

# COVID-19

## Health Evidence Summary No.45

### summary from this week

Kerry Millington & Samantha Reddin

Liverpool School of Tropical Medicine (LSTM) & Institute of Development Studies

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*This is a weekly summary of the daily COVID-19 health evidence summary (HES) which are based on 3 hours of desk-based research each day. The summary is not intended to be a comprehensive summary of available evidence on COVID-19 but aims to make original documents easily accessible to decision makers which, if relevant to them, they should go to before making decisions.*

### Clinical characteristics and management

Publication date	Title/URL	Journal/Article type	Summary
20.05.20	SARS-CoV-2 infection protects against rechallenge in rhesus macaques	Science/ article	Monkeys that had recovered from infection with the new coronavirus were protected from re-infection, although how long the protection lasts is unclear.
17.05.20	Prioritisation of ICU Treatments for Critically Ill Patients in a COVID-19 Pandemic With Scarce Resources	Anaesthesia Critical Care & Pain Medicine/  Journal Pre-proof	<ul style="list-style-type: none"> <li>• Prioritising both critical care initiation and continuation is paramount to save the greatest number of lives. It enables to allocate scarce resources in priority to those with the highest probability of benefiting from them.</li> <li>• Prioritisation schemes and their criteria are adjusted to the level of resource scarcity</li> </ul>
19.05.20	Medical Doctors Awareness, Perception, and Attitude towards	preprints from medRxiv (not	<ul style="list-style-type: none"> <li>• Cross sectional, web-based study was conducted with the help of an online questionnaire and sent to doctors</li> </ul>

	COVID-19 in Bangladesh: A Cross sectional study	peer-reviewed)	<ul style="list-style-type: none"> <li>Conclusion: The health authorities should take appropriate training measures to increase the awareness of the medical doctors along with providing sufficient amount of personal protective equipment for the medical doctors and supporting staff before deploying them in hospitals.</li> </ul>
18.05.2020	Psychiatric and neuropsychiatric presentations associated with severe coronavirus infections: a systematic review and meta-analysis with comparison to the COVID-19 pandemic	The Lancet Psychiatry   Article	<ul style="list-style-type: none"> <li>This SR/meta-analysis looks at the psychiatric and neuropsychiatric consequences of coronavirus infections in 3,550 patients hospitalised with SARS, MERS and COVID-19</li> <li>If infection with SARS-CoV-2 follows a similar course to that with SARS-CoV or MERS-CoV, most patients should recover without experiencing mental illness</li> <li>SARS-CoV-2 might cause delirium in a significant proportion of patients in the acute stage</li> <li>Clinicians should be aware of the possibility of depression, anxiety, fatigue, post-traumatic stress disorder, and rarer neuropsychiatric syndromes in the longer term</li> </ul>
18.05.2020	A clinical risk score to identify patients with Covid-19 at high risk of critical care admission or death : an observational cohort study	The Lancet Infectious Diseases   SSRN Preprint	<ul style="list-style-type: none"> <li>This observational cohort study of 1,157 patients acutely admitted to two London hospitals identified predictors of critical care admission and death in people admitted to hospital with COVID-19 and positive SARS-CoV-2 swab results</li> <li>These predictors were incorporated into a risk score that will inform clinical care and stratify patients for clinical trials</li> </ul>
15.05.2020	Risks and impact of angiotensin-converting enzyme inhibitors or angiotensin-receptor blockers	Annals of Internal Medicine   A Living Systematic Review	<ul style="list-style-type: none"> <li>High-certainty evidence suggest that ACEI or ARB use is not associated with more severe COVID-19 disease</li> <li>Moderate-certainty evidence suggests no association between use of these medications and positive SARS-CoV-2 test results among symptomatic patients</li> </ul>

	on SARS-CoV-2 infection in adults		<ul style="list-style-type: none"> <li>It remains uncertain whether these medications increase the risk for mild or asymptomatic disease or are beneficial in COVID-19 treatment</li> </ul>
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## Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary
22.05.2020	COVID-19: Real-time forecasts of confirmed cases, active cases, and health infrastructure requirements for India and its majorly affected States using the ARIMA model	medRxiv  preprint (not peer reviewed)	<ul style="list-style-type: none"> <li>This study forecasts the confirmed and active cases for C19 until June, using time series ARIMA model, and based on predicted active cases estimates required isolation beds, ICU beds and ventilators for C19 patients</li> <li>Forecasts are 441,896 confirmed cases (95% CI 210,240 to 673,552), 124,712 active cases (95% CI 68,481 to 180,944) by the end of June</li> <li>Estimates require 106,006 isolation beds (95% CI 58,209 to 153,802), 12,471 ICU beds (95% CI 6,848 to 18,094) and 6,236 ventilators (95% CI 3,424 to 9,047) to accommodate this forecast</li> <li>Authors suggest a Public-Private-Partnership model in the health sector to accommodate C19 patients and reduce the burden on the Indian public healthcare system</li> </ul>
20.05.20	Preliminary evaluation of COVID-19 disease outcomes, test capacities and management approaches among African countries./	preprint from medRxiv and bioRxiv (not peer reviewed)	<ul style="list-style-type: none"> <li>In this study, COVID-19 disease outcomes (confirmed cases, deaths and recoveries), testing capacities and disease management approaches among African countries were evaluated.</li> <li>Egypt, South Africa, Morocco and Algeria were clustered as countries with highest values of COVID-19 disease outcomes on the continent during the 75-day period of observation.</li> <li>The study recommends that the approaches adopted by the African countries which achieved high</li> </ul>

