United Nations | Department of Economic and Social Affairs

World Population Ageing 2020

Highlights

United Nations Department of Economic and Social Affairs, Population Division

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World Population Ageing 2020 Highlights

Living arrangements of older persons

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The designations employed in this publication and the material presented in it do not imply the expression of any opinions whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The term "country" as used in this report also refers, as appropriate, to territories or areas.

In this publication, data for countries and areas are often aggregated in six continental regions: Africa, Asia, Europe, Latin America and the Caribbean, Northern America, and Oceania. Further information on continental regions is available from https://unstats.un.org/unsd/methodology/m49/. Countries and areas have also been grouped into geographic regions based on the classification being used to track progress towards the Sustainable Development Goals of the United Nations (see: https://unstats.un.org/sdgs/indicators/regional-groups/).

The designation of "more developed" and "less developed", or "developed" and "developing", is intended for statistical purposes and does not express a judgment about the stage in the development process reached by a particular country or area. More developed regions comprise all countries and areas of Europe and Northern America, plus Australia, New Zealand and Japan. Less developed regions comprise all countries and areas of Africa, Asia (excluding Japan), Latin America and the Caribbean, and Oceania (excluding Australia and New Zealand).

The group of least developed countries (LDCs) includes 47 countries, located in sub-Saharan Africa (32), Northern Africa and Western Asia (2), Central and Southern Asia (4), Eastern and South-Eastern Asia (4), Latin America and the Caribbean (1), and Oceania (4). Further information is available at http://unohrlls.org/about-ldcs/.

The group of Landlocked Developing Countries (LLDCs) includes 32 countries or territories, located in sub-Saharan Africa (16), Northern Africa and Western Asia (2), Central and Southern Asia (8), Eastern and South-Eastern Asia (2), Latin America and the Caribbean (2), and Europe and Northern America (2). Further information is available at http://unohrlls.org/about-lldcs/.

The group of Small Island Developing States (SIDS) includes 58 countries or territories, located in the Caribbean (29), the Pacific (20), and the Atlantic, Indian Ocean, Mediterranean and South China Sea (AIMS) (9). Further information is available at http://unohrlls.org/about-sids/.

The classification of countries and areas by income level is based on gross national income (GNI) per capita as reported by the World Bank (June 2018). These income groups are not available for all countries and areas Further information is available at:
https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

Executive summary

The world continues to experience an unprecedented and sustained change in the age structure of the global population, driven by increasing levels of life expectancy and decreasing levels of fertility. People are living longer lives, and both the share and the number of older persons in the total population are growing rapidly. Globally, there were 727 million persons aged 65 years or over in 2020. Since women live longer than men, on average, they comprise the majority of older persons, especially at advanced ages. Over the next three decades, the number of older persons worldwide is projected to more than double, reaching over 1.5 billion in 2050. All regions will see an increase in the size of the older population between 2020 and 2050. Globally, the share of the population aged 65 years or over is expected to increase from 9.3 per cent in 2020 to around 16.0 per cent in 2050.

Population ageing is occurring alongside broader social and economic changes taking place throughout the world. Declines in fertility, changes in patterns of marriage, cohabitation and divorce, increased levels of education among younger generations, and continued rural-to-urban and international migration, in tandem with rapid economic development, are reshaping the context in which older persons live, including the size and composition of their households and their living arrangements. In Western European countries and the United States of America, intergenerational co-residence has declined dramatically, and most older persons now live either in single-person households or in households consisting of a couple only or a couple and their unmarried children. Despite the persistence of traditional family structures and cultural norms that favour multi-generational households, many countries of the less developed regions are experiencing a slow shift in family and household composition towards smaller families and household types. Family structures and household living arrangements can change quickly in response to major events or crises affecting family members and kin relations. For example, multi-generation households re-appeared in the United States of America and in some European countries in response to the economic crisis of 2008, while skip-generation families have become more common in sub-Saharan Africa as a means of caring for millions of children orphaned by the HIV/AIDS pandemic since the 1980s.

Throughout the world older women are more likely than older men to live alone. Older women are also more likely to live in skip-generation households or in extended-family households, whereas older men are more likely to live with a spouse only. Further, older men are more likely than older women to live with children under age 20, while older women are slightly more likely than older men to live with older children. These differences are explained to a large extent by the typical age difference between spouses and by the reproductive life spans of women and men. Since husbands are typically older than their wives, and since there is no male equivalent of menopause, men are more likely than women to co-reside with children under age 20 when they reach older ages.

