

Knowledge, evidence development

# COVID-19 **Demography Evidence Summary No.2**

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This is the second 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.

This DES looks specifically to the demographic indicators that impact on transmission/spreading and mortality rate, and the emerging evidence and policy advice on tailoring such responses to account for demographic indicators.

\* Means a specific focus on Africa.

### Academic journal articles and research papers

#### Tracking COVID-19 as Cause of Death: Global Estimates of Relative Severity

Philip Schellekens and Diego Sourrouille | World Bank Group/Brookings.edu | May 2020 | tags: mortality, inequalities

https://www.brookings.edu/wp-content/uploads/2020/05/Tracking COVID-19 as -Cause of Death-Global Estimates of Severity.pdf (link to the paper)

https://www.brookings.edu/blog/future-development/2020/05/05/the-unreal-dichotomy-in-COVID-19-mortality-between-high-income-and-developing-countries/ (link to blog post of both researchers titled: "The unreal dichotomy in COVID-19 mortality between high-income and developing countries").

Abstract: Reported data suggests the developing world has been largely spared, yet a host of factors, not least demography, suggest that the observed discrepancy in the burden of mortality is likely significantly exaggerated. This paper tracks the severity implied by the reported data and relates it to pre-pandemic mortality patterns to get a feel for the discrepancies and inequalities.

An indicator of "relative severity" is proposed to generate global comparisons across countries and over time which can be utilized to improve tracking systems and detect data anomalies.

## Age-dependent effects in the transmission and control of COVID-19 epidemics

Nicholas G Davies, Petra Klepac, Yang Liu, Kiesha Prem, Mark Jit, Rosalind M Eggo | *medRxiv* (*not peer reviewed*) | May 03, 2020 | tags: spreading, age-structure, comorbidity

#### https://doi.org/10.1101/2020.03.24.20043018

**Abstract:** The COVID-19 pandemic has shown a low proportion of cases among children. Age disparities in observed cases could be explained by children having lower susceptibility to infection, lower propensity to show clinical symptoms, or both. This study shows that the age-specific clinical fraction and susceptibility has implications for the expected global burden of COVID-19 because of demographic differences across settings: in younger populations, the expected clinical attack rate would be lower, although it is likely that comorbidities in low-income countries will affect disease severity. Without effective control measures, regions with older populations may see disproportionally more clinical cases, particularly in the later stages of the pandemic.

#### \*Ecologic correlation between underlying population level morbidities and COVID-19 case fatality rate among countries infected with SARS-CoV-2

Evaezi Okpokoro, Victoria Igbinowanhia, Elima Jedy-Agba, Gbenga Kayode, Ezenwa Onyemata, Elesh'le Abimiku | *medRxiv (not peer reviewed)* | May 02, 2020 | tags: mortality

#### https://doi.org/10.1101/2020.04.28.20082370

**Abstract:** Low middle income countries (LMIC) countries may experience far worse mortalities considering the existence of a weaker health care system and the several underlying population level morbidities. As a result, it becomes imperative to understand the ecological correlation between critical underlying population level morbidities and COVID-19 case fatality rates (CFR). The study concludes with caution that population level factors such as prevalence of COPD, prevalence of tobacco use, life expectancy and quality of air are positively correlated with CFR from COVID-19 but, adult HIV prevalence has a weak and negative correlation with COVID-19 CFR and would require extensive research.

### \*Awareness, Risk Perceptions and Safety Behavior: How are Men and Women in Rural and Urban Africa Responding to COVID-19? Analysis of a recent mobile phone survey that looked at perceptions of the COVID-19 pandemic in 12 African countries

Mywish Maredia | *Michigan State University* | April 30, 2020 | tags: spreading, awareness, rural-urban

https://www.canr.msu.edu/news/awareness-risk-perceptions-and-safety-behavior-how-are-menand-women-in-rural-and-urban-africa-responding-to-COVID-19 **Abstract:** The Geopoll survey data indicate that cellphone owners in rural areas of Africa are as informed as urban areas; and women are as informed as men about the global coronavirus pandemic. With a few exceptions, the level of concern about the spread of this disease was equally shared by people residing in rural and urban areas, and by men and women. This demonstrates the success of government efforts in raising general awareness of the disease and the level of concerns about the spread of the disease across the population in the early stages of shutdowns. However, there is a wide variation across countries in the risk perception of family exposure to coronavirus with no clear correlation with government measures taken or not taken by early April. The data also shows wide variation among countries in protective behaviours such as social distancing and hand washing. This quick analysis of a publicly available dataset demonstrates the need to promote safety measures and outreach efforts to target groups like people living in rural areas and to men who are less likely to engage in protective measures like social distancing and hand washing compared to women.

