K4D | Knowledge, evidence and learning for development

COVID-19
Health Evidence Summary No.72

Kerry Millington & Samantha Reddin
Liverpool School of Tropical Medicine (LSTM) & Institute of Development Studies
25 June 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	Keywords
23.06.2020	The prevalence of symptoms in 24,410 adults infected by the novel coronavirus (SARS-CoV-2; COVID-19): a systematic review and meta-analysis of 148 studies from 9 countries	PLoS ONE | Article	• Study confirms 'classic' symptoms of adults infected with SARS-CoV-2 – a persistent cough and fever as the most prevalent symptoms associated with C19 with other major symptoms including fatigue, losing the ability to small and difficulty in breathing • This study ratifies the list of symptoms listed by the WHO at the start of the pandemic • However, there is a large proportion of infected adults which symptoms alone do not identify	symptoms

Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
21.06.2020	Modelling the pandemic: attuning models to their context	BMJ Global Health | Analysis	• Mathematical models produce evidence to inform policy decisions but sociological and anthropological work shows how these models do not always fit with local implementation • This study draws on cases of Ebola and influenza to map how sociological and anthropological research contributes in the modelling of pandemics to consider lessons for C19	Modelling, sociology, anthropology, context

Testing

Publication date	Title/URL	Journal/Article type	Summary	Keywords
25.06.2020	Antibody tests for identification of current and past infection with SARS-CoV-2	Cochrane SR - Diagnostic	• The sensitivity of antibody tests is too low in the first week since symptom onset to have a primary role for the diagnosis of C19 • But may still have a role with other testing in individuals presenting later when RT-PCR tests are negative or not done • Antibody tests are likely to be useful for detecting previous SARS-CoV-2 infection if used 15 or more days after onset of symptoms • However, duration of antibody rises remains unknown, with little data beyond 35 days post-symptom onset • Authors are therefore uncertain about the utility of these tests for seroprevalence surveys for reasons of public health management • It is likely that the accuracy of tests when used in clinical care	Antibody tests

		will be lower than reported in the included studies	
		• It remains unclear whether tests are able to detect lower antibody levels likely seen with milder and asymptomatic C19 disease given sensitivity has mainly been evaluated in hospitalised patients	
		• Authors highlight that the design, execution and reporting of studies of the accuracy of C19 tests requires 'considerable improvement'	
		• Studies must report data on sensitivity disaggregated by time since onset of symptoms, C19 RT-PCR-positive and negative cases within WHO case definitions	
		• All results of test evaluations must be made available in the public domain to prevent selective reporting	

Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
24.06.2020	Tocilizumab in patients with severe COVID-19: a retrospective cohort study	The Lancet Rheumatology | Article	• This multi-centre, retrospective, observational cohort study of 544 adults with severe C19 pneumonia in Italy, found that treatment with tocilizumab, whether administered intravenously or subcutaneously, might reduce the risk of invasive mechanical ventilation or death in patients with severe C19 pneumonia	Severe C19, tocilizumab

Indirect impact of COVID-19

Publication date	Title/URL	Journal/Article type	Summary	Keywords
24.06.2020	Mitigating the impact of COVID-19 on countries affected by HIV, tuberculosis and malaria	Global Fund | Report	• Analyses from WHO, UNAIDS and the Stop TB Partnership and others suggest the annual death toll across HIV, TB and malaria could nearly double, wiping out years of progress • This report estimates that countries affected by HIV, TB and malaria urgently needs US$28.5 billion to protect progress made in the fight against these diseases	TB, HIV, malaria
24.06.2020	Voices from the frontline: findings from a thematic analysis of a rapid online global survey of maternal and newborn health professionals facing the COVID-19 pandemic	BMJ Global Health | Article	• Analysis from 714 maternal and newborn health professionals • Findings show a substantial knowledge gaps exist in guidance in management of maternity cases with or without COVID-19 • Levels of stress increased among health professionals globally due to a change in working hours, difficulties in getting to work and staff shortages • Health professionals are worried about the	Health professionals, maternal and newborn health

			- impact on health outcomes e.g. reduced access to antenatal care, shorter length of stay in facilities after birth - Authors recommend that formal information-sharing channels for providers be established and mental health support provided - This study highlights the susceptibility of maternity care services to emergencies, including reversal of hard-won gains	

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal | Article type	Author(s)
July 2020	Stigma during the COVID-19 pandemic	The Lancet Infectious Diseases | Newsdesk	Sanjeet Bagcchi
July 2020	COVID-19 in Iran: round 2	The Lancet Infectious Diseases | Newsdesk	Priya Venkatesan
24.06.2020	Exclusive: Women, babies at risk as COVID-19 disrupts health services, World Bank warns	Reuters | News	Kate Kelland
24.06.2020	Why covid-19 antibody tests are not the game changer the UK government claims	BMJ | Feature	

15.06.2020	Power and politics: the case for linking resilience to health system governance	BMJ Global Health | Editorial	Stephanie M Topp

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: C19 Policy responses	COVID-evidence			
Global 5050		UK	IFPRI COVID-19 Policy	Cochrane			

			Response Portal				
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 COVID-19 Digest	JAMA Network	Norwegian Institute of Public Health		
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					
GISAID					

Online learning & events

Date	Title/URL	Online learning/event	Duration	Lead
26.06.2020 0900 to 1030 EDT	Monitoring and mitigating the collateral effects of COVID-19	Online event	1h 30	CGD
13 July 3:00 PM – 6:00 PM BST	2020 UCL-Lancet Lecture: Global Health Preparedness by Dr Muhammad Pate, Global Director for Health, Nutrition and Population at the World Bank Group	Online Lecture	2 hour lecture, 1 hour panel discussion	UCL, The Lancet
June 2020	OpenWHO, the free, open-access learning platform for health emergencies, now offers 10 online courses related to COVID19.	Online courses	Varies	WHO
24-25.06.2020	Africa's leadership role in COVID-19 vaccine development and access	Zoom webinar		African Union & Africa CDC
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
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 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 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).