K4D | Knowledge, evidence and learning for development

COVID-19
Health Evidence Summary No.85

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23 July 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.

Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
06.07.2020	A rapid and reproducible picture of open access health facility data in Africa to support the COVID-19 response	Wellcome Open Research | not yet peer reviewed	• A summary of open access health facility location data in Africa using re-useable code to support data analysts developing software tools to address C19 response in individual countries • Open health facility lists need to be combined with other open or proprietary datasets to address specific questions such as those being asked during the C19 pandemic	Open data, facilities, Africa

Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary	Keywords
16.07.20	A vulnerability index for the management of and response to	The Lancet Global Health | Article	• This study developed a composite measure of community-level vulnerability concerning the C19 situation in India • The provision of state and district ranking to	Vulnerability, resources allocation

| | the COVID-19 epidemic in India: an ecological study | | policy makers will help prioritise resource allocation, in the context of constrained resources during the epidemic, and devise effective mitigation and reconstruction strategies for affected populations | |

Testing

Publication date	Title/URL	Journal/Article type	Summary	Keywords
23.07.2020	A SARS-CoV-2 surrogate virus neutralization test based on antibody-mediated blockage of ACE2-spike protein-protein interaction	Nature Biotechnology | Article	• A robust serological test to detect neutralising antibodies to SARS-CoV-2 is needed to determine infection rate, herd immunity and predicted humoral protection, and vaccine efficacy during clinical trials and after large-scale vaccination • The current gold standard requires live pathogen and a biosafety level 3 laboratory • Here results of a validated simple and rapid surrogate virus neutralisation test are presented. This test does not require biosafety level 3 containment, making it broadly accessible to the wider community for research and clinical application	Serological test, simple, rapid

Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
17.07.2020	Dexamethasone in Hospitalized Patients with Covid-19 – Preliminary Report	NEJM | Article	• Glucocorticoids may modulate inflammation-mediated lung injury and thereby reduce progression to respiratory failure and death • An open-label trial in patients who were hospitalised with C19 randomly assigned to receive oral or intravenous dexamethasone for up to 10 days or to receive usual care • Use of dexamethasone in patients hospitalised with C19 resulted in lower 28-day mortality among those who were receiving either invasive mechanical ventilation or oxygen alone at randomisation. Not so in those receiving no respiratory support.	Glucocorticoid, dexamethasone, mortality

16.07.2020	Hydroxychloroquine for early treatment of adults with mild COVID-19: a randomized-controlled trial	Clinical Infectious Diseases | Accepted manuscript	• Early treatment with HCQ in patients with mild C19 showed no benefit beyond usual care	Hydroxychloroquine, mild C19
16.07.2020	Hydroxychloroquine in nonhospitalized adults with early COVID-19	Annals of Internal Medicine | Article	• This randomised, double-blind, placebo-controlled trial showed that HCQ did not substantially reduce C19 severity in adult outpatients	Hydroxychloroquine, mild C19
15.07.2020	Effect of hydroxychloroquine in hospitalized patients with COVID-19: preliminary results from a multi-centre, randomized, controlled trial	medRxiv | pre-print (not peer-reviewed)	• Preliminary results from the RECOVERY trial comparing HCQ vs. usual care alone • HCQ was not associated with reductions in 28-day mortality in patients hospitalised with C19, but was associated with an increased length of hospital stay and increased risk of progressing to invasive mechanical ventilation or death	Hydroxychloroquine, severe C19

Vaccines

Publication date	Title/URL	Journal/Article type	Summary	Keywords
20.07.2020	Safety and immunogenicity of the ChAdOx1 nCoV-19 vaccine against SARS-CoV-2: a preliminary report of a phase1/2, single-blind, randomised controlled trial	The Lancet | Article	- ChAdOx1 nCoV-19 showed an acceptable safety profile and rapid induction of both humoral and cellular immune responses against SARS-CoV-2, with increased responses after a second dose - These results support large-scale evaluation of this candidate vaccine in ongoing phase 3 trial	Safety, immunogenicity, phase 1/2
20.07.2020	Immunogenicity and safety of a recombinant adenovirus type-5-vectored COVID-19 vaccine in healthy adults aged 18 years or older: a randomised, double-blind, placebo-controlled, phase 2 trial	The Lancet | Article	- Ad5-vectored COVID-19 vaccine showed an acceptable safety profile and rapid induction of both humoral and cellular immune responses against SARS-CoV-2 - These results support the planned international multi-centre, randomised, double-blind, controlled phase 3 effectiveness trial	Safety, immunogenicity, phase 2

