.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: The efficacy and safety of azithromycin in the treatment of COVID-19 remain uncertain. We assessed whether adding azithromycin to standard of care, which included hydroxychloroquine, would improve clinical outcomes of patients admitted to the hospital with severe COVID-19. **Methods:** We did an open-label, randomised clinical trial at 57 centres in Brazil. We enrolled patients admitted to hospital with suspected or confirmed COVID-19 and at least one additional severity criteria as follows: use of oxygen supplementation of more than 4 L/min flow; use of high-flow nasal cannula; use of non-invasive mechanical ventilation; or use of invasive mechanical ventilation. Patients were randomly assigned (1:1) to azithromycin (500 mg via oral, nasogastric, or intravenous administration once daily for 10 days) plus standard of care or to standard of care without macrolides. All patients received hydroxychloroquine (400 mg twice daily for 10 days) because that was part of standard of care treatment in Brazil for patients with severe COVID-19. The primary outcome, assessed by an independent adjudication committee masked to treatment allocation, was clinical status at day 15 after randomisation, assessed by a six-point ordinal scale, with levels ranging from 1 to 6 and higher scores indicating a worse condition (with odds ratio [OR] greater than 1.00 favouring the control group). The primary outcome was assessed in all patients in the intention-to-treat (ITT) population who had severe acute respiratory syndrome coronavirus 2 infection confirmed by molecular or serological testing before randomisation (ie, modified ITT [mITT] population). Safety was assessed in all patients according to which treatment they received, regardless of original group assignment. This trial was registered at ClinicalTrials.gov, NCT04321278. **Findings:** 447 patients were enrolled from March 28 to May 19, 2020. COVID-19 was confirmed in 397 patients who constituted the mITT population, of whom 214 were assigned to the azithromycin group and 183 to the control group. In the mITT population, the primary endpoint was not significantly different between the azithromycin and control groups (OR 1.36 [95% CI 0.94-1.97], p=0.11). Rates of adverse events, including clinically relevant ventricular arrhythmias, resuscitated cardiac arrest, acute kidney failure, and corrected QT interval prolongation, were not significantly different between groups. **Interpretation:** In patients with severe

COVID-19, adding azithromycin to standard of care treatment (which included hydroxychloroquine) did not improve clinical outcomes. Our findings do not support the routine use of azithromycin in combination with hydroxychloroquine in patients with severe COVID-19.

Publication Type

Journal article.

<144>

Accession Number

20203509227

Author

Dennis, A.

Title

Remdesivir and COVID-19.

Source

Lancet (British edition); 2020. 396(10256):952-952. 5 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Publication Type

Journal article.

<145>

Accession Number

20203504266

Author

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

El-Wahab, E. W. A.; Eassa, S. M.; Metwally, M.; Al-Hraishawi, H.; Omar, S. R.

Title

SARS-CoV-2 transmission channels: a review of the literature.

Source

MEDICC Review; 2020. 22(4):51-69. 301 ref.

Publisher

MEDICC

Location of Publisher

Decatur

Country of Publication

USA

Abstract

BACKGROUND: The novel coronavirus SARS-CoV-2 is responsible for the current global pandemic. There is a concerted effort within the global scientific community to identify (and thereby potentially mitigate) the possible modes of transmission through which the virus spreads throughout populations. **OBJECTIVE:** Summarize the ways in which SARS-CoV-2 is transmitted and provide scientific support for the prevention and control of COVID-19. **EVIDENCE AQUISITION:** We conducted an extensive literature search using electronic databases for scientific articles addressing SARSCoV-2 transmission published from December 28, 2019 through July 31, 2020. We retrieved 805 articles, but only 302 were included and discussed in this review. The report captured relevant studies investigating three main areas: (1) viral survival, (2) transmission period and transmissibility, and (3) routes of viral spread. **DEVELOPMENT:** Currently available evidence indicates that SARSCoV-2 seems to have variable stability in different environments and is very sensitive to oxidants, such as chlorine. Temperature and humidity are important factors influencing viral survival and transmission. SARSCoV-2 may be transmitted from person to person through several different routes. The basic mechanisms of SARS-CoV-2 transmission person-to-person contact through respiratory droplets, or via indirect contact. Aerosolized transmission is likely the dominant route for the spread of SARS-CoV-2, particularly in healthcare facilities. Although SARS-CoV-2 has been detected in non-respiratory specimens, including stool, blood and breast milk, their role in transmission remains uncertain. A complicating factor in disease control is viral transmission by asymptomatic individuals and through what would otherwise be understood as innocuous human activities. **CONCLUSIONS:** This article provides a review of the published research regarding human-to-human transmission of SARS-CoV-2 and insights into developing effective control strategies to stop viral propagation.

Publication Type

Journal article.

<146>

Accession Number

20203505493

Author

Marti, C.; Sanchez-Mendez, J. I.

Title

Neoadjuvant endocrine therapy for luminal breast cancer treatment: a first-choice alternative in times of crisis such as the COVID-19 pandemic.

Source

ecancermedalscience; 2020. 14(1027)26 ref.

Publisher

ecancer Global Foundation

Location of Publisher

Bristol

Country of Publication

UK

Abstract

The epidemiological emergency caused by CoV-2 (COVID-19) has changed priorities in breast cancer management. In those places where the pandemic has had the greatest effect, it is of paramount importance for most patients to be at home, reducing or postponing their attendance at clinics, as well as avoiding surgeries. In this scenario, neoadjuvant endocrine treatment could be an appropriate alternative treatment for hormone receptor positive breast cancer (luminal-like tumours) in order to minimise hospital admissions and to delay elective surgeries. Accordingly, we present a simple protocol that can be applied to most cases of luminal-like breast cancer and is appropriate for the majority of secondary or tertiary medical centres, or even primary care.

Publication Type

Journal article.

<147>

Accession Number

20203509788

Author

Iversen, J.; Sabin, K.; Chang, J.; Thomas, R. M.; Prestage, G.; Strathdee, S. A.; Maher, L.

Title

COVID-19, HIV and key populations: cross-cutting issues and the need for population-specific responses.

Source

Journal of the International AIDS Society; 2020. 23(10)41 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Introduction: Key populations at elevated risk to contract or transmit HIV may also be at higher risk of COVID-19 complications and adverse outcomes associated with public health prevention measures. However, the conditions faced by specific populations vary according to social, structural and environmental factors, including stigma and discrimination, criminalization, social and economic safety nets and the local epidemiology of HIV and COVID-19, which determine risk of exposure and vulnerability to adverse health outcomes, as well as the ability to comply with measures such as physical distancing. This commentary identifies common vulnerabilities and cross-cutting themes in terms of the impacts of COVID-19 on key populations before addressing issues and concerns specific to particular populations. Discussion: Cross-cutting themes include direct impacts such as disrupted access to essential medicines, commodities and services such as anti-retroviral treatment, HIV pre-exposure prophylaxis, opioid agonist treatment, viral load monitoring, HIV and sexually transmitted infections testing, condoms and syringes. Indirect impacts include significant collateral damage arising from prevention measures which restrict human rights, increase or impose criminal penalties, and expand police powers to target vulnerable and criminalized populations. Significant heterogeneity in the COVID-19 pandemic, the underlying HIV epidemic and the ability of key populations to protect themselves means that people who inject drugs and sex workers face particular challenges, including indirect impacts as a result of police targeting, loss of income and sometimes both. Geographical variations mean that transgender people and men who have sex with men in regions like Africa and the middle east remain criminalized, as well as stigmatized and discriminated against, increasing their vulnerability to adverse outcomes in relation to COVID-19. Conclusions: Disruptions to both licit and illicit supply chains, loss of income and livelihoods and changes in behaviour as a result of lockdowns and physical distancing have the potential to exacerbate the impacts of the COVID-19 pandemic on key populations. While these impacts will vary significantly, human-rights approaches to COVID-19 emergency laws and public health prevention measures that are population-specific and sensitive, will be key to reducing adverse health outcomes and ensuring that no one is left behind.

Publication Type

Journal article.

<148>

Accession Number

20203469797

Author

Guerra, C. A.; Donack, O. T.; Vaz, L. M.; Nlang, J. A. M.; Nchama, L. O. N.; Eyono, J. N. M.; Rivas, M. R.; Phiri, W. P.; Schwabe, C.; Aldrich, E.; Ratsirarson, J.; Fuseini, G.; Garcia, G. A.

Title

Malaria vector control in sub-Saharan Africa in the time of COVID-19: no room for complacency.

Source

BMJ Global Health; 2020. 5(9)15 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

In sub-Saharan Africa (SSA), the COVID-19 pandemic could cause major disruptions to the delivery of malaria vector control interventions. Such disruptions could potentially lead to significant increases in malaria morbidity and mortality in the region. The challenges for sustaining malaria vector control are multiple, from funding shortages to obstacles during implementation. The latter are more difficult to appreciate and are described from experience in the field. There is a need for major commitment from governments, organizations and individuals to avert a malaria public health disaster in SSA. The worst may well be yet to come in the COVID-19 pandemic and its impact may take years to dissipate. Meanwhile, SSA countries cannot afford to relax their efforts at malaria control to avoid woeful health consequences from this disease on top of the potential devastation of COVID-19. This pandemic is very far from over and other severe pandemics will likely follow before countries achieve malaria elimination. If COVID-19 is to teach us something about malaria, it should be how to keep up the fight against this old scourge during the hardest of times. This could also serve as an opportunity to boost the priority that malaria control deserves in the global public health agenda in normal times.

Publication Type

Journal article.

<149>

Accession Number

20203519190

Author

Poignon, C.; Blaize, M.; Vezinet, C.; Lampros, A.; Monsel, A.; Fekkar, A.

Title

Invasive pulmonary fusariosis in an immunocompetent critically ill patient with severe COVID-19.

Source

Clinical Microbiology and Infection; 2020. 26(11):1582-1584. 7 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Publication Type

Correspondence.

<150>

Accession Number

20203514194

Author

Kuhlmann, E.; Falkenbach, M.; Klasa, K.; Pavolini, E.; Ungureanu, M. I.

Title

Migrant carers in Europe in times of COVID-19: a call to action for European health workforce governance and a public health approach. (Special Issue: The health labour market and the 'human face' of the health workforce: analysis, advocacy and action.)

Source

European Journal of Public Health; 2020. 30(Suppl. 4):iv22-iv27. 33 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The present study explores the situation of migrant carers in long-term care (LTC) in European Union Member States and the disruptions caused by the COVID-19 pandemic from a public health perspective. The aim is to bring LTC migrant carers into health workforce research and highlight a need for trans-sectoral and European health workforce governance. We apply an exploratory approach based on secondary sources, document analysis and expert information. A framework comprising four major

dimensions was developed for data collection and analysis: LTC system, LTC health labour market, LTC labour migration policies and specific LTC migrant carer policies during the COVID-19 crisis March to May 2020. Material from Austria, Italy, Germany, Poland and Romania was included in the study. Results suggest that undersupply of carers coupled with cash benefits and a culture of family responsibility may result in high inflows of migrant carers, who are channelled in low-level positions or the informal care sector. COVID-19 made the fragile labour market arrangements of migrant carers visible, which may create new health risks for both the individual carer and the population. Two important policy recommendations are emerging: to include LTC migrant carers more systematically in public health and health workforce research and to develop European health workforce governance which connects health system needs, health labour markets and the individual migrant carers.

Publication Type

Journal article.

<151>

Accession Number

20203517221

Author

Lee Soohyeon; Lim AhReum; Kim MinJa; Choi YoonJi; Kim JuWon; Park KyongHwa; Shin SangWon; Kim YeulHong

Title

Innovative countermeasures can maintain cancer care continuity during the coronavirus disease-2019 pandemic in Korea.

Source

European Journal of Cancer; 2020. 136:69-75.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Even though Korea was known to have the highest number of coronavirus disease-2019 (COVID-19) infection in the early phase of the pandemic, Korea was able to successfully flatten the curve in a short period of time without extreme measures. We compared the status of cancer management before and after COVID-19 and analysed how cancer care continuity was maintained in Korea. **Patients and methods:** We investigated the medical records on the number of cancer diagnosis, cancer surgery, radiation therapy and scheduled chemotherapy conducted in Korea University Anam Hospital from January

1 to April 30, 2019 and from the same period in 2020. We also collected the data of metastatic cancer patients who were hospitalized due to respiratory disease. Results: Of all diagnoses, 1694 cancer diagnoses were made in the study period of 2019, and 1445 diagnoses in 2020 (decreased by 14.7%); the cancer surgery performed 830 and 800 cases; the set-up for radiation therapy decreased from 185 to 140 cases; the number of systemic chemotherapies for metastatic cancer patients treated in department of medical oncology increased from 2555 to 2878 cases. Among hospitalized patients, emergency centre visit, intensive care unit admission, discharge after recovery and death reveal no drastic changes. Conclusions: Routine cancer care for patients with metastatic cancer has been maintained without significant difference before and after the COVID-19 pandemic. The Korean government's innovative countermeasures in the early phase of outbreak made it possible for cancer care practitioners to provide cancer patients with regular care under the standard infection control protocol.

Publication Type

Journal article.

<152>

Accession Number

20203517206

Author

Elhadi, M.; Msherghi, A.; Elgzairi, M.; Alhashimi, A.; Bouhuwaish, A.; Biala, M.; Abuelmeda, S.; Khel, S.; Khaled, A.; Alsoufi, A.; Elmabrouk, A.; Alshiteewi, F. B.; Alhadi, B.; Alhaddad, S.; Gaffaz, R.; Elmabrouk, O.; Hamed, T. B.; Alameen, H.; Albakoush, A.

Title

Psychological status of healthcare workers during the civil war and COVID-19 pandemic: a cross-sectional study.

Source

Journal of Psychosomatic Research; 2020. 13748 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Objective: Healthcare workers, particularly those working in departments that provide care for patients with coronavirus disease 2019 (COVID-19), are at a higher risk of this contagious disease than those who work in other departments. The aim of this study was to assess the psychological status of healthcare workers during the COVID-19 outbreak, which has compounded Libya's existing civil war-related problems.

Methods: A multi-center cross-sectional survey on depressive symptoms, anxiety symptoms, and abuse was conducted. The Hospital Anxiety and Depression Scale (HADS) was used to measure the prevalence of anxiety and depressive symptoms among healthcare workers. Results: The data of 745 eligible healthcare workers from 15 hospitals were analyzed. Depressive and anxiety symptoms were compared to the basic characteristics of the participants to determine the association. A total of 420 (56.3%) participants had depressive symptoms, while 348 (46.7%) had anxiety symptoms. Age, residency status, department, stigmatization, and living in a conflict zone were significantly associated with depressive symptoms. Age, department, years of experience, working hours per week, internal displacement, stigmatization, living in a conflict zone, and verbal abuse were significantly associated with anxiety symptoms. Conclusion: Our study presents important findings regarding depressive, anxiety symptoms, and abuse among physicians providing care during the COVID-19 outbreak and civil war in Libya. It also demonstrates several factors that can be associated with depressive and anxiety symptoms in this population.

Publication Type

Journal article.

<153>

Accession Number

20203518441

Author

Vermisoglou, E.; Panacek, D.; Kolleboyina Jayaramulu; Pykal, M.; Frebort, I.; Kolar, M.; Hajduch, M.; Zboril, R.; Otyepka, M.

Title

Human virus detection with graphene-based materials.

Source

Biosensors & Bioelectronics; 2020. 166many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Our recent experience of the COVID-19 pandemic has highlighted the importance of easy-to-use, quick, cheap, sensitive and selective detection of virus pathogens for the efficient monitoring and treatment of virus diseases. Early detection of viruses provides essential information about possible efficient and targeted treatments, prolongs the therapeutic window and hence reduces morbidity. Graphene is a lightweight, chemically stable and conductive material that can be successfully utilized for the detection of

various virus strains. The sensitivity and selectivity of graphene can be enhanced by its functionalization or combination with other materials. Introducing suitable functional groups and/or counterparts in the hybrid structure enables tuning of the optical and electrical properties, which is particularly attractive for rapid and easy-to-use virus detection. In this review, we cover all the different types of graphene-based sensors available for virus detection, including, e.g., photoluminescence and colorimetric sensors, and surface plasmon resonance biosensors. Various strategies of electrochemical detection of viruses based on, e.g., DNA hybridization or antigen-antibody interactions, are also discussed. We summarize the current state-of-the-art applications of graphene-based systems for sensing a variety of viruses, e.g., SARS-CoV-2, influenza, dengue fever, hepatitis C virus, HIV, rotavirus and Zika virus. General principles, mechanisms of action, advantages and drawbacks are presented to provide useful information for the further development and construction of advanced virus biosensors. We highlight that the unique and tunable physicochemical properties of graphene-based nanomaterials make them ideal candidates for engineering and miniaturization of biosensors.

Publication Type

Journal article.

<154>

Accession Number

20203513493

Author

Schein, F.; Munoz-Pons, H.; Mahinc, C.; Grange, R.; Cathebras, P.; Flori, P.

Title

Fatal aspergillosis complicating severe SARS-CoV-2 infection: a case report.

Source

Journal de Mycologie Medicale; 2020. 30(4)

Publisher

Elsevier Masson

Location of Publisher

Paris

Country of Publication

France

Abstract

As aspergillosis is a well-known complication of severe influenza, we suggest that SARS-CoV-2 might be a risk factor for invasive aspergillosis (IA). We report the case of an 87 year-old woman, with no history of immune deficit, admitted in our emergency room for severe respiratory distress. Coronavirus disease 2019 (COVID-19) diagnosis was confirmed by a SARS-CoV-2 reverse transcriptase polymerase chain reaction (PCR) on nasal swab. On day 14, pulmonary examination deteriorated with haemoptysis and a major

increase of inflammatory response. A computed tomography (CT) scan revealed nodules highly suggestive of IA. Aspergillus antigen was found highly positive in sputum and blood, as was Aspergillus spp PCR on serum. Sputum cultures remained negative for Aspergillus. This patient died rapidly from severe respiratory failure, despite the addition of voriconazole. Considering SARS-CoV-2 acute respiratory distress syndrome (ARDS) as an acquired immunodeficiency, we report here a new case of "probable" IA based on clinical and biological arguments, in accordance with the last consensus definition of invasive fungal disease. On a routine basis, we have detected 30% of aspergillosis carriage (positive culture and antigen in tracheal secretions) in critically ill patients with COVID-19 in our centre. Further studies will have to determine whether sputum or tracheal secretions should be systematically screened for fungal investigations in intensive care unit (ICU) COVID-19 patients to early diagnose and treat aspergillosis.

Publication Type

Journal article.

<155>

Accession Number

20203513478

Author

Hargrave, C.

Title

COVID-19: implications of self-isolation and social distancing for the emotional and behavioural health of equines, parrots and small prey pets.

Source

Companion Animal; 2020. 25(4)15 ref.

Publisher

MA Healthcare Limited

Location of Publisher

London

Country of Publication

UK

Abstract

As the COVID-19 pandemic brings together health professionals from across the world to address the difficulties in controlling and reducing its spread, experts in human health are also considering the cost of control measures on human psychological welfare. This article concludes a short series of three pieces, considering the immediate consequences to our companion animals of reduced access to environmental and social stimulation outside the home while these animals experience increased exposure to social stimuli within the home. Some long-term emotional and behavioural effects are also considered. This

article focuses on the welfare changes to equines, parrots and small prey animals as COVID-19 restrictions continue.

Publication Type

Journal article.

<156>

Accession Number

20203511571

Author

Elfiky, A. A.; Baghdady, A. M.; Ali, S. A.; Ahmed, M. I.

Title

GRP78 targeting: hitting two birds with a stone.

Source

Life Sciences; 2020. 260122 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Background: Glucose regulating protein 78 (GRP78) is one member of the Heat Shock Protein family of chaperone proteins (HSPA5) found in eukaryotes. It acts as the master of the Unfolded Protein Response (UPR) process in the lumen of the Endoplasmic Reticulum (ER). Scope: Under the stress of unfolded proteins, GRP78 binds to the unfolded proteins to prevent misfolding, while under the load of the unfolded protein, it drives the cell to autophagy or apoptosis. Several attempts reported the overexpression of GRP78 on the cell membrane of cancer cells and cells infected with viruses or fungi. Major conclusions: Cell-surface GRP78 is used as a cancer cell target in previous studies. Additionally, GRP78 is used as a drug target to stop the progression of cancer cells by different compounds, including peptides, antibodies, and some natural compounds. Additionally, it can be used as a protein target to reduce the infectivity of different viruses, including the pandemic SARS-CoV-2. Besides, GRP78 targeting is used in diagnosis and imaging modalities using radionuclides. General significance: This review summarizes the various attempts that used GRP78 both in therapy (fighting cancer, viral and fungal infections) and diagnosis (imaging).

Publication Type

Journal article.

<157>

Accession Number

20203511569

Author

Cheudjeu, A.

Title

Correlation of D-xylose with severity and morbidity-related factors of COVID-19 and possible therapeutic use of D-xylose and antibiotics for COVID-19.

Source

Life Sciences; 2020. 260169 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

The SARS-Cov-2 pandemic that currently affects the entire world has been shown to be especially dangerous in the elderly (≥ 65 years) and in smokers, with notably strong comorbidity in patients already suffering from chronic diseases, such as Type 2 diabetes, cancers, chronic respiratory diseases, obesity, and hypertension. Inflammation of the lungs is the main factor leading to respiratory distress in patients with chronic respiratory disease and in patients with severe COVID-19. Several studies have shown that inflammation of the lungs in general and Type 2 diabetes are accompanied by the degradation of glycosaminoglycans (GAGs), especially heparan sulfate (HS). Several studies have also shown the importance of countering the degradation of HS in lung infections and Type 2 diabetes. D-xylose, which is the initiating element for different sulfate GAG chains (especially HS), has shown regeneration properties for GAGs. D-xylose and xylitol have demonstrated anti-inflammatory, antiglycemic, antiviral, and antibacterial properties in lung infections, alone or in combination with antibiotics. Considering the existing research on COVID-19 and related to D-xylose/xylitol, this review offers a perspective on why the association between D-xylose and antibiotics may contribute to significantly reducing the duration of treatment of COVID-19 patients and why some anti-inflammatory drugs may increase the severity of COVID-19. A strong correlation with scurvy, based on gender, age, ethnicity, smoking status, and obesity status, is also reviewed. Related to this, the effects of treatment with plants such as Artemisia are also addressed.

Publication Type

Journal article.

<158>

Accession Number

20203511529

Author

Li, W.; Schafer, A.; Kulkarni, S. S.; Liu, X.; Martinez, D. R.; Chen, C.; Sun, Z.; Leist, S. R.; Drelich, A.; Zhang LiYong; Ura, M. L.; Berezuk, A.; Chittori, S.; Leopold, K.; Mannar, D.; Srivastava, S. S.; Zhu Xing; Peterson, E. C.; Tseng ChienTe; Mellors, J. W.; Falzarano, D.; Subramaniam, S.; Baric, R. S.; Dimitrov, D. S.

Title

High potency of a bivalent human VH domain in SARS-CoV-2 animal models.

Source

Cell (Cambridge); 2020. 183(2):429-441.e16.

Publisher

Cell Press

Location of Publisher

Cambridge

Country of Publication

USA

Abstract

Novel COVID-19 therapeutics are urgently needed. We generated a phage-displayed human antibody VH domain library from which we identified a high-affinity VH binder ab8. Bivalent VH, VH-Fc ab8, bound with high avidity to membrane-associated S glycoprotein and to mutants found in patients. It potently neutralized mouse-adapted SARS-CoV-2 in wild-type mice at a dose as low as 2 mg/kg and exhibited high prophylactic and therapeutic efficacy in a hamster model of SARS-CoV-2 infection, possibly enhanced by its relatively small size. Electron microscopy combined with scanning mutagenesis identified ab8 interactions with all three S protomers and showed how ab8 neutralized the virus by directly interfering with ACE2 binding. VH-Fc ab8 did not aggregate and did not bind to 5,300 human membrane-associated proteins. The potent neutralization activity of VH-Fc ab8 combined with good developability properties and cross-reactivity to SARS-CoV-2 mutants provide a strong rationale for its evaluation as a COVID-19 therapeutic.

Publication Type

Journal article.

<159>

Accession Number

20203511517

Author

Brocato, R. L.; Principe, L. M.; Kim, R. K.; Zeng XianKun; Williams, J. A.; Liu YanAn; Li Rong; Smith, J. M.; Golden, J. W.; Gangemi, D.; Youssef, S.; Wang ZhongDe; Glanville, J.; Hooper, J. W.

Title

Disruption of adaptive immunity enhances disease in SARS-CoV-2-infected Syrian hamsters.

Source

Journal of Virology; 2020. 94(22)25 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

Animal models recapitulating human COVID-19 disease, especially severe disease, are urgently needed to understand pathogenesis and to evaluate candidate vaccines and therapeutics. Here, we develop novel severe-disease animal models for COVID-19 involving disruption of adaptive immunity in Syrian hamsters. Cyclophosphamide (CyP) immunosuppressed or RAG2 knockout (KO) hamsters were exposed to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by the respiratory route. Both the CyP-treated and RAG2 KO hamsters developed clinical signs of disease that were more severe than those in immunocompetent hamsters, notably weight loss, viral loads, and fatality (RAG2 KO only). Disease was prolonged in transiently immunosuppressed hamsters and was uniformly lethal in RAG2 KO hamsters. We evaluated the protective efficacy of a neutralizing monoclonal antibody and found that pretreatment, even in immunosuppressed animals, limited infection. Our results suggest that functional B and/or T cells are not only important for the clearance of SARS-CoV-2 but also play an early role in protection from acute disease.

Publication Type

Journal article.

<160>

Accession Number

20203511516

Author

Froggatt, H. M.; Heaton, B. E.; Heaton, N. S.

Title

Development of a fluorescence-based, high-throughput SARS-CoV-2 3 CLpro reporter assay.

Source

Journal of Virology; 2020. 94(22)34 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

In late 2019, a human coronavirus, now known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), emerged, likely from a zoonotic reservoir. This virus causes COVID-19, has infected millions of people, and has led to hundreds of thousands of deaths across the globe. While the best interventions to control and ultimately stop the pandemic are prophylactic vaccines, antiviral therapeutics are important to limit morbidity and mortality in those already infected. At this time, only one FDA-approved anti-SARS-CoV-2 antiviral drug, remdesivir, is available, and unfortunately, its efficacy appears to be limited. Thus, the identification of new and efficacious antivirals is of the highest importance. In order to facilitate rapid drug discovery, flexible, sensitive, and high-throughput screening methods are required. With respect to drug targets, most attention is focused on either the viral RNA-dependent RNA polymerase or the main viral protease, 3CLpro. 3CLpro is an attractive target for antiviral therapeutics, as it is essential for processing newly translated viral proteins and the viral life cycle cannot be completed without protease activity. In this work, we report a new assay to identify inhibitors of 3CLpro. Our reporter is based on a green fluorescent protein (GFP)-derived protein that fluoresces only after cleavage by 3CLpro. This experimentally optimized reporter assay allows for antiviral drug screening in human cell culture at biosafety level 2 (BSL2) with high-throughput compatible protocols. Using this screening approach in combination with existing drug libraries may lead to the rapid identification of novel antivirals to suppress SARS-CoV-2 replication and spread.

Publication Type

Journal article.

<161>

Accession Number

20203518964

Author

Mazzoni, A.; Salvati, L.; Maggi, L.; Capone, M.; Vanni, A.; Spinicci, M.; Mencarini, J.; Caporale, R.; Peruzzi, B.; Antonelli, A.; Trotta, M.; Zammarchi, L.; Ciani, L.; Gori, L.; Lazzeri, C.; Matucci, A.; Vultaggio, A.; Rossi, O.; Almerigogna, F.; Parronchi, P.; Fontanari, P.; Lavorini, F.; Peris, A.; Rossolini, G. M.; Bartoloni, A.; et al.

Title

Impaired immune cell cytotoxicity in severe COVID-19 is IL-6 dependent.

Source

Journal of Clinical Investigation; 2020. 130(9):4694-4703. 46 ref.

Publisher

American Society for Clinical Investigation

Location of Publisher

Ann Arbor

Country of Publication

USA

Abstract

BACKGROUND. Coronavirus disease 19 (COVID-19) is an emerging infectious disease caused by SARS-CoV-2. Antiviral immune response is crucial to achieve pathogen clearance; however, in some patients an excessive and aberrant host immune response can lead to an acute respiratory distress syndrome. The comprehension of the mechanisms that regulate pathogen elimination, immunity, and pathology is essential to better characterize disease progression and widen the spectrum of therapeutic options. **METHODS.** We performed a flow cytometric characterization of immune cell subsets from 30 patients with COVID-19 and correlated these data with clinical outcomes. **RESULTS.** Patients with COVID-19 showed decreased numbers of circulating T, B, and NK cells and exhibited a skewing of CD8+ T cells toward a terminally differentiated/senescent phenotype. In agreement, CD4+ T and CD8+ T, but also NK cells, displayed reduced antiviral cytokine production capability. Moreover, a reduced cytotoxic potential was identified in patients with COVID-19, particularly in those who required intensive care. The latter group of patients also showed increased serum IL-6 levels that inversely correlated to the frequency of granzyme A-expressing NK cells. Off-label treatment with tocilizumab restored the cytotoxic potential of NK cells. **CONCLUSION.** The association between IL-6 serum levels and the impairment of cytotoxic activity suggests the possibility that targeting this cytokine may restore antiviral mechanisms. **FUNDING.** This study was supported by funds from the Department of Experimental and Clinical Medicine of University of Florence (the ex-60% fund and the "Excellence Departments 2018-2022 Project") derived from Ministero dell'Istruzione, dell'Universita e della Ricerca (Italy).

Publication Type

Journal article.

<162>

Accession Number

20203518953

Author

Shields, L. B. E.; Hester, S. T.; Schulz, P. S.; Johnson, C.; Hamilton, R.; Wilde, A. M.; Honaker, J. T.

Title

Healthcare system approach to managing COVID-19 in a metropolitan community in Kentucky.

Source

Medicine (Baltimore); 2020. 99(38)18 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

The novel coronavirus disease 2019 (COVID-19) pandemic emerged in Wuhan, China in December 2019 and has subsequently escalated exponentially worldwide. As this virus has never been experienced previously, it poses a significant challenge to healthcare systems who are poorly equipped to handle the large number of gravely ill patients who seek medical attention. Additionally, treating providers are placing their own lives at risk due to the lack of adequate personal protective equipment. We are reporting the proactive measures that were implemented at our healthcare system in a metropolitan community in Kentucky to address COVID-19. The primary goal was to maintain a safe environment for providers, staff, and patients. Three key strategies were incorporated at our healthcare system, including (1) innovative processes/operations; (2) clear and transparent communication; and (3) adaptations in infrastructure. As the COVID-19 pandemic is highly fluid, we continually update our policies according to national, state, and local guidelines and recommendations.

Publication Type

Journal article.

<163>

Accession Number

20203512730

Author

Apuke, O. D.; Bahiyah Omar

Title

Modelling the antecedent factors that affect online fake news sharing on COVID-19: the moderating role of fake news knowledge.

Source

Health Education Research; 2020. 35(5):490-503. 40 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

We proposed a conceptual model combining three theories: uses and gratification theory, social networking sites (SNS) dependency theory and social impact theory to understand the factors that predict fake news sharing related to COVID-19. We also tested the moderating role of fake news knowledge in reducing the tendency to share fake news. Data were drawn from social media users (n=650) in Nigeria, and partial least squares was used to analyse the data. Our results suggest that tie strength was the strongest predictor of fake news sharing related to COVID-19 pandemic. We also found perceived herd, SNS dependency, information-seeking and parasocial interaction to be significant predictors of fake news sharing. The effect of status-seeking on fake news sharing, however, was not significant. Our results also established that fake news knowledge significantly moderated the effect of perceived herd, SNS dependency, information-seeking, parasocial interaction on fake news sharing related to COVID-19. However, tie strength and status-seeking effects were not moderated.

Publication Type

Journal article.

<164>

Accession Number

20203512729

Author

Ezeah, G.; Ogechi, E. O.; Ohia, N. C.; Celestine, G. V.

Title

Measuring the effect of interpersonal communication on awareness and knowledge of COVID-19 among rural communities in eastern Nigeria.

Source

Health Education Research; 2020. 35(5):481-489. 34 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Awareness and knowledge have been identified as essential requirements to successfully combat the global threat which COVID-19 currently poses. Rural communities are particularly at risk because of their low socio-economic status and high illiteracy level. There is currently uncertainty regarding how to effectively raise awareness about the pandemic and educate rural communities about it. In this study, we tested the effectiveness of interpersonal communication in awareness creation and knowledge about COVID-19 among rural communities in a developing country. We tested three hypotheses at 0.05 level of significance. The sample size was made up 470 participants. The questionnaire served as the instrument for data collection. In the analysis of data, both descriptive and inferential statistics were used. The results demonstrate that interpersonal communication is effective in creating awareness about COVID-19 among rural communities. It was also found that interpersonal communication was effective in improving knowledge about the pandemic among rural communications. We explored the implications of these findings on healthcare delivery.

Publication Type

Journal article.

<165>

Accession Number

20203512728

Author

Apuke, O. D.; Bahiyah Omar

Title

How do Nigerian newspapers report COVID-19 pandemic? The implication for awareness and prevention.

Source

Health Education Research; 2020. 35(5):471-480. 19 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This study examined media coverage of COVID-19 in Nigeria with attention to the frequency and depth of coverage, story format, news sources, media tone and themes. Four widely read newspapers were content analysed between February 2020 and April 2020. Focus was on Daily Sun, Vanguard, Daily Trust and Leadership. Results indicated that the Nigerian media performed well in terms of covering the pandemic, which in turn created awareness. However, the coverage was not in-depth as most of the reported stories were short and were predominantly straight news. It was also observed that the media cited more of the Nigeria Centre for Disease Control (NCDC) and government officials. Further findings disclosed that most of the stories were alarming and induced panic. Most common topics were coverage of cases in Nigeria, death rates and concerns about Nigeria's preparedness. Public sensitization and education were sparingly covered. Ethics healthcare workers could adhere to received minimal attention. The media should focus more on sensitizing and educating the public on the necessary steps to take in curbing the virus. They should refrain from over usage of alarming and panic tone in presenting the stories of COVID-19 pandemic in Nigeria.

Publication Type

Journal article.

<166>

Accession Number

20203512727

Author

Gever, V. C.; Ezeah, G.

Title

The media and health education: did Nigerian media provide sufficient warning messages on coronavirus disease?

Source

Health Education Research; 2020. 35(5):460-470. 29 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Previous studies on media coverage of health issues hardly recognize the role of time in moderating media contents. Instead, scholars most often examine how news media report health issues. In this study, we

recognized the role of time by taking into account how media report differs based on when a global outbreak is confirmed in a country and when it is not. We focused on coronavirus disease 2019 (COVID-19) and examined six media - two TV stations, two newspapers and two radio stations. We content-analysed 537 stories and found that there were few stories about the virus before it was confirmed in Nigeria. But as soon as Nigeria recorded a confirmed case, the number of stories tripled. We also noticed that story format and recommendation on health behaviour were also closely linked to the COVID-19 status of Nigeria. However, we did not find an association between Nigeria's COVID-19 status and policy recommendation among the media studied. Therefore, this study concludes that Nigerian media did not provide sufficient health warning messages on COVID-19 before its spread to the country.

Publication Type

Journal article.

<167>

Accession Number

20203473935

Author

Manoj Sharma

Title

Conceptualizing the nexus of migration and food security during COVID-19.

Source

Journal of Agriculture, Food Systems and Community Development; 2020. 9(4):181-185. 15 ref.

Publisher

New Leaf Associates

Location of Publisher

Ithaca

Country of Publication

USA

Abstract

Migration has been a part of the livelihood strategy and risk diversification to relieve crises. Food insecurity as a consequence as well as a cause of migration demands review during the COVID-19 pandemic. This paper is an attempt to explore the dynamics and vulnerabilities that ensue from the nexus of migration, food security, and COVID-19, as the economic crisis of COVID-19 seems more intensive when viewed through a migration lens. The vulnerability of the economy based on food imports and remittances is heightened by COVID-19. The whole nexus of migration and food security has shifted; even the positive aspects of migration are predisposed to vulnerabilities.

Publication Type

Journal article.

<168>

Accession Number

20203473930

Author

Ginanneschi, M.

Title

The future of food after COVID-19 through the lens of anthropology.

Source

Journal of Agriculture, Food Systems and Community Development; 2020. 9(4):157-159. 10 ref.

Publisher

New Leaf Associates

Location of Publisher

Ithaca

Country of Publication

USA

Abstract

This commentary uses the lens of anthropology to imagine the consequences of COVID-19 for the food system. It explores the different cultural meanings of food and presents the pandemic as a social phenomenon. All of these elements suggest the possibility of a deep and widespread impact and urge economic actors to consider the broader context.

Publication Type

Journal article.

<169>

Accession Number

20203473923

Author

Bollido, M. E.

Title

Economic security assessment of San Jorge, Samar, Philippines, as it experiences coronavirus.

Source

Journal of Agriculture, Food Systems and Community Development; 2020. 9(4):131-134. 3 ref.

Publisher

New Leaf Associates

Location of Publisher

Ithaca

Country of Publication

USA

Abstract

This study assesses the economic security of the city of San Jorge, Samar, Philippines, in terms of livelihood, income, and health in order to analyze the extent of the effect of the novel coronavirus (COVID-19) on the populace. The study evaluates the responses provided by the government, private nongovernmental organizations (NGOs), and international nongovernmental organizations (INGOs). It also looks at how people coped with the crisis during and after the community quarantine. Families received cash and food assistance from local government and other concerned INGOs, which was given to augment the expenses for food, health, and education of their children. The families coped with the food shortage by reducing the number of daily meals and by replacing rice in meals with root crops and vegetables.

Publication Type

Journal article.

<170>

Accession Number

20203457749

Author

Macqueen, D.; Mayers, J.

Title

Places to prosper: engaging with youth migration in forest landscapes.

Source

IIED Briefing Paper - International Institute for Environment and Development; 2020. (17754):4 pp.

Publisher

International Institute for Environment and Development

Location of Publisher

London

Country of Publication

UK

Abstract

Youth migration shapes economies and ecologies profoundly. Young men and women bring vibrancy to rural communities. But in rural areas, young people must weigh up their chances for prosperity: whether to remain in their place of origin, migrate in search of education or work, or even return home with new skills, capital and ideas. In many rural areas, forest and farm producer organisations (FFPOs) are the only source of support or employment. FFPOs should engage with youth to develop place-specific strategies, enhance their prospects for prosperity and strengthen their vital attachments to place - whether they are remainers, leavers or returners. Understanding the dynamics of youth migration could also help to 'build back better' after the COVID-19 pandemic, with longer-term benefits for resilient livelihoods, both for young people and FFPOs.

Publication Type

Bulletin.

<171>

Accession Number

20203487680

Author

Schwark, N.; Tiberius, V.; Fabro, M.

Title

How will we dine? Prospective shifts in international haute cuisine and innovation beyond kitchen and plate.

Source

Foods; 2020. 9(10)174 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Haute cuisine, the cooking style for fine dining at gourmet restaurants, has changed over the last decades and can be expected to evolve in the upcoming years. To engage in foresight, the purpose of this study is to identify a plausible future trend scenario for the haute cuisine sector within the next five to ten years, based on today's chefs' views. To achieve this goal, an international, two-stage Delphi study was conducted. The derived scenario suggests that the coronavirus disease 2019 (COVID-19) pandemic will lead to significant restaurant bankruptcies and will raise creativity and innovation among the remaining ones. It is expected that haute cuisine tourism will grow and that menu prices will differ for customer segments. More haute cuisine restaurants will open in Asia and America. Local food will remain a major trend and will be complemented by insect as well as plant-based proteins and sophisticated nonalcoholic food pairings. Restaurant design and the use of scents will become more relevant. Also, private dining and fine dining at home will become more important. The scenario also includes negative projections. These findings can serve as a research agenda for future research in haute cuisine, including the extension of the innovation lens towards the restaurant and the business model. Practical implications include the necessity for haute cuisine restaurants to innovate to cope with increasing competition in several regions. Customers should be seen as co-creators of the value of haute cuisine.

Publication Type

Journal article.

<172>

Accession Number

20203481462

Author

Sohn, A. H.; Phanuphak, N.; Baral, S.; Kamarulzaman, A.

Title

Know your epidemic, know your response: understanding and responding to the heterogeneity of the COVID-19 epidemics across Southeast Asia.

Source

Journal of the International AIDS Society; 2020. 23(7)14 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The current and expected future waves of COVID-19 represent a rapidly emerging threat to the world's public health, which will likely continue to manifest with substantial heterogeneity within and across countries and populations. Governments in Southeast Asia have imposed broad and sometimes punitive lockdowns, in part because of the limited data available to develop a more refined strategy. In order to strike an optimal balance between COVID-19 prevention and mitigation, we encourage leveraging a well-established framework of knowing your epidemic and knowing your response to facilitate rapid transition towards community and government led intervention strategies that are impactful, equitable, and contextually appropriate. For COVID-19, this also means appreciating that resources to support social distancing requirements should be distributed equitably to those who need them most - such as those living in extreme poverty and migrant workers, refugees, and prisoners. In our primarily low and middle-income country contexts, "working from home" is a luxury that only a minority of people can afford. As Southeast Asian countries emerge from lockdown and travel restrictions, and COVID-19 cases potentially resurge, addressing the insufficiencies of our social safety nets is central to implementing pragmatic responses. We also need to sustain the viability of public health and clinical systems to manage competing health priorities, including vaccination, reproductive health, HIV, tuberculosis, acute and chronic non-communicable conditions, and mental health.

Publication Type

Journal article.

<173>

Accession Number

20203488813

Author

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

Title

Pandemics, tourism and global change: a rapid assessment of COVID-19.

Source

Journal of Sustainable Tourism; 2021. 29(1):1-20. 121 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The novel coronavirus (COVID-19) is challenging the world. With no vaccine and limited medical capacity to treat the disease, nonpharmaceutical interventions (NPI) are the main strategy to contain the pandemic. Unprecedented global travel restrictions and stay-at-home orders are causing the most severe disruption of the global economy since World War II. With international travel bans affecting over 90% of the world population and wide-spread restrictions on public gatherings and community mobility, tourism largely ceased in March 2020. Early evidence on impacts on air travel, cruises, and accommodations have been devastating. While highly uncertain, early projections from UNWTO for 2020 suggest international arrivals could decline by 20 to 30% relative to 2019. Tourism is especially susceptible to measures to counteract pandemics because of restricted mobility and social distancing. The paper compares the impacts of COVID-19 to previous epidemic/pandemics and other types of global crises and explores how the pandemic may change society, the economy, and tourism. It discusses why COVID-19 is an analogue to the ongoing climate crisis, and why there is a need to question the volume growth tourism model advocated by UNWTO, ICAO, CLIA, WTTC and other tourism organizations.

Publication Type

Journal article.

<174>

Accession Number

20203504082

Author

Jacobson, T. A.; Smith, L. E.; Hirschhorn, L. R.; Huffman, M. D.

Title

Using implementation science to mitigate worsening health inequities in the United States during the COVID-19 pandemic.

Source

International Journal for Equity in Health; 2020. 19(170):(1 October 2020). 13 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

With the threat of coronavirus disease 2019 (Covid-19) enduring in the United States, effectively and equitably implementing testing, tracing, and self-isolation as key prevention and detection strategies remain critical to safely re-opening communities. As testing and tracing capacities increase, frameworks are needed to inform design and delivery to ensure their effective implementation and equitable distribution,

and to strengthen community engagement in slowing and eventually stopping Covid-19 transmission. In this commentary, we highlight opportunities for integrating implementation research into planned and employed strategies in the United States to accelerate reach and effectiveness of interventions to more safely relax social distancing policies and open economies, schools, and other institutions. Implementation strategies, such as adapting evidence-based interventions based on contextual factors, promoting community engagement, and providing data audit and feedback on implementation outcomes, can support the translation of policies on testing, tracing, social distancing, and public mask use into reality. These data can demonstrate how interventions are put into practice and where adaptation in policy or practice is needed to respond to the needs of specific communities and socially vulnerable populations. Incorporating implementation research into Covid-19 policy design and translation into practice is urgently needed to mitigate the worsening health inequities in the pandemic toll and response. Applying rigorous implementation research frameworks and evaluation systems to the implementation of evidence-based interventions which are adapted to contextual factors can promote effective and equitable pandemic response and accelerate learning both among local stakeholders as well as between states to further inform their varied experiences and responses to the pandemic.

Publication Type

Journal article.

<175>

Accession Number

20203504043

Author

Meneguim, A. C.; Rebello, L.; Das, M.; Ravi, S.; Mathur, T.; Mankar, S.; Kharate, S.; Tipre, P.; Oswal, V.; Iyer, A.; Mansoor, H.; Kalon, S.; Garone, D.; Ferlazzo, G.; Isaakidis, P.

Title

Adapting TB services during the COVID-19 pandemic in Mumbai, India.

Source

International Journal of Tuberculosis and Lung Disease; 2020. 24(10):1119-1121.

Publisher

International Union Against Tuberculosis and Lung Disease

Location of Publisher

Paris

Country of Publication

France

Publication Type

Journal article.

<176>

Accession Number

20203508369

Author

Nunez-Velasco, S.; Mercado-Pimentel, R.; Ochoa-Plascencia, M.; Rodriguez-Arias, R.; Lopez-Espinoza, G.; Gonzalez-Gonzalez, M. E.; Estrella-Sanchez, C.; Ramirez-Huerta, C.

Title

Response to SARS-CoV-2 pandemic in a non-COVID-19 designated Latin-American neurosurgery department.

Source

World Neurosurgery; 2020. 142:506-512. 28 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Background: Mexico declared the first case of novel coronavirus disease (COVID-19) in February 2020. At the time we write this article, our country is facing a community spread phase, expecting a rapid increase in the number of cases and fatalities. The Fray Antonio Alcalde Civil Hospital of Guadalajara has been declared a non-COVID-19 hospital with the mission of providing care to patients already registered and also those transferred from neurosurgical departments of neighboring centers, which have been converted into COVID-19 only hospitals. Methods: An organized response regarding personnel, surgical case selection, operating room behavior, and facility reorganization were designed to prevent an internal coronavirus outbreak in the neurosurgery department at the Fray Antonio Alcalde Civil Hospital of Guadalajara. Results: Distancing actions by the staff and residents, including ward case discussions, neurosurgery rounds, and classes, will be carried out virtually. We classified neurosurgical patients into 4 groups depending on whether their condition demands care in 0-6 hours, 6-48 hours, 48 hours to 14 days, and > 14 days. Subsequently, a questionnaire with epidemiologic, radiologic, clinical, and serologic criteria will be applied to determine the risk of COVID-19 infection to define to which area they are going to be transferred according to the different risk zones in our facility. Conclusions: Despite not being a COVID-19 center, we consider all patients at the neurosurgical ward and staff members as asymptomatic carriers or infected in the preclinical period. Specific measures must be taken to ensure the safety and care of neurosurgical patients and medical staff during the community spread phase.

Publication Type

Journal article.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

<177>

Accession Number

20203508368

Author

Pressman, E.; Noureldine, M. H. A.; Kumar, J. I.; Krafft, P. R.; Mantei, B.; Greenberg, M. S.; Agazzi, S.; Loveren, H. van; Alikhani, P.

Title

The return back to typical practice from the "Battle Plan" of the coronavirus disease 2019 (COVID-19) pandemic: a comparative study.

Source

World Neurosurgery; 2020. 142:e481-e486. 17 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Background: Every aspect of the medical field has been heavily affected by the coronavirus disease 2019 (COVID-19) pandemic, and neurosurgical services are no exception. Several departments have reported their experiences and protocols to provide insights for others impacted. The goals of this study are to report the load and variety of neurosurgical cases and clinic visits after discontinuing the COVID-19 Battle Plan at an academic tertiary care referral center to provide insights for other departments going through the same transition. Methods: The clinical data of all patients who underwent a neurosurgical intervention between May 4, 2020, and June 4, 2020 were obtained from a prospectively maintained database. Data of the control group were retrospectively collected from the medical records to compare the types of surgeries/interventions and clinic visits performed by the same neurosurgical service before the COVID-19 pandemic started. Results: One hundred sixty-one patients underwent neurosurgical interventions, and seven-hundred one patients were seen in clinic appointments, in the 4-week period following easing back from our COVID-19 "Battle Plan." Discontinuing the "Battle Plan" resulted in increases in case load to above-average practice after a week but a continued decrease in clinic appointments throughout the 4 weeks compared with average practice. Conclusions: As policy-shaping crises like pandemics abate, easing back to "typical" practice can be completed effectively by appropriately allocating resources. This can be accomplished by anticipating increases in neurosurgical volume, specifically in the functional/epilepsy and brain tumor subspecialties, as well as continued decreases in neurosurgical clinic volume, specifically in elective spine.

Publication Type

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Journal article.

<178>

Accession Number

20203509516

Author

Laksmiani, N. P. L.; Larasanty, L. P. F.; Santika, A. A. G. J.; Prayoga, P. A. A.; Dewi, A. A. I. K.; Dewi, N. P. A. K.

Title

Active compounds activity from the medicinal plants against SARS-CoV-2 using in silico assay.

Source

Biomedical & Pharmacology Journal; 2020. 13(2):873-881. 29 ref.

Publisher

Oriental Scientific Publishing Company

Location of Publisher

Bhopal

Country of Publication

India

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), better known as the coronavirus, is a new type of coronavirus that is transmitted to humans. This virus infection is called COVID-19 and was first discovered in the city of Wuhan, China, at the end of December 2019. This virus spread quickly and has spread to other regions in China and several countries, including Indonesia. This disease results in coronavirus pandemic 2019-2020. The objective of this research is to determine the inhibitory ability of several active compounds from natural sources against COVID-19 target protein in silico using molecular docking. In silico research was conducted using autodock 4.2 program by evaluating the binding energy between the active compound with ACE2, TMPRSS2, RdRp, 3CLpro and PLpro as the target proteins. All chemical compounds that evaluated such as asiatic acid, andrographolide, apigenin, brazilein, brazilin, catechin, curcumin, gingerol, hesperidin, hesperetin, kaemferol, luteolin, myricetin, naringenin and quercetin had an affinity to target protein. It reflects that active compounds in medicinal plants can be used as antiviral against COVID-19. Brazilein and brazilin from secang wood (*Caesalpinia sappan* L.) have a superior bond to ACE2 and lower binding energy value than chloroquine, arbidol, remdesivir, ribavirin and lopinavir. Citrus sp containing hesperidin had an excellent affinity to TMPRSS2. Secang wood and citrus sp. could be developed as an anti-SARS-CoV-2 through inhibiting ACE2, TMPRSS2, RdRp and protease (3CLpro and PLpro) that interfered the process of virus infection at the entry, replication and advanced stages, causing worst effect such as pneumonia.

Publication Type

Journal article.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

<179>

Accession Number

20203461932

Author

Olive, M. M.; Baldet, T.; Devillers, J.; Fite, J.; Paty, M. C.; Paupy, C.; Quenel, P.; Quillery, E.; Raude, J.; Stahl, J. P.; Thiann-Bo-Morel, M.; Roiz, D.

Title

The COVID-19 pandemic should not jeopardize Dengue control.

Source

PLoS Neglected Tropical Diseases; 2020. 14(9)25 ref.

Publisher

Public Library of Sciences (PLOS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

The concurrent circulation of Dengue and coronavirus disease 2019 (COVID-19) may produce many unfavourable outcomes - such as co-infections; delays in diagnosis, treatment, and mitigation measures; overwhelming of the healthcare system; underreporting of cases; deterioration in surveillance and control interventions; and exacerbation of social inequalities. Indeed, lockdown is greatly compromising the effectiveness of vector control, especially social mobilization campaigns and preventive insecticide spraying in private spaces (indoor and peridomestic spraying). Thus, failure to appropriately implement the full range of vector control interventions can lead to a reduction in their overall effectiveness and an increasing risk of vector-borne diseases circulating. Consequently, the health community and policy makers should develop proactive policies and allocate adequate resources to prevent and manage the resurgence of Dengue and other vector-borne diseases in the new era of COVID-19. Public health systems are faced with the challenge of co-circulation of Dengue and COVID-19 and the many detrimental outcomes - which include co-infections; delays in diagnosis, treatment, and mitigation measures; overwhelming of healthcare systems; underreporting of cases; deterioration of surveillance and vector control interventions; and exacerbation of social inequalities. If the effectiveness of vector control measures is compromised, this can have serious consequences for public health.

Publication Type

Journal article.

<180>

Accession Number

20203461931

Author

Chaumont, C.; Kamara, K.; Baring, E.; Palacio, K.; Power, A.; Lancaster, W.

Title

The SARS-CoV-2 crisis and its impact on neglected tropical diseases: threat or opportunity?

Source

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

Publisher

Public Library of Sciences (PLOS)

Location of Publisher

San Francisco

Country of Publication

USA

Abstract

This article reflects on how the current crisis modifies the future of the NTD sector focused on the five diseases treated through preventative chemotherapy (often called PC-NTDs): soil-transmitted helminths, schistosomiasis, lymphatic filariasis, onchocerciasis, and trachoma. The COVID-19 pandemic will have a long-lasting economic, social, and health impact across the globe. In the field of NTDs, it may lead to reinfections due to delayed care. In this brave new world, the NTD community has a responsibility to advocate for continued prioritization of NTDs on the global health agenda, in alignment with the likely transformed political and funding landscape. This could be a pivotal moment to further strengthen health systems with embedded horizontal platforms for NTD prevention.

Publication Type

Journal article.

<181>

Accession Number

20203498215

Author

Gasmi, A.; Tippairote, T.; Mujawdiya, P. K.; Peana, M.; Menzel, A.; Dadar, M.; Gasmi Benahmed, A.; Bjorklund, G.

Title

Micronutrients as immunomodulatory tools for COVID-19 management.

Source

Clinical Immunology; 2020. 220175 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

COVID-19 rapidly turned to a global pandemic posing lethal threats to overwhelming health care capabilities, despite its relatively low mortality rate. The clinical respiratory symptoms include dry cough, fever, anosmia, breathing difficulties, and subsequent respiratory failure. No known cure is available for COVID-19. Apart from the anti-viral strategy, the supports of immune effectors and modulation of immunosuppressive mechanisms is the rationale immunomodulation approach in COVID-19 management. Diet and nutrition are essential for healthy immunity. However, a group of micronutrients plays a dominant role in immunomodulation. The deficiency of most nutrients increases the individual susceptibility to virus infection with a tendency for severe clinical presentation. Despite a shred of evidence, the supplementation of a single nutrient is not promising in the general population. Individuals at high-risk for specific nutrient deficiencies likely benefit from supplementation. The individual dietary and nutritional status assessments are critical for determining the comprehensive actions in COVID-19.

Publication Type

Journal article.

<182>

Accession Number

20203496354

Author

Rumokoy, L.; Toar, W. L.; Untu, I. M.; Kiroh, H.; Assa, G.

Title

A development strategy of small-scale goats farm in pandemic COVID-19.

Source

Scientific Papers, Series D. Animal Science; 2020. 63(1):204-208. 13 ref.

Publisher

University of Agronomic Sciences and Veterinary Medicine of Bucharest

Location of Publisher

Bucharest

Country of Publication

Romania

Abstract

Small-scale goat farm with local breeds which are often referred to 'kambing kacang' in Minahasa area of North Sulawesi Province, which is generally one of the livestock species that are farmed by people in rural areas. Simple maintenance patterns with relatively small maintenance costs become a reason why this type of livestock is selected by the community to maintain this type of livestock. The purpose of this article is to present a scientific study concerning strategies to develop local goat farms that are generally small scale. The method used in this was a field study and combination of quantitative and qualitative approach using various data from scientific references. The use of local feed for local goat production and online marketing is an option that can help to develop this farm during the Covid-19 pandemic.

Publication Type

Journal article.

<183>

Accession Number

20203497521

Author

Ilyas, S.; Rajiv Ranjan Srivastava; Kim Hyunjung

Title

Disinfection technology and strategies for COVID-19 hospital and bio-medical waste management.

Source

Science of the Total Environment; 2020. 74950 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The isolation wards, institutional quarantine centers, and home quarantine are generating a huge amount of bio-medical waste (BMW) worldwide since the outbreak of novel coronavirus disease-2019 (COVID-19). The personal protective equipment, testing kits, surgical facemasks, and nitrile gloves are the major contributors to waste volume. Discharge of a new category of BMW (COVID-waste) is of great global concern to public health and environmental sustainability if handled inappropriately. It may cause exponential spreading of this fatal disease as waste acts as a vector for SARS-CoV-2, which survives up to 7 days on COVID-waste (like facemasks). Proper disposal of COVID-waste is therefore immediately requires to lower the threat of pandemic spread and for sustainable management of the environmental hazards. Henceforth, in the present article, disinfection technologies for handling COVID-waste from its separate collection to various physical and chemical treatment steps have been reviewed. Furthermore, policy briefs on the global initiatives for COVID-waste management including the applications of different disinfection techniques have also been discussed with some potential examples effectively applied to reduce both health and environmental risks. This article can be of great significance to the strategy development for preventing/controlling the pandemic of similar episodes in the future.

Publication Type

Journal article.

<184>

Accession Number

20203496887

Author

Kyuwa, S.; Sugiura, Y.

Title

Role of cytotoxic T lymphocytes and interferon-gamma in coronavirus infection: lessons from murine coronavirus infections in mice.

Source

Journal of Veterinary Medical Science; 2020. 82(10):1410-1414. 52 ref.

Publisher

Japanese Society of Veterinary Science

Location of Publisher

Tokyo

Country of Publication

Japan

Abstract

Murine coronavirus (CoV) is a beta-CoV that infects mice by binding to carcinoembryonic antigen-related cell adhesion molecule 1. Intraperitoneal infection with the murine CoV strain JHM (JHMOV) induces acute mild hepatitis in mice. While both innate and acquired immune responses play a significant role in the protection against murine CoV infection in mice, CD8+ cytotoxic T lymphocytes (CTLs) and interferon-gamma are essential for viral clearance in JHMOV-induced hepatitis. In addition, CoVs are characterized by high diversity, caused by mutations, recombination, and gene gain/loss. 25V16G is an immune-escape JHMOV variant, which lacks a dominant CTL epitope. By evading immune responses, 25V16G establishes persistent infections, leading to granulomatous serositis in interferon-gamma-deficient mice. These examples of CoV-associated pathogenesis in mice might provide useful information on other CoV infections, including coronavirus disease 2019 (COVID-19).

Publication Type

Journal article.

<185>

Accession Number

20203490672

Author

Clevenger, S. M.; Rick, O.; Bustad, J.

Title

Critiquing anthropocentric media coverage of the COVID-19 sport "hiatus". (Special Issue: Sport and the coronavirus crisis.)

Source

International Journal of Sport Communication; 2020. 13(3):559-565. 26 ref.

Publisher

Human Kinetics

Location of Publisher

Leeds

Country of Publication

UK

Abstract

This commentary highlights a recent trend of anthropocentrism (a focus on human-centered interests and activities) in the media coverage in the United States and Europe on the disruption of the contemporary sports industry caused by the COVID-19 pandemic. The authors argued that the coverage promotes anthropocentric narratives by framing the pandemic as an external force causing a temporary and

unforeseen "hiatus" in the sports industry. As a result, media consumers learn about human interest stories associated with consumer demand and industry adaptation: stories that renormalize, rather than question, the sports industry in its current and hegemonic form. Such media discourses bypass an opportunity to consider the longstanding entanglements of human and nonhuman actors in sporting contexts, rethink sport through environmental and nonhuman perspectives, and, ultimately, advance more progressive, democratic politics. The commentary employs a posthumanist lens to critique the recent anthropocentric media coverage, highlighting the ways in which it reproduces the dualist logic of neoliberal capitalism and deflects attention to the human and nonhuman relations that have always existed in contexts of sport and human physicality.

Publication Type

Journal article.

<186>

Accession Number

20203491810

Author

Loupy, A.; Aubert, O.; Reese, P. P.; Bastien, O.; Bayer, F.; Jacquelinet, C.

Title

Organ procurement and transplantation during the COVID-19 pandemic.

Source

Lancet (British edition); 2020. 395(10237):e95-e96. 5 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

There was a strong temporal association between the increase in COVID-19 infections and a striking reduction in overall solid-organ transplantation procedures. The effect was seen in France and confirmed in the USA. The overall reduction in deceased donor transplantations since the COVID-19 outbreak was 90.6% in France and 51.1% in the USA, respectively. In both France and the USA, this reduction was mostly driven by kidney transplantation, but a substantial effect was also seen for heart, lung, and liver transplants, all of which provide meaningful improvement in survival probability. In the appendix, the geographical association is shown between areas with COVID-19 clusters and the decrease in organ procurement, showing a significant reduction in transplantation rates even in regions where COVID-19 cases are low, suggesting a global and nationwide effect beyond the local COVID-19 infection prevalence. Transplant

professionals will need to adapt to these rapidly changing circumstances, provide reassurance to their patients, and remain poised to reinvigorate the valuable transplant infrastructure when the COVID-19 crisis begins to abate. By using the example of organ transplantation, which is a highly regulated field and has a specific centralised day-to-day reporting scheme at a federal level, we show how high-value medical procedures can be affected by the COVID-19 pandemic, with outcomes for vulnerable patient groups. Furthermore, detailed cartographic mapping of trends in organ donation and transplant activity will enable targeted interventions when the burdens of COVID-19 get lighter. Some organ procurement organisations and their networks will undoubtedly recover more quickly than others through best practices and effective communication with hospitals. Careful mapping will enable public health leaders and transplant organisations to identify areas where transplants have not recovered well and support is needed.

Publication Type

Journal article.

<187>

Accession Number

20203474459

Author

Atrubin, D.; Wiese, M.; Bohinc, B.

Title

An outbreak of COVID-19 associated with a recreational hockey game - Florida, June 2020.

Source

Morbidity and Mortality Weekly Report; 2020. 69(41):1492-1493. 7 ref.

Publisher

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

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

On June 16, 2020, a recreational ice hockey game was played at an ice rink in the Tampa Bay, Florida, metropolitan area. Teams A and B, each consisting of 11 players (typically six on the ice and five on the bench at any given time), included men aged 19-53 years. During the 5 days after the game, 15 persons (14 of the 22 players and a rink staff member) experienced signs and symptoms compatible with coronavirus disease 2019 (COVID-19); 13 of the 15 ill persons had positive laboratory test results indicating infection with SARS-CoV-2, the virus that causes COVID-19. Widespread transmission of SARS-CoV-2 has been documented at a choir practice and at meat processing plants; however, apart from an outbreak involving 57 infected dancers that has been linked to high-intensity fitness dance classes in South Korea and a cluster

of five infected persons at a squash facility in Slovenia, few published reports are available regarding transmission associated with specific sports games or practices. In addition, outbreaks of COVID-19 infections among amateur hockey players in the United States have recently been reported in the news. The high proportion of infections that occurred in this outbreak provides evidence for SARS-CoV-2 transmission during an indoor sporting activity where intense physical activity is occurring. In response, Florida Department of Health staff members provided isolation and quarantine recommendations to the persons in the rink during the game and advised ice rink management on COVID-19 risk and disease control.

Publication Type

Journal article.

<188>

Accession Number

20203474419

Author

Martinez, M.; Akbar, I. E.; Wadood, M. Z.; Shukla, H.; Jorba, J.; Ehrhardt, D.

Title

Progress toward poliomyelitis eradication - Afghanistan, January 2019-July 2020.

Source

Morbidity and Mortality Weekly Report; 2020. 69(40):1464-1468. 5 ref.

