

# COVID-19

## Health Evidence Summary No.114

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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
23.02.2021	Signs and symptoms to determine if a patient presenting in primary care or hospital outpatient settings has COVID-19	Cochrane   Systematic Review (update to the July 2020 review)	<ul style="list-style-type: none"> <li>Based on currently available data, neither absence nor presence of signs or symptoms are accurate enough to rule in or rule out COVID-19</li> <li>44 relevant studies with 26,884 participants were included. There were no studies specifically on children, and only one focussed on older adults</li> <li>Most studies were conducted in hospital settings so results may not be representative of primary care settings. Results do not apply to children or older adults and do not differentiate between disease severities</li> <li>A single symptom or sign cannot accurately diagnose COVID-19 but the presence of anosmia, ageusia, fever or cough, could be useful to identify people for further testing</li> </ul>	Symptoms, signs, COVID-19

			<ul style="list-style-type: none"> <li>• Prospective studies in an unselected population presenting to primary care or hospital outpatients settings, examining combinations of signs and symptoms to evaluate the syndromic presentation of COVID-19 remain urgent - findings of which could inform subsequent management decisions</li> </ul>	
23.02.2021	<p>Identification and validation of clinical phenotypes with prognostic implications in patients admitted to hospital with COVID-19: a multicentre cohort study</p>	<p>The Lancet Infectious Diseases   Article</p>	<ul style="list-style-type: none"> <li>• Investigation of the existence and characterisation of clinical phenotypes for COVID-19 patients at hospital admission</li> <li>• 3 distinct clinical phenotypes, based on demographics, underlying conditions, clinical and laboratory data and radiological features at presentation of patients admitted to hospital with COVID-19, were associated with patient prognosis and correlate with mortality</li> <li>• Authors have developed and validated a simplified probabilistic model for phenotype assignment available as a tool online</li> <li>• Identifying COVID-19 phenotypes could allow better pathogenesis-targeted approaches for therapies in the design and selection of participants in clinical trials and be helpful in clinical management by identifying low-risk patients and patients who may need closer monitoring during admission</li> </ul>	<p>Clinical phenotypes, prognosis</p>

## Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
24.02.2021	Increased transmission of SARS-CoV-2 lineage B.1.1.7 (VOC 202012/01) is not accounted for by a replicative advantage in primary airway cells or antibody escape	bioRxiv   pre-print (not peer reviewed)	<ul style="list-style-type: none"> <li>Increased transmission of B.1.1.7 (VoC 202012/01) is not caused by increased replication (as measured on human airway epithelial cells) or escape from serological immunity</li> </ul>	UK variant, transmission

## Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary	Keywords
24.02.2021	COVID-19: lessons and experiences from South Africa's first surge	BMJ Global Health   Practice	<ul style="list-style-type: none"> <li>Swift countrywide lockdowns enabled increased health system capacity but also resulted in economic hardship especially for the most vulnerable</li> <li>During a health emergency, country leaders must maintain a unified front with continuous and accurate communication with the public to maintain trust with ongoing accountability among leaders and to avoid corruption</li> <li>Epidemiological data is critical to inform types of intervention and where</li> </ul>	Lockdown, lessons, South Africa

- Healthcare workers and communities should be empowered with technology

## Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
25.02.2021	Dexamethasone in hospitalized patients with Covid-19	NEJM   Original Article	<ul style="list-style-type: none"> <li>• Final results of a controlled, open-label trial comparing a range of possible treatments in patients who were hospitalised with Covid-19 randomly assigned to receive oral or intravenous dexamethasone for up to 10 days (2104 patients) or to receive usual standard care (4321 patients)</li> <li>• Use of dexamethasone resulted in lower 28-day mortality in patients hospitalised with Covid-19 who were receiving either invasive mechanical ventilation or oxygen alone at randomisation but not among those receiving no respiratory support</li> </ul>	Dexamethasone, severe COVID-19, mortality

25.02.2021	Interleukin-6 Receptor Antagonists in Critically Ill Patients with Covid-19	NEJM   Original Article	<ul style="list-style-type: none"> <li>• Evaluation of tocilizumab and sarilumab in an ongoing international, multifactorial, adaptive platform trial (REMAP-CAP)</li> <li>• Adult patients with Covid-19 were randomly assigned to receive tocilizumab, sarilumab or standard care within 24h after starting organ support in the intensive care unit</li> <li>• In critically ill patients with Covid-19 receiving organ support in ICUs, treatment with the IL-6 receptor antagonists tocilizumab and sarilumab improved outcomes, including survival</li> </ul>	Tocilizumab, sarilumab, severe COVID-19
25.02.2021	Tocilizumab in hospitalized patients with severe Covid-19 pneumonia	NEJM   Original Article	<ul style="list-style-type: none"> <li>• Covid-19 is associated with immune dysfunction including elevated interleukin-6 levels. Use of tocilizumab, a monoclonal antibody against the IL-6 receptor, has been shown in case reports and retrospective</li> </ul>	Tocilizumab, severe COVID-19