## \*COVID-19 pandemic in the African continent: Forecasts of cumulative cases, new infections, and mortality

Tom Achoki, Uzma Alam, Lawrence Were, et al. | *medRxiv (not peer reviewed)* | April 28, 2020 | tags: spreading, mortality, urbanisation

https://doi.org/10.1101/2020.04.09.20059154 (link to the article)

https://publichealth.yale.edu/news-article/24397/ (link to interview with one of the authors)

**Abstract:** This paper aims for a systematic attempt to provide prevalence, incidence, and mortality estimates across Africa. It concludes that less urbanised countries with low levels of socio-economic development (hence least connected to the world) are likely to register lower and slower transmissions at the early stages of an epidemic.

## Multidimensional poverty and COVID-19 risk factors: A rapid overview of interlinked deprivations across 5.7 Billion People

Alkire, S., Dirksen, J., Nogales, R., and Oldiges, C. | *Oxford Poverty and Human Development Initiative*, University of Oxford | April 15, 2020 | tags: spreading, mortality, policy, poverty

#### https://ophi.org.uk/b53/

**Abstract:** This study uses the global MPI database for 2019, which covers 101 countries and 5.7 billion people in the developing world, to show at a glance some facts for the COVID-19 response. It shows that of the 1.3 billion people who are poor according to the global MPI, 98.8% are deprived in three or more indicators: health, education, living conditions. Deprivations in water, nutrition, and cooking fuel predict a high risk from COVID-19 in terms of hygiene, weakened immune systems, and respiratory conditions. In sub-Saharan Africa, 57.5% of the population is MPI poor, and 492 million are deprived in water.

### Policy briefs, statements, tools, guidelines

#### COVID-19: Working with and for young people

Briefing with policy recommendations by UNFPA and IFRC | May 19, 2020 | tags: spreading, policy, youth

#### Socio-economic vulnerability and epidemic risk by age. Implications for the exit strategy from COVID-19

Natale, F., Ghio, D., Goujon, A., Conte, A. | Briefing from European Commission's *Knowledge* | *Centre on Migration and Demography* | May 04, 2020 | tags: age-structure, policy

https://ec.europa.eu/knowledge4policy/publication/socio-economic-vulnerability-epidemic-risk-age-implications-exit-strategy-COVID-19\_en

#### Indigenous peoples' health and safety during Coronavirus (COVID-19)

Statement from the *FAO Indigenous Peoples Unit* (including video of online webinar) | May 2020 | tags: policy, indigenous people

http://www.fao.org/indigenous-peoples/COVID-19/en/

### Impact of the COVID-19 Pandemic on Family Planning and Ending Gender-based Violence, Female Genital Mutilation and Child Marriage

Technical note by *UNFPA* (contributions from Avenir Health, Johns Hopkins University (USA) and Victoria University (Australia)) | April 27, 2020 | tags: policy, family planning, child marriage

https://www.unfpa.org/sites/default/files/resource-pdf/COVID-19\_impact\_brief\_for\_UNFPA\_24\_April\_2020\_1.pdf

## Webinars (recordings)

### \*The effects of COVID-19 on Mobility and Citizenship

Organiser: *Migration Policy Centre* of the European University Institute, and *Global Citizenship Observatory* / With a presentation on Africa's mobility and citizenship by Professor Mehari Taddele Maru (Migration Policy Centre) | May 06, 2020 | tags: spreading, mobility, migration

https://www.youtube.com/watch?v=wGyNYScgVtU (link to recording) http://www.migrationpolicycentre.eu/events/mpc-webinar-the-effects-of-COVID-19-on-mobilityand-citizenship/ (link to abstracts of speakers)

### \*COVID-19 in Africa: An opportunity for structural transformation?

Organiser: SOAS, University of London | May 05, 2020 | tags: policy, population

https://www.soas.ac.uk/genderstudies/events/05may2020-COVID-19-in-africa-an-opportunity-for-structural-transformation-webinar-.html

