K4D | Knowledge, evidence and learning for development

COVID-19
Health Evidence Summary No.98

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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.

Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary	Keywords
15.10.2020	COVID-19 in Pakistan: a phone survey to assess education, economic, and health-related outcomes	CGD | Policy paper	• Using a sample of 1,211 households in Pakistan, authors examine the effects of C19 on 3 areas: education, economic and health-related • While the majority of respondents report adopting precautionary measures such as wearing a face mask (90%) and washing their hands more often than they used to (97%), a vast majority of respondents (78%) perceive a similar risk of contracting C19 or tuberculosis, even though estimates suggest a 74% higher chance of contracting C19 compare to TB • 68% of respondents associate a higher risk of a C19 infection if schools reopen compared to their current perceived risk (in June 2020)	Perception, Pakistan

12.10.2020	Genomic evidence for reinfection with SARS-CoV-2: a case study	The Lancet Infectious Diseases	• Genetic discordance of the two SARS-CoV-2 specimens from one patient was greater than could be accounted for by short-term in vivo evolution • This suggests that the patient was infected by SARS-CoV-2 on two separate occasions by a genetically distinct virus • Thus, previous exposure to SARS-CoV-2 may not guarantee total immunity to all cases • ALL individuals, whether previously diagnosed with COVID-19 or not, should take identical precautions to avoid infection with SARS-CoV-2 • Reinfection may be relevant for vaccine development and application • Reinfection with SARS-CoV-2 has now been reported in at least four individuals worldwide	reinfection

Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
15.10.2020	Repurposed antiviral drugs for COVID-19 – interim WHO SOLIDARITY trial results	medRxiv | pre-print (not peer reviewed)	• For its Solidarity clinical trial, WHO tested 4 drugs, remdesivir, hydroxychloroquine, auto-immune drug interferon and a combination of lopinavir and ritonavir, in 11,266 adult patients in total, across 405 hospitals in 30 different countries • The remdesivir, hydroxychloroquine, lopinavir and interferon regiments appeared to have little or no effect on hospitalised COVID-19	Remdesivir, hydroxychloroquine, interferon, lopinavir

			(mortality, initiation of ventilation and duration of hospital stay) • Gilead Sciences Inc have dismissed the findings	

Vaccines

Publication date	Title/URL	Journal/Article type	Summary	Keywords
15.10.2020	Safety and immunogenicity of an inactivation SARS-CoV-2 vaccine, BBIBP-CorV: a randomised, double-blind, placebo-controlled, phase1/2 trial	The Lancet Infectious Diseases | Article	• This is the first report of an inactivated SARS-CoV-2 vaccine tested on human participants • The inactivated SARS-CoV-2 vaccine, BBIBP-CorV, is safe and well tolerated at all tested doses (2ug, 4ug and 8ug) in two age groups (18-59 years and >=60 years) • Humoral responses against SARS-CoV-2 were induced in all vaccine recipients on day 42 • Two-dose immunisations with 4ug vaccine on days 0 and 21 or days 0 and 28 achieved higher neutralising antibody titres than the single 8ug or 4ug doses on days 0 and 14 • Further clinical studies are warranted to evaluate the potential of this vaccine in clinical application	Inactivated SARS-CoV-2 vaccine
14.10.2020	Safety and immunogenicity of two RNA-based Covid-19 vaccine candidates	NEJM | Article	• Results of an ongoing, placebo-controlled, observer-blinded, dose-escalation phase 1 trial of vaccine candidates BNT162b1 and BNT162b2 • This data adds to earlier interim safety and	RNA vaccine

			• immunogenicity data of BNT162b1 in younger adults from trials in Germany and the US • The safety and immunogenicity data from the US phase 1 trial of two vaccine candidates in younger and older adults supports progressing vaccine candidate BT162b2 to phase 2-3 safety and efficacy evaluation	