Publisher

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

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

Wild poliovirus circulation continues in Afghanistan. After approximately 2 years of campaign bans by the insurgency coupled with the COVID-19 pandemic, wild poliovirus circulation has increased during 2019-2020, and a new vaccine-derived poliovirus type 2 outbreak began in 2020. Polio vaccination must be incorporated more broadly into public health services in order to reach every child. New partners should be engaged in discussions with local leaders to facilitate the recommencement of nationwide house-to-house campaigns. The primary barrier to interrupting poliovirus transmission in Afghanistan is the number of inaccessible children in insurgency-held areas. Dialogue with insurgency leaders through nongovernmental and international organizations to regain house-to-house access, which was successful in earlier years, needs enhanced efforts and new partners. In the interim, focus must be placed on finding and strengthening alternatives to SIAs for vaccinating children against polio. Before being aborted at the start of

the COVID-19 pandemic, the country was in the process of rolling out integrated services to address widespread health demands beyond vaccination in polio-priority areas and to integrate OPV use into other health programs; provision of broad services should be fully implemented. With SIA resumption, partnering with other health sectors to offer multiantigen vaccination alongside other health services of high priority will increase community polio vaccination demand and coverage.

Publication Type

Journal article.

<189>

Accession Number

20203474417

Author

Schwartz, N. G.; Moorman, A. C.; Makaretz, A.; Chang, K. T.; Chu, V. T.; Szablewski, C. M.; Yousaf, A. R.; Brown, M. M.; Clyne, A.; Dellagrotta, A.; Drobeniuc, J.; Korpics, J.; Muir, A.; Drenzek, C.; Bandy, U.; Kirking, H. L.; Tate, J. E.; Hall, A. J.; Lanzieri, T. M.; Stewart, R. J.

Title

Adolescent with COVID-19 as the source of an outbreak at a 3-week family gathering - four states, June-July 2020.

Source

Morbidity and Mortality Weekly Report; 2020. 69(40):1457-1459. 7 ref.

Publisher

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

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

During July-August 2020, four state health departments and CDC investigated a COVID-19 outbreak that occurred during a 3-week family gathering of five households in which an adolescent aged 13 years was the index and suspected primary patient; 11 subsequent cases occurred. Eight relatives reported activities outside the gathering during their exposure periods that might have increased their risks for exposure. However, only the index patient reported exposure to a person with confirmed COVID-19 or compatible symptoms outside the family. The index patient's high-risk exposure and symptom onset 3-19 days before that of any other person at the family gathering support the hypothesis that this adolescent's infection was the source of the family outbreak. The adolescent's initial antigen test result was likely a false negative because it was performed before symptom onset; the only antigen test that had Food and Drug Administration Emergency Use Authorization at the time was intended for use within the first 5 days of

symptoms. This outbreak highlights several important issues. First, children and adolescents can serve as the source for COVID-19 outbreaks within families, even when their symptoms are mild. Better understanding of transmission by children and adolescents in different settings is needed to refine public health guidance. Second, this investigation provides evidence of the benefit of physical distancing as a mitigation strategy to prevent SARS-CoV-2 transmission. None of the six family members who maintained outdoor physical distance without face masks during two visits to the family gathering developed symptoms; the four who were tested for SARS-CoV-2 had negative test results. Third, rapid antigen tests generally have lower sensitivity (84.0%-97.6%) compared with RT-PCR testing; negative results should be confirmed with RT-PCR if used for persons with high pretest probability of infection, such as those with a known exposure. Fourth, regardless of negative test results, persons should self quarantine for 14 days after a known exposure or after travel when mandated by state, territorial, tribal, or local authorities. Finally, SARS-CoV-2 can spread efficiently during gatherings, especially with prolonged, close contact. Physical distancing, face mask use, and hand hygiene reduce transmission; gatherings should be avoided when physical distancing and face mask use are not possible.

Publication Type

Journal article.

<190>

Accession Number

20203470627

Author

Garrusi, B.; Amirkafi, A.; Garousi, S.

Title

Mental health: the forgotten aspect of the COVID-19 pandemic.

Source

Eastern Mediterranean Health Journal; 2020. 26(10):1151-1154. 19 ref.

Publisher

World Health Organization, Regional Office for the Eastern Mediterranean

Location of Publisher

Cairo

Country of Publication

Egypt

Abstract

Currently, countries are finding their health systems on the frontline in the fight against COVID-19. The lack of successful mental health interventions during the COVID-19 pandemic in the Eastern Mediterranean Region has highlighted the necessity to develop a model appropriate for Iranian society. To develop this model the article used a qualitative methodology with a grounded theory approach. Data were gathered

from 12 experts in the fields of psychiatry, psychology and sociology using semi-structured interviews. The research aim was explained to participants and informed consent was obtained for audio recordings or written viewpoints. Many health studies have been conducted in the Region since the outbreak of COVID-19. However, mental health promotion should be considered as a priority. This study attempted to provide an appropriate and cost-effective model based on views of experts in this field, focusing on mental health well-being intervention programmes that focus on the sociocultural context of each community.

Publication Type

Journal article.

<191>

Accession Number

20203474923

Author

Avtar, R.; Kumar, P.; Supe, H.; Jie, D.; Netranada Sahu; Mishra, B. K.; Yunus, A. P.

Title

Did the COVID-19 lockdown-induced hydrological residence time intensify the primary productivity in lakes? Observational results based on satellite remote sensing.

Source

Water; 2020. 12(9)43 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The novel coronavirus pandemic (COVID-19) has brought countries around the world to a standstill in the early part of 2020. Several nations and territories around the world insisted their population stay indoors for practicing social distance in order to avoid infecting the disease. Consequently, industrial activities, businesses, and all modes of traveling have halted. On the other hand, the pollution level decreased 'temporarily' in our living environment. As fewer pollutants are supplied in to the hydrosphere, and human recreational activities are stopped completely during the lockdown period, we hypothesize that the hydrological residence time (HRT) has increased in the semi-enclosed or closed lake bodies, which can in turn increase the primary productivity. To validate our hypothesis, and to understand the effect of lockdown on primary productivity in aquatic systems, we quantitatively estimated the chlorophyll-a (Chl-a) concentrations in different lake bodies using established Chl-a retrieval algorithm. The Chl-a monitored using Landsat-8 and Sentinel-2 sensor in the lake bodies of Wuhan, China, showed an elevated

concentration of Chl-a. In contrast, no significant changes in Chl-a are observed for Vembanad Lake in India. Further analysis of different geo-environments is necessary to validate the hypothesis.

Publication Type

Journal article.

<192>

Accession Number

20203457561

Author

Luca, G. de; Dastgerdi, A. S.; Francini, C.; Liberatore, G.

Title

Sustainable cultural heritage planning and management of overtourism in art cities: lessons from Atlas world heritage.

Source

Sustainability; 2020. 12(9)49 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

In recent years, there has been an increase in international tourist arrivals worldwide. In this respect, Art Cities are among the most favorable tourist destinations, as they exhibit masterpieces of art and architecture in a cultural environment. However, the so-called phenomenon of overtourism has emerged as a significant threat to the residents' quality of life, and, consequently, the sustainability of Art Cities. This research aims to develop a management toolkit that assists site managers to control tourism flows in Art Cities and World Heritage Sites and promotes the residents' quality of life. The research methodology was developed within the framework of the Atlas Project in 2019. In this project, five European Art Cities, including Florence, Edinburgh, Bordeaux, Porto, and Santiago de Compostela, discussed their common management challenges through the shared learning method. After developing selection criteria, the Atlas' partners suggested a total of nine strategies as best practices for managing overtourism in Art Cities in multiple sections of accommodation policies, monitoring tactics, and promotional offerings. The Atlas project was conducted before the outbreak of the COVID-19 virus pandemic. Based on the current data, it is somehow uncertain when and how tourism activities will return to normal. The analysis of the Atlas findings also highlights some neglected dimensions in the current strategies in terms of environmental

concerns, climate change impacts, crisis management, and cultural development plans, which require further research to boost the heritage planning process.

Publication Type

Journal article.

<193>

Accession Number

20203488142

Author

Mon-Lopez, D.; Rubia Riaza, A. de la; Galan, M. H.; Roman, I. R.

Title

The impact of COVID-19 and the effect of psychological factors on training conditions of handball players.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)45 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The spread of COVID-19 has altered sport in Spain, forcing athletes to train at home. The objectives of the study were: (i) to compare training and recovery conditions before and during the isolation period in handball players according to gender and competitive level, and (ii) to analyse the impact of psychological factors during the isolation period. A total of 187 participants (66 women and 121 men) answered a Google Forms questionnaire about demographics, training, moods, emotional intelligence, and resilience sent using the snowball sampling technique. T-test and analysis of variance (ANOVA) were used to compare sport level and gender differences. Linear regressions were used to analyse the psychological influence on training. Handball players reduced training intensity (in the whole sample; $p = 0.44$), training volume (especially in professional female handball players; $p < 0.001$), and sleep quality (especially in professional male handball players; $p = 0.21$) and increased sleep hours (especially in non-professional female players; $p = 0.006$) during the isolation period. Furthermore, psychological factors affected all evaluated training and recovery conditions during the quarantine, except for sleep quantity. Mood, emotional intelligence, and resilience have an influence on physical activity levels and recovery conditions. In addition, training components were modified under isolation conditions at $p < 0.001$. We conclude that the COVID-19 isolation period caused reductions in training volume and intensity and decreased sleep quality. Furthermore, psychological components have a significant impact on training and recovery conditions.

Publication Type

Journal article.

<194>

Accession Number

20203482472

Title

Special issue on diabetes and COVID-19: the IDF perspective. (Special issue on diabetes and COVID-19: the IDF perspective.)

Source

Diabetes Research and Clinical Practice; 2020. 166:unpaginated.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This special issue contains 25 articles that discuss translational science, genetics, immunology, nutrition, psychosocial research, epidemiology, prevention, socio-economic research, complications, new treatments, technologies and therapy, particularly the interplay of diabetes and COVID-19.

Publication Type

Journal issue.

<195>

Accession Number

20203486786

Author

Pecora, F.; Persico, F.; Argentiero, A.; Neglia, C.; Esposito, S.

Title

The role of micronutrients in support of the immune response against viral infections.

Source

Nutrients; 2020. 12(10)285 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Viral infections are a leading cause of morbidity and mortality worldwide, and the importance of public health practices including handwashing and vaccinations in reducing their spread is well established. Furthermore, it is well known that proper nutrition can help support optimal immune function, reducing the impact of infections. Several vitamins and trace elements play an important role in supporting the cells of the immune system, thus increasing the resistance to infections. Other nutrients, such as omega-3 fatty acids, help sustain optimal function of the immune system. The main aim of this manuscript is to discuss of the potential role of micronutrients supplementation in supporting immunity, particularly against respiratory virus infections. Literature analysis showed that in vitro and observational studies, and clinical trials, highlight the important role of vitamins A, C, and D, omega-3 fatty acids, and zinc in modulating the immune response. Supplementation with vitamins, omega 3 fatty acids and zinc appears to be a safe and low-cost way to support optimal function of the immune system, with the potential to reduce the risk and consequences of infection, including viral respiratory infections. Supplementation should be in addition to a healthy diet and fall within recommended upper safety limits set by scientific expert bodies. Therefore, implementing an optimal nutrition, with micronutrients and omega-3 fatty acids supplementation, might be a cost-effective, underestimated strategy to help reduce the burden of infectious diseases worldwide, including coronavirus disease 2019 (COVID-19).

Publication Type

Journal article.

<196>

Accession Number

20203486713

Author

Kriaucioniene, V.; Bagdonaviciene, L.; Rodriguez-Perez, C.; Petkeviciene, J.

Title

Associations between changes in health behaviours and body weight during the COVID-19 quarantine in Lithuania: the Lithuanian COVIDiet study.

Source

Nutrients; 2020. 12(10)30 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 quarantine has caused significant changes in everyday life. This study aimed to evaluate the effect of the quarantine on dietary, physical activity and alcohol consumption habits of Lithuanians and the association between health behaviours and weight changes. An online cross-sectional survey was carried out among individuals older than 18 years in April 2020. The self-administered questionnaire included health behaviour and weight change data. Altogether 2447 subjects participated in the survey. Almost half of the respondents (49.4%) ate more than usual, 45.1% increased snacking, and 62.1% cooked at home more often. Intake of carbonated or sugary drinks, fast food and commercial pastries decreased, while consumption of homemade pastries and fried food increased. A decrease in physical activity was reported by 60.6% of respondents. Every third (31.5%) respondent, more often those already with overweight, gained weight. Multivariate logistic regression analysis showed that the higher odds of weight gain were associated with females, older age, increased consumption of sugary drinks, homemade pastries and fried food, eating more than usual, increased snacking, decreased physical activity and increased alcohol consumption. Our data highlighted the need for dietary and physical activity guidelines to prevent weight gain during the period of self-isolation, especially targeting those with overweight and obesity.

Publication Type

Journal article.

<197>

Accession Number

20203505087

Author

Liu YuSong; Peng DuanLiang; Yang Jia; Chen DunYan; Jia HongBing; Yu SiYuan; Chen HuanHuan; Zhao Juan; Liu Lyurong

Title

Laboratory diagnostics within a modular hospital at the time of coronavirus disease 2019 (COVID-19) in Wuhan. (Special Issue: Critical role of laboratory medicine in the global response to the COVID-19 pandemic.)

Source

Clinical Chemistry and Laboratory Medicine; 2020. 58(7):1077-1080. 13 ref.

Publisher

Walter de Gruyter

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

An outbreak of the so-called Coronavirus disease 2019 (COVID-19), caused by the severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2), has been spreading rapidly nationwide in China since December 2019. Wuhan, Hubei Province, is the hardest-hit region, with a rise in confirmed cases and its hospitals overwhelmed. On 2nd February, 2020, Wuhan began to build a modular hospital to treat patients caught with mild illness. The mobile modular hospital is mainly composed of medical modules, technical support modules, ward units, living support units and transportation capacity under field conditions, and there are complete equipment and specialized personnel to treat patients. Due to the severity and particularity of SARS-CoV-2, taking granted from lessons learnt from mobile modular hospitals, we use the existing large venues to construct a new fixed modular hospital. As patients need to be treated and tested, it is important to develop a clinical laboratory in the modular hospital and ensure biosafety. The construction of a clinical laboratory in the modular hospital is faced with problems such as time pressure, limited site selection, high level of biosafety, lack of experience and so forth. This paper mainly discusses how to construct the clinical laboratory in the modular hospital quickly and safely and put it into use to provide testing service for patients under various limited conditions.

Publication Type

Journal article.

<198>

Accession Number

20203506241

Author

Peroni, D. G.; Fanos, V.

Title

Lactoferrin is an important factor when breastfeeding and COVID-19 are considered.

Source

Acta Paediatrica; 2020. 109(10):2139-2140. 7 ref.

Publisher

Wiley

Location of Publisher

Copenhagen

Country of Publication

Denmark

Publication Type

Journal article.

<199>

Accession Number

20203500050

Author

Wang GanYi; Tang ShangFeng

Title

Perceived psychosocial health and its sociodemographic correlates in times of the COVID-19 pandemic: a community-based online study in China.

Source

Infectious Diseases of Poverty; 2020. 9(148):(26 October 2020). 48 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Coronavirus disease 2019 (COVID-19) pandemic has been affecting people's psychosocial health and well-being through various complex pathways. The present study aims to investigate the perceived psychosocial health and its sociodemographic correlates among Chinese community-dwelling residents. Methods: This cross-sectional survey was carried out online and using a structured questionnaire during April 2020. In total, 4788 men and women with the age range of 11-98 years from eight provinces in

eastern, central and western China were included in the analysis. We adopted a tactical approach to capture three key domains of perceived psychosocial health that are more likely to occur during a pandemic including hopelessness, loneliness, and depression. Multiple regression method, binary logistic regression model and variance inflation factor (VIF) were used to conduct data analysis. Results: Respectively 34.8%, 32.5% and 44.8% of the participants expressed feeling more hopeless, lonely, and depressed during the pandemic. The percentage of all three indicators was comparatively higher among women than among men: hopelessness (50.7% vs 49.3%), loneliness (52.4% vs 47.6%), and depression (56.2% vs 43.8%). Being married was associated with lower odds of loneliness among men (odds ratio [OR] = 0.63, 95% CI: 0.45-0.90). Loneliness was negatively associated with smoking (OR = 0.67, 95% CI: 0.45-0.99) and positively associated with drinking (OR = 1.45, 95% CI: 1.04-2.02). Compared with those in the lowest income bracket (< CNY 10 000), men (OR = 0.34, 95% CI: 0.21-0.55) and women (OR = 0.36, 95% CI: 0.23-0.56) in the highest level of annually housed income (> CNY 40 000) had the lowest odds of reporting perceived hopelessness (OR = 0.35, 95% CI: 0.25-0.48). Smoking also showed negative association with depression only among men (OR = 0.63, 95% CI: 0.43-0.91). Conclusions: More than one-third of the participants reported worsening in the experience of hopelessness and loneliness, with more than two-fifth of worsening depression during the pandemic compared with before the outbreak. Several socioeconomic and lifestyle factors were found to be associated with the outcome variables, most notably participants' marital status, household income, smoking, alcohol drinking, existing chronic conditions. These findings may be of significance to treat patients and help them recover from the pandemic.

Publication Type

Journal article.

<200>

Accession Number

20203502495

Author

Cortes, J. A.; Espitia, P.; Rosero-Lasso, Y. L.

Title

Citywide preparedness for a pandemic: a crosssectional survey of knowledge, attitudes, and practices about respiratory infection prevention in Bogota, Colombia. (SARS-CoV-2 y COVID-19.)

Source

Biomedica; 2020. 40(Suppl. 2):159-165. 16 ref.

Publisher

Instituto Nacional de Salud

Location of Publisher

Bogotá

Country of Publication

Colombia

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Abstract

Introduction: Healthcare personnel plays an important role in the prevention of acute respiratory infections in hospital settings. Background: Our aim was to establish the level of knowledge about respiratory virus infections and the attitudes and practices among healthcare workers, leaders of infection control committees in hospitals of Bogota, Colombia. Materials and methods: We used a self-administered questionnaire of 28 items during the monthly meeting sponsored by the local health authority. "Yes or no" and "true or false" questions were applied to measure knowledge. Attitudes and practices were measured with a Likert-type scale according to the agreement degree. Results: We surveyed 70 healthcare workers. Respondents demonstrated a good level of knowledge as 80% of them answered correctly more than five questions. A total of 54.4% showed a low degree of agreement when asked if their institutions have the policy to stay home when they are sick with respiratory symptoms and 67.1% never or rarely remain at home under such conditions. Conclusion: Healthcare worker leaders of infection control committees in Bogota's hospitals have adequate knowledge about the prevention of seasonal respiratory viruses. There is a need for implementing urgent sick leave policies as a measure to prevent the spread of potential coronavirus infections in hospitals.

Publication Type

Journal article.

<201>

Accession Number

20203502491

Author

Motta, J. C.; Novoa, D.; Gomez, C. C.; Moreno, J.; Vargas, L.; Perez, J.; Millan, H.; Arango, A. I.

Title

Prognostic factors in hospitalized patients with a diagnosis of SARS-CoV-2 infection in Bogota, Colombia. (SARS-CoV-2 y COVID-19.) [Spanish]

Source

Biomedica; 2020. 40(Suppl. 2):116-130. 31 ref.

Publisher

Instituto Nacional de Salud

Location of Publisher

Bogotá;

Country of Publication

Colombia

Abstract

Introduction: Infection with the new SARS-Cov-2 coronavirus is a worldwide public health emergency; its diagnosis is based on molecular tests, while its prognosis depends on the patient's history and on some paraclinical tests. In Colombia, forecasts are not yet counted. Background: To assess the factors associated with the development of severe disease in hospitalized patients diagnosed with SARS-CoV-2 infection, as well as the prognostic factors for the outcome of mortality. Materials and methods: We conducted an ambispective cohort study in hospitalized patients at the Fundacion Cadioinfantil from March to June, 2020. Results: Of the 104 patients analyzed, 31.7% (n=33) had a severe presentation and 9.6% (n=10) had a mortality outcome. For mortality, the most important prognostic factor was the development of severe disease followed by age over 60 years and malnutrition. For the development of the severe disease, prognostic factors were a history of hemodialysis (HR=135), diabetes (HR=4.4), and an increased level of lactate dehydrogenase (LDH) (HR=1,004), while the lymphocyte count over 1,064 was a protective factor (HR=0.9). In the classification of patients, the National Early Warning Score (NEWS2) score in the high and low-risk categories corresponded to the best performance. There was no difference between the treatments administered. Conclusions: The most important prognostic factors for mortality were being over 60 years of age, hypertension, diabetes, and cirrhosis, while for the development of severe disease they were chronic kidney disease with hemodialysis, NEWS2 with high risk at admission, increased levels of LDH and C reactive protein (CRP), and leukocytosis.

Publication Type

Journal article.

<202>

Accession Number

20203502489

Author

Manrique-Hernandez, E. F.; Moreno-Montoya, J.; Hurtado-Ortiz, A.; Prieto-Alvarado, F. E.; Idrovo, A. J.

Title

Performance of the Colombian surveillance system during the COVID-19 pandemic: a rapid evaluation of the first 50 days. (SARS-CoV-2 y COVID-19.) [Spanish]

Source

Biomedica; 2020. 40(Suppl. 2):96-103. 24 ref.

Publisher

Instituto Nacional de Salud

Location of Publisher

Bogotá

Country of Publication

Colombia

Abstract

Introduction: The COVID pandemic is a challenge for public health surveillance and an opportunity to assess its strengths and weaknesses to improve the response. **Background:** To evaluate the performance of the Colombian public health surveillance system during the first 50 days of the COVID-19 pandemic in the country. **Materials and methods:** We analyzed the data published between March 6 and April 24, 2020, by the Instituto Nacional de Salud and the World Health Organization (WHO). We evaluated: (i) the quality of the data according to the fulfillment of Benford's law, and (ii) the timeliness of the information measured as the difference in dates between the data generated by the Instituto Nacional de Salud and WHO's situational reports. We assessed the fulfillment of Benford's law using the p values of the log-likelihood ratio, the chi square or Moreno's exact tests. **Results:** Until April 24 there were 4,881 cases of COVID-19 in Colombia. During most of the first 50 days of the pandemic, Benford's law was fulfilled except the first days of the epidemic. The difference between Instituto Nacional de Salud and WHO reports largely depends on the different reporting times. **Conclusion:** In general, the Colombian public health surveillance system fulfilled Benford's law suggesting that there was quality in the data. Future studies comparing the performance of the departments and districts will improve the diagnosis of the Colombian surveillance system.

Publication Type

Journal article.

<203>

Accession Number

20203502488

Author

Pimentel, J.; Andersson, N.

Title

Chloroquine and its derivatives in the management of COVID-19: a scoping review. (SARS-CoV-2 y COVID-19.) [Spanish]

Source

Biomedica; 2020. 40(Suppl. 2):80-95. 37 ref.

Publisher

Instituto Nacional de Salud

Location of Publisher

Bogotá;

Country of Publication

Colombia

Abstract

Introduction: Recently, researchers from China and France reported on the effectiveness of chloroquine and hydroxychloroquine for the inhibition of SARS-CoV-2 viral replication in vitro. Timely dissemination of

scientific information is key in times of pandemic. A systematic review of the effect and safety of these drugs on COVID-19 is urgently needed. Background: To map published studies until March 25, 2020, on the use of chloroquine and its derivatives in patients with COVID-19. Materials and methods: We searched on PubMed, Embase, Lilacs, and 15 registries from the World Health Organization's International Clinical Trials Registry Platform for theoretical and empirical research in English, Spanish, Italian, French, or Portuguese until March 25, 2020, and made a narrative synthesis of the results. Results: We included 19 records and 24 trial registries (n=43) including 18,059 patients. China registered 66% (16/24) of the trials. Nine trials evaluate chloroquine exclusively and eight hydroxychloroquine. The records are comments (n=9), in vitro studies (n=3), narrative reviews (n=2), clinical guidelines (n=2), as well as a systematic review, an expert consensus, and a clinical trial. Conclusions: One small (n=26), non-randomized, and flawed clinical trial supports hydroxychloroquine use in patients with COVID-19. There is an urgent need for more clinical trial results to determine the effect and safety of chloroquine and hydroxychloroquine on COVID-19.

Publication Type

Journal article.

<204>

Accession Number

20203502482

Author

Orozco-Hernandez, J. P.; Montoya-Martinez, J. J.; Pacheco-Gallego, M. C.; Cespedes-Roncancio, M.; Porras-Hurtado, G. L.

Title

SARS-CoV-2 and rhinovirus/enterovirus co-infection in a critically ill young adult patient in Colombia. (SARS-CoV-2 y COVID-19.) [Spanish]

Source

Biomedica; 2020. 40(Suppl. 2):34-43. 29 ref.

Publisher

Instituto Nacional de Salud

Location of Publisher

Bogotá;

Country of Publication

Colombia

Abstract

The current SARS-CoV-2 pandemic has caused a huge global public health problem. We report the case of a young adult patient with laboratory-confirmed SARS-CoV-2. We describe the identification of the virus and the clinical course, diagnosis, and treatment of the infection including her rapid clinical deterioration from the mild initial symptoms, which progressed to multilobar pneumonia requiring admission to the

intensive care unit. This case highlights the importance of establishing a diagnosis based on the clinical findings and the patient's history bearing in mind the possibility of gastrointestinal symptoms in addition to respiratory ones. Besides, the presence of risk factors should be investigated; in this case, we proposed obesity as a possible risk factor. Furthermore, limitations in diagnostic tests and the possibility of co-infection with other respiratory pathogens are highlighted. We describe the imaging, laboratory findings, and treatment taking into account the limited current evidence.

Publication Type

Journal article.

<205>

Accession Number

20203502474

Author

Murphy, N.; Boland, M.; Bambury, N.; Fitzgerald, M.; Comerford, L.; Dever, N.; O'Sullivan, M. B.; Petty-Saphon, N.; Kiernan, R.; Jensen, M.; O'Connor, L.

Title

A large national outbreak of COVID-19 linked to air travel, Ireland, summer 2020.

Source

Eurosurveillance; 2020. 25(42)27 ref.

Publisher

European Centre for Disease Prevention and Control

Location of Publisher

Stockholm

Country of Publication

Sweden

Abstract

An outbreak of 59 cases of coronavirus disease (COVID-19) originated with 13 cases linked by a 7 h, 17% occupancy flight into Ireland, summer 2020. The flight-associated attack rate was 9.8-17.8%. Spread to 46 non-flight cases occurred country-wide. Asymptomatic/pre-symptomatic transmission in-flight from a point source is implicated by 99% homology across the virus genome in five cases travelling from three different continents. Restriction of movement on arrival and robust contact tracing can limit propagation post-flight.

Publication Type

Journal article.

<206>

Accession Number

20203502403

Author

Guo Jun; Zhou Boda; Zhu Mengen; Yuan Yifang; Wang Qian; Zhou Hua; Wang Xiaohui; Tingting Lv; Li Siyuan; Liu Peng; Yang Ying; He Ping; Zhang Ping

Title

CURB-65 may serve as a useful prognostic marker in COVID-19 patients within Wuhan, China: a retrospective cohort study.

Source

Epidemiology and Infection; 2020. 148(e241)19 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

A recently developed pneumonia caused by SARS-CoV-2 has quickly spread across the world. Unfortunately, a simplified risk score that could easily be used in primary care or general practice settings has not been developed. The objective of this study is to identify a simplified risk score that could easily be used to quickly triage severe COVID-19 patients. All severe and critical adult patients with laboratory-confirmed COVID-19 on the West campus of Union Hospital, Wuhan, China, from 28 January 2020 to 29 February 2020 were included in this study. Clinical data and laboratory results were obtained. CURB-65 pneumonia score was calculated. Univariate logistic regressions were applied to explore risk factors associated with in-hospital death. We used the receiver operating characteristic curve and multivariate COX-PH model to analyse risk factors for in-hospital death. A total of 74 patients (31 died, 43 survived) were finally included in the study. We observed that compared with survivors, non-survivors were older and illustrated higher respiratory rate, neutrophil-to-lymphocyte ratio, D-dimer and lactate dehydrogenase (LDH), but lower SpO₂ as well as impaired liver function, especially synthesis function. CURB-65 showed good performance for predicting in-hospital death (area under curve 0.81, 95% confidence interval (CI) 0.71-0.91). CURB-65 ≥ 2 may serve as a cut-off value for prediction of in-hospital death in severe patients with COVID-19 (sensitivity 68%, specificity 81%, F1 score 0.7). CURB-65 (hazard ratio (HR) 1.61; 95% CI 1.05-2.46), LDH (HR 1.003; 95% CI 1.001-1.004) and albumin (HR 0.9; 95% CI 0.81-1) were risk factors for in-hospital death in severe patients with COVID-19. Our study indicates CURB-65 may serve as a useful prognostic marker in COVID-19 patients, which could be used to quickly triage severe patients in primary care or general practice settings.

Publication Type

Journal article.

<207>

Accession Number

20203467432

Author

Bloom, D. E.; Cadarette, D.; Tortorice, D. L.

Title

An ounce of prevention. Our approach to vaccine finance is ill-suited to addressing epidemic risk.

Source

Finance & Development; 2020. 57(3):54-57. 5 ref.

Publisher

International Monetary Fund

Location of Publisher

Washington

Country of Publication

USA

Abstract

Despite the high societal value of vaccination against diseases of epidemic potential, aspects of vaccine economics create challenges for achieving socially optimal levels of vaccine R&D, production, and uptake. Because vaccine R&D and the knowledge it creates are global public goods and because administered doses of vaccine have substantial positive externalities, the market tends to undersupply them. We therefore need public intervention to support R&D, manufacture, financing, and delivery-likely in the form of collective financing and the regulation of existing institutions. COVID-19 is highlighting the fragility of our current systems for vaccine development, manufacture, and delivery. The world would do well to strengthen its systems before the next emerging pathogen gets a foothold in the human reservoir.

Publication Type

Journal article.

<208>

Accession Number

20203504801

Author

Aasim Yusuf

Title

Cancer care in the time of COVID-19 - a perspective from Pakistan.

Source

ecancermedicalsecience; 2020. 14(1026)5 ref.

Publisher

ecancer Global Foundation

Location of Publisher

Bristol

Country of Publication

UK

Abstract

Across much of the world, cancer care has been sidelined to a variable degree by the global effort against the coronavirus pandemic. This paper discusses the impact of coronavirus infection on cancer diagnosis and treatment in two leading cancer centres in Pakistan. It also describes the effect that preparations for the expected surge in cases in Pakistan over the next few weeks have had on cancer care. There is an urgent need to evaluate the effect of delays in diagnosis and treatment on cancer stage and treatment, and to decide how to minimise these during likely future cycles of lockdown over the coming months and years.

Publication Type

Journal article.

<209>

Accession Number

20203502972

Author

Kirtana, J.; Arvind Kumar; Kumar, S. S.; Singh, A. K.; Shankar, S. H.; Amrit Sharma; Amit Kumar; Ravneet Kaur; Khan, M. A.; Piyush Ranjan; Prayas Sethi; Avinash Chakravarthy; Srivastava, A. K.; Naveet Wig

Title

Mild COVID-19 infection-predicting symptomatic phase and outcome: a study from AIIMS, New Delhi.

Source

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Context: Comprehensive management of mild COVID infection calls for better understanding of symptomatology in these group of patients as well as early identification and close monitoring of patients at risk, data on which is limited. **Aim:** To study association between inflammatory markers and clinical presentation with progression of disease and the duration of resolution of symptoms. **Settings and Design:** This is a retrospective study that has been conducted at a designated COVID -19 medical ward at AIIMS, New Delhi **Methods and Material:** Fifty healthcare workers and their dependents who were admitted with asymptomatic and mild COVID-19 infection were included. Their records were retrospectively reviewed, entered into a predesigned proforma and analyzed. **Results:** A total of 50 participants were included in the study of which 70% were healthcare workers. The patients were admitted with mild COVID illness out of which 22 (44%) were males. Most common symptom at presentation was fever (72%). Among patients who had mild disease versus those who progressed to moderate illness (n = 3), the patients with moderate illness were older [mean (SD): 57.33 (10.21) vs. 36.13 (14.05); P = 0.014] and had a longer duration of hospital stay [17 (1.41) days vs. 11.20 (3.86) days; P = 0.04]. Inflammatory markers, C-Reactive Protein (CRP) [2.46 vs. 0.20 (P = 0.024)], and Ferritin [306.15 vs. 72.53 (P = 0.023)] were higher in patients with moderate illness. There is also a significant correlation between the number of days taken for symptoms to resolve with Serum Ferritin (P = 0.007), CRP (P = 0.0256), and neutrophil lymphocyte ratio (NLR) (P = 0.044). **Conclusions:** Acute phase reactants/Inflammatory markers serve as good indicators of time taken to resolution of symptoms in acute COVID infection. NLR is a simple and inexpensive method to provide insight into symptomatic phase. These may be utility tools for primary care physician in the management in periphery and timely decision.

Publication Type

Journal article.

<210>

Accession Number

20203502971

Author

Kumar, S. S.; Arvind Kumar; Kirtana, J.; Singh, A. K.; Shankar, S. H.; Khan, M. A.; Srivastava, A. K.; Ravneet Kaur; Naveet Wig

Title

Risk factors and outcome among COVID-19 exposed and quarantined healthcare workers: a study on the status of existing practices of standard precautions.

Source

Journal of Family Medicine and Primary Care; 2020. 9(10):5355-5359. 5 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Context: Health care workers (HCWs) are at high risk of COVID-19 infection but data on the risk factors for exposure and infection rate among Indian HCWs are limited. Aims: Our study aims to identify the risk factors and behavior of HCWs which make them high risk for COVID-19 infection and the infection rate among them. Settings and Design: This is a retrospective study conducted at All India Institute of Medical Sciences, New Delhi. Methods and Material: Fifty HCWs quarantined at our institute in April and May 2020 following exposure to confirmed or suspected COVID-19 cases, or due to development of Influenza-Like Illness (ILI) were included. Data was collected from medical records in a predesigned proforma and analyzed. Results: Thirty-eight (76%) of the 50 quarantined HCWs had high-risk exposure and there was a significant breach in personal protective measures. N-95 masks were worn by 59.6%, gloves by 61.7%, and goggles or face shields by 2%. Exposures were more common in non-COVID areas of the hospital. Hydroxychloroquine pre-exposure prophylaxis was taken by 7 (14%). 3 (6%) were confirmed to be COVID-19 positive during the quarantine period. Conclusions: Our study has shown leniency among HCWs in adhering to infection control and personal protective measures resulting in an increased quarantine and infection rate and loss of manpower. The safety of our HCWs must be given paramount importance during this pandemic and should be ensured by educating them about infection control, and persistently reinforcing and strictly adhering to standard precautions.

Publication Type

Journal article.

<211>

Accession Number

20203502927

Author

Pillai, D. D. M.; Nagappan Nagappan; Sekar Veena Dharani; Kalaivani Subramanian; Bharath Champakesan; D'Cruz, T. M.

Title

Socio-economic impact of coronavirus disease 2019 (COVID-19) - an Indian outlook.

Source

Journal of Family Medicine and Primary Care; 2020. 9(10):5103-5106. 14 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

It took only days to a few months, for the coronavirus to spread across the globe from its place of origin, Wuhan city, China. Though, India is not among the worst affected countries of coronavirus, it is still a major Public Health emergency which poses a serious threat of crippling the nation's economy. A densely populated country like India, cannot afford getting its population infected with coronavirus, as that will have an enormous strain on existing healthcare facilities. Although the government of India has implemented complete lockdown, there are many economic concerns to be addressed. Even though, relief fund was announced, the nation's huge population could use additional financial support, to take care of their essential needs like groceries, provisions and medicines. The livelihood, employment and income of many citizens remains questionable. This article attempts to give a socio-economic perspective of the coronavirus pandemic in India.

Publication Type

Journal article.

<212>

Accession Number

20203502926

Author

Himmatrao Saluba Bawaskar; Pramodini Himmatrao Bawaskar

Title

From quarantine room: physician perspective.

Source

Journal of Family Medicine and Primary Care; 2020. 9(10):5092-5102. 41 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

This write-up is a brief reflection of a rural doctor couple, Dr. Himmatrao Saluba Bawaskar (HSB) and Dr. Pramodini Himmatrao Bawaskar (PHB), working in the remote area of Maharashtra state of India during COVID-19 pandemic. During the pandemic, rural doctors are routinely exposed to symptomatic COVID-positive cases in the outpatient as well as indoor setting. The authors, both husband and wife, were in compulsory quarantine for twice at home and experienced social stigmas attached to a positive case. Here is a report the details of COVID-19 pattern and its management learned from the published scientific papers on COVID-19, and severe acute respiratory syndrome due to SARS-CoV-2 from December 2019 and their own experience in rural setting and the current literature shared in the form of personal narration. Apart from the personal experience of patients experience regarding quarantine period, COVID-19 is discussed in detail for the benefit of rural practitioners.

Publication Type

Journal article.

<213>

Accession Number

20203493021

Author

Rohaim, M. A.; Munir, M.

Title

A scalable topical vectored vaccine candidate against SARS-CoV-2.

Source

Vaccines; 2020. 8(3)52 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2) caused an ongoing unprecedented global public health crises of coronavirus disease in 2019 (CoVID-19). The precipitously increased death rates, its impact on livelihood and trembling economies warrant the urgent development of a SARS-CoV-2 vaccine which would be safe, efficacious and scalable. Owing to unavailability of the vaccine, we propose a de novo synthesized avian orthoavulavirus 1 (AOaV-1)-based topical respiratory vaccine candidate against CoVID-19. Avirulent strain of AOaV-1 was engineered to express full length spike (S) glycoprotein which is highly neutralizing and a major protective antigen of the SARS-CoV-2. Broad-scale in vitro characterization of a recombinant vaccine candidate demonstrated efficient co-expression of the hemagglutinin-neuraminidase (HN) of AOaV-1 and S protein of SARS-CoV-2, and comparable replication kinetics were observed in a cell culture model. The recombinant vaccine candidate virus actively replicated and spread within cells independently of exogenous trypsin. Interestingly, incorporation of S protein of SARS-CoV-2 into the recombinant AOaV-1 particles attributed the sensitivity to anti-SARS-CoV-2 antiserum and more prominently to anti-AOaV-1 antiserum. Finally, our results demonstrated that the recombinant vaccine vector stably expressed S protein after multiple propagations in chicken embryonated eggs, and this expression did not significantly impact the in vitro growth characteristics of the recombinant. Taken together, the presented respiratory vaccine candidate is highly attenuated in primates per se, safe and lacking pre-existing immunity in human, and carries the potential for accelerated vaccine development against CoVID-19 for clinical studies.

Publication Type

Journal article.

<214>

Accession Number

20203493019

Author

Lastra, J. M. P. de la; Baca-Gonzalez, V.; Asensio-Calavia, P.; Gonzalez-Acosta, S.; Morales-Delanuez, A.

Title

Can immunization of hens provide oral-based therapeutics against COVID-19?

Source

Vaccines; 2020. 8(3)112 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

In the current worldwide pandemic situation caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and the newest coronavirus disease (COVID-19), therapeutics and prophylactics are urgently needed for a large population. Some of the prophylaxis strategies are based on the development of antibodies targeting viral proteins. IgY antibodies are a type of immunoglobulin present in birds, amphibians, and reptiles. They are usually obtained from egg yolk of hyper-immunized hens and represent a relatively inexpensive source of antibodies. Specific IgY can be produced by immunizing chickens with the target antigen and then purifying from the egg yolk. Chicken IgY has been widely explored as a clinical anti-infective material for prophylaxis, preventive medicine, and therapy of infectious diseases. Administered non-systemically, IgY antibodies are safe and effective drugs. Moreover, passive immunization with avian antibodies could become an effective alternative therapy, as these can be obtained relatively simply, cost-efficiently, and produced on a large scale. Here, we highlight the potential use of polyclonal avian IgY antibodies as an oral prophylactic treatment for respiratory viral diseases, such as COVID-19, for which no vaccine is yet available.

Publication Type

Journal article.

<215>

Accession Number

20203494262

Author

Fodjo, J. N. S.; Villela, E. F. de M.; Hees, S. van; Santos, T. T. dos; Vanholder, P. M. A.; Reyntiens, P.; Bergh, R. van den; Colebunders, R.

Title

Impact of the COVID-19 pandemic on the medical follow-up and psychosocial well-being of people living with HIV: a cross-sectional survey.

Source

JAIDS, Journal of Acquired Immune Deficiency Syndromes; 2020. 85(3):257-262. 32 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background: Empirical data on the consequences of the novel coronavirus disease (COVID-19) pandemic on HIV care are lacking. We surveyed people living with HIV (PLWH) in different countries to investigate whether their medical follow-up and psychosocial well-being had been compromised due to COVID-19 and

associated restrictions. Methods: In April 2020, a cross-sectional survey among PLWH was conducted using a web-based multilingual questionnaire. The research tool assessed HIV follow-up, psychosocial well-being, COVID-19 (flu-like) symptoms and prevention measures. Consenting respondents provided answers anonymously. Results: Three hundred seventeen PLWH were included (mean age 43.4 +/- 11.7; 71.6% men); 60.3% of participants resided in Belgium and Brazil. One hundred forty (44.2%) reported experiencing a cold with at least one flu-like symptom since January 2020. Of the 18 who reported COVID-19 test results, 4 (22.2%) were positive. Seventy-four (23.3%) respondents screened positive for major depressive disorders, whereas 72 (22.7%) had generalized anxiety disorders. Fifty-six (17.7%) respondents reported difficulties in obtaining antiretroviral medications because of COVID-19-related measures. Adaptations of HIV care during the COVID-19 outbreak included greater quantities of antiretroviral refill in 67 (21.1%), phone consultations in 25 (7.9%), and new refill sites in 12 (3.9%). Factors associated with a reduced risk of experiencing flu-like symptoms included flu vaccination during the past 12 months ($P = 0.005$) and adaptations of HIV care during the COVID-19 pandemic ($P = 0.010$). Conclusion: COVID-19 and associated restrictive measures seem detrimental to the well-being and follow-up of PLWH. We recommend that health systems devise innovative approaches for antiretroviral provision and psychosocial support to PLWH during such outbreaks.

Publication Type

Journal article.

<216>

Accession Number

20203498527

Author

Roos, Y. H.

Title

Water and pathogenic viruses inactivation-food engineering perspectives.

Source

Food Engineering Reviews; 2020. 12(3):251-267. 60 ref.

Publisher

Springer

Location of Publisher

New York

Country of Publication

USA

Abstract

Water is an essential component of food structures and biological materials. The importance of water as a parameter affecting virion stability and inactivation has been recognized across disciplinary areas. The large

number of virus species, differences in spreading, likelihood of foodborne infections, unknown infective doses, and difficulties of infective virus quantification are often limiting experimental approaches to establish accurate data required for detailed understanding of virions' stability and inactivation kinetics in various foods. Furthermore, non-foodborne viruses, as shown by the SARS-CoV-2 (Covid-19) pandemic, may spread within the food chain. Traditional food engineering benefits from kinetic data on effects of relative humidity (RH) and temperature on virion inactivation. The stability of enteric viruses, human norovirus (HuNoV), and hepatitis A (HAV) virions in food materials and their resistance against inactivation in traditional food processing and preservation is well recognized. It appears that temperature-dependence of virus inactivation is less affected by virus strains than differences in temperature and RH sensitivity of individual virus species. Pathogenic viruses are stable at low temperatures typical of food storage conditions. A significant change in activation energy above typical protein denaturation temperatures suggests a rapid inactivation of virions. Furthermore, virus inactivation mechanisms seem to vary according to temperature. Although little is known on the effects of water on virions' resistance during food processing and storage, dehydration, low RH conditions, and freezing stabilize virions. Enveloped virions tend to have a high stability at low RH, but low temperature and high RH may also stabilize such virions on metal and other surfaces for several days. Food engineering has contributed to significant developments in stabilization of nutrients, flavors, and sensitive components in food materials which provides a knowledge base for development of technologies to inactivate virions in foods and environment. Novel food processing, particularly high pressure processing (HPP) and cold plasma technologies, seem to provide efficient means for virion inactivation and food quality retention prior to packaging or food preservation by traditional technologies.

Publication Type

Journal article.

<217>

Accession Number

20203499786

Author

Belayneh Ayanaw Kassie; Aynishet Adane; Eskeziaw Abebe Kassahun; Amare Simegn Ayele; Aysheshim Kassahun Belew

Title

Poor COVID-19 preventive practice among healthcare workers in Northwest Ethiopia, 2020.

Source

Advances in Public Health; 2020. 2020(7526037)22 ref.

Publisher

Hindawi

Location of Publisher

London

Country of Publication

UK

Abstract

Background. The novel coronavirus disease (COVID-19) pandemic outbreak affects the global social, economic, and political context and becomes a significant threat to healthcare providers who are among the exposed groups to acquire and transmit the disease while caring and treating patients. It is crucial to comply with prevention recommendations so as to stay safe and protected. Therefore, this study aimed to assess COVID-19 preventive practice and associated factors among healthcare workers in Northwest Ethiopia. **Methods.** An institution-based cross-sectional study was conducted among 630 healthcare workers in Northwest Ethiopia from March to April 2020. A multistage sampling technique was used to select study participants. A pretested and structured self-administered questionnaire was used to collect data. The data were entered using Epi Info 7 and analyzed using STATA 16 statistical software. Both bivariate and multivariable logistic regression analyses were employed to identify associated factors. Adjusted odds ratio (AOR) with 95% confidence interval was used to determine independent predictors of COVID-19 preventive practice. In multivariable analysis, a variable with a P value of less than 0.05 was considered as statically significant. **Result.** Among 630 healthcare workers participated in the study, the overall good preventive practice towards COVID-19 was found to be 38.73% (95% CI: 34.8, 42.5). Being a male healthcare provider (AOR = 1.48; 95% CI: 1.02, 2.10), having work experience of 6-10 years (AOR = 2.22; 95% CI: 1.23, 4.00), and having poor attitude towards COVID-19 (AOR = 2.22; 95% CI: 1.03, 2.22) were found to be significantly associated with poor COVID-19 preventive practice among healthcare workers. **Conclusion.** Overall compliance towards COVID-19 preventive practice among healthcare workers was found to be low. Multiple education and training platforms with focus on COVID-19 preventive measures and adequate personal protective equipment and supplies should be provided for healthcare providers.

Publication Type

Journal article.

<218>

Accession Number

20203499769

Author

Kurup, D.; Wirblich, C.; Ramage, H.; Schnell, M. J.

Title

Rabies virus-based COVID-19 vaccine CORAVAX induces high levels of neutralizing antibodies against SARS-CoV-2.

Source

npj Vaccines; 2020. 5(98)38 ref.

Publisher

Nature Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

The recently emerged coronavirus SARS-CoV-2, the causative agent of COVID-19, is rapidly spreading in the world. The exponentially expanding threat of SARS-CoV-2 to global health highlights the urgent need for a vaccine. Herein we show the rapid development of a novel, highly efficient, and safe COVID-19 vaccine using a rabies virus-based vector that has proven to be an efficient vaccine against several emerging infectious diseases. This study reports that both a live and an inactivated rabies virus containing the SARS-CoV-2 spike S1 protein induces potent virus-neutralizing antibodies at much higher levels than seen in the sera of convalescent patients. In summary, the results provided here warrant further development of this safe and established vaccine platform against COVID-19.

Publication Type

Journal article.

<219>

Accession Number

20203499766

Author

McAuley, A. J.; Kuiper, M. J.; Durr, P. A.; Bruce, M. P.; Barr, J.; Todd, S.; Au, G. G.; Blasdell, K.; Tachedjian, M.; Lowther, S.; Marsh, G. A.; Edwards, S.; Poole, T.; Layton, R.; Riddell, S. J.; Drew, T. W.; Druce, J. D.; Smith, T. R. F.; Broderick, K. E.; Vasan, S. S.

Title

Experimental and in silico evidence suggests vaccines are unlikely to be affected by D614G mutation in SARS-CoV-2 spike protein.

Source

npj Vaccines; 2020. 5(96)25 ref.

Publisher

Nature Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

The 'D614G' mutation (Aspartate-to-Glycine change at position 614) of the SARS-CoV-2 spike protein has been speculated to adversely affect the efficacy of most vaccines and countermeasures that target this glycoprotein, necessitating frequent vaccine matching. Virus neutralisation assays were performed using sera from ferrets which received two doses of the INO-4800 COVID-19 vaccine, and Australian virus isolates (VIC01, SA01 and VIC31) which either possess or lack this mutation but are otherwise comparable. Through this approach, supported by biomolecular modelling of this mutation and the commonly-associated P314L mutation in the RNA-dependent RNA polymerase, we have shown that there is no experimental evidence to support this speculation. We additionally demonstrate that the putative elastase cleavage site introduced by the D614G mutation is unlikely to be accessible to proteases.

Publication Type

Journal article.

<220>

Accession Number

20203493578

Author

Casey, J. D.; Johnson, N. J.; Semler, M. W.; Collins, S. P.; Aggarwal, N. R.; Brower, R. G.; Chang StevenY.; Eppensteiner, J.; Filbin, M.; Gibbs, K. W.; Ginde, A. A.; Gong MichelleN.; Harrell, F.; Hayden, D. L.; Hough, C. L.; Khan, A.; Leither, L. M.; Moss, M.; Oldmixon, C. F.; Park, P. K.; Reineck, L. A.; Ringwood, N. J.; Robinson, B. R. H.; Schoenfeld, D. A.; Shapiro, N. I.; et al.

Title

Rationale and design of ORCHID: a randomized placebo-controlled clinical trial of hydroxychloroquine for adults hospitalized with COVID-19.

Source

Annals of the American Thoracic Society; 2020. 17(9):1144-1153. 55 ref.

Publisher

American Thoracic Society

Location of Publisher

New York

Country of Publication

USA

Abstract

The ORCHID (Outcomes Related to COVID-19 treated with Hydroxychloroquine among In-patients with symptomatic Disease) trial is a multicenter, blinded, randomized trial of hydroxychloroquine versus placebo for the treatment of adults hospitalized with coronavirus disease (COVID-19). This document provides the rationale and background for the trial and highlights key design features. We discuss five novel challenges to the design and conduct of a large, multicenter, randomized trial during a pandemic, including (1)

widespread, off-label use of the study drug before the availability of safety and efficacy data; (2) the need to adapt traditional procedures for documentation of informed consent during an infectious pandemic; (3) developing a flexible and robust Bayesian analysis incorporating significant uncertainty about the disease, outcomes, and treatment; (4) obtaining indistinguishable drug and placebo without delaying enrollment; and (5) rapidly obtaining administrative and regulatory approvals. Our goals in describing how the ORCHID trial progressed from study conception to enrollment of the first patient in 15 days are to inform the development of other high-quality, multicenter trials targeting COVID-19. We describe lessons learned to improve the efficiency of future clinical trials, particularly in the setting of pandemics. The ORCHID trial will provide high-quality, clinically relevant data on the safety and efficacy of hydroxychloroquine for the treatment of COVID-19 among hospitalized adults.

Publication Type

Journal article.

<221>

Accession Number

20203497829

Author

Vighnesh Ashok Ila Sharma; Goverdhan Dutt Puri

Title

In-hospital transfer of COVID-19 patients: perspectives from an Indian tertiary care hospital. (Special Issue: COVID-19 ACCPM SERIES.)

Source

Anaesthesia Critical Care & Pain Medicine; 2020. 39(4):473-473. 1 ref.

Publisher

Elsevier Masson SAS

Location of Publisher

Issy-les-Moulineaux

Country of Publication

France

Publication Type

Journal article.

<222>

Accession Number

20203478042

Author

Chazarra-Zapata, J.; Parras-Burgos, D.; Arteaga, C.; Ruiz-Canales, A.; Molina-Martinez, J. M.

Title

Adaptation of a traditional irrigation system of micro-plots to Smart Agri development: a case study in Murcia (Spain).

Source

Agronomy; 2020. 10(9)45 ref.

Publisher

MDPI Publishing

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Currently, water users associations (WUAs) in semi-arid areas of southeastern Spain (Murcia region) send a multitude of data supplied by sensors in the field to the cloud. The constant technological revolution offers opportunities for small farms not to be abandoned, thanks to the Internet of Things (IoT). This technology allows them to continue to manage remotely using smartphones/tablets/laptops. This new system contributes to the mitigation of climate change from several aspects: reduction of water footprint and energy consumption (in the pumps that pressurize the grid, such as in the optimization of the proposed solution, by using batteries that communicate in low radiation of electric and magnetic alternating fields (LoRad), General Packet Radio Service (GPRS), or narrowband IoT (NB-IoT), or clean energy). The analysis of these data and the incorporation of new IoT technologies facilitate the maintenance of green roofs and ensure the continuity of these farms. The direct benefit obtained is remarkable CO₂ removal that prevents desertification by the abandonment of arable land. This communication shows the implementation of a Smart Agri system in areas with micro-plots (surface less than 0.5 ha) with low-cost technology based on long-range (LoRa) systems, easily maintainable by personnel with basic knowledge of automation, which transforms into a very interesting solution for regions with development roads. In addition, complex orography and difficult access are added in both physical and technological environments. The main technical limitations found in such plots are poor coverage for mobile phones and unworkable and expensive implementation by wiring or WiFi/radio systems. Currently, thanks to the Smart Agri system implemented in this WUA in Murcia, farmers can manage and control the irrigation systems in their plots from home. Then, they cannot lose their crops and respect the isolation conditions imposed by the Spanish government as a result of the alarm caused by COVID-19.

Publication Type

Journal article.

<223>

Accession Number

20203475487

Author

Sahaj Rathi; Pranav Ish; Ashwini Kalantri; Shriprakash Kalantri

Title

Hydroxychloroquine prophylaxis for COVID-19 contacts in India.

Source

Lancet Infectious Diseases; 2020. 20(10):1118-1119. 5 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

An ongoing pandemic justifies leeway in generation and interpretation of evidence in the interest of public health. However, all scientific reasoning cannot be abandoned citing desperate times. A blanket recommendation for chemoprophylaxis in the absence of credible evidence might be contentious to say the least. If hydroxychloroquine is to be used, a clear informed choice needs to be offered to every contact, explaining the scarcity of evidence for its efficacy and its potential risks. Additionally, all outcome events should be recorded. If this is not done, the risk-benefit assessment would be skewed, adverse events accepted as collateral damage, and a drug accepted provisionally in a time of crisis could become commonplace as standard of care for a long time to come. The shortage of chloroquine, an inexpensive antimalarial in low-income malaria-endemic countries like India, could lead to preventable morbidity and mortality. Moreover, mathematical models estimate a worst-case scenario of 10 million cases of COVID-19 in New Delhi, India, alone in the coming weeks. In these chaotic times, no health-care system can screen such a large number of healthy contacts for concomitant QTc prolonging medicines, long QT syndromes, or glucose-6-phosphate dehydrogenase deficiency. Even a 0.1% proportion of serious complications would amount to more than 10,000 severe adverse events in New Delhi alone, a number an already overwhelmed health-care system would not be able to cope with. The drug is untested, the benefits unknown, and the risks not negligible, especially at this scale of use. Moreover, the safety of these immunomodulators in people at risk of a severe viral illness has never been evaluated.

Publication Type

Correspondence.

<224>

Accession Number

20203476604

Author

Kent, K.; Murray, S.; Penrose, B.; Auckland, S.; Visentin, D.; Godrich, S.; Lester, E.

Title

Prevalence and socio-demographic predictors of food insecurity in Australia during the COVID-19 pandemic.

Source

Nutrients; 2020. 12(9)51 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 pandemic has exacerbated economic vulnerabilities and disrupted the Australian food supply, with potential implications for food insecurity. This study aims to describe the prevalence and socio-demographic associations of food insecurity in Tasmania, Australia, during the COVID-19 pandemic. A cross-sectional survey (deployed late May to early June 2020) incorporated the U.S. Household Food Security Survey Module: Six-Item Short Form, and fifteen demographic and COVID-related income questions. Survey data (n = 1170) were analyzed using univariate and multivariate binary logistic regression. The prevalence of food insecurity was 26%. The adjusted odds of food insecurity were higher among respondents with a disability, from a rural area, and living with dependents. Increasing age, a university education, and income above \$80,000/year were protective against food insecurity. Food insecurity more than doubled with a loss of household income above 25% (Adjusted Odds Ratio (AOR): 2.02; 95% CI: 1.11, 3.71; p = 0.022), and the odds further increased with loss of income above 75% (AOR: 7.14; 95% CI: 2.01, 24.83; p = 0.002). Our results suggest that the prevalence of food insecurity may have increased during the COVID-19 pandemic, particularly among economically vulnerable households and people who lost income. Policies that support disadvantaged households and ensure adequate employment opportunities are important to support Australians throughout and post the COVID-19 pandemic.

Publication Type

Journal article.

<225>

Accession Number

20203487238

Author

Nguyen Bich-Ngoc; Teller, J.

Title

Potential effects of the COVID-19 pandemic through changes in outbound tourism on water demand: the case of Liege (Belgium).

Source

Water; 2020. 12(10)26 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 pandemic has led to many countries closing their borders, and numerous people spending their holidays at home instead of traveling abroad. This sudden reduction in travel activities, and other 'new normals', might have influenced people's water usage. Hence, using Liege as a case study, this study aims to address the potential effect of outbound tourism on water consumption and how the current situation might affect the total water demand. Statistical models were developed and validated using the total daily volume of 23 municipalities in the Liege conurbation, the monthly total number of outbound trips, and other meteorological data. Results suggest significantly lower water demand in the months with high numbers of outbound travel activities. Though the projected risk of increased water needs due to fewer people traveling is moderate, the threat becomes much higher during long periods of dry and hot weather.

Publication Type

Journal article.

<226>

Accession Number

20203486599

Author

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Kashaf Junaid; Hasan Ejaz; Abdalla, A. E.; Abosalif, K. O. A.; Ullah, M. I.; Humaira Yasmeen; Younas, S.; Hamam, S. S. M.; Abdul Rehman

Title

Effective immune functions of micronutrients against SARS-CoV-2.

Source

Nutrients; 2020. 12(10)107 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The third coronavirus outbreak in the last two decades has caused significant damage to the world's economy and community health. The highly contagious COVID-19 infection has affected millions of people to date and has led to hundreds of thousands of deaths worldwide. Aside from the highly infectious nature of SARS-CoV-2, the lack of a treatment or vaccine has been the main reason for its spread. Thus, it has become necessary to find alternative methods for controlling SARS-CoV-2. For the present review, we conducted an online search for different available nutrition-based therapies for previously known coronavirus infections and RNA-based virus infections as well as general antiviral therapies. These treatments have promise for combating COVID-19, as various nutrients and minerals play direct and indirect roles in the control and prevention of this newly emerged viral infection. The patients' nutritional status with COVID-19 must be analyzed before administering any treatment, and nutritional supplements should be given to the affected individuals along with routine treatment. We suggest a potential interventional role of nutrients to strengthen the immune system against the emerging infection caused by COVID-19.

Publication Type

Journal article.

<227>

Accession Number

20203486563

Author

Silva, D. F. O.; Lima, S. C. V. C.; Sena-Evangelista, K. C. M.; Marchioni, D. M.; Cobucci, R. N.; Andrade, F. B. de

Title

Nutritional risk screening tools for older adults with COVID-19: a systematic review.

Source

Nutrients; 2020. 12(10)93 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Coronavirus disease 2019 (COVID-19) is associated with high risk of malnutrition, primarily in older people; assessing nutritional risk using appropriate screening tools is critical. This systematic review identified applicable tools and assessed their measurement properties. Literature was searched in the MEDLINE, Embase, and LILACS databases. Four studies conducted in China met the eligibility criteria. Sample sizes ranged from six to 182, and participants' ages from 65 to 87 years. Seven nutritional screening and assessment tools were used: the Nutritional Risk Screening 2002 (NRS-2002), the Mini Nutritional Assessment (MNA), the MNA-short form (MNA-sf), the Malnutrition Universal Screening Tool (MUST), the Nutritional Risk Index (NRI), the Geriatric NRI (GNRI), and modified Nutrition Risk in the Critically ill (mNUTRIC) score. Nutritional risk was identified in 27.5% to 100% of participants. The NRS-2002, MNA, MNA-sf, NRI, and MUST demonstrated high sensitivity; the MUST had better specificity. The MNA and MUST demonstrated better criterion validity. The MNA-sf demonstrated better predictive validity for poor appetite and weight loss; the NRS-2002 demonstrated better predictive validity for prolonged hospitalization. mNUTRIC score demonstrated good predictive validity for hospital mortality. Most instruments demonstrate high sensitivity for identifying nutritional risk, but none are acknowledged as the best for nutritional screening in older adults with COVID-19.

Publication Type

Journal article.

<228>

Accession Number

20203486532

Author

Al-Musharaf, S.

Title

Prevalence and predictors of emotional eating among healthy young Saudi women during the COVID-19 pandemic.

Source

Nutrients; 2020. 12(10)83 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Emotional eating (EE) is prevalent among women and is associated with obesity. The coronavirus 2019 (COVID-19) pandemic and mandatory quarantine increased the risk of mental symptoms and, inferentially, emotional eating (EE). We investigated the EE prevalence and predictors during this pandemic. Overall, 638 women, ages 18-39, completed an online survey incorporating the Emotional Eating Scale, Perceived Stress Scale, Generalized Anxiety Disorder-7 Scale, Patient Health Questionnaire-9, Pittsburgh Sleep Quality Index, and Global Physical Activity Questionnaire. We asked about nutrition and collected data on weight, height, and pandemic responses. Most respondents (47.2%) reported low EE; 40.4% were "moderate" and 12.4% "high" emotional eaters; 42.8% reported depression, 27% anxiety, 71% moderate stress, and 12.5% severe stress. The main EE indicators/predictors were fat intake (beta = 0.192, p = 0.004), number of meals (beta = 0.187, p < 0.001), sugar consumption (beta = 0.150, p < 0.001), body mass index (beta = 0.149, p < 0.001), stress (beta = 0.143, p = 0.004), energy intake (beta = 0.134, p = 0.04), and fast food intake frequency (beta = 0.111, p < 0.01). EE score correlated negatively with increased family income (beta = -0.081, p = 0.049). Higher stress correlated with worse sleep, less sleep, and less physical activity. Emotional eating is common among young Saudi women during the pandemic. We recommend healthy food choices and increased physical activity to improve sleep and mitigate stress.

Publication Type

Journal article.

<229>

Accession Number

20203480854

Author

Wojcieszak-Zbierska, M. M.; Jeczmyk, A.; Zawadka, J.; Uglis, J.

Title

Agritourism in the era of the coronavirus (COVID-19): a rapid assessment from Poland.

Source

Agriculture; 2020. 10(9)82 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 pandemic has had strong impact on the tourism market. As a result of the lockdown and the closing of borders, tourist traffic came to an abrupt halt. Agritourism is an important way of diversifying agriculture and rural areas. In addition, it is a part of the idea of sustainable and multifunctional agriculture. It makes it possible to use production resources in the countryside and constitutes an additional source of income for both farmers and the local community. The aim of the paper was to present the results of survey research concerning the tourist plans of the Polish people in the era of the COVID-19 pandemic, in particular plans to spend holidays on agritourism farms. The study confirmed that according to Polish respondents, holidays in the country, spent on agritourism farms, were a good choice in the era of the COVID-19 pandemic. The respondents expect agritourism providers to take specific actions, i.e., disinfect communal rooms, make hand sanitizers available, as well as limit the maximum number of people allowed on the farm and in open-access rooms, in order to ensure safety during their stay. The article constitutes a contribution to the evolving literature on the impact of the COVID-19 pandemic on the development of the tourism sector.

Publication Type

Journal article.