			recovery rates from COVID-19 should be integrated into healthcare management plans for the disease across the continent even as the situation unfolds.
20.05.20	Individual quarantine versus active monitoring of contacts for the mitigation of COVID-19: a modelling study	The Lancet/ Article	<ul style="list-style-type: none"> <li>• Under what conditions can individual quarantine more effectively control COVID-19 than active monitoring?</li> <li>• This model highlights the urgent need for more data on the serial interval and the extent of presymptomatic transmission to make data-driven policy decisions regarding the cost-benefit comparisons of individual quarantine versus active monitoring of contacts. To the extent that these interventions can be implemented, they can help mitigate the spread of SARS-CoV-2.</li> </ul>
19.05.20	Temporal and spatial characteristics of the spread of COVID-19 in Rio de Janeiro state and city	preprints from medRxiv (not peer-reviewed)	<ul style="list-style-type: none"> <li>• Study analyses temporal and spatial characteristics of the spread of COVID-19 in the municipalities of the state of Rio de Janeiro, based on open data published by the Health Departments of Governments of the State of RJ and the Municipality of Rio de Janeiro, from February 27 - April 27, 2020.</li> <li>• Results suggest that the initial stages of spreading the virus across the state occur exponentially, with specific regions with a higher concentration of rates of cases, deaths and recovered people.</li> <li>• Qualitative and quantitative results, point out that the regions with the highest income average per capita have higher rates of confirmed cases and recovered people, however, high lethality is found in places of low income per capita.</li> </ul>
19.05.20	COVID-19 Epidemic Forecast in Different States of India using SIR Model	preprints from medRxiv (not peer-reviewed)	<ul style="list-style-type: none"> <li>• It is estimated that the epidemic curve flattening in India will start from the first week of July and epidemic may end in the third week of October with final epidemic size ~1,75,000.</li> </ul>

			<ul style="list-style-type: none"> <li>• The epidemic in Kerala is in final phase and is expected to end by first week of June.</li> <li>• Maharashtra is severely affected where the ending phase of epidemic may occur in the second week of September with epidemic size of ~55,000. The model indicates that the fast growth of infection in Punjab is from 27th April 2020 to 2nd June 2020, thereafter, curve flattening will start and the epidemic is expected to finished by the first week of July with the estimated number of ~3300 infected people. The epidemic size of COVID-19 outbreak in Delhi, West Bengal, Gujrat, Tamil Nadu and Odisha can reach as large as 24,000, 18,000, 16,000, 13,000 and 11,000, respectively,</li> </ul>
19.05.2020	Using a delay-adjusted case fatality ratio to estimate under-reporting	CMMID   Real time report last update 19.05.2020 (not yet peer reviewed)	<ul style="list-style-type: none"> <li>• Estimates of the percentage of symptomatic COVID-19 cases in different countries using case fatality ratio estimates based on data from the ECDC, correcting for delays between confirmation-and-death</li> </ul>
18.05.2020	Susceptible supply limits the role of climate in the early SARS-CoV-2 pandemic	Science   Report	<p>Using a climate-dependent epidemic model to simulate the SARS-CoV-2 pandemic outputs suggests that while variations in weather may be important for endemic infections, during the pandemic stage of an emerging pathogen the climate drives only modest changes to pandemic size</p> <p>Results imply that both tropical and temperate locations should prepare for severe outbreaks of the diseases and that summertime temperatures will not effectively limit the spread of infection</p> <p>Climate maybe important in the longer term where endemic cycles of the disease will likely be tied to climate factors and seasonal peaks may vary with latitude</p>

