

COVID-19

Health Evidence Summary No.50

summary from this week

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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
28.05.2020	Associations of hypertension with the severity and fatality of SARS-CoV-2 infection: a meta-analysis	Epidemiology & Infection Meta-analysis	<ul style="list-style-type: none"> Hypertensive patients were at a 3.48-fold higher risk of dying from COVID-19 (95% CI: 1.72-7.08) Pooled ORs of COVID-19 fatality for hypertension vs non-hypertension was 6.43 (95% CI: 3.40-12.17) and 2.66 (95% CI: 1.27-5.57) in age <50y and ≥50y patients respectively Hypertension could significantly increase the risk of severity and fatality of SARS-CoVd-2 infection
26.05.2020	Do the clinical management guidelines for Covid-19 in African countries	Bull WHO Review	<ul style="list-style-type: none"> This review identified and critically appraised the palliative care recommendations within COVID-19 case management guidelines in Africa

	reflect the African quality palliative care standards? A rapid review		<ul style="list-style-type: none"> • Governments and policymakers in Africa must prioritise palliative care within case management guidelines to ensure patients with COVID-19 have access
22.05.2020	Ventilation techniques and risk for transmission of coronavirus disease, including COVID-19: A living systematic review of multiple streams of evidence	Annals of Internal Medicine Review	<ul style="list-style-type: none"> • A review of multiple streams of evidence regarding the benefits and harms of ventilation techniques for coronavirus infections, including that causing COVID-19 • A limitation was that direct studies in COVID-19 are limited and poorly reported • Indirect and low-certainty evidence suggests that use of non-invasive ventilation, similar to invasive mechanical ventilation, probably reduces mortality but may increase the risk for transmission of COVID-19 to HCWs
28.05.2020	Description of COVID-19 in HIV-infected individuals: a single-centre, prospective cohort	The Lancet HIV Article	<ul style="list-style-type: none"> • This observational prospective study characterises individuals aged ≥ 18y with COVID-19 among a cohort of HIV-infected adults in Madrid. Included as information about incidence, clinical characteristics and outcomes of HIV-infected individuals with SARS-CoV-2 infection is scarce • As of 30 April 2020, 51 COVID-19 cases were diagnosed among a cohort of 2873 HIV-infected individuals • COVID-19 presented similar clinical, laboratory and radiological features in HIV-infected individuals compared with reports of the general population • Among HIV-infected individuals, lower CD4 cell counts affected disease severity and viral kinetics suggesting that those with low CD4 cell counts might have worse outcomes than individuals with restored immunity • HIV-infected individuals should receive the same treatment

			approach applied to the general population
28.05.2020	COVID-19 mortality in patients with cancer on chemotherapy or other anticancer treatments: a prospective cohort study	The Lancet Article	<ul style="list-style-type: none"> • This prospective observational study in the UK describes the clinical and demographic characteristics and C19 outcomes in patients with cancer. Included as data from large multicentre studies to support the assumption that individuals with cancer are at increased risk of mortality from C19 are scarce • Authors did not identify evidence that cancer patients on cytotoxic chemotherapy or other anti-cancer treatments are at increased risk of mortality from C19, compared to those not on active treatment • Mortality from COVID-19 in cancer patients appears to be driven by age, sex and co-morbidities
28.05.2020	Clinical impact of COVID-19 on patients with cancer (CCC19): a cohort study	The Lancet Article	<ul style="list-style-type: none"> • This study characterises outcomes of a cohort of 928 patients aged ≥ 18y with cancer and COVID-19 from the USA, Canada and Spain from the COVID-19 and Cancer Consortium (CCC19) database diverse in terms of age distribution, race and ethnicity, cancer status, and whether on anticancer treatment. Included as data on patients with COVID-19 who have cancer are lacking • Among patients with cancer and COVID-19, 30-day all-cause mortality was high and associated with general risk factors and risk factors unique to patients with cancer
25.05.20	Management of mild COVID-19: Policy implications of initial experience in India	medRxiv preprint (not peer reviewed)	<ul style="list-style-type: none"> • Study aimed at describing clinical characteristics and outcomes of admitted patients with mild COVID-19 illness in the initial phase of pandemic in India. • Conclusions - Patients with mild disease at presentation had a stable disease course and therefore such cases can be managed outside hospital setting.

Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary
28.05.2020	Asymptomatic transmission during the COVID-19 pandemic and implications for public health strategies	Clinical Infectious Diseases Narrative review	<ul style="list-style-type: none"> • This summary of evidence demonstrates the transmission potential of SARS-CoV-2 from asymptomatic and pre-symptomatic individuals • Authors urge reassessment of public health strategies relying solely on 'symptom' onset for infection identification • Extensive universal testing irrespective of symptoms should be considered with priority given to those with high frequency exposure to positive patients
26.05.2020	Susceptibility to and transmission of COVID-19 amongst children and adolescents compared with adults: a systematic review and meta-analysis	medRxiv (non-peer reviewed) / Systematic review	<ul style="list-style-type: none"> • Children and adolescents under the age of 20 are much less likely than adults to become infected by the new coronavirus, finds a large systematic review of journal articles, preprints and reports.

Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary
27.05.2020	Small droplet aerosols in poorly ventilated spaces and SARS-CoV-2 transmission	The Lancet Respiratory Medicine Comment	<ul style="list-style-type: none"> • A study to better understand the spreading of respiratory droplets and possible preventive measures • Although only healthy volunteers were studied, data on droplet size distribution and persistence has implications

			<p>on requirements to use face masks to prevent virus transmission</p> <ul style="list-style-type: none"> • Better ventilation of spaces substantially reduces the airborne time of respiratory droplets relevant in that typically poorly ventilated and populated spaces have reported sites of viral transmission despite preventive physical distancing
25.05.20	Coronavirus (COVID-19) infection in children at a specialist centre: outcome and implications of underlying high-risk comorbidities in a paediatric population	medRxiv preprint (not peer reviewed)	<ul style="list-style-type: none"> • There is evolving evidence of significant differences in severity and outcomes of COVID-19 in children compared to adults. • In children presenting with pre-existing COVID-19 vulnerable medical conditions at a specialist centre, there does not appear to be significantly increased risk of either contracting COVID-19 or severe complications, apart from those undergoing chemotherapy, who are over-represented.

Therapeutics

Publication date	Title/URL	Journal/Article type	Summary
27.05.2020	Hydroxychloroquine or chloroquine for treatment or prophylaxis of COVID-19: A living systematic review	Annals of Internal Medicine Review	<ul style="list-style-type: none"> • This review summaries evidence about the benefits and harms of hydroxychloroquine or chloroquine for the treatment or prophylaxis of COVID-19 • No studies evaluated prophylaxis • Evidence was conflicting and insufficient regarding the effect of hydroxychloroquine on such outcomes as all-

			<p>cause mortality, progression to severe diseases, clinical symptoms, and upper respiratory virologic clearance with antigen testing</p> <ul style="list-style-type: none"> • Evidence on the benefits and harms of using hydroxychloroquine or chloroquine to treat COVID-19 is very weak and conflicting
22.05.20	Remdesivir for the Treatment of Covid-19 — Preliminary Report	New England Journal of Medicine Article	<ul style="list-style-type: none"> • A trial of the drug remdesivir showed that it shortens the recovery of people hospitalized for COVID-19. • John Beigel at the National Institutes of Allergy and Infectious Diseases in Rockville, Maryland, and his colleagues studied more than 1,000 people enrolled in a randomized, double-blind trial and found that those who took remdesivir had a median recovery time of 11 days, compared to 15 days for those who took a placebo.

