

# **COVID-19 Health Evidence Summary No.101**

Kerry Millington & Samantha Reddin Liverpool School of Tropical Medicine (LSTM) & Institute of Development Studies 09 November 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
02.11.2020	SARS-CoV-2 seroprevalence and transmission risk factors among high- risk close contacts: a retrospective cohort study	The Lancet Infectious Diseases   Article	<ul> <li>Extensive contact tracing by MoH in Singapore for every diagnosed COVID-19 case, legally enforced quarantine and intensive health surveillance of close contacts provided an opportunity to determine asymptomatic attack rates and SARS-CoV-2 transmission risk factors among community close contacts of patients with COVID-19</li> <li>Retrospective cohort study of all close contacts of confirmed COVID-19 cases in Singapore, identified between 23 Jan to 3 Apr 2020</li> <li>Risk factor analysis identified longer duration of verbal interaction and sharing a bedroom as</li> </ul>	Transmission, risk factors, contacts, household, non-household

	independent exposure risk factors of SARS-CoV-2 transmission to household close contacts  For non-household contacts risk factor analysis identified longer duration of verbal interaction, sharing a vehicle and having contact with more than one index case  Indirect contact, meal-sharing and lavatory co-usage were no independently associated with SARS-CoV-2 transmission in both household and non-household contacts  Targeted community measures should include physical distancing and minimising verbal interactions  Routine testing of close contacts, regardless of symptoms, will reduce missed diagnoses with priority given to household contacts who are at high risk of SARS-CoV-2 transmission
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## **Infection Prevention and Control**

Publication date	Title/URL	Journal/Article type	Summary	Keywords
Nov 2020	The association of PPE availability, training and practices with COVID-19 sero-	Disaster Medicine and Public Health Preparedness   Article	Univariate     analysis of a     cross-sectional     study of 133     nurses and     paramedics     found PPE     availability,     training and	PPE availability, training, practice, frontline workers, seroprevelance

prevalence in nurses and paramedics in tertiary care hospitals of Peshawar, Pakistan	practices on COVID-19 reduced sero- prevalence among nurses and paramedics in teaching hospitals of Peshawar, Pakistan
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# **Therapeutics**

Publicatio n date	Title/URL	Journal/Articl e type	Summary	Keywords
05.11.202	Remdesivir for the treatment of COVID-19 – final report	NEJM   Article	<ul> <li>Double-blind, randomised, placebo-controlled trial of intravenous remdesivir in adults who were hospitalised with C19 and have evidence of lower respiratory tract infection found remdesivir as beneficial in the treatment of Covid-19 – consistent with the preliminary report</li> <li>10 day course of remdesivir was superior to placebo in shortening the time to recovery in adults who were hospitalised with C19 and have evidence of lower respiratory tract infection</li> </ul>	remdesivir
05.11.202 0	Remdesivir for 5 or 10 days in patients with severe Covid-19	NEJM   Article	<ul> <li>Randomised, open-label, phase 3 trial of 397 hospitalised patients with severe Covid-19 not requiring</li> </ul>	remdesivir

			mechanical ventilation  No significant difference was found between a 5-day course and a 10-day course of remdesivir With no placebo control, the magnitude of benefit cannot be determined
05.11.202	Effect of pre- exposure use of hydroxychloroquin e on COVID-19 mortality: a population-based cohort study in patients with rheumatoid arthritis or systemic lupus erythematosus using the OpenSAFELY platform	The Lancet Rheumatolog y   Article	Observational, population-based study of 194,637 people with rheumatoid arthritis or systemic lupus erythematosus of which 30,569 (15.7%) received two or more prescriptions of hydroxychloroqui ne     No evidence was found of any protective benefit of use of hydroxychloroqui ne for prevention of COVID-19 mortality in a general population     Authors suggest that randomised trials investigating pre-exposure prophylactic use of hydroxychloroqui ne for prevention of severe outcomes from C19 are warranted

## **Vaccines**

Publication date	Title/URL	Journal/Article type	Summary	Keywords
			<ul> <li>No new articles found (Refer to Comments, Editorials, Opinions, Blogs, News Section below for press release on Pfizer vaccine)</li> </ul>	