			<p>observational cohort studies to result in better outcomes in patients with severe Covid-19 pneumonia</p> <ul style="list-style-type: none"> <li>• Here results from a randomised, placebo-controlled phase 3 trial in 452 patients who were hospitalised with severe Covid-19 pneumonia are reported</li> <li>• Use of tocilizumab did not result in significantly between clinical status or lower mortality than placebo at 28 days</li> </ul>	
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## Vaccines

Publication date	Title/URL	Journal/Article type	Summary	Keywords
24.02.2021	<a href="#">BNT162b2 mRNA Covid-19 vaccine in a nationwide mass vaccination setting</a>	NEJM   Original Article	<ul style="list-style-type: none"> <li>• Assessment of vaccine effectiveness for a range of outcomes in a diverse population in a noncontrolled setting – data from Israel’s largest health care organisation used to evaluate the effectiveness of the BNT162b2 mRNA vaccine</li> <li>• Newly vaccinated persons during the period 20 Dec 2020 to 1 Feb 2021 were demographically and clinically matched 1:1</li> </ul>	Pfizer-BioNTech vaccine, effectiveness, Israel, real-world

			<p>with unvaccinated controls</p> <ul style="list-style-type: none"> <li>• Vaccine effectiveness was estimated for each of the following study outcomes at days 14 to 20 after the first dose and at 7 or more days after the second dose: SARS-CoV-2 infection, symptomatic Covid-19, Covid-19-related hospitalisation, severe illness and death. Each study group included 596.618 persons</li> <li>• This study in a nationwide mass vaccination setting suggests that the BNT162b2 mRNA vaccine is effective for a wide range of Covid-19 related outcomes – consistent with randomised trial findings</li> </ul>	
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## Indirect impact of COVID-19

Publication date	Title/URL	Journal/Article type	Summary	Keywords
25.02.2021	A double-edged sword – telemedicine for maternal care during COVID-19: findings from a global mixed-methods study of healthcare providers	BMJ Global Health   Original Research	<ul style="list-style-type: none"> <li>• Telemedicine has been rapidly applied globally to address disruptions of healthcare provision during the COVID-19 pandemic</li> <li>• Here the second round of a global online survey documents the experiences of providing telemedicine for maternal and newborn healthcare during the pandemic among healthcare professionals globally</li> <li>• Maternal and newborn healthcare providers globally considered telemedicine of benefit during the pandemic for</li> </ul>	Telemedicine, maternal and newborn care

			<p>different components of maternal and newborn healthcare but rapid adaptation was not optimally supported by guidelines, training, adequate equipment, reimbursement for cost of connectivity and insurance payments for care provided remotely</p> <ul style="list-style-type: none"> <li>• Also, predominantly in LMICs, substantial groups of families were not able to be reached by telemedicine encountering different barriers in providing high-quality maternity care by telemedicine including internet connection problems, lack of necessary equipment, digital illiteracy and distrust</li> <li>• Authors recommend that more research regarding the effectiveness, efficacy and quality of telemedicine for maternal healthcare in difference contexts is needed before long-term adaptations in care provision away from face-to-face interactions</li> <li>• Guidelines for care provision and approaches are need to minimise socioeconomic and technological inequalities in access to care</li> </ul>	
23.02.2021	COVID-19 in the Global South: Impacts and policy responses	Southern Voice   Occasional Paper Series No. 69	<ul style="list-style-type: none"> <li>• Analysis exploring the social and economic impact of, and responses to, COVID-19 and how it is affecting the Global South</li> </ul>	social and economic impact, Global South



## Social Science

Publication date	Title/URL	Journal/Article type	Summary	Keywords
24.02.2021	An intersectional human rights approach to prioritising access to COVID-19 vaccines	BMJ Global Health   Analysis	<ul style="list-style-type: none"> <li>International human rights law requires that if 'vulnerability' is used as a criterion for priority access to COVID-19 vaccines, this must include social vulnerability (e.g. socioeconomic status) as well as medical vulnerability (e.g. comorbidities) and broader consideration of intersectional needs in society and the disproportionate impact that COVID-19 is having on population groups with pre-existing social and medical vulnerabilities</li> <li>Here authors state that existing frameworks/mechanisms and proposals for COVID-19 vaccine allocation have shortcomings from a human rights perspective with national vaccine allocation schemes needing to adopt a more intersectional approach allocating COVID-19 vaccines on health, social and financial vulnerabilities</li> </ul>	Vaccine prioritisation, human rights, intersectional, medical and social vulnerability

## Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal   Article type
01.03.2021	Supporting COVID-19 Recovery and Improving Health Outcomes: The Case for Health Taxes	CGD   Blog
March 2021	Feelings towards COVID-19 vaccination in Africa	The Lancet Infection Diseases   Newsdesk
March 2021	COVID-19 hindering progress against female genital mutilation	The Lancet Public Health   Editorial
March 2021	Migrant health is public health: a call for equitable access to COVID-19 vaccines	The Lancet Public Health   Correspondence
01.03.2021	COVID-19 research in critical care: the good, the bad, and the ugly	Intensive Care Medicine
01.03.2021	India's COVID-19 vaccine roll-out in a nutshell	Southern Voice   Blog
27.02.2021	New WTO leader faces COVID-19 challenges	The Lancet   World Report
27.02.2021	Just allocation of COVID-19 vaccines	BMJ Global Health   Editorial
27.02.2021	FDA Issues Emergency Use Authorization for third COVID-19 Vaccine	FDA   News
26.02.2021	An expert explains variants	Wellcome   News
25.02.2021	Interleukin-6 Reception Inhibition in Covid-19 – cooling the inflammatory soup	NEJM   Editorial
25.02.2021	Research in the context of a pandemic	NEJM   Editorial
25.02.2021	The RECOVERY Platform	NEJM   Editorial

24.02.2021	Major rise in public support for COVID vaccine – Oxford study	Oxford University   News
24.02.2021	COVID-19 drug practices risk antimicrobial resistance evolution	The Lancet Microbe
23.02.2021	Who gets a COVID-19 vaccine and who pays? The need for economic analysis	CGD   Blog
19.02.2021	Creating effective research-policy partnerships for COVID response and beyond	CGD   Blog
02.02.2021	Comparing the Covid-19 vaccines developed by Pfizer, Moderna, and Johnson & Johnson	STAT   News

## 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	<a href="#">COVID-19 Oxford Vaccine Trial</a>
WEF		Sierra Leone	Oxford C19 Government Response Tracker (OxCGRT)	US NIH	Our World in Data: C19 Testing	COVID-19 Therapeutics Accelerator	<a href="#">COVID-19 Vaccine Tracker</a>

Our World in Data		Singapore	Our World in Data: C19 Policy responses	COVID-evidence			Our World in Data: COVID-19 vaccinations
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	Southern Voice	

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
8 March 2021	Chronic Respiratory Diseases in the COVID era	Webinar		GARD, WHO
February 2021	COVID-19 vaccination training for health workers	Online training	3h	WHO



14.01.2021	Evidence to impact in crisis: how have we measured up during the COVID-19 pandemic?	Webinar	1h 30	CGD
04.12.2020	COVID-19, supply chain resilience and global trade	Webinar	1h	CGD
03.12.2020	More money for health services: What is the role of PFM in the “new normal”?	WHO & CGD Health systems Governance & Financing	1h 30	Joe Kutzin
01.12.2020	Solutions and support for the mental wellbeing of community health workers on the COVID-19 frontline	Webinar		HSG TWG on CHWs with The George Institute for Global Health
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	<a href="#">Financing a Global Public Health Response</a>	Online event	1h30	CGD
02.10.2020	<a href="#">Understanding and Improving COVID-19 Vaccine Portfolio</a>	Online event	1h30	CGD
21.09.2020	<a href="#">Mitigating the Economic and Health Impact of COVID-19 across Africa</a>	Online event	1h30	CGD, GF, AU
June 2020	<a href="#">OpenWHO, the free, open-access learning platform for health emergencies, now offers 10 online courses related to COVID19.</a>	Online courses	Varies	WHO
Available now	<a href="#">Standard precautions: Environmental cleaning and disinfection</a>	Online course	1 hour	WHO
Available now	<a href="#">COVID-19: Effective Nursing in Times of Crisis</a>	Online course	2 weeks – 2 hours per week	Johns Hopkins School of Nursing
Available now	<a href="#">WHO Academy and WHO Info mobile applications</a>	Mobile app		WHO
Available now	<a href="#">COVID-19: Pandemics, Modelling and Policy</a>	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	COVID-19 Diagnostics and Testing	Online learning	3 weeks   3 hours weekly study	FutureLearn FIND/LSHTM/ASLM

early June 2020				
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 “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

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. 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).

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