COVID-19
Health Evidence Summary No.90

Kerry Millington & Samantha Reddin
Liverpool School of Tropical Medicine (LSTM) & Institute of Development Studies
27 August 2020

This weekly COVID-19 health evidence summary (HES) is based on 3.5 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.

Clinical characteristics and management

Publication date	Title/URL	Journal/Article type	Summary	Keywords
21.08.2020	COVID-19 associated hyperinflammation and escalation of patient care: a retrospective longitudinal cohort study	The Lancet Rheumatology | Article	• A retrospective cohort study in the UK but maybe useful in trial design • Associations between elevated inflammatory markers, escalation of respiratory support and survival in people with C19 indicate the existence of a high-risk inflammatory phenotype (COV-HI)	hyperinflammation

Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary	Keywords
24.08.2020	A vulnerability index for COVID-19: spatial analysis at the subnational level in Kenya	BMJ Global Health | Original research	• 3 vulnerability indices were created to identify the most vulnerable and their geographical location to inform the emergency response in Kenya • The heterogeneity of the vulnerability indices highlight the need for targeted and prioritised actions based on the needs across the subcounties • The vulnerability indices created are tools relevant to te county, national government and stakeholders for planning and prioritisation	Vulnerability indices

Testing

Publication date	Title/URL	Journal/Article type	Summary	Keywords
26.08.2020	Rapid, point-of-care antigen and molecular-based tests for diagnosis of SARS-CoV-2 infection	Cochrane Systematic Review - Diagnostic	• This SR assesses the diagnostic accuracy of point-of-care antigen and molecular-based tests to detect current SARS-CoV-2 infection (with the aim of reducing household and community transmission) • This review identifies early-stage POC tests for detecting SARS-CoV-2 infection but largely based on remnant lab samples with uncertainty on whether the tests will perform in the same way in clinical practice • Rapid tests have the potential to be used to inform triage of RT-PCR use, allowing earlier detection of those testing positive, but the evidence currently is not strong enough to determine	Point-of-care tests

Publication date	Title/URL	Journal/Article type	Summary	Keywords
			how useful they are in clinical practice	
21.08.2020	The interpretation of SARS-CoV-2 diagnostic tests	Cell | Review	• Testing is a tool to manage the ongoing C19 pandemic and is widely used but test interpretation is incompletely understood creating a challenge in decision making and proper testing utilisation • Here general principles of test interpretation are reviewed and applied to specific examples • The review runs contrary to many popular narratives about testing as a tool for C19 • Improper utilisation can potentially have unintended negative consequences	testing
19.08.2020	Information given by website selling home self-sampling COVID-19 tests: an analysis of accuracy and completeness	medRxiv | preprint (not peer reviewed)	• Cross-sectional observational study of 27 websites selling direct to user home self-sampling and testing for C19 in the UK and US but included to highlight caution for online sales due to incomplete, and in some cases misleading information on test accuracy, intended use and test interpretation. • Best practice guidance for communication about tests to the public should be developed and enforced for online sales of C19 tests	Online test sales

Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
21.08.2020	Effect of remdesivir vs standard care on clinical status at 11 days in patients with moderate COVID-19: a randomized clinical trial	JAMA | Original investigation	• Randomised, open-label, phase 3 trial that included 584 patients with moderate C19 • Hospitalised patients with moderate C19 randomised to a 5 day course of remdesivir had a	remdesivir

			statistically significant better clinical status compared with those randomised to standard care at 11 days after initiation of treatment, but the difference was of uncertain clinical importance	
21.08.2020	Risk of hydroxychloroquine alone and in combination with azithromycin in the treatment of rheumatoid arthritis: a multinational, retrospective study	The Lancet Rheumatology | Article	- Hydroxychloroquine treatment appears to have no increased risk in the short term among patients with RA - In the long term though it appears to be associated with excess cardiovascular mortality - Addition of azithromycin increases the risk of heart failure and cardiovascular mortality even in the short term - Careful consideration must be given to the benefit-risk trade-off when counselling those on hydroxychloroquine treatment	Hydroxychloroquine, azithromycin, rheumatoid arthritis

Indirect impact of COVID-19

Publication date	Title/URL	Journal/Article type	Summary	Keywords
25.08.2020	Immediate impact of stay-at-home orders con control COVID-19 transmission on socioeconomic conditions, food insecurity, mental health, and intimate partner violence in Bangladeshi women and their families: an interrupted time series	The Lancet Global Health | Article	• An interrupted time series to determine the immediate impact of C19 lockdown orders on women and their families in rural Bangladesh on income, food security and mental health compared to a median on 1 year and 2 years before the C19 pandemic and also assessment of women's IPV during the pandemic • There was marked reductions in income, increases in food insecurity, deteriorations in mental health and an increase in anxiety, and documents experiences of IPV • C19 lockdowns to reduce transmission of C19 exert substantial economic and social consequences to family welfare, family nutritional status, and to women's mental wellbeing and safety • Should future lockdowns be required to control the transmission of an infectious disease, a comprehensive public health response must underwrite economic	Lockdown, socioeconomic, food insecurity, mental health, IPV

			circumstances and include solutions to ensure the wellbeing of families and especially women	
20.08.2020	Impact of the societal response to COVID-19 on access to healthcare for non-COVID-19 health issues in slum communities of Bangladesh, Kenya, Nigeria and Pakistan: results of pre-COVID and COVID-19 lockdown stakeholder engagements	BMJ Global Health | Original research	• Considers access to healthcare before and during COVID-19 with those working and living in slum communities • With C19, a reduction in access to healthcare services was reported in all sites, including preventive services, costs of healthcare increased while household income reduced. Residents had difficulty reaching healthcare facilities. Fear of C19 diagnosis discouraged healthcare seeking. • Alleviators such as provision of healthcare by phone were inconsistent and inadequate • Slum residents' ability to seek healthcare for non-C19 conditions has been reduced during lockdowns • Clear communications is needed about what is available and whether infection control is in place • Policymakers need to ensure that costs do not escalate and unfairly disadvantage slum communities	Healthcare access, slums