<230>

Accession Number

20203507201

Author

Hussain, M.; Hussain, I.; Mahnoor; Muhammad Gulsher

Title

Coronavirus; chemistry of washing hands with soap for 20 seconds.

Source

Pakistan Journal of Public Health; 2020. 10(1):8-10. 9 ref.

Publisher

Health Services Academy

Location of Publisher

Islamabad

Country of Publication

Pakistan

Abstract

The coronavirus also called 2019 novel coronavirus (2019-nCoV) or severe acute respiratory syndrome coronavirus 2 (SARS-2) is notorious for its pandemic corona virus disease 2019 (COVID-19). By 20 April 2020 (11.44 GMT), the pandemicity has inflicted more than 2.42 million people in the world resulting in more than 165,903 deaths (case fatality rate = 14.6%). However, due credit goes to health care professionals for saving 635,761 lives i.e. 26.3% of the total affected population. On the other side, the economy of the countries has drastically been shattered in this scenario. According to an estimate, sole Pakistan will have to meet an economic loss of 1.3 trillion Pak rupees, provided the outbreak is controlled within short time span. Similarly, associated psychological disorders and social displeasure cannot be set aside.

Publication Type

Journal article.

<231>

Accession Number

20203507200

Author

Noor, M. N.

Title

Living with HIV in the time of COVID-19.

Source

Pakistan Journal of Public Health; 2020. 10(1):5-7. 18 ref.

Publisher

Health Services Academy

Location of Publisher

Islamabad

Country of Publication

Pakistan

Abstract

This commentary foregrounds the need to examine how the coronavirus disease 2019 (COVID-19) pandemic and associated conditions may be affecting the lives of people living with HIV (PLWH) in a developing country context like Pakistan. It raises some important questions on medical care and updated information regarding PLWH in the time of COVID-19. Since PLWH are at an increased risk of developing

comorbid conditions - something that makes them more vulnerable to COVID-19 - it is critical that timely research and evidence-based actions are undertaken to protect their health.

Publication Type

Journal article.

<232>

Accession Number

20203502289

Author

Bugembe, D. L.; Kayiwa, J.; Phan, M. V. T.; Tushabe, P.; Balinandi, S.; Dhaala, B.; Lexow, J.; Mwebesa, H.; Aceng, J.; Kyobe, H.; Ssemwanga, D.; Lutwama, J.; Kaleebu, P.; Cotten, M.

Title

Main routes of entry and genomic diversity of SARS-CoV-2, Uganda.

Source

Emerging Infectious Diseases; 2020. 26(10):2411-2415. 13 ref.

Publisher

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

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

We established rapid local viral sequencing to document the genomic diversity of severe acute respiratory syndrome coronavirus 2 entering Uganda. Virus lineages closely followed the travel origins of infected persons. Our sequence data provide an important baseline for tracking any further transmission of the virus throughout the country and region.

Publication Type

Journal article.

<233>

Accession Number

20203502278

Author

Kang EunKyo; Lee SunYoung; Jung HyeMin; Kim MinSun; Cho BeLong; Kim YonSu

Title

Operating protocols of a community treatment center for isolation of patients with coronavirus disease, South Korea.

Source

Emerging Infectious Diseases; 2020. 26(10):2329-2337. 26 ref.

Publisher

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

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

Most persons with confirmed coronavirus disease (COVID-19) have no or mild symptoms. During the COVID-19 pandemic, communities need efficient methods to monitor asymptomatic patients to reduce transmission. We describe the structure and operating protocols of a community treatment center (CTC) run by Seoul National University Hospital (SNUH) in South Korea. SNUH converted an existing facility into a CTC to isolate patients who had confirmed COVID-19 but mild or no symptoms. Patients reported self-measured vital signs and symptoms twice a day by using a smartphone application. Medical staff in a remote monitoring center at SNUH reviewed patient vital signs and provided video consultation to patients twice daily. The CTC required few medical staff to perform medical tests, monitor patients, and respond to emergencies. During March 5-26, 2020, we admitted and treated 113 patients at this center. CTCs could be an alternative to hospital admission for isolating patients and preventing community transmission.

Publication Type

Journal article.

<234>

Accession Number

20203505343

Author

Deep Bhowmik; Rajat Nandi; Rahul Jagadeesan; Niranjana Kumar; Amresh Prakash; Diwakar Kumar

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Title

Identification of potential inhibitors against SARS-CoV-2 by targeting proteins responsible for envelope formation and virion assembly using docking based virtual screening, and pharmacokinetics approaches.

Source

Infection, Genetics and Evolution; 2020. 84many ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

WHO has declared the outbreak of COVID-19 as a public health emergency of international concern. The ever-growing new cases have called for an urgent emergency for specific anti-COVID-19 drugs. Three structural proteins (Membrane, Envelope and Nucleocapsid protein) play an essential role in the assembly and formation of the infectious virion particles. Thus, the present study was designed to identify potential drug candidates from the unique collection of 548 anti-viral compounds (natural and synthetic anti-viral), which target SARS-CoV-2 structural proteins. High-end molecular docking analysis was performed to characterize the binding affinity of the selected drugs-the ligand, with the SARS-CoV-2 structural proteins, while high-level Simulation studies analyzed the stability of drug-protein interactions. The present study identified rutin, a bioflavonoid and the antibiotic, doxycycline, as the most potent inhibitor of SARS-CoV-2 envelope protein. Caffeic acid and ferulic acid were found to inhibit SARS-CoV-2 membrane protein while the anti-viral agent's simeprevir and grazoprevir showed a high binding affinity for nucleocapsid protein. All these compounds not only showed excellent pharmacokinetic properties, absorption, metabolism, minimal toxicity and bioavailability but were also remain stabilized at the active site of proteins during the MD simulation. Thus, the identified lead compounds may act as potential molecules for the development of effective drugs against SARS-CoV-2 by inhibiting the envelope formation, virion assembly and viral pathogenesis.

Publication Type

Journal article.

<235>

Accession Number

20203502207

Author

Nasirzadeh, M.; Aligol, M.

Title

Assessment of knowledge, attitude, and factors associated with the preventive behaviors of COVID-19 in Qom, Iran, in 2020. [Persian]

Source

Qom University of Medical Sciences Journal; 2020. 14(7):fa51-fa57, en50. 20 ref.

Publisher

Qom University of Medical Sciences

Location of Publisher

Qom

Country of Publication

Iran

Abstract

Background and Objectives: Preventive behaviors are indispensable to the reduction of the prevalence and severity of the complications of Covid-19 disease. Knowledge, attitudes, and perceptions of the individual are the explanatory variables contributing to the adoption of these health behaviors. The present study aimed to assess the knowledge, perception, attitude, and some factors associated with the preventive behaviors of Covid-19 in Qom. **Methods:** This descriptive cross-sectional study was conducted on 2423 cases who were selected by cluster sampling method in Qom in 2020. Data were collected using an online researcher-made questionnaire. This 44-item questionnaire encompassed the domains of COVID-19 related knowledge (20 items), COVID-19 perceived threat (5 items), attitude (6 items), and preventive measures (13 items). **Results:** The mean scores of knowledge, attitude, perceived threat, and preventive behaviors were obtained at 94.5%, 93.05%, 76.92%, and 88.42%, respectively. Preventive behaviors were significantly correlated with knowledge and attitude, and attitude was the strongest predictor of behavior ($B= 0.362$; $P<0.001$). **Conclusion:** The obtained results pointed to the high level of COVID-19-related knowledge, perception, and preventive behaviors among the residents of Qom.

Publication Type

Journal article.

<236>

Accession Number

20203500315

Author

Quaquarini, E.; Saltalamacchia, G.; Presti, D.; Caldana, G.; Tibollo, V.; Malovini, A.; Palumbo, R.; Teragni, C. M.; Balletti, E.; Mollica, L.; Biscaldi, E.; Frascaroli, M.; Bernardo, A.; Sottotetti, F.

Title

Impact of COVID-19 outbreak on cancer patient care and treatment: data from an outpatient oncology clinic in Lombardy (Italy).

Source

Cancers; 2020. 12(10)28 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Lombardy was the first area in Italy to have an outbreak of coronavirus disease 19 (COVID-19) at the beginning of 2020. In this context, cancer has been reported as a major risk factor for adverse outcomes and death, so oncology societies have quickly released guidelines on cancer care during the pandemic. The aim of this study was to investigate the management of cancer patients and oncological treatments during the COVID-19 pandemic and to describe the containment measures performed in our outpatient clinic at Pavia (Lombardy). A comparison with the same period of the four previous years (2019, 2018, 2017, and 2016) was also performed. Using our electronic databases, we evaluated the number and characteristics of patients accessing the hospital for anticancer drug infusion from 24 February, 2020 to 30 April, 2020 and the number of radiological exams performed. Although a significant reduction in access for therapy was seen when compared with 2019 (2590 versus 2974, access rate ratio (ARR) = 0.85, $p < 0.001$), no significant differences in access numbers and ARR was evident between 2020 and 2018, 2017, or 2016 (2590 versus 2626 (ARR = 0.07), 2660 (ARR = 0.99), and 2694 (ARR = 0.96), respectively, $p > 0.05$). In 2020, 63 patients delayed treatment: 38% for "pandemic fear", 18% for travel restrictions, 13% for quarantine, 18% for flu syndrome other than COVID-19, and 13% for worsening of clinical conditions and death. Only 7/469 patients developed COVID-19. A significant reduction in radiological exams was found in 2020 versus all the other years considered (211 versus 360, 355, 385, 390 for the years 2020, 2019, 2018, 2017, and 2016, respectively, $p < 0.001$). The low incidence of COVID-19 among our cancer patients, along with the hospital policy to control infection, enabled safe cancer treatment and a continuum of care in most patients, while a small fraction of patients experienced a therapeutic delay due to patient-related reasons.

Publication Type

Journal article.

<237>

Accession Number

20203501593

Author

Chan KamWa; Wong Taam [Wong, T. V.]; Tang ChiWai [Tang, C. W. S.]

Title

COVID-19: an update on the epidemiological, clinical, preventive and therapeutic evidence and guidelines of integrative Chinese - western medicine for the management of 2019 novel coronavirus disease.

Source

American Journal of Chinese Medicine; 2020. 48(3):737-762. many ref.

Publisher

World Scientific Publishing Co. Pte. Ltd

Location of Publisher

Singapore

Country of Publication

Singapore

Abstract

As of 22 February 2020, more than 77662 cases of confirmed COVID-19 have been documented globally with over 2360 deaths. Common presentations of confirmed cases include fever, fatigue, dry cough, upper airway congestion, sputum production, shortness of breath, myalgia/arthralgia with lymphopenia, prolonged prothrombin time, elevated C-reactive protein, and elevated lactate dehydrogenase. The reported severe/critical case ratio is approximately 7-10% and median time to intensive care admission is 9.5-10.5 days with mortality of around 1-2% varied geographically. Similar to outbreaks of other newly identified virus, there is no proven regimen from conventional medicine and most reports managed the patients with lopinavir/ritonavir, ribavirin, beta-interferon, glucocorticoid and supportive treatment with remdesivir undergoing clinical trial. In China, Chinese medicine is proposed as a treatment option by national and provincial guidelines with substantial utilization. We reviewed the latest national and provincial clinical guidelines, retrospective cohort studies, and case series regarding the treatment of COVID-19 by add-on Chinese medicine. We have also reviewed the clinical evidence generated from SARS and H1N1 management with hypothesized mechanisms and latest in silico findings to identify candidate Chinese medicines for the consideration of possible trials and management. Given the paucity of strongly evidence-based regimens, the available data suggest that Chinese medicine could be considered as an adjunctive therapeutic option in the management of COVID-19.

Publication Type

Journal article.

<238>

Accession Number

20203502796

Author

Ballivian, J.; Alcaide, M. L.; Cecchini, D.; Jones, D. L.; Abbamonte, J. M.; Casseti, I.

Title

Impact of COVID-19-related stress and lockdown on mental health among people living with HIV in Argentina.

Source

JAIDS, Journal of Acquired Immune Deficiency Syndromes; 2020. 85(4):475-482.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background: The spread of severe acute respiratory syndrome coronavirus 2, causative agent of the coronavirus disease 2019 (COVID-19), has necessitated widespread lockdown to mitigate the pandemic. This study examines the influence of resilience on the impact of COVID-related stress and enforced lockdown on mental health, drug use, and treatment adherence among people living with HIV (PLWH) in Argentina. **Setting:** PLWH residing predominantly in Buenos Aires Metropolitan Area and urban regions of Argentina were identified from a private clinic electronic database. **Methods:** Participants completed an anonymous online survey to evaluate the impact of COVID-19 on economic disruption, resilience, mental health outcomes (depression, anxiety, stress, and loneliness), adherence to HIV treatment, and substance use. We performed ordinary least squares and logistic regressions to test whether resilient coping buffered the impact of economic disruption on mental health and drug use during quarantine. **Results:** A total of 1336 PLWH aged 18-82 were enrolled. The impact of economic disruption on mental health $\Delta F(1,1321) = 8.86, P = 0.003$ and loneliness $\Delta F(1,1326) = 5.77, P = 0.016$ was buffered by resilience. A 3-way interaction between resilient buffering, stress, and sex was significant $\Delta F(1,1325) = 4.76, P = 0.029$. Participants reported less than excellent adherence to medication (33%), disruption to mental health services (11%), and disruption to substance abuse treatment (1.3%) during lockdown. **Discussion:** The impact of COVID-stress and lockdown on emotional distress seemed mitigated by resilience coping strategies, and the buffering impact of resilience on perceived stress was greater among women. Results highlight PLWH's capacity to adhere to treatment in challenging circumstances and the importance of developing resilience skills for better coping with stress and adversity.

Publication Type

Journal article.

<239>

Accession Number

20203499079

Author

Eromon, P. E.; Oseni, T. I. A.; Fuh, N. F.; Affusim, C. C.; Adewuyi, B.; Imomoh, P. A.

Title

The family physicians in a tertiary setting in COVID-19 pandemic in Nigeria: the isth experience.

Source

Annals of Biomedical Sciences; 2020. 19(2):76-81.

Publisher

Department of Haematology, University of Benin Teaching Hospital

Location of Publisher

Benin City

Country of Publication

Nigeria

Abstract

Aim/Background: The Covid-19 pandemic continues to pose a major health challenge globally. Nigeria have been battling with the pandemic since recording its first case on 28th February, 2020. Irrua Specialist Teaching Hospital (ISTH) is one of the centres for the diagnosis and treatment of Covid-19 in Nigeria. **Materials and Methods:** To ensure safety of health care workers as well as non Covid-19 patients presenting to the hospital, measures were put in place by the hospital management and the department of family medicine. **Results:** Patients were triaged prior to entering the hospital and the clinics such that patients with risk of Covid-19 were seen separately. Home visits, telemedicine, social distancing, appropriate safety attires including compulsory face masks for all were instituted. **Conclusion:** With these measures, the hospital did not have to shut down its clinics, neither did it record any significant increase in Covid-19 cases compared to other centres. Thus non Covid-19 patients could get the highest standard of care without increasing their chances of contracting Covid-19 from the hospital nor the health workers being put at increased risk. **Recommendations:** Clinics across the country and other climes should institute adequate safety measures to protect staff and patients while offering standard care to patients irrespective of ailment.

Publication Type

Journal article.

<240>

Accession Number

20203499074

Author

Vilakati, P. N.; Villa, S.; Alagna, R.; Bongani Khumalo; Tshuma, S.; Quaresima, V.; Nieman, N. R.; Cirillo, D. M.; Raviglione, M. C.

Title

The neglected role of faith-based organizations in prevention and control of COVID-19 in Africa.

Source

Transactions of the Royal Society of Tropical Medicine and Hygiene; 2020. 114(10):784-786. 11 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The COVID-19 pandemic has exposed health system weaknesses of economically wealthy countries with advanced technologies. COVID-19 is now moving fast across Africa where small outbreaks have been reported so far. There is a concern that with the winter transmission will grow rapidly. Despite efforts of African Governments to promptly establish mitigating measures, rural areas, especially in sub-Saharan Africa, risk being neglected. In those settings, faith-based and other non-governmental organizations, if properly equipped and supported, can play a crucial role in slowing the spread of COVID-19. We describe our experience in two rural health facilities in eSwatini and Ethiopia highlighting the struggle towards preparedness and the urgency of international support to help prevent a major public health disaster.

Publication Type

Journal article.

<241>

Accession Number

20203499067

Author

Abdela, S. G.; Griensven, J. van; Fikre Seife; Wendemagegn Enbiale

Title

Neglecting the effect of COVID-19 on neglected tropical diseases: the Ethiopian perspective.

Source

Transactions of the Royal Society of Tropical Medicine and Hygiene; 2020. 114(10):730-732. 5 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Countries around the world are facing an enormous challenge due to the COVID-19 pandemic. The pressure that the pandemic inflicts on health systems could certainly impact on the care, control, and elimination of neglected tropical diseases (NTDs). From mid-January 2020, Ethiopia started to prepare for the prevention and treatment of COVID-19. The Federal Ministry of Health pledged to continue essential healthcare, including NTD care, during this pandemic. However, some hospitals have been closed for other healthcare services and have been turned into isolation and treatment centers for COVID-19. In addition to the healthcare facility measures, all community-based health promotion and disease prevention services have been stopped. The current shift in attention towards COVID-19 is expected to have a negative impact on NTD prevention and care.

Publication Type

Journal article.

<242>

Accession Number

20203497179

Author

Almandoz, J. P.; Xie, L.; Schellinger, J. N.; Mathew, M. S.; Gazda, C.; Ofori, A.; Kukreja, S.; Messiah, S. E.

Title

Impact of COVID-19 stay-at-home orders on weight-related behaviours among patients with obesity.

Source

Clinical Obesity; 2020. 10(5)36 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

How the impact of the COVID-19 stay-at-home orders is influencing physical, mental and financial health among vulnerable populations, including those with obesity is unknown. The aim of the current study was to explore the health implications of COVID-19 among a sample of adults with obesity. A retrospective medical chart review identified patients with obesity from an obesity medicine clinic and a bariatric surgery

(MBS) practice. Patients completed an online survey from April 15, 2020 to May 31, 2020 to assess COVID-19 status and health behaviours during stay-at-home orders. Logistic regression models examined the impact of these orders on anxiety and depression by ethnic group. A total of 123 patients (87% female, mean age 51.2 years [SD 13.0]), mean BMI 40.2 [SD 6.7], 49.2% non-Hispanic white (NHW), 28.7% non-Hispanic black, 16.4% Hispanic, 7% other ethnicity and 33.1% completed MBS were included. Two patients tested positive for severe acute respiratory syndrome coronavirus 2 and 14.6% reported symptoms. Then, 72.8% reported increased anxiety and 83.6% increased depression since stay-at-home orders were initiated. Also 69.6% reported more difficulty in achieving weight loss goals, less exercise time (47.9%) and intensity (55.8%), increased stockpiling of food (49.6%) and stress eating (61.2%). Hispanics were less likely to report anxiety vs NHWs (adjusted odds ratios 0.16; 95% CI, 0.05-0.49; P = 0.009). Results here showed the COVID-19 pandemic is having a significant impact on patients with obesity regardless of infection status. These results can inform clinicians and healthcare professionals about effective strategies to minimize COVID-19 negative outcomes for this vulnerable population now and in post-COVID-19 recovery efforts.

Publication Type

Journal article.

<243>

Accession Number

20203497135

Author

Nayanabai Shabadi; Chandana Hombaiah; Thomas, J. J.; Mathews, N. A.; Khanum, R. S.; Shwethashree, M.; Murthy, M. R. N.

Title

Knowledge, attitude, and practices toward COVID-19 among the college students in a southern city of Karnataka.

Source

International Journal of Health and Allied Sciences; 2020. 9(4):343-347. 12 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

BACKGROUND: The new coronavirus disease COVID-19 has been spreading from Wuhan city to other cities in China and worldwide since December 2019. It was declared a pandemic by the World Health

Organization on March 11, 2020. To guarantee the final success, people's adherence to the control measures is essential, which is greatly influenced by their knowledge, attitude, and practices toward COVID-19. Hence, the study was taken up to assess the knowledge, attitude, and practices among law college students. MATERIALS AND METHODS: A cross-sectional study was conducted in Mysore in March 2020 among the students of Law College. Students who were not interested in taking up the study were not included in the study. A total of 256 study participants were included in the study. Data were collected using a pretested and self-administered questionnaire about knowledge-, attitude-, and practice-based questions on COVID-19. Data were entered in Microsoft Excel and were analyzed using SPSS V.23. RESULTS: Among 256 study participants, 130 were female (50.8%) and 126 were male (49.2%). The main sources of information for the study participants are online newspapers/channels (n = 70) and social media (n = 55). The median score of knowledge, attitude, and practices is 5, 4, and 8, respectively. A comparison of the scholastic year with knowledge scores was found to be statistically significant at a P < 0.05. CONCLUSION: The knowledge and attitude scores were low, but it was found that the study participants were following appropriate practices regarding COVID-19.

Publication Type

Journal article.

<244>

Accession Number

20203497130

Author

Nadig, A. P. R.; Krishna, K. L.

Title

Impact of lockdown during COVID-19 pandemic and its advantages.

Source

International Journal of Health and Allied Sciences; 2020. 9(4):316-321. 42 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

COVID-19, caused by novel coronavirus SARCoV2, is a contagious disease, emerged in the end of December 2019, at Wuhan seafood market, China. This disease is spiraling like a wildfire and rapidly spreading worldwide, overburdening the health system with newly infected cases. As of April 25, 2020, a total of 2,846,536 COVID-19-positive cases and 197,859 total deaths were reported across the globe. This

epidemic has exponential growth characteristics in the absence of specific vaccine and treatment for COVID-19. Many countries across the world including India, the USA, China, Italy, and German are implementing the lockdown measures to control the COVID-19 pandemic and to maintain the infection at manageable levels. Keeping the prospectus of future such pandemics, we reviewed; what is lockdown and containment? Does it works? What are the advantages of lockdown and containment in cotrolling the spread of the virus?. The present review answers these questions and tries to spread light on the impact of lockdown. Our review concludes that the implementation of lockdown has forced many countries in flattening the epidemic curve and strengthening the health-care system and improves the environmental quality during the COVID-19 pandemic.

Publication Type

Journal article.

<245>

Accession Number

20203498357

Author

Derwand, R.; Scholz, M.

Title

Does zinc supplementation enhance the clinical efficacy of chloroquine/hydroxychloroquine to win today's battle against COVID-19?

Source

Medical Hypotheses; 2020. 14222 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Currently, drug repurposing is an alternative to novel drug development for the treatment of COVID-19 patients. The antimalarial drug chloroquine (CQ) and its metabolite hydroxychloroquine (HCQ) are currently being tested in several clinical studies as potential candidates to limit SARS-CoV-2-mediated morbidity and mortality. CQ and HCQ (CQ/HCQ) inhibit pH-dependent steps of SARS-CoV-2 replication by increasing pH in intracellular vesicles and interfere with virus particle delivery into host cells. Besides direct antiviral effects, CQ/HCQ specifically target extracellular zinc to intracellular lysosomes where it interferes with RNA-dependent RNA polymerase activity and coronavirus replication. As zinc deficiency frequently occurs in elderly patients and in those with cardiovascular disease, chronic pulmonary disease, or diabetes, we

hypothesize that CQ/HCQ plus zinc supplementation may be more effective in reducing COVID-19 morbidity and mortality than CQ or HCQ in monotherapy. Therefore, CQ/HCQ in combination with zinc should be considered as additional study arm for COVID-19 clinical trials.

Publication Type

Journal article.

<246>

Accession Number

20203498354

Author

Klimke, A.; Hefner, G.; Will, B.; Voss, U.

Title

Hydroxychloroquine as an aerosol might markedly reduce and even prevent severe clinical symptoms after SARS-CoV-2 infection.

Source

Medical Hypotheses; 2020. 142

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Covid-19 is a new coronavirus disease first described in December 2019. This respiratory illness is severe and potentially fatal. Severe cases make up to 15%, lethality ranges between 1.5 and more than 10%. What is urgently needed is an efficient pharmacological treatment for the treatment of severe cases. During the infection of alveolar epithelial cells of the lung, the ACE2 receptor has a central function. The antimalarial drugs chloroquine phosphate (CQ) and hydroxychloroquine (HCQ) impair in vitro the terminal glycosylation of ACE2 without significant change of cell-surface ACE2 and, therefore, might be potent inhibitors of SARS-CoV-2 infections. Starting inhibition at 0.1 M, CQ completely prevented in vitro infections at 10 M, suggesting a prophylactic effect and preventing the virus spread 5 h after infection. In a first clinical trial, CQ was effective in inhibiting exacerbation of pneumonia, improving lung imaging findings, promotion of virus-negative conversion, and shortening the disease. In addition, HCQ, which is three times more potent than CQ in SARS-CoV-2 infected cells (EC50 0.72 M), was significantly associated with viral load reduction/disappearance in COVID-19 patients compared to controls. Theoretically, CQ and HCQ could thus be effectively used in the treatment of SARS-CoV pneumonia. From a pharmacological standpoint, however, the major problems of oral treatment with these drugs are possible severe side effects and

toxicity. Concretely, this relates to (a) the inconsistent individual bioavailability of these drugs at the alveolar target cells, depending on intestinal resorption, hepatic first-pass metabolism and accumulation in liver, spleen and lung, and (b) the need for a relatively high concentration of 1-5 M at the alveolar surface. Therefore, we propose in a first dose estimation the use of HCQ as an aerosol in a dosage of 2-4 mg per inhalation in order to reach sufficient therapeutic levels at the alveolar epithelial cells. By using a low-dose non-systemic aerosol, adverse drug reactions will markedly be reduced compared with oral application. This increase in tolerability enables a broader use for prevention and after contact with an infected person, which would be an advantage especially for the high-risk, often multi-morbid and elderly patients. Empirical data on self-medication with a one-week aerosol application by two of the authors is presented. Inhalation was well tolerated without relevant side effects.

Publication Type

Journal article.

<247>

Accession Number

20203498349

Author

Ahmad, S. I.

Title

5-fluorouracil in combination with deoxyribonucleosides and deoxyribose as possible therapeutic options for the coronavirus, COVID-19 infection.

Source

Medical Hypotheses; 2020. 142

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The recent global pandemic created by the Coronavirus SARS-CoV-2, started in Wuhan, China in December 2019, has generated panic, both in term of human death (4-5% of infected patients identified through testing) and the global economy. Human sufferings seem to be continuing, and it is not clear how long this will continue and how much more destruction it is going to cause until complete control is achieved. One of the most disturbing issues is Covid-19 treatment; although a large number of medications, previously used successfully with other viruses (including Chinese herbal medicines and anti-malaria drugs), are under consideration, there remain questions as to whether they can play a satisfactory role for this disease.

Global attempts are ongoing to find the drugs for the treatment of this virus but none of the antiviral drugs used for treatment of other human viral infection is working and hence attempts to find new drugs are continuing. Here the author is proposing that 5-Fluorouracil (5-FU) which when used on its own is failing as an antiviral agent due to the removal of this compound by proof reading ability exceptionally found in Coronaviruses. The author here is proposing to test 5-FU in combination with a number of deoxynucleosides on animal models infected with this Covid-19. Should encouraging results ensue, therapies could then be tried on patients.

Publication Type

Journal article.

<248>

Accession Number

20203492174

Author

Wang JiaHao; Zhu Xue; Sun YuYing; Zhang XingCai; Zhang Wei

Title

Efficacy and safety of traditional Chinese medicine combined with routine western medicine for the asymptomatic novel coronavirus disease (COVID-19): a Bayesian network meta-analysis protocol.

Source

Medicine (Baltimore); 2020. 99(35)27 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background: The number of patients infected with novel coronavirus disease (COVID-19) has exceeded 10 million in 2020, and a large proportion of them are asymptomatic. At present, there is still no effective treatment for this disease. Traditional Chinese medicine (TCM) shows a good therapeutic effect on COVID-19, especially for asymptomatic patients. According to the search results, we found that although there are many studies on COVID-19, there are no studies targeting asymptomatic infections. Therefore, we design a network meta-analysis (NMA) to evaluate the therapeutic effect of TCM on asymptomatic COVID-19. **Methods:** We will search Chinese and English databases to collect all randomized controlled trials (RCTs) of TCM combined with conventional western medicine or using only TCM to treat asymptomatic COVID-19 from December 2019 to July 2020. Then, two investigators will independently filter the articles, extract data, and evaluate the risk of bias. We will conduct a Bayesian NMA to evaluate the effects of different

therapies. All data will be processed by Stata 16.0 and WinBUGS. Results: This study will evaluate the effectiveness of various treatments for asymptomatic COVID-19. The outcome indicators include the time when the nucleic acid turned negative, the proportion of patients with disease progression, changes in laboratory indicators, and the side effects of drugs. Conclusion: This analysis will further improve the treatment of asymptomatic COVID-19.

Publication Type

Journal article.

<249>

Accession Number

20203492169

Author

Wen DengPeng; Shi Yu; Zhang XiaoXia; Lv Gang

Title

Chinese medicine treatment of mastitis in COVID-19 patients: a protocol for systematic review.

Source

Medicine (Baltimore); 2020. 99(35)13 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background: Assessing the effectiveness and safety of Chinese medicine for the mastitis in COVID-19 patients is the main purpose of this systematic review protocol. Methods: The following electronic databases will be searched from inception to April 2020: MEDLINE, Ovid, EMBASE, the Cochrane Library, the Allied and Complementary Medicine Database (AMED), Chinese National Knowledge Infrastructure (CNKI), Chinese Biomedical Literature Database (CBM), VIP Database and Wanfang Database. In addition, Clinical trial registries, like the Chinese Clinical Trial Registry (ChiCTR), the Netherlands National Trial Register (NTR) and ClinicalTrials.gov, will be searched for ongoing trials with unpublished data. No language restrictions will be applied. The primary outcome will be the time of disappearance of main symptoms (including fever, asthenia, cough disappearance rate, and temperature recovery time), and serum cytokine levels. The secondary outcome will be the accompanying symptoms (such as myalgia, expectoration, stuffiness, runny nose, pharyngalgia, anhelation, chest distress, dyspnea, crackles, headache, nausea, vomiting, anorexia, diarrhea) disappear rate, negative COVID-19 results rate on 2 consecutive occasions (not on the same day), CT image improvement, average hospitalization time, occurrence rate of common

type to severe form, clinical cure rate, and mortality. Two independent reviewers will conduct the study selection, data extraction and assessment. RevMan V.5.3 will be used for the assessment of risk of bias and data synthesis. Results: The results will provide a high-quality synthesis of current evidence for researchers in this subject area. Conclusion: The conclusion of the study will provide an evidence to judge whether Chinese medicine is effective and safe for mastitis in COVID-19 patients.

Publication Type

Journal article.

<250>

Accession Number

20203499533

Author

Faouzia Tanveer; Khalil, A. T.; Muhammad Ali; Shinwari, Z. K.

Title

Ethics, pandemic and environment; looking at the future of low middle income countries.

Source

International Journal for Equity in Health; 2020. 19(182):(15 October 2020). 67 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

COVID-19 which started in Wuhan, China and swiftly expanded geographically worldwide, including to Low to Middle Income Countries (LMICs). This in turn raised numerous ethical concerns in preparedness, knowledge sharing, intellectual property rights, environmental health together with the serious constraints regarding readiness of health care systems in LMICs to respond to this enormous public health crisis. From the restrictions on public freedom and burgeoning socio-economic impacts to the rationing of scarce medical resources, the spread of COVID-19 is an extraordinary ethical dilemma for resource constrained nations with less developed health and research systems. In the current crisis, scientific knowledge and technology has an important role to play in effective response. Emergency preparedness is a shared responsibility of all countries with a moral obligation to support each other. This review discusses the ethical concerns regarding the national capacities and response strategies in LMICs to deal with the COVID-19 pandemic as well as the deep link between the environment and the increasing risk of pandemics.

Publication Type

Journal article.

<251>

Accession Number

20203494587

Author

Applebaum, J. W.; Tomlinson, C. A.; Matijczak, A.; McDonald, S. E.; Zsembik, B. A.

Title

The concerns, difficulties, and stressors of caring for pets during COVID-19: results from a large survey of U.S. pet owners.

Source

Animals; 2020. 10(10)many ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Pets may be a positive presence for their owners during the Coronavirus Disease 2019 (COVID-19) pandemic. However, it is pertinent to identify the hardships associated with pet ownership. We conducted a large-scale survey of U.S. pet owners (n = 2254) in spring and summer 2020 to assess the ways that relationships with pets impacted life during COVID-19. We used thematic analysis to analyze 3671 open-ended responses to three prompts. Reported concerns fell into three major categories: (1) pet-focused (meeting needs of pets; procuring supplies; accessing veterinary care; new and emerging behavioral issues; fate of the pet if owner becomes ill; general safety and well-being), (2) human-focused (issues with working from home; well-being and mental health; balancing responsibilities), and (3) household-focused (disease spread; economic issues). Quantitative analyses showed that the owner's strength of attachment to their pet, economic resources, and relationship status were associated with the types of concerns expressed. Results from this study indicate that pet owners experienced unique hardships related to changes in everyday life from the COVID-19 pandemic. These hardships should be considered alongside the potential benefits found in other studies in order to manage pet owner expectations, prevent pet relinquishment, and more fully understand multifaceted human-companion animal relationships.

Publication Type

Journal article.

<252>

Accession Number

20203497606

Author

Roshan Wathore; Ankit Gupta; Hemant Bherwani; Nitin Labhasetwar

Title

Understanding air and water borne transmission and survival of coronavirus: insights and way forward for SARS-CoV-2.

Source

Science of the Total Environment; 2020. 749many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The ongoing pandemic of coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has resulted in unprecedented disease burden, healthcare costs, and economic impacts worldwide. Despite several measures, SARS-CoV-2 has been extremely impactful due to its extraordinary infection potential mainly through coronavirus-borne saliva respiratory and droplet nuclei of an infected person and its considerable stability on surfaces. Although the disease has affected over 180 countries, its extent and control are significantly different across the globe, making it a strong case for exploration of its behavior and dependence across various environmental pathways and its interactions with the virus. This has spurred efforts to characterize the coronavirus and understand the factors impacting its transmission and survival such as aerosols, air quality, meteorology, chemical compositions and characteristics of particles and surfaces, which are directly or indirectly associated with coronaviruses infection spread. Nonetheless, many peer-reviewed articles have studied these aspects but mostly in isolation; a complete array of coronavirus survival and transmission from an infected individual through air- and water-borne channels and its subsequent interactions with environmental factors, surfaces, particulates and chemicals is not comprehensively explored. Particulate matter (PM) is omnipresent with variable concentrations, structures and composition, while most of the surfaces are also covered by PM of different characteristics. Learning from the earlier coronavirus studies, including SARS and MERS, an attempt has been made to understand the survival of SARS-CoV-2 outside of the host body and discuss the probable air and water-borne transmission routes and its interactions with the outside environment. The present work (1) Helps appreciate the role of PM, its chemical constituents and surface characteristics and (2) Further identifies gaps in this field and suggests possible domains to work upon for better understanding of transmission and survival of this novel coronavirus.

Publication Type

Journal article.

<253>

Accession Number

20203498886

Author

Morabia, A.

Title

Pandemics and methodological developments in epidemiology history.

Source

Journal of Clinical Epidemiology; 2020. 125:164-169. 40 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

The crisis spurred by the pandemic of COVID-19 has revealed weaknesses in our epidemiologic methodologic corpus, which scientists are struggling to compensate. This article explores whether this phenomenon is characteristic of pandemics or not. Since the emergence of population-based sciences in the 17th century, we can observe close temporal correlations between the plague and the discovery of population thinking, cholera and population-based group comparisons, tuberculosis and the formalization of cohort studies, the 1918 Great Influenza and the creation of an academic epidemiologic counterpart to the public health service, the HIV/AIDS epidemic, and the formalization of causal inference concepts. The COVID-19 pandemic seems to have promoted the widespread understanding of population thinking both with respect to ways of flattening an epidemic curve and the societal bases of health inequities. If the latter proves true, it will support my hypothesis that pandemics did accelerate profound changes in epidemiologic methods and concepts.

Publication Type

Journal article.

<254>

Accession Number

20203495725

Author

Batlle-Bayer, L.; Aldaco, R.; Bala, A.; Puig, R.; Laso, J.; Margallo, M.; Vazquez-Rowe, I.; Anto, J. M.; Fullana-I-Palmer, P.

Title

Environmental and nutritional impacts of dietary changes in Spain during the COVID-19 lockdown.

Source

Science of the Total Environment; 2020. 74833 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The COVID lockdown has affected food purchases and eating habits. In this regard, this short communication assesses the nutritional and environmental impacts of these changes during the COVID lockdown in Spain, by applying Life Cycle Assessment and an energy- and nutrient-corrected functional unit. Three environmental impacts were studied (Global Warming Potential, Blue Water Footprint and Land Use) and a total of seven weekly diet scenarios were designed: two pre-COVID diets for March and April in 2019 (MAR19, APR19), one COVID diet (COVID) and two alternative diets, one based on the National Dietary Guidelines (NDG) and another one on the Planetary Health Diet (PHD). Results show that the COVID diet had larger energy intake and lower nutritional quality, as well as higher environmental impacts (between 30 and 36%) than the pre-COVID eating patterns. Further research is needed to account for food affordability within this assessment, as well as to analyze how eating patterns will evolve after the COVID lockdown. Finally, the definition of short guidelines for sustainable food behaviors for future possible lockdowns is suggested, as well as the introduction of sustainable indicators within NDGs.

Publication Type

Journal article.

<255>

Accession Number

20203496972

Author

Dadar, M.; Fakhri, Y.; Bjorklund, G.; Shahali, Y.

Title

The association between the incidence of COVID-19 and the distance from the virus epicenter in Iran.

Source

Archives of Virology; 2020. 165(11):2555-2560. 21 ref.

Publisher

Springer-Wien

Location of Publisher

Vienna

Country of Publication

Austria

Abstract

Since the first official report of the spread of SARS-CoV-2 infections in the city of Qom in mid-February, Iran has become the country most affected by the COVID-19 epidemic in the Middle East. All Iranian provinces are now affected, although to a different extent. The aim of the present study was to evaluate whether the distance from the epicenter of the infection (Qom) or demographic factors such as population density and the ratio of the elderly population are associated with the incidence of COVID-19 in different Iranian provinces. For the purpose of determining whether the distance from the virus epicenter could be associated with the spread of infection, linear regression analysis was performed using STATA 12.0 software. The association of the incidence of COVID-19 with the population density and the ratio of the population over 65 years old in 31 Iranian provinces was also evaluated. According to our results, a strong association was found between the incidence of COVID-19 in Iranian provinces and their respective distance from Qom ($p < 0.001$; $C = -0.68$). The incidence of COVID-19 in Iranian provinces was also positively associated with the ratio of the population over 65 years old ($p = 0.002$; $C = 0.53$), while no significant association with population density was found ($p = 0.39$; $C = 0.16$). These results suggest that the implementation of travel restrictions from highly affected areas to other provinces could considerably reduce the rate of transmission of the disease throughout the country. Also, provinces with a higher proportion of elderly people (over 65) were identified as particularly at risk for the spread of SARS-CoV-2 infections. These results will contribute to better management of the COVID-19 outbreak in Iran, taking into account demographic and geographic characteristics of different province.

Publication Type

Journal article.

<256>

Accession Number

20203496959

Author

Saba Shamim; Maryam Khan; Kharaba, Z. J.; Munazza Ijaz; Ghulam Murtaza

Title

Potential strategies for combating COVID-19.

Source

Archives of Virology; 2020. 165(11):2419-2438. 177 ref.

Publisher

Springer-Wien

Location of Publisher

Vienna

Country of Publication

Austria

Abstract

Coronavirus disease 2019, also known as COVID-19, is caused by a novel coronavirus named severe acute respiratory syndrome coronavirus 2, or SARS-CoV-2. The infection has now catapulted into a full-blown pandemic across the world, which has affected more than 2 million people and has led to approximately 150,000 fatalities all over the world (WHO). In this review, we elaborate all currently available data that shed light on possible methods for treatment of COVID-19, such as antiviral drugs, corticosteroids, convalescent plasma, and potentially effective vaccines. Additionally, ongoing and discontinued clinical trials that have been carried out for validating probable treatments for COVID-19 are discussed. The review also elaborates the prospective approach and the possible advantages of using convalescent plasma and stem cells for the improvement of clinical symptoms and meeting the demand for an instantaneous cure.

Publication Type

Journal article.

<257>

Accession Number

20203510276

Author

Meekins, D. A.; Morozov, I.; Trujillo, J. D.; Gaudreault, N. N.; Bold, D.; Carossino, M.; Artiaga, B. L.; Indran, S. V.; Kwon, T.; Balaraman, V.; Madden, D. W.; Feldmann, H.; Henningson, J.; Ma WenJun; Balasuriya, U. B. R.; Richt, J. A.

Title

Susceptibility of swine cells and domestic pigs to SARS-CoV-2.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Source

Emerging Microbes and Infections; 2020. 9(2278-2288):2278-2288. 48 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The emergence of SARS-CoV-2 has resulted in an ongoing global pandemic with significant morbidity, mortality, and economic consequences. The susceptibility of different animal species to SARS-CoV-2 is of concern due to the potential for interspecies transmission, and the requirement for pre-clinical animal models to develop effective countermeasures. In the current study, we determined the ability of SARS-CoV-2 to (i) replicate in porcine cell lines, (ii) establish infection in domestic pigs via experimental oral/intranasal/intratracheal inoculation, and (iii) transmit to co-housed naive sentinel pigs. SARS-CoV-2 was able to replicate in two different porcine cell lines with cytopathic effects. Interestingly, none of the SARS-CoV-2-inoculated pigs showed evidence of clinical signs, viral replication or SARS-CoV-2-specific antibody responses. Moreover, none of the sentinel pigs displayed markers of SARS-CoV-2 infection. These data indicate that although different porcine cell lines are permissive to SARS-CoV-2, five-week old pigs are not susceptible to infection via oral/intranasal/intratracheal challenge. Pigs are therefore unlikely to be significant carriers of SARS-CoV-2 and are not a suitable pre-clinical animal model to study SARS-CoV-2 pathogenesis or efficacy of respective vaccines or therapeutics.

Publication Type

Journal article.

<258>

Accession Number

20203475288

Author

Galhardi, C. P.; Freire, N. P.; Souza Minayo, M. C. de; Fagundes, M. C. M.

Title

Fact or fake? An analysis of disinformation regarding the COVID-19 pandemic in Brazil.

Source

Ciencia & Saude Coletiva; 2020. 25(Suppl. 2):4201-4210. 39 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

This paper aims to present an analysis of the most widespread fake news about the New Coronavirus (Sars-CoV-2) on social networks and how it can harm public health. This is a quantitative empirical study, based on the notifications received by the Eu Fiscalizo Brazilian application. The conclusions show that WhatsApp is the primary channel for sharing fake news, followed by Instagram and Facebook. We can conclude that the dissemination of malicious content related to Covid-19 contributes to the discrediting of science and global health institutions, and the solution to this problem is to increase the level of adequate information for Brazilian society.

Publication Type

Journal article.

<259>

Accession Number

20203475283

Author

Martinez, E. Z.; Silva, F. M.; Zucoloto, M. L.; Joaquim, A. G.; Dall'Agnol, G.; Galdino, G.; Silva, T. L.; Martinez, M. O. Z.; Silva, W. R. da

Title

Physical activity in periods of social distancing due to COVID-19: a cross-sectional survey.

Source

Ciencia & Saude Coletiva; 2020. 25(Suppl. 2):4157-4168. 48 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Physical inactivity and sedentary behavior are associated with poor physical and mental health. The article aims to assess the changes in the habits of the Brazilian participants engaged in physical activities in relation to their practices, due the measures of social distancing during the COVID-19 epidemic in 2020. The secondary objective was to describe their levels of anxiety and depression. The questionnaire used in this online survey included demographic information, questions about self-perceptions of the impact of the COVID-19 in the life routines and the 14-item Hospital Anxiety Depression Scale. A total of 1,613 adults completed the questionnaire between May 11 and 15, 2020. Of those, 79.4% reported that the measures to contain the epidemic had any impact on their physical activities, and many had to interrupt or decrease the frequency of their practices. Participants who felt a higher impact of quarantine on their physical activities tend to have higher prevalence of anxiety and depression symptoms. Individuals who practiced physical activities reported that social distance had a high influence on their practices. Furthermore, changes in these habits are associated with high levels of poor mental health.

Publication Type

Journal article.

<260>

Accession Number

20203471924

Author

Cortignani, R.; Caroni, G.; Dono, G.

Title

COVID-19 and labour in agriculture: economic and productive impacts in an agricultural area of the Mediterranean.

Source

Italian Journal of Agronomy; 2020. 15(2):172-181. 33 ref.

Publisher

PAGEPress Publications

Location of Publisher

Pavia

Country of Publication

Italy

Abstract

Social distancing and mobility restrictions adopted in Italy to deal with the COVID-19 emergency can also alter the operating conditions of the Italian agricultural labour market. The restrictions can limit the movement of temporary labour that is already on the national territory and can prevent the arrival of other foreign workers to be engaged mainly in the harvesting of crops. In Italy, temporary workers support diverse farming activities and are mainly young immigrants engaged in working relationships characterized

by extreme flexibility. They must be available for very different tasks, interacting with multiple farms and moving between different areas of the country, generally based on the succession of the harvesting calendars of the main crops. Reducing the mobility of this workforce on the national territory decreases its availability in local labour markets with worrying damage to agricultural production. This paper analyses the possible impact of this labour availability reduction in a farming area of Southern Italy (Centre-West Sardinia), where various farm types operate, with diverse productive orientations. An economic model estimates this impact on production and income based on the structural characteristics of these farm types, among others own farm labour endowment, as well as on the technical requirements of the productive processes, including labour needs. The model considers the expectations of farmers on the temporary labour availability and identifies the possible adaptations that can be undertaken to better contrast the reduction generated by the constraints to the mobility of individuals in the COVID-19 crisis. These adjustments result in changes in income levels, as well as employment in the single farm types and the area as a whole. There is a strong, albeit very diversified, impact on the types of farms. Significant reductions in income are found in the types that heavily depend on temporary labour for certain crop operations, especially harvesting. These effects are generated despite these farms change their activities, expanding some crops to make better use of their family labour and permanent employees. The less profitable types of farm, therefore even less able to attract external resources, considerably worsen their conditions; this would aggravate the social and environmental balance of the areas in which they operate, which are also the most marginal in the study area.

Publication Type

Journal article.

<261>

Accession Number

20203487558

Author

Ali, A. M.; Kunugi, H.

Title

Apitherapy for age-related skeletal muscle dysfunction (Sarcopenia): a review on the effects of royal jelly, propolis, and bee pollen.

Source

Foods; 2020. 9(10)173 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The global pandemic of sarcopenia, skeletal muscle loss and weakness, which prevails in up to 50% of older adults is increasing worldwide due to the expansion of aging populations. It is now striking young and midlife adults as well because of sedentary lifestyle and increased intake of unhealthy food (e.g., western diet). The lockdown measures and economic turndown associated with the current outbreak of Coronavirus Disease 2019 (COVID-19) are likely to increase the prevalence of sarcopenia by promoting sedentarism and unhealthy patterns of eating. Sarcopenia has multiple detrimental effects including falls, hospitalization, disability, and institutionalization. Although a few pharmacological agents (e.g., bimagrumab, sarconeos, and exercise mimetics) are being explored in different stages of trials, not a single drug has been approved for sarcopenia treatment. Hence, research has focused on testing the effect of nutraceuticals, such as bee products, as safe treatments to prevent and/or treat sarcopenia. Royal jelly, propolis, and bee pollen are common bee products that are rich in highly potent antioxidants such as flavonoids, phenols, and amino acids. These products, in order, stimulate larval development into queen bees, promote defenses of the bee hive against microbial and environmental threats, and increase royal jelly production by nurse bees. Thanks to their versatile pharmacological activities (e.g., anti-aging, anti-inflammatory, anticarcinogenic, antimicrobial, etc.), these products have been used to treat multiple chronic conditions that predispose to muscle wasting such as hypertension, diabetes mellitus, cardiovascular disorder, and cancer, to name a few. They were also used in some evolving studies to treat sarcopenia in laboratory animals and, to a limited degree, in humans. However, a collective understanding of the effect and mechanism of action of these products in skeletal muscle is not well-developed. Therefore, this review examines the literature for possible effects of royal jelly, bee pollen, and propolis on skeletal muscle in aged experimental models, muscle cell cultures, and humans. Collectively, data from reviewed studies denote varying levels of positive effects of bee products on muscle mass, strength, and function. The likely underlying mechanisms include amelioration of inflammation and oxidative damages, promotion of metabolic regulation, enhancement of satellite stem cell responsiveness, improvement of muscular blood supply, inhibition of catabolic genes, and promotion of peripheral neuronal regeneration. This review offers suggestions for other mechanisms to be explored and provides guidance for future trials investigating the effects of bee products among people with sarcopenia.

Publication Type

Journal article.

<262>

Accession Number

20203507025

Author

Anant Gupta; Jitender Sodhi; Shekhar, B. R.; Sharma, D. K.

Title

Medical social service officers and their contribution in COVID-19 pandemic.

Source

Indian Journal of Community Health; 2020. 32(3):610-612. 4 ref.

Publisher

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Indian Association of Preventive and Social Medicine, Uttar Pradesh and Uttarakhand (IAPSMUPUK) State Chapter

Location of Publisher

Etawah

Country of Publication

India

Abstract

Social workers perform diverse roles in a hospital setting. They constitute an important workforce extending help to patients for their varied needs. In the current pandemic as well, team of social workers worked round the clock to arrange for the resources and facilitated important hospital functions. They are the "unsung heroes" amongst the front line warriors who sometimes even do not get their due recognition.

Publication Type

Journal article.

<263>

Accession Number

20203507022

Author

Uma Alagappan; Prabhusaran Nagarajan; Thirumalaikolundusubramanian Ponniah; Ramchandra Goyal

Title

COVID-19: group testing and digital technology "Aarogya Setu" - the need of the hour.

Source

Indian Journal of Community Health; 2020. 32(3):601-603. 6 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 importance of group testing, efficient utilization of the diagnostic tests and its applications are highlighted. Though it has advantages, the challenges and constraints and the need for the policy from the

concerned authorities to implement group testing in a reliable manner with competent persons were brought out. Thus, with group testing and the use of digital technology "Aarogya Setu" in India, we are confident that we will be able to diagnose cases and implement surveillance activities successfully. Popularization of "Aarogya Setu" by all categories of healthcare workers, teachers, women self help groups and other users of android mobile phones in the interest of the Nation and community at large, towards disease containment were cited. However, the ethical aspects of deployment of such kind of approach as part of a multidimensional public health response, and its usefulness in infectious disease outbreaks have to be monitored.

Publication Type

Journal article.

<264>

Accession Number

20203507001

Author

Mohd. Saleem; Fahaad Alenazi; Moursi, S. A.; Ahmed, H. G.; Alam, M. J.; Alzapni, M. I. A.; Jarallah, G. A. S.; Alanazi, T. B.; Almusawi, R. A. M.; Alrashidi, F. A.; Jarallah, R. A. S.; Beg, M. M. A.; Khaja, A. S. S.

Title

Evaluation of knowledge and awareness regarding COVID-19 disease among medical and dental students in Saudi Arabia.

Source

Indian Journal of Community Health; 2020. 32(3):486-492. 19 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

Objective: To evaluate the levels of information regarding the current emerging outbreak of coronavirus disease 2019 (COVID-19) among medical and dental students at universities in Saudi Arabia through an online questionnaire. **Methods:** A detailed structured questionnaire was prepared, containing demographic profiles and questions related to knowledge and awareness of the COVID-19 pandemic, and was emailed to 240 subjects, out of these, 209 responded to all the questions. **Results:** The majority of the respondents were aware of the current and past epidemics of the coronavirus diseases, and they heard about SARS or MERS (89.5%) and the COVID-19 pandemic (94.7%). Internet was the main source of information (63.1%)

followed by professors and physicians (24.2%), print media (6.1%), television (4%), and family or friends (2.5%). The majority of respondents received information about COVID-19 from the Ministry of Health (85.6%) and 44.5% of respondents participated in the COVID-19 symposium or conference. Respondents of the college of Medicine were more aware (96.1%) about COVID-19 than respondents of the college of Dentistry (86.2%; $p=0.02$). Conclusion: The study finds a high level of COVID-19 awareness among medical and dental students at KSA universities. However, there is a need to study in a community-level assessment regarding knowledge about COVID-19.

Publication Type

Journal article.

<265>

Accession Number

20203505159

Author

Rogero, M. M.; Leao, M. de C.; Santana, T. M.; Pimentel, M. V. de M. B.; Carlini, G. C. G.; Silveira, T. F. F. da; Goncalves, R. C.; Castro, I. A.

Title

Potential benefits and risks of omega-3 fatty acids supplementation to patients with COVID-19.

Source

Free Radical Biology & Medicine; 2020. 156:190-199. 120 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Studies have shown that infection, excessive coagulation, cytokine storm, leukopenia, lymphopenia, hypoxemia and oxidative stress have also been observed in critically ill Severe Acute Respiratory Syndrome coronavirus 2 (SARS-CoV-2) patients in addition to the onset symptoms. There are still no approved drugs or vaccines. Dietary supplements could possibly improve the patient's recovery. Omega-3 fatty acids, specifically eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), present an anti-inflammatory effect that could ameliorate some patients need for intensive care unit (ICU) admission. EPA and DHA replace arachidonic acid (ARA) in the phospholipid membranes. When oxidized by enzymes, EPA and DHA contribute to the synthesis of less inflammatory eicosanoids and specialized pro-resolving lipid mediators (SPMs), such as resolvins, maresins and protectins. This reduces inflammation. In contrast, some studies have reported that EPA and DHA can make cell membranes more susceptible to non-enzymatic oxidation

mediated by reactive oxygen species, leading to the formation of potentially toxic oxidation products and increasing the oxidative stress. Although the inflammatory resolution improved by EPA and DHA could contribute to the recovery of patients infected with SARS-CoV-2, Omega-3 fatty acids supplementation cannot be recommended before randomized and controlled trials are carried out.

Publication Type

Journal article.

<266>

Accession Number

20203505149

Author

Ghasemi, M.; Keshtegar, A.; Mohammadzadeh, Z.

Title

Good governance and public value management in the face of COVID-19. [Persian]

Source

Journal of Management Strategies in Health System; 2020. 5(1):fa3-fa6. 8 ref.

Publisher

Shahid Sadoughi University of Medical Sciences

Location of Publisher

Yazd

Country of Publication

Iran

Abstract

Nowadays, most countries of the world are dealing with covid-19, which has resulted in many economic, political, social, and health challenges. However, people in society need to interact with each other due to economic and social reasons, which make it harder to control the disease. Infectious diseases and quarantine cause widespread devastation in the lives of people in the community. Therefore, the community needs good governance in the given circumstances.

Publication Type

Journal article.

<267>

Accession Number

20203467077

Author

Rivera, X. C. S.

Title

Convenience versus sustainability.

Source

Food Science & Technology; 2020. 34(3):30-33. 32 ref.

Publisher

Institute of Food Science & Technology

Location of Publisher

London

Country of Publication

UK

Abstract

This article reports on a study of the sustainability of the UK ready-made meal sector. This initial attempt to assess the sustainability of the RMM sector has used LCA models to determine the environmental impact of the chilled and frozen RMM sectors, by assessing their contribution to GWP and the depletion of fossil fuels. This data has been used to assess the contribution of the RMM sector to food and drink sector emissions as a whole. The findings suggest that the RMM sector contributes ~3% to the GWP of the food and drink sector. The environmental and economic results are based on data from 2012-2014, and only on four cuisines and thirteen specific meals. Therefore, these results should be considered as a basis for further work. However, the challenges are clear: there is a need to increase sustainability while providing nutritious and healthy food for all. COVID-19 has shocked the world and has shown the importance of having a sustainable and healthy food system. The health of people and the planet should be the driver for the food industry. Hence, it is important to use this opportunity to grow in a responsible manner, for example redefining success, developing and promoting healthy, sustainable and affordable foods, investing in communities and supporting local growers.

Publication Type

Journal article.

<268>

Accession Number

20203502005

Author

Kara, M.; Ekiz, T.; Ricci, V.; Kara, O.; Chang, K. V.; Ozcakar, L.

Title

'Scientific strabismus' or two related pandemics: coronavirus disease and vitamin D deficiency.

Source

British Journal of Nutrition; 2020. 124(7):736-741. 55 ref.

Publisher

Cambridge University Press

Location of Publisher

Cambridge

Country of Publication

UK

Abstract

The WHO has announced the novel coronavirus disease (COVID-19) outbreak to be a global pandemic. The distribution of community outbreaks shows seasonal patterns along certain latitude, temperature and humidity, that is, similar to the behaviour of seasonal viral respiratory tract infections. COVID-19 displays significant spread in northern mid-latitude countries with an average temperature of 5-11degreesC and low humidity. Vitamin D deficiency has also been described as pandemic, especially in Europe. Regardless of age, ethnicity and latitude, recent data showed that 40% of Europeans are vitamin D deficient (25-hydroxyvitamin D (25(OH)D) levels <50 nmol/l), and 13% are severely deficient (25(OH)D < 30 nmol/l). A quadratic relationship was found between the prevalences of vitamin D deficiency in most commonly affected countries by COVID-19 and the latitudes. Vitamin D deficiency is more common in the subtropical and mid-latitude countries than the tropical and high-latitude countries. The most commonly affected countries with severe vitamin D deficiency are from the subtropical (Saudi Arabia 46%; Qatar 46%; Iran 33.4%; Chile 26.4%) and mid-latitude (France 27.3%; Portugal 21.2%; Austria 19.3%) regions. Severe vitamin D deficiency was found to be nearly 0% in some high-latitude countries (e.g. Norway, Finland, Sweden, Denmark and Netherlands). Accordingly, we would like to call attention to the possible association between severe vitamin D deficiency and mortality pertaining to COVID-19. Given its rare side effects and relatively wide safety, prophylactic vitamin D supplementation and/or food fortification might reasonably serve as a very convenient adjuvant therapy for these two worldwide public health problems alike.

Publication Type

Journal article.

<269>

Accession Number

20203500144

Author

Bos, R.; Rutten, L.; Lubbe, J. E. M. van der; Bakkers, M. J. G.; Hardenberg, G.; Wegmann, F.; Zuijdgeest, D.; Wilde, A. H. de; Koornneef, A.; Verwilligen, A.; Manen, D. van; Kwaks, T.; Vogels, R.; Dalebout, T. J.; Myeni, S. K.; Kikkert, M.; Snijder, E. J.; Li ZhenFeng; Barouch, D. H.; Vellinga, J.; Langedijk, J. P. M.; Zahn, R. C.; Custers, J.; Schuitemaker, H.

Title

Ad26 vector-based COVID-19 vaccine encoding a prefusion-stabilized SARS-CoV-2 spike immunogen induces potent humoral and cellular immune responses.

Source

npj Vaccines; 2020. 5(91)49 ref.

Publisher

Nature Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Development of effective preventative interventions against SARS-CoV-2, the etiologic agent of COVID-19 is urgently needed. The viral surface spike (S) protein of SARS-CoV-2 is a key target for prophylactic measures as it is critical for the viral replication cycle and the primary target of neutralizing antibodies. We evaluated design elements previously shown for other coronavirus S protein-based vaccines to be successful, e.g., prefusion-stabilizing substitutions and heterologous signal peptides, for selection of a S-based SARS-CoV-2 vaccine candidate. In vitro characterization demonstrated that the introduction of stabilizing substitutions (i.e., furin cleavage site mutations and two consecutive prolines in the hinge region of S2) increased the ratio of neutralizing versus non-neutralizing antibody binding, suggestive for a prefusion conformation of the S protein. Furthermore, the wild-type signal peptide was best suited for the correct cleavage needed for a natively folded protein. These observations translated into superior immunogenicity in mice where the Ad26 vector encoding for a membrane-bound stabilized S protein with a wild-type signal peptide elicited potent neutralizing humoral immunity and cellular immunity that was polarized towards Th1 IFN-gamma. This optimized Ad26 vector-based vaccine for SARS-CoV-2, termed Ad26. COV2.S, is currently being evaluated in a phase I clinical trial.

Publication Type

Journal article.

<270>

Accession Number

20203500127

Author

Kirti Gaur; Kunal Keshri; Avinash Sharma; Hariom Pachori

Title

A study of depression, anxiety and insomnia during COVID-19 lockdown. (Special Issue: COVID-19 and demographic impact.)

Source

Demography India; 2020. 49(Special Issue):140-152. many ref.

Publisher

Hindustan Publishing Corporation

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Few empirical studies on mental morbidity during the COVID-19 lockdown have been carried out in India. The present study improves upon methodological limitations of earlier ones and aims to provide prevalence of depression, anxiety and insomnia among general population and examines the determining factors during lockdown in India. This study utilized data from an online survey during April 24 to May 07, 2020 using a bi-lingual questionnaire with a countrywide sample of 1015. Results show high prevalence of depressive (12.7%), anxiety (9.0%) and insomnia (21.0%) symptoms using PHQ-9, GAD-7 and ISI-7; comparatively higher than the pre-COVID-19 period in India. Respondents living in metros and non-metros were at greater risk of experiencing anxiety and insomnia. Single/married individuals not currently co-habiting with their spouse experienced 2-3 fold higher risks of mental morbidity. Those concerned about losing their livelihood or reduced earnings, had significantly higher risk of experiencing all three outcomes of interest. Risk of depression among Scheduled Caste/Scheduled Tribes was nearly twice compared to higher castes. Mental illness history was an important risk factor for depression and anxiety symptoms. Findings call for allocation of adequate resources for mental health service delivery in the current scenario, ensuring delivery to those identified at greater risk.

Publication Type

Journal article.

<271>

Accession Number

20203500126

Author

Vasudha Chakravarthy

Title

Women at the center of the COVID-19 pandemic: insights from rural contexts in India. (Special Issue: COVID-19 and demographic impact.)

Source

Demography India; 2020. 49(Special Issue):132-139. 7 ref.

Publisher

Hindustan Publishing Corporation

Location of Publisher

New Delhi

Country of Publication

India

Abstract

The Covid19 pandemic has resulted in an unprecedented health and socio-economic crisis globally and in India. Emerging discussions and evidence indicate that the impact of the pandemic is exacerbated for women and girls. In India, media articles have highlighted the challenges faced by women and girls, including increased incidents of domestic violence, limited access to support services and healthcare, challenges faced by the women frontline health workers, and those who had migrated and are travelling back long distances. This paper, based on a rapid study undertaken to understand access to health and nutrition services in rural contexts in India, highlights the impact of the pandemic on women and girls. It particularly reflects on how the pandemic and lockdown has affected access to essential health and nutrition services; the impact it is having on front-line workers, who are an entirely women workforce; increase in incidents of domestic violence, and mental health and wellbeing of women and girls. It outlines the need for the gendered approach to research and programming in the context of Covid-19.

Publication Type

Journal article.

<272>

Accession Number

20203500125

Author

K. M. Sulaiman; T. Muhammad; Rishad A. P. Muhammad; K. Afsal

Title

Trace, quarantine, test, isolate and treat: a Kerala model of COVID-19 response. (Special Issue: COVID-19 and demographic impact.)

Source

Demography India; 2020. 49(Special Issue):120-131. 20 ref.