15.05.2020	<p>Inferring change points in the spread of COVID-19 reveals the effectiveness of interventions</p>	<p>Science   Article</p>	<p>This modelling approach allows detection and quantification of the effect of governmental interventions and forecasting future case number scenarios</p> <p>Analysis highlights the importance of the precise timing and magnitude of interventions for future case numbers and the importance of including the reporting delay between the date of infection and the date of the confirmed cases in the model</p> <p>The code is freely available and can be readily adapted to any country or region</p>
14.05.2020	<p>The potential effects of widespread community transmission of SARS-CoV-2 infection in the WHO African Region: a predictive model</p>	<p>BMJ Global Health   pre-print</p>	<p>This predictive modelling study conducted by the WHO predicts that C19 will infect almost one-quarter of a billion people in Africa during the first year of the pandemic and 190,000 are likely to die unless immediate measures are taken to control the spread of the virus</p> <p>Risk of exposure and transmission in the WHO African Region is lower than other areas of the world but an increase in hospital admissions and care needs and impacts on morbidity and mortality of other health conditions, will strain limited resources where health systems are not designed to mitigate against the implications of widespread community transmission of SARS-CoV-2</p> <p>Countries in the WHO African Region need to expand the capacity and especially of primary hospitals, including basic emergency care needs, to mitigate implication of widespread community spread of SARS-CoV-2</p> <p>Infection Prevention and Control</p>

## Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary
20.05.20	Is Nigeria really on top of COVID-19? Message from effective reproduction number	preprint from medRxiv and bioRxiv (not peer reviewed)	Research shows that control measures are working but not effective enough to keep $R(t)$ below one. Also, the estimated fractional reported symptomatic cases are between 10 to 50%. Our analysis has shown evidence that the existing control measures are not enough to end the epidemic and more stringent measures are needed.
19.05.20	Work-related COVID-19 transmission in six Asian countries/areas: A follow-up study	Plos One/ Article	Work-related transmission is considerable in early COVID-19 outbreaks, and the elevated risk of infection was not limited to HCW. Implementing preventive/surveillance strategies for high-risk working populations is warranted.
19.05.20	Assessment of service availability and Infection prevention measures in hospitals of Nepal during the transition phase of COVID-19 case surge	preprints from medRxiv (not peer-reviewed)	<ul style="list-style-type: none"> <li>Nepalese medical fraternity expressed concerns regarding public health strategies of government and hospital readiness in response to upgoing case surge.</li> <li>Service availability and Infection prevention and control (IPC) status was assessed in 110 hospitals situated across seven provinces via electronic survey sent out to the frontline clinicians 24th March- 7th April 2020; one response per hospital was analyzed.</li> <li>Findings alert the Nepalese and other governments to act early and proactively during health emergencies and not wait until the disease disrupts their health systems.</li> </ul>
15.05.2020	Risk factors for SARS-CoV-2 among patients	The Lancet Infectious	<ul style="list-style-type: none"> <li>This observational study from 3802 people tested for C19 (including 587 positive tests) in the UK found that a positive SARS-CoV-2 test</li> </ul>

	in the Oxford Royal College of General Practitioners Research and Surveillance Centre primary care network: a cross-sectional study	Diseases   Article	<p>result within a primary care cohort was associated with similar risk factors as observed for severe outcomes of C19 in hospital settings, except for smoking</p> <ul style="list-style-type: none"> <li>• This study provides evidence of sociodemographic factors associated with a positive test, including deprivation, population density, ethnicity, obesity and chronic kidney disease</li> </ul>
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## Testing

Publication date	Title/URL	Journal/Article type	Summary
21.05.2020	Recombination potential of SARS-CoV-2 and MERS-CoV	iScience   SSRN	<ul style="list-style-type: none"> <li>• This study suggests that recombination between SARS-CoV-2 and MERS-CoV RNA is possible</li> <li>• Public health laboratories in high-risk areas should develop diagnostic capability for the detection of recombined coronaviruses in patient samples</li> </ul>
19.05.2020	Screening for COVID-19: Patient factors predicting positive PCR test	Infection Control & Hospital Epidemiology   Article	<ul style="list-style-type: none"> <li>• The selection of patients for SARS-CoV-2 screening remains challenging as many factors influence the decisions on which patients to screen, including test resources, test accuracy and local disease prevalence</li> <li>• Strategies are needed to best utilise testing resources</li> <li>• This retrospective study of patients screened between 12 March 2020 to 26 March 2020 in the US found that exposure to confirmed SARS-CoV-2 and recent travel were both significantly more predictive of a positive test than the presence of any symptoms suggesting a role for testing patients with these risk factors regardless of symptom presence</li> </ul>



