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COVID-19 Health Evidence Summary No.16

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This daily COVID-19 Health Evidence Summary is to signpost DFID and other UK government departments to the latest relevant evidence and discourse on COVID-19 to inform and support their response. It is a result of 3 hours of work and is not intended to be a comprehensive summary of evidence.

BCG against coronavirus: less hype and more evidence, please

Pai M. | Forbes | 12 April 2020 | Blog

https://www.forbes.com/sites/madhukarpai/2020/04/12/bcg-against-coronavirus-less-hype-and-more-evidence-please/#52e40db66b4f

The hype around BCG is analogous to the hype around choloroquine and hydroxychloroquine for COVID-19 – hope of a silver bullet. But this blog highlights that 'there is no evidence to support the clinical use of either BCG or hydroxychloroquine for COVID-19, except in carefully controlled clinical trials'. BCG has variable efficacy against pulmonary TB in adults (reported to range between 0 to 80%) but is still offered to infants in many mostly low- and middle-income countries where TB rates are high because trials show that BCG can protect children from severe, extrapulmonary forms of active TB disease. Global BCG vaccination policies and practices are mapped (last updated 2017) on the BCG World Atlas. A recent 'flurry' of ecological studies (currently pre-prints) claim a strong correlation between BCG vaccination and protection against COVID-19 but these studies have serious limitations which are described. BCG is inexpensive, safe and may have non-specific immune-boosting effects that might confer some protection against mortality by any cause so it is a lead worth following but through rigorous trials which are now underway in Australia, the Netherlands and the US with a focus on adults (e.g. healthcare workers) and from which results could be available within months. Note that this is not a vaccine specific for COVID-19 and cannot be administered to those with a compromised immune system as is a live-attenuated vaccine but may offer something generic globally in the meantime.

The gendered dimensions of COVID-19

The Lancet | 11 April 2020 | Editorial

https://doi.org/10.1016/S0140-6736(20)30823-0

Demographic data from small studies are already informing political decisions and clinical research strategies. Global Health 50/50 tracks sex-disaggregated infection and mortality COVID-19 data

from the 39 most-affected countries yet some countries, including the UK, the USA, Russia and Brazil, have yet to report such data. This Editorial joins the European Association of Science Editors and other organisations to urge all COVID-19 data to include age and sex. From those that have, it is unclear whether women or men are more likely to become infected, but more men are dying from COVID-19. Adverse outcomes of COVID-19 seem to be associated with comorbidities, including hypertension, cardiovascular disease and lung disease – conditions more prevalent in men and linked to smoking and drinking alcohol – behaviours associated with masculine norms. For women and girls, they are disproportionately affected in their wellbeing (including increased concerns over domestic violence) and economic resilience during lockdown. Women's sexual and reproductive health services, including pre and post-natal care, are also disrupted.

Neurologic manifestations of hospitalised patients with coronavirus disease 2019 in Wuhan China

Mao et al. | JAMA | 10 April 2020 | Article

https://doi.org/10.1001/jamaneurol.2020.1127

In this retrospective, observational case series of data from 16 January 2020 to 19 February 2020 of 214 consecutive hospitalised patients (mean [SD] age 52.7 [15.5] years, 40.7% men, 126 had non-severe infection and 88 patients had severe infection according to their respiratory status) with COVID-19 from three designated special care centres in Wuhan, China, 36.4% had neurologic manifestations and which were more common in patients with severe infection (45.5%) than in nonsevere patients (30.2%) according to their respiratory status. Compared with patients with non-severe infection, patients with more severe infection had neurologic symptoms, which included acute cerebrovascular diseases (5 [5.7%] vs 1 [0.8%]), impaired consciousness (13 [14.8%] vs 3 [2.4%]), and skeletal muscle injury (17 [19.3%] vs 6 [4.8%]). Clinicians should suspect SARS-CoV-2 infection when seeing patients with neurologic manifestations as a differential diagnosis.