Publisher

Hindustan Publishing Corporation

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Kerala reported the first three cases of coronavirus in India in late January 2020. Kerala, one of India's most densely populated states, which makes its success in fighting the Covid-19 all the more commendable. Moreover, an estimated 17% of its 35 million population employed or lives elsewhere, more than 1 million tourists visit each year, and hundreds of students study abroad, including in China. All of this mobility makes the state more vulnerable to contagious outbreaks. What is the strategy behind the success story? This paper compares the situation of COVID-19 pandemic in major states and Kerala by the different phase of lockdown and also highlights Kerala's fight against the pandemic. We used publicly available data from <https://www.covid19india.org/> and Covid-19 Daily Bulletin (Jan 31-May 31), Directorate of Health Services, Kerala (<https://dashboard.kerala.gov.in/>). We calculate the phase-wise period prevalence rate (PPR) and the case fatality rate (CFR) of the last phase. Compared to other major states, Kerala showed a better response in preventing a pandemic. The equation for Kerala's success has been simple, prioritized testing, widespread contact tracing, and promoting social distance. They also imposed uncompromising controls, were supported by an excellent healthcare system, government accountability, transparency, public trust, civil rights and importantly, the decentralized governance and strong grass-root level institutions. The "proactive" measures taken by Kerala such as early detection of cases and extensive social support measures can be a "model for India and the world".

Publication Type

Journal article.

<273>

Accession Number

20203500124

Author

Suresh Sharma; Johny, K. D.

Title

Is social distancing a good strategy to contain COVID-19 for slums in India? (Special Issue: COVID-19 and demographic impact.)

Source

Demography India; 2020. 49(Special Issue):113-119. 9 ref.

Publisher

Hindustan Publishing Corporation

Location of Publisher

New Delhi

Country of Publication

India

Abstract

Around 6.5 crore people in India live in slums where social distancing is practically difficult to comply with and implementing it is even harder. Social Distancing along with lockdown does not go right with the poor people living in slums, as they do not have access to comfort living by watching TV or using smart phones or working from home options etc. Crowding is inevitable in slum areas because the only leisure activity affordable to the slum people is to sit and talk in groups in narrow streets of slum locality. As per Census 2011 data, more than one-third of slum households had no indoor toilets. About 18 per cent of the households opt for open defecation, and 15 per cent of the households uses public latrine. About 43.27 per cent households do not have a water source within their household premises. Not having water and toilet facility inside the house implies that social distancing is difficult. Based on cross-country examples, what support is needed from the government in the slum localities and some useful strategies of social distancing for the poor has been suggested in the article which could be adopted.

Publication Type

Journal article.

<274>

Accession Number

20203500119

Author

Dwivedi, L. K.; Balram Rai; Anandi Shukla; Radhika Sharma; Tapas Dey; Usha Ram; Chander Shekhar; Preeti Dhillon; Suryakant Yadav; Sayeed Unisa

Title

Assessing the impact of complete lockdown on COVID-19 infections in India and its burden on public health facilities. (Special Issue: COVID-19 and demographic impact.)

Source

Demography India; 2020. 49(Special Issue):37-50. 31 ref.

Publisher

Hindustan Publishing Corporation

Location of Publisher

New Delhi

Country of Publication

India

Abstract

In this paper, an attempt has been made to assess the impact of complete lockdown on COVID-19 infection in India. This study obtained COVID-19 data on daily confirmed, recovered, and deaths for 21 days and have implemented the exponential growth model to predict future cases and study the role of lockdown in reducing the number of confirmed COVID 19 cases and deaths. The mathematical model was used to calculate the average reproduction number and herd immunity. Initially, the curve of confirmed cases and deaths grows exponentially; but later, the government-enforced lockdown has helped in curtailing the growth of the curve. The preventive measures may have averted around 4,31,915 confirmed cases and 32,856 deaths till May 3, 2020. The reproduction rate was estimated at 2.56 during the pre-lockdown period and is reduced to 1.56 during lockdown period. It is also observed that the number of COVID-19 patients in a government hospital in India as on May 3 would have been on an average of 15 cases per hospital if it grows exponentially. However, due to lockdown, it has reduced to the level of 2 cases per hospital. The number of confirmed cases grew around 19 percent during the pre-lockdown period of March 14-24, 2020, and stabilizes at the same pace till April 5. Post-April 5, the decline in the growth rate of confirmed cases reached as low as 10 percent. Results indicate that the preventive measures taken at the early stages have successfully helped in preventing a large number of deaths and infected cases in India.

Publication Type

Journal article.

<275>

Accession Number

20203500118

Author

Nair, P. M.; Chidambram, S.; Chandran, S. A.

Title

On the origin, transmission and consequences of the COVID-19 virus to human lives in India: with special reference to Kerala state. (Special Issue: COVID-19 and demographic impact.)

Source

Demography India; 2020. 49(Special Issue):27-36. 2 ref.

Publisher

Hindustan Publishing Corporation

Location of Publisher

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

New Delhi

Country of Publication

India

Abstract

Humanity has often been taken by surprise by new strains of microorganisms that adversely affect human life expectancy. The coronavirus outbreak is causing an unprecedented global health emergency and a global economic slowdown. Epidemiologists are aware of various specimens of viruses like the ones that cause Malaria, for instance, and scientists have been able to meet such threats by introducing drugs that make them perish at a rapid pace so that the natural human resistance to meet such attacks become sufficient for the patients to return to normal health. But viruses also try to survive by transmuting themselves into different strains that are capable of overcoming the existing antiviral drugs. Probably, COVID-19 may be one such transmutation. Hence the main objectives are to study how the COVID-19 virus affects the population and at what stage and time the epidemic will abate. As primary data is challenging to get, we use ICMR and other Govt. publications for the related information. Simple demographic and statistical methods are used for the analysis. At the early stages of the infection, we have no protocol on how to approach the virus. But now the health department has the protocol and thus even though we have no medicine, we are able to increase the recovery rate and flatten the mortality. Thus by following government and health workers' directions - Break the Chain movement - one can make sure that one is safe and also the people around him. So governments need to take measures for testing as many people under observation as possible and assess their COVID-19 status at the earliest.

Publication Type

Journal article.

<276>

Accession Number

20203500116

Author

Padmavathi Srinivasan

Title

Implications of COVID-19 pandemic and lockdown on the components of population change: a parsimonious framework for research. (Special Issue: COVID-19 and demographic impact.)

Source

Demography India; 2020. 49(Special Issue):1-14. 21 ref.

Publisher

Hindustan Publishing Corporation

Location of Publisher

New Delhi

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Country of Publication

India

Abstract

The COVID-19 pandemic, which originated in China, is unprecedented, the likes of which man has not seen in the last 100 years. It has affected over 200 hundred countries, resulting in 11 million infected cases and 500 thousand deaths and devastated economies without exception. India with a population of 1.2 billion enforced a full lockdown in the early stages of the epidemic in the hopes of preventing an avalanche of infected cases all at once. The effect of the lockdown on the demographic, social, economic and health indicators are likely to be as remarkable as that from the disease itself. The study explores channels through which the epidemic and lockdown impacts on the three demographic processes of fertility, mortality and migration in India. The impacts will depend on whether we are measuring them during the time of the epidemic and lockdown, the intermediate period immediately after the epidemic crisis is over and the lockdown is lifted, and the long-term. The generic framework through which such an impact can be measured is also presented, which will be useful when the data become available.

Publication Type

Journal article.

<277>

Accession Number

20203501364

Author

Algunmeeyn, A.; El-Dahiyat, F.; Altakhineh, M. M.; Azab, M.; Babar, Z. U. D.

Title

Understanding the factors influencing healthcare providers' burnout during the outbreak of COVID-19 in Jordanian hospitals.

Source

Journal of Pharmaceutical Policy and Practice; 2020. 13(53):(22 September 2020). 27 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. The nature of healthcare providers' occupation puts them at an increased risk of getting any contagious disease, including COVID-19. They are on the front line of the COVID-19 outbreak response and as such are at risk of contracting this virus. The infectious disease started from China in December 2019 and spread rapidly throughout countries, including Jordan. Especially, recent studies indicated that Jordanian healthcare providers' work conditions and demographic are significant factors for healthcare providers' burnout. Additionally, burnout has been increased among healthcare providers in Jordanian hospital. Aim: The present investigation aims to better understand the factors affecting pharmacists', physicians', and nurses' burnout during the outbreak of COVID-19 to provide basic information for lowering and preventing the level of burnout in Jordanian hospitals. Method: This study is qualitative in nature, adopting face-to-face interviews as the key instrument of data collection in one hospital in Jordan. The sample interviewed consisted of 30 healthcare providers in total (10 nurses, 10 physicians. and 10 pharmacists). Result: Three key factors to healthcare providers' burnout were identified in the sampled hospitals: job stress, staff and resource adequacy, fear of COVID-19 infection, and interprofessional relationships in healthcare practice. The examination also offers recommendations for lowering and preventing healthcare providers' burnout in Jordanian hospitals. Conclusion: This study explored the main factors of healthcare providers' burnout during the outbreak of COVID-19 in Jordanian hospitals, thereby making an original contribution to existing knowledge, as it is the first empirical exploration of healthcare providers' burnout during the outbreak of COVID-19. As such, it has attempted to offer an in-depth understanding of the factors impacting this issue.

Publication Type

Journal article.

<278>

Accession Number

20203501348

Author

Duprat, I. P.; Melo, G. C. de

Title

Analysis of cases and deaths by COVID-19 in Brazilian nursing professionals. [Portuguese]

Source

Revista Brasileira de Saude Ocupacional; 2020. 45(e30)21 ref.

Publisher

Fundacentro

Location of Publisher

Sao Paulo

Country of Publication

Brazil

Abstract

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Objective: to analyze confirmed cases and deaths by COVID-19 among nursing professionals in Brazil. Methods: epidemiological study using geoprocessing techniques. Data from March 20 until May 28 2020 were collected from the Conselho Federal de Enfermagem [Brazilian Federal Nursing Council]. We used Chi-squared, Mantel-Haenszel, and G test for analysing the association between deaths and age group, sex, geographical region of work. Results: 17,414 suspicious cases, 5,732 confirmed cases and 134 deaths occurred in the period. The Southeast region showed the highest number of cases (46.35%) and deaths (44.78%). The most affected age group regarding cases was 31-40 years (n = 2,515), and regarding deaths, 41-50 (n = 38). The death rate was higher in men. The variables "age group", "sex" and "geographical region of work" were significantly correlated to deaths by COVID-19 (p < 0.05). The states Amapa, Roraima and Bahia presented the highest rate of cases per 1,000 officially acknowledged nursing professionals (6.28, 6.10 and 5.99, respectively). Conclusion: the data indicate the need for a critical perspective on the nursing field in order to combat COVID-19.

Publication Type

Journal article.

<279>

Accession Number

20203502570

Author

Ding ZheYuan; Wu HaoCheng; Wu Chen; Lu QinBao; Lin JunFen

Title

Surveillance for notifiable communicable diseases in the context of emergency response to COVID-19 in Zhejiang. [Chinese]

Source

Disease Surveillance; 2020. 35(8):746-752. 14 ref.

Publisher

Editorial Board of Disease Surveillance

Location of Publisher

Beijing

Country of Publication

China

Abstract

Objective: To understand epidemiological characteristics of notifiable communicable diseases in the context of emergency response to COVID-19 in Zhejiang province. Methods: Descriptive epidemiological analysis was conducted on the incidence data of notifiable communicable diseases in the context of emergency response to COVID-19 in Zhejiang. Seasonal autoregressive integrated moving average (ARIMA) model was used to predict the incidence levels of common respiratory diseases and enteric infectious

diseases in normal status in Zhejiang. The results were compared. Results: Compared with the same period in 2019, the incidences of Class B and C communicable diseases decreased by 47.5% and 67.7% respectively in the context of the first level response to COVID-19 emergency and decreased by 29.6% and 95.0%, respectively in the context of the second level response to COVID-19 emergency in Zhejiang. The incidences of nearly all the communicable diseases decreased with the obvious declines in case numbers of scarlet fever, influenza, hand foot and mouth disease (HFMD) and other infectious diarrhea disease. Compared with the prediction results, the incidences of pulmonary tuberculosis, influenza, mumps, scarlet fever, HFMD and other infectious diarrhea diseases decreased by approximately 31.3%, 48.9%, 48.2%, 75.0%, 72.3% and 66.0%, respectively in the context of the first and second level responses to COVID-19 emergency. Conclusion: In the context of emergency response to COVID-19, the incidences of notifiable infectious diseases decreased obviously in Zhejiang, especially the incidences of scarlet fever, influenza, other infectious diarrhea and HFMD. Measures such as restricting people flow in public places, school closure and promoting mask wearing might have brought a long-term suppression effect to some communicable diseases, which provided certain reference for the future prevention and control of communicable diseases in normal status.

Publication Type

Journal article.

<280>

Accession Number

20203505640

Author

Nyamukamba, P.; Mujuru, N. M.; Isaacs, S.

Title

Early impacts of COVID-19 and government's intervention and prevention actions in South Africa.

Source

Journal of Human Ecology; 2020. 71(1/3):266-276. 25 ref.

Publisher

Kamla-Raj Enterprises

Location of Publisher

New Dehli

Country of Publication

India

Abstract

This paper examines the early impacts of Covid-19 and policy response in South Africa. The study employed a scoping meta review of existing literature on the impacts of the pandemic. Current literature on the epidemiology, vulnerability and preparedness as well as socio-economic impacts of Covid-19 and

policy response was collected and summarised. The findings reveal that South Africa was affected and the viral incidence was highest in Cape Town. The pandemic affected social interaction and economic activities through lockdown and social distancing policies. There was a reduction in gang violence and alcohol related deaths. Large social relief applications showed how poor households are vulnerable to external shocks. The loopholes in the health care system were also exposed. Corporate financial and operating activities were affected leading to retrenchments or temporary lay-offs. Measures to strengthen health care systems, value chains and social protection as well as build economic resilience must be adopted.

Publication Type

Journal article.

<281>

Accession Number

20203500622

Author

Graupensperger, S.; Benson, A. J.; Kilmer, J. R.; Evans, M. B.

Title

Social (un)distancing: teammate interactions, athletic identity, and mental health of student-athletes during the COVID-19 pandemic.

Source

Journal of Adolescent Health; 2020. 67(5):662-670. 54 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Purpose: Physical distancing measures to combat the spread of the novel coronavirus have presented challenges for the mental health and well-being of college students. As campus activities ceased, student-athletes abruptly became isolated from teammates and were no longer able to participate in sport activities that are often central to their identity as an athlete. However, student-athletes who have supportive social connections with teammates during this pandemic may maintain their athletic identity to a greater extent and report better mental health. The present study examined how student-athletes' mental health was associated with teammate social support, connectedness, and changes to athletic identity from before to during COVID-19. Method: A sample of 234 student-athletes completed surveys before COVID-19 physical distancing (February 2020), with 135 (63% female) participating in a follow-up in the month following school closures (April 2020). Path models estimated the effects of teammate social

support and connectedness (during COVID-19), as well as changes in athletic identity on indices of mental health. Results: Considering all path models tested, student-athletes who received more social support and reported more connectedness with teammates reported less dissolution of their athletic identity and-in most models-reported better mental health and well-being. Indirect effects indicated that student-athletes' change in athletic identity mediated the effects of teammate social support on psychological well-being and depression symptoms. Conclusions: In addition to advancing theory on how small groups relate to mental health, these findings demonstrate the value in remaining socially connected with peers and maintaining role identities during the COVID-19 pandemic.

Publication Type

Journal article.

<282>

Accession Number

20203498182

Author

Giani, P.; Castruccio, S.; Anav, A.; Howard, D.; Hu WenJing; Crippa, P.

Title

Short-term and long-term health impacts of air pollution reductions from COVID-19 lockdowns in China and Europe: a modelling study.

Source

Lancet Planetary Health; 2020. 4(10):e474-e482. 32 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background Exposure to poor air quality leads to increased premature mortality from cardiovascular and respiratory diseases. Among the far-reaching implications of the ongoing COVID-19 pandemic, a substantial improvement in air quality was observed worldwide after the lockdowns imposed by many countries. We aimed to assess the implications of different lockdown measures on air pollution levels in Europe and China, as well as the short-term and long-term health impact. Methods For this modelling study, observations of fine particulate matter (PM2.5) concentrations from more than 2500 stations in Europe and China during 2016-20 were integrated with chemical transport model simulations to reconstruct PM2.5 fields at high spatiotemporal resolution. The health benefits, expressed as short-term and long-term avoided mortality from PM2.5 exposure associated with the interventions imposed to control the COVID-19

pandemic, were quantified on the basis of the latest epidemiological studies. To explore the long-term variability in air quality and associated premature mortality, we built different scenarios of economic recovery (immediate or gradual resumption of activities, a second outbreak in autumn, and permanent lockdown for the whole of 2020). Findings The lockdown interventions led to a reduction in population-weighted PM2.5 of 14.5 µg m⁻³ across China (-29.7%) and 2.2 µg m⁻³ across Europe (-17.1%), with unprecedented reductions of 40 µg m⁻³ in bimonthly mean PM2.5 in the areas most affected by COVID-19 in China. In the short term, an estimated 24 200 (95% CI 22 380 - 26 010) premature deaths were averted throughout China between Feb 1 and March 31, and an estimated 2190 (1960 - 2420) deaths were averted in Europe between Feb 21 and May 17. We also estimated a positive number of long-term avoided premature fatalities due to reduced PM2.5 concentrations, ranging from 76 400 (95% CI 62 600 - 86 900) to 287 000 (233 700 - 328 300) for China, and from 13 600 (11 900 - 15 300) to 29 500 (25 800-33 300) for Europe, depending on the future scenarios of economic recovery adopted. Interpretation These results indicate that lockdown interventions led to substantial reductions in PM2.5 concentrations in China and Europe. We estimated that tens of thousands of premature deaths from air pollution were avoided, although with significant differences observed in Europe and China. Our findings suggest that considerable improvements in air quality are achievable in both China and Europe when stringent emission control policies are adopted.

Publication Type

Journal article.

<283>

Accession Number

20203497992

Author

Hamadouche, M.

Title

Means of preventing the risk of exposure to SARS-CoV-2: survey of pharmacists in a city in eastern Algeria. [French]

Source

Archives des Maladies Professionnelles et de l'Environnement; 2020. 81(4):341-347. 22 ref.

Publisher

Elsevier Masson

Location of Publisher

Issy-les Moulineaux Cedex

Country of Publication

France

Abstract

Context: The COVID-19 pandemic is on the rise worldwide, causing more than 7.5 million people infected and more than 400,000 dead to date. The mortality rate in Algeria is the highest in Africa, the wilaya of Setif, currently registering an increase in the number of patients, goes back to 3rd place nationwide. Method: This investigation involved 63 pharmacies in the city of Setif (northeast of Algeria), under partial confinement. The information was collected using a questionnaire from pharmacists or by direct observation. Results: The proportion of women that were on exceptional leave is 24.8%, and that of men 6.8%. A barrier maintaining a safe distance between pharmacists and customers is present in 95.2% of pharmacies. This distance is respected in 38.1% of cases between pharmacists, and in 76.8% of cases between clients. In 50.8% of cases, the mask is worn by the majority of employees, but more rarely by customers. Physical meetings are held in almost half of the cases. The means necessary for good hand hygiene are available to all staff; customers rarely (6.3%) have access to the hydroalcoholic solution. In most cases disinfection takes place frequently. Discussion: Several measures to limit the spread of the virus have been implemented in pharmacies. However, the wearing of protective masks should be generalized for staff and customers, as well as the posting of safety instructions and the availability of hydroalcoholic solution to customers.

Publication Type

Journal article.

<284>

Accession Number

20203497991

Author

Ndiaye, M.; Diatta, A. E. R.

Title

Screening procedure for COVID-19 infection in African structured workplace. [French]

Source

Archives des Maladies Professionnelles et de l'Environnement; 2020. 81(4):337-340. 7 ref.

Publisher

Elsevier Masson

Location of Publisher

Issy-les Moulineaux Cedex

Country of Publication

France

Abstract

Though there are no specific guidelines in Sub-Saharan Africa, the aim is to suggest to health practitioners, a simple screening tool of COVID-19 cases in the formal workforce in the region. Indeed the COVID-19 response in the formal African workplace should clearly be integrated into the national system and should

include: the setting up, in each company, of a response management unit that works in collaboration with the occupational health and safety committee; awareness-raising and training of social partners on aspects relating to knowledge of the disease and prevention measures; implementation of a procedure for screening and handling cases detected; evaluation and monitoring of the psychosocial and economic impact of the disease.

Publication Type

Journal article.

<285>

Accession Number

20203491783

Author

Yang YiChang

Title

Use of herbal drugs to treat COVID-19 should be with caution.

Source

Lancet (British edition); 2020. 395(10238):1689-1690. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

These herbal drugs are widely used to treat COVID-19 in China. The official claimed the patent herbal drugs can effectively relieve symptoms, such as fever, cough, and fatigue, and reduce the probability of patients developing severe conditions, but without giving further details. So far, no high-quality, rigorously peer-reviewed clinical trials of herbal drugs have been reported in internationally recognized journals. The approvals, based on in-vitro investigations and anecdotal clinical data, will probably lead to several worrisome consequences. The current COVID-19 pandemic is an unprecedented challenge for the Chinese Government and the general public. Doctors and researchers are desperately seeking a proven cure for it. When the conventional drugs such as lopinavir, ritonavir, chloroquine, and hydroxychloroquine are not as effective as expected, screening potential active components from traditional herbal medicine is a viable strategy that should not be dismissed. My colleagues and I have previously called for more attention to testing traditional herbal medicine for the treatment of COVID-19, but a rushed judgment without sufficient scientific evidence should be cautioned against.

Publication Type

Journal article.

<286>

Accession Number

20203491773

Author

Barberia, L. G.; Gomez, E. J.

Title

Political and institutional perils of Brazil's COVID-19 crisis.

Source

Lancet (British edition); 2020. 396(10248):367-368. 21 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The COVID-19 pandemic is likely to continue to exact a heavy toll on human lives in Brazil during the coming months. Now is the moment for democratic institutions to be resilient and to work with society and the scientific community to protect the health of the nation and overcome a president and administration that are failing to effectively lead in the political arena and in the response to COVID-19. Despite Bolsonaro's recent diagnosis with COVID-19, this has not motivated him to alter his policy position.²¹ There is still a need in Brazil for more testing, contact tracing, and isolation. State and municipal governments must not shirk from their responsibility to protect local populations given that the nation's president seems determined to abstain from this role.

Publication Type

Journal article.

<287>

Accession Number

20203497917

Author

Aldekhyl, S. S.; Arabi, Y. M.

Title

Simulation role in preparing for COVID-19.

Source

Annals of Thoracic Medicine; 2020. 15(3):134-137. 12 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

During the current COVID-19 global pandemic, the major efforts are channeled toward containing and minimizing the spread and maintaining the healthcare providers' safety. One of the major aspects of effective infection control and prevention is healthcare team training and system troubleshooting. Simulation-based education appears to be a practical and flexible instructional design to achieve variable levels of knowledge, skills, and attitude training. In this paper, we aim is to provide a brief scheme on how simulation-based training can be employed in COVID-19 pandemic preparedness efforts. In addition, we will be sharing our multidisciplinary simulation experience in critical care at the National Guard Health Affairs, Saudi Arabia.

Publication Type

Journal article.

<288>

Accession Number

20203497915

Author

Al-Khikani, F. H. O.

Title

Amphotericin B as antiviral drug: possible efficacy against COVID-19.

Source

Annals of Thoracic Medicine; 2020. 15(3):118-124. 37 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Since its discovery, amphotericin B (AmB) is still one of the most common first-line choices in treatment pulmonary mycoses for over seventh decades from discovery. AmB which is belonged to the polyene group has a wide spectrum in vitro and in vivo antimicrobial activity against fungi and parasites, resistance to AmB is rare despite extensive use. Recently, some studies focused on the potential antimicrobial action of AmB against some enveloped viruses such as human immunodeficiency virus, Japanese encephalitis virus, and rubella virus. Coronaviruses are enveloped positive-sense RNA nucleic acid viruses that have club-like spikes, characterized by a distinctive replication strategy; they are round and sometimes pleomorphic shapes. COVID-19 is regarding the new genera of coronaviridae that appear the first time in Wuhan, China, in early December 2019. Due to the continuous spreading of the novel COVID-19 with the exponential rise in death numbers, new therapeutic development is urgent, in general, there are no specific antiviral drugs or vaccines for 2019-novel coronavirus. Hence, this review may serve as an impetus for researchers working in the field of medical microbiology, vaccination, and antiviral drug design by discussion the most recent information about the antiviral action of AmB against COVID-19 infection as well as trying to a deep understanding of major properties, mechanisms of action, immune system responses, and antimicrobial efficiency of AmB. Since AmB is expected to alter the structure of the viral envelope, membrane integrity of cells, and internal cellular organelles, besides its other unique properties such as host immunomodulatory effects, so this review suggested that AmB as an effective anti-fungi drug thus may hold the promise of formulating a novel therapeutic option to treat COVID-19.

Publication Type

Journal article.

<289>

Accession Number

20203497906

Author

Mahdavi, A. M.

Title

A brief review of interplay between vitamin D and angiotensin-converting enzyme 2: implications for a potential treatment for COVID-19.

Source

Reviews in Medical Virology; 2020. 30(5)

Publisher

Wiley

Location of Publisher

Chichester

Country of Publication

UK

Abstract

The novel coronavirus disease 2019 (COVID-19) is rapidly expanding and causing many deaths all over the world with the World Health Organization (WHO) declaring a pandemic in March 2020. Current therapeutic options are limited and there is no registered and/or definite treatment or vaccine for this disease or the causative infection, severe acute respiratory coronavirus 2 syndrome (SARS-CoV-2). Angiotensin-converting enzyme 2 (ACE2), a part of the renin-angiotensin system (RAS), serves as the major entry point into cells for SARS-CoV-2 which attaches to human ACE2, thereby reducing the expression of ACE2 and causing lung injury and pneumonia. Vitamin D, a fat-soluble-vitamin, is a negative endocrine RAS modulator and inhibits renin expression and generation. It can induce ACE2/Ang-(1-7)/MasR axis activity and inhibits renin and the ACE/Ang II/AT1R axis, thereby increasing expression and concentration of ACE2, MasR and Ang-(1-7) and having a potential protective role against acute lung injury (ALI)/acute respiratory distress syndrome (ARDS). Therefore, targeting the unbalanced RAS and ACE2 down-regulation with vitamin D in SARS-CoV-2 infection is a potential therapeutic approach to combat COVID-19 and induced ARDS.

Publication Type

Journal article.

<290>

Accession Number

20203497902

Author

Giovane, R. A.; Rezai, S.; Cleland, E.; Henderson, C. E.

Title

Current pharmacological modalities for management of novel coronavirus disease 2019 (COVID-19) and the rationale for their utilization: a review.

Source

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF
T: +44 (0) 20 7202 0752
E: library@rcvsknowledge.org
www.rcvsknowledge.org

Reviews in Medical Virology; 2020. 30(5)28 ref.

Publisher

Wiley

Location of Publisher

Chichester

Country of Publication

UK

Abstract

SARS-CoV-2 has caused a pandemic which is putting strain on the health-care system and global economy. There is much pressure to develop both preventative and curative therapies for SARS-CoV-2 as there is no evidence to support therapies to improve outcomes in patients with SARS-CoV-2. Medications that inhibit certain steps of virus life cycle that are currently used to treat other illnesses such as Malaria, Ebola, HIV and Hepatitis C are being studied for use against SARS-CoV-2. To date, data is limited for medications that facilitate clinical improvement of COVID-19 infections.

Publication Type

Journal article.

<291>

Accession Number

20203487376

Author

Tetteh, E. K.; Amankwa, M. O.; Armah, E. K.; Rathilal, S.

Title

Fate of COVID-19 occurrences in wastewater systems: emerging detection and treatment technologies - a review.

Source

Water; 2020. 12(10)79 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Abstract

The coronavirus (COVID-19) pandemic is currently posing a significant threat to the world's public health and social-economic growth. Despite the rigorous international lockdown and quarantine efforts, the rate of COVID-19 infectious cases remains exceptionally high. Notwithstanding, the end route of COVID-19, together with emerging contaminants' (antibiotics, pharmaceuticals, nanoplastics, pesticide, etc.) occurrence in wastewater treatment plants (WWTPs), poses a great challenge in wastewater settings. Therefore, this paper seeks to review an inter-disciplinary and technological approach as a roadmap for the water and wastewater settings to help fight COVID-19 and future waves of pandemics. This study explored wastewater-based epidemiology (WBE) potential for detecting SARS-CoV-2 and its metabolites in wastewater settings. Furthermore, the prospects of integrating innovative and robust technologies such as magnetic nanotechnology, advanced oxidation process, biosensors, and membrane bioreactors into the WWTPs to augment the risk of COVID-19's environmental impacts and improve water quality are discussed. In terms of the diagnostics of COVID-19, potential biosensors such as sample-answer chip-, paper- and nanomaterials-based biosensors are highlighted. In conclusion, sewage treatment systems, together with magnetic biosensor diagnostics and WBE, could be a possible way to keep a surveillance on the outbreak of COVID-19 in communities around the globe, thereby identifying hotspots and curbing the diagnostic costs of testing. Photocatalysis prospects are high to inactivate coronavirus, and therefore a focus on safe nanotechnology and bioengineering should be encouraged.

Publication Type

Journal article.

<292>

Accession Number

20203487319

Author

Sampath, P. V.; Jagadeesh, G. S.; Bahinipati, C. S.

Title

Sustainable intensification of agriculture in the context of the COVID-19 pandemic: prospects for the future.

Source

Water; 2020. 12(10)51 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 pandemic is adversely impacting food and nutrition security and requires urgent attention from policymakers. Sustainable intensification of agriculture is one strategy that attempts to increase food production without adversely impacting the environment, by shifting from water-intensive crops to other climate-resistant and nutritious crops. This paper focuses on the Indian state of Andhra Pradesh by studying the impact of shifting 20% of the area under paddy and cotton cultivation to other crops like millets and pulses. Using FAO's CROPWAT model, along with monsoon forecasts and detailed agricultural data, we simulate the crop water requirements across the study area. We simulate a business-as-usual base case and compare it to multiple crop diversification strategies using various parameters-food, calories, protein production, as well as groundwater and energy consumption. Results from this study indicate that reduced paddy cultivation decreases groundwater and energy consumption by around 9-10%, and a calorie deficit between 4 and 8%-making up this calorie deficit requires a 20-30% improvement in the yields of millets and pulses. We also propose policy interventions to incentivize the cultivation of nutritious and climate-resistant crops as a sustainable strategy towards strengthening food and nutrition security while lowering the environmental footprint of food.

Publication Type

Journal article.

<293>

Accession Number

20203486681

Author

Blaszczyk-Bebenek, E.; Jagielski, P.; Boleslawska, I.; Jagielska, A.; Nitsch-Osuch, A.; Kawalec, P.

Title

Nutrition behaviors in Polish adults before and during COVID-19 lockdown.

Source

Nutrients; 2020. 12(10)39 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Unexpected isolation, which has not yet been seen on a global scale, has created the conditions for evaluating nutrition in a situation of reduced spatial activity. The study aimed to assess the influence of

lockdown on selected eating habits of Polish adults. An anonymous questionnaire was conducted, including questions about eating habits and self-reported anthropometric measurements, referring to "before" and "during" lockdown. We reported the findings of 312 adults (aged 41.12 +/- 13.05 years). Overall, 64.1% of the participants were women, 77.7% urban inhabitants and 78.6% employed. The average length of social isolation was 50.79 +/- 10.53 days. The majority (51.6%) of the respondents did not eat outside the house during lockdown ($p < 0.0001$). The number of meals eaten during the day during lockdown increased significantly, 11.2% of the respondents ate 5 and more meals ($p < 0.0001$). The percentage of people snacking between meals increased by 5.1% during lockdown ($p = 0.0001$). Eggs, potatoes, sweets, canned meat and alcohol were consumed considerably more commonly during lockdown, while fast-food products, instant soups and energy drinks were eaten or drunk significantly less frequently. A marked decrease in the number of daily servings of the following products was observed: bakery products, red meat, fast food, instant soups, sweet beverages and energy drinks. Conversely, the number of daily servings of sweets and canned meat significantly increased. Two thirds of the respondents reported body weight changes, with 45.86% of the participants being overweight during lockdown. Significant changes in the diet of Polish adults were found during lockdown due to COVID-19.

Publication Type

Journal article.

<294>

Accession Number

20203486619

Author

Grabia, M.; Markiewicz-Zukowska, R.; Puscion-Jakubik, A.; Bielecka, J.; Nowakowski, P.; Gromkowska-Kepka, K.; Mielcarek, K.; Socha, K.

Title

The nutritional and health effects of the COVID-19 pandemic on patients with diabetes mellitus.

Source

Nutrients; 2020. 12(10)32 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

COVID-19 related restrictions aimed at curbing the spread of the coronavirus result in changes in daily routines and physical activity which can have a negative effect on eating and health habits. The aim of the

study was to assess the impact of the COVID-19 pandemic on patients with diabetes and their nutrition and health behaviours. A survey conducted in July 2020 included 124 individuals with type 1 (n = 90) and 2 (n = 34) diabetes mellitus from Poland. To assess nutritional and health behaviours, an online questionnaire covering basic information, anthropometric data, and details regarding physical activity, eating, and hygiene habits was used. Almost 40% of all respondents with type 1 and 2 diabetes mellitus (DM) stated that their disease self-management had significantly improved. Over 60% of all participants declared that they had started eating more nutritious and regular meals during the COVID-19 pandemic. Enhanced hygiene, in particular, during the period, a statistically significant increase in hand sanitiser use was reported by respondents (18% vs. 82%, $p < 0.001$). The study demonstrated that the pandemic had a significant impact on the behaviour of patients with DM. Improved disease self-management and making healthy, informed food and hygiene choices were observed.

Publication Type

Journal article.

<295>

Accession Number

20203435517

Author

Megha Hastantram Sampangi-ramaiah; Ram Vishwakarma; Shaanker, R. U.

Title

Molecular docking analysis of selected natural products from plants for inhibition of SARS-CoV-2 main protease.

Source

Current Science; 2020. 118(7):1087-1092. 20 ref.

Publisher

Current Science Association

Location of Publisher

Bangalore

Country of Publication

India

Abstract

In this article, we report results of a molecular dock-ing analysis of commonly occurring natural product compounds against COVID-19 6LU7 and 6Y2E prote-ases. Our results show that several of these compounds have binding affinity against both the COVID-19 proteases, and compare well with a known anti-HIV drug, Saquinavir. Many of the compounds form an integral component of many cuisines, both Indian as well as others. We propose that some of these compounds could be easily and quickly positioned to hold fort

against the COVID-19 virus, until of course newer therapies are discovered and detailed studies are taken to empirically validate some of the compounds for their ability to inhibit the virus.

Publication Type

Journal article.

<296>

Accession Number

20203503044

Author

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

Title

Needs assessment and impact of COVID-19 on pharmacy professionals in 31 Commonwealth countries.

Source

Journal of Pharmaceutical Policy and Practice; 2020. 13(72):(21 October 2020). 29 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: The declaration of COVID-19 a pandemic by the World Health Organization on 11 March 2020 marked the beginning of a global health crisis of an unprecedented nature and scale. The approach taken by countries across the world varied widely, however, the delivery of frontline healthcare was consistently recognised as being central to the pandemic response. This study aimed to identify and explore the issues currently facing pharmacy teams across Commonwealth countries during the COVID-19 pandemic. The study also evaluates pharmacy professionals' understanding of key knowledge areas from the COVID-19 webinar hosted by the Commonwealth Pharmacists' Association (CPA). Method: A quantitative survey-based approach was adopted, using a 32-item questionnaire developed from the literature on pharmacy and pandemic response. The survey was hosted on Survey Monkey and pilot tested. The final survey was disseminated by CPA member organisations. A 6-item online questionnaire was sent via email to all attendees of CPA's COVID-19 webinar. Descriptive statistics on frequency distributions and percentages were used to analyse the responses. Data were analysed using Microsoft Excel (2010). Results: There were 545 responses from pharmacy professionals across 31/54 Commonwealth countries in Africa, Asia, the Americas, Europe and the Pacific. Majority of the respondents reported being at least somewhat worried (90%) and more than 65% were very worried or extremely about the impact of COVID-19 on them personally and professionally. Nearly two-thirds of respondents stated finding it somewhat difficult or very

difficult to work effectively during the pandemic. Challenges mostly faced by pharmacy professionals working remotely included; general anxiety about the impact of COVID-19 on their lives (12%), and difficulties in communicating with their co-workers (12%). Most pharmacy professionals had not previously been actively involved in a global health emergency (82%) nor obtained training on global/public health emergency preparedness (62%). Between 45 and 97% of the COVID-19 webinar attendees provided the correct answers to post-webinar questions, suggesting some improvement in knowledge. Conclusion: Our study confirms pharmacy professionals' concerns about practice during a pandemic and provides preliminary data on the challenges and learning needs of the profession. The CPA has since acted on these findings, providing ongoing opportunities to develop and refine resources for the profession as the pandemic evolves. Pharmacy professionals have also demonstrated improved knowledge on the management of COVID-19 and resources available for professionals.

Publication Type

Journal article.

<297>

Accession Number

20203506115

Author

Hoang Thi Tran; Phuong Thi Kim Nguyen; Le Thi Huynh; Chau Hoang Minh Le; Hoang Thi Nam Giang; Phuong Thi Thu Nguyen; Murray, J.

Title

Appropriate care for neonates born to mothers with COVID-19 disease.

Source

Acta Paediatrica; 2020. 109(9):1713-1716. 29 ref.

Publisher

Wiley

Location of Publisher

Copenhagen

Country of Publication

Denmark

Abstract

The global COVID-19 pandemic has been associated with high rates of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission, morbidity and mortality in the general population. Evidence-based guidance on caring for babies born to mothers with COVID-19 is needed. There is currently insufficient evidence to suggest vertical transmission between mothers and their newborn infants. However, transmission can happen after birth from mothers or other carers. Based on the currently

available data, prolonged skin-to-skin contact and early and exclusive breastfeeding remain the best strategies to reduce the risks of morbidity and mortality for both the mother with COVID-19 and her baby.

Publication Type

Journal article.

<298>

Accession Number

20203502369

Author

Vergkizi, S.; Nikolakakis, I.

Title

Bacillus Calmette - Guerin (BCG) vaccine generates immunoregulatory cells in the cervical lymph nodes in guinea pigs injected intra dermally.

Source

Vaccine; 2020. 38(48):7629-7637. 59 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This work demonstrates the presence of immune regulatory cells in the cervical lymph nodes draining Bacillus Calmette-Guerin (BCG) vaccinated site on the dorsum of the ear in guinea pigs. It is shown that whole cervical lymph node cells did not proliferate in vitro in the presence of soluble mycobacterial antigens (PPD or leprosin) despite being responsive to whole mycobacteria. Besides, T cells from these lymph nodes separated as a non-adherent fraction on a nylon wool column, proliferated to PPD in the presence of autologous antigen presenting cells. Interestingly, addition of as low as 20% nylon wool adherent cells to these, sharply decreased the proliferation by 83%. Looking into what cells in the adherent fraction suppressed the proliferation, it was found that neither the T cell nor the macrophage enriched cell fractions of this population individually showed suppressive effect, indicating that their co-presence was necessary for the suppression. Since BCG induced granulomas resolve much faster than granulomas induced by other mycobacteria such as Mycobacterium leprae the present experimental findings add to the existing evidence that intradermal BCG vaccination influences subsequent immune responses in the host and may further stress upon its beneficial role seen in Covid-19 patients.

Publication Type

Journal article.

<299>

Accession Number

20203502358

Author

Chen WenHsiang; Tao XinRong; Agrawal, A. S.; Abdullah Algaissi; Peng BiHung; Pollet, J.; Strych, U.; Bottazzi, M. E.; Hotez, P. J.; Lustigman, S.; Du LanYing; Jiang ShiBo; Tseng, C. te K.

Title

Yeast-expressed SARS-CoV recombinant receptor-binding domain (RBD219-N1) formulated with aluminum hydroxide induces protective immunity and reduces immune enhancement.

Source

Vaccine; 2020. 38(47):7533-7541. 39 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

We developed a severe acute respiratory syndrome (SARS) subunit recombinant protein vaccine candidate based on a high-yielding, yeast-engineered, receptor-binding domain (RBD219-N1) of the SARS beta-coronavirus (SARS-CoV) spike (S) protein. When formulated with Alhydrogel, RBD219-N1 induced high levels of neutralizing antibodies against both pseudotyped virus and a clinical (mouse-adapted) isolate of SARS-CoV. Here, we report that mice immunized with RBD219-N1/Alhydrogel were fully protected from lethal SARS-CoV challenge (0% mortality), compared to ~30% mortality in mice immunized with the SARS S protein formulated with Alhydrogel, and 100% mortality in negative controls. An RBD219-N1 formulation with Alhydrogel was also superior to the S protein, unadjuvanted RBD, and AddaVax (MF59-like adjuvant)-formulated RBD in inducing specific antibodies and preventing cellular infiltrates in the lungs upon SARS-CoV challenge. Specifically, a formulation with a 1:25 ratio of RBD219-N1 to Alhydrogel provided high neutralizing antibody titers, 100% protection with non-detectable viral loads with minimal or no eosinophilic pulmonary infiltrates. As a result, this vaccine formulation is under consideration for further development against SARS-CoV and potentially other emerging and re-emerging beta-CoVs such as SARS-CoV-2.

Publication Type

Journal article.

<300>

Accession Number

20203502318

Author

Lee HongHsi; Lin ShengHsuan

Title

Effects of COVID-19 prevention measures on other common infections, Taiwan.

Source

Emerging Infectious Diseases; 2020. 26(10):2509-2511. 6 ref.

Publisher

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

Location of Publisher

Atlanta

Country of Publication

USA

Abstract

To determine whether policies to limit transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) hinder spread of other infectious diseases, we analyzed the National Health Insurance database in Taiwan. Rates of other infections were significantly lower after SARS-CoV-2 prevention measures were announced. This finding can be applied to cost-effectiveness of SARS-CoV-2 prevention.

Publication Type

Journal article.

<301>

Accession Number

20203464299

Author

Khan, U. Z.

Title

Telemedicine in the COVID-19 Era: a chance to make a better tomorrow.

Source

Pakistan Journal of Medical Sciences; 2020. 36(6):1405-1407. 9 ref.

Publisher

Professional Medical Publications

Location of Publisher

Karachi

Country of Publication

Pakistan

Abstract

Telemedicine use is increasing globally and in Pakistan. However, Pakistan faces unique challenges related to socioeconomic, geographic and perhaps political challenges. This is the time for Pakistan to create policies and protocols for ethical and efficient use of telemedicine. The goal of this manuscript is to start a discussion, by encouraging questions, and identifying challenges for healthcare providers.

Publication Type

Journal article.

<302>

Accession Number

20203464294

Author

Hasan, S. R.; Hamid, Z.; Jawaid, M. T.; Ali, R. K.

Title

Anxiety among doctors during COVID-19 pandemic in secondary and tertiary care hospitals.

Source

Pakistan Journal of Medical Sciences; 2020. 36(6):1360-1365. 16 ref.

Publisher

Professional Medical Publications

Location of Publisher

Karachi

Country of Publication

Pakistan

Abstract

Objective: To assess the level of anxiety among doctors during COVID-19 pandemic and the associated risk factors. **Methods:** This cross-sectional study was conducted from 30th April to 16th May, 2020 in Karachi, Pakistan. The data was collected via an online web-based questionnaire. Questionnaire was used to assess anxiety level using GAD-7 scale among health-care professionals and the risk factors playing role in it. **Results:** One hundred and fifty-one doctors participated in our study. Out of these 151 participants, 69 (45.7%) had mild, 22 (14.6%) had moderate, and 5 (3.3%) had severe symptoms of anxiety, whereas the remaining 55 (36.4%) had no anxiety according to GAD-7 scale. The median [interquartile range (IQR)] GAD-7 scale scores are 6.0 [3.00 - 9.00]. Females showed more severe degrees of measurement of anxiety symptoms than males. Doctors dealing with COVID-19 patients showed higher level of anxiety as compared to the doctors who were not dealing with COVID-19 patients, having a significant difference ($U = 9.697$, $p = 0.008$). One hundred and forty-one (93.4%) participants were concerned about being exposed to COVID-19 at work and 112 (74.2%) thought they have inadequate protective equipment for safety. **Conclusions:** During COVID-19 pandemic, doctors exhibited different grades of anxiety. In order for healthcare workers to perform to the best of their capability, certain guidelines and interventions are needed.

Publication Type

Journal article.

<303>

Accession Number

20203500487

Author

Bryche, B.; Albin, A. S.; Murri, S.; Lacote, S.; Pulido, C.; Gouilh, M. A.; Lesellier, S.; Servat, A.; Wasniewski, M.; Picard-Meyer, E.; Monchatre-Leroy, E.; Volmer, R.; Rampin, O.; Goffic, R. le; Marianneau, P.; Meunier, N.

Title

Massive transient damage of the olfactory epithelium associated with infection of sustentacular cells by SARS-CoV-2 in golden Syrian hamsters. (Special issue on immunopsychiatry of COVID-19 pandemic.)

Source

Brain, Behavior and Immunity; 2020. 89:579-586. 28 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Anosmia is one of the most prevalent symptoms of SARS-CoV-2 infection during the COVID-19 pandemic. However, the cellular mechanism behind the sudden loss of smell has not yet been investigated. The initial step of odour detection takes place in the pseudostratified olfactory epithelium (OE) mainly composed of olfactory sensory neurons surrounded by supporting cells known as sustentacular cells. The olfactory neurons project their axons to the olfactory bulb in the central nervous system offering a potential pathway for pathogens to enter the central nervous system by bypassing the blood brain barrier. In the present study, we explored the impact of SARS-CoV-2 infection on the olfactory system in golden Syrian hamsters. We observed massive damage of the OE as early as 2 days post nasal instillation of SARS-CoV-2, resulting in a major loss of cilia necessary for odour detection. These damages were associated with infection of a large proportion of sustentacular cells but not of olfactory neurons, and we did not detect any presence of the virus in the olfactory bulbs. We observed massive infiltration of immune cells in the OE and lamina propria of infected animals, which may contribute to the desquamation of the OE. The OE was partially restored 14 days post infection. Anosmia observed in COVID-19 patient is therefore likely to be linked to a massive and fast desquamation of the OE following sustentacular cells infection with SARS-CoV-2 and subsequent recruitment of immune cells in the OE and lamina propria.

Publication Type

Journal article.

<304>

Accession Number

20203500480

Author

Alves, V. S.; Leite-Aguiar, R.; Silva, J. P. da; Coutinho-Silva, R.; Savio, L. E. B.

Title

Purinergic signaling in infectious diseases of the central nervous system.

Source

Brain, Behavior and Immunity; 2020. 89:480-490. many ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

The incidence of infectious diseases affecting the central nervous system (CNS) has been increasing over the last several years. Among the reasons for the expansion of these diseases and the appearance of new neuropathogens are globalization, global warming, and the increased proximity between humans and wild animals due to human activities such as deforestation. Neurotropism affecting normal brain function is shared by organisms such as viruses, bacteria, fungi, and parasites. Neuroinfections caused by these agents activate immune responses, inducing neuroinflammation, excitotoxicity, and neurodegeneration. Purinergic signaling is an evolutionarily conserved signaling pathway associated with these neuropathologies. During neuroinfections, host cells release ATP as an extracellular danger signal with pro-inflammatory activities. ATP is metabolized to its derivatives by ectonucleotidases such as CD39 and CD73; ATP and its metabolites modulate neuronal and immune mechanisms through P1 and P2 purinergic receptors that are involved in pathophysiological mechanisms of neuroinfections. In this review we discuss the beneficial or deleterious effects of various components of the purinergic signaling pathway in infectious diseases that affect the CNS, including human immunodeficiency virus (HIV-1) infection, herpes simplex virus type 1 (HSV-1) infection, bacterial meningitis, sepsis, cryptococcosis, toxoplasmosis, and malaria. We also provide a description of this signaling pathway in emerging viral infections with neurological implications such as Zika and SARS-CoV-2.

Publication Type

Journal article.

<305>

Accession Number

20203507878

Author

Ogando, N. S.; Dalebout, T. J.; Zevenhoven-Dobbe, J. C.; Limpens, R. W. A. L.; Meer, Y. van der; Caly, L.; Druce, J.; Vries, J. J. C. de; Kikkert, M.; Barcena, M.; Sidorov, I.; Snijder, E. J.

Title

SARS-coronavirus-2 replication in Vero E6 cells: replication kinetics, rapid adaptation and cytopathology.

Source

Journal of General Virology; 2020. 101(9):925-940. 111 ref.

Publisher

Microbiology Society

Location of Publisher

London

Country of Publication

UK

Abstract

The sudden emergence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) at the end of 2019 from the Chinese province of Hubei and its subsequent pandemic spread highlight the importance of understanding the full molecular details of coronavirus infection and pathogenesis. Here, we compared a variety of replication features of SARS-CoV-2 and SARS-CoV and analysed the cytopathology caused by the two closely related viruses in the commonly used Vero E6 cell line. Compared to SARS-CoV, SARS-CoV-2 generated higher levels of intracellular viral RNA, but strikingly about 50-fold less infectious viral progeny was recovered from the culture medium. Immunofluorescence microscopy of SARS-CoV-2-infected cells established extensive cross-reactivity of antisera previously raised against a variety of non-structural proteins, membrane and nucleocapsid protein of SARS-CoV. Electron microscopy revealed that the ultrastructural changes induced by the two SARS viruses are very similar and occur within comparable time frames after infection. Furthermore, we determined that the sensitivity of the two viruses to three established inhibitors of coronavirus replication (remdesivir, alisporivir and chloroquine) is very similar, but that SARS-CoV-2 infection was substantially more sensitive to pre-treatment of cells with pegylated interferon alpha. An important difference between the two viruses is the fact that - upon passaging in Vero E6 cells - SARS-CoV-2 apparently is under strong selection pressure to acquire adaptive mutations in its spike protein gene. These mutations change or delete a putative furin-like cleavage site in the region connecting the S1 and S2 domains and result in a very prominent phenotypic change in plaque assays.

Publication Type

Journal article.

<306>

Accession Number

20203504795

Author

Ismael, J.; Losco, F.; Quildrian, S.; Sanchez, P.; Pincemin, I.; Lastiri, J.; Bella, S.; Chinellato, A.; Dellamea, G.; Ahualli, A.; Rompato, S.; Velez, J.; Escobar, R.; Zwenger, A.; Rosales, C.; Bagnes, C.; Puyol, J.; Niewiadomski, D.; Smecuol, E.; Nachman, F.; Gonzalez, E.; Ferraris, G.; Ramos Suppicich, J.; Price, P.; Medina, L.; et al.

Title

Multidisciplinary approach to COVID-19 and cancer: consensus from scientific societies in Argentina.

Source

ecancermedicalsecience; 2020. 14(1044)32 ref.

Publisher

ecancer Global Foundation

Location of Publisher

Bristol

Country of Publication

UK

Abstract

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF
T: +44 (0) 20 7202 0752
E: library@rcvsknowledge.org
www.rcvsknowledge.org

Introduction: The world is living through an outbreak of an acute respiratory syndrome caused by a new betacoronavirus known as coronavirus 2 (SARS CoV-2), which has been declared an international public health emergency by the World Health Organisation. Cancer patients are a very special population in this setting since they are more susceptible to viral infections than the general population. Several recommendations have been made on this issue, most of them based on expert opinion and institutional experience. It is essential to gather the evidence available for decision making. **Background:** To review the evidence available in order to create a multi-institutional position from the perspective of scientific societies in Argentina involved in the management of cancer patients. **Methodology:** The review included two phases: (1) search and systematic revision of the medical literature; (2) consensus and revision of the document drafted by national scientific societies involved in the management and care of cancer patients using the modified Delphi method. The final results were presented at a videoconference with all the participants. Also, additional comment and recommendations were discussed. The final document was revised and approved for publication by the members of the panel. **Results:** The consensus panel included 18 representatives from scientific societies from Argentina who assessed the evidence and then made recommendations for the management of cancer patients in our country. International guidelines (CDC; ASCO, NCCN and ESMO) were considered as a background for analysis, as well as institutional guidelines and an open ad hoc survey administered to 114 healthcare professionals from the scientific societies involved in this study. The recommendations are grouped as follows: (1) general care interventions-training of the personnel, cleaning and disinfection of the hospital premises and patient scheduling; (2) treatment decisions-patient care, surgeries, immunosuppressive therapy, radiotherapy and screening; (3) ethical considerations-optimisation of resources, end-of-life care for critically-ill patients; (4) management of hospitalised patients; and (5) wellbeing of the healthcare team. The general recommendation arising from the study is that the management of cancer patients must adapt to the exceptional pandemic status quo without disregarding treatment or cure options. Moreover, healthcare professional accompaniment of all patients should not be neglected. All healthcare professionals must make a significant joint effort to create multidisciplinary teams to discuss the most appropriate measures for each particular situation. **Conclusions:** The scientific evidence available on this topic worldwide is in progress. This together with the epidemiologically shifting scenario poses unprecedented challenges in the management of cancer amidst this global pandemic. Furthermore, the key role of the healthcare structural organisation appears evident, such as the drafting of clear guidelines for all the stakeholders, adaptability to constant change and an interdisciplinary shared vision through consensus to provide adequate care to our cancer patients in the light of uncertainty and fast-paced change.

Publication Type

Journal article.

<307>

Accession Number

20203504760

Author

Lombea, D. C.; Mwaba, C. K.; Msadabwe, S. C.; Banda, L.; Mwale, M.; Pupwe, G.; Kamfwa, P.; Kanduza, M.; Munkupa, H.; Maliti, B.; Simbeye, K.; Hachizo, P.; Lin, L.; Chiao, E.; Lishimpi, K.

Title

Zambia's National Cancer Centre response to the COVID-19 pandemic - an opportunity for improved care.

Source

ecancermedicallscience; 2020. 14(1051)20 ref.

Publisher

ecancer Global Foundation

Location of Publisher

Bristol

Country of Publication

UK

Abstract

The COVID-19 pandemic has overwhelmed health systems around the globe even in countries with strong economies. This is of particular concern for nations with weaker health systems. This article reports the response of a comprehensive cancer centre in a lower-middle income country to prevent COVID-19 transmission and how the implementation of pragmatic strategies have served as a springboard to improve cancer services beyond the COVID-19 pandemic. The strategies included establishment of a local taskforce, increased education and facilitation of good hygiene practices, staff training, patient triaging, improved patient scheduling, remote review of patients and establishing a virtual platform for meetings.

Publication Type

Journal article.

<308>

Accession Number

20203501685

Author

Hou JianQiong; Xiao BiRong; He YuJuan

Title

Investigation of people's behavior and psychology during the COVID-19 epidemic in Deyang, Sichuan. [Chinese]

Source

China Tropical Medicine; 2020. 20(10):988-991. 14 ref.

Publisher

Editorial Department of China Tropical Medicine

Location of Publisher

Haikou

Country of Publication

China

Abstract

Objective: To understand Deyang people's knowledge, behavior changes and psychological state during coronavirus disease 2019 (COVID-19) pandemic, and provide scientific basis for the government and individuals to take effective measures. Methods: A total of 1 380 people in Jingyang District of Deyang City were investigated by online questionnaire. SPSS 23.0 software was used for statistical analysis. Results: People's mode of acquiring relevant knowledge through traditional TV, radio and newspaper has changed to TV, Internet, WeChat, and Tik Tok. In addition to ventilation and panic buying mask and disinfectant, the general public has positive behavior for COVID-19 pandemic, especially those with higher education and higher education level. The differences are statistically significant (all $P < 0.01$). In terms of people's psychological state, those who feel fear and pessimism and disappointment have lower education background than those of high school and below; those who are worried about infection, worried about family health, depressed mood, irritable and angry have higher education background than those of high school and below, with statistical significance (all $P < 0.05$). There are seven main reasons for residents' fear, the proportion of college degree or above is higher than that of high school degree or below in fear reasons of strong infectivity, long incubation period and infectivity, increasing number of suspected cases, lack of medicines and protective substances (all $P < 0.05$). Conclusion: During the epidemic period, there are panic, anxiety, pessimism and other psychological states in Deyang people. It is very important to take targeted health education strategies and measures to effectively prevent and control the spread of disease, and pay attention to the prevention and control of psychological diseases caused by the epidemic.

Publication Type

Journal article.

<309>

Accession Number

20203504756

Author

Keat, W. O. L.; Lechmiannandan, S.; Aziz, M. N.; Manoharan, D.; Lee, S. B.; Johan, R. M.

Title

Triage of urology referrals and outpatient service during COVID-19 pandemic: experience from a single centre in Malaysia.

Source

Medical Journal of Malaysia; 2020. 75(4):400-402. 10 ref.

Publisher

Malaysian Medical Association

Location of Publisher

Kuala Lumpur

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Country of Publication

Malaysia

Abstract

In Malaysia, COVID-19 pandemic recorded considerable number of cases. Many hospitals have been converted into COVID-19 centres to manage these cases. The Penang General Hospital was designated as a hybrid hospital to manage both COVID-19 and non-COVID-19 cases. Consequently, services across specialties, including urology have been affected. Triage of referrals was necessary to ensure optimum patient care, thus we designed a triage system to address this situation. A record screening system of patients was also implemented to limit outpatient appointments. We share this early experience in managing urology patients during this pandemic.

Publication Type

Journal article.

<310>

Accession Number

20203501678

Author

Dong WenYi; Huang GaoYan; Xie ZhouHua; Lin YanRong; Song XiaoLing; Wu NianNing; Wei ShanQiu; Tang Xike

Title

Epidemiological and clinical characteristics of 55 patients with COVID-19. [Chinese]

Source

China Tropical Medicine; 2020. 20(10):959-961. 14 ref.

Publisher

Editorial Department of China Tropical Medicine

Location of Publisher

Haikou

Country of Publication

China

Abstract

Objective: To explore the clinical and epidemiological characteristics of patients with coronavirus disease 2019, and we provide reference for the prevention and control of epidemic situation. Methods: Fifty-five patients with COVID-19 diagnosed and admitted to the hospital were studied as the research object from January 23 to February 16, 2020, we collected epidemiological data, such as whether patients had been a recent travel to Hubei, ever come into contact with people from Hubei, whether recent contact with

patients with respiratory diseases; and clinical features include fever, fatigue, dry cough, muscle pain, cough, sputum, etc, collected related laboratory tests and imaging examination index, analyzed clinical and epidemiology features of COVID-19 patients. Results: Among the 55 cases, 27 were males and 28 were females, with an average age of (43.11+/-17.91) years. Among them, there were 3 cases of mild type, 48 cases of normal type, 3 cases of severe type and 1 case of critical type. The common type was dominant, accounting for 87.27% of the total cases. There were 29 cases of family cluster (52.73%). There were 19 imported cases (34.55%), and 27 recent contacts with persons from Hubei (49.09%). The clinical symptoms were dry cough in 34 cases (61.82%), fever in 30 cases (54.55%), sputum in 19 cases (34.55%), and fatigue in 18 cases (32.73%), and asymptomatic in 6 cases (10.91%). The total number of white blood cells was normal or decreased in 52 cases (94.55%), and the lymphocyte count was decreased in 12 cases (21.82%). There were 46 cases (83.64%) with ground-glass changes in both lungs on CT 5 days after the onset of symptoms. Conclusions: COVID-19 patients were mainly normal type, mainly imported and family cluster cases, but there were also asymptomatic patients. The prevention and control of COVID-19 should strictly prevent imported cases and personnel gathering, and strengthen the monitoring of body temperature. Strengthen COVID-19 nucleic acid testing of confirmed close contacts, we could timely detect asymptomatic cases and conduct isolation and treatment.

Publication Type

Journal article.

<311>

Accession Number

20203501672

Author

Zhang HaiRu; Ju Mei

Title

Status and influencing factors of health behaviors of community residents in the period of COVID-19 epidemic. [Chinese]

Source

China Tropical Medicine; 2020. 20(10):926-932. 15 ref.

Publisher

Editorial Department of China Tropical Medicine

Location of Publisher

Haikou

Country of Publication

China

Abstract

Objective: To understand the community residents' health behaviors and the influencing factors in the period of COVID-19 epidemic. Methods: Questionnaires, which were designed, and then distributed and collected online; were statistical analyzed. Results: According to a total of 523 valid questionnaires collected, 87.00% residents had no confirmed COVID-19 cases around them, 74.19% knew its transmission route, 69.02% knew the disease preventive measures, 80.50% believed the disease preventive measures, 12.62% believed the disease did not pose serious threat on their lives, and 65.39% were fear of the disease to different degrees. Among the health behaviors, the behavior of wearing a mask initiatively accounts for the largest proportion (97.13%), while the lowest proportion goes to the behavior of eating by dishes separately and using serving chopsticks (35.37%). According to multiple Logistic regression analysis, the factors that influence the community residents' health behaviors include occupation, access to epidemic information via social platform/newspapers and periodicals, supporting degree of community's enclosed management, understandings on the confirmed cases nearby and preventive measures and degree of faith. Teachers/medical workers/civil public servants [OR(95%CI):2.700(1.235-5.904)], and the residents who knew epidemic information via newspapers and periodicals [OR(95%CI):1.728(1.072-2.787)], supported community's enclosed management [OR(95%CI):2.148(1.150-4.013)], knew about preventive measures [OR(95%CI):2.274(1.468-3.523)], and trusted these measures [OR(95%CI):1.879(1.119-3.154)] had good health behaviors while the residents hardly knowing whether there was any confirmed case around them [OR(95%CI):0.253(0.107-0.600)], and knew the epidemic information via social platform [OR(95%CI):0.393(0.221-0.698)] had poor health behaviors. Conclusion: To cope with the COVID-19, community residents would take certain health behaviors initiatively, which, however, need intensifying. Residents should also enhance their prevention awareness and health behavior level.

Publication Type

Journal article.

<312>

Accession Number

20203504746

Author

Dai RuoChen; Feng Hao; Hu JunPeng; Jin Quan; Li HuiWen; Wang RanRan; Wang RuiXin; Xu LiHe; Zhang XiaoBo

Title

The impact of COVID-19 on small and medium-sized enterprises: evidence from two-wave phone surveys in China.

Source

Working Paper - Centre for Global Development; 2020. (549):27 pp. 11 ref.

Publisher

Center for Global Development

Location of Publisher

Washington

Country of Publication

USA

Abstract

This paper examines both the short-term and mid-term impact of COVID-19 restrictions on small and medium-sized enterprises (SMEs), based on two waves of phone interviews with a previously surveyed large SME sample in China. The outbreak of COVID-19 and resultant lockdowns cast a heavy toll on SMEs. Affected by problems of logistics blocks, labor shortages, and drops in demand, 80 percent of SMEs temporarily closed at the time of the first wave of interviews in February 2020. After reining in COVID-19, authorities largely eased lockdown restrictions in April. Consequently, most SMEs had reopened by the time of the second round of surveys in May. However, many firms, particularly export firms, ran at partial capacity, primarily due to inadequate demand. Moreover, around 18 percent of SMEs closed for good between the two waves of surveys from February to May, shedding 14 percent of total jobs.

Publication Type

Bulletin.

<313>

Accession Number

20203502823

Author

Shi YueXin; Li Hong; Xian Peng; Xie ZhongYao; Jiang Li; Liu Qian; Fan YunZhou; Liu Ying; Liu LiFei; Zhang YueWei

Title

Practice on infection control during the outbreak of COVID-19 from medical team of Beijing municipal hospital for aiding Hubei province. [Chinese]

Source

Chinese Journal of Nosocomiology; 2020. 30(19):2895-2899.