## Therapeutics

Publication date	Title/URL	Journal/Article type	Summary
22.05.2020	Hydroxychloroquine or chloroquine with or without a macrolide for the treatment of COVID-19: a multinational registry analysis	The Lancet   Article	<ul style="list-style-type: none"> <li>• This observational study of 96,032 patients with C19, 14,888 of whom were treated with hydroxychloroquine, chloroquine, or their combination with a macrolide, across six continents evaluated real-world evidence related to outcomes with the use of hydroxychloroquine or chloroquine in the absence of reported randomised trials</li> <li>• Although observational studies cannot fully account for unmeasured confounding factors no evidence of benefit of hydroxychloroquine or chloroquine when either used alone or with a macrolide was found and also potential harm (decreased in-hospital survival and an increased frequency of ventricular arrhythmias) with the use of hydroxychloroquine or chloroquine drug regimens (with or without macrolide) in hospitalised patients with C19</li> </ul>
20.05.20	How to Discover Antiviral Drugs Quickly	The New England Journal of Medicine/ Article	<ul style="list-style-type: none"> <li>• Molecular-dynamics simulations together with virtual high-throughput screening provide a means of quick evaluation of existing drugs for antiviral activity. The authors explain how these methods serve in the quest for drugs to treat Covid-19.</li> </ul>
17.05.2020	What are the effects of convalescent plasma for people with COVID-19?	Cochrane Clinical Answers	<ul style="list-style-type: none"> <li>• Reviewers identified two case studies and six small case series evaluating convalescent plasma for people with COVID-19 that included 32 participants</li> <li>• All evidence was rated as very low certainty with a lack of higher-quality studies</li> <li>• It remains unclear whether these results are related to</li> </ul>

			convalescent plasma therapy, to the underlying natural history of COVID-19, or to other concomitant treatments
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## Vaccines

Publication date	Title/URL	Journal/Article type	Summary
22.05.2020	Safety, tolerability, and immunogenicity of a recombinant adenovirus type-5 vectored COVID-19 vaccine: a dose-escalation, open-label, non-randomised, first-in-human trial	The Lancet   Article	<ul style="list-style-type: none"> <li>• This first-in-human trial showed that the Ad5 vectored COVID-19 vaccine is tolerable and immunogenic in healthy adults at 28 days post-vaccination.</li> <li>• Humoral responses against SARS-CoV-2 peaked at day 28 post-vaccination in healthy adults, and rapid specific T-cell responses were noted from day 14 post-vaccination</li> <li>• This study suggests there is potential for further investigation of this vaccine candidate</li> <li>• An ongoing phase 2 trial in China will provide more information on the safety and immunogenicity of this vaccine candidate</li> </ul>
20.05.2020	DNA vaccine protection against SARS-CoV-2 in rhesus macaques	Science   Article	<ul style="list-style-type: none"> <li>• DNA vaccine candidates expressing different forms of the SARS-CoV-2 Spike (S) protein elicited neutralising antibody titres which correlated with protection against SARS-CoV-2 in nonhuman primates</li> </ul>
14.05.2020	Targets of T cell responses to SARS-CoV-2 coronavirus in humans with COVID-19 disease and unexposed individuals	Cell   Article	<ul style="list-style-type: none"> <li>• Understanding adaptive immunity to SARS-CoV-2 will help vaccine design and evaluation of candidate vaccines, understand C19 pathogenesis and calibration of pandemic control measures</li> <li>• SARS-CoV-2-specific CD4<sup>+</sup> T cells and antibody responses were observed in all C19 cases, and CD8<sup>+</sup> T cell responses were observed in most</li> <li>• CD4<sup>+</sup> T cell responses to spike, the main target of most vaccine efforts, were robust and correlated with the magnitude of the anti-SARS-CoV-2 IgG and IgA titers</li> </ul>

			<ul style="list-style-type: none"> <li>Valuable targets for candidate vaccine development were identified along with distinct specificity patterns between C19 cases and unexposed health controls</li> <li>SARS-CoV-2 reactive CD4<sup>+</sup> T cells were detected in approx. 40 to 60% of unexposed individuals suggesting pre-existing cross-reactive T cell recognition between circulating 'common cold' coronavirus and SARS-CoV-2</li> </ul>
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## Indirect impact of COVID-19

Publication date	Title/URL	Journal/Article type	Summary
22.05.2020	Prevalence of mental health problems during virus epidemics in the general public, health care workers and survivors: a rapid review of the evidence	medRxiv   Review (not peer reviewed)	<ul style="list-style-type: none"> <li>A rapid review of mental health problems (MHP) prevalence rates published since 2000, during and after epidemics, including the general public, healthcare workers and survivors</li> <li>Most original studies on MHP were conducted in China in the context of SARS-CoV-1, and reported anxiety, depression, post-traumatic stress symptoms/disorder, general psychiatric morbidity, and psychological symptoms</li> <li>The MHP rates across studies, populations and epidemics vary substantially</li> <li>Results call for the use of validated and standardised instruments, reference norms, and pre-post measurements to better understand the magnitude of the MHP during and after epidemics</li> </ul>
20.05.20	COVID-19 in Uganda: Predicting the impact of the disease and public health response on disease burden	preprint from medRxiv and bioRxiv (not peer reviewed)	<ul style="list-style-type: none"> <li>The results indicate that COVID-19 impact on Uganda may be relatively light, while there is a high risk of a significant negative impact on other disease burden if the lockdown response to COVID-19 is prolonged.</li> <li>The results are likely to extend to other sub-Saharan populations, underlining the importance of tailoring COVID-19 responses according to population structure and potential disease vulnerabilities.</li> </ul>

## Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal   Article type	Author(s)
22.05.2020	Chloroquine or hydroxychloroquine for COVID-19: why might they be hazardous?	The Lancet   Comment	Christian Funck-Brentano Joe-Elie Salem
22.05.2020	Children appear half as likely to catch COVID-19 as adults	UCL   News	
21.05.2020	Covid-19 and the impact on gender and sexuality	IDS   Opinion	Susie Jolly
21.05.2020	Survey suggests rising risk of food and nutrition insecurity in Addis Ababa, Ethiopia as COVID-19 restrictions continue	IFPRI   Blog	Kalle Hirvonen Gashaw Tadesse Abate Alan De Brauw
21.05.2020	The economic impact of Covid-19 around the world: remittances, updated growth and poverty projections, and the reintroduction of Barter in Fiji	CGD	David Evans Amina Mendez Acosta
20.05.2020	Coronavirus: everyone wins when patents are pooled	Nature   Editorial	
20.05.20	Vitamin-D and COVID-19: do deficient risk a poorer outcome?	The Lancet Diabetes and Endocrinology/ In Focus	Fiona Mitchell
19.05.20	Septic shock presentation in adolescents with COVID-19	The Lancet Child & Adolescent Health/ Correspondence	Cecilia Dallan, Fabrizio Romano, Johan Siebert, Sofia Politi, Laurence Lacroix, Cyril Sahyoun

18.05.20	How covid-19 is accelerating the threat of antimicrobial resistance	BMJ/ Opinion	Jeremy Hsu
19.05.20	Coronavirus vaccine trials have delivered their first results — but their promise is still unclear	Nature/ News	Ewen Callaway
21.05.20	Africa: Let's Prepare for a Marathon Struggle Against COVID-19	All Africa	Dr Chibuzo Okonta
20.05.20	South Africa: Why Easing the Lockdown Threatens to Put Workers in South Africa At Risk	All Africa	
21.05.20	South Africa: SAMRC Scientists Harvest Live Coronavirus for Validation of Test Kits	All Africa	
21.05.20	South Sudan: Minister Makuei Tests Positive for COVID-19	All Africa	
21.05.20	Africa: COVID-19 'Is an African Governance Crisis'	All Africa	
20.05.20	Global solidarity with Africa is an imperative	UN brief	
20.05.20	How Academic Health Systems Can Move Forward Once COVID-19 Wanes	JAMA/ viewpoint	Steven D. Shapiro, Paul B. Rothman
18.05.20	Better the drug you know: Commentary on “Daughton 2020, Natural experiment concept to accelerate the re-purposing of existing therapeutics for Covid-19”	Global Epidemiology/ Commentary	Alex Broadbent
19.05.20	When does a major outbreak become a Public Health	Lancet Infectious Diseases/ Comment	David N Durrheim,

	Emergency of International Concern?		Laurence O Gostin, Keymanthri Moodley
May 2020	Water, climate change, and COVID-19: prioritising those in water-stressed settings	Lancet Planetary Health/ Correspondence	Richard Armitage, Laura B Nellums
May 2020	Shared sanitation and the spread of COVID-19: risks and next steps	Lancet Planetary Health/ Correspondence	Bethany A Caruso, Matthew C Freeman
19.05.20	How environmental racism is fuelling the coronavirus pandemic	Nature/ Comment	Harriet A. Washington
19.05.20	Tackle coronavirus in vulnerable communities	Nature/ Editorial	
19.05.20	United Nations, World Health Organization Caution COVID-19 Disruptions Could Foster Surge in Extra AIDS-Related Deaths	JAMA Health Forum	Joan Stephenson
19.05.20	In the Face of the COVID-19 Pandemic We Are Only as Strong as the Weakest of Us	IPS/ opinion	David Nabarro and Joe Colombano
20.05.20	Kenya: Youth Emerge as COVID-19 Superspreaders	All Africa news	
19.05.20	WHO countries agree 'equitable and timely access' to coronavirus vaccine, 'comprehensive evaluation' of response	UN news	
19.05.2020	Update on the ongoing Novel Coronavirus (COVID-19) Global Epidemic, Brief #18	Africa CDC	
18.05.2020	Planning for a COVID-19 vaccination program	JAMA   Viewpoint	Sarah Schaffer DeRoo