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal | Article type
Sept 2020	Air travel in the time of COVID-19	The Lancet Infectious Diseases | Editorial
Sept 2020	Transparency during global health emergencies	The Lancet Digital Health | Editorial
Sept 2020	COVID-19 and the communication blackouts in Kashmir, India	The Lancet Psychiatry | Correspondence
26.08.2020	A call for strengthened evidence on targeted, non-pharmaceutical interventions against COVID-19 for the protection of vulnerable individuals in sub-Saharan Africa	International JID | Perspective
25.08.2020	The COVID-19 multi-model comparison collaboration releases its first two outputs	CGD | Blog
25.08.2020	Africa Centres for Disease Control and Prevention's COVID-19 response: A united, continental strategy	World Bank | blog
24.08.2020	Tuberculosis control and care in the era of COVID-19	Health Policy and Planning | Commentary
24.08.2020	Research, innovation vital in new COVID-19 world	SciDevNet| Opinion Peter Piot
24.08.2020	Vaccines targeting SARS-CoV-2 tested in humans	Nature Medicine | News & Views
24.08.2020	Lifting the mask on neurological manifestations of COVID-19	Nature Reviews Neurology | Perspective
24.08.2020	COVID-19 care in India: the course to self-reliance	The Lancet Global Health | Comment

24.08.2020	First Covid-19 reinfection documented in Hong Kong, researchers say	Statnews (including a news article as the full research paper has not yet been published). Note only one case.
23.08.2020	COVID-19 as social disability: the opportunity of social empathy for empowerment	BMJ Global Health | Commentary
23.08.2020	Coronavirus: Trump authorizes plasma treatment amid attacks on FDA	The Guardian | news (included to highlight what is happening in the absence of unproven treatments)
23.08.2020	The NIMH global mental health research community and COVID-19	The Lancet Psychiatry | Comment
21.08.2020	Multisystem inflammatory syndrome in children in South Africa	The Lancet Child & Adolescent Health | Correspondence
21.08.2020	Delving beneath the surface of hyperinflammation in COVID-19	The Lancet Rheumatology | Comment
21.08.2020	Efficacy of remdesivir in COVID-19	JAMA | Editorial
21.08.2020	Coronavirus research updates: vaccines given through the nose could protect against infection	Nature | News
20.08.2020	Killer #2: Disrupted health services during COVID-19	World Bank | blog
20.08.2020	Bringing a COVID-19 vaccine to market: Where do we go from here?	CGD | Blog
20.08.2020	Global health and human rights for a postpandemic world	BMJ Global Health | Editorial
20.08.2020	How close are we to a vaccine for COVID-19?	BBC News World Service The Inquiry | radio programme

			(included as a good overview and a break from reading)
19.08.2020	Continuing vital health services in Guinea-Bissau during COVID-19		UN Development Programme | Blog

Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Summary
21.08.2020	Advice on the use of masks for children in the community in the context of COVID-19	WHO | Overview	• A Q&A on children and mass related to C19
03.08.2020	WHO COVID-19 preparedness and response progress report – 1 February to 30 June 2020	WHO | Report	• This first report highlights the main points of progress that were made up to 30 June 2020 under the 3 objectives outlined in the WHO C19 Strategic Response and Preparedness Plan published on 3 Feb 2020

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	COVID-19 Vaccine Tracker

Our World in Data		Singapore	Our World in Data: C19 Policy responses	COVID-evidence			
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							
SeroTracker							

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	Epidemic Preparedness Innovations	Social Development Direct C19 blog series
UN Women	Africa Evidence Network	Elsevier	CMMID Repository		

UNOCHA	OCHA Southern and Eastern Africa COVID-19 Digest	Health Policy and Planning	Norwegian Institute of Public Health		
UNHCR	South African Government	JAMA Network	Oxford Centre for Evidence-based Medicine		
UNICEF		The Lancet	HEART		
UNESCO		medRxiv and bioRxiv (Preprints)	UKRI		
UN WFP		NEJM	Evidence Aid		
GOARN		Oxford University Press	NIH		
EPI-WIN		PLoS	IFPRI Resources and Analyses of C19 Impact		
World Bank		SAGE journals	Prevent Epidemics		
Our World in Data		Science			
COVID-19 Narratives by David Nabarro		Springer Nature			
Reliefweb		SSRN (Preprints)			

Humanitarian OpenStreetMap Team		Wiley			
Global Partnership for Sustainable Development Data					
WorldPop					
Flowminder					
COVID-END					
Premise COVID-19 Global Impact Study					
GISAID					

Online learning & events

Date	Title/URL	Online learning/event	Duration	Lead
June 2020	OpenWHO, the free, open-access learning platform for health emergencies, now offers 10 online courses related to COVID19.	Online courses	Varies	WHO
Available now	Standard precautions: Environmental cleaning and disinfection	Online course	1 hour	WHO

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
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
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.90.* K4D Evidence Summary. Brighton, UK: Institute of Development Studies.

Rapid review methodology

The rapid weekly 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 "South Asia" OR "Developing" OR "low-income" OR "low income" OR "lower-middle income" OR "low and middle income" OR "LMIC" OR "LIC" OR "global south") OR ("poverty") OR ("equity" OR "equities"), 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 weekly COVID-19 health evidence summary (HES) is based on 3.5 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).