

COVID-19

Health Evidence Summary No.119

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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
09.04.2021	SARS-CoV-2 infection rates of antibody-positive compared with antibody-negative health-care workers in England: a large, multicentre, prospective cohort study (SIREN)	The Lancet Article	<ul style="list-style-type: none"> To address the research gap, and understand if individuals who have recovered from COVID-19 are protected from future infection, a large multicentre, prospective cohort study was conducted in the UK. 30 625 participants were enrolled on the study to be followed up for 1 year. Symptomatic questionnaire were completed every 2 weeks, with antibody testing and Nucleic Acid Amplification Testing done at baseline and routinely throughout the study. 32.3% of participants were positive at baseline and formed the positive cohort; at 7 months post follow up, the study identified 153 possible reinfections, and 2 probable 	Reinfection, prospective cohort, SIREN study, UK

			<p>reinfection in this cohort. In the negative cohort, 1704 new infections were identified in the 7 month period. The authors report that previous infection reduced the incidence of infection by at least 84%.</p>	
08.04.2021	<p>Post-COVID-19 syndrome among symptomatic COVID-19 patients: A prospective cohort study in a tertiary care centre of Bangladesh</p>	<p>PLOS One Article</p>	<ul style="list-style-type: none"> • This study explores the incidence, association and risk factors for the development of post-Covid-19 syndrome. 400 participants with a diagnosis of COVID-19 from a hospital in Bangladesh were recruited. The participants were followed up for one month post discharge from hospital. • From the 355 patients followed up via telephone interview, 46% reportedly had post-Covid-19 symptoms, with fatigue being the most prevalent symptom (70%). Post-Covid-19 symptoms were higher amongst females, those who required a long time to achieve clinical improvement and those who presented with severe disease. The authors conclude that patients hospitalised and discharge with Covid-19 require long-term follow up. 	<p>Long Covid, Bangladesh, prospective cohort</p>

Vaccines

Publication date	Title/URL	Journal/Article type	Summary	Keywords
09.04.2021	Thrombosis and Thrombocytopenia after ChAdOx1 nCoV-19 Vaccination	The New England Journal of Medicine Brief Report	<ul style="list-style-type: none"> Five case studies from Oslo, Norway are reported of health care workers (32-54 years) who presented with thrombosis and thrombocytopenia 7-10 days following their first dose of ChAdOx1 nCoV-19 vaccine. Four of the patients had severe cerebral venous thrombosis with intracranial haemorrhage, and three subsequently died. At that time a total of 132,686 persons in Norway had received the first dose of the ChAdOx1 nCoV-19 vaccine. The authors conclude that these were rare vaccine-induced immune thrombotic thrombocytopenia. 	Rare vaccine-induced immune thrombotic thrombocytopenia, case study

Indirect impact of COVID-19

Publication date	Title/URL	Journal/Article type	Summary	Keywords
31.03.2021	Effects of the COVID-19 pandemic on maternal and perinatal outcomes: a systematic review and meta-analysis	Lancet Global Health Article	<ul style="list-style-type: none"> The authors identify that there has been poorer maternal, foetal and neonatal outcomes including an increase in maternal and foetal mortality, increase in still births, ruptured ectopic pregnancies and maternal mental health during the COVID-19 pandemic. This has disproportionately affected LMICs, however more publications were from HIC settings. Poorer outcomes in LMICs and HICs were highest amongst vulnerable populations. Maternal stress and postnatal depression was also increased. An increase in still births was reported in LMICs but not HICs. Overall analysis showed no increased in preterm births but data suggests there was a decrease in preterm births in HICs. A systematic review and metanalysis was conducted using Medline and Embase to search articles from January 2020 to January 2021. The authors suggest that limited access to maternity services, redeployment of maternity staff and fear of contracting COVID-19 may have contributed to less engagement with maternity services and poorer outcomes. More so, wider society changes including increased intimate partner violence, 	Maternal, foetal and neonatal outcomes, stillbirths, postnatal depression