			Natalie J. Pudalov Linda Y. Fu
18.05.2020	What can psychiatrists learn from SARS and MERS outbreaks?	The Lancet Psychiatry   Comment	Iris E Sommer P Roberto Bakker
18.05.2020	Somalia sees “massive” rise in FGM during lockdown and Ramadan	All Africa   News	Emma Batha
15.05.2020	Wrong but useful – what Covid-19 epidemiologic models can and cannot tell us	NEJM   Perspective	Ingra Holmdahl Caroline Buckee
15.05.2020	Drug researchers pursue new lines of attack against COVID-19	Nature Biotechnology   News	Charlotte Harrison
12.05.2020	Neglected refugees find themselves even more neglected during COVID-19	African Arguments   Blog	Lucy Hovil Vittorio Capici
18.05.2020	Early data show Moderna Covid-19 vaccine generates immune response	Statnews   News	Helen Branswell
16.05.2020	Covid-19: Mental health services must be boosted to deal with “tsunami” of cases after lockdown	BMJ   News	Ingrid Torjesen
15.05.2020	The sprint to solve coronavirus protein structures – and disarm them with drugs	Nature   News feature	Megan Scudellari
15.05.2020	Reopening society and the need for real-time assessment of COVID-19 at the community level	JAMA   Viewpoint	Frederick J. Angulo Lyn Finelli David L. Swerdlow

15.05.2020	More harm than good? The net impact of COVID-19 policies is what matters for health	CGD   Blog	Damian Walker Y-Ling Chi Amanda Glassman Kalipso Chalkidou
15.05.2020	Sex workers must not be forgotten in the COVID-19 response	The Lancet   Comment	Lucy Platt Jocelyn Elmes Luca Stevenson Victoria Holt Stephen Rolles Rachel Stuart
14.05.2020	Recommendations from Guatemala to urban municipalities responding to COVID-19 in low- and middle-income countries	ARISE   Blog	Guillermo Hegel Yaimie Lopez Kim Ozano
14.05.2020	Integrating implementation science into covid-19 response and recovery	BMJ   Editorial	Lisa Hirschhorn Justin D Smith Miriam F Frisch Agnes Binagwaho
13.05.2020	How COVID-19 is changing the world: a statistical perspective from international agencies	World Bank   Blog	Haishan Fu
13.05.2020	How nutrition can protect people's health during COVID-19	World Bank   blog	Muhammad Ali Pate Martien van Nieuwkoop
12.05.2020	Waste in covid-19 research	BMJ   Editorial	Paul P Glasziou Sharon Sanders



			Tammy Hoffmann
11.05.2020	COVID-19 and postinfection immunity	JAMA   Viewpoint	Robert D Kirkcaldy Brian A. King John T. Brooks
29.04.2020	We need global health systems to be stronger than ever: corruption is getting in the way	Health Systems Global   Blog	Rachel Cooper

## Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Summary
21.05.2020	Revealing the toll of COVID-19	Prevent Epidemics   Tool	<ul style="list-style-type: none"> <li>This technical package helps guide governments in rapid mortality surveillance, informing decision-making based on the true impact of C19 within their countries</li> </ul>
May 2020	Key considerations for COVID-19 management in marginalised populations in Southeast Asia: transnational migrants, informal workers, and people living in informal settlements	SSHAP   Briefings	<ul style="list-style-type: none"> <li>This brief presents considerations of C19 management among structurally vulnerable populations in SE Asia including transnational migrants, people working in the informal economy, and people living in informal urban and peri-urban settlements</li> <li>These populations are poorly understood ignored or left out of formal policy</li> <li>Whilst not a systematic study of C19 control measures, does include information on alternative parallel, or informal responses that are relevant to C19 control in the region</li> </ul>
May 2020	Key considerations: Covid-19 in the context of conflict and displacement – Myanmar	SSHAP   Briefing	<ul style="list-style-type: none"> <li>This brief focuses on how the interplay between conflict, displacement and inter-communal tensions in Myanmar may influence disease control</li> <li>The response to C19 must be sensitive and effective where there are social and political challenges and where trust in authorities imposing diseases control may be low</li> </ul>

