

COVID-19

Health Evidence Summary No.95

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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.

Clinical characteristics and management

Publication date	Title/URL	Journal/Article type	Summary	Keywords
25.09.2020	Viral presence and immunopathology in patients with lethal COVID-19: a prospective autopsy cohort study	The Lancet Microbe Article	<ul style="list-style-type: none"> • Extensive systemic inflammatory response was present in patients with lethal COVID-19 • SARS-CoV-2-infected cells were only sporadically present at late stages of C19 suggesting a maladaptive immune response substantiating the evidence for immunomodulation as a target in the treatment of severe C19 	Systemic inflammatory response
24.09.2020	Auto-antibodies against type I IFNs in patients with life-threatening COVID-19	Science Article	<ul style="list-style-type: none"> • Out of 987 ICU patients with life-threatening C19 pneumonia, 101 had auto-antibodies against type I IFNs. 37 of these patients died. • No auto-antibodies against type I IFNs 	Auto-antibodies

			<p>were found in 663 patients with asymptomatic or mild SARS-CoV-2 infection</p> <ul style="list-style-type: none"> • Severe COVID-19 is associated with auto-antibodies against type I interferon but causality and direction of causality is not shown • Autoantibodies to IFN may be a useful biomarker of severe disease that could be used to guide clinical care. These autoantibodies could also be target by novel drugs to treat C19 	
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Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
25.09.2020	Susceptibility to SARS-CoV-2 infection among children and adolescents compared with adults: A systematic review and meta-analysis	JAMA Pediatrics systematic review and meta-analysis	<ul style="list-style-type: none"> • Included 32 studies • Preliminary evidence suggests that children and adolescents younger than 20 years have a lower susceptibility to SARS-CoV-2 infection (44% lower odds of secondary infection) compared with adults • Data were insufficient to conclude whether transmission of SARS-CoV-2 by children is lower than by adults 	Susceptibility, transmission, children
17.09.2020	Transmission of SARS-CoV-2: A review of viral, host, and	Annals of Internal Medicine Review	<ul style="list-style-type: none"> • A comprehensive review of the evidence on transmission of SARS-CoV-2 • Strong evidence from case and cluster reports indicates that respiratory 	transmission

	environmental factors		<p>transmission is dominant, with proximity and ventilation being key determinants of transmission risk</p> <ul style="list-style-type: none"> • Infectiousness peaks around a day before symptom onset and declines within a week of symptom onset • The virus has heterogeneous transmission dynamics with most people not transmitting virus, whereas some cause many secondary cases in clusters 	
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Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
18.09.2020	Mortality outcomes with hydroxychloroquine and chloroquine in COVID-19: an international collaborative meta-analysis of randomized trials	medRxiv pre-print (not peer reviewed)	<ul style="list-style-type: none"> • Rapid meta-analysis of ongoing, completed, or discontinued RCTs on hydroxychloroquine or chloroquine treatment for any C19 patients • No benefit of hydroxychloroquine or chloroquine on the survival of C19 patients was found • For hydroxychloroquine, the confidence interval is compatible with increased mortality (OR 1.18) or negligibly reduced mortality (OR 0.99) 	Hydroxychloroquine, chloroquine

			<ul style="list-style-type: none"> Generalisability to outpatients, children, pregnant women, and people with comorbidities is unclear 	
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Vaccines

Publication date	Title/URL	Journal/Article type	Summary	Keywords
23.09.2020	SARS-CoV-2 vaccines in development	Nature Review	<ul style="list-style-type: none"> There are currently more than 180 SARS-CoV-2 vaccines in various stages of development Data available so far suggests that effective and safe vaccines might become available within months 	vaccines

Social Science

Publication date	Title/URL	Journal/Article type	Summary	Keywords
23.09.2020	COVID-19 and violence against women and children: a second research round up	CGD Notes	<ul style="list-style-type: none"> Round up of 28 news studies that have been released since the last summary Most studies focus on the question: Have violence levels increased during COVID-19? There is increasing evidence that the C19 pandemic and associated policy responses increase VAW/C across contexts. Where there is mixed or decreasing trends, emerging evidence suggests that this may, in part, be due to underreporting Additional attention and reporting on ethics is needed to ensure a 'do no harm' approach with increasing numbers of studies on primary data 	VAW/C

			<p>collection and often using remote survey methodologies</p> <ul style="list-style-type: none"> • Rather than simply examining trends, future studies should prioritise “actionable” research informing evidence-based policy and financing responses, including possible prevention and mitigation measures 	
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Leadership and governance

Publication date	Title/URL	Journal/Article type	Summary	Keywords
24.09.2020	Lessons learnt from easing COVID-19 restrictions: an analysis of countries and regions in Asia Pacific and Europe	The Lancet Health Policy	<ul style="list-style-type: none"> • This Health Policy papers using an adapted framework to examine the approaches taken by nine high-income countries and regions that have started to ease C19 but aims to facilitate cross-country learning so included in this summary 	Lessons, easing restrictions

Health systems

Publication date	Title/URL	Journal/Article type	Summary	Keywords
23.09.2020	How previous epidemics enable timelier COVID-19 responses: an empirical study using organisational memory theory	BMJ Global Health Original research	<ul style="list-style-type: none"> • There has been little systematic exploration into what affects timeliness of epidemic response, despite the potential for earlier responses to be more effective • Results from this study show that exposure to any major epidemic was associated with an approx. 6-10 days earlier response 	Timeliness, epidemic response

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type
26.09.2020	Offline: COVID-19 is not a pandemic	The Lancet Comment
26.09.2020	COVID-19 in India: the dangers of false optimism	The Lancet Editorial
25.09.2020	It's time to put children and young people first during the global COVID-19 pandemic	JAMA Pediatrics Editorial
25.09.2020	What matters most for policy now: better mortality data	CGD Blog
25.09.2020	Reclaiming comprehensive public health	BMJ Global Health Commentary
25.09.2020	COVID-19 vaccination: returning to WHO's Health For All	The Lancet Global Health Comment
24.09.2020	Saliva or nasopharyngeal swab specimens for detection of SARS-CoV-2	NEJM Correspondence
24.09.2020	Willingness to comply with physical distancing measures against COVID-19 in four African countries	BMJ Global Health Commentary
24.09.2020	Challenges and priorities for delivering on the Beijing Declaration and Platform for Action 25 years on	The Lancet Comment
22.09.2020	COVID-19 clinical trials: learning from exceptions in the research chaos	Nature Medicine Correspondence
21.09.2020	For an equitable COVID-19 response, investments in civil society cannot wait	UHC2030 Blog
21.09.2020	SARS-CoV-2 transmission dynamics should inform policy	SSRN

18.09.2020	New findings confirm global disruptions in essential health services for women and children from COVID-19	GFF News
15.09.2020	Adjustments in health purchasing as part of the COVID-19 health response: results of a short survey and lessons for the future	P4H 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 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	Health Policy and Planning	Norwegian Institute of Public Health		

	COVID-19 Digest				
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
02.10.2020	Understanding and Improving COVID-19 Vaccine Portfolio	Online event	1h30	CGD
21.09.2020	Mitigating the Economic and Health Impact of COVID-19 across Africa	Online event	1h30	CGD, GF, AU
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

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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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