



COVID-19

Demography Evidence Summary

No.8

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This is the 8th of a weekly COVID-19 Demography Evidence Summary (DES) to signpost DFID and other UK government departments to the latest relevant evidence and discourse on COVID-19 to inform and support their response. It is a result of 4 hours of work per week and is not intended to be a comprehensive summary of available evidence on COVID-19 but aims to make original documents easily accessible to decisionmakers which, if relevant to them, they could refer to before making decisions.

The scope of DES includes emerging evidence on i) how COVID-19 impacts on demographic indicators, ii) how demographic indicators impact on transmission/spreading and mortality rate, and iii) policy advice on tailoring such responses to account for demographic indicators.

** Means a specific focus on Africa.*

Academic journal articles and research papers

Impact of demographic indicators on COVID-19 spreading and mortality

Publication date	Title/URL	Journal/Publication type	Authors	Summary	Tags
02.07.2020	Community vulnerability to epidemics in Nepal: A high-resolution spatial assessment amidst COVID-19 pandemic	medRxiv (not peer reviewed)	Khanal, L., Paudel, B.K., & Acharya, B.K.	This study assessed spatial variations and heterogeneity of disease vulnerability among the population in 753 municipal units of Nepal. The authors collected geospatial indicators representing the domain of socioeconomic inequalities, population dynamics, heterogeneity in the accessibility and the information related to an underlying health condition which potentially affect the severity of COVID-19 transmission. Those indicators were assembled to create three vulnerability indices using Geographic Information System (GIS); Social Vulnerability Index (SVI), Epidemiological Vulnerability Index (EVI) and a composite of the two- Social and Epidemiological Vulnerability Index (SEVI). The index output indicated high vulnerability to epidemics in megacities like Kathmandu, Pokhara, Bharatpur, etc. Additionally, some other municipalities such as Dhulikhel, Beshishahar, Tansen etc. which have a higher prevalence of pulmonary and cardiovascular disorders are highly vulnerable. The vulnerability indices created are means for different tiers of the existing government in federal system of Nepal for prioritization and improved planning for disease intervention	Age structure, population density,

				especially in highly vulnerable municipal units where the COVID-19 transmission could have high severity.	
01.07.2020	COVID-19 Age-Mortality Curves Are Flatter in Developing Countries	Policy Research Working Paper by the <i>World Bank</i>	Demombynes, G.	This study confirms that experiences with COVID-19 in wealthy countries may not be generalisable to developing countries. A greater share of reported COVID-19 deaths occur at younger ages in LMICs compared to HICs. Based on data from 26 countries, people age 70 and older constitute 37% of deaths attributed to COVID-19 in LMICs on average, versus 87% in HICs. Only part of this difference is accounted for by differences in population age structure. In HICs, the COVID-19 mortality rate for those ages 70–79 is 12.6 times the rate for those ages 50–59. In LMICs, that ratio is just 3.5. With each year of age, the age-specific mortality rate increases by an average of 12.6 percent in HICs versus 7.1 percent in LMICs. This pattern holds overall and separately for men’s and women’s mortality rates.	Age Structure, Mortality
01.07.2020	Interstate heterogeneity and combatting COVID-19 in Brazil	Research article published on <i>Voxeu.org</i>	Borelli, L. & Goes, G.	This study finds with empirical evidence in the COVID-19 literature for Brazil that the characteristics of Brazilian states may significantly affect state epidemic dynamics, making them differ substantially. From a policymaking perspective, this interstate heterogeneity implies the need for optimal containment policies that are also heterogeneous and	Spreading, Policy

