



COVID-19

Health Evidence Summary No.48

Kerry Millington & Samantha Reddin

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

28 May 2020

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 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 Governments and policymakers in Africa must prioritise

	reflect the African quality palliative care standards? A rapid review		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

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

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 on requirements to use face masks to prevent virus transmission • 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

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

			<p>such outcomes as all-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
--	--	--	---

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

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type	Author(s)
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 et 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.
------------	--	--	--

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: COVID-19 Policy responses	COVID-evidence			
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	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					

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

Millington, K.A. and Reddin, S. (2020). *COVID-19 Health Evidence Summary No.48*. K4D Evidence Summary. Brighton, UK: Institute of Development Studies.

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 daily COVID-19 health evidence summary (HES) is based on 3 hours of desk-based research. 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).

This evidence summary was prepared for the UK Government's Department for International Development (DFID) and its partners in support of pro-poor programmes. It is licensed for non-commercial purposes only. K4D cannot be held responsible for errors, omissions or any consequences arising from the use of information contained in this health evidence summary. Any views and opinions expressed do not necessarily reflect those of DFID, K4D or any other contributing organisation.



© DFID - Crown copyright 2020.