# **Indirect impact of COVID-19**

Publication date	Title/URL	Journal/Article type	Summary	Keywords
05.11.2020	Interventions to support the resilience and mental health of frontline health and social care professionals during and after a disease outbreak, epidemic or pandemic: a mixed methods systematic review	Cochrane   Systematic Review	<ul> <li>The two objectives of this SR were (1) how successfully any interventions improved frontline health professionals' resilience or mental well-being and (2) what were the facilitators and barriers to delivery of these interventions</li> <li>16 relevant studies were found from different disease outbreaks (2 SARS, 9 Ebola, 1 MERS, 4 COVID-19)</li> <li>No evidence was found on how well different strategies work at supporting the resilience and mental well-being of frontline workers. Limited evidence on facilitators of successful delivery.</li> <li>Research to determine the effectiveness of interventions is a high priority with COVID-19 offering a unique opportunity for robust evaluations of interventions</li> </ul>	Resilience, mental health, frontline workers

# **Comments, Editorials, Opinions, Blogs, News**

Publication date	Title/URL	Journal   Article type
09.11.2020	Pfizer and BioNTech announce vaccine candidate against COVID-19 achieved success in first interim analysis from phase 3 study	<ul> <li>First interim efficacy analysis from phase 3 COVID-19 vaccine trial</li> <li>Analysis evaluated 94 confirmed cases of COVID-19 in trial participants (trial will continue to final analysis at 164 confirmed cases)</li> <li>Study enrolled 43,538 participants from six countries with 42% having diverse backgrounds</li> <li>Effective in preventing more than 90% of people from getting COVID-19 (7 days after second dose)</li> <li>No serious safety concerns have been observed so far; safety and additional efficacy data continue to be collected</li> <li>The RNA-based vaccine requires two doses three weeks apart and its true efficacy over a longer period of time remains to be evaluated</li> <li>There are logistical challenges as the vaccine has to be kept in ultra-cold storage at below minus 80°C</li> </ul>
07.11.2020	Strategy, coordinated implementation, and sustainable financing needed for COVID-19 innovations	The Lancet   Comment
07.11.2020	COVID-19 in Latin America: a humanitarian crisis	The Lancet   Editorial
06.11.2020	Public health during the pandemic in India	Science   Perspective
05.11.2020	The urgent need for a global commitment to protect healthcare workers	BMJ Global Health   Commentary

05.11.2020	Emergency use authorisation for COVID-19 vaccines: lessons from Ebola	The Lancet   Comment
05.11.2020	What could fair allocation of an efficacious COVID-19 vaccine look like in South Africa?	The Lancet Global Health   Comment
05.11.2020	Sex differences in COVID-19 case fatality: do we know enough?	The Lancet Global Health   Comment
05.11.2020	Use first-ever "Finance in Common Summit" to propel global action for COVID-19 recovery	CGD   Blog
04.11.2020	The BMJ Interview: Chris Whitty, England's chief medical officer, on covid-19	BMJ   Feature
02.11.2020	Bridging the gap between need and innovation: the case of vaccines	CGD   Blog



#### **Dashboards & Trackers**

Cases & deaths: Global	Cases & deaths:	Cases & deaths:	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	Academi c journals & Publisher s	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	Cambrid ge Universit y Press	ODI	SLH: Handwashi ng in low resource settings	Coregrou p 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	Cochran e	Center for Global Development	Epidemic Preparedne ss Innovations	Social Developm ent 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 Governme nt	JAMA Network	Oxford Centre for Evidence-based Medicine	
UNICEF		The Lancet	HEART	
UNESCO		medRxiv and bioRxiv (Preprint s)	UKRI	
UN WFP		NEJM	Evidence Aid	
GOARN		Oxford Universit y 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 (Preprint s)		
Humanitarian OpenStreetM ap 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
19.11.2020	Looking at the pandemic with a gender lens	Live Twitter conversation		SSHAP

16.11.2020	HIFA and WHO collaborate to promote sharing of experience and expertise around the maintenance of essential health services during (and after) the pandemic	4-week discussion starting 16 Nov		HIFA
10.11.2020	COVID-19 vaccine predictions part 2: estimating the time before we approve efficacious COVID-19 vaccines	Online event	1h30	CGD
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 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	Online learning	Multiple self-paced course	WHO

	coronavirus disease outbreak			
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**

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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 "low-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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