Co-residence with adult children is a common mechanism of support for parents at older ages, which may be triggered by a decline in their physical or mental health and an increased need for personal care. In other cases, co-residence is a way for parents to support adult children who never left the parental home or have returned to cope with economic hardship or adverse life events. Yet another situation is an older person who moves into the household of an adult child to help care for grandchildren.

The living arrangements of older people are an important determinant of their economic well-being as well as their physical and psychosocial health and life satisfaction. Research has also found an association between mortality risks at older ages and an individual's living arrangements. Older persons living alone or in institutions, for example, have higher overall mortality risks than those living with a spouse or other family members. The living arrangements of older persons can also have important macroeconomic implications by shaping the demand for housing, social services, energy, water and other resources.

Since early 2020, the world has been impacted by the rapid spread of COVID-19, which continues to expand globally. By the end of September 2020, over 33 million cases had been reported worldwide, with nearly 850,000 deaths attributed to the disease. Since COVID-19 is a new disease in humans, and since the pandemic is ongoing, available studies of its impact on older persons remain inconclusive. Nevertheless, a preliminary analysis of COVID-19 mortality rates at older ages has uncovered considerable variation across countries and points toward factors that may explain the observed differences. Among the factors affecting mortality from COVID-19 at older ages, the main determinant is the extent to which countries have been able to control the spread of the virus and mitigate the pandemic. In addition, frailty is a key factor since the risk of death from COVID-19 increases with both age and the presence of co-morbidities such as cardiovascular, pulmonary or kidney disease, as well as cancer and obesity. Living arrangements explain part of the observed international differences in age patterns of COVID-19 mortality, in particular for older persons whose living arrangements affect the risk of contracting COVID-19.

In this context, the living arrangements and mechanisms of family support for older persons have become increasingly important for policymakers, especially in countries at advanced stages of population ageing. Understanding the interconnections between the living arrangements of older persons and their health and well-being has particular relevance in light of the pledge made by Governments in the 2030 Agenda for Sustainable Development[1] that no one will be left behind. In practice, this pledge implies that the Sustainable Development Goals (SDGs) must be achieved for all segments of society and at all ages, with a particular focus on the most vulnerable, including older persons.

How and with whom older people reside has important implications for the Goals related to ending poverty in all its forms everywhere (SDG 1), ensuring healthy lives and promoting well-being for all at all ages (SDG 3), and achieving gender equality and empowering all women and girls (SDG 5). Mitigating the impact of COVID-19 on the older population will require continued efforts by the international community to curb the spread of the virus and to put in place measures to protect the most vulnerable segments of the population — in particular, older persons with pre-existing conditions or who reside in institutions — from exposure to the disease.

[1] A/RES/70/1

Introduction

The world continues to experience a sustained change in the age structure of the population, driven by increasing life expectancy and decreasing levels of fertility. People are living longer lives, and both the share and the number of older people in the total population are increasing rapidly. Globally, there were 727 million persons aged 65 years or over in the world in 2020. Over the next three decades, the global number of older persons is projected to more than double, reaching over 1.5 billion in 2050. All regions will see an increase in the size of their older population between 2020 and 2050. The share of the global population aged 65 years or over is expected to increase from 9.3 per cent in 2020 to 16.0 per cent by 2050 (United Nations, 2019a).

Population ageing is occurring along with broader social and economic changes that are taking place around the world. Declines in fertility, changes in patterns of marriage, cohabitation and divorce, increased levels of education among younger generations, and continued rural-to-urban and international migration, in tandem with rapid economic development, are reshaping the context in which older persons live, including the size and composition of their households and their living arrangements. In countries that have historical data, including Western European countries and the United States of America, intergenerational co-residence has declined dramatically, and most older persons now live either in single-person households or in households consisting of a couple only or a couple and their unmarried children (Ruggles, 2007). A widely held view among researchers is that the size of families decreases as a society industrializes and urbanizes (Bongaarts and Zimmer, 2002), and available data indicate that many countries in the less developed regions are experiencing a slow shift in family and household composition away from multi-generational households and towards smaller families and household types (Ruggles, 2007). However, persistent differences in the living arrangements of older persons across countries of the less developed regions seem to reflect the continuing influence of traditional family structures and cultural norms in the context of demographic, economic and social change (Knodel and others, 2000; Ruggles and Heggeness, 2008).