The spectrum of neurologic disease in the severe acute respiratory syndrome coronavirus 2 pandemic infection: neurologists move to the frontlines

Pleasure et al | JAMA | 10 April 2020 | Editorial

https://doi.org/10.1001/jamaneurol.2020.1065

Given limited reports of neurologic complications of SARS, the study by Mao et al (above) is important. Neurological manifestations ranged from specific symptoms (e.g. loss of sense of smell or taste, myopathy and stroke) to more nonspecific symptoms (e.g. headaches, depressed level of consciousness, dizziness or seizure). Patients with some of the more common specific symptoms, including smell or taste impairment and myopathy, tended to have these symptoms earlier in their clinical course, distinct from SARS, where manifestations appeared quite late in established disease.

Compassionate use of remdesivir for patients with severe COVID-19

Grein et al | NEJM | 10 April 2020 | Article

https://doi.org/10.1056/NEJMoa2007016

In a cohort of patients hospitalised for severe COVID-19 who were treated with compassionate-use remdesivir, clinical improvement was observed in 36 of 53 patients.

Note that there was no control group and this was not a randomised controlled trial. There is also discomfort in calling the use of an unproven and possibly harmful use of a drug 'compassionate'.

Obesity in patients younger than 60 years is a risk factor for COVID-19 hospital admission

Lighter et al. | Clinical Infectious Diseases | 9 April 2020 | Article

https://doi.org/10.1093/cid/ciaa415

This univariate retrospective analysis of data from COVID-19-positive symptomatic patients who presented to a large academic hospital system in New York City suggests that obesity in patients <60 years maybe a newly identified risk factor for hospital admission and need for critical care.

Fear of a fragile planet

Hossain N | IDS | 8 April 2020 | Opinion

https://www.ids.ac.uk/opinions/fear-of-a-fragile-planet/

"Among the lessons of COVID-19 is the vital importance of political trust, of space for civil society and of strong communities in coping with health, social and economic shocks". When powers are granted to governments there is concern that they can be hard to take back. Civil and political rights will be eroded as governments take on more power, but there are new opportunities to gain new rights, as governments take on responsibilities for supporting citizens in emergency support packages. When rights are granted these also can be hard to take back. "States that have failed to create space for civil society to thrive and grow now find they are faced with weak social allies in the fight against COVID-19". Good citizen-state relationships are key to facing many global crises and building trust means citizens having the power to hold governments to account.

Tracking COVID-19 cases

Global

WHO COVID-19 daily situation reports

https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports

Johns Hopkins University COVID-19 dashboard in real time

https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6

WEF: Visualisation tracking confirmed cases of COVID-19 as it spreads. Updated daily.

https://wef-prod.earthtime.org/m/stories/2019_nCOV_infection

Vaccine Centre, LSHTM

https://vac-lshtm.shinyapps.io/ncov_tracker/

This site complements the WHO and Johns Hopkins University COVID-19 dashboards by including the timeline functions, the ability to overlay past outbreaks, and an emphasis on normalised counts (per 100,000 individuals).

Live data tracker: sex-disaggregated COVID-19 data from the 25 most-affected countries

http://globalhealth5050.org/covid19

Africa

Coronavirus in Africa Tracker: How many covid-19 cases & where?

https://africanarguments.org/2020/03/23/coronavirus-in-africa-tracker-how-many-cases-and-where-latest/

UK

PHE dashboard of UK COVID-19 Cases

https://www.arcgis.com/apps/opsdashboard/index.html#/f94c3c90da5b4e9f9a0b19484dd4bb14

Tools

WhatsApp coronavirus information hub

https://www.whatsapp.com/coronavirus

CMMID Repository: Effectiveness of airport screening at detecting travellers infected with COVID-19

https://cmmid-lshtm.shinyapps.io/traveller_screening/

App to model effectiveness of airport screening.