				<p>varying in extent and duration for different states. Disregarding the importance of such heterogeneities and not taking them into account to coordinate containment policies may amplify both the severity of the economic recession and the number of infected and deaths resulting from the epidemic.</p>	
*30.06.2020	<p>The role of testing in infectious disease control: A case of COVID-19 in Africa</p>	<p>International Journal of Infectious Diseases / in press / journal pre-proof</p>	<p>Seidu, A.A., Hagan Jr., J.E., Ameyaw, E.K., Ahinkorah, B.O., Schack, T.</p>	<p>The dramatic increase in COVID-19 suspected cases in Africa has placed enormous burden on public and private clinical facilities. Till date, the most commonly used method for the identification and confirmation of the virus is the laboratory-based reverse transcription-polymerase chain reaction (RT-PCR) testing. Unfortunately, testing capacities have been limited in many parts of Africa because of inadequate test kits which have restricted scaling up beyond the few public health laboratories at designated locations. The review highlights the urgent need for speedy expansion and distribution of several laboratory testing platforms to public health facilities and fully accredited private clinical laboratories, including real-time PCR and serological assays.</p>	<p>Spreading, Policy</p>
*24.06.2020	<p>How villagers in central Sierra Leone understand infection risks under threat of Covid-19</p>	<p>PLOS ONE / 15(6): e0235108 / Peer reviewed</p>	<p>Kamara F.M., Mokuwa, E.Y., Richards, P.</p>	<p>The study compares two communities based on prior contrasted exposure to Ebola Virus Disease—one with substantial number of cases and the other having resisted infection through strong community sequestration measures. We assessed understanding of infection risks via an experimental game. In total 107 adult villagers played the game (58% women). Half (52%) preferred the disease model with lower risk of infection, 29%</p>	<p>Awareness</p>

				<p>preferred the model with lower risk of death, while 21% saw the combined risk of infection and death as being equivalent. Differences in reactions between the two locations were small despite different experiences of Ebola. Asked to explain their choices 48% of players cited information on infection risks modelled by the game and 31% stated that their choices reflected awareness of the need for personal action and respect for local regulations. The authors concluded that villagers thoughtfully assess disease risks and that some are good intuitive statisticians.</p>	
04.06.2020	<p>Social network-based distancing strategies to flatten the COVID-19 curve in a post-lockdown world</p>	<p>Nature Human Behaviour, 4, pages 588–596 (2020)</p>	<p>Block, P., Hoffman, M., Raabe, I.J., Dowd, J.B., Rahal, C. Kashyap, R. & Mills, M.C.</p>	<p>Social distancing and isolation have been widely introduced to counter the COVID-19 pandemic resulting in adverse social, psychological and economic consequences. This study evaluates the effectiveness of three distancing strategies designed to keep the curve flat and aid compliance in a post-lockdown world. These are: limiting interaction to a few repeated contacts akin to forming social bubbles; seeking similarity across contacts; and strengthening communities via triadic strategies. The study finds that a strategic social network-based reduction of contact strongly enhances the effectiveness of social distancing measures while keeping risks lower. The research provides scientific evidence for effective social distancing that can be applied in public health messaging and</p>	<p>Spreading, Policy</p>

				that can mitigate negative consequences of social isolation.	
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Impact of COVID-19 on demography

Publication date	Title/URL	Journal/Publication type	Authors	Summary	Tags
*25.06.2020	Exploring the impact of COVID-19 in Africa: a scenario analysis to 2030	Research report by Institute for Security Studies, Gordon Institute of Business Science, Frederick S. Pardee Center for International Futures. Funded by Humanity United and Hans Seidel Foundation	Cilliers, J., Oosthuizen, M., Kwasi, S., Alexander, K., Pooe, T.K., Yeboua, K. & Moyer, J.D.	This foresight study is based on scenarios on mortality and economic indicators. The study takes into account that Africa's youthful advantage may be undermined by two factors, 1) high levels of comorbidity, i.e. the extent to which Africans also suffer from other diseases or conditions such as diabetes, cardiovascular-related illnesses like hypertension, chronic kidney disease, HIV/AIDS and tuberculosis; 2) the lower capacity of health systems in Africa compared to elsewhere.	Indirect impacts, Socioeconomic factors
*22.06.2020	COVID-19 in Developing Economies	eBook by Voxeu.org published by CEPR Press	Djankov, S. & Panizza, U.	This book examines the indirect socioeconomic impacts of COVID-19 in LMICs. At the beginning of the COVID-19 pandemic, it was hoped that warm weather and younger populations would shield many developing countries from the virus. This hope has not been realised.	Indirect impact, Policy