Living arrangements of older people are an important determinant of their well-being. In many countries, the living arrangements of older persons are associated with their economic well-being as well as with their physical and psychosocial health and life satisfaction (Ong and others, 2016; Zimmer and Das, 2014; Smith and others, 2018). Research has also found differences in mortality associated with an individual's living arrangements. Older persons living alone or in institutions, for example, have higher overall mortality risks than those living with their spouse or family (Feng and others, 2016). The living arrangements of older persons can also have important macroeconomic implications by shaping the demand for housing, social services, energy, water and other resources (Bradbury and others, 2014; Kowsari and Zerriffi, 2011; United Nations, 2005).

The living arrangements and family support for older persons, therefore, have become an increasingly important policy concern especially in countries at advanced stages of population ageing. Understanding the interconnections between the living arrangements of older persons, their socioeconomic status and their health and well-being are particularly relevant to the pledge in the 2030 Agenda for Sustainable Development that the Sustainable Development Goals (SDGs) will be met for all segments of society and at all ages, with a particular focus on the most vulnerable, including older persons. How and with whom older people live is especially relevant for the SDGs related to ending poverty in all its forms everywhere (SDG 1), ensuring healthy lives and promoting well-being for all at all ages (SDG 3), and achieving gender equality and empowering all women and girls (SDG 5).

The *United Nations Database on the Households and Living Arrangements of Older Persons 2019*,[2] hereafter referred to as "the database", is the only dataset that provides harmonized and comparable data on patterns and trends in the household size and composition and the living arrangements of older persons at the global level, across regions and countries, and over time.[3] Box 1 provides an overview of the data sources used to populate the database.

Box 1. Data sources on the living arrangement of older persons

The *United Nations Database on the Households and Living Arrangements of Older Persons 2019* presents a global compilation of indicators to describe the household composition and living arrangements of persons aged 60 years or over. The database builds on work carried out by the United Nations more than a decade ago (United Nations, 2005). This work was updated and expanded in 2017 and 2018 (United Nations 2017a, 2017b, forthcoming 2020).[4]

The primary data sources used to populate the database were censuses and household surveys. Input data from these sources had two distinct forms: tabulated data as well as microdata at the household level. Microdata were obtained from the international collection of census data included in the Integrated Public Use Microdata Samples (IPUMS-International) and from collections of internationally comparable survey data, including the Demographic and Health Surveys (DHS) and the European Union Labour Force Surveys (EU LFS). Tabulated data were obtained from the *United Nations Demographic Yearbook*.

Because most of these data sources rely on information collected at the household level, older persons residing in institutions, such as nursing homes, prisons, religious facilities or dormitories, are not included. Therefore, most of the data presented here on living arrangements refer only to older persons who live in households. In most countries, the institutional population at ages 60 and above is less than 5 per cent of the total.

The complete database draws on 738 unique data sources with reference dates ranging from 1960 to 2018, covering 155 countries or areas that represent more than 97 per cent of persons aged 60 or over globally. For this report, however, the analysis was restricted to data with reference dates ranging from 2006 to 2015, covering 123 countries with approximately 70 per cent of older persons globally. The reason for limiting the analysis to the decade between 2006 and 2015 is that the database includes at least one recent observation for most countries and areas during this reference period.

Since early 2020, the world has been impacted by the rapid spread of the coronavirus that causes COVID-19, which continues to expand globally. By the end of September 2020, over 33 million confirmed cases had been reported, with nearly one million deaths attributed to the disease worldwide. Governments have adopted a variety of policies to curb the spread of the virus and to cope with the socioeconomic impacts of the pandemic, with varying degrees of success. The available data show that older persons in general are much more susceptible to the disease and have higher mortality rates than younger age groups.