Disability Inclusive Community Action – COVID-19 Matrix

CBM | 30 March 2020 | Tool

https://www.cbm.org/news/news/news-2020/cbm-develops-disability-inclusive-community-action-covid-19-matrix/

Online learning and events

Online event: Policy modelling for COVID-19: Better data for better decision-making in low and middle-income countries

Tuesday 14 April 2020 0900-1030 ET | Center for Global Development

https://www.cgdev.org/event/policy-modelling-covid-19-better-data-better-decision-making-low-and-middle-income-countries

Moderator: Kalipso Chalkidou (CDG). Features Dan Ollendorf (CGD), Yot Teerawattananon (Thai Ministry of Public Health) and Anna Vassall (LSHTM)

COVID-19 Diagnostics and Testing

FIND, LSHTM & ASLM | FutureLearn course | Starts 20 April 2020 | 3 weeks | 3 hours weekly study | Free

https://www.futurelearn.com/courses/covid-19-diagnostics-and-testing

This course is designed for professionals involved in the testing and diagnosis of COVID-19, with a focus on low- and middle-income settings. You will learn the latest recommendations on COVID-19 testing, get upt0date information on the performance of tests and how best to deploy them.

COVID-19 Critical Care: Understanding and Application

University of Edinburgh & Royal College of Physicians of Edinburgh | FutureLearn course | Starts 6 April 2020 | 5 weeks | 1 hour weekly study | Free

https://www.futurelearn.com/courses/covid-19-critical-care-education-resource

Designed for frontline clinical staff to learn the principles and practice of critical care to treat and care for critically ill patients during the COVID-19 pandemic. You will learn (1) how to apply the current and evolving principles of PPE in the care of COVID-19; (2) apply evidence-based principles of advanced organ support and monitoring to the COVID-19 critically ill patients; (3) apply evidence-based daily practices to care of the critically ill patient; and (4) develop a range of specialised self-caring practices.

Note that this resource has been created in response to the COVID-19 emergency and does not correspond to the classic structure of a FutureLearn course. You do not have to follow the week by week approach and can select the materials most relevant to your work.

Emerging respiratory viruses, including COVID-19: methods for detection, prevention, response and control

WHO | Free | 3 hours duration

https://openwho.org/courses/introduction-to-ncov

A general introduction to enable you to describe the fundamental principles of emerging respiratory viruses, including novel coronaviruses, and how to effectively respond to an outbreak.

Intended for public health professionals, incident managers and personnel working for the UN, international organisations and NGOs.

Responding to COVID-19: Real-time training for the coronavirus disease outbreak

WHO | Available now | multiple self-paced courses

https://openwho.org/channels/covid-19

Note that courses are available in English and other languages including French, Portuguese and Spanish.

COVID-19: Tackling the Novel Coronavirus

LSHTM | FutureLearn course | Starts 25 May 2020 | 3 weeks | 4 hours weekly study | Free

https://www.futurelearn.com/courses/covid19-novel-coronavirus

Unfacilitated access to this course remains. An updated version of this course will though be run from 25 May 2020. On this course you will learn what is known about the outbreak of COVID-19 (week 1); what the practical implications for responding to COVID-19 are (week 2); and what we need to find out about COVID-19 (week 3).

Resource Hubs

WHO: Coronavirus disease (COVID-19) pandemic

https://www.who.int/emergencies/diseases/novel-coronavirus-2019

Resources on coronavirus and disability

https://asksource.info/covid-resources/search

ODI Coronavirus: latest research and analysis on the implications of the coronavirus pandemic worldwide

https://www.odi.org/our-work/coronavirus

International Disability and Development Consortium and CORE Group: Repository of resources on disability inclusion and COVID-19

https://docs.google.com/document/d/1IVP1u6yHfLuN9qNyLEct5-vtC0aqLKtKr-o-faAjves/edit

US NIH online platform of all registered, ongoing clinical trials globally

https://clinicaltrials.gov/ct2/results?cond=COVID-19

COVID-19 Narratives by Dr David Nabarro

https://www.4sd.info/covid-19-narratives/

These narratives are being written by David Nabarro, Co-Director of the Imperial College Institute of Global Health Innovation at Imperial College London, Strategic Director for 4SD and one of six Special Envoys to the WHO DG Special Envoy on COVID-19, and peers to share with those who want more information about the situation and to help raise the awareness and readiness of all actors. Please visit WHO website for official guidance.

