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COVID-19 and older people: the data challenge

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Even prior to COVID-19 the availability of good quality disaggregated data on older women and men in development and humanitarian contexts was limited. Now the pandemic has disrupted the day-to-day operation of National Statistical Offices (NSOs), including the scheduled production and release of statistics, and increased the pressure on agencies to deliver faster, new, and varied types of information required for preparedness, response and recovery from the pandemic.

While many NSOs and their partners were able to ensure continued production of data during the pandemic, older women and men, including older people with disabilities have been largely invisible in data due to persisting barriers that exist in data systems in general and in production of statistics on older people specifically, affecting both primary and secondary data at global, national and local levels.

As a result, the knowledge about health, social, and economic impact of COVID-19 on older people, and the support they need to mitigate the adverse effects is limited and fragmented. [1] This further excludes older people from response and recovery planning.

To ensure that all individuals including older women and men benefit from 'building back better', data systems must be ageing-inclusive, and timely good quality age-, sex-, and disability-disaggregated data must guide the recovery, and foster transparency and accountability.

The data challenge

Data systems in many low- and middle-income countries (LMICs) struggled to collect information on various aspects of the pandemic impact on older people. When data was collected, it was not fully analysed, consistently reported in intersection of age, sex, and disability, or made publicly available for further reuse.

NSOs' capacity to operate during crisis

The ability of Statistical Agencies in developing countries to ensure continued production of statistics has been severely limited during COVID-19. Nearly all NSOs in Sub-Saharan Africa (SSA) and over 50 per cent of EME Agencies experienced either severe or moderate disruption in production of administrative data, and essential monthly and quarterly statistics. [2] The majority of the NSOs, 90 per cent in SSA, 71 per cent in Northern Africa and Western Asia, and 67 per cent in Central and Southern Asia, identified a need for additional external support to ensure continued operation.[3] Sixty three per cent of Statistical Agencies in LMICs identified the need for financial support as a priority, followed by equipment/infrastructure and technical assistance, 56 and 55 per cent respectively.[4] In SSA, 81 per cent of NSOs identified the need for technical assistance as a priority, followed by training and financial support, 76 and 67 per cent respectively.[5] This context

frames the scale and scope of the challenge to produce statistics on older people at times of emergency.

Partnerships with other stakeholders, including UN agencies, enabled countries to overcome some of these challenges. More than half of the interviewed NSOs established new partnerships or networking arrangements during the pandemic.[6]

During the pandemic, nearly half of NSOs in LMICs (47 per cent) continued collecting data for pre-planned surveys by adapting to the new reality. Fifty-six per cent of all interviewed NSOs changed data collection mode or used alternative data sources. The predominant change was the switch to phone surveys (82 per cent), followed by web surveys (37 per cent), administrative data (27 per cent), and modelled estimates (14 per cent).[7] Overall, all regions relied on traditional data sources – surveys and administrative records (Table 1). Across Latin America, Asia and Sub-Saharan Africa, more countries utilised surveys than administrative records. NSOs in Northern Africa and Western Asia region were able to draw on surveys and administrative data in equal measures. It is interesting to note the use of mobile phone data in Africa, and credit card and earth observation data in Asia, highlighting the growing role of non-traditional data sources but also a technological divide across regions.

However, older people may be excluded or underrepresented by adaptations made in order to continue data collection during COVID-19. Older women and men have higher levels of disability that may be related to sight, hearing and communicating, alongside physical impairments. Older people also generally have lower levels of access to technology in the development context and more limited digital literacy.[8] For example, in West Bank and Gaza only 27 per cent of people aged 60 and older use Internet, and older women are less likely to be online than older men, 16 and 38 per cent respectively.[9] There is a need for greater understanding of considerations for inclusion of older people, as a population of interest, within new methodologies, sample designs, and non-traditional modes of data collection and surveillance, and potential biases in collected data.