Since COVID-19 is a new disease in humans, and since the pandemic is ongoing, available studies of

[2] https://population.un.org/LivingArrangements/resources/About_UN_Database_on_the_Living_Arrangements_of_Older_Persons_2019.pdf.
[3] Apart from country-specific data published by national statistical offices, estimates of household size, composition and living arrangements are published by the Organization for Economic Cooperation and Development (OECD) (www.oecd.org/els/family/database.htm) and the European Commission (http://ec.europa.eu/eurostat/data/database).
[4] The 2017 and 2018 versions of the database are no longer publicly available, replaced by the 2019 version used to prepare the present report.

its impact on older persons remain inconclusive. This report describes large differences across countries in COVID-19 mortality rates among older persons and seeks to identify factors that may explain the observed differences. A principal factor affecting mortality from COVID-19 among older persons is the extent to which countries have been able to control the spread of the virus and mitigate the epidemic. In addition, individual frailty is a key risk factor: the risk of dying from COVID-19 is positively associated both with increasing age and with the presence of co-morbidities such as cardiovascular, pulmonary or kidney disease, as well as cancer and obesity. Living arrangements explain part of the observed differences in age patterns of COVID-19 mortality, in particular the elevated levels of mortality among older persons, since their living arrangements affect the risk of contracting COVID-19.

This report examines the living arrangements of older persons and reviews linkages with their well-being, including their socioeconomic status and their health, in the context of the 2030 Agenda for Sustainable Development. After the introduction, the first chapter provides an overview of the living arrangements of older men and women across countries and regions. The second chapter reports some provisional findings about COVID-19 mortality risks at older ages and about the factors that underlie such risks, including the living arrangements of older persons. Lastly, the report provides recommendations for policy makers on key challenges related to the living arrangements of older persons and their health and socioeconomic well-being. The report also includes description of the data, definitions and measures used to characterize the living arrangements of older persons, as well as the data used for the analysis of morbidity and mortality from COVID-19 among older persons.

"Taking care of each other", by United Nations/Nicole Mun Sim Lai, 2020

Living arrangements of older persons

The living arrangements of older persons are the result of individual preferences and constraints (Reher and Requena, 2018). For most older persons, the preferred living arrangements may differ from their actual living arrangements because of health constraints and limited functional ability, financial affordability (income and wealth), kin availability (including the presence of spouse and/or the number of children), housing costs and location (rural or urban). Preferences for living arrangements are also influenced by the prevailing cultural norms and traditions. Within Europe, older persons are more likely to live alone or with a spouse in the "individualistic" societies of Northern and Western Europe, while they are more likely to co-reside with children in the so-called "familistic" societies of Southern Europe (Reher and Requena, 2018). In addition, the provision of social welfare programmes, such as public pensions, universal health care, public housing programmes and social care services, influence choices about the living arrangements of older persons, especially in later stages of their life (Daly, 2010). The availability of such welfare programmes is usually associated with a higher level of economic development. Therefore, it is not surprising that economic development is positively associated with older persons living alone or with a spouse only and negatively associated with older persons living with children or with extended family.[5]

In more developed countries, people tend to marry later, have fewer children and have them later in life. In addition, a larger proportion of women than men are formerly married (separated, divorced or widowed), which has implications for their living arrangements later in life. Social programmes in these countries typically offer financial assistance or health-care benefits to retired adults, making it more affordable for older people to stay in their own homes and to live by themselves or with a spouse only. In Europe and Northern America, research has shown that many older persons have a preference to live independently (either alone or with a spouse only). In these countries, however, older people tend to live near their children, who may provide for, or receive support from, their older parents.

Historical data show that the living arrangements of older persons have changed slowly over time, shifting from co-residence towards independent living. Yet under some circumstances, such as economic or health crises, families are faced with an urgent need to provide support for their kin. Recent economic downturns for example have led adult children to move back with their parents, resulting in multi-generational households headed by older persons. In Eastern Europe, the housing crisis brought on by the privatization of the housing market caused adult children to move back to their parents' homes even after forming their own families, triggering a re-emergence of multi-generational households (Hărăguș, 2014). The impact of the 2008 financial crisis and austerity policies in Greece, Italy and Spain also led adult children with families to move back in with their parents (Alvarez-Galvez, 2019). In the United States of America, social and economic crises linked to the crack and opioid epidemics, increased incarceration, or child abuse and neglect have led to a rising number of skip-generation households, especially among African Americans (Keene, 2010).

In less developed countries, higher fertility in the past provided more opportunities for older persons to co-reside with their children and grandchildren, potentially including one or more minor children in the same household. Co-residence with minor children was more likely for older men than for older women, given typical age differences between spouses as well as differences by sex in the reproductive life span. Today, most older persons in developing countries live with their children or with members of the extended family. In the absence of comprehensive social protection programmes and limited employment prospects for adult children, co-residence is important as a form of intergenerational support, which can flow both "downward" (from older persons to their adult children or grandchildren) and "upward" (from adult children to their parents).