Publisher

Editorial Board of Chinese Journal of Nosocomiology

Location of Publisher

Beijing

Country of Publication

China

Abstract

OBJECTIVE: To assist the prevention and treatment of COVID-19 in Wuhan city, Beijing municipal health commission and Beijing hospitals authority set up a medical team of 138 experts from 13 Beijing municipal

hospitals, which was dispatched to Wuhan union hospital west campus to participate in the treatment of severe patients. We will give full play to the role of hospital infection prevention and control experts in our work, and ensure the strict implementation of hospital infection prevention and control requirements such as the protection of medical staff. METHODS: After arriving in Wuhan, Beijing aid medical team of Hubei province defined the mission, established the rules and regulations for infection control, and conducted standardized procedures and protection training for all the team members and the medical staff in the west hospital of Wuhan union hospital. It took 24 hours to complete the transformation of the ward, build a reasonable layout of the demonstration ward of "Beijing standard", and start the treatment of COVID-19 confirmed patients. While the work was carried out rapidly, the disinfection of the ward and residence was strengthened, which laid the foundation for medical and nursing safety. RESULTS: The medical team has been working continuously for 50 days, receiving and treating 341 patients including 216 severe patients, 83 critically ill patients and 142 cured. As of March 16 2020, the number of patients in the hospital is gradually decreasing, with the utilization rate of beds dropping from 100.00% (150/150) to 70.67% (106/150). The proportion of critically ill patients dropped from a peak of 98.00%(147/150) to 74.67% (112/150), and the number of patients cured and discharged increased significantly. Zero infection was achieved for all health care workers. CONCLUSION: This paper summarizes a series of prevention and control measures taken by the infection control team during the work in prevention and control of novel coronavirus pneumonia in Wuhan union hospital west campus, which provides a reference for the prevention and control of the outbreak of infectious diseases.

Publication Type

Journal article.

<314>

Accession Number

20203500959

Author

Ianevski, A.; Yao, R.; Biza, S.; Zusinaite, E.; Mannik, A.; Kivi, G.; Planken, A.; Kurg, K.; Tombak, E. M.; Ustav, M., Jr.; Shtaida, N.; Kuleskiy, E.; Jo EunJi; Yang JaeWon; Lysvand, H.; Loseth, K.; Oksenych, V.; Aas, P. A.; Tenson, T.; Vitkauskiene, A.; Windisch, M. P.; Fenstad, M. H.; Nordbo, S. A.; Ustav, M.; Bjoras, M.; et al.

Title

Identification and tracking of antiviral drug combinations.

Source

Viruses; 2020. 12(10)27 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Combination therapies have become a standard for the treatment for HIV and hepatitis C virus (HCV) infections. They are advantageous over monotherapies due to better efficacy, reduced toxicity, as well as the ability to prevent the development of resistant viral strains and to treat viral co-infections. Here, we identify new synergistic combinations against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), echovirus 1 (EV1), hepatitis C virus (HCV) and human immunodeficiency virus 1 (HIV-1) in vitro. We observed synergistic activity of nelfinavir with convalescent serum and with purified neutralizing antibody 23G7 against SARS-CoV-2 in human lung epithelial Calu-3 cells. We also demonstrated synergistic activity of nelfinavir with EIDD-2801 or remdesivir in Calu-3 cells. In addition, we showed synergistic activity of vemurafenib with emetine, homoharringtonine, anisomycin, or cycloheximide against EV1 infection in human lung epithelial A549 cells. We also found that combinations of sofosbuvir with brequinar or niclosamide are synergistic against HCV infection in hepatocyte-derived Huh-7.5 cells, and that combinations of monensin with lamivudine or tenofovir are synergistic against HIV-1 infection in human cervical TZM-bl cells. These results indicate that synergy is achieved when a virus-directed antiviral is combined with another virus- or host-directed agent. Finally, we present an online resource that summarizes novel and known antiviral drug combinations and their developmental status.

Publication Type

Journal article.

<315>

Accession Number

20203500955

Author

Martin, J.; Klapsa, D.; Wilton, T.; Zambo, M.; Bentley, E.; Bujaki, E.; Fritzsche, M.; Mate, R.; Majumdar, M.

Title

Tracking SARS-CoV-2 in sewage: evidence of changes in virus variant predominance during COVID-19 pandemic.

Source

Viruses; 2020. 12(10)many ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), responsible for the ongoing coronavirus disease (COVID-19) pandemic, is frequently shed in faeces during infection, and viral RNA has recently been detected in sewage in some countries. We have investigated the presence of SARS-CoV-2 RNA in wastewater samples from South-East England between 14th January and 12th May 2020. A novel nested RT-PCR approach targeting five different regions of the viral genome improved the sensitivity of RT-qPCR assays and generated nucleotide sequences at sites with known sequence polymorphisms among SARS-CoV-2 isolates. We were able to detect co-circulating virus variants, some specifically prevalent in England, and to identify changes in viral RNA sequences with time consistent with the recently reported increasing global dominance of Spike protein G614 pandemic variant. Low levels of viral RNA were detected in a sample from 11th February, 3 days before the first case was reported in the sewage plant catchment area. SARS-CoV-2 RNA concentration increased in March and April, and a sharp reduction was observed in May, showing the effects of lockdown measures. We conclude that viral RNA sequences found in sewage closely resemble those from clinical samples and that environmental surveillance can be used to monitor SARS-CoV-2 transmission, tracing virus variants and detecting virus importations.

Publication Type

Journal article.

<316>

Accession Number

20203496086

Author

Wang YaLi; Jing Xiang; Han WanTong; Jing YuRong; Xu LingZhong

Title

Positive and negative affect of university and college students during COVID-19 outbreak: a network-based survey.

Source

International Journal of Public Health; 2020. 65(8):1437-1443. 16 ref.

Publisher

Springer

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Objectives: To understand the status of positive affect (PA) and negative affect (NA) on university and college students, and to explore the determinants during the COVID-19 outbreak. **Methods:** Our data were from network-based survey, and 17,876 participants completed the questionnaire. t test, one-way ANOVA and multiple linear regression model were performed using PANAS (Positive and Negative Affect Schedule) score as the dependent variable. **Results:** Of 17,876 participants, the mean score of PA was 25.5 +/- 7.3, while NA was 19.1 +/- 7.1. Multiple linear regression models showed that there are some common determinants of PA and NA, such as education, health literacy on communicable diseases, satisfaction with measures for epidemic prevention and control, risk of infection, impact of the outbreak on daily life, sleep duration and frequency of hand washing in the past 2 weeks. Besides, whether the student is a medical major and whether outing in the past 2 weeks were specific determinants of PA, and frequency of masks wearing was specific determinant of NA. **Conclusions:** The outbreak of COVID-19 is detrimental to university and college students' affect. During the outbreak response, we should strengthen the guidance and regulation for negative affect and pay attention to improving the positive affect of university and college students.

Publication Type

Journal article.

<317>

Accession Number

20203499152

Author

Sarkarat, F.; Tootoonchian, A.; Hosseinpour, M.; Moghadasi, M.; Rakhshan, V.

Title

Knowledge of Iranian dentists, dental specialists, and dental students towards COVID-19: a preliminary survey of 778 subjects.

Source

Shiraz E Medical Journal; 2020. 21(12)35 ref.

Publisher

Shiraz University of Medical Sciences

Location of Publisher

Shiraz

Country of Publication

Iran

Abstract

Background: COVID-19 is a serious pandemic. However, no studies worldwide have assessed the knowledge of any healthcare workers, including dentists, towards COVID-19. **Objectives:** Given the importance of Iran as an epicenter of this disease, this preliminary study assessed the knowledge of

dentists, dental students, and dental specialists towards COVID-19. Methods: In this cross-sectional study, a questionnaire with 23 questions (three regarding sources of information and 20 regarding knowledge) was developed through a pilot study. It was distributed electronically to dental professions/students, 778 of whom completed it. Factors associated with knowledge were assessed using the chi-square test in SPSS (= 0.05). Results: Above 70% of the responders answered correctly to all questions, except for six more technical questions, including handwashing-related questions. Age, specialization, and attendance at lectures and meetings did not play a role in grasping accurate information (all P values > 0.1). Men had poorer information (P = 0.014), and the sources of information were mostly official websites and social networks (P = 0.000). Conclusions: Knowledge of dentists, dental students, and specialists towards SARS-CoV-2 is generally good, except in the case of more technical questions that need more education (especially regarding handwashing).

Publication Type

Journal article.

<318>

Accession Number

20203499141

Author

Chandrakant Lahariya; Sanjay Gupta; Gaurav Kumar; Graeve, H. de; Inder Parkash; Das, J. K.

Title

Patient safety in graduate curricula and training needs of health workforce in India: a mixed-methods study.

Source

Indian Journal of Public Health; 2020. 64(3):277-284.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Background: Improving quality of health services and providing safe care require well-trained and skilled workforce. The inclusion of components of patient safety in graduate training curricula, followed by adherence to curricula in teaching programs, can improve the quality of health-care services. Objectives: To review the existing training curricula for five subgroups of health workforce (Allopathic doctors, nurses, laboratory technicians, pharmacists, and nurse midwives) and to document the components and identified variables of patient safety covered. Methods: A mixed-methods study was conducted during July 2017-

March 2018. Data were collected through desk review, field visits, in-depth interviews, self-administered questionnaires, and focused group discussions (FGDs). A total of 24 variables were identified by the experts to review the training curricula. Results: Seven states, 28 institutes, and 42 health-care facilities were visited. A total of 516 staff from different health cadres participated in the study through 54 interviews, 156 self-administered questionnaires, and 24 FGDs. Of 24 patient safety variables considered, 16 were covered in the medical and nursing, 9 in laboratory technician and pharmacist, and 5 in midwives' curricula. The teaching material on the patient safety, for most categories of staff, was not available in consolidated form, and there was no standardization. Conclusion: There is a need for the development of comprehensive training material cum operational modules on patient safety, suitably adopted as per the learning needs of different subgroups of health staff. The need for strengthening patient safety has been further underscored as the health workforce is fighting the coronavirus disease 19 (COVID-19) pandemic. The initiatives on patient safety will contribute to improved overall quality of health services, which in turn would advance universal health coverage.

Publication Type

Journal article.

<319>

Accession Number

20203496045

Author

Nadeem Ahmad; Rubeena Bano; Mahmood, S. E.

Title

Review of novel corona virus (COVID-19): status, challenges and progress. (Special Issue: COVID-19.)

Source

National Journal of Medical and Allied Sciences; 2020. 9(2):19-24. 25 ref.

Publisher

SMH Educational and Health Welfare Society

Location of Publisher

Lucknow

Country of Publication

India

Abstract

Coronavirus disease (COVID-19) was unknown before the outbreak began in Wuhan, China, in December 2019. COVID-19 is now a pandemic affecting nearly 190 countries. As of July 17, 2020, more than 13.9 million people worldwide had been infected with SARS-CoV-2 with more than 5.93 lac deaths. In Saudi Arabia as of now there are overall 245,518 cases and 2407 deaths. Many aspects of transmission, infection, and treatment still remain unclear. Personal characteristics such as age, gender, medical conditions or co-

morbidities, diet, nutrition, lifestyle and environmental factors of a COVID-19 infected individual play an important role in deciding the clinical severity of the disease. Until an effective vaccine is available, the primary methods to reduce spread are face masks, social distancing, and contact tracing. Monoclonal antibodies and hyper immune globulin may provide additional preventive strategies. Advances in prevention and effective management of COVID-19 will require clinical investigation and interventions. Individual risk assessment and its management can play a key role in SARS-CoV-2 pandemic.

Publication Type

Journal article.

<320>

Accession Number

20203497213

Author

Meena, M. K.; Mahendra Singh; Panda, P. K.; Bairwa, M. K.

Title

Non-COVID area of a tertiary care hospital: a major source of nosocomial COVID-19 transmission.

Source

Journal of Family and Community Medicine; 2020. 27(3):212-215. 7 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

COVID-19 pandemic has spread to all corners of the world where infection control measures are being implemented. There is now a resurgence of the disease in health care facilities with documented in-hospital transmission and cases becoming positive in areas designated to cater for COVID-19 negative patients. We encountered such an event at our institution where fourteen patients (including health care workers) in the non-COVID zone were found to be COVID-19 positive. This highlights the loopholes in the system and the need for better and systematic infection control measures in hospitals that deal with infectious diseases with high infectivity. Findings also suggests the failure of government's criteria for suspected COVID-19 cases, and therefore needs a rethinking.

Publication Type

Journal article.

<321>

Accession Number

20203497212

Author

Alghamdi, S. M.; Alqahtani, J. S.; Aldhahir, A. M.

Title

Current status of telehealth in Saudi Arabia during COVID-19.

Source

Journal of Family and Community Medicine; 2020. 27(3):208-211. 35 ref.

Publisher

Medknow Publications

Location of Publisher

Mumbai

Country of Publication

India

Abstract

Since the beginning of the coronavirus disease (COVID-19) pandemic, the responses of countries to emerging infectious diseases have altered dramatically, increasing the demand for health-care practitioners. Telehealth (TH) applications could have an important role in supporting public health precautions and the control of the spread of the COVID-19 pandemic. This review summarizes the existing literature on the current status of TH applications used during COVID-19 in Saudi Arabia and discusses the extent to which TH can support public health measures. TH mobile applications (e.g., Seha, Mawid, Tawakklna, Tabaud, and Tetamman) have found effective tools to facilitate delivering healthcare to persons with COVID-19, and tracking of COVID-19 patients. TH has been essential in the control of the spread of COVID-19 and has helped to flatten the growth curve in Saudi Arabia. Further research is needed to explore the impact of TH applications on the progression of COVID-19 in Saudi Arabia.

Publication Type

Journal article.

<322>

Accession Number

20203495821

Author

Hendarwan, H.; Syachroni, S.; Aryastami, N. K.; Su'udi, A.; Susilawati, M. D.; Despitasaki, M.; Mulyani, U. A.; Sumiarsih, M.; Puspondari, N.; Indrati, A. R.; Solikha, D. A.; Riana, D. A.; Wahyuni, I. R.

Title

Assessing the COVID-19 diagnostic laboratory capacity in Indonesia in the early phase of the pandemic.

Source

WHO South East Asia Journal of Public Health; 2020. 9(2):134-140. 21 ref.

Publisher

World Health Organization

Location of Publisher

Geneva

Country of Publication

Switzerland

Abstract

The coronavirus disease 2019 (COVID-19) pandemic has put a great burden on countries as a result of the demand for laboratory diagnostic testing for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). This paper reports our experiences in rapidly assessing Indonesia's COVID-19 laboratory testing capacity in the early phase of the pandemic response. Through a questionnairebased survey carried out between 23 March and 2 April, we estimated the daily tests that could be done by the 44 facilities, excluding the national referral laboratory, first assigned to be COVID-19 diagnostic laboratories. The capacity constraints were lack of reagents and equipment, and limited human resources; because of these constraints, most of the laboratories were not yet operational. A major hindrance was reliance on imported supplies and the associated procurement time. Expanding real-time polymerase chain reaction testing capacity, through increased numbers of laboratories and optimization of existing facilities, was clearly the main priority. We also assessed the potential yield from using rapid molecular testing machines in the country's referral hospitals. Even assuming this potential could be tapped, several provinces would still be poorly served by diagnostic services in the event of a surge in cases. Since this rapid assessment, the number of designated COVID-19 laboratories has increased and, by 1 July 2020, was 163. On 29 July 2020, for the first time, the number of specimens examined in a day reached more than 30 000, achieving the WHO testing capacity target of 1 in 1000 inhabitants per week.

Publication Type

Journal article.

<323>

Accession Number

20203495819

Author

Srichan, P.; Apidechkul, T.; Tamornpark, R.; Yeemard, F.; Khunthason, S.; Kitchanapaiboon, S.; Wongnuch, P.; Wongphaet, A.; Upala, P.

Title

Knowledge, attitudes and preparedness to respond to COVID-19 among the border population of northern Thailand in the early period of the pandemic: a crosssectional study.

Source

WHO South East Asia Journal of Public Health; 2020. 9(2):118-125. 11 ref.

Publisher

World Health Organization

Location of Publisher

Geneva

Country of Publication

Switzerland

Abstract

Background: Chiang Rai province in northern Thailand is a site of many people travelling among nearby countries and areas, including Yunnan province, China. In February 2020, there was concern about the population's vulnerability to coronavirus disease 2019 (COVID-19). Methods: A cross-sectional study was conducted in 15 villages less than 10 km from a border. A questionnaire was developed and tested for reliability and validity; 48 questions covered participant characteristics, plus knowledge about, attitudes to and preparedness for COVID-19. Chi-squared tests were used to detect any significant association between variables. Unadjusted and adjusted odds ratios with 95% confidence intervals (CIs) were calculated to assess the possible association of various factors with participants' level of reported knowledge, attitudes and preparedness. Results: A total of 520 participants were recruited of whom 320 (61.5%) were women. The age range was 18-90 years; the average age was 45.2 years. Variables with an association with good to moderate preparedness for COVID-19 prevention and control that remained after adjustment were: women were better prepared than men (adjusted odds ratio (ORadj) = 2.52; 95% CI = 1.36-4.68); those aged 18-30 years (ORadj = 4.26; 95% CI = 1.18-15.30), 31-45 years (ORadj = 4.60; 95% CI = 1.59- 13.32) or 46-60 years (ORadj = 2.69; 95% CI = 1.16-6.26) were better prepared than those aged 60-90 years; and, compared with those with no formal education, those educated to primary school level (ORadj = 2.43; 95% CI = 1.09-5.43) or to university level (ORadj = 3.18; 95% CI = 1.06-9.51) were better prepared. Conclusion: Effective communication of essential, accurate and up-to-date information regarding COVID-19 prevention and control is essential in this population - especially for men, older age groups and those lacking formal education.

Publication Type

Journal article.

<324>

Accession Number

20203495816

Author

Reza-Paul, S.; Lazarus, L.; Partha Haldar; Paul, M. R.; Bhagya Lakshmi; Manjula Ramaiah; Akram Pasha; Rahman, S. H. U.; Venukumar, K.; Venugopal, M.; Bharat Bhushan Rewari; Lorway, R.

Title

Community action for people with HIV and sex workers during the COVID-19 pandemic in India.

Source

WHO South East Asia Journal of Public Health; 2020. 9(2):104-106. 10 ref.

Publisher

World Health Organization

Location of Publisher

Geneva

Country of Publication

Switzerland

Abstract

Sex workers have been one of the marginalized groups that have been particularly affected by India's stringent lockdown in response to the coronavirus disease 2019 (COVID-19) pandemic. The sudden loss of livelihood and lack of access to health care and social protection intensified the vulnerabilities of sex workers, especially those living with HIV. In response, Ashodaya Samithi, an organization of more than 6000 sex workers, launched an innovative programme of assistance in four districts in Karnataka. Since access to antiretroviral therapy (ART) was immediately disrupted, Ashodaya adapted its HIV outreach programme to form an alternative, community-led system of distributing ART at discreet, private sites. WhatsApp messaging was used to distribute information on accessing government social benefits made available in response to the COVID-19 pandemic. Other assistance included advisory messages posted in WhatsApp groups to raise awareness, dispel myths and mitigate violence, and regular, discreet phone check-ins to follow up on the well-being of members. The lessons learnt from these activities represent an important opportunity to consider more sustainable approaches to the health of marginalized populations that can enable community organizations to be better prepared to respond to other public health crises as they emerge.

Publication Type

Journal article.

<325>

Accession Number

20203495815

Author

Janyam, S.; Phuengsamran, D.; Pangnongyang, J.; Saripra, W.; Jitwattanapataya, L.; Songsamphan, C.; Benjarattanaporn, P.; Gopinath, D.

Title

Protecting sex workers in Thailand during the COVID-19 pandemic: opportunities to build back better.

Source

WHO South East Asia Journal of Public Health; 2020. 9(2):100-103. 18 ref.

Publisher

World Health Organization

Location of Publisher

Geneva

Country of Publication

Switzerland

Abstract

The Government of Thailand was prompt to launch social and economic measures to mitigate the effects on the general population following lockdown measures to counter coronavirus disease 2019 (COVID-19). However, sex workers were one of the vulnerable groups who were unable to access state support. A rapid survey of sex workers in Thailand showed that almost all had become unemployed and lost their income as a consequence of the lockdown, restrictions on international flights into the country and the closure of entertainment venues. Most were unable to cover the costs of food and shelter for themselves and their dependents. COVID-19 had also disrupted testing and treatment for sexually transmitted infections and HIV services for sex workers. As in other countries, community-based organizations were essential to providing an immediate, short-term COVID-19 response for sex workers. Also as in other countries, the pandemic has demonstrated that many people's health and well-being depends on very fragile foundations. This presents a clear opportunity to build back better by committing to a longer-term vision for the overall societal inclusion of sex workers. Thailand should advocate for decriminalization of sex work and ensure sex workers are entitled to equal labour rights and inclusion in the government social protection programme. Progress in innovative government initiatives aimed at ending HIV stigma and discrimination show how structural change can come about through harnessing community-based organizations. In turn, HIV services for sex workers need to expand and incorporate targeted interventions to reduce sex workers' occupational susceptibility to COVID-19.

Publication Type

Journal article.

<326>

Accession Number

20203495814

Author

Vineet Bhatia; Mandal, P. P.; Srinath Satyanarayana; Aditama, T. Y.; Mukta Sharma

Title

Mitigating the impact of the COVID-19 pandemic on progress towards ending tuberculosis in the WHO Southeast Asia Region.

Source

WHO South East Asia Journal of Public Health; 2020. 9(2):95-99. 17 ref.

Publisher

World Health Organization

Location of Publisher

Geneva

Country of Publication

Switzerland

Abstract

Almost half of the deaths worldwide caused by tuberculosis in 2018 occurred in the World Health Organization (WHO) South-East Asia Region, home to around a quarter of the global population. Maintaining robust progress in this region is therefore essential if the global goal of ending the tuberculosis epidemic is to be realized. Substantial gains have been made in the region, but the threat to health worldwide posed by the coronavirus disease 2019 (COVID-19) pandemic includes not only the direct effects of the pandemic but also the potential eclipsing of the global tuberculosis emergency. The results of modelling studies present stark warnings of a reversal of years of progress and a significant resurgence in deaths from tuberculosis. The COVID-19 pandemic has had variable impacts in the WHO South-East Asia Region to date, but in the countries most affected there has been targeted diversion and repurposing of tuberculosis services, health-care workers and diagnostic equipment. The combined effects of COVID-19, containment measures and fragmentation of tuberculosis services have resulted in delays in diagnosis or non-diagnosis and disruption in treatment resulting in increased morbidity, mortality, transmission and drug resistance. Countries of the region have made attempts to ensure continuity of services and civil society and nongovernmental organizations have instituted a range of innovative mechanisms to support national programmes. However, a comprehensive approach - including scaling up successful initiatives, empowering community leadership, harnessing digital tools, and implementing easily accessible cash transfers and nutrition support - will be critical to success. As COVID-19 recedes, countries will need "catch-up plans" to deploy supplementary measures to address the increased tuberculosis burden. Urgent, targeted and agile responses have the potential to mitigate and reverse the impact of the COVID-19 pandemic on tuberculosis in SouthEast Asia.

Publication Type

Journal article.

<327>

Accession Number

20203510368

Author

Gaudreault, N. N.; Trujillo, J. D.; Carossino, M.; Meekins, D. A.; Morozov, I.; Madden, D. W.; Indran, S. V.; Bold, D.; Velmurugan Balaraman; Kwon TaeYong; Artiaga, B. L.; Cool, K.; Garcia-Sastre, A.; Ma WenJun; Wilson, W. C.; Henningson, J.; Balasuriya, U. B. R.; Richt, J. A.

Title

SARS-CoV-2 infection, disease and transmission in domestic cats.

Source

Emerging Microbes and Infections; 2020. 9(2322-2332):2322-2332. 26 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) is the cause of Coronavirus Disease 2019 (COVID-19) and responsible for the current pandemic. Recent SARS-CoV-2 susceptibility studies in cats show that the virus can replicate in these companion animals and transmit to other cats. Here, we present an in-depth study of SARS-CoV-2 infection, disease and transmission in domestic cats. Cats were challenged with SARS-CoV-2 via intranasal and oral routes. One day post challenge (DPC), two sentinel cats were introduced. Animals were monitored for clinical signs, clinicopathological abnormalities and viral shedding. Postmortem examinations were performed at 4, 7 and 21 DPC. Viral RNA was not detected in blood but transiently in nasal, oropharyngeal and rectal swabs and bronchoalveolar lavage fluid as well as various tissues. Tracheobronchadenitis of submucosal glands with the presence of viral RNA and antigen was observed in airways of the infected cats. Serology showed that both, principals and sentinels, developed antibodies to SARS-CoV-2. All animals were clinically asymptomatic during the course of the study and capable of transmitting SARS-CoV-2 to sentinels. The results of this study are critical for understanding the clinical course of SARS-CoV-2 in a naturally susceptible host species, and for risk assessment.

Publication Type

Journal article.

<328>

Accession Number

20203473932

Author

Campbell, C. G.; McAvoy, G.

Title

Florida fruit and vegetable growers' adaptation and response to COVID-19.

Source

Journal of Agriculture, Food Systems and Community Development; 2020. 9(4):165-169. 2 ref.

Publisher

New Leaf Associates

Location of Publisher

Ithaca

Country of Publication

USA

Abstract

While Florida is known for theme parks and beaches, its agricultural sector is the second largest industry in the state and accounts for a substantial proportion of the United States' annual production of many fruit and vegetable crops. Florida's farmers have capitalized on the fact that Florida is a top tourism destination, with 70-80% of large producers' sales targeting the theme-park, hotel, restaurant, and cruise line industries that were decimated by stay-at-home orders. With the exception of citrus, peak harvest for these crops is from March to May, which coincided exactly with the onset of the COVID-19 pandemic in the spring of 2020. Florida producers were left with hundreds of millions of pounds of produce with no available market. Florida farmers utilized innovative sales and market opportunities to sell as much of their highly perishable produce as they could. In addition, despite substantial personal hardship and financial losses, producers paid to harvest and transport produce to food banks and other hunger-relief organizations that were overwhelmed with demand from people who recently lost their jobs or were furloughed due to the closures of restaurants, hotels, theme parks, and cruise lines due to the pandemic. However, with the sheer volume of perishable produce left without buyers, some crops simply had to be tilled under or terminated. The COVID-19 pandemic increased awareness of and demand for Florida agricultural products among Florida residents, leading some grocery stores around the state to commit to buying more produce from Florida growers. A variety of programs and resources to help connect Florida growers to buyers were developed by the University of Florida, Institute of Food and Agricultural Sciences; industry groups; and state and regional organizations. This provides a valuable foundation to support food system resilience for future public health emergencies and natural disasters.

Publication Type

Journal article.

<329>

Accession Number

20203473931

Author

Chin ChiewFoan

Title

The impact of food supply chain disruptions amidst COVID-19 in Malaysia.

Source

Journal of Agriculture, Food Systems and Community Development; 2020. 9(4):161-163. 4 ref.

Publisher

New Leaf Associates

Location of Publisher

Ithaca

Country of Publication

USA

Abstract

Over the last 10 years, the food supply has been secured in Malaysia through a combination of local food production and supply of imported food. The occurrence of COVID-19 has disrupted the food supply chain with the lockdown restriction known as the Movement Control Order (MCO) put in place to break the transmission mode of COVID-19. This article outlines the chronological events that took place in Malaysia after a COVID-19 outbreak due to a religious gathering. The impact of MCO on the food supply chain, particularly to urban residents, is also described, with recommended approaches to mitigate the situation.

Publication Type

Journal article.

<330>

Accession Number

20203473929

Author

Cruz-Vidal, A. M.

Title

Digital media to guarantee food security in Colombia during COVID-19.

Source

Journal of Agriculture, Food Systems and Community Development; 2020. 9(4):153-155. 4 ref.

Publisher

New Leaf Associates

Location of Publisher

Ithaca

Country of Publication

USA

Abstract

In Colombia, quarantine and biosecurity measures were decreed to avoid contagion due to the COVID-19 pandemic beginning on March 24, among which is the promotion of social distancing. This has caused the use of digital media to carry out activities that were previously carried out in person, such as marketing. For this reason, people started looking for alternatives that would avoid social contacts, like digital media, which have become a channel that promotes food security, fair trade, and direct purchases from small producers in the cities.

Publication Type

Journal article.

<331>

Accession Number

20203473928

Author

Crush, J.; Si ZhenZhong

Title

COVID-19 containment and food security in the global south.

Source

Journal of Agriculture, Food Systems and Community Development; 2020. 9(4):149-151. 7 ref.

Publisher

New Leaf Associates

Location of Publisher

Ithaca

Country of Publication

USA

Abstract

Population-level COVID-19 containment strategies have been particularly hard on the urban poor and vulnerable population groups such as female-headed households, children, youth, the homeless, informal sector employers and employees, casual workers, the unemployed, and migrants and refugees. As a direct result of the COVID-19 outbreak, a secondary pandemic of hunger and food insecurity is now impacting many of these groups. An effective and sustainable global response to the COVID-19 (and any further) viral pandemics must ensure that food security is an essential piece of the containment and mitigation puzzle.

Publication Type

Journal article.

<332>

Accession Number

20203484043

Author

Huang HuiLing; Liu, S. Q.

Title

"Donate to help combat COVID-19!" How typeface affects the effectiveness of CSR marketing?

Source

International Journal of Contemporary Hospitality Management; 2020. 32(10):3315-3333.

Publisher

Emerald Publishing

Location of Publisher

Bingley

Country of Publication

UK

Abstract

Purpose: Corporate social responsibility (CSR) marketing has become ubiquitous in the hospitality industry. The purpose of this paper is to examine the effectiveness of donation appeals containing warmth-focused versus competence-focused messages in hospitality CSR marketing. Moreover, we offer an innovative visual design strategy focusing on the typeface (handwritten vs machine-written) in donation appeals to encourage consumers' donations and boost their brand loyalty. **Design/methodology/approach:** This research used a 2 (message framing: warmth-focused vs competence-focused) 2 (typeface: handwritten vs machine-written) between-subjects experimental design. **Findings** The findings suggest that donation appeals featuring warmth-focused messages combined with handwritten typeface and competence-focused messages combined with machine-written typeface can maximize donation intention and brand loyalty. Furthermore, results from the moderated mediation analyses indicate that brand trust is the psychological mechanism underlying these effects. **Practical implications** Hospitality managers should use typeface design, which is easy and inexpensive to manipulate, to enhance the effectiveness of CSR

marketing. Specifically, for donation appeals featuring warmth-focused (competence-focused) messages, the handwritten (machine-written) typeface can boost consumers' donation intention and brand loyalty. Originality/value To the best of the authors' knowledge, this research is the first to reveal the competitive advantage of typeface design in hospitality CSR marketing. This research sheds light on the congruency effects of message framing and typeface design in donation appeals on consumers' donation intention and brand loyalty while using the contemporary context of The Coronavirus Disease 2019 to test the theory.

Publication Type

Journal article.

<333>

Accession Number

20203484035

Author

Lai KaWai [Lai, I. K. W.]; Wong WengChou [Wong, J. W. C.]

Title

Comparing crisis management practices in the hotel industry between initial and pandemic stages of COVID-19.

Source

International Journal of Contemporary Hospitality Management; 2020. 32(10):3135-3156.

Publisher

Emerald Publishing

Location of Publisher

Bingley

Country of Publication

UK

Abstract

Purpose: Given the increasing number of travel restrictions, the COVID-19 outbreak has dealt a crippling blow to the hotel industry, and the crisis management practices supporting the industry needs are changing as the pandemic continues. This study aims to compare how the hotel industry has responded to this crisis at the initial stage and the pandemic stage. **Design/methodology/approach:** Data were collected from hotel managers in Macau in two occasions, namely, early February and early April 2020. Importance-usage-performance analysis was conducted to classify six categories of practices (pricing, marketing, maintenance, human resources, government assistance and epidemic prevention) into four executable crisis management strategies (priority, maintain, low priority and possible overkill) for each stage. Follow-up in-person interviews were conducted to validate the results of the study. **Findings:** In the initial stage, priority strategies should be applied in all epidemic prevention, pricing and maintenance practices and in two governmental assistance and human resources practices. In the pandemic stage, all epidemic

prevention practices remain at the priority quadrant, but two pricing practices are downgraded. Hotels tended to force labour into unpaid vacations (furlough) and postpone office and system maintenance. Governmental assistance should be at a low priority. Originality/value: This study contributes to the knowledge of contingency planning for crisis management across crisis periods. It also demonstrates the processes of importance-usage-performance analysis for researchers to undertake further studies in tourism crisis management. Timely recommendations for governments and hotel industry stakeholders are provided to cope with this crisis.

Publication Type

Journal article.

<334>

Accession Number

20203488323

Author

Colnago, L. A.; Trevisol, I. M.; Rech, D. V.; Forato, L. A.; Mitre, C. I. do N.; Leite, J. P. G.; Giglioti, R.; Okino, C. H.

Title

Simple, low-cost and long-lasting film for virus inactivation using avian coronavirus model as challenge.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)24 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 infection, caused by SARS-CoV-2, is inequitably distributed and more lethal among populations with lower socioeconomic status. Direct contact with contaminated surfaces has been among the virus sources, as it remains infective up to days. Several disinfectants have been shown to inactivate SARS-CoV-2, but they rapidly evaporate, are flammable or toxic and may be scarce or inexistent for vulnerable populations. Therefore, we are proposing simple, easy to prepare, low-cost and efficient antiviral films, made with a widely available dishwashing detergent, which can be spread on hands and inanimate surfaces and is expected to maintain virucidal activity for longer periods than the current sanitizers. Avian coronavirus (ACoV) was used as model of the challenge to test the antivirus efficacy of the proposed films. Polystyrene petri dishes were covered with a thin layer of detergent formula. After drying, the films were exposed to different virus doses for 10 min and virus infectivity was determined using

embryonated chicken eggs, and RNA virus quantification in allantoic fluids by RT-qPCR. The films inactivated the ACoV (ranging from 103.7 to 106.7 EID₅₀), which is chemically and morphologically similar to SARS-CoV-2, and may constitute an excellent alternative to minimize the spread of COVID-19.

Publication Type

Journal article.

<335>

Accession Number

20203488316

Author

Liang YiMing; Wu KanKan; Zhou YongJie; Huang Xin; Zhou YueYue; Liu ZhengKui

Title

Mental health in frontline medical workers during the 2019 novel coronavirus disease epidemic in China: a comparison with the general population.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)53 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Background: Since December 2019, China has been affected by a severe outbreak of coronavirus disease 2019 (COVID-19). Frontline medical workers experienced difficulty due to the high risk of being infected and long and distressing work shifts. The current study aims to evaluate psychological symptoms in frontline medical workers during the COVID-19 epidemic in China and to perform a comparison with the general population. **Methods:** An online survey was conducted from 14 February 2020 to 29 March 2020. A total of 899 frontline medical workers and 1104 respondents in the general population participated. Depression, anxiety, insomnia, and resilience were assessed via the Patient Health Questionnaire (PHQ-9), Generalized Anxiety Disorder Scale (GAD-7), Insomnia Severity Index (ISI), and abbreviated Connor-Davidson Resilience Scale (CD-RISC-10), respectively. **Results:** Overall, 30.43%, 20.29%, and 14.49% of frontline medical workers in Hubei Province and 23.13%, 13.14%, and 10.64% of frontline medical workers in other regions reported symptoms of depression, anxiety, and insomnia, respectively. In addition, 23.33%, 16.67%, and 6.67% of the general population in Hubei Province and 18.25%, 9.22%, and 7.17% of the general population in other regions reported symptoms of depression, anxiety, and insomnia, respectively. The resilience of frontline medical staff outside Hubei Province was higher than that of the general

population outside Hubei Province. Conclusion: A large proportion of frontline medical workers and the general public experienced psychological symptoms during the COVID-19 outbreak. Psychological services for frontline medical workers and the general public are needed.

Publication Type

Journal article.

<336>

Accession Number

20203486453

Author

Zhou Qiong; Chen, V.; Shannon, C. P.; Wei XiaoShan; Xiang Xuan; Wang Xu; Wang ZiHao; Tebbutt, S. J.; Kollmann, T. R.; Fish, E. N.

Title

Interferon-a2b treatment for COVID-19.

Source

Frontiers in Immunology; 2020. 11(May)14 ref.

Publisher

Frontiers Media S.A.

Location of Publisher

Lausanne

Country of Publication

Switzerland

Abstract

The global pandemic of COVID-19 cases caused by infection with SARS-CoV-2 is ongoing, with no approved antiviral intervention. We describe here the effects of treatment with interferon (IFN)-a2b in a cohort of confirmed COVID-19 cases in Wuhan, China. In this uncontrolled, exploratory study, 77 adults hospitalized with confirmed COVID-19 were treated with either nebulized IFN-a2b (5 mU b.i.d.), arbidol (200 mg t.i.d.) or a combination of IFN-a2b plus arbidol. Serial SARS-CoV-2 testing along with hematological measurements, including cell counts, blood biochemistry and serum cytokine levels, and temperature and blood oxygen saturation levels, were recorded for each patient during their hospital stay. Treatment with IFN-a2b with or without arbidol significantly reduced the duration of detectable virus in the upper respiratory tract and in parallel reduced duration of elevated blood levels for the inflammatory markers IL-6 and CRP. These findings suggest that IFN-a2b should be further investigated as a therapy in COVID-19 cases.

Publication Type

Journal article.

<337>

Accession Number

20203486451

Author

Murck, H.

Title

Symptomatic protective action of glycyrrhizin (licorice) in COVID-19 infection?

Source

Frontiers in Immunology; 2020. 11(May)42 ref.

Publisher

Frontiers Media S.A.

Location of Publisher

Lausanne

Country of Publication

Switzerland

Abstract

The role of the ACE2 enzyme in the COVID-19 infection is 2-fold, with opposing implications for the disease development. 1. The membrane bound angiotensin converting enzyme 2 (ACE2) serves as the entry point of COVID-19 2. Conversely, it supports an anti-inflammatory pathway. This led to the controversy of the impact of medications, which influence its expression. ACE2 is part of the wider renin-angiotensin-aldosterone system (RAAS) and is upregulated via compounds, which inhibits the classical ACE, thereby plasma aldosterone and aldosterone receptor (MR) activation. MR activation may therefore protect organs from binding the COVID-19 by reducing ACE2 expression. Glycyrrhizin (GL) is a frequent component in traditional Chinese medicines, which have been used to control COVID-19 infections. Its systemically active metabolite glycyrrhetic acid (GA) inhibits 11beta hydroxysteroid dehydrogenase(11betaHSD2) and activates MR in organs, which express this enzyme, including the lungs. Does this affect the protective effect of ACE2? Importantly, GL has anti-inflammatory properties by itself via toll like receptor 4 (TLR4) antagonism and therefore compensates for the reduced protection of the downregulated ACE2. Finally, a direct effect of GL or GA to reduce virus transmission exists, which may involve reduced expression of type 2 transmembrane serine protease (TMPRSS2), which is required for virus uptake. Glycyrrhizin may reduce the severity of an infection with COVID-19 at the two stages of the COVID-19 induced disease process, 1. To block the number of entry points and 2. provide an ACE2 independent anti-inflammatory mechanism.

Publication Type

Journal article.

<338>

Accession Number

20203486424

Author

Kell, D. B.; Heyden, E. L.; Pretorius, E.

Title

The biology of Lactoferrin, an iron-binding protein that can help defend against viruses and bacteria.

Source

Frontiers in Immunology; 2020. 11(May)196 ref.

Publisher

Frontiers Media S.A.

Location of Publisher

Lausanne

Country of Publication

Switzerland

Abstract

Lactoferrin is a nutrient classically found in mammalian milk. It binds iron and is transferred via a variety of receptors into and between cells, serum, bile, and cerebrospinal fluid. It has important immunological properties, and is both antibacterial and antiviral. In particular, there is evidence that it can bind to at least some of the receptors used by coronaviruses and thereby block their entry. Of importance are Heparan Sulfate Proteoglycans (HSPGs) and the host receptor angiotensin-converting enzyme 2 (ACE2), as based on other activities lactoferrin might prevent severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) from attaching to the host cells. Lactoferrin (and more specifically enteric-coated LF because of increased bioavailability) may consequently be of preventive and therapeutic value during the present COVID-19 pandemic.

Publication Type

Journal article.

<339>

Accession Number

20203482658

Author

Callander, D.; Meunier, E.; Deveau, R.; Grov, C.; Donovan, B.; Minichiello, V.; Goodwin, A. S.; Duncan, D. T.

Title

Sex workers are returning to work and require enhanced support in the face of COVID-19: results from a longitudinal analysis of online sex work activity and a content analysis of safer sex work guidelines.

Source

Sexual Health; 2020. 17(4):384-386. 13 ref.

Publisher

CSIRO

Location of Publisher

Collingwood

Country of Publication

Australia

Abstract

Sex workers confront unique challenges in the face of COVID-19. Data from an international sex work website popular with cisgender men and transgender men and women suggest that, after a period of physical distancing, many sex workers are returning to in-person work: from May to August 2020, active sex work profiles increased 9.4% ($P < 0.001$) and newly created profiles increased by 35.6% ($P < 0.001$). Analysis of sex work and COVID-19 guidelines published by five community-based organisations found that they focused on altering sexual practices, enhancing hygiene and pivoting to virtual work. To capitalise on these guidelines, funding and research for implementation and evaluation are needed to support COVID-19 risk reduction strategies for sex workers.

Publication Type

Journal article.

<340>

Accession Number

20203482623

Author

Wiltshire, E.; Pena, A. S.; MacKenzie, K.; Shaw, G.; Couper, J.

Title

High dose folic acid is a potential treatment for pulmonary hypertension, including when associated with COVID-19 pneumonia.

Source

Medical Hypotheses; 2020. 14316 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Pulmonary hypertension is a significant complication for some patients with COVID-19 pneumonia, especially those requiring intensive care. Tachyphylaxis to the current therapy, inhaled nitric oxide (iNO), is also common. In vitro, folic acid directly increases nitric oxide (NO) production and extends its duration of action; effects which could be of benefit in reversing pulmonary hypertension and severe hypoxaemia. Our work has shown that, in the systemic circulation, folic acid in high dose rapidly improves nitric oxide mediated vasodilation, by activating endothelial nitric oxide synthase (eNOS). Hypothesis: A similar effect of high dose folic acid on pulmonary endothelial function would be expected from the same mechanism and would lead to improvement in pulmonary perfusion. We therefore hypothesise that folic acid, 5 mg or greater, is a useful therapeutic option for pulmonary hypertension and/or refractory severe hypoxaemia, in patients with severe COVID-19 associated pneumonia in whom NO therapy is considered, with a very low risk of adverse effects.

Publication Type

Journal article.

<341>

Accession Number

20203482615

Author

Beyazit, F.; Beyazit, Y.; Tanoglu, A.; Haznedaroglu, I. C.

Title

Ankaferd hemostat (abs) as a potential mucosal topical agent for the management of COVID-19 syndrome based on its PAR-1 inhibitory effect and oestrogen content.

Source

Medical Hypotheses; 2020. 14364 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

COVID-19 due to the SARS-CoV-2 infection is a multi-systemic immune syndrome affecting mainly the lungs, oropharyngeal region, and other vascular endothelial beds. There are tremendous ongoing efforts for the aim of developing drugs against the COVID-19 syndrome-associated inflammation. However, currently no specific medicine is present for the absolute pharmacological cure of COVID-19 mucositis. The re-purposing/re-positioning of already existing drugs is a very important strategy for the management of ongoing pandemy since the development of a new drug needs decades. Apart from altering angiotensin signaling pathways, novel drug candidates for re-purposing comprise medications shall target COVID-19 pathobiology, including pharmaceutical formulations that antagonize proteinase-activated receptors (PARs), mainly PAR-1. Activation of the PAR-1, mediators and hormones impact on the hemostasis, endothelial activation, alveolar epithelial cells and mucosal inflammatory responses which are the essentials of the COVID-19 pathophysiology. In this context, Ankaferd hemostat (Ankaferd Blood Stopper, ABS) which is an already approved hemostatic agent affecting via vital erythroid aggregation and fibrinogen gamma could be a potential topical remedy for the mucosal management of COVID-19. ABS is a clinically safe and effective topical hemostatic agent of plant origin capable of exerting pleiotropic effects on the endothelial cells, angiogenesis, cell proliferation and vascular dynamics. ABS had been approved as a topically applied hemostatic agent for the management of post-surgical/dental bleedings and healing of infected inflammatory mucosal wounds. The anti-inflammatory and proteinase-activated receptor axis properties of ABS with a considerable amount of oestrogenic hormone presence highlight this unique topical hemostatic drug regarding the clinical re-positioning for COVID-19-associated mucositis. Topical ABS as a biological response modifier may lessen SARS-CoV-2 associated microthrombosis, endothelial dysfunction, oropharyngeal inflammation and mucosal lung damage. Moreover, PAR-1 inhibition ability of ABS might be helpful for reducing the initial virus propagation and mocal spread of COVID-19.

Publication Type

Journal article.

<342>

Accession Number

20203482614

Author

Bernardis, E. de; Busa, L.

Title

A putative role for the tobacco mosaic virus in smokers' resistance to COVID-19.

Source

Medical Hypotheses; 2020. 14314 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Reports from various countries suggest that tobacco smoking might protect from SARS-CoV-2 infection, since the prevalence of smoking in COVID-19 hospitalized patients is lower than in the respective general population. Apart from nicotine or other chemicals contained in tobacco smoke, we propose that a single-stranded RNA virus that infects tobacco leaves, tobacco mosaic virus (TMV), might be implicated in this effect. TMV, though non-pathogenic, is found in smokers' airways, and stimulates adaptive and innate immunity, with release of specific antibodies and interferons. The latter may have preventive and/or therapeutic effects against COVID-19. If confirmed by epidemiological and interventional studies, this might lead to the use of TMV as an immunological adjuvant against SARS-CoV-2 infection and COVID-19 disease.

Publication Type

Journal article.

<343>

Accession Number

20203482612

Author

Balzan, M.

Title

Low incidence and mortality from SARS-CoV-2 in Southern Europe. proposal of a hypothesis for arthropod borne herd immunity.

Source

Medical Hypotheses; 2020. 14337 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

SARS-CoV-2 incidence and mortality in Europe have shown wide variation. Northern Italy in particular the Lombardy region, north-eastern French regions, Switzerland and Belgium were amongst the hardest hit, while the central and southern Italian regions, all the Balkan countries from Slovenia to Greece and the Islands of Malta and Cyprus had much fewer cases and deaths per capita, and deaths per number of cases. Differences in public health measures, and health care delivery, in the author's opinion, can only partly explain the difference. The geographical distribution of Phlebotomus sand-flies and the relative distribution of arthropod borne diseases Leishmaniasis and Phlebovirus infections especially the Sicilian Sandfly fever group corresponds to most areas of low prevalence of SARS-CoV-2. A hypothesis is proposed whereby repeated arthropod or sandfly vector infection of humans by novel viruses of zoonotic origins carrying bat or mammalian RNA/DNA, such as phleboviruses may have resulted in the development of an effective evolutionary immune response to most novel zoonotic viruses such as SARS-CoV-2 by means of survival of the fittest possibly over many generations. This process probably ran in parallel and concurrent with the progressive evolution of novel coronaviruses which spread from one mammalian species to another. Other possible, but less likely mechanisms for the role of sandfly meals within a much shorter time frame may have led to, (i) previous exposure and infection of humans with the SARS-Cov-2 virus itself, or a closely related corona virus in the previous decades, or (ii) exposure of human populations to parts coronavirus protein namely either S or more likely N protein carried mechanically by arthropods, but without clinical disease causing direct immunity or (iii) by causing infection with other arthropod borne viruses which could carry bat DNA/RNA and have similar functional proteins resulting in an immediate cross-reactive immune response rather than by natural selection. The Evidence possibly supporting or disputing this hypothesis is reviewed, however the major problem with the hypothesis is that to date no coronavirus has ever been isolated from arthropods. Such a hypothesis can only be supported by research investigating the possible biological relationship of arthropods and coronaviruses where paradoxically they may be promoting immunity rather than disease.

Publication Type

Journal article.

<344>

Accession Number

20203482607

Author

Kavanagh, O.; Marie Healy, A.; Dayton, F.; Robinson, S.; O'Reilly, N. J.; Mahoney, B.; Arthur Aisling; Walker, G.; Farragher, J. P.

Title

Inhaled hydroxychloroquine to improve efficacy and reduce harm in the treatment of COVID-19.

Source

Medical Hypotheses; 2020. 14329 ref.

Publisher

Elsevier Ltd

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Current formulations and dose regimens of hydroxychloroquine (HCQ) put patients at risk of harm. An analysis of clinical trials registered on ClinicalTrials.gov revealed that this may continue as many studies combine HCQ with agents that prolong the QT interval. Further, almost all of the trials registered do not consider dosage adjustment in the elderly, a patient population most likely to require HCQ treatment. Here we describe an inhaled formulation of HCQ which has passed safety studies in clinical trials for the treatment of asthma and discuss how this approach may reduce side-effects and improve efficacy. As this simple formulation progressed to phase II studies, safety data can be used to immediately enable phase II trials in COVID-19.

Publication Type

Journal article.

<345>

Accession Number

20203481948

Author

Deng JiaGang; Hou XiaoTao; Zhang TieJun; Bai Gang; Hao ErWei; Chu JangHann [Chu, J. H. J.]; Wattanathorn, J.; Sirisa-ard, P.; Ee Ch'ngSoo; Low, J.; Liu ChangXiao

Title

Carry forward advantages of traditional medicines in prevention and control of outbreak of COVID-19 pandemic.

Source

Chinese Herbal Medicines; 2020. 12(3):207-213. 14 ref.

Publisher

Elsevier B.V.

Location of Publisher

Beijing

Country of Publication

China

Abstract

Members of the China-ASEAN Joint Laboratory for International Cooperation in Traditional Medicine Research used the video conference platform to exchange and discuss the advantages of traditional medicine through the form of score exchange and report, and research and develop the amount and issues of the therapeutic COVID-19 products of concern. This paper mainly reviews the achievements of the implementation of the epidemic prevention and control plan, advances of scientific basic studies on SARS-CoV-2, analysis and screening of potential targets and pathways of antiviral compounds based on network pharmacology and development of antiviral food dual-use products. The authors believe that the declaration of the (10 + 3) special meeting of national leaders on epidemic prevention and control should raise the medical and pharmaceutical issues of common concern. It is the responsibility of our joint laboratory members to accelerate the development of traditional medicine research and industry. Also the authors believe that this exchange will certainly promote the development of the cause of cooperation.

Publication Type

Journal article.

<346>

Accession Number

20203468315

Author

Jyotsnarani Biswal; Vijayalakshmy, K.; Rahman, H.

Title

Impact of COVID-19 and associated lockdown on livestock and poultry sectors in India.

Source

Veterinary World; 2020. 13(9):1928-1933. 15 ref.

Publisher

Veterinary World

Location of Publisher

Wankaner

Country of Publication

India

Abstract

The COVID-19 pandemic and the associated lockdown for a long period have created a significant adverse impact on different sectors, including that of the agriculture and other allied sub-sectors in India and several other countries. The present review aimed to depict the impact of this pandemic and the lockdown on the livestock and poultry sectors in the country, which has been one of the fastest-growing sectors in recent years. Inadequacy of country-wide information has been a major bottleneck for having a thorough understanding of the impact of the prolonged lockdown on different sub-sectors of livestock and poultry. In the present case, an in-depth analysis of the subject has been made through the collation of available

published materials and information collected through public contacts. The pandemic and the associated lockdown has not only caused enormous distress to the millions of poor and marginal farmers for saving their crops and/or livestock and thereby assuring their livelihoods but also impacted the overall poultry, dairy, and other livestock production systems and associated value chains, nutrition and health care, and labor availability. The paper highlights various dimensions of the impacts, namely, reduction in demand of different commodities, wastage of the produce due to the closure of transport and market chains, distress sale of the produce, and labor shortage and revival strategies taken by the government and associated enterprises. The present impact study although gives a picture about the overall present scenario, a systematic study through the collection of primary data from all over the country is suggested, which will provide a holistic view of the impact on each of the sub-sectors and the associated value chains.

Publication Type

Journal article.

<347>

Accession Number

20203492053

Author

Jamaati, H.; Dastan, F.; Dolabi, S. E.; Varahram, M.; Hashemian, S. M.; Rayeini, S. N.; Farzanegan, B.; Monjazebi, F.

Title

COVID-19 in Iran: a model for crisis management and current experience.

Source

Iranian Journal of Pharmaceutical Research; 2020. 19(2):1-8. 16 ref.

Publisher

School of Pharmacy, Shaheed Beheshti University of Medical Sciences

Location of Publisher

Tehran

Country of Publication

Iran

Abstract

In February 2020, the first sample test was confirmed as positive for corona virus in Masih Daneshvari Hospital that is the reference center in Iran for all pulmonary and respiratory diseases. The decisions made in a hospital or organization to manage a crisis is very vital. Success in managing any crisis requires a scientific and scholarly attitude. This paper was distilled from experiences gained in Masih Daneshvari Hospital in Tehran, capital of Iran, in March 2020 at the stubborn time of coping and managing corona virus crisis. This endeavor was an action research. This Action research involves five stages: statement of the problem, planning, data interpretation and analysis, action, and evaluation of the research process during

performing the study. The whole hospital was equipped for corona virus patients in 10 phases during one week and 250 active beds were equipped for these patients. Three models, namely, "corona virus crisis management model", "Pharmaceutical care management in coronavirus crisis model" and "nursing in coronavirus crisis model" were planned and implemented. During one month of implementing these three models, the supervision team monitored the accurate implementation of instructions and resolving or revising the possible deficiencies and faults. The Masih Daneshvari crisis management model in coronavirus, Management model in coronavirus crisis, Nursing care model in coronavirus crisis and Pharmaceutical care management model in coronavirus crisis can be a useful and applicable model in other corona virus centers.

Publication Type

Journal article.

<348>

Accession Number

20203497551

Author

Chen Yang; Zhang ShuMin; Peng Chao; Shi GuangMing; Tian Mi; Huang RuJin; Guo DongMei; Wang HuanBo; Yao XiaoJiang; Yang FuMo

Title

Impact of the COVID-19 pandemic and control measures on air quality and aerosol light absorption in southwestern China.

Source

Science of the Total Environment; 2020. 749

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

China has been performing nationwide social lockdown by releasing the Level 1 response to major public health emergencies (RMPHE) to struggle against the COVID-19 (SARS-CoV-2) outbreak since late January 2020. During the Level 1 RMPHE, social production and public transport were maintained at minimal levels, and residents stayed in and worked from home. The universal impact of anthropogenic activities on air pollution can be evaluated by comparing it with air quality under such extreme conditions. We investigated the concentration of both gaseous and particulate pollutants and aerosol light absorption at different levels of (RMPHE) in an urban area of southwestern China. During the lockdown, PM2.5, PM10, SO2, NOx, and BC

decreased by 30-50%, compared to the pre-Level 1 RMPHE period. Meanwhile, the decrease of NO_x caused the rise of O₃ by up to 2.3 times due to the volatile organic compounds (VOCs) limitation. The aerosol light absorption coefficient at multiple wavelengths decreased by 50%, and AAE decreased by 20% during the Level 1 RMPHE. BrC played essential roles in light absorption after the RMPHE was announced, accounting for 54.0% of the aerosol absorption coefficient at 370 nm. Moreover, the lockdown down-weighted the fraction of fossil fuel in BC concentrations to 0.43 (minima). This study characterizes air pollution at the most basic level and can provide policymakers with references for the "baseline."

Publication Type

Journal article.

<349>

Accession Number

20203497524

Author

Mendez-Espinosa, J. F.; Rojas, N. Y.; Vargas, J.; Pachon, J. E.; Belalcazar, L. C.; Ramirez, O.

Title

Air quality variations in Northern South America during the COVID-19 lockdown.

Source

Science of the Total Environment; 2020. 74948 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Lockdown measures led to air pollution decrease in several countries around the world such as China and India, whereas other regions experimented an increase in pollutant concentrations. Northern South America (NSA) was one of those areas where pollution changed during lockdown due to high fire activity. This study aims to analyze, for the first time in NSA, the behavior of selected criteria air pollutants during the implementation of the SARS-CoV-2 lockdown in two high populated cities of the region: Bogota and Medellin in Colombia. A set of tools including surface measurements, as well as satellite and modeled data were used. 24-hour average concentrations of PM₁₀, PM_{2.5}, and NO₂ were collected from air quality stations for the lockdown period ranging from February 21 to June 30, 2020. The Copernicus Atmosphere Monitoring Service (CAMS) was used to analyze the fire flux OC as a biomass burning (BB) indicator, and tropospheric NO₂ concentrations were retrieved from TROPOMI. The HYSPLIT model was used to analyze back trajectories and fire data were obtained from MODIS sensor measurements. Our analysis shows short-

term background NO₂, PM₁₀, and PM_{2.5} concentration reductions of 60%, 44%, and 40%, respectively, for the strict lockdown; and 62%, 58%, and 69% for the relaxed lockdown. Corresponding long-term reductions were of 50%, 32%, and 9% for the strict lockdown; and 37%, 29%, and 19% for the relaxed lockdown. Regional BB increased PM_{2.5} concentrations by 20 µg/m³ during the strict lockdown, and the Saharan dust event increased PM₁₀ concentrations up to 168 µg/m³ in Bogota, and 104 µg/m³ in Medellin, bringing an additional risk of morbidity and mortality for population. Regional BB has several causes that need to be properly managed to benefit local air quality improvement plans. Future cleaner transport policies equivalent to reduced lockdown mobility could bring pollution close to WHO guidelines.

Publication Type

Journal article.

<350>

Accession Number

20203490685

Author

Khemani, S.; Chaudhary, S.; Scot, T.

Title

Strengthening public health systems : policy ideas from a governance perspective.

Source

Policy Research Working Paper - World Bank; 2020. (9220):59 pp.

Publisher

World Bank

Location of Publisher

Washington

Country of Publication

USA

Abstract

Public health systems that are capable of disease surveillance and action to prevent and manage outbreaks require trustworthy community-embedded public health workers who are empowered to undertake their tasks as professionals. Economic theory on incentives and norms of agents tasked with performing activities that society cares about yield direct implications for how to recruit and manage frontline health workers to promote trustworthiness and professionalism. This paper provides novel evidence from a survey of public health workers in Bihar, India's poorest state, that supports the insights of economic theory and taken together yields ideas that can immediately be put to work in policy responses to the COVID-19 crisis. These ideas address problems of governance and trust that have bedeviled health policymakers. Managing the current and preventing future pandemics requires going beyond technical

health policies to the political institutions that shape incentives and norms of health workers tasked with implementing those policies.

Publication Type

Bulletin.

<351>

Accession Number

20203493749

Author

Annweiler, C.; Cao ZhiJian; Sabatier, J. M.

Title

Point of view: should COVID-19 patients be supplemented with vitamin D?

Source

Maturitas; 2020. 140:24-26. 26 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Using Hill's methodology for exploring causality, we aimed to determine in early May 2020 whether evidence supports vitamin D as a biological determinant of COVID-19 outcomes. Vitamin D is a secosteroid hormone theoretically able to reduce COVID-19 risk through regulation of (i) the renin-angiotensin system, (ii) cellular innate and adaptive immunity, and (iii) physical barriers. Inverse associations were found between 25-hydroxyvitamin D concentrations and COVID-19 incidence and mortality. Randomized controlled trials testing vitamin D supplementation in the treatment of COVID-19 are in progress. Positive results in such studies would encourage the use of vitamin D supplements as an adjuvant treatment in COVID-19.

Publication Type

Journal article.

<352>

Accession Number

20203490600

Author

Kinga, B. M.; Munteh, P. A.; Wilfred, M. F.

Title

Costs and benefits of early response in the COVID-19 outbreak in Cameroon: DALYs, treatment cost and labour supply lost.

Source

Journal of the Cameroon Academy of Sciences; 2020. 16(1):43-51. 33 ref.

Publisher

Cameroon Academy of Sciences

Location of Publisher

Province

Country of Publication

Cameroon

Abstract

COVID-19 has had multiple effects on our daily lives and led to a general recession of what is today known as the Coronavirus recession. This is an economic recession across the world economy in 2020 due to the 2019/20 coronavirus pandemic (Schwartz, 2020). The trajectory of COVID-19 is highly uncertain. Variables include how long it will take for the virus to play out, how many people will be infected, how many will die, and whether the virus will spread significantly (Zandi et al, 2020). There is thus a need for studies to analyze the detail cost and benefit of an early response to this pandemic. This work sets out to calculate the costs and benefits of early response in the COVID-19 outbreak in Cameroon using DALYs, healthcare expenditure and labour supply lost. In order to do this, secondary data was collected from the Ministry of Public Health periodic reports on the COVID-19 situation and from the global disease burden report published in 2015. Data were analyzed using standard formula as used in Shutterstock, (2020) to calculate DALY, while percentages, algebra and other descriptive statistical tools like charts were used to present findings. Results showed that Cameroon had 658, 2265, 7599 and 14,916 cases one, two, three and months respectively after the outbreak. Results further show a 16.37 loss years of "healthy" life per person and a total of 10771.46DALYs, 37078.05DALYs, 124,395.6DALYs and 244,174.9DALYs after one, two, three and four months of onset. Health care expenditure for all patients stood at 2.632 M, 9.060 M, 30,396 M and 59,664 M FCFA for one, two, three and four months respectively after onset COVID 19 6 of March 2020. Lastly, all patients in total lost 105,280, 362,400, 1215840 and 2386560 hours of labour one, two, three and four months respectively after the onset of COVID 19 in Cameroon. This study thus concludes that COVID-19 has enormous cost to patients and government and a timely intervention will lead to great benefits. It recommends strict adherence to government's preventive measures modified from the WHO guide. This will lessen the economic consequences of COVID 19 in Cameroon thus preventing the Economy from sinking into a recession.

Publication Type

Journal article.

<353>

Accession Number

20203449519

Author

Kornilov, S. A.; Lucas, I.; Jade, K.; Dai, C. L.; Lovejoy, J. C.; Magis, A. T.

Title

Plasma levels of soluble ACE2 are associated with sex, Metabolic Syndrome, and its biomarkers in a large cohort, pointing to a possible mechanism for increased severity in COVID-19.

Source

Critical Care; 2020. 24(452):(22 July 2020). 6 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

This article interrogated the associations between plasma concentrations of sACE2 and biomarkers of metabolic syndrome (body mass index, BMI; blood pressure; glycemic markers; and lipid levels), adiposity (plasma leptin and serum adiponectin), inflammation (high-sensitivity C-reactive protein, hsCRP, white blood cell count, and interleukin-8), and liver damage (alanine aminotransferase, aspartate transaminase, and gamma-glutamyl-transferase, GGT) in a large cohort of participants in a commercial wellness program who had undergone comprehensive multi-omic profiling. The robust pattern of associations between increased plasma sACE and MetS points to the possible shared pathways in cardiometabolic disease and COVID-19, implicating insulin resistance, chronic inflammation, and liver damage. This is intriguing given that both sACE2 and mACE2 have been shown to be upregulated in a rat model of chronic liver disease and that sACE2 levels are higher in patients with heart failure. The upregulation may be related to the tissue-specific patterns of increased SARS-CoV-2 infectivity in patients with cardiometabolic disease and/or liver damage and warrants further research on sACE2 as a potential biomarker for COVID-19 severity.

Publication Type

Journal article.

<354>

Accession Number

20203454411

Author

Kraak, V. I.

Title

How digital technology is transforming the food retail landscape.

Source

UNSCN News; 2020. (45):107-115. many ref.