Table 1 Percentage of NSOs collecting data on COVID-19 and its impacts, by data sources and methods

	Adding questions to existing survey	New survey	Use of administrative data	Use of mobile phone data	Use of scanner data	Use of credit card data	Use of earth observation data	Use of geospatial referencing of information	Other
Sub-Saharan Africa	31	62	38	52	0	3	0	7	7
Asia[10]	55	45	18	27	9	9	18	18	9
Northern Africa and West Asia	47	47	53	13	0	7	0	7	7
Latin America	80	53	40	7	0	0	0	7	0

Source: UNSD and World Bank, June 2020, Monitoring the state of statistical operations under the Covid-19 pandemic. Highlights from a global Covid-19 survey of National Statistical Offices. Report and data file for the round 3, https://covid-19-response.unstatshub.org/statistical-programmes/covid19-nso-survey/

Collection of data

The majority of NSOs in LMICs planned to collect information on the impacts of the pandemic on the population and the economy, with fewer countries collecting information on other thematic topics needed to understand the impact of COVID-19 on older people. Ninety-seven per cent of LMICs collected information on socio-economic impacts on households, followed by the impacts on

the private sector (86 per cent), healthcare services (40 per cent), and at-risk population groups (26 per cent).[11] A similar pattern is observed across the four regions (Table 2). Fewer NSOs collected information on access to healthcare services, physical and mental health of the population or the situation of at-risk groups. This partially explains the paucity of data on older women and men, as an at-risk group, and highlights the need for national surveys on older people to close knowledge gaps.

Specific gaps identified by HelpAge International and the review of COVID-19 impact surveys administered by UN agencies and NSOs include[12] [13]:

Health and care: COVID-19 related impact on physical and mental health of older people and people with disability and pre-existing health conditions; impact of the disruption in health service provision on individual's health; impact of social isolation on wellbeing of older people.

Violence, abuse and neglect: incidence, risk factors, availability and accessibility of services for older people; and immediate and longer-term impacts on older survivors.

Livelihoods: impact on jobs and income of older people working in the informal sector; poverty rates and social protection coverage of older women and men during COVID-19.

Discrimination: the scale and scope to which older people's rights have been denied during the pandemic, including experiences of ageism.

COVID-19 impacts on marginalised and hard-to-reach groups, i.e. ethnic minorities, LGBTQ+, and older people residing outside 'traditional' households – homeless, in informal settlements, care homes, refugees camps, prisons and other settings.

Table 2: Percentage of NSOs collecting data on COVID-19 and its impacts by specific topic and region

	Monitoring COVID-19 infections, fatalities, and recovery	Access to COVID-19 testing	Availability /access to health infrastructure and services	Identification of at-risk population	General physical and mental health impact on population	Socioeconomic impact at household level	Socioeconomic impact on business/firms
Sub-Saharan Africa	17	21	38	17	14	97	83
Asia	9	9	18	27	0	82	82
Northern Africa and West Asia	27	7	40	27	20	67	60
Latin America	0	0	20	20	20	87	67

Source: UNSD and World Bank, June 2020, Monitoring the state of statistical operations under the Covid-19 pandemic. Highlights from a global Covid-19 survey of National Statistical Offices. Report and data file for the round 3, https://covid-19-response.unstatshub.org/statistical-programmes/covid19-nso-survey/

Analysis and reporting of data

Despite the UN framework's explicit reference to older people as one of the disproportionally affected groups, and the international cooperation to enable LMICs to continue data collection during the pandemic, this has not translated into availability of data on older women and men. [14] As of November 2020, among 13 completed surveys in the EME region only four specified that data was collected from older respondents, including UN Women Kyrgyzstan and Moldova, World Food Programme Kyrgyzstan, and a survey by the National Statistical Office of Morocco. The rest of the

surveys (nine) lack detailed demographic information on population groups covered by their respective samples.

Even where data on older people is collected, it is not always analysed and reported. Across the EME region, only one summary report of the four surveys that interviewed older respondents, UN Women Kyrgyzstan, consistently presented analysis of the results for the population aged 65 and over. In the Africa region, among the seven completed surveys that specified that data was collected from older respondents only one, NSO Rwanda, consistently presented analysis of the results for the population aged 65 and over.[15]

Published data on older people is not granular and standardized. Data is rarely disaggregated beyond the intersection of age and sex, masking disability, ethnic and other socio-economic inequalities. The countries that published age and sex disaggregated data demonstrate a lack of standardized approaches to reporting. For example, the presentation of data on COVID-19 case and mortality among people aged 60 and over varies from a single cohort 60+ (Chad), to two broad cohorts 50-69 and 70+ (Ukraine), three cohorts 45-64, 65-74 and 75+ (Tunisia) or 60-64, 65-69, and 70+ (Mozambique), and four cohorts in Moldova, 50-59, 60-69, 70-79, and 80+.[16]

Dissemination of data and information

Majority of LMICs countries monitor the pandemic and report aggregate COVID-19 case and mortality data, however across all regions, few countries have published case and mortality data disaggregated by sex and age. A review of openly available data on COVID-19 cases and deaths across LMICs shows that all countries have been monitoring the pandemic and reporting aggregate figures (Table 3). However, across all regions fewer countries have published case and mortality data by sex, and even fewer have reported it by sex and age. This demonstrates that despite the global emergency and the need for good quality near-real time information, sharing of granular data with public and international partners remains a sensitive issue for many countries across all regions.