Social Science

Publication date	Title/URL	Journal/Article type	Summary	Keywords
2020	Clinical and vaccine trials for COVID-19: Key considerations from social science	SSHAP | Brief	• This brief sets out social science considerations that can inform clinical and vaccine trials for COVID-19 • Considerations include: context specific research; identify community dynamics and patterns of trust; integrate participant and community perspectives in trial design and implementation; maintain open dialogue with participants and relevant communities; identify sources of mistrust and potentials for community dialogue and respond to them in dynamic ways	Social science considerations, clinical and vaccine trials
2020	Emerging evidence on shielding vulnerable	SSHAP | Brief	• A second briefing, to be read in conjunction with the first briefing which focuses on terms and general principles, which	shielding

	groups during COVID-19		focuses on emerging evidence (primarily from LMIC) relevant to shielding, including research regarding social acceptability and implementation of shielding • Planning for socioeconomic impacts on the shielded, including psychosocial well-being, income generation, food access and health service access is essential when considering shielding. These are trade-offs that communities and individuals must weigh against the positive effects of shielding in the context of C19 containment measures • Shielding will need to be adapted based on state and non-state capacity to provide social and economic support for those shielding and their households and must be co-designed with target communities • Terminology and meaning should be made clear (confusion about differences in shielding, quarantine and isolation) • Mandatory shielding policies are unlikely to assure compliance • Shielding requires cross-sectoral management • Humanitarian organisations that facilitate shielding should do so as part of a larger health and	

			• WASH promotion response • Ongoing risk analysis must be integrated within any shielding intervention • Information and support on locally-appropriate avenues to report cases and receive emergency support after and incidence of domestic abuse	

Leadership and governance

Publication date	Title/URL	Journal/Article type	Summary	Keywords
13.10.2020	Community engagement for COVID-19 prevention and control: a rapid evidence synthesis	BMJ Global Health | Original research	• Community engagement has been considered fundamental to the response to past outbreaks • There is concern over the lack of involvement of communities and 'bottom-up' approaches used within C19 responses so far. This review aims to Identify how community engagement approaches that have been used in past epidemics can support more robust implementation within the C19 response – particularly in reaching marginalised populations and to support equity-informed responses • Countries worldwide are encouraged to assess existing community engagement structures and use community engagement approaches to support contextually specific, acceptable and appropriate COVID-19 prevention and control measures	Community engagement

Health systems

Publication date	Title/URL	Journal/Article type	Summary	Keywords
2020	Broader health impacts of vertical responses to COVID-19 in LMICs	SSHAP | Evidence Review	• A review of the effects of vertical responses to C19 on health systems, services, and people's access to and use of them in LMICs • Here the term 'vertical response' is used to describe decisions, measures and actions taken solely with the purpose of preventing and containing C19, often without the adequate consideration of those this affects the wider health system and pre-existing resource constraints • Four main sections to the review: (1) characterising the vertical response; (2) the drivers of broader health impacts; (3) evidence of impacts; (4) suggestions for mitigation	Health impact, vertical response
13.10.2020	From overall fiscal space to budgetary space for health: connecting public financial management to resource mobilisation in the era of COVID-19	CGD | Policy paper	• The budget decomposition approach presented in this paper provides insight into the extent to which higher public expenditure, better budget allocations and improved public financial management (PFM) drives expansion in budgetary space for health • The approach is applied to 133 LMICs between 2000-2017 and finds that around 70% of budgetary space for health is driven by changes in overall public expenditure,	Public financial management, resource mobilisation

			while about 30% is directly attributable to the share of the budget allocated to health • A key implication of the analysis is that health policymakers should systematically link PFM reforms to budgetary space for health by supporting comprehensive country assessments and by enhancing the effectiveness of budget dialogue between finance and health authorities	

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal | Article type
Nov 2020	Developing health policies in patients presenting with SARS-CoV-2: consider tuberculosis	The Lancet Global Health | Comment
15.10.2020	A promising inactivated whole-virion SARS-CoV-2 vaccine	The Lancet Infectious Diseases | Comment
15.10.2020	Bridging Health Gaps with inclusive urbanization	Think Global Health
15.10.2020	Three lessons from a new phone survey in Pakistan	CGD | Blog
15.10.2020	Coping with COVID-19: The Pakistan Experience	CGD | Blog
14.10.2020	Making the $12 billion go further: four things the World Bank can do in support of COVID-19 vaccination efforts	CGD | Blog
14.10.2020	Challenges of social health insurance in low- and lower-middle income countries: balancing limited budgets and pressure to provide Universal Health Coverage	CGD | Blog

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 communicati on	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: Handwashin g 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 Preparedne ss 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
16.10.2020	Financing a Global Public Health Response	Online event	1h30	CGD
02.10.2020	Understanding and Improving COVID-19 Vaccine Portfolio	Online event	1h30	CGD
21.09.2020	Mitigating the Economic and Health	Online event	1h30	CGD, GF, AU

	Impact of COVID-19 across Africa			
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	COVID-19 Open online brief with Dr David Nabarro	Event	1h	4SD

(Geneva time)				
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

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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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