Publisher

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

Location of Publisher

Rome

Country of Publication

Italy

Abstract

This paper examines digital technology trends that are influencing the current and future business practices of the food retail landscape, including transnational grocery stores and chain restaurants. It describes trends in online food sales and meal delivery, and presents ethical concerns related to the use of digital technology in the food retail sector. It concludes with examples of how food-system stakeholders are using digital technology to support healthy and sustainable diets, providing some insights into how the COVID-19 pandemic has transformed the food retail sector. Retailers are using the online experience to optimize search terms and website content, provide attractive images, offer promotional coupons that ensure the availability and speedy delivery of products to shoppers. An AI-enabled payment platform provides a "unified shopping experience" for customers. Retailers and restaurants in China are supported by technology firms, such as Alibaba, which has invested in facial-recognition start-up companies that scan customers' faces when making purchases. This information is linked to a government and corporate digital surveillance system used to monitor the computer activities, behaviours and data content of Chinese citizens. Digital technologies influence every sector of the global and national economies, including agriculture, food and beverage manufacturing, food retail and restaurants, finance, media and entertainment. Digital technology is transforming how transnational food retailers and chain restaurants use e-commerce strategies and OFD services to reach customers.

Publication Type

Journal article.

<355>

Accession Number

20203488199

Author

Yang Yang; Su YingYing

Title

Public voice via social media: role in cooperative governance during public health emergency.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)68 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

With the development of the Internet, social networking sites have empowered the public to directly express their views about social issues and hence contribute to social change. As a new type of voice behavior, public voice on social media has aroused wide concern among scholars. However, why public voice is expressed and how it influences social development and betterment in times of public health emergencies remains unstudied. A key point is whether governments can take effective countermeasures when faced with public health emergencies. In such situation, public voice is of great significance in the formulation and implementation of coping policies. This qualitative study uses China's Health Code policy under COVID-19 to explore why the public performs voice behavior on social media and how this influences policy evolution and product innovation through cooperative governance. A stimulus-cognition-emotion-behavior model is established to explain public voice, indicating that it is influenced by cognitive processes and public emotions under policy stimulus. What is more, as a form of public participation in cooperative governance, public voice plays a significant role in promoting policy evolution and product innovation, and represents a useful form of cooperation with governments and enterprises to jointly maintain social stability under public health emergencies.

Publication Type

Journal article.

<356>

Accession Number

20203488185

Author

Li Qi; Wei Cong; Dang JianNing; Cao Lei; Liu Li

Title

Tracking and analyzing public emotion evolutions during COVID-19: a case study from the event-driven perspective on microblogs.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)70 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Objective: Coronavirus disease 2019 (COVID-19) has caused substantial panic worldwide since its outbreak in December 2019. This study uses social networks to track the evolution of public emotion during COVID-19 in China and analyzes the root causes of these public emotions from an event-driven perspective.

Methods: A dataset was constructed using microblogs (n = 125,672) labeled with COVID-19-related super topics (n = 680) from 40,891 users from 1 December 2019 to 17 February 2020. Based on the skeleton and key change points of COVID-19 extracted from microblogging contents, we tracked the public's emotional evolution modes (accumulated emotions, emotion covariances, and emotion transitions) by time phase and further extracted the details of dominant social events. **Results:** Public emotions showed different evolution modes during different phases of COVID-19. Events about the development of COVID-19 remained hot, but generally declined, and public attention shifted to other aspects of the epidemic (e.g., encouragement, support, and treatment). **Conclusions:** These findings suggest that the public's feedback on COVID-19 predated official accounts on the microblog platform. There were clear differences in the trending events that large users (users with many fans and readings) and common users paid attention to during each phase of COVID-19.

Publication Type

Journal article.

<357>

Accession Number

20203485094

Author

Parks, C. A.; Nugent, N. B.; Fleischhacker, S. E.; Yaroch, A. L.

Title

Food system workers are the unexpected but under protected COVID heroes.

Source

Journal of Nutrition; 2020. 150(8):2006-2008. 21 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19) poses an occupational health risk to food system workers including farmers/producers, grocery store workers, emergency food system staff and volunteers (e.g., food pantry workers), and others. These food system workers have been pushed to the front-line of this pandemic, providing essential services that support food consumption for all Americans. Food system workers are some of the most economically vulnerable populations and are at risk of further financial disparities and contraction of COVID-19 during this pandemic. As we continue to grapple with the best strategies to support the food system and mitigate concerns around the spread of COVID-19, appropriate measures must be considered to better protect and support front-line food system workers that safeguard food access for all Americans.

Publication Type

Journal article.

<358>

Accession Number

20203485033

Author

Chapple, L. A. S.; Fetterplace, K.; Asrani, V.; Burrell, A.; Cheng, A. C.; Collins, P.; Doola, R.; Ferrie, S.; Marshall, A. P.; Ridley, E. J.

Title

Nutrition management for critically and acutely unwell hospitalised patients with coronavirus disease 2019 (COVID-19) in Australia and New Zealand.

Source

Nutrition & Dietetics; 2020. 77(4):426-436. 17 ref.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Publisher

Wiley

Location of Publisher

Melbourne

Country of Publication

Australia

Abstract

Coronavirus disease 2019 (COVID-19) results from severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The clinical features and subsequent medical treatment, combined with the impact of a global pandemic, require specific nutritional therapy in hospitalised adults. This document aims to provide Australian and New Zealand clinicians with guidance on managing critically and acutely unwell adult patients hospitalised with COVID-19. These recommendations were developed using expert consensus, incorporating the documented clinical signs and metabolic processes associated with COVID-19, the literature from other respiratory illnesses, in particular acute respiratory distress syndrome, and published guidelines for medical management of COVID-19 and general nutrition and intensive care. Patients hospitalised with COVID-19 are likely to have preexisting comorbidities, and the ensuing inflammatory response may result in increased metabolic demands, protein catabolism, and poor glycaemic control. Common medical interventions, including deep sedation, early mechanical ventilation, fluid restriction, and management in the prone position, may exacerbate gastrointestinal dysfunction and affect nutritional intake. Nutrition care should be tailored to pandemic capacity, with early gastric feeding commenced using an algorithm to provide nutrition for the first 5-7 days in lower-nutritional-risk patients and individualised care for high-nutritional-risk patients where capacity allows. Indirect calorimetry should be avoided owing to potential aerosol exposure and therefore infection risk to healthcare providers. Use of a volume-controlled, higher-protein enteral formula and gastric residual volume monitoring should be initiated. Careful monitoring, particularly after intensive care unit stay, is required to ensure appropriate nutrition delivery to prevent muscle deconditioning and aid recovery. The infectious nature of SARS-CoV-2 and the expected high volume of patient admissions will require contingency planning to optimise staffing resources including upskilling, ensure adequate nutrition supplies, facilitate remote consultations, and optimise food service management. These guidelines provide recommendations on how to manage the aforementioned aspects when providing nutrition support to patients during the SARS-CoV-2 pandemic.

Publication Type

Journal article.

<359>

Accession Number

20203487457

Author

Yu PeyJen; Cassiere, H.; Derosa, S.; Bocchieri, K.; Yar, S.; Hartman, A.

Title

Hypermetabolism and coronavirus disease 2019.

Source

Journal of Parenteral and Enteral Nutrition; 2020. 44(7):1234-1236. 6 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Background: Hypermetabolism has been described in stress states such as trauma, sepsis, acute respiratory distress syndrome, and severe burn injuries. We hypothesize that patients with Coronavirus disease 2019 (COVID-19) may develop a hypermetabolic state, which may be a major contributing factor to the extraordinary ventilatory and oxygenation demands in patients with COVID-19. Method: Resting energy expenditure (REE), carbon dioxide production (VCO₂), and oxygen consumption (VO₂) were measured by indirect calorimetry on 7 critically ill patients with COVID-19. Results: The median measured REE was 4044 kcal/d, which was 235.7% +/- 51.7% of predicted. The median VCO₂ was 452 mL/min (range, 295-582 mL/min), and the median VO₂ was 585 mL/min (range, 416-798 mL/min). Conclusion: Critically ill patients with COVID-19 are in an extreme hypermetabolic state. This may explain the high failure rates for mechanical ventilation for these patients and highlights the potential need for increased nutrition requirements for such patients.

Publication Type

Journal article.

<360>

Accession Number

20203487452

Author

Martindale, R.; Patel, J. J.; Taylor, B.; Arabi, Y. M.; Warren, M.; McClave, S. A.

Title

Nutrition therapy in critically ill patients with coronavirus disease 2019.

Source

Journal of Parenteral and Enteral Nutrition; 2020. 44(7):1174-1184. 51 ref.

Publisher

Wiley

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

In the midst of a coronavirus disease 2019 (COVID-19) pandemic, a paucity of data precludes derivation of COVID-19-specific recommendations for nutrition therapy. Until more data are available, focus must be centered on principles of critical care nutrition modified for the constraints of this disease process, ie, COVID-19-relevant recommendations. Delivery of nutrition therapy must include strategies to reduce exposure and spread of disease by providing clustered care, adequate protection of healthcare providers, and preservation of personal protective equipment. Enteral nutrition (EN) should be initiated early after admission to the intensive care unit (ICU) using a standard isosmolar polymeric formula, starting at trophic doses and advancing as tolerated, while monitoring for gastrointestinal intolerance, hemodynamic instability, and metabolic derangements. Intra-gastric EN may be provided safely, even with use of prone-positioning and extracorporeal membrane oxygenation. Clinicians should have a lower threshold for switching to parenteral nutrition in cases of intolerance, high risk of aspiration, or escalating vasopressor support. Although data extrapolated from experience in acute respiratory distress syndrome warrants use of fiber additives and probiotic organisms, the lack of benefit precludes a recommendation for micronutrient supplementation. Practices that increase exposure or contamination of equipment, such as monitoring gastric residual volumes, indirect calorimetry to calculate requirements, endoscopy or fluoroscopy to achieve enteral access, or transport out of the ICU for additional imaging, should be avoided. At all times, strategies for nutrition therapy need to be assessed on a risk/benefit basis, paying attention to risk for both the patient and the healthcare provider.

Publication Type

Journal article.

<361>

Accession Number

20203487426

Author

Aguila, E. J. T.; Cua, I. H. Y.; Fontanilla, J. A. C.; Yabut, V. L. M.; Causing, M. F. P.

Title

Gastrointestinal manifestations of COVID-19: impact on nutrition practices.

Source

Nutrition in Clinical Practice; 2020. 35(5):800-805. 27 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Although Coronavirus disease 2019 (COVID-19) is primarily a respiratory disease, growing evidence shows that it can affect the digestive system and present with gastrointestinal (GI) symptoms. Various nutrition societies have recently published their guidelines in context of the pandemic, and several points emphasize the impact of these GI manifestations on nutrition therapy. In patients with COVID-19, the normal intestinal mucosa can be disrupted by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus, and this could result in GI symptoms and a compromise in nutrient absorption. Optimization of oral diet is still recommended. However, given the GI effects of COVID-19, a fraction of infected patients have poor appetite and would not be able to meet their nutrition goals with oral diet alone. For this at-risk group, which includes those who are critically ill, enteral nutrition is the preferred route to promote gut integrity and immune function. In carrying this out, nutrition support practices have been revised in such ways to mitigate viral transmission and adapt to the pandemic. All measures in the GI and nutrition care of patients are clustered to limit exposure of healthcare workers. Among patients admitted to intensive care units, a significant barrier is GI intolerance, and it appears to be exacerbated by significant GI involvement specific to the SARS-CoV-2 infection. Nevertheless, several countermeasures can be used to ease side effects. At the end of the spectrum in which intolerance persists, the threshold for switching to parenteral nutrition may need to be lowered.

Publication Type

Journal article.

<362>

Accession Number

20203487425

Author

Patel, J. J.; Martindale, R. G.; McClave, S. A.

Title

Relevant nutrition therapy in COVID-19 and the constraints on its delivery by a unique disease process.

Source

Nutrition in Clinical Practice; 2020. 35(5):792-799. 34 ref.

Publisher

Wiley

Location of Publisher

Hoboken

Country of Publication

USA

Abstract

Worldwide, as of July 2020, >13.2 million people have been infected by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus. The spectrum of coronavirus disease 2019 (COVID-19) ranges from mild illness to critical illness in 5% of cases. The population infected with SARS-CoV-2 requiring an intensive care unit admission often requires nutrition therapy as part of supportive care. Although the various societal guidelines for critical care nutrition meet most needs for the patient with COVID-19, numerous factors, which impact the application of those guideline recommendations, need to be considered. Since the SARS-CoV-2 virus is highly contagious, several key principles should be considered when caring for all patients with COVID-19 to ensure the safety of all healthcare personnel involved. Management strategies should cluster care, making all attempts to bundle patient care to limit exposure. Healthcare providers should be protected, and the spread of SARS-CoV-2 should be limited by minimizing procedures and other interventions that lead to aerosolization, avoiding droplet exposure through hand hygiene and use of personal protective equipment (PPE). PPE should be preserved by decreasing the number of individuals providing direct patient care and by limiting the number of patient interactions. Enteral nutrition (EN) is tolerated by the majority of patients with COVID-19, but a relatively low threshold for conversion to parenteral nutrition should be maintained if increased exposure to the virus is required to continue EN. This article offers relevant and practical recommendations on how to optimize nutrition therapy in critically ill patients with COVID-19.

Publication Type

Journal article.

<363>

Accession Number

20203487424

Author

Mulherin, D. W.; Walker, R.; Holcombe, B.; Guenter, P.

Title

ASPEN report on nutrition support practice processes with COVID-19: the first response.

Source

Nutrition in Clinical Practice; 2020. 35(5):783-791. 12 ref.

Publisher

Wiley

Location of Publisher

Hoboken

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Country of Publication

USA

Abstract

Coronavirus disease 2019 (COVID-19) has changed nutrition care processes in hospitals and in the home setting. This paper summarizes clinician reports on these changed processes, including overall nutrition care, nutrition assessment, enteral nutrition and parenteral nutrition care steps, and food and oral supplement delivery. Also included are teaching, logistics, and personnel issues around changes in the work environment. Use of safe, standardized, evidence-based processes in the face of altered care patterns is critical.

Publication Type

Journal article.

<364>

Accession Number

20203485584

Author

Head, M. G.

Title

A real-time policy dashboard can aid global transparency in the response to coronavirus disease 2019.

Source

International Health (RSTMH); 2020. 12(5):373-374. 8 ref.

Publisher

Oxford University Press

Location of Publisher

Oxford

Country of Publication

UK

Abstract

There has been great provision of open data across the coronavirus disease 2019 (COVID-19) pandemic response, with, for example, dashboards presenting real-time descriptions of new daily cases and risk factors. Transparency has been an important discussion point and there have been concerns and criticisms of governments for not publishing the evidence base that is informing their decision-making. A 'policy dashboard' could act as a hub to show the localised reasoning behind COVID-19 policy decisions and allow the global health community to provide further support to governments and international stakeholders.

Publication Type

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

<365>

Accession Number

20203482466

Author

Rimesh Pal; Urmila Yadav; Sandeep Grover; Banshi Saboo; Anmol Verma; Bhadada, S. K.

Title

Knowledge, attitudes and practices towards COVID-19 among young adults with type 1 diabetes mellitus amid the nationwide lockdown in India: a cross-sectional survey. (Special issue on diabetes and COVID-19: the IDF perspective.)

Source

Diabetes Research and Clinical Practice; 2020. 16637 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Aims: To assess knowledge, attitude, and practices (KAP) of young adults with type 1 diabetes mellitus (T1DM) towards COVID-19 amid nationwide lockdown in India. **Methods:** We conducted a cross-sectional web-based survey among young adults with T1DM (aged 18-30 years) in the North, Central, South, and West zones of India. It consisted of fifteen, five and eight questions pertaining to knowledge, attitude, and practices towards COVID-19, respectively. Certain questions relevant to T1DM were also incorporated. **Results:** After exclusion, 212 participants were included (mean age = 25.1 +/- 4.3 years; M:F = 10:11). The overall correct rate of the knowledge questionnaire was 83% (mean total knowledge score = 12.4 +/- 1.9). Most (74%) had an average knowledge score (mean +/- 1SD). Higher educational status, urban residence, and being married were associated with better knowledge scores; however, only urban residence was found to be statistically significant on multinomial logistic regression. Most (88%) felt that being a patient of T1DM, they were at higher risk of getting infected with COVID-19. At the same time, 98% were confident about self-protection. Fifty-one percent of respondents had left home amid lockdown mostly to procure insulin/injection needles/syringes/glucometer strips from the pharmacy. However, all were maintaining proper hand hygiene and majority were following routine dietary advice (95%) and administering prescribed insulin doses (99%). Seventy-two participants (34%) had experienced one or more episodes of hypoglycemia since the commencement of lockdown. **Conclusions:** Young adults with T1DM have average knowledge, positive attitude, and healthy preventive practices towards COVID-19. Awareness campaigns

targeted towards rural communities and providing doorstep delivery of insulin/needles/syringes may be more rewarding.

Publication Type

Journal article.

<366>

Accession Number

20203482455

Author

Barone, M. T. U.; Villarroel, D.; Luca, P. V. de; Harnik, S. B.; Lima, B. L. de S.; Wieselberg, R. J. P.; Giampaoli, V.

Title

COVID-19 impact on people with diabetes in South and Central America (SACA region). (Special issue on diabetes and COVID-19: the IDF perspective.)

Source

Diabetes Research and Clinical Practice; 2020. 16632 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Aims: The present observational study aims to describe political actions in place to combat COVID-19 in the South and Central America region (SACA) while protecting individuals with diabetes. **Methods:** A survey with 12 questions was shared with all IDF-SACA member organizations, in 18 countries. A descriptive analysis was performed and a multivariate cluster analysis technique pam (partitioning around medoids) was applied. **Results:** Two groups of countries were identified. The first group, mostly countries with stricter measures to contain the spread of the virus, reported more difficulties (limitations in accessing basic or health needs) and fears (concerns regarding the impact of the pandemic); whereas most of the second group consisted of countries with less restrictive measures, and reported fewer difficulties. Only 37% responded that a policy was put into place to protect individuals with diabetes, either delivering their medicines and supplies at home (16%) or providing them at once enough for 2-3 months (21%). All respondents reported that one of the main fear was to "be infected and not to receive adequate treatment" and/or "getting infected if going to the hospital or medical appointments". **Conclusion:** Most of the SACA countries failed to implement timely measures to protect individuals with diabetes, which may severely impact individuals, health systems and economies.

Publication Type

Journal article.

<367>

Accession Number

20203489867

Author

Evans, M. V.; Garchitorena, A.; Rakotonanahary, R. J. L.; Drake, J. M.; Andriamihaja, B.; Rajaonarifara, E.; Ngonghala, C. N.; Roche, B.; Bonds, M. H.; Rakotonirina, J.

Title

Reconciling model predictions with low reported cases of COVID-19 in sub-Saharan Africa: insights from Madagascar.

Source

Global Health Action; 2020. 13(1816044)41 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

COVID-19 has wreaked havoc globally with particular concerns for sub-Saharan Africa (SSA), where models suggest that the majority of the population will become infected. Conventional wisdom suggests that the continent will bear a higher burden of COVID-19 for the same reasons it suffers from other infectious diseases: ecology, socio-economic conditions, lack of water and sanitation infrastructure, and weak health systems. However, so far SSA has reported lower incidence and fatalities compared to the predictions of standard models and the experience of other regions of the world. There are three leading explanations, each with different implications for the final epidemic burden: (1) low case detection, (2) differences in epidemiology (e.g. low R_0), and (3) policy interventions. The low number of cases have led some SSA governments to relaxing these policy interventions. Will this result in a resurgence of cases? To understand how to interpret the lower-than-expected COVID-19 case data in Madagascar, we use a simple age-structured model to explore each of these explanations and predict the epidemic impact associated with them. We show that the incidence of COVID-19 cases as of July 2020 can be explained by any combination of the late introduction of first imported cases, early implementation of non-pharmaceutical interventions (NPIs), and low case detection rates. We then re-evaluate these findings in the context of the COVID-19 epidemic in Madagascar through August 2020. This analysis reinforces that Madagascar, along with other countries in SSA, remains at risk of a growing health crisis. If NPIs remain enforced, up to 50,000 lives may be saved. Even with NPIs, without vaccines and new therapies, COVID-19 could infect up to 30% of the

population, making it the largest public health threat in Madagascar for the coming year, hence the importance of clinical trials and continually improving access to healthcare.

Publication Type

Journal article.

<368>

Accession Number

20203489864

Author

McKinney, E. L.; McKinney, V.; Swartz, L.

Title

COVID-19, disability and the context of healthcare triage in South Africa: notes in a time of pandemic.

Source

African Journal of Disability; 2020. 9(a766)

Publisher

AOSIS OpenJournals

Location of Publisher

Tygervalley

Country of Publication

South Africa

Abstract

During disasters, when resources and care are scarce, healthcare workers are required to make decisions and prioritise which patients receive life-saving resources over others. To assist healthcare workers in standardising resources and care, triage policies have been developed. However, the current COVID-19 triage policies and practices in South Africa may exclude or disadvantage many disabled people, especially people with physical and intellectual impairments, from gaining intensive care unit (ICU) access and receiving ventilators if becoming ill. The exclusion of disabled people goes against the principles established in South Africa's Constitution, in which all people are regarded as equal, have the right to life and inherent dignity, the right to access healthcare, as well as the protection of dignity. In addition, the triage policy contravenes the United Nations Convention on the Rights of Persons with Disabilities, which the South African government has signed and ratified. This article raises debates about whose lives matter and whose lives are 'worth' saving over others, and although the focus is on South Africa, the issues may be relevant to other countries where life-saving resources are being rationed.

Publication Type

Journal article.

<369>

Accession Number

20203483637

Title

Evidence review: vitamin D for COVID-19.

Source

Evidence review: vitamin D for COVID-19; 2020. :58 pp. 5 ref.

Publisher

National Institute for Health and Care Excellence

Location of Publisher

London

Country of Publication

UK

Publication Type

Miscellaneous.

<370>

Accession Number

20203483628

Author

Sun Yan; Li YangYang; Bao YanPing; Meng ShiQiu; Sun YanKun; Schumann, G.; Kosten, T.; Strang, J.; Lu Lin; Shi Jie

Title

Increased addictive Internet and substance use behavior during the COVID-19 pandemic in China.

Source

American Journal on Addictions; 2020. 29(4):268-270. 16 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Background and Objectives: The COVID-19 pandemic and control measures may have increased the risk of abusing addictive substances as well as addictive behaviors. **Methods:** We present an initial online survey in 6416 Chinese about the relation between the COVID-19 pandemic and addictive behavior in China. **Results:** During the COVID-19 pandemic, 46.8% of the subjects reported increased dependence on internet use, and 16.6% had longer hours of internet use. The prevalence (4.3%) of severe internet dependence rose up to 23% than that (3.5%) before the COVID-19 pandemic occurred, and their dependence degree rose 20 times more often than being declined (60% vs 3%). Relapses to abuse from alcohol and smoking abstinence were relatively common at 19% and 25%, respectively. Similarly, 32% of regular alcohol drinkers and 20% of regular smokers increased their usage amount during the pandemic. **Conclusion and Scientific Significance:** These three coping behaviors (internet, alcohol, and smoking) during this COVID-19-related crisis appear to have increased the risk for substance use disorders and internet addiction.

Publication Type

Journal article.

<371>

Accession Number

20203487982

Author

Mash, B.

Title

Primary care management of the coronavirus (COVID-19).

Source

South African Family Practice; 2020. 62(1 Part 2)8 ref.

Publisher

AOSIS OpenJournals

Location of Publisher

Tygervalley

Country of Publication

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

South Africa

Abstract

South Africa is in the grip of a novel coronavirus pandemic (COVID-19). Primary care providers are in the frontline. COVID-19 is spread primarily by respiratory droplets contaminating surfaces and hands that then transmit the virus to another person's respiratory system. The incubation period is 2-9 days and the majority of cases are mild. The most common symptoms are fever, cough and shortness of breath. Older people and those with cardiopulmonary co-morbidities or immunological deficiency will be more at risk of severe disease. If people meet the case definition, the primary care provider should immediately adopt infection prevention and control measures. Diagnosis is made by a RT-PCR test using respiratory secretions, usually nasopharyngeal and oropharyngeal swabs. Mild cases can be managed at home with self-isolation, symptomatic treatment and follow-up if the disease worsens. Contact tracing is very important. Observed case fatality is between 0.5% and 4%, but may be overestimated as mild cases are not always counted. Primary care providers must give clear, accurate and consistent messages on infection prevention and control in communities and homes.

Publication Type

Journal article.

<372>

Accession Number

20203482906

Author

Anderson, P. O.

Title

Antivirals for COVID-19 and breastfeeding.

Source

Breastfeeding Medicine; 2020. 15(10):605-607. 1 ref.

Publisher

Mary Ann Liebert, Inc.

Location of Publisher

New Rochelle

Country of Publication

USA

Abstract

The aim of the article was to review the use in breastfeeding of the most prominent drugs that might be active against the SARS-CoV-2 virus that causes the disease (remdesivir, favipiravir, HIV protease inhibitors,

interferons, antibody therapy, famotidine, antimalarials, azithromycin, ivermectin, nitazoxanide, and vitamin D).

Publication Type

Journal article.

<373>

Accession Number

20203469809

Author

Carter, S. E.; Gobat, N.; Zambruni, J. P.; Bedford, J.; Kleef, E. van; Jombart, T.; Mossoko, M.; Nkakirande, D. B.; Colorado, C. N.; Ahuka-Mundeke, S.

Title

What questions we should be asking about COVID-19 in humanitarian settings: perspectives from the social sciences analysis cell in the Democratic Republic of the Congo.

Source

BMJ Global Health; 2020. 5(9)50 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Social sciences research for epidemic response has evolved to provide critical evidence needed for outbreak prevention and control and is most impactful when included as part of a multidisciplinary, integrated package. Outbreak analytics is a data science which encompasses multiple methods in epidemiological analysis and modelling to inform outbreak response. This article proposes to complement this with data and analytical approaches from multiple disciplines to provide a holistic understanding which not only maps and models epidemiological data but seeks to provide context and an understanding for potential cause and effect, thus creating an integrated multidisciplinary outbreak analytics (IMOA) model. Drawing on this experience, this article identified four questions to shape IMOA: (1) What are the impacts on healthcare-seeking behaviour, changing trends in service perception, and the availability, access and use of health services? (2) What are the perceptions and behaviours of healthcare workers and what impact does this have on outbreak dynamics? (3) What are individual and community understanding, perceptions and practices relevant to adapting public health and social measures? (4) What mechanisms are used to include gender and what impacts do these have on outbreak dynamics?

Publication Type

Journal article.

<374>

Accession Number

20203469806

Author

Ahmed, M. A. A.; Ly, B. A.; Millimouno, T. M.; Alami, H.; Faye, C. L.; Boukary, S.; Accoe, K.; Damme, W. van; Put, W. van de; Criel, B.; Doumbia, S.

Title

Willingness to comply with physical distancing measures against COVID-19 in four African countries.

Source

BMJ Global Health; 2020. 5(9)14 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Mali, Burkina Faso, Senegal and Guinea, four West-African countries, have put in place several physical distancing measures that made it possible to contain the spread of COVID-19 in Western countries without too much questioning about their acceptability by their populations. The article describes these measures and discuss the importance of considering the socio-cultural, economic and political context to choose the most appropriate and effective measures, as well as proposes ways to explore strategies that are potentially better adapted to the African context. The low number of cases and deaths in the four countries included in this work can be explained by many factors. Also, several measures of physical distancing have been implemented to varying extents in these countries. These strategies are very similar to those applied in high-income countries, but the contexts are very different, which seems to have led to suboptimal results. Finally, these measures were only partially implemented in these four countries, reducing their potential impact. They have generated popular uprisings, forcing the authorities to reconsider some of the decisions made without thinking about a real exit strategy. Indeed, as the spread of the virus continues, it is very difficult to decide when and how to gradually relax these measures. Experts should, therefore, agree on the most effective and realistic measures. Handwashing, although difficult in some contexts where populations do not even have access to safe drinking water, must be maintained. Similarly, situations conducive to super-spreading of the virus can be reduced by implementing appropriate local solutions.

Publication Type

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

<375>

Accession Number

20203493040

Author

Zettl, F.; Meister, T. L.; Vollmer, T.; Fischer, B.; Steinmann, J.; Krawczyk, A.; V'kovski, P.; Todt, D.; Steinmann, E.; Pfaender, S.; Zimmer, G.

Title

Rapid quantification of SARS-CoV-2-neutralizing antibodies using propagation-defective vesicular stomatitis virus pseudotypes.

Source

Vaccines; 2020. 8(3)28 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Severe acute respiratory syndrome coronavirus type 2 (SARS-CoV-2), a new member of the genus Betacoronavirus, is a pandemic virus, which has caused numerous fatalities, particularly in the elderly and persons with underlying morbidities. At present, there are no approved vaccines nor antiviral therapies available. The detection and quantification of SARS-CoV-2-neutralizing antibodies plays a crucial role in the assessment of the immune status of convalescent COVID-19 patients, evaluation of recombinant therapeutic antibodies, and the evaluation of novel vaccines. To detect SARS-CoV-2-neutralizing antibodies, classically, a virus-neutralization test has to be performed at biosafety level 3, considerably limiting the general use of this test. In the present work, a biosafety level 1 pseudotype virus assay based on a propagation-incompetent vesicular stomatitis virus (VSV) has been used to determine the neutralizing antibody titers in convalescent COVID-19 patients. The neutralization titers in serum of two independently analyzed patient cohorts were available within 18 h and correlated well with those obtained with a classical SARS-CoV-2 neutralization test (Pearson correlation coefficients of $r = 0.929$ and $r = 0.939$, respectively). Most convalescent COVID-19 patients had only low titers of neutralizing antibodies ($ND_{50} < 320$). The sera of convalescent COVID-19 patients also neutralized pseudotype virus displaying the SARS-CoV-1 spike protein on their surface, which is homologous to the SARS-CoV-2 spike protein. In summary, we report a robust virus-neutralization assay, which can be used at low biosafety level 1 to rapidly quantify SARS-CoV-2-neutralizing antibodies in convalescent COVID-19 patients and vaccinated individuals.

Publication Type

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Journal article.

<376>

Accession Number

20203493011

Author

Francesco, M. A. de; Alberici, F.; Bossini, N.; Scolari, F.; Pascucci, F.; Tomasoni, G.; Caruso, A.

Title

Pneumocystis jirevocii and SARS-CoV-2 co-infection: a common feature in transplant recipients?

Source

Vaccines; 2020. 8(3)30 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

COVID-19 might potentially give rise to a more severe infection in solid organ transplant recipients due to their chronic immunosuppression. These patients are at a higher risk of developing concurrent or secondary bacterial and fungal infections. Co-infections can increase systemic inflammation influencing the prognosis and the severity of the disease, and can in turn lead to an increased need of mechanical ventilation, antibiotic therapy and to a higher mortality. Here we describe, for the first time in Europe, a fatal case of co-infection between SARS-CoV-2 and Pneumocystis jirevocii in a kidney transplant recipient.

Publication Type

Journal article.

<377>

Accession Number

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

20203494291

Author

Ataguba, O. A.; Ataguba, J. E.

Title

Social determinants of health: the role of effective communication in the COVID-19 pandemic in developing countries.

Source

Global Health Action; 2020. 13(1788263)26 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The coronavirus disease 2019 (COVID-19) pandemic has affected many countries with increasing morbidity and mortality. Interestingly, many of the actions and policies adopted in countries are linked to the social determinants of health (SDH). The SDH are critical determinants of health and health inequalities that are not directly within the health sector. Policies such as social distancing, good hygiene, avoiding large gatherings, cancelling of social and sports events, using personal protective equipment, schools and restaurants closure, country lockdown, etc. are not necessarily within the health sector but have been promoted to prevent and attenuate COVID-19 infection rates significantly. The SDH that serve to reduce morbidity will forestall or substantially reduce the pressure on many weak health systems in developing countries that cannot cope with increased hospitalisation and intensive health care. This paper argues that one of the most critical social determinants of health (i.e. effective crisis and risk communication), is crucial in many developing countries, including those with fewer confirmed coronavirus cases. We note that the effectiveness of many of the other SDH in reducing the burden of the COVID-19 pandemic hinges on effective communication, especially crisis and risk communication. Although many countries are adopting different communication strategies during the COVID-19 crisis, effective crisis and risk communication will lead to building trust, credibility, honesty, transparency, and accountability. The peculiarity of many developing countries in terms of regional, cultural, linguistic and ethnic diversity is an essential consideration in ensuring effective crisis and risk communication. Developing countries facing significant poverty and disease burden cannot afford to handle the burgeoning of COVID-19 infections and must take preventive measures seriously. Thus, we submit that there is a need to intensify SDH actions and ensure that no one is left behind when communicating crisis and risk to the population to address the COVID-19 pandemic.

Publication Type

Journal article.

<378>

Accession Number

20203494239

Author

Elhadi, M.; Msherghi, A.; Alkeelani, M.; Alsuyihili, A.; Khaled, A.; Buzreg, A.; Boughididah, T.; Abukhashem, M.; Alhashimi, A.; Khel, S.; Gaffaz, R.; Ben Saleim, N.; Bahroun, S.; Elharb, A.; Eisay, M.; Alnafati, N.; Almiqlash, B.; Biala, M.; Alghanai, E.

Title

Concerns for low-resource countries, with under-prepared intensive care units, facing the COVID-19 pandemic.

Source

Infection, Disease & Health; 2020. 25(4):227-232. 35 ref.

Publisher

Elsevier

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Background: Low-resource countries with fragile healthcare systems lack trained healthcare professionals and specialized resources for COVID-19 patient hospitalization, including mechanical ventilators. Additional socio-economic complications such as civil war and financial crisis in Libya and other low-resource countries further complicate healthcare delivery. **Methods:** A cross-sectional survey evaluating hospital and intensive care unit's capacity and readiness was performed from 16 leading Libyan hospitals in March 2020. In addition, a survey was conducted among 400 doctors who worked in these hospitals to evaluate the status of personal protective equipment. **Results:** Out of 16 hospitals, the highest hospital capacity was 1000 in-patient beds, while the lowest was 25 beds with a median of 200 (IQR 52-417, range 25-1000) hospital beds. However, a median of only eight (IQR 6-14, range 3-37) available functioning ICU beds were reported in these hospitals. Only 9 (IQR 4.5-14, range 2-20) mechanical ventilators were reported and none of the hospitals had a reverse transcription-polymerase chain reaction machine for COVID-19 testing. Moreover, they relied on one of two central laboratories located in major cities. Our PPE survey revealed that 56.7% hospitals lacked PPE and 53% of healthcare workers reported that they did not receive proper PPE training. In addition, 70% reported that they were buying the PPE themselves as hospitals did not provide them. **Conclusion:** This study provides an alarming overview of the unpreparedness of Libyan hospitals for detecting and treating patients with COVID-19 and limiting the spread of the pandemic.

Publication Type

Journal article.

<379>

Accession Number

20203493584

Author

Vatsala Misra; Ranjan Agrawal; Harendra Kumar; Asaranti Kar; Usha Kini; Aruna Poojary; Indranil Chakrabarti; Sharada Rai; Anika Singhal; Shankar, S. V.; Iyengar, J. N.

Title

Guidelines for various laboratory sections in view of COVID-19: recommendations from the Indian association of pathologists and microbiologists.

Source

Indian Journal of Pathology & Microbiology; 2020. 63(3):350-357. 34 ref.

Publisher

Indian Association of Pathologists & Microbiologists

Location of Publisher

Chandigarh

Country of Publication

India

Abstract

Declared as a pandemic by WHO on March 11, 2020, COVID-19 has brought about a dramatic change in the working of different laboratories across the country. Diagnostic laboratories testing different types of samples play a vital role in the treatment management. Irrespective of their size, each laboratory has to follow strict biosafety guidelines. Different sections of the laboratory receive samples that are variably infectious. Each sample needs to undergo a proper and well-designed processing system so that the personnel involved are not infected and also their close contacts. It takes a huge effort so as to limit the risk of exposure of the working staff during the collection, processing, reporting or dispatching of biohazard samples. Guidelines help in preventing the laboratory staff and healthcare workers from contracting the disease which has a known human to human route of transmission and high rate of mortality. A well-knit approach is the need of the hour to combat this fast spreading disease. We anticipate that the guidelines described in this article will be useful for continuing safe work practices by all the laboratories in the country.

Publication Type

Journal article.

<380>

Accession Number

20203490422

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Author

Espejo, W.; Celis, J. E.; Chiang, G.; Bahamonde, P.

Title

Environment and COVID-19: pollutants, impacts, dissemination, management and recommendations for facing future epidemic threats.

Source

Science of the Total Environment; 2020. 747many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Coronavirus disease 2019 (COVID-19) has become a global pandemic. Its relationship with environmental factors is an issue that has attracted the attention of scientists and governments. This article aims to deal with a possible association between COVID-19 and environmental factors and provide some recommendations for adequately controlling future epidemic threats. Environmental management through ecosystem services has a relevant role in exposing and spreading infectious diseases, reduction of pollutants, and control of climatic factors. Pollutants and viruses (such as COVID-19) produce negative immunological responses and share similar mechanisms of action. Therefore, they can have an additive and enhancing role in viral diseases. Significant associations between air pollution and COVID-19 have been reported. Particulate matter (PM_{2.5}, PM₁₀) can obstruct the airway, exacerbating cases of COVID-19. Some climatic factors have been shown to affect SARS-CoV-2 transmission. Yet, it is not well established if climatic factors might have a cause-effect relationship to the spreading of SARS-CoV-2. So far, positive as well as negative indirect environmental impacts have been reported, with negative impacts greater and more persistent. Too little is known about the current pandemic to evaluate whether there is an association between environment and positive COVID-19 cases. We recommend smart technology to collect data remotely, the implementation of "one health" approach between public health physicians and veterinarians, and the use of biodegradable medical supplies in future epidemic threats.

Publication Type

Journal article.

<381>

Accession Number

20203490403

Author

Ordóñez, C.; Garrido-Pérez, J. M.; García-Herrera, R.

Title

Early spring near-surface ozone in Europe during the COVID-19 shutdown: meteorological effects outweigh emission changes.

Source

Science of the Total Environment; 2020. 747many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This paper analyses the impact of the control measures during the COVID-19 lockdown in Europe (15 March-30 April 2020) on 1-h daily maximum nitrogen dioxide (NO₂) and maximum daily 8-h running average ozone (MDA8 O₃) observations obtained from the European Environment Agency's air quality database (AirBase). Daily maximum NO₂ decreased consistently over the whole continent, with relative reductions ranging from 5% to 55% with respect to the same period in 2015-2019 for 80% of the sites considered (10th - 90th percentiles). However, MDA8 O₃ concentrations showed a different pattern, decreasing over Iberia and increasing elsewhere. In particular, a large region from northwestern to central Europe experienced increases of 10-22% at urban background stations, reaching typical values of the summer season. The analysis of the expected NO₂ and O₃ concentrations in the absence of the lockdown, using generalised additive models fed by reanalysis meteorological data, shows that the low NO₂ concentrations were mostly attributed to the emission reductions while O₃ anomalies were dominated by the meteorology. The relevance of each meteorological variable depends on the location. The positive O₃ anomalies in northwestern and central Europe were mostly associated with elevated temperatures, low specific humidity and enhanced solar radiation. This pattern could be an analogue to study the limits of pollution control policies under climate change scenarios. On the other hand, the O₃ reduction in Iberia is mostly attributable to the low solar radiation and high specific humidity, although the reduced zonal wind also played a role in the proximity of the Iberian Mediterranean coast.

Publication Type

Journal article.

<382>

Accession Number

20203494740

Author

Faico-Filho, K. S.; Carvalho, J. M. A.; Conte, D. D.; Souza Luna, L. K. de; Bellei, N.

Title

COVID-19 in health care workers in a university hospital during the quarantine in Sao Paulo city.

Source

Brazilian Journal of Infectious Diseases; 2020. 24(5):462-465. 6 ref.

Publisher

Elsevier Editora Ltda.

Location of Publisher

São Paulo

Country of Publication

Brazil

Abstract

@page {size: 21 cm 29.7 cm; margin: 2 cm} p {margin-bottom: 0.25 cm; direction: ltr; line-height: 115%; text-align: left; orphans: 2; widows: 2; background: transparent} a:link {color: #000080; so-language: zxx; text-decoration: underline} Health care workers (HCW) are at a higher risk of being infected in their workplace. Out of a total of 466 HCW of Hospital Sao Paulo with influenza-like illnesses or any clinical suspicion of COVID-19 were tested for COVID-19 by RT-PCR for SARS-CoV-2 169 (36%) turned out positive and were analyzed by type of exposure and hospital occupation. Data of HCW household locations were also obtained. Logistic workers had the highest positivity rate for SARS-CoV-2 ($p = 0.002$), while nurse technicians had the highest rate among those reporting routine contacts with patients ($p = 0.001$). Physicians presented the lowest rate of infection, although living in most affected districts ($p < 0.001$). Policies and adequate training for all hospital employees may improve prevention of COVID-19 among all health care service categories.

Publication Type

Journal article.

<383>

Accession Number

20203494737

Author

Bicudo, N.; Bicudo, E.; Costa, J. D.; Castro, J. A. L. P.; Barra, G. B.

Title

Co-infection of SARS-CoV-2 and Dengue virus: a clinical challenge.

Source

Brazilian Journal of Infectious Diseases; 2020. 24(5):452-454. 11 ref.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Publisher

Elsevier Editora Ltda.

Location of Publisher

São Paulo

Country of Publication

Brazil

Abstract

Many regions of the world where dengue epidemics are seasonal are also facing the COVID-19 pandemic. This is a medical concern because both diseases are difficult to distinguish since they have similar clinical symptoms and laboratory findings, and because they have different clinical management. So far, co-infection of SARS-CoV-2 and dengue virus (DENV) has not been studied. Herein we report the first case of a patient with co-infection of COVID-19 and dengue. Both infections were simultaneously laboratory confirmed by positive RT-qPCR for SARS-CoV-2 and RT-qPCR for DENV, NS1, IgM and IgG antibody tests for dengue. The patient had a favorable clinical improvement, without severe symptoms. This case emphasize that, in pandemic era, having a diagnostic of one infection does not rule out the possibility of having another infection concomitantly. In addition, underscores the importance of an accurate and timely diagnosis to prevent the spread of COVID-19.

Publication Type

Journal article.

<384>

Accession Number

20203490909

Author

Luo WenYi; Sun JiWen; Zhang WenLan; Li Qian; Ni Ping; Zhao LieBin; Tian JinHui; Zhang YaQing; Lu Hong

Title

Management in the paediatric wards facing novel coronavirus infection: a rapid review of guidelines and consensuses.

Source

BMJ Open; 2020. 10(8)55 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Objectives: Relevant guidelines and consensuses for COVID-19 contain recommendations aimed at optimising the management in paediatric wards. The goal of this study was to determine the quality of those recommendations and provide suggestions to hospital managers for the adjustment of existing hospital prevention and control strategies, and also to offer recommendations for further research. **Design:** A rapid review of the guidelines and consensuses for the management in paediatric wards facing COVID-19. **Methods:** PubMed, EMBASE, the Cochrane Library, UpToDate, China National Knowledge Infrastructure, the Wanfang database and relevant websites such as medlive.cn, dxy.cn, the National Health and Health Commission and the China Center for Disease Control and Prevention were systematically searched through late May 2020. The Appraisal of Guidelines for Research and Evaluation II (AGREE II) tool was then used to assess the quality of the selected articles and summarise the relevant evidence concerning management in paediatric wards. **Results:** A total of 35 articles were included, composed of 3 consensus guidelines, 25 expert consensuses and 7 expert opinions. Of the 35 papers, 24 were from China, 2 from the USA, 1 from Spain, 1 from Brazil, 1 from Saudi Arabia and 6 from multinational cooperative studies. Scores for the six domains of the AGREE II tool (scope and purpose, stakeholder involvement, rigour of development, clarity of presentation, applicability and editorial independence) were 98.57%, 53.57%, 17.92%, 69.62%, 26.96% and 50.35%, respectively. Recommendations for nosocomial infection and control, human resource management as well as management of paediatric patients and their families were summarised. **Conclusions:** Due to the outbreak of COVID-19, the quality of rapid guidelines and consensuses for the management in paediatric wards affected by COVID-19 is unsatisfactory. In the future, it will be necessary to develop more high-quality guidelines or consensuses for the management in paediatric wards to deal with nosocomial outbreaks in order to fully prepare for emergency medical and health problems.

Publication Type

Journal article.

<385>

Accession Number

20203470410

Title

Expression of concern: hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19: a multinational registry analysis.

Source

Lancet (British edition); 2020. 395(10240):e102-e102. 1 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Country of Publication

UK

Publication Type

Journal article.

<386>

Accession Number

20203489187

Author

Martinez Iturriaga, S.

Title

Nutritional approach in patients hospitalized with COVID-19.

Source

Nutricion Clinica y Dietetica Hospitalaria; 2020. 40(2):104-111. 16 ref.

Publisher

Sociedad Espanola de Dietetica y Ciencias de la Alimentacion (S.E.D.C.A.)

Location of Publisher

Madrid

Country of Publication

Spain

Abstract

Introduction: Nutritional support is a central pillar of comprehensive treatment. The recommendations suggest starting with protein supplements and enteral nutrition specific for respiratory distress. Objectives: To characterize patients with nutritional risk admitted by COVID-19, describe nutritional procedures, and assess the impact of admission on nutritional status. Material and methods: Observational, descriptive and retrospective study of admissions by COVID-19 from March 15 to April 25, 2020 Inclusion criteria: income > 3 days and PCR, protein and albumin values at admission and discharge. Computer tools: FarHo and HCI del. Statistics: SPSS. Results: 45 patients in the study, 55% men with an average age of 65 years. The average values of protein and albumin at entry and discharge were in range, with a slight decrease for the high values, especially of albumin. ($p>0.05$). The average number of days of admission is 7.32 days. 40% were patients with nutritional risk. Nutritional intervention was carried out on 46% of the patients and 50% managed to increase the protein figures at discharge. The differences are not statistically significant. ($p>0.05$). There are no significant differences between the values in the entry and discharge over time ($p>0.05$). Discussion: We should consider protocolizing a correct approach to hospital malnutrition in our center and systematize nutritional care in this vulnerable population. Conclusions: 1. Forty% of the patients admitted for COVID-19 presented nutritional risk. 2. The nutritional interventions carried out consisted of

providing hypercaloric and hyperprotein supplements and specific enteral diets for respiratory failure. The differences in protein and albumin, at admission and discharge are not significant. 3. Time in hospital for COVID has no effect on the nutritional status of patients.

Publication Type

Journal article.

<387>

Accession Number

20203489169

Author

Mardani, R.; Alamdary, A.; Mousavi Nasab, S. D.; Gholami, R.; Ahmadi, N.; Gholami, A.

Title

Association of vitamin D with the modulation of the disease severity in COVID-19.

Source

Virus Research; 2020. 28945 ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

In late 2019, SARS-CoV-2 started to spread throughout the world causing the COVID-19 that has taken a considerable number of lives. Results obtained from several investigations have explained the virus origin, pathogenicity, and transmission. Similar to SARS coronavirus, the pulmonary angiotensin converting enzyme (ACE) 2 was introduced as the virus receptor for entering the cell. An increased body of epidemiological and clinical evidences has shown modulating effects of vitamin D in lung injuries through several mechanisms. Several clinical symptoms as well as molecular factors have shown to be related to the disease transmission and severity. In this study, vitamin D, ACE concentrations, and neutrophil to lymphocyte ratio (NLR) were measured in patients with confirmed COVID-19 in comparison with control group. Results demonstrated significant alterations in vitamin D and ACE levels as well as NLR in the patients' group. Contribution of those factors with the prognosis and severity of the disease has been shown.

Publication Type

Journal article.

<388>

Accession Number

20203489165

Author

Rangel, H. R.; Ortega, J. T.; Maksoud, S.; Pujol, F. H.; Serrano, M. L.

Title

SARS-CoV-2 host tropism: an in silico analysis of the main cellular factors.

Source

Virus Research; 2020. 289many ref.

Publisher

Elsevier B.V.

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Recent reports have shown that small and big felines could be infected by SARS-CoV-2, while other animals, like swines and mice, are apparently not susceptible to this infection. These findings raise the question of the role of cell factors associated with early stages of the viral infection in host selectivity. The cellular receptor for SARS-CoV-2 is the Angiotensin Converting Enzyme (ACE2). Transmembrane protease serine 2 (TMPRSS2) has been shown to prime the viral spike for its interaction with its receptor. GRP78 has also been proposed as a possible co-receptor. In this study, we used several bioinformatics approaches to bring clues in the interaction of ACE2, TMPRSS2, and GRP78 with SARS-CoV-2. We selected several mammalian hosts that could play a key role in viral spread by acting as secondary hosts (cats, dogs, pigs, mice, and ferrets) and evaluated their predicted permissiveness by in silico analysis. Results showed that ionic pairs (salt bridges, N-O pair, and long-range interactions) produced between ACE2 and the viral spike has an essential function in the host interaction. On the other hand, TMPRSS2 and GRP78 are proteins with high homology in all the evaluated hosts. Thus, these proteins do not seem to play a role in host selectivity, suggesting that other factors may play a role in the non-permissivity in some of these hosts. These proteins represent however interesting cell targets that could be explored in order to control the virus replication in humans and in the intermediary hosts.

Publication Type

Journal article.

<389>

Accession Number

20203486048

Author

Cao Ying; Sun YePing; Tian XiaoDong; Bai ZhiHua; Gong Yue; Qi JianXun; Liu Di; Liu WenJun; Li Jing

Title

Analysis of ACE2 gene-encoded proteins across mammalian species.

Source

Frontiers in Veterinary Science; 2020. 6(July)25 ref.

Publisher

Frontiers Media S.A.

Location of Publisher

Lausanne

Country of Publication

Switzerland

Abstract

Human beings are currently experiencing a serious public health event. Novel coronavirus disease 2019 (COVID-19), caused by the novel severe acute respiratory syndrome coronavirus (SARS-CoV-2), has infected about 3 million people worldwide and killed more than 200,000, most being the elderly or people with potential chronic diseases or in immunosuppressive states. According to big data analysis, there are many proteins homologous to or interacting with the angiotensin-converting enzyme 2 (ACE2), which, therefore, may not be the only receptor for the novel coronavirus; other receptors may also exist in host cells of different species. These potential receptors may also play an important role in the infection process of the novel coronavirus. The current study aimed to discover such key proteins or receptors and analyze the susceptibility of different animals to the novel coronavirus, in order to reveal the transmission process of the virus in cross-species infection. We analyzed the proteins coded by the ACE2 gene in different mammalian species and predicted their correlation and homology with the human ACE2 receptor. The major finding of our predictive analysis suggested ACE2 gene-encoded proteins to be highly homologous across mammals. Based on their high homology, their possibility of binding the spike-protein of SARS-CoV-2 is quite high and species such as *Felis catus*, *Bos taurus*, *Rattus norvegicus* etc. may be potential susceptible hosts; special monitoring is particularly required for livestock that are in close contact with humans. Our results might provide ideas for the prevention and control of the novel coronavirus pneumonia.

Publication Type

Journal article.

<390>

Accession Number

20203488466

Author

Chang TuHsuan; Chou ChiaChing; Chang LuanYin

Title

Effect of obesity and body mass index on coronavirus disease 2019 severity: a systematic review and meta-analysis.

Source

Obesity Reviews; 2020. 21(11)104 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

We conducted a systematic review of observational studies to examine the effects of body mass index (BMI) and obesity (BMI \geq 30 kg/m²) on coronavirus disease 2019 (COVID-19). Medline, Embase, and the Cochrane Library were searched. Sixteen articles were finally included in the meta-analysis, and a random effects model was used. BMI was found to be higher in patients with severe disease than in those with mild or moderate disease (MD 1.6, 95% CI, 0.8-2.4; $p = .0002$) in China; however, the heterogeneity was high ($I^2 = 75\%$). Elevated BMI was associated with invasive mechanical ventilation (IMV) use (MD 4.1, 95% CI, 2.1-6.1; $p < .0001$) in Western countries, and this result was consistent across studies ($I^2=0\%$). Additionally, there were increased odds ratios of IMV use (OR 2.0, 95% CI, 1.4-2.9; $p < .0001$) and hospitalization (OR 1.4, 95% CI, 1.3-1.60; $p < .00001$) in patients with obesity. There was no substantial heterogeneity ($I^2=0\%$). In conclusion, obesity or high BMI increased the risk of hospitalization, severe disease and invasive mechanical ventilation in COVID-19. Physicians must be alert to these early indicators to identify critical patients.

Publication Type

Journal article.

<391>

Accession Number

20203488465

Author

Popkin, B. M.; Du ShuFa; Green, W. D.; Beck, M. A.; Taghred Algaith; Herbst, C. H.; Alsukait, R. F.; Mohammed Alluhidan; Nahar Alazemi; Shekar, M.

Title

Individuals with obesity and COVID-19: a global perspective on the epidemiology and biological relationships.

Source

Obesity Reviews; 2020. 21(11)201 ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The linkage of individuals with obesity and COVID-19 is controversial and lacks systematic reviews. After a systematic search of the Chinese and English language literature on COVID-19, 75 studies were used to conduct a series of meta-analyses on the relationship of individuals with obesity-COVID-19 over the full spectrum from risk to mortality. A systematic review of the mechanistic pathways for COVID-19 and individuals with obesity is presented. Pooled analysis show individuals with obesity were more at risk for COVID-19 positive, >46.0% higher (OR=1.46; 95% CI, 1.30-1.65; $p < 0.0001$); for hospitalization, 113% higher (OR=2.13; 95% CI, 1.74-2.60; $p < 0.0001$); for ICU admission, 74% higher (OR=1.74; 95% CI, 1.46-2.08); and for mortality, 48% increase in deaths (OR=1.48; 95% CI, 1.22-1.80; $p < 0.001$). Mechanistic pathways for individuals with obesity are presented in depth for factors linked with COVID-19 risk, severity and their potential for diminished therapeutic and prophylactic treatments among these individuals. Individuals with obesity are linked with large significant increases in morbidity and mortality from COVID-19. There are many mechanisms that jointly explain this impact. A major concern is that vaccines will be less effective for the individuals with obesity.

Publication Type

Journal article.

<392>

Accession Number

20203489699

Author

Ajibo, H.

Title

Effect of COVID-19 on Nigerian socio-economic well-being, health sector pandemic preparedness and the role of Nigerian social workers in the war against COVID-19. (Special Issue: COVID-19: social work's response to the global pandemic.)

Source

Social Work in Public Health; 2020. 35(7):511-522. 35 ref.

Publisher

Routledge

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

Covid-19 is a virus that has created tension and devastation around the globe. This study is designed to specifically find out the effect of Covid-19 on the socioeconomic well-being of Nigerians, the health sector preparedness to handle the pandemic, and the role of Nigerian social workers in the fight against Covid-19 in Nigeria. The study employed a phenomenological and exploratory research design in its inquiry. Sixteen respondents made up the sample size for the study. A Focus Group Discussion Guide and an In-Depth Interview Guide were the instruments for data collection. The result of the study shows that the Covid-19 pandemic has had a devastating impact on the socioeconomic well-being of Nigerians. Second, the Nigerian health system is ill equipped and under prepared to handle the Covid-19 pandemic. Third, Nigerian social workers, most especially medical social workers, have played a significant role in passing out information on Covid-19 preventive measures to the general public. The study recommends that the Nigerian government should wake up and fix the health sector and make it proactive to handle epidemics/pandemics in the future. Social work practice in Nigeria should be promoted by the government through institutionalization of the profession.

Publication Type

Journal article.

<393>

Accession Number

20203489697

Author

Lin CheHuei; Lin YaWen; Wang JongYi; Lin MingHung

Title

The pharmaceutical practice of mask distribution by pharmacists in Taiwan's community pharmacies under the Mask Real-Name System, in response to the COVID-19 outbreak.

Source

Cost Effectiveness and Resource Allocation; 2020. 18(45):(19 October 2020). 6 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Pharmacists hold to their promise to foster, implement and promote the health of the population and to prevent disease, given their knowledge, skills, and proximity to the locals. The objective of this study was to foster equality and cost-effectiveness in the distribution and sale of masks to all Taiwanese citizens, in response to the COVID-19 pandemic. Methods: All 6336 special community pharmacies participating in the NHI (National Health Insurance) served as mask-selling sites. Access to masks by citizens was determined and controlled, based on the weekly rationing of the number of purchasable masks per citizen and the last digit of their NHI card number. Masks were available on different weekdays for holders of cards ending with odd and even numbers, except on Sundays, when everyone was eligible to buy a mask. Results: Implementing the program has provided equal access to masks for all citizens across Taiwan. It has stabilized the pricing of masks and mitigated the public's anxiety of a perceived likely market shortage. Conclusion: The community pharmacy-based approach to the distribution of prevention face masks to citizens represents a new and innovative engagement of pharmacists in public health promotion and protection initiatives. Community pharmacies can greatly improve the efficiency, reliability, and cost-saving of the distribution of public health resources to local communities, especially in the face of an epidemic.

Publication Type

Journal article.

<394>

Accession Number

20203489669

Author

Seddighi, H.; Seddighi, S.

Title

How much the Iranian government spent on disasters in the last 100 years? A critical policy analysis.

Source

Cost Effectiveness and Resource Allocation; 2020. 18(46):(19 October 2020). 72 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

Background: During the past 20 years, Iran has been experiencing a significant increase in the occurrence of disasters mainly due to the emergence of anthropogenic climate change. This paper aims at analyzing the trend of national budget allocation in Iran over the last 100 years to evaluate the focus of the Iranian state on the four phases of Preparedness, Mitigation, Response, and Recovery and propose modifications. **Methods:** It is used a critical policy analysis with what's the problem represented approach. In this approach is focused on problematization and policy gaps. The most important policy statement in any government is the budget. During the first screening, 1028 regulations and laws were found from 1910 to 2020. After full text screening, 494 regulations and laws related to budget allocation to disasters were analyzed. **Results:** The Iranian government has spent around 29 billion USD on disasters during the last 100 years. Droughts, earthquake and flood have costs the government more than other disasters, accounting for more than 14, 6.9, and 6.1 billion USD, respectively, in the allocated budget. Most of the Iranian government expenditure during the last 100 years on various disasters such as drought, flood, earthquake, and COVID-19 has been spent on involuntary costs including Response and Recovery. Mitigation and Preparedness are the two critical disaster management phases with very small shares of national budgeting. **Conclusions:** From policy audit and policy gaps it is concluded that Iranian governments during last 100 years, problematized the issue of "disasters strike" and not "disasters' risks". In time of disasters, governments tried to solve the issues or impacts of disasters with budgeting to response and recovery. Nevertheless, disasters' prevention or mitigation or preparedness was not a problem for Iranian governments from 1920 to 2020.

Publication Type

Journal article.

<395>

Accession Number

20203489668

Author

Mannle, H.; Hubner, J.; Munstedt, K.

Title

Beekeepers who tolerate bee stings are not protected against SARS-CoV-2 infections.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Source

Toxicon; 2020. 187:279-284. 20 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

A survey on 5115 beekeepers and 121 patients treated with bee venom by an apitherapy clinic in the Hubei province, the epicenter of COVID-19 in China, reported that none of the beekeepers developed symptoms associated with COVID-19, the new and devastating pandemic. The hypothesis that immunity to bee venom could have a preventive effect was expressed and the authors of the Chinese survey suggested that the next step should be animal experiments on monkeys. We believed that before starting such studies, a second independent survey should verify the findings and define the hypothesis more clearly. Thus we asked all German beekeepers to complete an assessment form which would summarize their experiences with COVID-19. In contrast to the Chinese study we found that two beekeepers had died from a SARS-CoV-2 infection and forty-five were affected. The reaction to bee stings (none; mild swelling; severe swelling) correlated with the perceived severity of the SARS-CoV-2-infection-associated symptoms - exhaustion and sore throat. Beekeepers comorbidity correlated with problems with breathing at rest, fever, and diarrhea. Our results did not confirm the findings of the Chinese study. However, since the antiviral effects of bee venom have been found in several studies, we cannot exclude that there could be a direct preventive or alleviating effect when bee venom is administered during the infection.

Publication Type

Journal article.

<396>

Accession Number

20203489630

Author

Bambra, C.; Riordan, R.; Ford, J.; Matthews, F.

Title

The COVID-19 pandemic and health inequalities.

Source

Journal of Epidemiology & Community Health; 2020. 74(11):964-968. 50 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

This essay examines the implications of the COVID-19 pandemic for health inequalities. It outlines historical and contemporary evidence of inequalities in pandemics-drawing on international research into the Spanish influenza pandemic of 1918, the H1N1 outbreak of 2009 and the emerging international estimates of socio-economic, ethnic and geographical inequalities in COVID-19 infection and mortality rates. It then examines how these inequalities in COVID-19 are related to existing inequalities in chronic diseases and the social determinants of health, arguing that we are experiencing a syndemic pandemic. It then explores the potential consequences for health inequalities of the lockdown measures implemented internationally as a response to the COVID-19 pandemic, focusing on the likely unequal impacts of the economic crisis. The essay concludes by reflecting on the longer-term public health policy responses needed to ensure that the COVID-19 pandemic does not increase health inequalities for future generations.

Publication Type

Journal article.

<397>

Accession Number

20203487751

Author

Bracale, R.; Vaccaro, C. M.

Title

Changes in food choice following restrictive measures due to Covid-19.

Source

Nutrition, Metabolism and Cardiovascular Diseases; 2020. 30(9):1423-1426. 14 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Abstract

Background and aims: Following the Covid-19 proliferation beyond the borders of China at the beginning of 2020, containment measures have been taken by different countries around the globe. Citizens were forced to stay at home. The aim of this study is twofold. First, we will provide an analysis of food consumption in Italy during the emergency from a social stance. Secondly, we will consider the risks in relation to health of these food product choices. **Methods and result:** This analysis is based on IRI's data on consumption trends (percentage increase in sales in value) during the first period of the spread of coronavirus, from 23rd of February through the 29th of March, 2020. The sample includes 10 769 stores. There was an increase in the consumption of pasta, flour, eggs, long-life milk and frozen foods, in comparison to a reduction of fresh food goods. The sales of snacks have dropped in relation to the production of homemade bread, pizza and cakes. **Conclusion:** The increase in the consumption of some types of food is linked with their symbolic value and its tendency to carry on at home some external socialization habits. But be careful: these habits are not always healthy.

Publication Type

Journal article.

<398>

Accession Number

20203487750

Author

Mattioli, A. V.; Sciomer, S.; Cocchi, C.; Maffei, S.; Gallina, S.

Title

Quarantine during COVID-19 outbreak: changes in diet and physical activity increase the risk of cardiovascular disease.

Source

Nutrition, Metabolism and Cardiovascular Diseases; 2020. 30(9):1409-1417. 86 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Aims: CoV-19/SARS-CoV-2 is a highly pathogenic virus that is causing a global pandemic with a high number of deaths and infected people. To contain the diffusion of infection, several governments have enforced restrictions on outdoor activities or even collective quarantine on the population. The present

commentary briefly analyzes the effects of quarantine on lifestyle, including nutrition and physical activity and the impact of new technologies in dealing with this situation. Data synthesis: Quarantine is associated with stress and depression leading to unhealthy diet and reduced physical activity. A diet poor in fruit and vegetables is frequent during isolation, with a consequent low intake of antioxidants and vitamins. However, vitamins have recently been identified as a principal weapon in the fight against the Cov-19 virus. Some reports suggest that Vitamin D could exert a protective effect on such infection. During quarantine, strategies to further increase home-based physical activity and to encourage adherence to a healthy diet should be implemented. The WHO has just released guidance for people in self-quarantine, those without any symptoms or diagnosis of acute respiratory illness, which provides practical advice on how to stay active and reduce sedentary behavior while at home. Conclusion: Quarantine carries some long-term effects on cardiovascular disease, mainly related to unhealthy lifestyle and anxiety. Following quarantine, a global action supporting healthy diet and physical activity is mandatory to encourage people to return to a good lifestyle routine.