Social Science

Publication date	Title/URL	Journal/Article type	Summary
28.05.2020	A vulnerability index for COVID-19: spatial analysis to inform equitable response in Kenya	medRxiv preprint (not peer reviewed)	<ul style="list-style-type: none"> • 3 vulnerability indices were used to identify areas and people who require greater support in the public health pandemic response to C19 in Kenya • The combined index of social and epidemiological vulnerabilities shows that on average 15% (7 million) of Kenyans live in the most vulnerable sub-counties mainly located in the central and south-eastern parts of Kenya • The heterogeneous nature of the vulnerability highlights the need to address social determinants of health disparities, strengthen the

			health system and establish programmes to buffer against the impact of C19
26.05.20	Digital Health Equity and COVID-19 – The Innovation Curve Cannot Reinforce the Social Gradient of Health	Journal of Medical Internet Research preprint	<ul style="list-style-type: none"> • Poverty, lack of access to digital health, poor engagement with digital health for some communities, and barriers to digital health literacy are some factors that can contribute to poor health outcomes. • Here the Digital Health Equity Framework is presented, which can be used to consider health equity factors. Along with person-centered care, digital health equity should be incorporated into health provider training and should be championed at the individual, institutional, and social levels.
21.05.20	Public knowledge, attitudes and practices towards COVID-19: A cross-sectional study in Malaysia	PLOS ONE Research article	<ul style="list-style-type: none"> • Cross-sectional online survey of 4,850 Malaysian residents was conducted between 27th March-3rd April 2020. • Respondents largely positive about way government was handling COVID-19. Most avoiding crowds and washing hands but fewer wearing masks. • The results highlight the importance of consistent messaging from health authorities and the government as well as the need for tailored health education programs to improve levels of knowledge, attitudes and practices.

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type	Author(s)
30.05.2020	COVID-19 in Africa: no room for complacency	The Lancet Editorial	
30.05.2020	Fears of “highly catastrophic” COVID-19 spread in Yemen	The Lancet World Report	Sharmila Devi
29.05.2020	Covid-19 study on hydroxychloroquine use questioned by 120	The Guardian News	Melissa Davey

	researchers and medical professionals		
29.05.2020	COVID-19 research in Africa	Science Editorial	Linda-Gail Bekker Valerie Mizrahi
29.05.2020	Paying participants in COVID-19 trials	The Journal of Infectious Diseases Review	Emily A. Largent Holly Fernandez Lynch
28.05.2020	The starting line for COVID-19 vaccine development	The Lancet Comment	Nelson Lee Allison McGeer
28.05.2020	COVID-19 in people with HIV	The Lancet HIV Comment	Zhe Xu Chao Zhang Fu-Sheng Wang
27.05.2020	A voice from the front line: reaching out of the box to engage private non-state healthcare actors in LMICs to combat COVID-19	Health Policy and Planning Blog	Priya Balasubramaniam et al.
May 2020	First measles, now COVID-19 – are outbreaks finally moving the dial on vaccine hesitancy?	LSHTM Feature	Jacqui Thornton
June 2020	Obstacles to COVID-19 control in east Africa	The Lancet Infectious Diseases Newsdesk	Esther Nakkazi
June 2020	A call for a global COVID-19 neuro research coalition	The Lancet Neurology Correspondence	Andrew Sylvia Winkler et al.
28.05.2020	Covid-19: WHO halts hydroxychloroquine trial to review links with increased mortality risk	BMJ News	

28.05.2020	COVID-19's collateral damage could devastate low- and middle-income countries	GAVI Blog	
28.05.2020	How Mauritius' unique political culture helped it beat COVID-19	African Arguments Blog	Myriam Blin Jess Auerbach
27.05.2020	Pandemic preparedness: developing vaccines and therapeutic antibodies for COVID-19	Cell Perspective	Gregory D. Sempowski Kevin O. Saunders Priyamvada Acharya Kevin J. Wiehe Barton F. Haynes
27.05.2020	The COVID-19 MS Coalition – accelerating diagnostics, prognostics, and treatment	The Lancet Correspondence	Weston Struwe Edward Emmott Melanie Bailey Michal Sharon Andrea Sinz Fernando J Corrales et al.
27.05.2020	Ratio, rate, or risk?	The Lancet Infectious Diseases Correspondence	Srinivas Mantha
27.05.2020	Hydroxychloroquine: balancing the needs of LMICs during the COVID-19 pandemic	The Lancet Rheumatology Correspondence	Soumya Banerjee
27.05.2020	Reducing transmission of SARS-CoV-2	Science Perspective	Kimberly A. Prather Chia C. Wang Robert T. Schooley