[5] It is noted that although Japan has high levels of economic development, it is still a "familistic" society, where the proportion of older persons living alone is lower than in other countries with a similar level of development.

Throughout the less developed regions, many older persons are at risk of living in poverty, and this risk is especially high in sub-Saharan Africa (Adeyemi, Ijaiya and Raheem, 2009; Barrett, Carter and Little, 2006; Collier, 2007; Kakwani and Subbarao, 2005). Relatives, particularly adult children, provide a safety net of caretaking and material support for their ageing parents (Aboderin, 2000). Such a safety net operates at the household level through co-residence. In countries with high levels of HIV/AIDS in recent decades, older persons faced additional vulnerability and hardship resulting from the death of adult children who were the traditional providers of old-age support. In sub-Saharan Africa, the prevalence of skip-generation households (see box 2) increased significantly during the HIV/AIDS epidemic. A similar pattern occurs when parents are absent due to migration, as observed frequently in sub-Saharan Africa and Central America and in the labour-sending countries of South-east Asia. Other household types that are commonly observed in settings with high mortality due to AIDS are older persons living alone, with their spouse only, or with other older persons (Kakwani and Subbarao, 2005).

Box 2. Categories to describe the household living arrangements of older persons

A full description of the methods used by the United Nations to classify households by size and composition is available elsewhere (United Nations, 2019b; United Nations, forthcoming 2020). This box provides a summary of the categories used in this report to describe the living arrangements of older persons in terms of relationships linking them to co-resident members of the household, focusing in particular on parents, spouses and children.

The following categories form a typology of living arrangements for older persons who live in households (excluding those who live in institutions).

Living independently: Households consisting of an older person living alone or with a spouse or partner only.

Living with children: Couple (whether married or not) or single parent living with their children only, including biological, adopted and foster children, as well as stepchildren and children-in-law, irrespective of the children's ages. This category has two sub-categories:

Living with children under 20 years of age: The oldest co-resident child is aged 0 to 19 years;

Living with children aged 20 years or over: The oldest co-resident child is aged 20 years or older.

Extended family households: Households that include one or more members from outside the nuclear family unit[6], and no members who are not related to each other. A specific sub-category is mentioned in this analysis:

Skip-generation households: Households consisting of grandparents and their grandchildren, but with no one from the intermediate generation (parents of the grandchildren or children of the grandparents).

Non-relative households: Households consisting of an older person living with one or more unrelated persons. This category is not included in the analysis presented here.

[6] Nuclear family households are those in which the relationship between any two household members is that of child, parent or spouse. The category includes households consisting of a couple only, a couple with children, or a single parent with children.

Older persons living independently

Living independently (alone or with a spouse) is likely to offer more privacy and control over household decisions, but also less companionship and sharing of household tasks. Nevertheless, the experience of living independently may differ between older persons living in more developed countries and those living in less developed countries.

