K4D | Knowledge, evidence and learning for development

COVID-19 Health Evidence Summary No.61

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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 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	Keywords
11.06.2020	Merits and culprits of immunotherapies for neurological diseases in times of COVID-19	EBioMedicine | Review	• An overview, of the most recently available data about SARS-CoV-2 and the approved immunotherapies for neurological diseases, that includes current treatment strategies and the associated COVID-19 risk and the potential of immunotherapies to treat COVID-19	Immunotherapy, neurology

Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
12.06.2020	Predicted COVID-19 fatality rates based on age, sex, comorbidities, and health system capacity	CGD | Working Paper	• Non-random testing and incomplete vital registration systems challenge estimating directly the infection fatality rate (IFR) in many LMICs • This paper estimates the adjustments required to extrapolate estimates of IFR from high- to lower-income regions • Predicted IFR across 21 world regions range from 0.11% in Western sub-Saharan Africa to 1.07% for high-income Asia Pacific when accounting for differences in the distribution of age, sex, and relevant comorbidities • Adjusting for health system capacity greatly diminishes, but does not erase entirely, the demography-based advantage predicted from the lowest income settings • Code for this paper is available	Mortality, LMICs
12.06.2020	The effectiveness of social bubbles as part of a Covid-19 lockdown exit strategy, a modelling study	medRxiv | Preprint (not peer reviewed)	• The impact of contact clustering in social bubbles, as part of gradual lockdown exit strategy, on epidemic and mortality risk was estimated using the UK as a case study • Analysis highlights the continued need for social distancing despite a social bubble strategy being effective in expanding contacts while limited the risk for a resurgence of cases. • Recommending social bubbles only for those struggling with lockdown alongside continuing prioritising outdoor settings	Social bubbles, exit strategy

			for gathers and maintaining social distancing could strike a balance between minimising the impact on mental health and minimising the C19 epidemic risk	

Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary	Keywords
12.06.2020	The impact of COVID-19 and strategies for mitigation and suppression in low- and middle-income countries	Science | Research Article	- Analysis combines data on demography, contact patterns, disease severity and health care capacity and quality to understand its impact and inform strategies for its control - Limited health system capacity and closer inter-generational contact negate the "benefit" of younger populations in LICs - Mitigation strategies that slow but do not interrupt transmission will still result in health systems being overwhelmed due to the poorer health care available - Many lower income countries acted quickly when transmission was low which likely substantially slowed viral spread - This will need to be maintained or triggered frequently to keep within health care capacity	Mitigation, suppression, health care capacity

Testing

Publication date	Title/URL	Journal/Article type	Summary	Keywords
11.06.2020	Systematic SARS-CoV-2 screening in cerebrospinal fluid during the COVID-19 pandemic	The Lancet Microbe | Correspondence	• Retrospective systematic screening of all cerebrospinal fluid (CSF) samples (n=622) at University Hospital in Lyon, France 1 Feb to 11 May 2020 • SARS-CoV-2 detection in CSF samples was very low suggesting that although SARS-CoV-2 can replicate in neuronal cells in vitro, SARS-CoV-2 testing in CSF is currently not relevant in the general population • Further studies are required to identify the potential role of the host-immune response on neurological manifestation in patients with C19	Testing, CSF
12.06.2020	Evaluation of sample pooling for screening of SARS-CoV-2	medRxiv | Preprint (not peer reviewed)	• This study recommends pooling of 4 in 1 using the standard protocols of the assay, reagents and equipment, expected to retain test accuracy • This approach allows expansion of screening capacity	Sample pooling
12.06.2020	An imperfect tool: COVID-19 'test & trace' success relies on minimising the impact of false negatives and continuation of physical distancing	medRxiv | Preprint (not peer reviewed)	• Although this study extends an existing UK-focused branching process model, it highlights that test accuracy must be considered when relaxing physical distancing measures through contact tracing.	Test accuracy

Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
11.06.2020	Hydroxychloroquine proves ineffective in hamsters and macaques infected with SARS-CoV-2	bioRxiv | Preprint (not peer reviewed)	• Although many human clinicals trials are ongoing assessing efficacy of prophylactic/therapeutic use of hydroxychloroquine (HCQ) for C19 there remains a lack of supportive preclinical drug efficacy studies • This preclinical animal study in two animal models does not support the use of HCQ in prophylaxis/treatment of C19	Preclinical, HCQ

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal | Article type	Author(s)
13.06.2020	COVID-19 vaccines for all?	The Lancet | World Report	Ann Danaiya Usher
13.06.2020	Offline: COVID-19 - what can we expect to come	The Lancet | Comment	Richard Horton
12.06.2020	Predicting COVID-19 infection fatality rates around the world	CGD | Blog	Justin Sandefur et al.

Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Summary
10.06.2020	COVID-19 measures must be grounded first and foremost on the right to health	OHCHR | Press release	• UN Human Rights Special Rapporteur press release on the right to health foundation of the C19 response

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 Diagnostics: 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-evidence			

			C19 Policy responses				
Global 5050		UK	IFPRI COVID-19 Policy Response Portal	Cochrane			
CEBM, University of Oxford		US	COVID-19 Primer	Clinicaltrials.gov			
Humanitarian Data Exchange			NIH LitCovid	UKCDR			
Information is Beautiful			WHO COVID-19 Database				
LSHTM							
HealthMap (cases)							
The Commons Project							

C19 Resource Hubs

Global	Regional & Country	Academic journals & Publishers	Institutes/Centres /Funders/Other	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	JAMA Network	Norwegian Institute of Public Health		

	COVID-19 Digest				
UNHCR	South African Government	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
Available now	Standard precautions: Environmental cleaning and disinfection	Online course	1 hour	WHO
16.06.2020	Africa beyond COVID-19	Virtual event	1h 30 hours	ODI
15.06.2020	Poverty monitoring in the context of Covid-19	Virtual event	1h 15	ODI
Available now	COVID-19: Effective Nursing in Times of Crisis	Online course	2 weeks – 2 hours per week	Johns Hopkins School of Nursing
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
12.05.2020	COVID-19 and maintaining quality essential health services	Webinar	1 hour	WHO & ISQua – Dr Shams Syed, Dr Peter Lachman, Dr Teri Rynolds & Dr Ed Kelley
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	Online learning	Multiple self-paced course	WHO

	coronavirus disease outbreak			
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

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).