			<ul style="list-style-type: none"> <li>• A range of non-state actors must be factored into a public health response</li> </ul>
20.05.20	Impact of COVID-19 in Africa	UN Policy Brief	<ul style="list-style-type: none"> <li>• This policy brief takes a snapshot of immediate impacts of the pandemic on health, economies, peace, security, human rights and humanitarian assistance in Africa.</li> </ul>
12.05.2020	Guidance on community physical distancing during COVID-19 pandemic	Africa CDC   Guidance	<ul style="list-style-type: none"> <li>• Revised guidance accommodating new evidence</li> </ul>
May 2020	Responding to COVID-19 in Africa: Using data to find a balance	Partnership for Evidence-based response to COVID-19 (PERC)   Report	<ul style="list-style-type: none"> <li>• A consortium of global public health organisations and private sector firms collected social, economic, epidemiological, population movement, and security data from AU Member States to help determine the acceptability, impact and effectiveness of public health and social measures for C19</li> <li>• These findings have been developed into actionable guidance for governments and policymakers</li> <li>• PERC is working with governments to mitigate unintended social and economic disruptions of interventions to control C19</li> </ul>
18.05.2020	Management of covid-19: A practical guideline for maternal and newborn health care providers in sub-Saharan Africa	J Maternal-Fetal & Neonatal Med   Guideline	<ul style="list-style-type: none"> <li>• This guideline prepares and equips clinicians working in the maternal and newborn sections in the sub-region to manage COVID-19 during pregnancy and childbirth</li> </ul>
April 2020	Preserve essential health services	GFF   series country briefs	<ul style="list-style-type: none"> <li>• These country briefs provide data and guidance for policy makers and practitioners on preserving essential health care services in a time of crisis to</li> </ul>

	during the COVID-19 pandemic		help sustain progress achieved over recent years
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## Dashboards & Trackers

Cases & deaths: Global	Cases & deaths: Regional	Cases & deaths: Country	Living evidence & policy maps	Current research including trials	Diagnostics	Treatments	Vaccines
<a href="#">WHO sitreps</a>	<a href="#">WHO Africa</a>	<a href="#">Ghana</a>	<a href="#">COVID-NMA</a>	<a href="#">WHO</a>	<a href="#">FIND SARS-CoV-2 Test Tracker</a>	<a href="#">Global COVID-19 Clinical Trial Tracker</a>	<a href="#">CEPI</a>
<a href="#">WHO dashboard</a>	<a href="#">African Arguments</a>	<a href="#">Indonesia</a>	<a href="#">EPPI Centre</a>	<a href="#">WHO International Clinical Trials Registry Platform (ICTRP)</a>	<a href="#">FIND SARS-CoV-2 Diagnostic tests: performance data</a>	<a href="#">US NIH registered clinical trials</a>	<a href="#">Vaccine Centre LSHTM</a>
<a href="#">Johns Hopkins University</a>	<a href="#">European CDC</a>	<a href="#">Nigeria CDC</a>	<a href="#">Norwegian Institute of Public Health</a>	<a href="#">Cytel</a>	<a href="#">Serology-based tests for COVID-19</a>	<a href="#">Solidarity trial</a>	<a href="#">COVID-19 Oxford Vaccine Trial</a>
<a href="#">WEF</a>		<a href="#">Sierra Leone</a>	<a href="#">Oxford C19 Government Response Tracker (OxCGRT)</a>	<a href="#">US NIH</a>	<a href="#">Our World in Data: C19 Testing</a>	<a href="#">COVID-19 Therapeutics Accelerator</a>	
<a href="#">Our World in Data</a>		<a href="#">Singapore</a>	<a href="#">Our World in Data: C19 Policy responses</a>	<a href="#">COVID-evidence</a>			

Global 5050		UK	IFPRI COVID-19 Policy Response Portal	Cochrane			
CEBM, University of Oxford		US		Clinicaltrials.gov			
Humanitarian Data Exchange				UKCDR			
Information is Beautiful							
LSHTM							
HealthMap (cases)							
The Commons Project							

## C19 Resource Hubs

Global	Regional & Country	Academic journals & Publishers	Global Health Institutes/Centres/Funders/Others	Health Topics	Social Sciences
WHO COVID-19 pandemic	Africa CDC	Annals of Internal Medicine	LSTM	Stop TB Partnership	SSHAP
WHO risk communication	African Union	BMJ	LSHTM		IDA

WHO Q&A	Nigeria CDC	Bulletin of the WHO	ICL MRC Centre for Global Infectious Disease Analysis	Global Menstrual Collective	Disability and Inclusion
WHO Global research	GeoPoll : SSA	Cambridge University Press	ODI	SLH: Handwashing in low resource settings	Coregroup IDDC
COVID-19 Solidarity Response Fund	Global Health Network Africa	Cell Press	Johns Hopkins University		Ethics, health systems & COVID-19
UN	African Academy of Sciences	Cochrane	Center for Global Development		Social Development Direct C19 blog series
UN Women	Africa Evidence Network	Elsevier	CMMID Repository		
UNOCHA	OCHA Southern and Eastern Africa COVID-19 Digest	JAMA Network	Norwegian Institute of Public Health		
UNHCR		The Lancet	Oxford Centre for Evidence-based Medicine		
UNICEF		medRxiv and bioRxiv (Preprints)	HEART		