Indirect impact of COVID-19

Publication date	Title/URL	Journal/Article type	Summary	Keywords
17.07.2020	Routine childhood immunisation during the COVID-19 pandemic in Africa: a benefit-risk analysis of health benefits versus excess risk of SARS-CoV-2 infection	The Lancet | Article	- A comparison of the health benefits of sustaining routine childhood immunisation in Africa with the risk of acquiring SARS-CoV-2 infection through visiting routine vaccination service delivery points - A high-impact and low-impact scenario was considered - Deaths prevented by sustaining routine childhood immunisation in 54 African countries outweighed the excess risk of C19 deaths associated with vaccination clinic visits, especially for the vaccinated children - Routine childhood immunisation should be safeguarded and continued where possible, given logistical constraints, staff shortages, and reallocation or resources during the C19 pandemic	Routine immunisation
10.07.2020	The cost of doing nothing: The price of inaction in response to the COVID-19 crises	UNOCHA | Report	- A taxonomy of the direct and secondary costs arising from not acting now to contain the virus and mitigate its cascading effects - The cost of inaction includes (1) the health cost of failing to contain C19 domestically; (2) the spill-over costs of failing to contain C19 internationally; (3) the economic costs of protracted containment measure on education;	Health, economy, inaction

			(4) the human and economic costs of increased poverty and hunger; (5) the cost of increased global instability and conflict	
			• Scenarios presented to showcase the differential cost of inaction	
			• Where relevant, a spotlight on a subset of 32 LICs	

Health systems

Publication date	Title/URL	Journal/Article type	Summary	Keywords
16.07.2020	COVID-19 and budgetary space for health in developing economies	CGD | Note	• Expected economic contraction due to C19 will place pressure on budgetary space for health spending • Even maintaining previous allocation levels will be insufficient given growing health needs as a result of C19 • There is uncertainty in the volume and destination of development assistance for health especially in lower-middle-income countries • Recommendations to address the above are given	Health financing

Comments, Editorials, Opinions, Blogs, New

Publication date	Title/URL	Journal | Article type
24.07.2020	Our response to COVID-19 will help define the 21st century	Wellcome | Opinion
22.07.2020	Building Back Better: Creating resilience in critical supply chains while supporting global development	CGD | Blog

Date	Title	Source
22.07.2020	Age is just a number: a critically important number for COVID-19 case fatality	Annals of Internal Medicine | Editorial
21.07.2020	Lessons from Ebola as DRC grapples with conflict, measles, and covid-19	BMJ | Feature Infection Control
21.07.2020	Disability and COVID-19: who counts depends on who is counted	The Lancet Public Health | Correspondence
20.07.2020	Encouraging results from phase 1/2 COVID-19 vaccine trials	The Lancet | Comment
20.07.2020	After COVID-19: How to pull off the SDG hat-trick?	CGD | Blog
20.07.2020	Trial of COVID-19 drug given via inhaler 'very promising', say scientists	The Guardian | News
19.07.2020	Covid-19 in Brazil has exposed socio-economic inequalities and underfunding of its public health system	BMJ | Opinion
18.07.2020	COVID-19: Africa needs unprecedented attention to strengthen community health systems	The Lancet | Comment
18.07.2020	New funds proposed to prevent pandemics	The Lancet | World Report
17.07.2020	Beyond COVID-19 (coronavirus): What will be the new normal for health systems and universal health coverage?	UHC2030 | Blog
17.07.2020	The explosion of new coronavirus tests that could help to end the pandemic	Nature | News Feature
15.07.2020	The price of inaction during the COVID-19 crises	CGD | Blog
13.07.2020	An effective response to COVID-19 is an inclusive response: the case of Uganda	UHC2030 | Blog

| 11.07.2020 | COVID-19: the worst may be yet to come | The Lancet | Editorial |

Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Summary
16.07.2020	Update – research and development goals for COVID-19 in Africa	African Academy of Sciences	• An update to the C19 research priorities in Africa

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							

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
30.07.2020 1440-1530 BST	The politics of vaccines: development and delivery	Online event	1h 30	Blavatnik School of Government, University of Oxford
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

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

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