			<p>worsening unemployment and poverty may have contributed.</p> <ul style="list-style-type: none"> The authors conclude that safe and accessible maternal care must be prioritised during and following the pandemic, and lessons must be learnt. 	
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Social Science

Publication date	Title/URL	Journal/Article type	Summary	Keywords
30.03.2021	Smart Cities and COVID-19: Implications for Data Ecosystems from Lessons Learned in India	Social Science in Humanitarian Action Platform (SSHAP) Brief	<ul style="list-style-type: none"> This policy brief considers key issues for the use of technology for surveillance, fact checking and coordinated control during the COVID-19 response in four urban contexts across India. In emergencies, technology used in public health interventions have the potential to worsen existing inequalities and therefore interventions should be evaluated exploring their appropriateness, inclusive outcomes for marginalised urban populations and consideration of the balance between surveillance and control, and privacy and citizen autonomy. This policy brief was developed through dialogue with national and city authorities and key city stakeholders. Access to devices, connectivity and digital 	Smart city architecture, surveillance, urban technologies, digital literacy

			<p>literacy should be considered, as well as data protection, transparency and trust. Local need and reality should be understood, local innovation encouraged and capacity strengthening activities considered.</p>	
30.03.2021	<p>Key Considerations: Indigenous Peoples in COVID-19 Response and Recovery</p>	<p>Social Science in Humanitarian Action Platform (SSHAP) Brief</p>	<ul style="list-style-type: none"> • This policy brief considers key recommendations for COVID-19 response and recovery to mitigate impacts of the pandemic for indigenous people in South America (focus on the Amazon), who have been disproportionately affected. Drawing on public statements and other documents from indigenous organisations and civil society network, the brief identifies key principles. Principles include: <ul style="list-style-type: none"> ○ Identify and monitor the specific epidemiological, demographic and social dimensions of indigenous vulnerability to COVID ○ Target economic and social protection responses to address the particular vulnerability of indigenous livelihoods ○ Respect indigenous 	<p>Policy brief, Amazon region, indigenous populations, engagement, response and recovery</p>

			<ul style="list-style-type: none">territorial rights, including the right to isolation○ Listen to indigenous communities and organisations● Based on these principles, key considerations for public health policy and practice were developed. Indigenous populations are heterogenous, and the brief considers different contexts and vulnerabilities such as remote and border communities, urban and peri-urban communities. Key considerations should be adapted to the local context and engage with indigenous people and leaders for immediate and longer-term response. This guide can be used as a guide to engage indigenous leaders, communities and organisations in designing appropriate strategies for Covid-19 response and recovery.	
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Leadership and governance

Publication date	Title/URL	Journal/Article type	Summary	Keywords
30.03.2021	<p>WHO-convened Global Study of Origins of SARS-CoV-2: China Part</p> <p>Joint WHO-China Study 14 January-10 February 2021</p> <p>Joint Report</p>	World Health Organisation Report	<ul style="list-style-type: none"> • A team of international experts from WHO and China convened “to identify the zoonotic source of the virus and the route of introduction to the human population, including the possible role of intermediate hosts, including through efforts such as scientific and collaborative field missions” • This is the report of the international team on the Wuhan field visit, from 14 January to 10 February 2021 by a joint WHO-China study team conducted over a 28 day period and explored epidemiology, animals and the environment and molecular epidemiology and bioinformatics. • Following the report WHO Director-General highlights that the source of the virus has not yet been found and all hypotheses remain on the table. This single research trip is just the start to finding the origin of the virus so that collectively steps can be taken “to reduce the risk of this happening again” • The epidemiology working group analysed surveillance data from Wuhan in late 2019. In addition to national sentinel surveillance data; laboratory confirmations of disease; 	Origins, Source, animal reservoir, epidemiology, genomics, Wuhan, Hubei Province

and reports of retail pharmacy purchases for antipyretics, cold and cough medications, stored research samples from across Hubei Province were also analysed. No evidence of mortality or morbidity due to SARS-CoV-2 was found before the reported outbreak.