Publication Type

Journal article.

<399>

Accession Number

20203487741

Author

Dicke, M.; Eilenberg, J.; Salles, J. F.; Jensen, A. B.; Lecocq, A.; Pijlman, G. P.; Loon, J. J. A. van; Oers, M. M. van

Title

Edible insects unlikely to contribute to transmission of coronavirus SARS-CoV-2.

Source

Journal of Insects as Food and Feed; 2020. 6(4):333-339. 50 ref.

Publisher

Wageningen Academic Publishers

Location of Publisher

Wageningen

Country of Publication

Netherlands

Abstract

In the context of food safety, edible insects are evaluated for biological hazards such as microbial pathogens according to regulations currently in place. When the European Food Safety Authority evaluated the hazards of edible insects as a potential source of pathogenic viruses for humans and livestock, the novel zoonotic coronavirus SARS-CoV-2 had not yet emerged but other pathogenic coronaviruses such as SARS

(SARS-CoV) and MERS (MERS-CoV) were known. As a result of the COVID-19 pandemic, animal sources of protein for human consumption are being evaluated for the risks of being a transmission vector of coronaviruses, like SARS-CoV-2. Insects lack a receptor that can bind SARS-CoV-2, thus preventing the virus from replicating in insects, unlike some vertebrate livestock species and companion animals. Despite extensive monitoring, coronaviruses have never been recorded in insect microbiomes. Contamination of insects produced for food or feed may occur during the production process, resulting from rearing substrate or from insect farmers. However, the currently permitted rearing substrates do not include animal products and the farming process is highly automated, thus limiting interactions between farmers and insects. If contamination would still occur, the fact that the insects in production are not hosts to SARS-CoV-2 precludes virus replication and the further processing of the insects will destroy the contamination. We conclude that the hazard of edible insects being a transmission vector of SARS-CoV-2 is extremely low.

Publication Type

Journal article.

<400>

Accession Number

20203488946

Author

Roberts, K.

Title

Locked down leisure in Britain.

Source

Leisure Studies; 2020. 39(5):617-628. 50 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

This paper explains how the spread of Covid-19 in early-2020 led to containment measures throughout Europe, including a legally enforced lockdown in the UK from 23 March which closed most out-of-home leisure provisions. Time use evidence is then used to show how lockdown led to an abrupt, unprecedented in scale, increase in residual 'leisure' time, and how this was distributed and used among males and females, in different age groups. The immediate lessons for leisure studies have been to endorse claims that leisure activities promote well-being, that loss of social connections at work and leisure weakens macro-solidarity, and that the importance of leisure provisions in modern economies. Experiences during

the lockdown, and difficulties in existing, then clarify exactly which leisure matters most, for whom, and why.

Publication Type

Journal article.

<401>

Accession Number

20203494021

Author

Wawrzyk, A.; Rybitwa, D.; Cywinski, P.; Piore, R.; Lobacz, M.

Title

Prevention of SARS-CoV-2 coronavirus spread at the Auschwitz-Birkenau state museum in Poland. the most visited memorial site in the world during the COVID-19 pandemic.

Source

Przegląd Epidemiologiczny; 2020. 74(2):303-315. 12 ref.

Publisher

Narodowy Instytut Zdrowia Publicznego - Panstwowy Zaklad Higieny

Location of Publisher

Warsaw

Country of Publication

Poland

Abstract

INTRODUCTION. At the Auschwitz-Birkenau State Museum (A-BSM) actions have been undertaken to effectively protect employees and minimise risk of SARS-CoV-2 coronavirus spreading from the beginning of the COVID-19 epidemic. **AIM OF THE ARTICLE.** The aim was to present the actions, instructions and procedures introduced at the A-BSM to provide information how to deal with pandemic caused by the SARS-CoV-2 coronavirus in institutions taking care of cultural heritage before and after closure of the Museum for visitors and after reopening. **MATERIALS AND METHODS.** The described activities were developed at the Museum by a specially established Expert Team. **RESULTS.** Groups of employees and places in which they were most exposed to contact with visitors and, as a consequence, at the highest risk of getting infected, were characterised. The employees were provided with personal protective equipment, and at the Museum site, devices essential for maintaining the microbiological cleanliness of the rooms, were placed. In the next stage, instructions and procedures for particular groups of employees were prepared. Visitors were educated about the need of taking precautions and were allowed to disinfect in several places at the Memorial Site. Steps to reduce attendance at this time has also been taken. Procedures for employees of the A-BSM were developed in such way that they can also be used after reopening of the Museum for visitors. **CONCLUSIONS.** The actions which ensured the microbiological safety

of the A-BSM employees, brought satisfying results. In more than 21 days after closing of the Museum for visitors, no cases of SARS-CoV-2 infection or COVID-19 were found among employees, despite a very high threat.

Publication Type

Journal article.

<402>

Accession Number

20203494013

Author

Paliga, R. E.

Title

Quarantine as a tool of epidemics fight.

Source

Przegląd Epidemiologiczny; 2020. 74(2):180-195. 30 ref.

Publisher

Narodowy Instytut Zdrowia Publicznego - Panstwowy Zakład Higieny

Location of Publisher

Warsaw

Country of Publication

Poland

Abstract

Until the 19th century, the factor causing epidemics was not known, and the escape from a place where it occurred as well as isolation of patients was considered to be the only effective way to avoid illness and death. Quarantine in a sense similar to modern times was used in 1377 in Ragusa, today's Dubrovnik, during the plague epidemic. It was the first administratively imposed procedure in the world's history. It was later used in Venice and other rich port cities in the Mediterranean. On the territory of today's Poland, quarantine measures were used by the so-called Mayor of the Air - LukaszDrewno in 1623 during the plague epidemic in Warsaw. The quarantine left its mark on all areas of human activity. It affected all humanity in a way that is underestimated today. Throughout history, it has been described and presented visually. It is omnipresent in the world literature, art and philosophy. However, the isolation and closure of cities, limiting trade, had an impact on the economic balance, and the dilemma between the choice of inhabitants' health and the quality of existence, i.e. their wealth, has been the subject of discussions since the Middle Ages. Since the end of the 19th century, quarantine has lost its practical meaning. The discovery of bacteria and a huge development of medical and social sciences allowed limiting its range. In the 20th century isolation and quarantine no longer had a global range, because the ability to identify factors causing the epidemic, knowledge about the incubation period, carrier, infectiousness, enabled the rational

determination of its duration and territorial range. The modern SARS COV 2 pandemic has resulted in a global quarantine on a scale unprecedented for at least three hundred years. The aim of this paper is to present the history of quarantine from its beginning to the present day, including its usefulness as an epidemiological tool.

Publication Type

Journal article.

<403>

Accession Number

20203495257

Author

Adjorlolo, S.; Egbenya, D. L.

Title

A twin disaster: addressing the COVID-19 pandemic and a cerebrospinal meningitis outbreak simultaneously in a low-resource country.

Source

Global Health Action; 2020. 13(1795963)44 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Managing a deadly pandemic in low- and middle-income countries (LMIC) is challenging. The task becomes tougher when there is an outbreak of an equally deadly disease. This is the present situation of Ghana, a low-resource country, that is confronted with the coronavirus disease 2019 (COVID-19) pandemic and cerebrospinal meningitis (CSM) outbreak. Apart from the resource constraint at both governmental and individual levels, such a situation affects the overall wellbeing of ordinary citizens as well as healthcare professionals, particularly those in high-risk areas. Perhaps, more than ever, we have to ensure equitable distribution of scarce healthcare resources in our effort to manage this 'twin disaster' of COVID-19 and CSM. We evaluated Ghana's situation (outbreak response) and recommended measures to help us navigate this conundrum of a public health crisis.

Publication Type

Journal article.

<404>

Accession Number

20203492162

Author

Long Yan; Wang XiaWei; Tong Qian; Xia JianHua; Shen Ye

Title

Investigation of dry eye symptoms of medical staffs working in hospital during 2019 novel coronavirus outbreak.

Source

Medicine (Baltimore); 2020. 99(35)18 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

The aim of this study was to survey the prevalence of dry eye symptoms (DES) among doctors and nurses in the period of 2019, novel coronavirus (COVID-19) outbreak. To evaluate the DES of doctors and nurses worked at front-line hospitals with protective glasses for a mean time of 4 to 6 hours, a questionnaire developed by the researchers with the Ocular Surface Disease Index (OSDI) was used. These data were evaluated using descriptive statistics and correlation test with SPSS 22.0. The study included 13 doctors and 40 nurses, among which 16 were male and 37 were female, and the mean age of the participants was 32.43 +/- 5.15 years old. According to the OSDI scores, 64.15, 24.52, 7.54, and 3.77% of the participants experienced occasional, mild, moderate, and severe DES, respectively. The factors significantly correlated with OSDI scores were age and duration of wearing protective glasses, while the duration of wearing protective glasses may be a protective factor of dry eye symptoms. Our study showed that most of the doctors and nurses worked at the front-line of combating COVID-19 did not experience DES, while the symptoms of those who experienced DES might be improved by wearing protective glasses.

Publication Type

Journal article.

<405>

Accession Number

20203490270

Author

Giuliani, C.; Volsi, P. L.; Brun, E.; Chiambretti, A.; Giandalia, A.; Tonutti, L.; Bartolo, P. di; Napoli, A.

Title

Breastfeeding during the COVID-19 pandemic: suggestions on behalf of woman study group of AMD. (Special issue on diabetes and COVID-19: the IDF perspective.)

Source

Diabetes Research and Clinical Practice; 2020. 16533 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

SARS-Cov2 infection has recently spread to Italy with important consequences on pregnancy management, mother and child health and mother-child contact. Breastfeeding improves the health of mother and child and reduces risk of neonatal infection with other pathogens that are likely to cause serious illness. To date no evidence confirmed COVID-19 vertical transmission from infected pregnant mother to their fetus. However it is well known that an infected mother can transmit the COVID-19 virus through respiratory droplets during breastfeeding or intimate contact. Thus, the mothers with known or suspected COVID-19 should adhere to standard and contact precautions during breastfeeding. Woman Study Group of AMD, after reviewing current knowledge about COVID-19 vertical transmission and the compatibility of breastfeeding in COVID-19 mother, the available recommendations from Health Care Organizations and main experts opinions, issued the following suggestions on breastfeeding during the COVID-19 pandemic, addressed both to mothers with and without diabetes. It should be considered that following suggestions may change in the future when more evidence is acquired regarding SARS-Cov2 infection.

Publication Type

Journal article.

<406>

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Accession Number

20203494557

Author

Williams, J. M.; Randle, H.; Marlin, D.

Title

COVID-19: impact on United Kingdom horse owners.

Source

Animals; 2020. 10(10)63 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

COVID-19 was declared a global pandemic on 11 March 2020; the United Kingdom (UK) implemented quarantine measures shortly afterward, resulting in rapid changes in how owners managed and interacted with their horses. This study provides a rapid analysis of the initial impact of the COVID-19 outbreak on the management of UK leisure and competition horses. A 17 question online survey was distributed via equestrian social media sites to ascertain the impact of COVID-19 on horse and yard management and on human-horse interactions. Frequency analysis combined with Chi-squared and thematic analyses identified the impact of COVID-19 on UK horse owners. Major changes within horse management and horse-human interactions were reported for the majority of horse owners (>65%), regardless of the establishment type or region. Social distancing and visiting restrictions were implemented at most yards, but nearly half were not providing hand sanitization or disinfection protocols for the shared areas/equipment to prevent cross-contamination between users. The financial impact of the pandemic combined with restricted access to veterinary professionals resulted in owners expressing concerns that horse health and welfare may be compromised as a result. Horse owners also felt that the reduced opportunities for horse-human interactions were negatively affecting their mental health and wellbeing.

Publication Type

Journal article.

<407>

Accession Number

20203497601

Author

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Sharifi, A.; Khavarian-Garmsir, A. R.

Title

The COVID-19 pandemic: impacts on cities and major lessons for urban planning, design, and management.

Source

Science of the Total Environment; 2020. 749

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Since the early days of the COVID-19 crisis the scientific community has constantly been striving to shed light on various issues such as the mechanisms driving the spread of the virus, its environmental and socio-economic impacts, and necessary recovery and adaptation plans and policies. Given the high concentration of population and economic activities in cities, they are often hotspots of COVID-19 infections. Accordingly, many researchers are struggling to explore the dynamics of the pandemic in urban areas to understand impacts of COVID-19 on cities. In this study we seek to provide an overview of COVID-19 research related to cities by reviewing literature published during the first eight months after the first confirmed cases were reported in Wuhan, China. The main aims are to understand impacts of the pandemic on cities and to highlight major lessons that can be learned for post-COVID urban planning and design. Results show that, in terms of thematic focus, early research on the impacts of COVID-19 on cities is mainly related to four major themes, namely, (1) environmental quality, (2) socio-economic impacts, (3) management and governance, and (4) transportation and urban design. While this indicates a diverse research agenda, the first theme that covers issues related to air quality, meteorological parameters, and water quality is dominant, and the others are still relatively underexplored. Improvements in air and water quality in cities during lockdown periods highlight the significant environmental impacts of anthropogenic activities and provide a wake-up call to adopt environmentally friendly development pathways. The paper also provides other recommendations related to the socio-economic factors, urban management and governance, and transportation and urban design that can be used for post-COVID urban planning and design. Overall, existing knowledge shows that the COVID-19 crisis entails an excellent opportunity for planners and policy makers to take transformative actions towards creating cities that are more just, resilient, and sustainable.

Publication Type

Journal article.

<408>

Accession Number

20203495720

Author

Kenarkoohi, A.; Noorimotlagh, Z.; Falahi, S.; Amarloei, A.; Mirzaee, S. A.; Pakzad, I.; Bastani, E.

Title

Hospital indoor air quality monitoring for the detection of SARS-CoV-2 (COVID-19) virus.

Source

Science of the Total Environment; 2020. 74822 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

On December 31, 2019, the novel human coronavirus (COVID-19) was identified in Wuhan, China and swiftly spread in all nations and territories around the globe. There is much debate about the major route of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmissions. So, more evidence is required to determine the potential pathway of transmission of SARS-CoV-2 including airborne transmission. Therefore, we examined the potential aerosol transmission of the virus through hospital wards indoor air by confirmed COVID-19 patients on May 7, 2020. In order to capture airborne SARS-CoV-2, the liquid impinger biosampler was used to take fourteen air samples in different wards of the indoor air of the hospital. The specific primer and probe real-time reverse transcriptase-polymerase chain reaction (RT-PCR) were applied to detect viral genomes of the SARS-CoV-2 virus in positive air samples. Accordingly, we found two positive air samples (in the ICU) out of 14 ones taken from different wards with confirmed COVID-19 patients. The results revealed the possibility of airborne transmission of SARS-CoV-2 though more studies are required to determine the role of actual mechanisms such as cough, sneeze, normal breathing and speaking in the emission of airborne size carrier aerosols. Likewise, more quantitative analyses are needed to estimate airborne viability of SARS-CoV-2 in the carrier aerosols.

Publication Type

Journal article.

<409>

Accession Number

20203495718

Author

Shen XinYi; Cai ChenKai; Li Hui

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Title

Socioeconomic restrictions slowdown COVID-19 far more effectively than favorable weather-evidence from the satellite.

Source

Science of the Total Environment; 2020. 74833 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

We model the impact of restricting socioeconomic activities (SA) on the transmission of COVID-19 globally. Countries initiate public health measures to slow virus transmission, ranging from stringent quarantines including city lockdown to simpler social distancing recommendations. We use satellite readings of NO₂, a pollutant emitted from socioeconomic activities, as a proxy for the level of social-economic restrictions, and discuss the implications under the influences of weather. We found that restricting SA has a leading contribution to lowering the reproductive number of COVID-19 by 18.3% +/- 3.5%, while air temperature, the highest contributor among all weather-related variables only contributes 8.0% +/- 2.6%. The reduction effects by restricting SA becomes more pronounced (23% +/- 3.0%) when we limited the data to China and developed countries where the indoor climate is mostly controlled. We computed the spared infectees by restricting SA until mid-April. Among all polities, China spared 40,964 (95% CI 31,463-51,470) infectees with 37,727 (95% CI, 28,925-47,488) in the Hubei Province, the epicenter of the outbreak. Europe spared 174,494 (95% CI 139,202-210,841) infectees, and the United States (US) spared 180,336 (95% CI 142,860-219,445) with 79,813 (95% CI 62,887-97,653) in New York State. In the same period, many regions except for China, Australia, and South Korea see a steep upward trend of spared infectees due to restricting SA with the US and Europe far steeper, signaling a greater risk of reopening the economy too soon. Latin America and Africa show less reduction of transmissivity through the region-by-time fixed effects than other regions, indicating a higher chance of becoming an epicenter soon.

Publication Type

Journal article.

<410>

Accession Number

20203493847

Author

Pizzorno, A.; Padey, B.; Dubois, J.; Julien, T.; Traversier, A.; Duliere, V.; Brun, P.; Lina, B.; Rosa-Calatrava, M.; Terrier, O.

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Title

In vitro evaluation of antiviral activity of single and combined repurposable drugs against SARS-CoV-2.

Source

Antiviral Research; 2020. 18132 ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

In response to the current pandemic caused by the novel SARS-CoV-2, identifying and validating effective therapeutic strategies is more than ever necessary. We evaluated the in vitro antiviral activities of a shortlist of compounds, known for their cellular broad-spectrum activities, together with drugs that are currently under evaluation in clinical trials for COVID-19 patients. We report the antiviral effect of remdesivir, lopinavir, chloroquine, umifenovir, berberine and cyclosporine A in Vero E6 cells model of SARS-CoV-2 infection, with estimated 50% inhibitory concentrations of 0.99, 5.2, 1.38, 3.5, 10.6 and 3 µM, respectively. Virus-directed plus host-directed drug combinations were also investigated. We report a strong antagonism between remdesivir and berberine, in contrast with remdesivir/diltiazem, for which we describe high levels of synergy, with mean Loewe synergy scores of 12 and peak values above 50. Combination of host-directed drugs with direct acting antivirals underscore further validation in more physiological models, yet they open up interesting avenues for the treatment of COVID-19.

Publication Type

Journal article.

<411>

Accession Number

20203491910

Author

Lacy, J. M.; Brooks, E. G.; Akers, J.; Armstrong, D.; Decker, L.; Gonzalez, A.; Humphrey, W.; Mayer, R.; Miller, M.; Perez, C.; Arango, J. A. R.; Sathyavagiswaran, L.; Stroh, W.; Utley, S.

Title

COVID-19: postmortem diagnostic and biosafety considerations.

Source

American Journal of Forensic Medicine and Pathology; 2020. 41(3):143-151. 77 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

As a result of the 2019 novel human coronavirus (COVID-19) global spread, medical examiner/coroner offices will inevitably encounter increased numbers of COVID-19-infected decedents at autopsy. While in some cases a history of fever and/or respiratory distress (eg, cough or shortness of breath) may suggest the diagnosis, epidemiologic studies indicate that the majority of individuals infected with COVID-19 develop mild to no symptoms. Those dying with-but not of-COVID-19 may still be infectious, however. While multiple guidelines have been issued regarding autopsy protocol in cases of suspected COVID-19 deaths, there is some variability in the recommendations. Additionally, limited recommendations to date have been issued regarding scene investigative protocol, and there is a paucity of publications characterizing COVID-19 postmortem gross and histologic findings. A case of sudden unexpected death due to COVID-19 is presented as a means of illustrating common autopsy findings, as well as diagnostic and biosafety considerations. We also review and summarize the current COVID-19 literature in an effort to provide practical evidence-based biosafety guidance for medical examiner-coroner offices encountering COVID-19 at autopsy.

Publication Type

Journal article.

<412>

Accession Number

20203475286

Author

Maciel, F. B. M.; Santos, H. L. P. C. dos; Silva Carneiro, R. A. da; Souza, E. A. de; Prado, N. M. de B. L.; Teixeira, C. F. de S.

Title

Community health workers: reflections on the health work process in COVID-19 pandemic times.

Source

Ciencia & Saude Coletiva; 2020. 25(Suppl. 2):4185-4195. 50 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Rio de Janeiro

Country of Publication

Brazil

Abstract

This study discusses the reorganization of the Community Health Workers (CHWs) work process as a result of the Covid-19 pandemic, considering its importance as a link between the community and the health services in the field of basic care. The literature review comes from the following databases: Virtual Health Library, Scientific Electronic Library Online, and the Brazilian Scientific Publications Portal databases in open access and document review of technical and normative notes from the Municipal Health Secretariats in Brazil. The analysis was based on the premises of Primary Health Care and on the axes of the CHW work, especially cultural competence and community orientation, aiming to discuss the changes introduced in this work regarding the following aspects: (1) health teams support, (2) use of telehealth, and (3) health education. This study concluded that the Covid-19 pandemic demanded reorganization of the work process and assistance flows in the field of basic care. In order for the CHW to continue developing their activities it is necessary to guarantee decent working conditions, training and continuing education, including the concern about the possible discontinuity of other care needed to ensure the population health care in the territory.

Publication Type

Journal article.

<413>

Accession Number

20203475285

Author

Moraes, C. L. de; Marques, E. S.; Ribeiro, A. P.; Souza, E. R. de

Title

Contributions to address violence against older adults during the COVID-19 pandemic in Brazil.

Source

Ciencia & Saude Coletiva; 2020. 25(Suppl. 2):4177-4184. 58 ref.

Publisher

Associacao Brasileira de Pos-Graduacao em Saude Coletiva

Location of Publisher

Rio de Janeiro

Country of Publication

Brazil

Abstract

Most Brazilian state and municipal governments have used social distancing as the primary strategy for reducing the transmission speed of the new Coronavirus (SARS-CoV-2), which causes COVID-19. However, this social isolation has had several adverse repercussions, including increased intrafamily violence against children, adolescents, and women. Recently, violence against older adults (VAOA) during the pandemic has also been on the agenda of concerns, although discussing possible strategies for coping with VAOA during COVID-19 is still unimpressive worldwide. Aiming to broaden the debate on the theme in Brazil, this paper aims to offer theoretical elements and evidence from previous studies for a greater understanding of the situation of vulnerability of older adults to situations of violence, of the possible motivations for the increased number of cases of VAOA during the COVID-19 pandemic, and possible strategies to address the problem.

Publication Type

Journal article.

<414>

Accession Number

20203476440

Author

Owens, M. R.; Brito-Silva, F.; Kirkland, T.; Moore, C. E.; Davis, K. E.; Patterson, M. A.; Miketinas, D. C.; Tucker, W. J.

Title

Prevalence and social determinants of food insecurity among college students during the COVID-19 pandemic.

Source

Nutrients; 2020. 12(9)63 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The coronavirus disease (COVID-19) pandemic has increased unemployment and food insecurity in the United States (US). Prior to the pandemic, college students exhibited higher rates of food insecurity than nonstudent households. The objectives of this study were to assess the prevalence and determinants of food insecurity among college students during the COVID-19 pandemic. We administered an online survey

to 651 students on three diverse campuses at a state-funded university in Texas, US, in May 2020. Food security was assessed using a multistep approach that included the 2-item Food Sufficiency Screener and 6-Item USDA Food Security Survey Module (FSSM). Overall, 34.5% of respondents were classified as food insecure within the last 30 days. The strongest predictors of food insecurity were change in current living arrangement (OR = 2.70, 95% CI: 2.47, 2.95), being furloughed (OR = 3.22, 95% CI: 2.86, 3.64), laid off (OR = 4.07, 95% CI: 3.55, 4.66), or losing part-time work (OR = 5.73, 95% CI: 5.09, 6.46) due to the COVID-19 pandemic. These findings highlight the high prevalence of food insecurity among college students during the COVID-19 pandemic, with students who experienced housing insecurity and/or loss of income due to the pandemic being impacted the most.

Publication Type

Journal article.

<415>

Accession Number

20203488289

Author

Chong YuenYu; Chien WaiTong; Cheng HoYu; Chow KaMing; Kassianos, A. P.; Karekla, M.; Gloster, A.

Title

The role of illness perceptions, coping, and self-efficacy on adherence to precautionary measures for COVID-19.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)32 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

As the novel coronavirus disease 2019 (COVID-19) pandemic continues, engaging the public in adherence to precautionary measures for preventing COVID-19 spread or infection becomes difficult. The present study aims to extend our understanding of how illness perceptions, coping, and self-efficacy affect adherence to precautionary measures among the public. An online survey was administered between April and June 2020 to a sample of 514 Hong Kong citizens. Variables considered were illness perceptions toward COVID-19, problem-solving, avoidance-based coping, self-efficacy, as well as adherence to precautionary measures including physical distancing, limiting unnecessary travelling, and washing hands regularly with soap and water. Adjusted structural equation model showed that illness perceptions toward COVID-19 had

significant direct effect on their adherence to precautionary measures (unstandardized beta = 0.50, [95% CI, 0.28, 0.80], p = 0.001), and indirect effects through avoidance-based coping (beta = -0.10 [95% CI, -0.26, -0.01], p = 0.016) and self-efficacy (beta = -0.10, [95% CI, -0.18, -0.01], p = 0.025). These results imply that apart from emphasizing the health hazards of a novel infectious disease, an effective public health intervention and crisis communication should address avoidance-based coping and self-efficacy of the public in adherence to precautionary measures for COVID-19.

Publication Type

Journal article.

<416>

Accession Number

20203488288

Author

Sun ZhongGen; Cheng Xin; Zhang, R.; Yang BingQing

Title

Factors influencing rumour re-spreading in a public health crisis by the middle-aged and elderly populations.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)42 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Due to discrimination and media literacy, middle-aged and elderly individuals have been easily reduced to marginalized groups in the identification of rumours during a public health crisis and can easily spread rumours repeatedly, which has a negative impact on pandemic prevention and social psychology. To further clarify the factors influencing their behaviours, this study used a questionnaire to survey a sample of 556 individuals in China and used multiple linear regression and analysis of variance to explore influencing factors during the coronavirus disease 2019 (COVID-19) pandemic. We found that, first, in the COVID-19 pandemic, middle-aged and elderly adults' willingness to re-spread rumours is positively related to their degree of believing rumours and to personal anxiety and is negatively related to their rumour-discrimination ability and to their perception of serious consequences to rumour spreading. Second, the degree of believing rumours plays an intermediary role in the willingness to re-spread rumours. It plays a partial mediating role in the path of anxiety's influence on behaviour, suggesting that an anxious person will

spread a rumour even if he or she does not have a strong belief in the rumour. Third, interpersonal communication has a greater credibility and a greater willingness to re-spread than does mass communication. This suggests the importance of increasing public knowledge expertise and of reducing public panic. This also has important implications for the future design of public health policies.

Publication Type

Journal article.

<417>

Accession Number

20203488284

Author

Anghel, L.; Popovici, C. G.; Statescu, C.; Sascau, R.; Verdes, M.; Ciocan, V.; Serban, I. L.; Maranduca, M. A.; Hudisteanu, S. V.; T&tail;urcanu, F. E.

Title

Impact of HVAC-systems on the dispersion of infectious aerosols in a cardiac intensive care unit.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)54 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

At the end of 2019, a variation of a coronavirus, named SARS-CoV-2, has been identified as being responsible for a respiratory illness disease (COVID-19). Since ventilation is an important factor that influences airborne transmission, we proposed to study the impact of heating, ventilation and air-conditioning (HVAC) with a variable air volume (VAV) primary air system, on the dispersion of infectious aerosols, in a cardiac intensive care unit, using a transient simulation with computational fluid dynamics (CFD), based on the finite element method (FEM). We analyzed three scenarios that followed the dispersion of pathogen carrying expiratory droplets particles from coughing, from patients possibly infected with COVID-19, depending on the location of the patients in the intensive care unit. Our study provides the mechanism for spread of infectious aerosols, and possibly of COVID-19 infection, by air conditioning systems and also highlights important recommendations for disease control and optimization of ventilation in intensive care units, by increasing the use of outdoor air and the rate of air change, decreasing the recirculation of air and using high-efficiency particulate air (HEPA) filters. The CFD-FEM simulation approach

that was applied in our study could also be extended to other targets, such as public transport, theaters, philharmonics and amphitheatres from educational units.

Publication Type

Journal article.

<418>

Accession Number

20203488282

Author

Song Eugene; Yoo HyunJung

Title

Impact of social support and social trust on public viral risk response: a COVID-19 survey study.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)73 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Public health has been under continuous threat worldwide in recent years. This study examined the impact of social support and social trust on the activities and efficacy of the public's risk response in the case of COVID-19. We conducted an online survey over eight days with 620 Korean adult participants. Data were analyzed using structural equation modelling and K-means cluster analysis. Our results showed that public support had a positive impact on response efficacy, while response efficacy had a positive impact on sanitation, distancing, and purchasing activities. In addition, social support positively moderated the impact of public and individual support on response efficacy, while response efficacy negatively moderated the impact on sanitation activities. These results suggest that, first, amid viral risk, governments should proactively supply tools and information for infection-prevention, and deliver messages that encourage and support infection-prevention activities among the public. Second, when viral risk occurs, governments, along with all other members of society, must engage in aggressive risk response measures. Third, there is a need for risk communication that further emphasizes the importance of personal sanitation activities in the face of viral risk.

Publication Type

Journal article.

<419>

Accession Number

20203488264

Author

Fong, B. Y. F.; Wong, M. C. S.; Law, V. T. S.; Lo ManFung; Ng, T. K. C.; Yee, H. H. L.; Leung, T. C. H.; Ho, P. W. T.

Title

Relationships between physical and social behavioural changes and the mental status of homebound residents in Hong Kong during the COVID-19 pandemic.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)47 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

In Hong Kong, social distancing has been adopted in order to minimise the spread of COVID-19. This study aims to examine the changes in physical health, mental health, and social well-being experienced by local residents who were homebound during the pandemic. An online questionnaire in both Chinese and English versions was completed by 590 eligible participants from 24 April to 13 May 2020. The questionnaire found that individuals aged 18 to 25 years spent more time resting and relaxing but experienced more physical strain. Working status was associated with social contact, with participants working full-time jobs scoring higher in "maintaining social communication via electronic means" and "avoiding social activities outside the home". Additionally, approximately one third of the participants (29.7%) had moderate to severe depression, and participants aged 18 to 25 were found to have higher scores in PHQ-9. Changes in physical health and social contact were significantly associated with developing depressive symptoms. From the results, it is clear that the COVID-19 pandemic has the potential to exert a negative impact on the mental health status of individuals.

Publication Type

Journal article.

<420>

Accession Number

20203488257

Author

Adly, H. M.; Aljahdali, I. A.; Garout, M. A.; Khafagy, A. A.; Saati, A. A.; Saleh, S. A. K.

Title

Correlation of COVID-19 pandemic with healthcare system response and prevention measures in Saudi Arabia.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)51 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Background: The Saudi government has taken the decision to prevent the entrance of about 2.5 million international pilgrims seeking to perform hajj in order to protect the world from a catastrophic widespread of disease. Moreover, health systems in Saudi Arabia are offering free testing for residents whether Saudi and non-Saudi. Background: This study aimed to evaluate the spread of COVID-19 associated with preventive measures taken in Saudi Arabia and to develop a detailed COVID-19 prevention strategy as a framework for the Saudi Arabia community. Methodology: Population size and age distributions among the country of Saudi Arabia were taken from the 2020 World Population Prospects. Contact patterns were measured using the Saudi Arabia Ministry of Health Statistical Annual Report. Conclusions: Our study demonstrates that performing screening tests as early as possible to facilitate the rapid detection of infected cases, fast treatment, and instant isolation for suspected cases is the most definitive rejoinder for public health. Moreover, our study revealed the significance of performing preventive measures in reducing infection and death rates around Saudi Arabia by 27%, while in other countries, it reduced the death rate ranging from 10-73%. This study provides an achievable strategy for prevention and early detection of COVID-19 spread.

Publication Type

Journal article.

<421>

Accession Number

20203488256

Author

Zhao Bo; Kong FanLei; Aung MyoNyein; Yuasa Motoyuki; Nam EunWoo

Title

Novel coronavirus (COVID-19) knowledge, precaution practice, and associated depression symptoms among university students in Korea, China, and Japan.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)66 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

This study assessed university students' knowledge and precaution practices of Novel Coronavirus (COVID-19) in South Korea, China, and Japan, and investigated their depressive states during the pandemic. This cross-sectional survey collected data from 821 respondents, using an anonymous online questionnaire designed by the Yonsei Global Health Center, from 23 March to 20 April 2020, which included socio-demographic questions, knowledge and perceptions of COVID-19, preventative practices, and the Patient Health Questionnaire-9 (PHQ-9) scale to assess mental health. High proportions of respondents showed good knowledge of the transmission pathways and information related to COVID-19. Contact history as well as concerns about family members and the disease showed statistically significant distinctions by nationality and gender. On the whole, all participants reported good levels of preventative practices. The Chinese group reported the highest preventative practice scores; and females scored higher than males. Moreover, the Japanese group showed the most severe depressive states; overall, females experienced more severe depression than males. Thus, authorities should especially emphasize the importance of COVID-19 precautions to males. Educational departments and health authorities should observe the mental health of university adults during the pandemic and plan interventions to improve it.

Publication Type

Journal article.

<422>

Accession Number

20203488250

Author

Kim Junic; Ashihara, K.

Title

National disaster management system: COVID-19 case in Korea.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)41 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The COVID-19 pandemic poses unprecedented challenges for governments and societies around the world and represents a global crisis of hitherto unexperienced proportions. Our research seeks to analyse disaster management systems from a national perspective by examining the Korean management of the COVID-19 crisis according to a four-phase epidemiological disaster management system. Utilising a meta-study, official documents, reports and interviews, we explore the role of the control tower mechanism related to the life-cycle of disaster management, and Korea's sustainable containment strategy. This study begins with a discussion of the crisis and disaster management literature and provides specific information related to the Korean government's response to COVID-19. It continues by detailing specific strategies such as wide-spread testing, tracking, treatment and quarantine that have enabled Korea to prevent wide-spread community transmission. The study concludes emphasising the relevance of systematic national disaster management, providing insight into methods for containment in Korea - a system commended by the WHO. Implications include the extension and the efficient application of disaster management theory by empirical application and integration of concepts.

Publication Type

Journal article.

<423>

Accession Number

20203488234

Author

Radic, A.; Luck, M.; Ariza-Montes, A.; Han Heesup

Title

Fear and trembling of cruise ship employees: psychological effects of the COVID-19 pandemic.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)98 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The current COVID-19 pandemic has evolved to unprecedented proportions. This research aimed to gain a deeper understanding of the psychological effects of the COVID-19 pandemic on cruise ship employees stuck at sea. Using an inductive qualitative approach, a synchronous online focus group was conducted with nine cruise ship employees who were stuck at sea during COVID-19 pandemic. The findings revealed that COVID-19 pandemic has managed to erase the feeling of joy from cruise ship employees who were stuck at sea while exposing weakness of cruise line companies such as poor human resource management leadership. Moreover, COVID-19 pandemic demonstrated that it is of paramount importance that cruise line companies create a comprehensive strategy in assisting their employees who are experiencing an anxiety disorder and depression. The managerial implications are outlined.

Publication Type

Journal article.

<424>

Accession Number

20203488228

Author

Soule, E. K.; Mayne, S.; Snipes, W.; Guy, M. C.; Breland, A.; Fagan, P.

Title

Impacts of COVID-19 on electronic cigarette purchasing, use and related behaviors.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)40 ref.

Publisher

MDPI AG

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Background: COVID-19 has caused health impacts and disruptions globally. Electronic cigarette (ECIG) users may face additional impacts. This study examined impacts of COVID-19 on ECIG users. Methods: Concept mapping, a mixed-methods approach, was used to identify COVID-19 impacts on adult ECIG users. ECIG users (n = 93) provided statements completing a prompt: "A specific way Coronavirus/COVID-19 has affected my vaping/e-cigarette use, my vaping/e-cigarette related purchasing, or other vaping/e-cigarette related behaviors or issues is...". Participants generated 85 unique statements, sorted statements into groups of similar content and rated each statement on how true they were. Multidimensional scaling and hierarchical cluster analysis identified thematic clusters. Mean cluster ratings were compared between sample subgroups. Results: Ten clusters were identified: Stocking up and Bulk Purchasing, Challenges in Obtaining ECIG Supplies, Alternative Purchasing Procedures, Increased ECIG use, Disruption of Routine and ECIG Use, Efforts to Decrease ECIG Use, Improving ECIG Skills, COVID-19 Health Concerns, Perceptions of ECIG Use and COVID-19, and COVID-19 Protection. More dependent ECIG users and dual users of ECIGs and cigarettes rated clusters higher than less dependent ECIG users and non-dual users. Conclusions: ECIG users may experience or perceive they face additional COVID-19 impacts, such as increased exposure, financial burdens, stress, and health risks.

Publication Type

Journal article.

<425>

Accession Number

20203488226

Author

Ceulemans, M.; Verbakel, J. Y.; Calsteren, K. van; Eerdeken, A.; Allegaert, K.; Foulon, V.

Title

SARS-CoV-2 infections and impact of the COVID-19 pandemic in pregnancy and breastfeeding: results from an observational study in primary care in Belgium.

Source

International Journal of Environmental Research and Public Health; 2020. 17(18)37 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

COVID-19 also affects pregnant and breastfeeding women. Hence, clinicians and policymakers require reliable evidence on COVID-19 epidemiology and consequences in this population. We aimed to assess the susceptibility of pregnant women to SARS-CoV-2 and women's perceived impact of the pandemic on their breastfeeding practices, medical counseling and social support. We performed a cross-sectional study using an online survey in primary care in Belgium. Pregnant and breastfeeding women and women who breastfed in the preceding four weeks were eligible to participate. The survey was distributed through social media in April 2020. In total, 6470 women participated (i.e., 2647 pregnant and 3823 breastfeeding women). Overall, 0.3% of all respondents reported to have tested positive for SARS-CoV-2, not indicating a higher susceptibility of pregnant women to contracting COVID-19. More than 90% refuted that the pandemic affected their breastfeeding practices, nor indicated that the coronavirus was responsible for breastfeeding cessation. Half of the women even considered giving longer breastmilk because of the coronavirus. In contrast, women's medical counseling and social support were negatively affected by the lockdown. Women without previous breastfeeding experience and in the early postpartum period experienced a higher burden in terms of reduced medical counseling and support. In the future, more consideration and alternative supportive measures such as tele-visits by midwives or perinatal organizations are required for these women.

Publication Type

Journal article.

<426>

Accession Number

20203485148

Author

Molenaar, R. J.; Vreman, S.; Hakze-Van Der Honing, R. W.; Zwart, R.; Rond, J. de; Weesendorp, E.; Smit, L. A. M.; Koopmans, M.; Bouwstra, R.; Stegeman, A.; Poel, W. H. M. van der

Title

Clinical and pathological findings in SARS-CoV-2 disease outbreaks in farmed mink (*Neovison vison*).

Source

Veterinary Pathology; 2020. 57(5):653-657. 13 ref.

Publisher

Sage Publications

Location of Publisher

Thousand Oaks

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Country of Publication

USA

Abstract

SARS-CoV-2, the causative agent of COVID-19, caused respiratory disease outbreaks with increased mortality in 4 mink farms in the Netherlands. The most striking postmortem finding was an acute interstitial pneumonia, which was found in nearly all examined mink that died at the peak of the outbreaks. Acute alveolar damage was a consistent histopathological finding in mink that died with pneumonia. SARS-CoV-2 infections were confirmed by detection of viral RNA in throat swabs and by immunohistochemical detection of viral antigen in nasal conchae, trachea, and lung. Clinically, the outbreaks lasted for about 4 weeks but some animals were still polymerase chain reaction-positive for SARS-CoV-2 in throat swabs after clinical signs had disappeared. This is the first report of the clinical and pathological characteristics of SARS-CoV-2 outbreaks in mink farms.

Publication Type

Journal article.

<427>

Accession Number

20203482013

Author

Al-Mansour, B.; Adraa, W.

Title

Concept of aromatherapy in boosting psychological immune system against Covid-19.

Source

Medicinal Plants - International Journal of Phytomedicines and Related Industries; 2020. 12(2):205-213.

Publisher

Society for Conservation and Resource Development of Medicinal Plants

Location of Publisher

New Delhi

Country of Publication

India

Abstract

The new coronavirus (Covid-19) is affecting 210 countries and territories around the world. Till now there is no specific treatment, and vaccine development is in progress. While corona pandemic draws the world's attention to the vaccine, also it reminds for the importance of immunization that can help us fight against the novel virus. Good health and psychological alertness has been proven to increase human body immune

response and thus enhancing resistance towards disease. Aromatherapy is considered as one of the complementary medical approach involves the therapeutic use of essential oils, that may lead to viable options for fighting this disease. This review highlighted on some psychological features related to this virus and how practicing aromatherapy could help us to control or minimize the percussions of Covid-19.

Publication Type

Journal article.

<428>

Accession Number

20203487523

Author

Nakeshbandi, M.; Maini, R.; Daniel, P.; Rosengarten, S.; Parmar, P.; Wilson, C.; Kim, J. M.; Oommen, A.; Mecklenburg, M.; Salvani, J.; Joseph, M. A.; Breitman, I.

Title

The impact of obesity on COVID-19 complications: a retrospective cohort study.

Source

International Journal of Obesity; 2020. 44(9):1832-1837. 16 ref.

Publisher

Nature Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Background: Obesity is an epidemic in New York City, the global epicenter of the coronavirus pandemic. Previous studies suggest that obesity is a possible risk factor for adverse outcomes in COVID-19. Background: To elucidate the association between obesity and COVID-19 outcomes. Design: Retrospective cohort study of COVID-19 hospitalized patients tested between March 10 and April 13, 2020. Setting: SUNY Downstate Health Sciences University, a COVID-only hospital in New York. Participants: In total, 684 patients were tested for COVID-19 and 504 were analyzed. Patients were categorized into three groups by BMI: normal (BMI 18.50-24.99), overweight (BMI 25.00-29.99), and obese (BMI \geq 30.00). Measurements Primary outcome was 30-day in-hospital mortality, and secondary outcomes were intubation, acute kidney injury (AKI), acute respiratory distress syndrome (ARDS), and acute cardiac injury (ACI). Results: There were 139 patients (27%) with normal BMI, 150 patients who were overweight (30%), and 215 patients with obesity (43%). After controlling for age, gender, diabetes, hypertension, and qSOFA score, there was a significantly increased risk of mortality in the overweight (RR 1.4, 95% CI 1.1-1.9) and obese groups (RR 1.3, 95% CI 1.0-1.7) compared with those with normal BMI. Similarly, there was a significantly increased relative

risk for intubation in the overweight (RR 2.0, 95% CI 1.2-3.3) and obese groups (RR 2.4, 95% CI 1.5-4.0) compared with those with normal BMI. Obesity did not affect rates of AKI, ACl, or ARDS. Furthermore, obesity appears to significantly increase the risk of mortality in males (RR 1.4, 95% CI 1.0-2.0, P = 0.03), but not in females (RR 1.2, 95% CI 0.77-1.9, P = 0.40). Conclusion: This study reveals that patients with overweight and obesity who have COVID-19 are at increased risk for mortality and intubation compared to those with normal BMI. These findings support the hypothesis that obesity is a risk factor for COVID-19 complications and should be a consideration in management of COVID-19.

Publication Type

Journal article.

<429>

Accession Number

20203487521

Author

Rebello, C. J.; Kirwan, J. P.; Greenway, F. L.

Title

Obesity, the most common comorbidity in SARS-CoV-2: is leptin the link?

Source

International Journal of Obesity; 2020. 44(9):1810-1817. 88 ref.

Publisher

Nature Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Overweight and obesity are major risk factors for diabetes, cardiovascular disease, and lung disease. These diseases are the most commonly reported health conditions that predispose individuals with SARS-CoV-2 infection to require hospitalization including intensive care unit admissions. The innate immune response is the host's first line of defense against a human coronavirus infection. However, most coronaviruses are armed with one strategy or another to overcome host antiviral defense, and the pathogenicity of the virus is related to its capacity to suppress host immunity. The multifaceted nature of obesity including its effects on immunity can fundamentally alter the pathogenesis of acute respiratory distress syndrome and pneumonia, which are the major causes of death due to SARS-CoV-2 infection. Elevated circulating leptin concentrations are a hallmark of obesity, which is associated with a leptin-resistant state. Leptin is secreted by adipocytes in proportion to body fat and regulates appetite and metabolism through signaling in the hypothalamus. However, leptin also signals through the Jak/STAT and Akt pathways, among others, to

modulate T cell number and function. Thus, leptin connects metabolism with the immune response. Therefore, it seems appropriate that its dysregulation would have serious consequences during an infection. We propose that leptin may be the link between obesity and its high prevalence as a comorbidity of the SARS-CoV-2 infection. In this article, we present a synthesis of the mechanisms underpinning susceptibility to respiratory viral infections and the contribution of the immunomodulatory effects of obesity to the outcome.

Publication Type

Journal article.

<430>

Accession Number

20203482583

Author

Bon, S. D. le; Horoi, M.

Title

Is anosmia the price to pay in an immune-induced scorched-earth policy against COVID-19?

Source

Medical Hypotheses; 2020. 14330 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Since the outbreak of Coronavirus Disease 2019 (COVID-19), loss of smell has increasingly been reported as a frequent clinical sign. Understanding the underlying mechanism and the prognostic value of this symptom will help better manage patients. SARS-CoV-2, as SARS-CoV-1, may likely spread to the central nervous system (CNS) via the olfactory nerve, a known gateway for respiratory neurotropic viruses. We hypothesise that sudden loss of smell due to COVID-19 is the consequence of a protective host defence mechanism involving apoptosis of olfactory receptor neurons. Sacrificing smelling over neuroprotection is a logical strategy, even more so as olfaction is the only sense with the ability to regenerate in adults. Induced apoptosis of olfactory neurons has been shown in mice, successfully preventing neuroinvasion. On the other hand, adult olfactory neurogenesis has been shown to be regulated in part by the immune system, allowing to restore olfactory function. Understanding anosmia as part of a defence mechanism would support the concept of sudden anosmia as being a positive prognostic factor in the short term. Also, it may

orient research to investigate the risk of future neurodegenerative disease linked to persisting coronavirus in neurons.

Publication Type

Journal article.

<431>

Accession Number

20203482582

Author

Hoang, B. X.; Hoang, H. Q.; Han Bo

Title

Zinc iodide in combination with dimethyl sulfoxide for treatment of SARS-CoV-2 and other viral infections.

Source

Medical Hypotheses; 2020. 14335 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Zinc Iodide and Dimethyl Sulfoxide compositions are proposed as therapeutic agents to treat and prevent chronic and acute viral infections including SARS-CoV-2 infected patients. The therapeutic combinations have a wide range of virucidal effects on DNA and RNA containing viruses. The combinations also exhibit anti-inflammatory, immunomodulating, antifibrotic, antibacterial, antifungal and antioxidative effects. Given the fact that Zinc Iodide has been used as an oral antiseptic agent and DMSO has been already proven as a safe pharmaceutical solvent and therapeutic agent, we hypothesize that the combination of these two agents can be applied as an effective, safe and inexpensive treatment for SARS-CoV-2 and other viral infection. The therapeutic compound can be applied as both etiological and pathogenesis therapy and used as an effective and safe antiseptic (disinfectant) for human and animals as well.

Publication Type

Journal article.

<432>

Accession Number

20203485630

Author

Studart-Neto, A.; Guedes, B. F.; Tuma, R. de L. E.; Camelo Filho, A. E.; Kubota, G. T.; Iepsen, B. D.; Moreira, G. P.; Rodrigues, J. C.; Ferrari, M. M. H.; Carra, R. B.; Spera, R. R.; Oku, M. H. M.; Terrim, S.; Lopes, C. C. B.; Passos Neto, C. E. B.; Fiorentino, M. D.; Souza, J. C. C. de; Baima, J. P. S.; Silva, T. F. F. da; Moreno, C. A. M.; Silva, A. M. S.; Heise, C. O.; Mendonca, R. H.; Fortini, I.; Smid, J.; et al.

Title

Neurological consultations and diagnoses in a large, dedicated COVID-19 university hospital.

Source

Arquivos de Neuro-Psiquiatria; 2020. 78(8):494-500. 27 ref.

Publisher

Academia Brasileira de Neurologia

Location of Publisher

São Paulo

Country of Publication

Brazil

Abstract

Background: More than one-third of COVID-19 patients present neurological symptoms ranging from anosmia to stroke and encephalopathy. Furthermore, pre-existing neurological conditions may require special treatment and may be associated with worse outcomes. Notwithstanding, the role of neurologists in COVID-19 is probably underrecognized. **Background:** The aim of this study was to report the reasons for requesting neurological consultations by internists and intensivists in a COVID-19-dedicated hospital. **Methods:** This retrospective study was carried out at Hospital das Clinicas da Faculdade de Medicina da Universidade de Sao Paulo, Brazil, a 900-bed COVID-19 dedicated center (including 300 intensive care unit beds). COVID-19 diagnosis was confirmed by SARS-CoV-2-RT-PCR in nasal swabs. All inpatient neurology consultations between March 23rd and May 23rd, 2020 were analyzed. Neurologists performed the neurological exam, assessed all available data to diagnose the neurological condition, and requested additional tests deemed necessary. Difficult diagnoses were established in consensus meetings. After diagnosis, neurologists were involved in the treatment. **Results:** Neurological consultations were requested for 89 out of 1,208 (7.4%) inpatient COVID admissions during that period. Main neurological diagnoses included: encephalopathy (44.4%), stroke (16.7%), previous neurological diseases (9.0%), seizures (9.0%), neuromuscular disorders (5.6%), other acute brain lesions (3.4%), and other mild nonspecific symptoms (11.2%). **Conclusions:** Most neurological consultations in a COVID-19-dedicated hospital were requested for severe conditions that could have an impact on the outcome. First-line doctors should be able to recognize neurological symptoms; neurologists are important members of the medical team in COVID-19 hospital care.

Publication Type

Journal article.

<433>

Accession Number

20203482512

Author

Liu Lee

Title

Sustainable COVID-19 mitigation: Wuhan lockdowns, health inequities, and patient evacuation.

Source

International Journal of Health Policy and Management; 2020. 9(10):415-418. 17 ref.

Publisher

Kerman University of Medical Sciences

Location of Publisher

Kerman

Country of Publication

Iran

Abstract

The world is urgently looking for ways to flatten the coronavirus disease 2019 (COVID-19) curve, and many governments have resorted to implementing strict lockdowns, as researchers show the effectiveness of China's approaches in containing the virus. However, this paper argues that the draconian lockdowns instituted in Wuhan, Hubei, China, may have actually contributed to intensifying patient surges and incapacitating local health systems. Medical aids were rushed to Hubei and new hospitals were rapidly built, however, the healthcare system was still unable to match the staggering increase of patients in the early stages of the lockdowns. The paper proposes using patient evacuation to enhance sustainable COVID-19 mitigation during lockdowns. It demonstrates that patients in Hubei could have been transported to other Chinese provinces where hospitals were under-utilized. This could have theoretically saved thousands of lives by reducing inequities between Hubei and the rest of China in healthcare capacity for treating COVID-19 patients.

Publication Type

Journal article.

<434>

Accession Number

20203484925

Author

Lackey, K. A.; Pace, R. M.; Williams, J. E.; Bode, L.; Donovan, S. M.; Jarvinen, K. M.; Seppo, A. E.; Raiten, D. J.; Meehan, C. L.; McGuire, M. A.; McGuire, M. K.

Title

SARS-CoV-2 and human milk: what is the evidence?

Source

Maternal and Child Nutrition; 2020. 16(4)many ref.

Publisher

Wiley

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The novel coronavirus SARS-CoV-2 has emerged as one of the most compelling and concerning public health challenges of our time. To address the myriad issues generated by this pandemic, an interdisciplinary breadth of research, clinical and public health communities has rapidly engaged to collectively find answers and solutions. One area of active inquiry is understanding the mode(s) of SARS-CoV-2 transmission. Although respiratory droplets are a known mechanism of transmission, other mechanisms are likely. Of particular importance to global health is the possibility of vertical transmission from infected mothers to infants through breastfeeding or consumption of human milk. However, there is limited published literature related to vertical transmission of any human coronaviruses (including SARS-CoV-2) via human milk and/or breastfeeding. Results of the literature search reported here (finalized on 17 April 2020) revealed a single study providing some evidence of vertical transmission of human coronavirus 229E; a single study evaluating presence of SARS-CoV in human milk (it was negative); and no published data on MERS-CoV and human milk. We identified 13 studies reporting human milk tested for SARS-CoV-2; one study (a non-peer-reviewed preprint) detected the virus in one milk sample, and another study detected SARS-CoV-2 specific IgG in milk. Importantly, none of the studies on coronaviruses and human milk report validation of their collection and analytical methods for use in human milk. These reports are evaluated here, and their implications related to the possibility of vertical transmission of coronaviruses (in particular, SARS-CoV-2) during breastfeeding are discussed.

Publication Type

Journal article.

<435>

Accession Number

20203432662

Author

Ren JunLing; Zhang AiHua; Wang XiJun

Title

Traditional Chinese medicine for COVID-19 treatment.

Source

Pharmacological Research; 2020. 155

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Publication Type

Journal article.

<436>

Accession Number

20203461312

Author

Sales, C. M. M.; Silva, A. I. da; Maciel, E. L. N.

Title

COVID-19 health surveillance in Brazil: investigation of contacts by primary health care as a community protection strategy.

Source

Epidemiologia e Servicos de Saude; 2020. 29(4)16 ref.

Publisher

Ministerio de Saude

Location of Publisher

Brasilia

Country of Publication

Brazil

Abstract

This article proposes a flowchart to strategically assist the organization of the territory-based primary health care (PHC) service network, scaling up interventions by making the population's everyday life the central point of care in relation to COVID-19. The flowcharts presented for active tracing of symptomatic COVID-19 cases in PHC can be useful for preventing the disease transmission chain from being maintained and thus reduce the demand for ITU beds, principally in places where there are few hospital beds. As such, identifying people with FLS, performing diagnostic tests and promoting isolation early can stop transmission to individuals belonging to groups at greater risk of developing severe forms of COVID-19. Health education, conducted using language, information and guidance easily understandable by the population, is highly necessary in order to avoid the negative effect of fake news in circulation on the internet, in addition to reaching a larger number of people who, once they have received guidance, can become spreaders of quality information. The flowcharts presented here can and should be adapted to concomitant surveillance of other endemic and epidemic diseases in Brazil, since COVID-19 comes on top of the diseases already in existence in the country, stressing the need to reorganize health services, given that the pandemic has altered PHC's way of working. Therefore, it is believed that the actions proposed can provide significant advancement with COVID-19 health surveillance, given that this approach takes into consideration transmission in the community and in its social spaces, with contact tracing and adequate health guidance and education. As such, implementing the flowcharts can assist PHC organization, providing benefits for affected people and for the community as a whole.

Publication Type

Journal article.

<437>

Accession Number

20203461311

Author

Teixeira, M. G.; Medina, M. G.; Costa, M. da C. N.; Barral-Netto, M.; Carreiro, R.; Aquino, R.

Title

Reorganization of primary health care for universal surveillance and containment of COVID-19.

Source

Epidemiologia e Servicos de Saude; 2020. 29(4)20 ref.

Publisher

Ministerio de Saude

Location of Publisher

Brasilia

Country of Publication

Brazil

Abstract

This article discusses limits to implementing COVID-19 ES in Brazil, and presents suggestions for enhancing surveillance actions to be developed within PHC. In this scenario, it is fundamental that, in articulation with ES, the PHC teams (i) investigate possible suspected cases, (ii) trace and screen contacts, (iii) implement control actions, (iv) monitor mild cases and (v) refer them when necessary to more complex care in a timely and early manner. Moreover, changes recommended in some behaviors, necessary for greater adherence to social isolation measures, are more likely to be successful when guided by someone close to the community, such as the PHC teams, especially community health agents, who work daily in the territories, closer and more closely linked to communities and their families. All these initiatives require the good will of all three levels of SUS management in incorporating them into their respective pandemic Contingency Plans, with a view to allocating resources for concrete measures to be adopted, in particular increasing the number of teams, qualifying health personnel, access to equipment and internet access for health centers and the population - above all for more vulnerable social groups.

Publication Type

Journal article.

<438>

Accession Number

20203490064

Author

El-Zowalaty, M. E.; Young, S. G.; Jarhult, J. D.

Title

Environmental impact of the COVID-19 pandemic - a lesson for the future.

Source

Infection Ecology & Epidemiology; 2020. 10(1768023)7 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The environment is an integral component of human and animal health. COVID-19 is a global health challenge in the twenty-first century. The emergence of SARS-CoV-2 in Wuhan, China in December 2019, and its spread to regional countries and nowadays affecting more than 210 countries worldwide represents the first pandemic in history to be caused by a coronavirus. The COVID-19 pandemic has huge impacts on most aspects of human activities, as well as on the economy and health care systems. Lock-downs, quarantines and border closures in the wake of the pandemic have led to reductions in air pollution through decreased travel and production. These positive environmental effects are likely mostly temporary, but may serve as an example that changes in our way of life can have prompt positive effects for the environment and demonstrate the usefulness of travel-reducing measures such as teleconferencing. Thus, acknowledging that COVID-19 is first and foremost a global disaster, the pandemic may inspire to future behavioral changes with positive environmental effects.

Publication Type

Journal article.

<439>

Accession Number

20203493133

Author

Jawhara, S.

Title

How to boost the immune defence prior to respiratory virus infections with the special focus on coronavirus infections.

Source

Gut Pathogens; 2020. 12(47):(12 October 2020). 73 ref.

Publisher

BioMed Central Ltd

Location of Publisher

London

Country of Publication

UK

Abstract

The emergence of the novel coronavirus SARS-CoV-2, which causes severe respiratory tract infections in humans (COVID-19), has become a global health concern. One of the most worrying features of COVID-19 is a phenomenon known as the "cytokine storm", which is a rapid overreaction of the immune system. Additionally, coagulation abnormalities, thrombocytopenia and digestive symptoms, including anorexia, vomiting, and diarrhea, are often observed in critically ill patients with COVID-19. Baker's yeast beta-glucan, a natural immunomodulatory component derived from *Saccharomyces cerevisiae*, primes the immune

system to respond better to any microbial infection. Our previous studies have shown that oral administration of yeast beta-glucans decreased the diarrhoea, modulated cytokine expression, and reduced the intestinal inflammation. Additionally, we showed that beta-glucan fractions decreased coagulation in plasma and reduced the activation of platelets. During the period of home confinement facing individuals during the COVID-19 pandemic, our immune defence could be weakened by different factors, including stress, anxiety and poor nutrition, while a healthy diet rich in vitamins C and D can reinforce the immune defence and reduce the risk of microbial infections. Additionally, beta-glucan can be used to strengthen the immune defence in healthy individuals prior to any possible viral infections. This short review focuses on the role of baker's yeast beta-glucan, with a healthy diet rich in natural vitamins C and D, in addition to a healthy gut microbiota can provide synergistic immune system support, helping the body to naturally defend prior to respiratory virus infections, until stronger options such as vaccines are available.

Publication Type

Journal article.

<440>

Accession Number

20203490055

Author

Jackson-Morris, A. M.; Nugent, R.; Ralston, J.; Cavalcanti, O. B.; Wilding John

Title

Strengthening resistance to the COVID-19 pandemic and fostering future resilience requires concerted action on obesity.

Source

Global Health Action; 2020. 13(1804700)30 ref.

Publisher

Taylor & Francis

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Initial observations showed that people with chronic noncommunicable diseases were at heightened risk of severe COVID-19 and adverse outcomes. Subsequently, data from various countries have revealed obesity as an independent and significant factor, with people who are overweight/have obesity significantly more likely to be hospitalized, require ICU treatment, and to die. Notably, this additional risk applies to younger people relative to the general COVID-19 risk profile. This paper sets out the evidence of greater risk of poor COVID outcomes for people who are overweight/have obesity, indication of reduced treatment

and support for obesity self-management where it existed prior to COVID-19, and highlights the dearth of specific guidance and measures to mitigate the impacts of COVID-19 upon people with obesity. We identify the health, social and economic impacts that this specific vulnerability creates relative to COVID-19 outcomes. Reduced national and global pandemic resilience due to high obesity prevalence should spur governments and funders to provide urgent specific protection and support for people with overweight/obesity, and to commission rapid research to identify effective prevention and reduction measures. We set out priorities for action on obesity to begin compensating for years of underfunding and inadequate policy attention in the face of escalating obesity across countries of all income groups and world regions.

Publication Type

Journal article.

<441>

Accession Number

20203492452

Author

Cheng XiaoTing; Liu JiaLin; Li Ning; Nisenbaum, E.; Sun Qing; Chen Bing; Casiano, R.; Weed, D.; Telischi, F.; Denny, J. C., III; Liu XueZhong; Shu YiLai

Title

Otolaryngology providers must be alert for patients with mild and asymptomatic COVID-19. (Special section on COVID-19.)

Source

Otolaryngology - Head and Neck Surgery; 2020. 162(6):809-810. 5 ref.

Publisher

Sage Publications

Location of Publisher

Thousand Oaks

Country of Publication

USA

Abstract

More than half of COVID-19 patients are afebrile early in the disease course, yet mildly ill or asymptomatic patients can still spread SARS-CoV-2 with high efficiency. Atypically presenting patients may be seen in noninfectious disease settings such as otolaryngology, which is a specialty prone to occupational exposure. Otolaryngologists have been infected with COVID-19 at higher rates than other specialties in China and other countries. Otolaryngology providers should maintain high clinical suspicion for mild and asymptomatic COVID-19 patients. Protective strategies should be implemented including preappointment

screening, triaging, restriction of nonurgent visits and surgeries, telemedicine, and appropriate personal protective equipment use.

Publication Type

Journal article.

<442>

Accession Number

20203496712

Author

Lawal, N.; Onoja, A. B.

Title

The veterinary perspective of COVID-19.

Source

Sokoto Journal of Veterinary Sciences; 2020. 18(2):53-66. many ref.

Publisher

Sokoto Journal of Veterinary Sciences

Location of Publisher

Sokoto

Country of Publication

Nigeria

Abstract

Coronaviridae is a family of RNA viruses responsible for two previous epidemics of viral pneumonia and related illnesses: Severe Acute Respiratory Syndrome in 2002 and Middle East Respiratory Syndrome in 2012. The current COVID-19 pandemic is caused by a new member of the family Coronaviridae, named SARS-CoV-2 which emerged in December, 2019 in Wuhan, China. Infected persons present with severe respiratory illness including pneumonia. There have been reports of confirmed cases in different animal species that became infected with SARS-CoV-2, suggesting possible reverse zoonosis. In this review, we discussed the origin, biology, genome organization, replication and virus entry into host cells, immune mechanisms, epidemiological trends, prevention and control strategies employed in combating the threat posed by the COVID-19 pandemic.

Publication Type

Journal article.

<443>

Accession Number

20203491788

Author

Kaplan, H. S.; Trumble, B. C.; Stieglitz, J.; Mamany, R. M.; Cayuba, M. G.; Moye, L. M.; Alami, S.; Kraft, T.; Gutierrez, R. Q.; Adrian, J. C.; Thompson, R. C.; Thomas, G. S.; Michalik, D. E.; Rodriguez, D. E.; Gurven, M. D.

Title

Voluntary collective isolation as a best response to COVID-19 for indigenous populations? A case study and protocol from the Bolivian Amazon.