		See here for summary article on Voxeu.org		Infected cases in Africa, South Asia and Latin America are still growing, with Latin America having surpassed the number of cases in Europe and growing rapidly. It concludes that the international community should step up, by providing aid, technical assistance and debt relief so that countries will not need to decide between saving lives and servicing their debts.	
June 2020	Trust in the time of corona	Working Paper 2020/82 by <i>UNU-WIDER</i>	Brück, T., Ferguson, N.T.N., Justino, P., & Stojetz, W.	The on-going pandemic and its countermeasures have led to varying physical, psychological, and emotional experiences, shaping not just public health and the economy but also societies. This research focusses on how the pandemic impacts on trust in societies, exploring how trust correlates with the individual experiences of the pandemic. The study finds that those who have had contact with sick people and those that are unemployed exhibit lower trust in people, institutions, and in general. By contrast, no such differences exist for those who have personally experienced symptoms of the disease. These associations vary across contexts and are not driven by concerns about personal health or the health of loved ones, but rather by increased levels of worry and stress. These findings suggest that the effects of the pandemic go well beyond immediate health concerns, leading to important normative	Trust

				changes that are likely to shape how societies will emerge from the pandemic.	
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Policy briefs, statements, tools, guidelines

Publication date	Title/URL	Publication organisation/type	Authors	Tags
June 2020	Putting the UN framework for socioeconomic response to COVID-19 into action: Insights	Brief no.2 by <i>UNDP</i>	UNDP	Socioeconomic factors, Indirect impacts, Policy
29.06.2020	COVID-19 & the Risks to Children in Urban Contexts	Policy Brief by <i>World Vision</i>	Rahbany, A. & Lovett, A.C.	Youth, Population density, Policy
*18.06.2020	WHO concerned over COVID-19 impact on women, girls in Africa	Statement by WHO Africa	WHO Africa	Women, Policy
04.06.2020	COVID-19 and Women Migrant Workers in ASEAN	Policy Brief by <i>ILO-UN Spotlight Initiative</i>	Bharathi, D. & Napier-Moore, R. (both ILO) and Volpe, V., Choi, Y. (both UN Women)	Migration, Women, Policy
03.06.2020	Physical Distancing & Alternative Disease Control Mechanisms in South Asia	Policy Brief by IDInsight	IDInsight	Policy

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Article type	Authors
29.06.2020	Including Immigrants is Good Policy Not Just During the Pandemic, but Afterwards Too	Online article by the <i>Center for Global Development</i>	Thomas Ginn (research fellow) and Janeen Madan Keller (assistant director, Global Health and senior policy analyst)
19.06.2020	Forced displacement during COVID-19: A crisis for refugees and host communities in developing countries	Blog post on <i>World Bank</i>	Alex van Trotsenburg (World Bank Managing Director of Operations)

16.06.2020	Global poverty: coronavirus could drive it up for the first time since the 1990s	Online article on <i>The Conversation</i>	Andy Sumner (Professor International Development King's Collage London), Christopher Hoy (Research and Policy fellow at Australian National University), Eduardo Ortiz-Juarez (PhD student King's College London)
16.06.2020	How deadly is the coronavirus? Scientists are close to an answer	News article in <i>Nature</i>	Smriti Mallapaty (Freelance writer based in Australia)
*16.06.2020	Why South Africa's coronavirus outbreak could be a 'catalyst for transformation'	Online article by <i>National Geography</i>	Linda Nordling (journalist based in Cape Town, South Africa)
11.06.2020	Where are the women? Gender inequalities in COVID-19 research authorship	Commentary in <i>BMJ Global Health</i>	Ana-Catarina Pinho-Gomes, Sanne Peters, Kelly Thompson, Carinna Hockham, Katherine Ripullone, Mark Woodward, Cheryl Carcel