27.05.2020	Tracking the gender impact of COVID-19	CGD Blog	Mayra Buvinic Lorenz Noe Eric Swanson
27.05.2020	Introducing the COVID-19 multi-model comparison collaboration	CGD Blog	Kalipso Chalkidou Marelize Gorgens Raymond Hutubessy Yot Teerawattananon David Wilson
27.05.2020	Disease forecasting during the COVID-19 pandemic: have we learned from previous outbreaks	CGD Blog	Hiral Anil Shah Kalipso Chalkidou
26.05.2020	A tool to estimate the net health impact of COVID-19 policies	CGD Blog	Damian Walker Y-Ling Chi Florian Poli Kalipso Chalkidou
26.05.2020	Adverse consequences of rushing a SARS-CoV-2 vaccine: implications for public trust	JAMA Viewpoint	Brit Trogen David Oshinsky Arthur Caplan
22.05.2020	Cloth masks may prevent transmission of COVID-19: an evidence-based, risk-based approach	Annals of Internal Medicine Ideas and Opinions	Catherine M. Clase Edouard L. Fu Meera Joseph et al.
26.05.20	Will the Pandemic Lead to Outbreaks of Other Maladies?	New York Times Opinion	Anita Shet

26.05.20	Digital contact tracing poses ethical challenges	John Hopkins University Q&A	Jeffrey Kahn
23.05.20	COVID-19: Exposing digital poverty in a pandemic	International Journal of Surgery Correspondence	Matthew Seah
22.05.20	India's medical students and residents grapple with uncertain futures in the face of covid-19	BMJ Opinion	Payel Biswas
26.05.20	Physician Moms Group: the support network that's needed more than ever during the covid-19 pandemic	BMJ Feature	Chris Stokel-Walker
25.05.20	COVID-19 preparedness in Malawi: a national facility-based critical care assessment	Lancet Global Health Correspondence	Paul D Sonenthal et al.
June 2020	A call for a global COVID-19 Neuro Research Coalition	Lancet Neurology Correspondence	Andrea Sylvia Winkler et al.
26.05.20	Scientific networks are helping African countries to access coronavirus lab supplies	Nature News	Linda Nordling
26.05.20	Hunger could double in East Africa and the Horn in months as coronavirus spreads	Scaling up Nutrition/ WFP	
27.05.20	Africa: Women and Children Will Pay For This Pandemic – Unless We Act	All Africa News	By H.E. Kersti Kaljulaid, Rt Hon. Helen Clark, H.E. Jorge Alcocer Varela, and Hon. Graça Machel,
22.05.20	Hydroxychloroquine prophylaxis for high-risk	Lancet/ Correspondence	Praveen Tilangi, Devashish Desai,

	COVID-19 contacts in India: a prudent approach		Adil Khan, Manish Soneja
21.05.20	Detection of SARS-CoV-2 in human breastmilk	Lancet/ Correspondence	Rüdiger Groß Carina Conzelmann et al.
1.06.20	Food insecurity will be the sting in the tail of COVID-19	Lancet Global Health/ Editorial	
26.05.20	Invest in planetary health to build resilience, urges global health community	UK Health Alliance on Climate Change'	
25.05.20	Trump's favoured drug shows no benefit — but another drug does	Nature / News	
22.05.20	Translating Science on COVID-19 to Improve Clinical Care and Support the Public Health Response	JAMA / Viewpoint	Carlos del Rio, Preeti Malani,
26.05.20	0.27% Rise in Infections Pushes Total of African COVID-19 Cases Over 115,000	All Africa / News	
26.05.20	Rwanda: COVID-19 - Researchers Discover New Method of Mass Testing	All Africa / News	

Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Summary
26.05.20	Digital Contact Tracing for Pandemic Response: Ethics	Johns Hopkins	<ul style="list-style-type: none"> Detailed guidelines to help manage the creation, implementation, and application of digital contact tracing.

	and Governance Guidance	University Press	
22.05.20	Covid-19 Rx: Treatment Simulations	NEJM	<ul style="list-style-type: none"> The spectrum of Covid-19 presentations ranges from mild self-limited flu-like illness to life-threatening multi-organ failure. Prepare by engaging in these five treatment simulations from NEJM Group.
26.05.20	WHO Manifesto for a healthy recovery from COVID-19	WHO	<ol style="list-style-type: none"> 1) Protect and preserve the source of human health: Nature 2) Invest in essential services, from water and sanitation to clean energy in healthcare facilities. 3) Ensure a quick healthy energy transition. 4) Promote healthy, sustainable food systems. 5) Build healthy, liveable cities. 6) Stop using taxpayers money to fund pollution.
22.05.2020	Framework for decision-making: implementation of mass vaccination campaigns in the context of COVID-19	WHO Interim Guidance	<ul style="list-style-type: none"> Outlines a common framework for decision-making for the conduct of preventive and outbreak response campaigns Considerations for implementing mass vaccination campaigns for prevention of increased risk of vaccine-preventable diseases (VPD)/high impact diseases (HID) among susceptible populations Details the risks and benefits of conducting vaccination campaigns to respond to VPD/HID outbreaks

Dashboards & Trackers

Cases & deaths: Global	Cases & deaths: Regional	Cases & deaths: Country	Living evidence & policy maps	Current research including trials	Diagnostics	Treatments	Vaccines
WHO sitreps	WHO Africa	Ghana	COVID-NMA	WHO	FIND SARS-CoV-2 Test Tracker	Global COVID-19 Clinical Trial Tracker	CEPI
WHO dashboard	African Arguments	Indonesia	EPPI Centre	WHO International Clinical Trials Registry Platform (ICTRP)	FIND SARS-CoV-2 Diagnostic tests: performance data	US NIH registered clinical trials	Vaccine Centre LSHTM
Johns Hopkins University	European CDC	Nigeria CDC	Norwegian Institute of Public Health	Cytel	Serology-based tests for COVID-19	Solidarity trial	COVID-19 Oxford Vaccine Trial
WEF		Sierra Leone	Oxford C19 Government Response Tracker (OxCGRT)	US NIH	Our World in Data: C19 Testing	COVID-19 Therapeutics Accelerator	
Our World in Data		Singapore	Our World in Data: C19 Policy responses	COVID-evidence			
Global 5050		UK	IFPRI COVID-19 Policy	Cochrane			

			Response Portal				
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	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	RBM Partnership	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
May 28 09:30 am to 11:00 am EDT	Virtual Event - No backsliding: How can we re-orient food systems and health systems to protect nutrition and healthy diets in the context of COVID-19?	Virtual event	1.5 hours	IFPRI
Available now	COVID-19: Effective Nursing in Times of Crisis	Online course	2 weeks – 2 hours per week	Johns Hopkins School of Nursing
04.06.2020 12pm ET	CGD Conversations on COVID-19 and Development: John Nkengasong	Event		CGD
Available now	WHO Academy and WHO Info mobile applications	Mobile app		WHO
Available now	COVID-19: Pandemics, Modelling and Policy	Online learning	2 weeks 2 hours weekly study	FutureLearn UNESCO UNITWIN Complex Systems Digital Campus/Open University
11.5.2020	COVID-19 Contact Tracing course	Online learning	5 hours	Johns Hopkins Bloomberg School of Health

7-28 May 2020	Virtual Evidence Weeks	5 sessions	1h 30	International Initiative for Impact Evaluation (3ie)
Tuesdays at 1700 CEST (Geneva time) & Thursdays 0830 CEST (Geneva time)	COVID-19 Open online brief with Dr David Nabarro	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

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