Table 3 Number of low and lower middle income countries reporting and disaggregating data on COVID-19 cases and mortality, by region

	Total cases	Cases reported by sex	Cases reported by sex and age	Total deaths	Deaths reported by sex	Deaths reported by sex and age
Africa[17]	23	17	6	23	5	2
APAC[18]	20	11	7	20	11	8
EME[19]	10	7	3	10	6	2
LAC[20]	5	3	1	5	1	1

Source: Global Health 5050, The Covid-19 sex-disaggregated data tracker, dataset updated 2 November, 2020. https://globalhealth5050.org/the-sex-gender-and-covid-19-project/dataset/ Accessed 13 November and 19 January 2021. WHO Coronavirus disease dashboard. https://covid19.who.int/ Accessed 19 January 2021

Limited availability of microdata significantly hampers our understanding of the impact of COVID-19 on older people. A review of COVID-19 impact surveys conducted by UN agencies and NSOs shows that microdata is openly available for only a small number of surveys and countries.[21] In Africa microdata was available for six of the eight completed surveys, all from the World Bank. In the EME region, by the end of November 2020 none of the 13 completed surveys had microdata in public domain. In one case a data provider's explicit commitment to publish anonymised data has not been realised over seven months since the data was collected.

Given the challenges with analysis of data on older women and men, it is important that microdata is released as soon as possible to enable other stakeholders to reuse the data to close the knowledge

gaps on the population of interest. It also raises questions about good standards and accountability for data sharing at the times of emergencies and what support is needed to enable data producers to release microdata safely.

Using secondary data to fill the knowledge gaps

In addition to the primary data collections efforts, utilisation of secondary data collected pre-COVID-19 offered an opportunity to identify at-risk population groups and assess systems' capacity to respond. National and international dashboards such as UNFPA's COVID-19 Population Vulnerability Dashboard relied on census and survey data to build an understanding of older people's potential exposure to the virus across different types of living arrangements and dwellings at sub-national levels. [22]

However, the data is drawn from the IPUMS-International, an important initiative in itself, and it highlights challenges of relying on census and survey data at the times of the emergency.[23] For ten of the 23 low-income countries in Africa, data on number of older people, living arrangement and access to amenities is not available as the census data wasn't shared by countries with the IPUMS. [24] For 13 countries with publicly available data, 11 have data older than ten years.
This raises a question whether alternative sources with comparable geographic coverage and administrative granularity could provide more timely data.

How can we fix this?

The implications of data systems that are not fit for purpose are significant. The gaps in data, analysis and reporting have resulted in the production of statistics that provides only a narrow and partial understanding of how the pandemic has affected older people, unable to capture variations in impacts and their drivers across different demographic and socioeconomic groups within the older population. This evidence cannot adequately inform response and recovery planning at national levels. The limited and inadequate granular data that is available itself becomes a barrier to the inclusion of older men and women in the efforts to build back better.

The challenge faced in the production of data on older people during COVID-19 highlights the importance of making ageing-inclusive data systems part of the recovery. Leadership, concerted efforts, and close cooperation between NSOs, donor and multilateral agencies, and members of the wider data community is needed to build resilient and ageing-inclusive data systems at national and international levels.

Leadership

- High-quality guidance is developed in relation to conceptual and analytical framework on ageing-related statistics, incorporating a life-course approach, to inform the collection, analysis and utilisation of more nuanced data on ageing and older people at global, regional and national levels.
- In-depth review is conducted to assess collection and dissemination of data on older people during the pandemic, approaches and methodologies to including older people in survey samples and interviewing older respondents, and the adequacy of the produced data to support COVID-19 response and recovery.
- Mechanisms are developed for better coordination of stakeholders (e.g. NSO, civil society organisations, academia, data collaboratives and others) and resources within national data system to produce timely good quality data on older people.

- The work and outputs of the Titchfield Group on ageing-related statistics and age-disaggregated data are proactively supported, disseminated and utilised at global and national levels.