Source

Lancet (British edition); 2020. 395(10238):1727-1734. 34 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Indigenous communities worldwide share common features that make them especially vulnerable to the complications of and mortality from COVID-19. They also possess resilient attributes that can be leveraged to promote prevention efforts. How can indigenous communities best mitigate potential devastating effects of COVID-19? In Bolivia, where nearly half of all citizens claim indigenous origins, no specific guidelines have been outlined for indigenous communities inhabiting native communal territories. In this Public Health article, we describe collaborative efforts, as anthropologists, physicians, tribal leaders, and local officials, to develop and implement a multiphase COVID-19 prevention and containment plan focused on voluntary collective isolation and contact-tracing among Tsimane forager-horticulturalists in the Bolivian Amazon. Phase 1 involves education, outreach, and preparation, and phase 2 focuses on containment, patient management, and quarantine. Features of this plan might be exported and adapted to local circumstances elsewhere to prevent widespread mortality in indigenous communities.

Publication Type

Journal article.

<444>

Accession Number

20203492955

Author

Rothman, J. A.; Loveless, T. B.; Griffith, M. L.; Steele, J. A.; Griffith, J. F.; Whiteson, K. L.

Title

Metagenomics of wastewater influent from southern California wastewater treatment facilities in the era of COVID-19.

Source

Microbiology Resource Announcements; 2020. 9(41)13 ref.

Publisher

American Society for Microbiology (ASM)

Location of Publisher

Washington, D.C.

Country of Publication

USA

Abstract

Sequencing wastewater may be useful for detecting pathogens and assaying microbial water quality. We concentrated, extracted, and sequenced nucleic acids from 17 composite influent wastewater samples spanning seven southern California wastewater treatment facilities in May 2020. Bacteria were the most proportionally abundant taxonomic group present, followed by viruses and archaea.

Publication Type

Journal article.

<445>

Accession Number

20203477463

Author

Preziuso, S.

Title

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) exhibits high predicted binding affinity to ACE2 from lagomorphs (rabbits and pikas).

Source

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Animals; 2020. 10(9)33 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is responsible for the pandemic COVID-19. The virus infects human cells by binding of the virus spike to the cell receptor ACE2. The crystal structure of SARS-CoV-2 spikes in complex with human ACE2 has recently been solved, and the main amino acid residues involved in the virus-receptor complex have been detected. To investigate the affinity of ACE2 of lagomorphs to the SARS-CoV-2 spike, ACE2 sequences from rabbits and American pikas were compared with human ACE2 and with ACE2 from mammals with different susceptibility to the virus. Models of the complex formed by SARS-CoV-2 spike and ACE2 from lagomorphs and from other mammals were created for comparative studies. ACE2 of lagomorphs showed fewer substitutions than human ACE2 in residues involved in the ACE2-SARS-CoV-2 spike complex, similar to cats. Analysis of the binding interface of the simulated complexes ACE2-SARS-CoV-2 spike showed high affinity of the ACE2 of lagomorphs to the viral spike protein. These findings suggest that the spike of SARS-CoV-2 could bind the ACE2 receptor of lagomorphs, and future studies should investigate the role of lagomorphs in SARS-CoV-2 epidemiology. Furthermore, the risks to humans coming into close contacts with these animals should be evaluated.

Publication Type

Journal article.

<446>

Accession Number

20203458100

Author

Guido, Z.; Knudson, C.; Rhiney, K.

Title

Will COVID-19 be one shock too many for smallholder coffee livelihoods? (Special Section: Pandemics and sustainability.)

Source

World Development (Oxford); 2020. 13631 ref.

Publisher

Elsevier Ltd

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Coffee supports the livelihoods of millions of smallholder farmers in more than 52 countries, and generates billions of dollars in revenue. The threats that COVID-19 pose to the global coffee sector is daunting with profound implications for coffee production. The financial impacts will be long-lived and uneven, and smallholders will be among the hardest hit. We argue that the impacts are rooted in the systemic vulnerability of the coffee production system and the unequal ways the sector is organized: Large revenues from the sale of coffee in the Global North are made possible by mostly impoverished smallholders in the Global South. COVID-19 will accentuate the existing vulnerabilities and create new ones, forcing many smallholders into alternative livelihoods. This outcome, however, is not inevitable. COVID-19 presents an opportunity to rebalance the system that currently creates large profits on one end of the supply chain and great vulnerability on the other.

Publication Type

Journal article.

<447>

Accession Number

20203485453

Author

Zwart, S. R.; Smith, S. M.

Title

Vitamin D and COVID-19: lessons from spaceflight analogs.

Source

Journal of Nutrition; 2020. 150(10):2624-2627. 43 ref.

Publisher

Oxford University Press

Location of Publisher

Cary

Country of Publication

USA

Abstract

This article postulate that vitamin D status may be involved in the severity of the immune response to SARS-CoV-2 infection. Preliminary data show that the mortality rate from COVID-19 is lower in countries proximal to the equator compared with more distal countries. A higher rate of infection and mortality exists among the elderly, and although all ethnic populations are affected, the death rate among African Americans is disproportionately higher than in other populations. One possible explanation for these trends is vitamin D status. The change in serum 25(OH)D response after either a daily 2000-IU or weekly 10,000-IU supplement of vitamin D depended on both BMI and baseline 25(OH)D concentration. In this, and other studies, subjects with a higher BMI had less of a serum 25(OH)D response to supplementation, possibly because of decreased bioavailability of vitamin D in adipose tissue. Additionally, subjects with lower baseline concentrations of vitamin D had a greater elevation of serum 25(OH)D after supplementation. The association between vitamin D and viral reactivation was only present when serum cortisol concentrations were high. These data suggest that higher vitamin D status, along with physical fitness, may help protect against reactivation of latent viruses in high-stress environments, and the amount of vitamin D required to increase serum 25(OH)D depends on BMI and baseline status.

Publication Type

Journal article.

<448>

Accession Number

20203485450

Author

Jorgensen, S. C. J.; Kebriaei, R.; Dresser, L. D.

Title

Remdesivir: review of pharmacology, pre-clinical data, and emerging clinical experience for COVID-19.

Source

Pharmacotherapy; 2020. 40(7):659-671. 41 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

The global pandemic of novel coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has created an urgent need for effective antivirals. Remdesivir (formerly GS-5734) is a nucleoside analogue pro-drug currently being evaluated in COVID-19 clinical trials. Its unique structural features allow high concentrations of the active triphosphate metabolite to be

delivered intracellularly and it evades proofreading to successfully inhibit viral RNA synthesis. In pre-clinical models, remdesivir has demonstrated potent antiviral activity against diverse human and zoonotic beta-coronaviruses, including SARS-CoV-2. In this article, we critically review available data on remdesivir with an emphasis on biochemistry, pharmacology, pharmacokinetics, and in vitro activity against coronaviruses as well as clinical experience and current progress in COVID-19 clinical trials.

Publication Type

Journal article.

<449>

Accession Number

20203486697

Author

Mayasari, N. R.; Ho DangKhanhNgan; Lundy, D. J.; Skalny, A. V.; Tinkov, A. A.; Teng IChun; Wu, M. C.; Faradina, A.; Mohammed, A. Z. M.; Park JiMin; Ngu YiJing; Aline, S.; Shofia, N. M.; Chang JungSu

Title

Impacts of the COVID-19 pandemic on food security and diet-related lifestyle behaviors: an analytical study of Google trends-based query volumes.

Source

Nutrients; 2020. 12(10)28 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

The severe acute respiratory syndrome coronavirus (SARS-CoV)-2 disease (COVID)-19 is having profound effects on the global economy and food trade. Limited data are available on how this pandemic is affecting our dietary and lifestyle-related behaviors at the global level. Google Trends was used to obtain worldwide relative search volumes (RSVs) covering a timeframe from before the COVID-19 pandemic 1 June 2019 to 27 April 2020. Spearman's rank-order correlation coefficients were used to measure relationships between daily confirmed cases and aforementioned RSVs between 31 December 2019 and 15 April 2020. RSV curves showed increased interest in multiple keywords related to dietary and lifestyle behaviors during the COVID-19 lockdown period in March and April 2020. Spearman's correlation analysis showed that the strongest variables in each keyword category were (1) food security (food shortage: $r = 0.749$, food bank: $r = 0.660$, and free food: $r = 0.555$; all $p < 0.001$), (2) dietary behaviors (delivery: $r = 0.780$, restaurant: $r = -0.731$, take-away: $r = 0.731$, and food-delivery: $r = 0.693$; all $p < 0.001$), (3) outdoor-related behaviors (resort: $r = -0.922$,

hotel: $r = -0.913$, cinema: $r = -0.844$, park: $r = -0.827$, fitness: $r = -0.817$, gym: $r = -0.811$; plant: $r = 0.749$, sunbathing: $r = 0.668$, and online: $r = 0.670$; all $p < 0.001$), and (4) immune-related nutrients/herbs/foods (vitamin C: $r = 0.802$, vitamin A: $r = 0.780$, zinc: $r = 0.781$, immune: $r = 0.739$, vitamin E: $r = 0.707$, garlic: $r = 0.667$, omega-3 fatty acid: $r = -0.633$, vitamin D: $r = 0.549$, and turmeric: $r = 0.545$; all $p < 0.001$). Restricted movement has affected peoples' dietary and lifestyle behaviors as people tend to search for immune-boosting nutrients/herbs and have replaced outdoor activities with sedentary indoor behaviors.

Publication Type

Journal article.

<450>

Accession Number

20203489761

Author

Rajon Banik; Mahmudur Rahman; Hossain, M. M.

Title

COVID-19 pandemic and Rohingya refugees in Bangladesh: what are the major concerns?

Source

Global Public Health; 2020. 15(10):1578-1581. 14 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

The COVID-19 pandemic is now a global crisis and the Rohingya refugees in Bangladesh are in the most vulnerable situation. Lack of access to services that are considered critical and life-saving such as food, drinkable water, and shelter, together with limited access to health services are turning an already serious crisis into a major human disaster. Meanwhile, there are concerns that Rohingya refugees are already in too poor health to ward off the COVID-19. Access to the abovementioned facilities and trustworthy information about COVID-19 are amongst their dire needs to combat this pandemic. The humanitarian organisations in collaboration with the Government of Bangladesh should urgently scale up their efforts to provide proper isolation centres, protective equipment, and trained health care representatives to avoid a potential catastrophe. Finally, immediate education intervention is desperately needed to protect the Rohingya refugees from this deadly COVID-19 pandemic.

Publication Type

Journal article.

<451>

Accession Number

20203489751

Author

Nyashanu, M.; Simbanegavi, P.; Gibson, L.

Title

Exploring the impact of COVID-19 pandemic lockdown on informal settlements in Tshwane Gauteng province, South Africa.

Source

Global Public Health; 2020. 15(10):1443-1453. 38 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

Informal settlements remain a public health problem as they lack basic infrastructure. Furthermore, it is challenging to enforce public health regulations and protocols to prevent the spread of infection during a pandemic. This paper was set out to explore the impact of lockdown during COVID-19 among people living in informal settlements. An exploratory qualitative design was utilised. Purposive sampling was used to select research participants. In-depth one-to-one interviews were held involving 30 research participants through a WhatsApp online telephone platform. A thematic approach underpinned by the four stages of data analysis in interpretive phenomenological analysis was utilised to analyse the data. The study found that during the the research participants were affected by lack of space to practice social distancing, overburdened infrastructure, lack of savings, loss of income and shortage of food, hunger and diseases, anxiety and depression and poor access to education. There is a need to prioritise the needs of informal settlers and endeavour to establish permanent homes. Health promotion and communication initiatives and pandemic awareness programmes are needed to mitigate the impact of lockdown during a pandemic in informal settlements.

Publication Type

Journal article.

<452>

Accession Number

20203489750

Author

Gichuna, S.; Hassan, R.; Sanders, T.; Campbell, R.; Mutonyi, M.; Mwangi, P.

Title

Access to healthcare in a time of COVID-19: sex workers in crisis in Nairobi, Kenya.

Source

Global Public Health; 2020. 15(10):1430-1442. 29 ref.

Publisher

Routledge

Location of Publisher

Abingdon

Country of Publication

UK

Abstract

This paper uses empirical data collected from 117 female sex workers living in informal settlements in Nairobi and 15 healthcare providers to highlight specific effects of COVID-19 and related restrictions on healthcare access for the sex workers. We highlight the existing gender and health inequalities that have now been reinforced by the initial outbreak of the COVID-19 pandemic. Specifically, we focus on the most concerning healthcare needs for the sex workers including HIV prevention, care and treatment and sexual and reproductive healthcare. Our study findings reveal that the various restrictions imposed by the government to help curb the spread of COVID-19 to a large extent made it difficult for the sex workers to access their healthcare needs. The paper discusses the challenges of healthcare service delivery reflecting on some innovative and pioneering responses from health care providers to address the emergency situation.

Publication Type

Journal article.

<453>

Accession Number

20203489745

Author

Parnham, J. C.; Lavery, A. A.; Majeed, A.; Vamos, E. P.

Title

Half of children entitled to free school meals did not have access to the scheme during COVID-19 lockdown in the UK.

Source

Public Health; 2020. 187:161-164. 12 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: The objectives of the study were to investigate access to free school meals (FSMs) among eligible children, to describe factors associated with uptake and to investigate whether receiving FSMs was associated with measures of food insecurity in the UK using the Coronavirus (COVID-19) wave of the UK Household Longitudinal Study. **Study design:** The study design was cross-sectional analyses of questionnaire data collected in April 2020. **Methods:** Six hundred and thirty-five children who were FSM eligible with complete data were included in the analytic sample. Accessing a FSM was defined as receiving a FSM voucher or a cooked meal at school. Multivariable logistic regression was used to investigate (i) associations between characteristics and access to FSMs and (ii) associations between access to FSMs and household food insecurity measures. All analyses accounted for survey design and sample weights to ensure representativeness. **Results:** Fifty-one percent of eligible children accessed a FSM. Children in junior schools or above (aged 8+ years) (adjusted odds ratio [AOR]: 11.81; 95% confidence interval [CI]: 5.54, 25.19), who belonged to low-income families (AOR: 4.81; 95% CI: 2.10, 11.03) or still attending schools (AOR: 5.87; 95% CI: 1.70, 20.25) were more likely to receive FSMs. Children in Wales were less likely to access FSMs than those in England (AOR: 0.11; 95% CI: 0.03, 0.43). Receiving a FSM was associated with increased odds of recently using a food bank but not reporting feeling hungry. **Conclusions:** In the month after the COVID-19 lockdown, 49% of eligible children did not receive any form of FSMs. The present analyses highlight that the voucher scheme did not adequately serve children who could not attend school during the lockdown. Moreover, more needs to be done to support families relying on income-related benefits, who still report needing to access a food bank. As the scheme may be continued in summer or in a potential second wave, large improvements will be needed to improve its reach.

Publication Type

Journal article.

<454>

Accession Number

20203489741

Author

Silva, J. A. T. da; Tsigaris, P.

Title

Policy determinants of COVID-19 pandemic-induced fatality rates across nations.

Source

Public Health; 2020. 187:140-142. 10 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: Coronavirus disease 2019 (COVID-19) is the most devastating pandemic to affect humanity in a century. In this article, we assessed tests as a policy instrument and policy enactment to contain COVID-19 and potentially reduce mortalities. Study design: A model was devised to estimate the factors that influenced the death rate across 121 nations and by income group. Results: Nations with a higher proportion of people aged 65+ years had a higher fatality rate ($P = 0.00014$). Delaying policy enactment led to a higher case fatality rate ($P = 0.0013$). A 10% delay time to act resulted in a 3.7% higher case fatality rate. This study found that delaying policies for international travel restrictions, public information campaigns, and testing policies increased the fatality rate. Tests also impacted the case fatality rate, and nations with 10% more cumulative tests per million people showed a 2.8% lower mortality rate. Citizens of nations who can access more destinations without the need to have a prior visa have a significant higher mortality rate than those who need a visa to travel abroad ($P = 0.0040$). Conclusion: Tests, as a surrogate of policy action and earlier policy enactment, matter for saving lives from pandemics as such policies reduce the transmission rate of the pandemic.

Publication Type

Journal article.

<455>

Accession Number

20203489730

Author

Vally, Z.

Title

Public perceptions, anxiety and the perceived efficacy of health-protective behaviours to mitigate the spread of the SARS-CoV-2/COVID-19 pandemic.

Source

Public Health; 2020. 187:67-73. 21 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: Data relating to the novel coronavirus disease 2019 (COVID-19) in the Middle East remains sparse. This study examines the public's perceptions of the pandemic, assesses the extent to which participants have adhered to a range of recommended health-protective behaviours to prevent infection and evaluates whether anxiety about COVID-19 or perceptions related to the pandemic are associated with greater adherence to these behaviours. **Study design:** A cross-sectional, survey-based design was used. Data were collected using an electronic survey distributed to students, staff and faculty at universities in the three major cities of the United Arab Emirates, Abu Dhabi, Al Ain and Dubai, between the 23rd and 31st of April 2020. A total of 634 participants were included in the analysis. **Methods:** Participants reported whether they had adhered to health-protective behaviours such as spatial distancing, increased hygiene and disinfection and diminished time spent outside their homes. They also reported the perceived efficacy of a range of behaviours aimed at reducing risk for contracting COVID-19. Data relating to perception of risk, negative consequences of contracting the disease, perceived longevity of the illness and perceptions of the accuracy of the information read about COVID-19 were collected. Anxiety related to COVID-19 was also assessed, as well as a range of demographic variables. Binary logistic regressions were used to examine whether the demographic variables, perceived efficacy ratings and the perception variables were associated with overall adherence. **Results:** A total of 44.8% of the sample reported adherence to all the examined behaviours. Participants who were employed, those with some or completed postsecondary education and those with a chronic illness diagnosis were more likely to adhere to the precautionary behaviours. The perception of personal risk of infection (odds ratio [OR]: 0.83, 95% confidence interval [CI]: 0.71-0.98), perception of substantial life consequences of becoming infected (OR: 0.87, 95% CI: 0.75-0.10) and the perception that the public health information was clear (OR: 0.69, 95% CI: 0.57-0.83) were all positively related with behavioural adherence. The health-protective behaviours were all perceived as being highly efficacious in combating infection, and these efficacy ratings were also positively associated with greater behavioural adherence (OR: 0.41-0.77). Having read the official government public health information was related to greater behavioural adherence (OR: 0.37, 95% CI: 0.23-0.61). **Conclusions:** Dissemination of reliable public health information during a public health crisis is essential. This study's results highlight the importance of providing the public with information that is clear and consistent and, moreover, emphasises the efficacy of the recommended behaviours as this is likely to improve adherence. When individuals perceive themselves to be at personal risk and are aware of the severity of the consequences posed by the illness, they are more likely to adopt caution. However, in this sample, the trustworthiness of the information portrayed in the media and the perceived duration of the pandemic - whether this would resolve soon or persist well into the future - did not impact adherence.

Publication Type

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

Journal article.

<456>

Accession Number

20203489709

Author

Rajani Suresh; James, J.; Balraju, R. S. J.

Title

Migrant workers at crossroads-the COVID-19 pandemic and the migrant experience in India. (Special Issue: COVID-19: social work's response to the global pandemic.)

Source

Social Work in Public Health; 2020. 35(7):633-643. 40 ref.

Publisher

Routledge

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

The social and economic crisis induced by Covid-19 in low- and middle-income countries could be long, deep, and pervasive, especially when viewed through the lens of migrant workers. Migrant workers in India tend to live and work in megacities in crowded conditions that do not permit social distancing, putting them at an increased risk of contracting the disease. Migrant workers here face challenges accessing health care even in normal circumstances due to lack of health insurance, cost, administrative hurdles, lack of public health infrastructure, and lack of access to these facilities. The sudden lockdown due to Covid left lakhs of migrant workers in India stranded and on the road, having lost jobs and being left without income, food, and accommodation. Lakhs attempted to travel back home on foot only to be shuttled into shelters and relief camps hastily cobbled up as a last-minute response to the migrant crisis. This article analyzes the specific ways in which Indian migrant workers have been affected by the pandemic and examines the response of the government and its impact in mitigating and addressing the crisis. By doing so, it aims to provide insights for more comprehensive, inclusive, and effective migrant policies and operations involving multiple stakeholders at all levels.

Publication Type

Journal article.

<457>

Accession Number

20203489707

Author

Ozmete, E.; Pak, M.

Title

The relationship between anxiety levels and perceived social support during the pandemic of COVID-19 in Turkey. (Special Issue: COVID-19: social work's response to the global pandemic.)

Source

Social Work in Public Health; 2020. 35(7):603-616. 42 ref.

Publisher

Routledge

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

The uncertainty which is threatening and stressful prevents a person's perception of control and leads to maladaptive psychological reactions such as anxiety. We aimed to define the relationship between the state/trait anxiety levels and perceived social support in the COVID-19 pandemic as a global crisis and stressor. Our main hypothesis was that perceived social support would negatively affect the levels of anxiety. A cross-sectional community-based study was carried out using the relational screening model. The data were collected between March 20 and April 15, 2020, by using an online survey (N=630). Anxiety levels of individuals, particularly the state anxiety were high during the pandemic. Also, perceived social support and state/trait anxiety levels were analyzed for various variable categories. Anxiety levels decreased significantly when perceived social support increased. Perceived social support as a determinant of state and trait anxiety should be the focus of social work practices in this period.

Publication Type

Journal article.

<458>

Accession Number

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF

T: +44 (0) 20 7202 0752

E: library@rcvsknowledge.org

www.rcvsknowledge.org

20203489705

Author

Budak, F.; Bostan, S.

Title

The effects of COVID-19 pandemic on Syrian refugees in turkey: the case of Kilis. (Special Issue: COVID-19: social work's response to the global pandemic.)

Source

Social Work in Public Health; 2020. 35(7):579-589. 18 ref.

Publisher

Routledge

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

The objective of this study; is to find out the sensitivity, the concern that are created by the Covid-19 pandemic on the Syrian refugees, who live in Kilis province of Turkey and have different life standards and status and to find out their possibilities and attitudes of prevention from and combating the pandemic. The data of the study were collected between 12-16 April 2020 by applying a questionnaire on 414 refugees. According to the study results, it has been discovered that the refugees have concerns about Covid-19 and their insensitivity levels are low. It has been seen that there is a group who are not aware of the seriousness of the pandemic, who do not have enough information about the pandemic and cannot reach personal protective equipment (such as masks, gloves). In general, in the fight against pandemic; the levels of refugees' following the rules and their finding the decisions taken and implemented proper, can be defined as close to each other and good.

Publication Type

Journal article.

<459>

Accession Number

20203489704

Author

Yousaf, M. A.; Misbah Noreen; Tayyaba Saleem; Iram Yousaf

Title

A cross-sectional survey of knowledge, attitude, and practices (KAP) toward pandemic COVID-19 among the general population of Jammu and Kashmir, India. (Special Issue: COVID-19: social work's response to the global pandemic.)

Source

Social Work in Public Health; 2020. 35(7):569-578. 17 ref.

Publisher

Routledge

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

Awareness and comprehension of disease origin, transmission, and control in a health crisis are mainly affected by the knowledge, attitude, and practices (KAP) of the general public. We conducted the current study to assess KAP among the general population of Jammu and Kashmir (J&K), India, based on an online cross-sectional survey. Participants completed a questionnaire we developed consisting of KAP questions. We also collected sociodemographic information and source of information about disease awareness. The main source of information regarding COVID-19 was Internet social media (66.3%) followed by TV (17.4%). We conducted nonparametric analyses on KAP scores using a Mann-Whitney U and Kruskal-Wallis H tests ($P < .05$) to find out the association with sociodemographic characteristics. The overall knowledge score (correct answer) was 88.9%, which was significantly associated with gender, age, qualification, and occupation. The positive attitude score was 73.3%, which was significantly associated with gender, age, qualification, marital status, and geographic area. Overall, 93.0% positive practices were observed in the general population based on asked questions. These scores were significantly associated with gender, age, qualification, marital status, area, and occupation. On the basis of the Spearman correlation test ($P < .01$), a significant correlation was observed between scores of knowledge and attitude, with $r_s = +0.28$, $P = .000$, knowledge and practices scores as $r_s = +0.24$, $P = .000$, and attitude and practices scores as $r_s = +0.24$, $P = .000$. However, due to the limited sample presentation in the survey, the study is unable to generalize to lower socioeconomic communities.

Publication Type

Journal article.

<460>

Accession Number

20203489702

Author

Al-Rasheed, M.

Title

RCVS Knowledge is a registered Charity No. 230886. Registered as a Company limited by guarantee in England and Wales No. 598443
Belgravia House 62 – 64 Horseferry Road London SW1P 2AF
T: +44 (0) 20 7202 0752
E: library@rcvsknowledge.org
www.rcvsknowledge.org

Protective behavior against COVID-19 among the public in Kuwait: an examination of the protection motivation theory, trust in government, and sociodemographic factors. (Special Issue: COVID-19: social work's response to the global pandemic.)

Source

Social Work in Public Health; 2020. 35(7):546-556. 29 ref.

Publisher

Routledge

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

With the COVID-19 pandemic threatening millions of lives around the world with no clear promises for treatment or vaccine yet, motivating the public to change their behaviors to prevent the spread of the disease becomes crucial and moral imperative. The current study investigated the associations between self-reported intentions to perform protective behaviors against COVID-19, the seven constructs of the Protection Motivation Theory PMT, trust in government, and sociodemographic factors within the general population in Kuwait. A cross-sectional design was adapted to explore the associations between study factors in a nonprobability voluntary response sample of 679 participants who completed an online public survey. Results indicate that the scores of trust in government and the severity, vulnerability, response efficacy, and self-efficacy subconstructs of the PMT were positively related to protective behavior intention, whereas intrinsic and extrinsic reward and response cost subconstructs were negatively associated with protective behavior intention. The results were discussed considering previous literature and future applications.

Publication Type

Journal article.

<461>

Accession Number

20203489700

Author

Adams, R. D.; Tyson, C. A.

Title

"there is a balm in gilead": black social workers' spiritual counterstory on the COVID-19 crisis. (Special Issue: COVID-19: social work's response to the global pandemic.)

Source

Social Work in Public Health; 2020. 35(7):523-532. 102 ref.

Publisher

Routledge

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

The authors assert that art-based inquiry can serve as a powerful medium for understanding the connection between faith and resilience as perceived and understood by older African-Americans adults disproportionately affected by the COVID-19 pandemic. Utilizing the CRT method of counterstorytelling as our conduit to elucidate our culturally situated responses to the COVID-19 pandemic. We seek to explore the connections between faith and resilience in social work practice during this public health crisis. Drawing from our shared experiences as two Black social workers we discuss the role spirituality plays in mitigating loneliness and stress among socially isolated older African-American adults (i.e., social distancing). Finally, with physical contact limited (i.e., social distancing) because of COVID-19, implications and recommendations for using spiritualbased practices with older African-American adults and families are discussed.

Publication Type

Journal article.

<462>

Accession Number

20203485903

Author

Romagnoli, S.; Adriano, P.; Gaudio, A. R. de; Geppetti Pierangelo

Title

SARS-CoV-2 and COVID-19: from the bench to the bedside.

Source

Physiological Reviews; 2020. 100(4):1455-1466.

Publisher

American Physiological Society

Location of Publisher

Bethesda

Country of Publication

USA

Abstract

First isolated in China in early 2020, Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) is the novel coronavirus responsible for the ongoing pandemic of Coronavirus Disease 2019 (COVID-19). The disease has been spreading rapidly across the globe, with the largest burden falling on China, Europe, and the United States. COVID-19 is a new clinical syndrome, characterized by respiratory symptoms with varying degrees of severity, from mild upper respiratory illness to severe interstitial pneumonia and acute respiratory distress syndrome, aggravated by thrombosis in the pulmonary microcirculation. Three main phases of disease progression have been proposed for COVID-19: an early infection phase, a pulmonary phase, and a hyperinflammation phase. Although current understanding of COVID-19 treatment is mainly derived from small uncontrolled trials that are affected by a number of biases, strong background noise, and a litany of confounding factors, emerging awareness suggests that drugs currently used to treat COVID-19 (antiviral drugs, antimalarial drugs, immunomodulators, anticoagulants, and antibodies) should be evaluated in relation to the pathophysiology of disease progression. Drawing upon the dramatic experiences taking place in Italy and around the world, here we review the changes in the evolution of the disease and focus on current treatment uncertainties and promising new therapies.

Publication Type

Journal article.

<463>

Accession Number

20203436734

Author

Henry, R.

Title

Innovations in agriculture and food supply in response to the COVID-19 pandemic.

Source

Molecular Plant; 2020. 13(8):1095-1097. 15 ref.

Publisher

Cell Press

Location of Publisher

Cambridge

Country of Publication

USA

Abstract

This article examines the impact of the COVID-19 pandemic on food demand and supply as well as on agricultural research. It also looks at changes in agriculture and food production, resulting from many responses to the pandemic, which may persist in the longer term.

Publication Type

Journal article.

<464>

Accession Number

20203432964

Author

Du HongZhi; Hou XiaoYing; Miao YuHuan; Huang BiSheng; Liu DaHui

Title

Traditional Chinese Medicine: an effective treatment for 2019 novel coronavirus pneumonia (ncp).

Source

Chinese Journal of Natural Medicines; 2020. 18(3):206-210. 22 ref.

Publisher

Science Press

Location of Publisher

Beijing

Country of Publication

China

Abstract

The novel coronavirus pneumonia broke out in 2019 and spread rapidly. In 30 different countries, there are over seventy thousand patients have been diagnosed in total. Therefore, it is urgent to develop the effective program to prevent and treat for the novel coronavirus pneumonia. In view of Traditional Chinese Medicine has accumulated a solid theoretical foundation of plague in ancient and recent decades. Meanwhile, Traditional Chinese Medicine can provide the more effective and personalized treatment via adjusting the specific medicine for each patient based on the different syndromes. In addition, TCM often has different effect on the distinct stages of diseases, contributing to the prevention, treatment and rehabilitation. Nowadays, TCM has exhibited decent effect in the in the fight against NCP. Therefore, it is convinced that Traditional Chinese Medicine is an effective treatment for 2019 novel coronavirus pneumonia.

Publication Type

Journal article.

<465>

Accession Number

20203464293

Author

Torun, F.; Torun, S. D.

Title

The psychological impact of the COVID-19 pandemic on medical students in Turkey.

Source

Pakistan Journal of Medical Sciences; 2020. 36(6):1355-1359. 12 ref.

Publisher

Professional Medical Publications

Location of Publisher

Karachi

Country of Publication

Pakistan

Abstract

Objective: We aimed to investigate the knowledge of medical students about COVID-19, the effects of the traumatic situation they experienced, the stress they perceived and the factors affecting them. In addition, we aimed to learn the thoughts of the students about the virus due to the uncertainties. **Methods:** The study was carried out online between April 30, May 5, 2020 with a questionnaire prepared with googleforms. For the study, all students studying at the Faculty of Medicine of Istanbul Yeni Yuzyil University were called through class representatives and WhatsApp class groups. The questionnaire included sociodemographic information, knowledge and sources of information about the disease, to agreement degree the proposition whether covid 19 is produced as a biological weapon. The Perceived Stress Scale (PSS) and Impact of Events Scale-Revised (IES-R) were applied. **Results:** The total number of participants was 275 students. No student was infected with COVID-19 at the time of the survey. The presence of chronic disease in the participants was found to be a factor that increased anxiety ($p = 0.01$). Majority of participants (60.40%) stated that they agree with COVID-19 is a biological weapon. The mean scores of women 's total PSS and IES-R were higher than men. It was found that the families of the students had a lower monthly income than the minimum monthly wage is increasing the anxiety about getting COVID-19 infection and perceived stress. Onethird of the students reported that sleep and appetite were impaired than the before pandemic. The announcements and website of Ministry of Health and the social media was the main source of information of the participants. **Conclusions:** It was found that medical students were highly worried about being infected with COVID-19. The scores obtained from the pre-clinic students' anxiety to become infected with COVID-19, PSS and IES-R total scores were found to be significantly higher than their clinical students.

Publication Type

Journal article.

<466>

Accession Number

20203496087

Author

Xie Lin; Luo Hong; Li Mei; Ge WenJie; Xing BingYu; Miao QunFang

Title

The immediate psychological effects of Coronavirus Disease 2019 on medical and non-medical students in China.

Source

International Journal of Public Health; 2020. 65(8):1445-1453. 24 ref.

Publisher

Springer

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Objectives: To investigate the immediate psychological effects of Coronavirus Disease 2019 (COVID-19) on medical and non-medical students. **Methods:** An online survey of 805 medical students and 1900 non-medical students was conducted from Feb 4, 2020 to Feb 7, 2020, in China. The questionnaire measured the subjective estimated severity of COVID-19, the impact of the outbreak, and the levels of anxiety and depression of both medical and non-medical students. **Results:** Medical students estimated COVID-19 to be more serious and disastrous than non-medical students, while they scored lower than non-medical students on the Impact of Event Scale-Revised (IES-R), and less severe anxiety and depression than non-medical students. The students experienced greater impact from the outbreak and a higher rate of anxiety and depression with increased time focusing on the outbreak. The difference in psychological effects between medical and non-medical students was further enlarged when focusing time was prolonged. **Conclusions:** The immediate psychological effects of COVID-19 on medical and non-medical students exhibit different characteristics. The outcome of this study provides implication that providing accurate and transparent information about the epidemic and appropriate COVID-19-based knowledge in accessible ways will contribute to the public's mental health during the outbreak.

Publication Type

Journal article.

<467>

Accession Number

20203495357

Author

Leo, P. C. de; Huynh, C.; Pattanayek, M.; Schmid, K. C.; Pechacek, N.

Title

Assessment of ecological hazards and environmental fate of disinfectant quaternary ammonium compounds.

Source

Ecotoxicology and Environmental Safety; 2020. 206many ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Disinfectant quaternary ammonium compounds (Quats) have diverse uses in a variety of consumer and commercial products, particularly cleaning products. With the emergence of the COVID-19 pandemic, they have become a primary tool to inactivate the SARS-CoV-2 virus on surfaces. Disinfectant Quats have very low vapor pressure, and following the use phase of the products in which they are found, disposal is typically "down-the-drain" to wastewater treatment systems. Consequently, the potential for the greatest environmental effect is to the aquatic environment, from treated effluent, and potentially to soils, which might be amended with wastewater biosolids. Among the earliest used and still common disinfectant Quats are the alkyl dimethyl benzyl ammonium chloride (ADBAC) compounds and the dialkyl dimethyl ammonium chloride (DDAC) compounds. They are cationic surfactants often found in consumer and commercial surface cleaners. Because of their biocidal properties, disinfectant Quats are heavily regulated for human and environmental safety around the world. Consequently, there is a robust database of information regarding the ecological hazards and environmental fate of ADBAC and DDAC; however, some of the data presented are from unpublished studies that have been submitted to and reviewed by regulatory agencies (i.e., EPA and European Chemicals Agency) to support antimicrobial product registration. We summarize the available environmental fate data and the acute and chronic aquatic ecotoxicity data for freshwater species, including algae, invertebrates, fish, and plants using peer-reviewed literature and unpublished data submitted to and summarized by regulatory agencies. The lower limit of the range of the ecotoxicity data for disinfectant Quats tends to be lower than that for other surface active agents, such as nonionic or anionic surfactants. However, ecotoxicity is mitigated by environmental fate characteristics, the data for which we also summarize, including high biodegradability and a strong tendency to sorb to wastewater biosolids, sediment, and soil. As a result, disinfectant Quats are largely removed during wastewater treatment, and those residues discharged in treated effluent are likely to rapidly bind to suspended solids or sediments, thus mitigating their toxicity.

Publication Type

Journal article.

<468>

Accession Number

20203492229

Author

Loss, S. H.; Nunes, D. L.; Franzosi, O. S.; Teixeira, C.

Title

A pragmatic approach and treatment of coronavirus disease 2019 (COVID-19) in intensive care unit.

Source

Revista da Associacao Medica Brasileira; 2020. 66(8):1157-1163. 63 ref.

Publisher

Associacao Medica Brasileira

Location of Publisher

São Paulo

Country of Publication

Brazil

Abstract

There is a new global pandemic that emerged in China in 2019 that is threatening different populations with severe acute respiratory failure. The disease has enormous potential for transmissibility and requires drastic governmental measures, guided by social distancing and the use of protective devices (gloves, masks, and facial shields). Once the need for admission to the ICU is characterized, a set of essentially supportive therapies are adopted in order to offer multi-organic support and allow time for healing. Typically, patients who require ventilatory support have bilateral infiltrates in the chest X-ray and chest computed tomography showing ground-glass pulmonary opacities and subsegmental consolidations. Invasive ventilatory support should not be postponed in a scenario of intense ventilatory distress. The treatment is, in essence, supportive.

Publication Type

Journal article.

<469>

Accession Number

20203492209

Author

Ma Qian; Yang ZhiHua; Zhu Feng; Chen HaoJia; Yang HaoLin; Wang ShuPing

Title

The effect of Baduanjin exercise on the quality of life in patients recovering from COVID-19: a protocol for systematic review and meta-analysis.

Source

Medicine (Baltimore); 2020. 99(37)16 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background: Since the outbreak of COVID-19, the number of COVID-19 patients has been on the rise. With the improvement of diagnosis and treatment level in various countries, more and more patients have recovered. Baduanjin exercise is a traditional Chinese health care method with a long history, easy-to-learn, and remarkable effect. It is not subject to the constraints of the field and can be practiced at any time. It can be used as an alternative therapy for COVID-19 rehabilitation patients. At present, there are no relevant articles for systematic review. Methods: We will retrieve a randomized controlled trial of Baduanjin exercise for COVID-19 from the beginning to July 2020. The following databases are areas of concern: Published randomized Cochrane Central Register of Controlled Trials (Central), PubMed, EMBASE, Web of Science, China National Knowledge Infrastructure, Chinese Biomedical Literature Database, and Wan-fang Database-controlled trials in Chinese and English related to Baduanjin exercise and COVID-19 were included. The main result was the effect of Baduanjin exercise on the quality of life in patients recovering from COVID-19. Secondary results to accompany symptoms (such as muscle pain, cough, sputum, runny nose, sore throat, chest tightness, shortness of breath, difficulty breathing, fatigue, headache, nausea, vomiting, anorexia, diarrhea), disappearance rate, 2 consecutive (not on the same day) COVID-19 negative rate of nucleic acid test results, the quality of life improved, improve CT images, the average hospitalization time, severe form of common clinical cure rate and mortality. Results: The results of this study will provide researchers in the field of COVID-19 with a current synthesis of high-quality evidence. Conclusion: The conclusion of this study will provide evidence for judging whether Baduanjin exercise is an effective intervention for the quality of life of rehabilitative patients.

Publication Type

Journal article.

<470>

Accession Number

20203492206

Author

Yan Huan; Ouyang YongHong; Wang Lang; Luo XiangJun; Zhan Qian

Title

Effect of respiratory rehabilitation training on elderly patients with COVID-19: a protocol for systematic review and meta-analysis.

Source

Medicine (Baltimore); 2020. 99(37)24 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background: Patients with the Corona Virus Disease 2019 (COVID-19) often see their respiratory, physical, and psychological functions impaired to varying degrees, especially for the elderly patients. Timely respiratory rehabilitation intervention for such patients may improve their prognoses. However, its relative effectiveness has not been proved. Therefore, this study is purposed to determine the effect of respiratory rehabilitation on elderly patients with COVID-19. Methods: This study will search the following electronic databases: Embase, MEDLINE, PubMed, Cochrane Library, China national knowledge infrastructure database, Wan Fang database, Chinese Science and Technology Periodical Database, and Chinese Biomedical Literature Database, with the retrieval period running from their inception to August 2020. All randomized controlled trials of respiratory rehabilitation training on elderly patients with COVID-19 are collected, and the data are selected and extracted independently according to the pre-designed inclusion/exclusion criteria. Cochrane bias risk assessment tool is used to evaluate the method quality and bias risk. All data analyses will be implemented by using Revman5.3 and Stata14 software. Results: This study will make a high-quality and comprehensive evaluation of the efficacy of respiratory rehabilitation training on elderly patients with COVID-19. Conclusion: The conclusions of this systematic review will deliver more convincing evidence. Ethics and dissemination: The private information collected from individuals will not be published. And this systematic review will also not involve impairing the participants' rights. Ethical approval is not required. The results may be published in a peer-reviewed journal or disseminated in relevant conferences.

Publication Type

Journal article.

<471>

Accession Number

20203492204

Author

Liu Yan; Fu XiaoXu; Xie ChunGuang

Title

Efficacy and safety of chloroquine and hydroxychloroquine in the treatment of patients with COVID-19 combined with diabetes mellitus a protocol for systematic review and meta-analysis.

Source

Medicine (Baltimore); 2020. 99(37)24 ref.

Publisher

Lippincott Williams & Wilkins, Inc.

Location of Publisher

Hagerstown

Country of Publication

USA

Abstract

Background: Diabetes is a common chronic metabolic disease. COVID-19 is a large-scale infectious disease that broke out in 2019, and 212 countries have now been infected with this infectious disease. Some studies have shown that COVID-19 combined with diabetes is an independent risk factor for death or other adverse outcomes. There is currently no specific and effective drug treatment. More and more people have realized that the low-cost CQ and its derivative HCQ have antiviral and anti-inflammatory capabilities and may play a huge role in the fight against COVID-19. At the same time, HCQ can be used as an oral hypoglycemic agent and has the effect of lowering blood glucose. However, there is no evidence-based medicine to confirm the effectiveness and safety of CQ and HCQ in the treatment of COVID-19 patients with diabetes. Therefore, we will conduct a systematic review and meta-analysis to synthesize the existing clinical evidences. Methods and analysis: Chinese literature comes from CNKI, Wanfang, VIP, CBM databases. English literature mainly searches Cochrane Library, PubMed, Web of Science, EMBASE. We will retrieve each database from December 2019 to August 2020. At the same time, we will look for clinical trial registration and gray literature. This study only included clinical randomized controlled trials. The reviewers independently conduct literature selection, data analysis, quality analysis, and evaluation. The primary outcomes include Sputum virus nucleic acid negative time, lung imaging improvement time, mortality rate, mechanical ventilation rate, ICU hospitalization time, hospitalization time, clinical improvement, symptoms Improvement, fasting blood glucose, 2-hour postprandial blood glucose, glycosylated hemoglobin, fasting insulin, adverse reactions, etc. Finally, we will conducted a meta-analysis through Review Manager Software version 5.3. Results: The results will be published in peer-reviewed journals and presented at a relevant conference. Conclusion: This study will explore the effectiveness and safety of CQ and HCQ in the treatment of COVID-19 patients with diabetes. It will provide evidence-based medical evidence for CQ and HCQ in the treatment of diabetes with COVID-19.

Publication Type

Journal article.

<472>

Accession Number

20203493483

Author

Tempe, D. K.; Khilnani, G. C.; Passey, J. C.; Sherwal, B. L.

Title

Challenges in preparing and managing the critical care services for a large urban area during COVID-19 outbreak: perspective from Delhi.

Source

Journal of Cardiothoracic and Vascular Anesthesia; 2020. 34(10):2586-2594. 11 ref.

Publisher

Elsevier Inc.

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

The coronavirus disease-2019 (COVID-19) pandemic has put healthcare services all over the world into a challenging situation. The contagious nature of the disease and the respiratory failure necessitating ventilatory care of these patients have put extra burden on intensive care unit (ICU) services. India has been no exception; by March 2020, the number of COVID-19 patients started increasing in India. This article describes the measures taken and challenges faced in creating ample ICU bed capacity to cater to the anticipated load of patients in the state of Delhi, India, as a result of the COVID-19 pandemic. The main challenges faced, among others, were estimating the number of ICU beds to be created; deciding on dedicated hospitals to treat COVID-19 patients; procuring ventilators, personal protective equipment, and other related material; mobilizing human resources and providing their training; and providing isolated in-house accommodations to the staff on duty. The authors acknowledge and agree that the methodology proposed in this article is but one way of approaching this difficult scenario and that there could be other, perhaps better, methods of dealing with such a problem.

Publication Type

Journal article.

<473>

Accession Number

20203490385

Author

Xiang JianBang; Austin, E.; Gould, T.; Larson, T.; Shirai, J.; Liu YiSi; Marshall, J.; Seto, E.

Title

Impacts of the COVID-19 responses on traffic-related air pollution in a northwestern US city.

Source

Science of the Total Environment; 2020. 74739 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This study evaluates the COVID-19 impacts on traffic-related air pollution, including ultrafine particles (UFPs), PM_{2.5}, black carbon (BC), NO, NO₂, NO_x, and CO in a Northwestern US city. Hourly traffic, air pollutants, and meteorological data on/near a major freeway in the downtown of Seattle, Washington, were collected for five weeks before and ten weeks after the Washington Stay Home Order (SHO) was enacted, respectively (February 17-May 31, 2020). The pollutants between pre- and post-SHO periods were compared, and their differences were statistically tested. Besides, first-order multivariate autoregressive (MAR(1)) models were developed to reveal the impacts specific to the change of traffic due to the COVID-19 responses while controlling for meteorological conditions. Results indicate that compared with those in the post-SHO period, the median traffic volume and road occupancy decreased by 37% and 52%, respectively. As for pollutants, the median BC and PM_{2.5} levels significantly decreased by 25% and 33%, relatively, while NO, NO₂, NO_x, and CO decreased by 33%, 29%, 30%, and 17%, respectively. In contrast, neither size-resolved UFPs nor total UFPs showed significant changes between the two periods, although larger particles (≥ 115.5 nm) decreased by 4-29%. Additionally, significant differences were found in meteorological conditions between the two periods. Based on the MAR(1) models, controlling for meteorological conditions, the COVID-19 responses were associated with significant decreases in median levels of traffic-related pollutants including 11.5-154.0 nm particles (ranging from -3% [95% confidence interval (CI): -1%, -4%] to -12% [95% CI: -10%, -14%]), total UFPs (-7% [95% CI: -5%, -8%]), BC (-6% [95% CI: -5%, -7%]), PM_{2.5} (-2% [95% CI: -1%, -3%]), NO, NO₂, NO_x (ranging from -3% [95% CI: -2%, -4%] to -10% [95% CI: -18%, -12%]), and CO (-4% [95% CI, -3%, -5%]). These findings illustrate that the conclusion of the COVID-19 impacts on urban traffic-related air pollutant levels could be completely different in scenarios whether meteorology was adjusted for or not. Fully adjusting for meteorology, this study shows that the COVID-19 responses were associated with much more reductions in traffic-related UFPs than PM_{2.5} in the Seattle region, in contrast to the reverse trend from the direct empirical data comparison.

Publication Type

Journal article.

<474>

Accession Number

20203490362

Author

Hospers, L.; Smallcombe, J. W.; Morris, N. B.; Capon, A.; Jay, O.

Title

Electric fans: a potential stay-at-home cooling strategy during the COVID-19 pandemic this summer?

Source

Science of the Total Environment; 2020. 747many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Current public health guidance designed to protect individuals against extreme heat and the ongoing COVID-19 pandemic is seemingly discordant, yet during the northern hemisphere summer, we are faced with the imminent threat of their simultaneous existence. Here we examine the environmental limits of electric fan-use in the context of the United States summer as a potential stay-at-home cooling strategy that aligns with existing efforts to mitigate the spread of SARS-COV-2.

Publication Type

Journal article.

<475>

Accession Number

20203490348

Author

Lu DingNan; Huang ZhuangRong; Luo JiaYue; Zhang XiaoQi; Sha Sha

Title

Primary concentration - the critical step in implementing the wastewater based epidemiology for the COVID-19 pandemic: a mini-review.

Source

Science of the Total Environment; 2020. 747many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The recent outbreak of a novel coronavirus SARS-CoV-2 has posed a significant global public health threat and caused dramatic social and economic disruptions. A new research direction is attracting a significant amount of attention in the academic community of environmental sciences and engineering, in which rapid community-level monitoring could be achieved by applying the methodology of wastewater based epidemiology (WBE). Given the fact that the development of a mass balance on the total number of viral RNA copies in wastewater samples and the infected stool specimens is the heart of WBE, the result of the quantitative RNA detection in wastewater has to be highly sensitive, accurate, and reliable. Thus, applying effective concentration methods before the subsequent RNA extraction and RT-qPCR detection is a must-have procedure for the WBE. This review provides new insights into the primary concentration methods that have been adopted by the eighteen recently reported COVID-19 wastewater detection studies, along with a brief discussion of the mechanisms of the most commonly used virus concentration methods, including the PEG-based separation, electrostatically charged membrane filtration, and ultrafiltration. In the end, two easy and well-proven concentration strategies are recommended as below, aiming to maximize the practical significance and operational effectiveness of the SARS-CoV-2 virus concentration from wastewater samples. Strategy1: Prefiltration-Salt addition-Electronegative membrane filtration (for initial volume ≤ 50 mL). Strategy2: Prefiltration-PEG-based separation-Overnight standing (for initial volume from 50 to 1000 mL).

Publication Type

Journal article.

<476>

Accession Number

20203490300

Author

Filardo, S.; Pietro, M. di; Mastromarino, P.; Sessa, R.

Title

Therapeutic potential of resveratrol against emerging respiratory viral infections.

Source

Pharmacology and Therapeutics; 2020. 214many ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Resveratrol has been widely studied for its therapeutic potential due to its antioxidant, anti-inflammatory and anti-microbial properties. In particular, resveratrol has shown promising antiviral activity against numerous viruses responsible for severe respiratory infections. Amongst these, influenza virus, respiratory syncytial virus and the emerging SARS-cov-2 are known to cause pneumonia, acute respiratory distress syndrome or multi-organ failure, especially, in vulnerable individuals like immunocompromised patients or the elderly, leading to a considerable economic burden worldwide. In this context, resveratrol may have potential value for its anti-inflammatory activity, since most of the severe virus-associated complications are related to the overactivation of the host-immune response, leading to lung damage. Herein, we present an overview of the antiviral activity and potential mechanisms of resveratrol against the respiratory tract viruses considered as a public threat for their rapid transmission and high morbidity and mortality in the general population.

Publication Type

Journal article.

<477>

Accession Number

20203494611

Author

Hassan, M. M.; Kalam, M. A.; Mahabub Alam; Shahanaj Shano; Al-Faruq, A.; Hossain, M. S.; Islam, M. N.; Khan, S. A.; Islam, A.

Title

Understanding the community perceptions and knowledge of bats and transmission of Nipah virus in Bangladesh.

Source

Animals; 2020. 10(10)55 ref.

Publisher

MDPI AG

Location of Publisher

Basel

Country of Publication

Switzerland

Abstract

Bats are known reservoirs of Nipah virus (NiV) and some filoviruses and also appear likely to harbor the evolutionary progenitors of severe acute respiratory syndrome coronavirus (SARS-CoV), severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), and Middle East respiratory syndrome coronavirus (MERS-CoV). While bats are considered a reservoir of deadly viruses, little is known about people's knowledge, attitudes, and perceptions of bat conservation and ecology. The current study aimed to assess community people's knowledge, attitudes, and perceptions of bat ecology, myths, and the role of bats in transmitting NiV in Bangladesh. Since 2001, NiV has been a continuous threat to public health with a mortality rate of approximately 70% in Bangladesh. Over the years, many public health interventions have been implemented to raise awareness about bats and the spreading of NiV among the community peoples of Nipah outbreak areas (NOAs) and Nipah non-outbreak areas (NNOAs). We hypothesized that people from both areas might have similar knowledge of bat ecology and myths about bats but different knowledge regarding their role in the spreading of NiV. Using a four-point Likert scale-based questionnaire, our analysis showed that most people lack adequate knowledge regarding the role of bats in maintaining the ecological balance and instead trust their beliefs in different myths about bats. Factor score analysis showed that respondents' gender ($p = 0.01$), the outbreak status of the area ($p = 0.03$), and their occupation ($p = 0.04$) were significant factors influencing their knowledge of bat ecology and myths. A regression analysis showed that farmers had 0.34 times the odds of having correct or positive knowledge of bat ecology and myths than businesspersons (odds ratio (OR) = 0.34, 95% confidence interval (95% CI) = 0.15-0.78, $p = 0.01$). Regarding the spreading of NiV via bats, people had a lower level of knowledge. In NOAs, age ($p = 0.00$), occupation ($p = 0.00$), and level of education ($p = 0.00$) were found to be factors contributing to the amount of knowledge regarding the transmission of NiV, whereas in NNOAs, the contributing factors were occupation ($p = 0.00$) and level of education ($p = 0.01$). Regression analysis revealed that respondents who were engaged in services (OR = 3.02, 95% CI = 1.07-8.54, $p = 0.04$) and who had completed primary education (OR = 3.06, 95% CI = 1.02-9.17, $p < 0.05$) were likely to have correct knowledge regarding the spreading of NiV. Based on the study results, we recommend educational interventions for targeted groups in the community, highlighting the ecosystem services and conservation of bats so as to improve people's current knowledge and subsequent behavior regarding the role of bats in ecology and the spreading of NiV in Bangladesh.

Publication Type

Journal article.

<478>

Accession Number

20203493963

Author

Joshi, M. G.; Jeevitaa Kshersagar; Desai, S. R.; Shimpa Sharma

Title

Antiviral properties of placental growth factors: a novel therapeutic approach for COVID-19 treatment.

Source

Placenta; 2020. 99:117-130. 158 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

The current challenge of the COVID-19 pandemic is complicated by the limited therapeutic options against the virus, with many being anecdotal or still undergoing confirmatory trials, underlining the urgent need for novel strategies targeting the virus. The pulmotropic virus causes loss of oxygenation in severe cases with acute respiratory distress syndrome (ARDS) and need for mechanical ventilation. This work seeks to introduce placental extract-derived biologically active components as a therapeutic option and highlights their mechanism of action relevant to COVID-19 virus. Human placenta has been used in clinical practice for over a century and there is substantial experience in clinical applications of placental extract for different indications. Aqueous extract of human placenta contains growth factors, cytokines/chemokines, natural metabolic and other compounds, anti-oxidants, amino acids, vitamins, trace elements and biomolecules, which individually or in combination show accelerated cellular metabolism, immunomodulatory and anti-inflammatory effects, cellular proliferation and stimulation of tissue regeneration processes. Placental extract treatment is proposed as a suitable therapeutic approach considering the above properties which could protect against initial viral entry and acute inflammation of alveolar epithelial cells, reconstitute pulmonary microenvironment and regenerate the lung. We reviewed useful therapeutic information of placental biomolecules in relation to COVID-19 treatment. We propose the new approach of using placental growth factors, chemokines and cytokine which will execute antiviral activity in coordination with innate and humoral immunity and improve patient's immunological responses to COVID-19. Executing a clinical trial using placental extract as preventive, protective and/or therapeutic approach for COVID-19 treatment could advance the development of a most promising therapeutic candidate that can join the armamentaria against the COVID-19 virus.

Publication Type

Journal article.

<479>

Accession Number

20203493958

Author

Xu JiaSu; Wang Jin; Zhong ZeCheng; Su XiaoSong; Yang KunYu; Chen ZhongFu; Zhang DongXu; Li TingDong; Wang YingBin; Zhang ShiYin; Ge ShengXiang; Zhang Jun; Xia NingShao

Title

Room-temperature-storable PCR mixes for SARS-CoV-2 detection.

Source

Clinical Biochemistry; 2020. 84:73-78. 24 ref.

Publisher

Elsevier

Location of Publisher

Amsterdam

Country of Publication

Netherlands

Abstract

Objectives: A novel coronavirus (severe acute respiratory syndrome coronavirus 2, SARS-CoV-2) emerged in late 2019, causing an outbreak of pneumonia [coronavirus disease 2019 (COVID-19)] globally. Although the use of ready-made reaction mixes can enable more rapid PCR-based diagnosis of COVID-19, the need to transport and store these mixes at low temperatures presents challenges to already overburdened logistics networks. **Methods:** Here, we present an optimized freeze-drying procedure that allows SARS-CoV-2 PCR mixes to be transported and stored at ambient temperatures, without loss of activity. Additive-supplemented PCR mixes were freeze-dried. The residual moisture of the freeze-dried PCR mixes was measured by Karl-Fischer titration. **Results:** We found that the freeze-dried PCR mixes with ~1.2% residual moisture are optimal for storage, transport, and reconstitution. The sensitivity, specificity, and repeatability of the freeze-dried reagents were similar to those of freshly prepared, wet reagents. The freeze-dried mixes retained activity at room temperature (18 ~ 25degreesC) for 28 days, and for 14 and 10 days when stored at 37degreesC and 56degreesC, respectively. **Conclusion:** The uptake of this approach will ease logistical challenges faced by transport networks and make more cold storage space available at diagnosis and hospital laboratories.

Publication Type

Journal article.

<480>

Accession Number

20203493956

Author

Wu ShuAng; Li Zhe; Li ZhiXiong; Xiang WeiYi; Yuan YiWen; Liu YaYa; Xiong ZhenZhen

Title

The mental state and risk factors of Chinese medical staff and medical students in early stages of the COVID-19 epidemic.

Source

Comprehensive Psychiatry; 2020. 10242 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Objective: This study aimed to investigate the mental state of medical staff and medical students in the early stages of the SARS-CoV-2 outbreak, as well as analyze the risk factors of serious mental illness (SMI), so as to provide a scientific basis for further psychological intervention and management. **Method:** A cross-sectional survey was conducted from February 2-7, 2020. The Kessler 6 Psychological Distress Scale and a general information questionnaire were administered on-line to a convenience sample of 548 medical staff and medical students in China. Multivariate binary logistic regression analysis was used to screen the risk factors of SMI in medical staff and medical students. **Results:** Of the 505 respondents in the final analysis, 188 (37.23%) were at high risk of SMI. Respondents were at significantly higher risk of SMI if they had been suspected of being infected with the SARS-CoV-2 (OR = 7.00, 95% CI: 1.19-41.14), had relatives suspected of being infected with the SARS-CoV-2 (OR = 23.60, 95% CI: 1.11-501.30), felt concerned towards media coverage of outbreak-related information (OR = 11.95, 95% CI: 3.07-46.57), recently dreamed related to SARS-CoV-2 (OR = 4.21, 95% CI: 2.22-8.01), experienced difficulty in controlling emotions during SARS-CoV-2 epidemic (OR = 3.25, 95% CI: 1.66-6.37), or spent hours watching outbreaks per day (OR = 1.29, 95% CI: 1.13-1.46). **Conclusion:** Our findings highlight that medical staff and medical students were vulnerable to SMI during the early stages of the SARS-CoV-2 outbreak and identify the factors associated with SMI which can be used to formulate psychological interventions to improve the mental health. The independent risk factors for SMI among them are suspicion that they or relatives were infected with the SARS-CoV-2, greater interest in media reports about the epidemic, frequency of recent dreams related to SARS-CoV-2, difficulty in controlling emotions during the epidemic, and hours spent watching outbreaks per day.

Publication Type

Journal article.

<481>

Accession Number

20203490872

Author

Wang JiangShan; Zong Liang; Zhang JingHong; Sun Han; Walline, J. H.; Sun PengXia; Xu ShengYong; Li Yan; Wang ChunTing; Liu JihAi; Li Fan; Xu Jun; Li Yi; Yu XueZhong; Zhu HuaDong

Title

Identifying the effects of an upgraded 'fever clinic' on COVID-19 control and the workload of emergency department: retrospective study in a tertiary hospital in China.

Source

BMJ Open; 2020. 10(8)18 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Objective: COVID-19 started spreading widely in China in January 2020. Outpatient fever clinics (FCs), instituted during the SARS epidemic in 2003, were upgraded to serve for COVID-19 screening and prevention of disease transmission in large tertiary hospitals in China. FCs were hoped to relieve some of the healthcare burden from emergency departments (EDs). We aimed to evaluate the effect of upgrading the FC system on rates of nosocomial COVID-19 infection and ED patient attendance at Peking Union Medical College Hospital (PUMCH). **Design:** A retrospective cohort study. **Participants:** A total of 6365 patients were screened in the FC. **Methods:** The FC of PUMCH was upgraded on 20 January 2020. We performed a retrospective study of patients presenting to the FC between 12 December 2019 and 29 February 2020. The date when COVID-19 was declared an outbreak in Beijing was 20 January 2020. Two groups of data were collected and subsequently compared with each other: the first group of data was collected within 40 days before 20 January 2020; the second group of data was collected within 40 days after 20 January 2020. All necessary data, including patient baseline information, diagnosis, follow-up conditions and the transfer records between the FC and ED, were collected and analysed. **Results:** 6365 patients were screened in the FC, among whom 2912 patients were screened before 21 January 2020, while 3453 were screened afterward. Screening results showed that upper respiratory infection was the major disease associated with fever. After the outbreak of COVID-19, the number of patients who were transferred from the FC to the ED decreased significantly (39.21% vs 15.75%, $p < 0.001$), and patients generally spent more time in the FC (55 vs 203 min, $p < 0.001$), compared with before the outbreak. For critically ill patients waiting for their screening results, the total length of stay in the FC was 22 min before the outbreak, compared with 442 min after the outbreak ($p < 0.001$). The number of in-hospital deaths of critically ill patients in the FC was 9 out of 29 patients before the outbreak and 21 out of 38 after the outbreak ($p < 0.05$). Nineteen cases of COVID-19 were confirmed in the FC during the period of this study. However, no other patients nor any healthcare providers were cross-infected. **Conclusion:** The workload of the FC increased significantly after the COVID-19 outbreak. New protocols regarding the use of FC likely helped prevent the spread of COVID-19 within the hospital. The upgraded FC also reduced the burden on the ED.

Publication Type

Journal article.

<482>

Accession Number

20203490814

Author

Bu Ying; He Wei; Wang Fei; Zhu WenHui; Li XuePeng; Yi ShuMin; Xu YongXia; Li JianRong

Title

Screening research of anti-SARS-CoV-2 peptides from Mizuhopecten yessoensis based on molecular docking. [Chinese]

Source

Journal of Food Science and Technology (Beijing); 2020. 38(4):54-62. 21 ref.

Publisher

Beijing Technology and Business University

Location of Publisher

Beijing

Country of Publication

China

Abstract

In order to screen bioactive peptides against SARS-CoV-2 from food raw materials, Mizuhopecten yessoensis myosin was selected as the target sequence, which was enzymatically digested in silico, and then the toxicity and bioactivity of the peptides were predicted. The non-toxicity peptides with activity scores exceeding 0.5 were selected, and SARS-CoV-S/ACE2 complex protein and COVID-19 Mpro hydrolase were selected as targets for molecular docking to identify their viral resistance. The molecular docking results showed that the peptide CSNAIPEL could bind to the two key amino acids GLN42 and GLU329 on the SARS-CoV-S/ACE2 complex protein, and the LibDock Score was 136.03. LPIY could not only combine with ASP38 and TYR491 on the SARS-CoV-S/ACE2 complex protein, but also potentially combine with THR24, THR25 and THR26 on COVID-19 Mpro, and the LibDock Score was 142.85 and 168.04 respectively. QRPR combined with THR24, THR25 and THR26 on the COVID-19 Mpro hydrolase crystal, and the LibDock Score was 154.93. In summary, peptides CSNAIPEL, LPIY and QRPR exhibited well anti-SARS-CoV-2 capability. This study could provide novel ideas for the development of new function foods of anti-SARS-CoV-2 in the future.

Publication Type

Journal article.

<483>

Accession Number

20203350584

Author

Gregorio, G. B.; Ancog, R. C.

Title

Reshaping agricultural research and development in higher education institutions in a time of pandemic in Southeast Asia.

Source

Policy Brief Series - Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA); 2020. (2):4 pp.

Publisher

Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA)

Location of Publisher

Los Baños

Country of Publication

Philippines

Abstract

This paper explores (1) the major priority areas for research in agriculture and allied fields to accelerate transformation toward sustainable agricultural food systems in Southeast Asia; (2) how the human capital of higher education institutions (HEIs), particularly through their research and academic initiatives, can be strategically wielded so it can be fully maximized toward contributing to the solving of pressing societal concern, particularly COVID-19; and (3) what innovative solutions could be put forward for HEIs to continue to enhance their capability in knowledge generation.

Publication Type

Bulletin.