# \*COVID-19 in Africa: A multidimensional crisis: Strategies & challenges in mitigation for LMICs

Organiser: University of Edinburgh, Usher Institute | April 30, 2020 | tags: policy, population, health

https://www.youtube.com/watch?v=PISG25GszcM&feature=youtu.be

#### \*Post COVID-19 urban futures: Learning from African postpandemic experiences to tackle deep inequalities

Organiser: University College London (UCL), The Bartlett Development Planning Unit | April 28, 2020 | tags: urbanisation, inequality

https://www.ucl.ac.uk/bartlett/development/events/2020/apr/learning-african-post-pandemic-experiences-tackle-deep-inequalities

## Comments, Editorials, Opinions, Blogs, News

### COVID-19 and the impact on gender and sexuality

Susie Jolly (Honorary Associate at IDS) and Kelly Shephard (Head of Knowledge, Impact and Policy at IDS) | Published on *Institute of Development Studies* | May 21, 2020

https://www.ids.ac.uk/opinions/COVID-19-and-the-impact-on-gender-and-sexuality/

#### \* Migration and development: What now with COVID-19?

By: Tanja Bastia (Global Development Institute) and Ronald Skeldon (Emeritus Professor, University of Sussex) | Published on *University of Manchester, Global Development Institute* | May 19, 2020

http://blog.gdi.manchester.ac.uk/migration-and-development-what-now-with-COVID-19/

### \* COVID-19 in South Sudan's UN Protection of Civilian Sites

Naomi Pendle (researcher at the LSE Firoz Lalji Centre for Africa) | Published on London School of Economics | May 17, 2020

https://blogs.lse.ac.uk/africaatlse/2020/05/17/COVID-19-south-sudans-un-protection-of-civilian-sites-poc-trust-unmiss/

### \* COVID-19 highlights need to boost resilience of Africa's rural poor

Arun Baral (Chief executive officer at HarvestPlus), Aparna Das (Technical programme manager of the Global Maize Programme at international Maize and Wheat Improvement Centre) and Bill Rustrick (Chief executive officer of the Clinton Development Initiative) | Published on *Devex.com* / May 04, 2020

https://www.devex.com/news/opinion-covid-19-highlights-need-to-boost-resilience-of-africa-s-rural-poor-97122

# \* A novel idea: integrating urban and rural safety nets in Africa during the pandemic

By: Astrid R.N. Haas (Policy Director, International Growth Centre) and Rachel Strohm (PhD Candidate in Political Science, UC Berkeley) | Published on *The Conversation* | May 03, 2020 https://theconversation.com/a-novel-idea-integrating-urban-and-rural-safety-nets-in-africa-during-the-pandemic-137532

## \* State of disaster: what is COVID-19 teaching us about housing in Africa?

Kecia Rus (Executive Director and founder of the Centre for Affordable Housing Finance in Africa (CAHF)) | Published on *Centre for Affordable Housing Finance in Africa* | April 22, 2020

http://housingfinanceafrica.org/documents/state-of-disaster-what-is-COVID-19-teaching-us-about-housing-in-africa/

### **COVID-19 Data hubs relevant for Demography**

## Demographic and Social Statistics: countries with a census in 2020 and the impact of COVID-19

Updates on census 2020 and COVID-19 by the UN Statistics Division https://unstats.un.org/unsd/demographic-social/census/COVID-19/

### **Migration Data Portal**

Migration data relevant for COVID-19 pandemic https://migrationdataportal.org/themes/migration-data-relevant-COVID-19-pandemic

### Understanding the Coronavirus (COVID-19) pandemic through data

Data centre on COVID-19 by the *World Bank Group* http://datatopics.worldbank.org/universal-health-coverage/coronavirus/

### Using mobile operator data

Data portal by *Flowminder* https://COVID19.flowminder.org/

### **COVID-19 Resource hubs relevant for Demography**

#### \*African Population and Health Research Centre

APHRC COVID-19 Situation updates in Sub-Saharan Africa https://aphrc.org/COVID-19-situation-updates/

### \*Africa Centres for Disease Control and Prevention

COVID-19 Resource hub https://africacdc.org/COVID-19/COVID-19-resources/

### \*Africa UN Knowledge Hub for COVID-19

One-stop knowledge information centre of all UN agencies on COVID-19 by UN Development System in Africa https://knowledge.uneca.org/COVID19/

### **Global Partnership for Sustainable Development Data**

COVID-19 resources hub on data and mapping http://www.data4sdgs.org/resources/COVID-19-resources

#### **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

#### **Population Council**

Responding to 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

Demography and COVID-19 https://population-europe.eu/news/demography-coronavirus

#### **UNFPA**

United Nations Population Funds COVID-19 knowledge hub https://www.unfpa.org/COVID19

### **Suggested citation**

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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.

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