Collection of data

- Close knowledge gaps on short and longer-term health and socio-economic impacts of COVID-19 on older people in LMICs, recognising the intersectional and compounding nature of marginalisation, by conducting in-depth national survey or study on ageing.
- Data collection initiatives assessing situation of population groups cover older women and men, including those residing outside 'traditional' households.

Analysis and reporting of data

- Raise greater awareness among member states about the importance of age-, sex-, and disability-disaggregated data for policy and programmes, and build commitment for the dissemination of this data.
- Data collected to assess situation of different population groups is fully analysed, disaggregated beyond aggregates to the best statistically feasible level, and included in summary reports. As a minimum data should be reported in 5-year cohorts (if not possible, in 10-year bands) in intersection of sex and disability, and other characteristics where appropriate.
- Take advantage of the 2020 Censuses of Population and Housing to produce a stand-alone summary report on the state of older people in a country, and share microdata with IPUMS-International to enable production of harmonised data on older people.

Dissemination of data and information

- Be transparent about how the older population and other marginalised groups are considered in relation to methodology, sample design, development of new indicators, data collection and analysis, and make collected data, analysis and findings publicly available.
- Remove unnecessary restrictions to make microdata accessible as soon as possible while respecting privacy and confidentiality of respondents.

Financing

- Investment is made in statistical capacity-building on ageing and older people for staff of NSOs, especially in LMICs, and in strengthening production of statistics on older populations, reporting and sharing of microdata for public good.

Older people's voices and experiences inform data production

- Guidance is developed on meaningful and transparent inclusion of older people, their representative organisations or national focal points on ageing, in all stages of the data production cycle from conceptualisation, collection and analysis of data through to dissemination and utilisation to support an ageing-inclusive response and recovery.

References

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[3] United Nations and World Bank, June 2020, Monitoring the State of Statistical Operations under the COVID-19 Pandemic. Highlights from a global COVID-19 survey of National Statistical Offices. Round 1, report and data file, https://covid-19-response.unstatshub.org/statistical-programmes/covid19-nso-survey/

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[6] This ranges from 64 per cent in Sub-Saharan Africa and 60 per cent in Northern Africa and West Asia, to 56 per cent and 50 per cent in Asia and Latin America respectively. United Nations and World Bank, 2020, Monitoring the state of statistical operations under the Covid-19 pandemic. Round 3, report and data file, https://covid-19-response.unstatshub.org/statistical-programmes/covid19-nso-survey/

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[8] ITU, Measuring the information society report 2018, volume 1, p. 39, 41

[9] Palestinian Central Bureau of Statistics, The International Day of Older Person 01/10/2019, http://www.pcbs.gov.ps/post.aspx?lang=en&ItemID=3563#:~:text=The per cent20data per cent20of per cent20the per cent20survey,23 per cent25 per cent20in per cent20Gaza per cent20Strip. Accessed 26 November 2020

[10] Includes Central and Southern Asia, and Eastern and South-Eastern Asia

[11] United Nations and World Bank, December 2020, Monitoring the state of statistical operations under the Covid-19 pandemic. Round3, report and data file, https://covid-19-response.unstatshub.org/statistical-programmes/covid19-nso-survey/

[12] HelpAge International and UNFPA global synthesis report on the impact of COVID-19 on older people (forthcoming)

[13] The information on COVID-19 surveys is collated by the Task force on COVID-19 and household surveys at the Inter-secretariat Working Group on Household Surveys (IWGHS). It is possible that the initiative does not capture all COVID-19 surveys conducted by NSOs and their partners (e.g. Tunisia's survey on the socio-economic impact of COVID-19 on households administered from April to early October 2020 wasn't included in November 5th IWGHS update).

[14] UN framework for the immediate socio-economic response to COVID-19

[15] BFA, TCD, ETH, MWI, MLI, UGA, RWA

[16] Global Health 5050, The Covid-19 sex-disaggregated data tracker, dataset updated 2 November, 2020. Accessed 13 November and 19 January 2021.

[17] Covers 23 low income countries as defined by the World Bank

[18] Covers 20 low and lower middle income countries

[19] Covers 10 low and lower middle income countries

[20] Covers 5 low and lower middle income countries

[21] HelpAge and UNFPA reports on impact of COVID-19 on older people in Africa and EME (forthcoming)

[22] https://covid19-map.unfpa.org/

[23] Integrated Public Use Microdata Samples, a collection of harmonised census microdata from around the world

[24] Eritrea, Somalia, CAF, COD, Burundi, Madagascar, Chad, Niger, Gambia, Guinea-Bissau