- Whilst many early cases of COVID-19 were associated with Huanan market, other cases were associated with other markets, and some with no markets, therefore the report suggests that 'no firm conclusion therefore about the role of the Huanan market in the origin of the outbreak, or how the infection was introduced into the market, can currently be drawn' (page 7).
- Genomic data of virus from animals were also studied. Whilst bats and pangolins are a potential reservoir, no direct progenitor has been identified. The animal and environment working group sampled and tested from 80, 000 wildlife, livestock and poultry, across 31 provinces.
- From the molecular sequence data, most estimates suggest the outbreak may have started mid November to early December 2019, but this is not considered by the report as conclusive.
- Evidence from recent outbreaks in China have been linked to cold-chain products. This was not

			considered early in the pandemic and now is being considered as a possible pathway, along with other potential pathways which require further investigation.	
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Health systems

Publication date	Title/URL	Journal/Article type	Summary	Keywords
25.03.2021	Local Covid-19 Syndemics and the Need for an Integrated Response	IDS Bulletin Article	<ul style="list-style-type: none"> A series of articles have been produced which reflect on the impacts of COVID-19 on vulnerable populations and the potential opportunities there may be to build back better for stronger health systems which are equitable and sustainable. This article was included as part of this series (see Comments, Editorials, Opinions, Blogs, News). This article outlines how a Syndemic approach to COVID-19 is needed for a greater public health response. The authors highlight how COVID-19 has 'exposed fault lines in our societies and 	Syndemics, Local realities, vulnerabilities, Biosocial, Environmental, Structural interactions

			<p>amplified inequalities' (page 20). A syndemic approach recognises the role of structural and social factors that increase vulnerabilities to certain diseases for specific populations, and highlights the biosocial connections of two or more diseases which increases the health burden within these specific populations. The authors highlight that evidence is starting to emerge that COVID-19 interacts with other health and social conditions which increases vulnerabilities. Health conditions may include pre-existing respiratory and cardiac disease, hypertension and diabetes. These conditions may affect some populations more than others due to socio-economic status, age or occupation.</p>	
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			<ul style="list-style-type: none"> • The article draws on published literature and experience. It was initially produced as a Position Paper and further developed to incorporate additional analysis and evidence. • The authors propose that pandemic response need to consider local context and local vulnerabilities, and they present examples such as the challenges of implementing blanket social distancing and hand hygiene policies in densely populated urban areas with limited access to water. • In conclusion, public health responses need to be innovative and reflect local realities, and should centrally consider equity and social justice. 	
25.03.2021	Building Forward Better: Inclusive	IDS Bulletin Article	<ul style="list-style-type: none"> • Livelihoods, health and wellbeing are being threatened for large 	Informal settlements, Nairobi, Income support, Urban, Youth