COVID-19 Data hubs relevant for Demography

Organisation	Title	URL
*African Arguments	Coronavirus in Africa Tracker: Data on confirmed cases in Africa	https://africanarguments.org/2020/06/11/coronavirus-in-africa-tracker-how-many-cases-and-where-latest/
Data World	COVID-19 Data Resource Hub	https://data.world/resources/coronavirus/
UN statistics division	Updates on census 2020 and COVID-19	https://unstats.un.org/unsd/demographic-social/census/COVID-19/
*GeoPoll	Data dashboard on COVID-19 impact on Africa	https://www.geopoll.com/blog/coronavirus-in-sub-saharan-africa-food-security-covid-testing/#dashboard
Migration Data Portal	Migration data relevant for COVID-19 pandemic	https://migrationdataportal.org/themes/migration-data-relevant-COVID-19-pandemic

World Bank Group	Understanding the COVID-19 pandemic through data: Data centre on COVID-19	http://datatopics.worldbank.org/universal-health-coverage/coronavirus/
Flowminder	Using mobile operator data to track COVID-19	https://COVID19.flowminder.org/
University of Southampton	WorldPop global demographic data: Portal with localised demographic data on sex and age accessible to tailor COVID-19 responses	https://www.southampton.ac.uk/publicpolicy/COVID19/tatem-worldpop.page

COVID-19 Resource hubs relevant for Demography

Organisation	Title	URL
*African Population and Health Research Centre (APHRC)	APHRC COVID-19 Situation updates in Sub-Saharan Africa	https://aphrc.org/COVID-19-situation-updates/
*Africa Centres for Disease Control and Prevention (Africa CDC)	Africa CDC COVID-19 Resource hub	https://africacdc.org/COVID-19/COVID-19-resources/
*UN Development System in Africa	One-stop knowledge information centre of all UN agencies on COVID-19	https://knowledge.uneca.org/COVID19/
Family Planning 2020	Family Planning and COVID-19 resource hub	http://familyplanning2020.org/COVID-19
Global Partnership for Sustainable Development Data	COVID-19 resources hub on data and mapping	http://www.data4sdgs.org/resources/COVID-19-resources
*INCLUDE Knowledge Platform	COVID-19: Challenging Inclusive Development in Africa	https://includeplatform.net/inclusive-development-covid-19-pandemic/
International Conference on Family Planning	COVID-19 and reproductive health	https://icfp2021.org/COVID19

International Union for the Scientific Study of Population	Demographers' contributions to the understanding of the COVID-19 pandemic	https://iussp.org/fr/node/11297
*ONE	The ONE Africa COVID-19 Tracker	https://www.one.org/africa/about/policy-analysis/covid-19-tracker/
Population Council	Research hub on the COVID-19 pandemic	https://www.popcouncil.org/research/responding-to-the-COVID-19-pandemic
Population Europe	The Network of Europe's leading Demographic Research Centres on Demography and COVID-19	https://population-europe.eu/news/demography-coronavirus
REACH Initiative	Supporting the Humanitarian Response to COVID-19	https://www.reach-initiative.org/what-we-do/news/updates-on-ongoing-research-and-activities-linked-to-covid-19-pandemic/
UNFPA	United Nations Population Funds COVID-19 knowledge hub	https://www.unfpa.org/COVID19

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Methodology

The rapid weekly search looks for peer-reviewed academic articles, however, due to rapid developments most academic literature is not peer-reviewed (yet). Therefore, the literature is complemented by a search of the homepage of high-impact global health, demography and population journals and a Twitter search of their Twitter pages. A search also of preprints, for example from medRxiv. Additional commentaries, opinions, and commissioned pieces are selected based on relevance. The search for dashboards, guidelines, tools, editorials, comments, blogs, opinions and news is mostly through academic institutions, journals, C19 resource hubs and following lead academics and professionals on Twitter.

About this report

The weekly Demography Evidence Summaries are not intended to replace 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 summaries 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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