UNESCO		NEJM	UKRI		
UN WFP		Oxford University Press	Evidence Aid		
GOARN		PLoS	NIH		
EPI-WIN		SAGE journals	IFPRI Resources and Analyses of C19 Impact		
World Bank		Science	Prevent Epidemics		
Our World in Data		Springer Nature			
COVID-19 Narratives by David Nabarro		SSRN (Preprints)			
Reliefweb		Wiley			
Humanitarian OpenStreetMap Team					
Global Partnership for Sustainable Development Data					
WorldPop					
Flowminder					
COVID-END					

Premise COVID-19 Global Impact Study					
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## Online learning & events

Date	Title/URL	Online learning/event	Duration	Lead
04.06.2020 12pm ET	CGD Conversations on COVID-19 and Development: John Nkengasong	Event		CGD
Available now	<a href="#">WHO Academy and WHO Info mobile applications</a>	Mobile app		WHO
Available now	<a href="#">COVID-19: Pandemics, Modelling and Policy</a>	Online learning	2 weeks   2 hours weekly study	FutureLearn UNESCO UNITWIN Complex Systems Digital Campus/Open University
11.5.2020	<a href="#">COVID-19 Contact Tracing course</a>	Online learning	5 hours	Johns Hopkins Bloomberg School of Health
7-28 May 2020	<a href="#">Virtual Evidence Weeks</a>	5 sessions	1h 30	International Initiative for Impact Evaluation (3ie)
Tuesdays at 1700 CEST (Geneva time) & Thursdays 0830 CEST (Geneva time)	<a href="#">COVID-19 Open online brief with Dr David Nabarro</a>	Event	1h	4SD

30.04.2020	Professor Chris Whitty's Gresham lecture on COVID-19	Event	1h 20	Gresham College
Available now	Emerging respiratory viruses, including COVID-19: methods for detection, prevention, response and control	Online learning	3 hours	WHO
Available now	Responding to COVID-19: Real-time training for the coronavirus disease outbreak	Online learning	Multiple self-paced course	WHO
25 May 2020	COVID-19: Tackling the Novel Coronavirus	Online learning	3 weeks   4 hours weekly study	FutureLearn LSHTM/UK PHRST
Available online now without mentors. Updated version will commence early June 2020	COVID-19 Diagnostics and Testing	Online learning	3 weeks   3 hours weekly study	FutureLearn FIND/LSHTM/ASLM
6 April 2020	COVID-19 Critical Care: Understanding and Application	Online learning	5 weeks   1 hour weekly study	FutureLearn University of Edinburgh & Royal College of Physicians of Edinburgh
Available now	COVID-19 supporting online courses	Online learning	Multiple self-paced course	BMJ Learning



## Suggested citation

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## Rapid review methodology

The rapid daily search for peer-reviewed literature is carried out through a PubMed search with the following keywords (“COVID-19” OR “severe acute respiratory syndrome coronavirus 2” OR “2019-nCoV” OR “SARS-CoV-2” OR “2019nCoV” OR “coronavirus” ) AND (“Africa”) OR (“equity” OR “equities”) OR (“poverty”), restricted to articles published in the previous 2 to 3 days, in English. This is complemented by a search of the homepage of the following high-impact global health journals: The Lancet journals, New England Journal of Medicine, Nature, JAMA, Annals of Internal Medicine, Cochrane Reviews, BMJ Global Health, the PLoS journals and a Twitter search of their Twitter pages. A search also of preprints from bioRxiv and medRxiv. Please note that papers that have not been peer-reviewed are highlighted in red. All primary research papers that relate to the primary and secondary impacts of the COVID-19 response in LMICs, and disease control and health system responses are included. Articles related to tackling the secondary impacts on other sectors are not included. Additional commentaries, opinions, and commissioned pieces are selected based on relevance.

The search for dashboards, guidelines, tools, editorials, comments, blogs, opinions and news is through the academic journals listed above, C19 resource hubs and following lead academics and professionals on Twitter.

## About this report

This is a weekly summary of the daily COVID-19 health evidence summary (HES) which are based on 3 hours of desk-based research each day. The summary is not intended to be a comprehensive summary of available evidence on COVID-19 but aims to make original documents easily accessible to decision makers which, if relevant to them, they should go to before making decisions. The HES are not intended to replace medical or professional advice and the researcher or the K4D consortium cannot be held responsible for any decisions made about COVID-19 on the basis of the HES alone. K4D services are provided by a consortium of leading organisations working in international development, led by the Institute of Development Studies (IDS), with Education Development Trust, Itad, University of Leeds Nuffield Centre for International Health and Development, Liverpool School of Tropical Medicine (LSTM), University of Birmingham International Development Department (IDD) and the University of Manchester Humanitarian and Conflict Response Institute (HCRI).

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