	<p>Livelihood Support in Nairobi's Informal Settlements</p>		<p>populations living in Nairobi's (Kenya) informal settlements due to COVID-19. This affects approximately 70% of the population. The authors report that COVID-19 has 'exacerbated long-standing failures in urban governance and existing social inequalities' (page 39). Whilst there have been a range of support provided (by governments, NGOs and businesses) for people living in informal settlements, these has largely been insufficient to meet their needs. Furthermore, there have been increases in insecurity, violence and crime (including gender-based violence), and worsening poverty.</p> <ul style="list-style-type: none"> • This article includes observations and experiences of community organisers, a survey and a 	
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			<p>rapid literature review.</p> <ul style="list-style-type: none">• A series of articles have been produced which reflect on the impacts of COVID-19 on vulnerable populations and the potential opportunities there may be to build back better for stronger health systems which are equitable and sustainable. This article was included as part of this series (see Editorial below).• In conclusion the authors argue that increased transparency, accountability and trust of response is needed to support the needs of populations living and working in informal settlements, and to prevent even more people falling into poverty.	
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Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type
09.04.2021	Military coup during COVID-19 pandemic and health crisis in Myanmar	BMJ Global Health Commentary
08.04.2021	Leadership, collaboration and using data science to fight COVID-19 in the WHO African region	Epidemiology & Infection Editorial
08.04.2021	Covid-19: Brazil breaks record daily death toll as crisis spreads through South America	The BMJ News
08.04.2021	AstraZeneca vaccine: Blood clots are “extremely rare” and benefits outweigh risks, regulators conclude	The BMJ News
05.04.2021	The catastrophic Brazilian response to covid-19 may amount to a crime against humanity	The BMJ Opinion
April 2021	Planetary healthy publics after COVID-19	The Lancet Planetary Health Personal View (Hinchliffe. S, Manderson. L and Moore. M)
April 2021	Vaccine certificates: does the end justify the means?	The Lancet Microbe Editorial
April 2021	Behind Cuba's successful pandemic response	The Lancet Infectious Diseases News desk
April 2021	Vacuna-gate escalates in Peru	The Lancet Infectious Diseases News desk
April 2021	Ebola and COVID-19 in DR Congo and Guinea	The Lancet Infectious Diseases News desk
01.04.2021	Preparing for the next pandemic requires public health focused industrial policy	The BMJ Opinion

01.04.2021	Covid-19: Ivermectin's politicisation is a warning sign for doctors turning to orphan treatments	The BMJ Feature
01.04.2021	Covid-19: Brazil's spiralling crisis is increasingly affecting young people	The BMJ News
01.04.2021	After the WHO report: what's next in the search for COVID's origins	Nature News Explainer
31.03.2021	The Pfizer-BioNTech Vaccine Is Said to Be Powerfully Protective in Adolescents	New York Times News
30.03.2021	WHO calls for further studies, data on origin of SARS-CoV-2 virus, reiterates that all hypotheses remain open	World Health Organisation News
29.03.2021	Initial report of decreased SARS-CoV-2 viral load after inoculation with the BNT162b2 vaccine	Nature Brief Communication
29.03.2021	Africa Signs Historic Agreement with Johnson & Johnson for 400 Million Doses of COVID-19 Vaccines	UNECA Press release
25.03.2021	Introduction – Building Back a Better World: The Crisis and Opportunity of Covid-19	IDS Bulletin Editorial
25.03.2021	Building a Better World: The Crisis and Opportunity of Covid-19	IDS Bulletin Articles

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			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	Covid Collective Research Platform

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	Health systems Global		
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
15.04.2021	How can evaluation work support greater vaccine equity for COVID-19?	Webinar	1h	Itad
12.04.2021	COVID-19: Vaccines Safety Webinar - Understanding the Facts & Myths	Webinar	1.5h	Asia Pacific Association of Allergy, Asthma and Clinical Immunology

07.04.2021	Public webinar 'The RECOVERY Trial: one year on'	Webinar	1h	Nuffield Department of Population Health
25 March 2021	UK Public Health Rapid Support Team: Latest research & scientific insights	Webinar	1h	LSHTM
18 March 2021	Africa taking charge of its future: prioritizing gender equality in the path to recovery	Webinar	1h 30	CGD
10 March 2021	Equity and scale in global immunization: new evidence from Nigeria on cash transfers for vaccination	Webinar	1h 15	CGD
9 March 2021	COVID-19 vaccines and Africa: where do we stand in the race for vaccines?	Virtual conference webinar	1h	AHAIC
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	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	Online courses	Varies	WHO

	emergencies, now offers 10 online courses related to COVID19.			
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	Online learning	3 hours	WHO

	COVID-19: methods for detection, prevention, response and control			
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

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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