Reliefweb COVID-19

https://reliefweb.int/topics/covid-19

Coronavirus global health emergency

https://www.un.org/coronavirus

Norwegian Institute of Public Health: Live map of COVID-19 evidence

https://www.fhi.no/en/qk/systematic-reviews-hta/map/

Overview of scientific publications on COVID-19 categorised into subgroups to provide quick access to specific topic-relevant publications to help decision makers and research navigate the research and help identify research gaps.

Vaccine Centre at LSHTM: COVID-19 vaccine development pipeline tracker

https://vac-lshtm.shinyapps.io/ncov_vaccine_landscape/

COVID-19 Research Project Tracker by UKCDR & GloPID-R

https://www.ukcdr.org.uk/funding-landscape/covid-19-research-project-tracker/

A live database of funded research projects across the world related to COVID-19 mapped against the priorities identified in the WHO Coordination Global Research Roadmap: 2019 Novel Coronavirus.

WHO Q&A on COVID-19

https://www.who.int/news-room/q-a-detail/q-a-coronaviruses

Note that this resource includes Q&A on COVID-19; COVID-19, pregnancy, childbirth and breastfeeding; COVID-19, HIV and antiretrovirals; similarities and differences COVID-19 and influenza; mass gatherings and COVID-19; IPC for healthcare workers; COVID-19 and food and agriculture; smoking and COVID-19; malaria and COVID-19.

COVID-19: Resources and research on epidemics and pandemics

https://steps-centre.org/covid-19-coronavirus-resources-research-epidemics-pandemics/

Stop TB Partnership TB and COVID-19

http://www.stoptb.org/covid19.asp

EPI-WIN: WHO information network for epidemics: COVID-19 public health emergency

https://www.who.int/teams/risk-communication

COVID-19: Research ethics

https://ethicsresource.ringsgenderresearch.org/covid-19-resources/

LSTM: COVID-19

https://www.lstmed.ac.uk/covid-19

LSHTM: COVID-19

https://www.lshtm.ac.uk/research/research-action/covid-19

International Disability Alliance: COVID 19 and the disability movement

http://www.internationaldisabilityalliance.org/content/covid-19-and-disability-movement

Africa Centres for Disease Control and Prevention (Africa CDC)

https://africacdc.org/covid-19/

UNICEF: Latest news and updates on coronavirus disease 2019 (COVID-19)

https://www.unicef.org/coronavirus/covid-19

Coronavirus: the science explained

https://coronavirusexplained.ukri.org/en/

Social Science in Humanitarian Action: Updates on the novel COVID-19 outbreak

https://www.socialscienceinaction.org/update-novel-covid-19-outbreak/

Special Collection: Coronavirus (COVID-19): evidence relevant to critical care

https://www.cochrane.org/news/special-collection-coronavirus-covid-19-evidence-relevant-critical-care

NICE UK: Rapid guidelines and evidence reviews

https://www.nice.org.uk/covid-19

Imperial College London MRC Centre for Global Infectious Disease Analysis COVID-19 reports

https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/news--wuhan-coronavirus/

Global research on COVID-19

https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov

WHO R&D Blueprint

https://www.who.int/blueprint/priority-diseases/key-action/novel-coronavirus/en/

Latest information and advice from the UK Government

https://www.gov.uk/guidance/coronavirus-covid-19-information-for-the-public

CDC COVID-19 Resources

https://www.cdc.gov/coronavirus/2019-ncov/index.htmlThe Global Health Network Coronavirus outbreak knowledge hub

The Lancet COVID-19 Resource Centre

https://www.thelancet.com/coronavirus

Elsevier's Novel Coronavirus Information Center

https://www.elsevier.com/connect/coronavirus-information-center

Cell Press Coronavirus Resource Hub

https://www.cell.com/2019-nCOV

Cochrane Special Collections - COVID-19: infection control and prevention measures

https://www.cochranelibrary.com/collections/doi/SC000040/full

The BMJ Coronavirus (covid-19): Latest news and resources

https://www.bmj.com/coronavirus?int_source=wisepops&int_medium=wisepops&int_campaign=DAA_CoronaVirus_Jan24

Johns Hopkins Coronavirus Resource Centre

https://coronavirus.jhu.edu

Global Partnership for Sustainable Development – COVID-19 resources

http://www.data4sdgs.org/resources/covid-19-resources

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