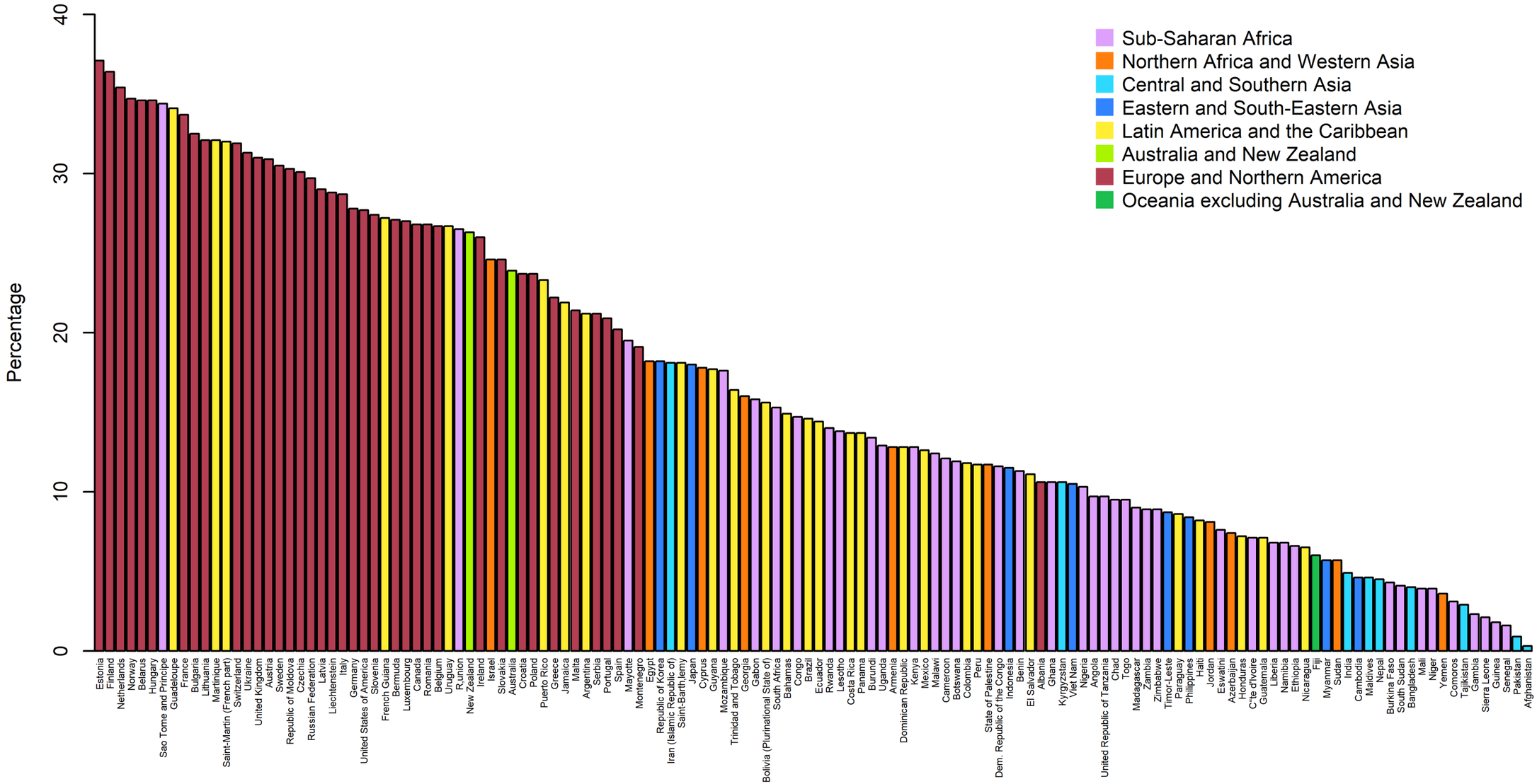
In more developed countries, there are relatively high proportions (figure 1) of older persons living alone. Older persons with sufficient resources, including from pensions, personal assets or access to publicly funded health care, often live on their own as long as their health is good enough to do so. Moreover, living alone does not necessarily imply an absence of family and other support networks. Older persons living alone tend nevertheless to rely on children not residing with them for contact and support. They may also rely on siblings and other kin as well as non-kin (friends, neighbours). Research has shown that when older persons' adult children live in separate households, they often live close by. Older persons living alone who never married or had children tend to rely on other relatives as well as friends and neighbours.

In less developed countries, the proportion of older persons living alone varies considerably (figure 1). Most Latin American and Caribbean countries fall into an intermediate category, while the lowest proportions of older persons living alone are found in Africa and Asia. By comparison to the more developed countries, older persons living alone in developing countries tend to be more vulnerable, given the usual reliance on children and other kin as the primary source of support for older family members. A study in India found that disabled older persons were more likely to live alone, compounding their social isolation and deprivation (Ugargol and others, 2016) . In some countries of sub-Saharan Africa, older persons who are isolated or live alone are often stigmatized and accused of witchcraft by the community (Nzabona and others, 2015).

Gender plays a crucial role in explaining why many older persons live alone. In all regions, the proportion of older women living alone has typically been higher than that of older men (figure 2). Because of the combined effect of men marrying younger women, on average, and the female advantage in life expectancy, older men are more likely to be married, whereas older woman are more likely to be widowed. Living alone at the older ages is often a consequence of marital dissolution, either due to the death of a spouse or a partner or because of separation or divorce.

Figure 1.

Percentage of persons aged 65 year or over who live alone, by country or area of residence, 2006-2015



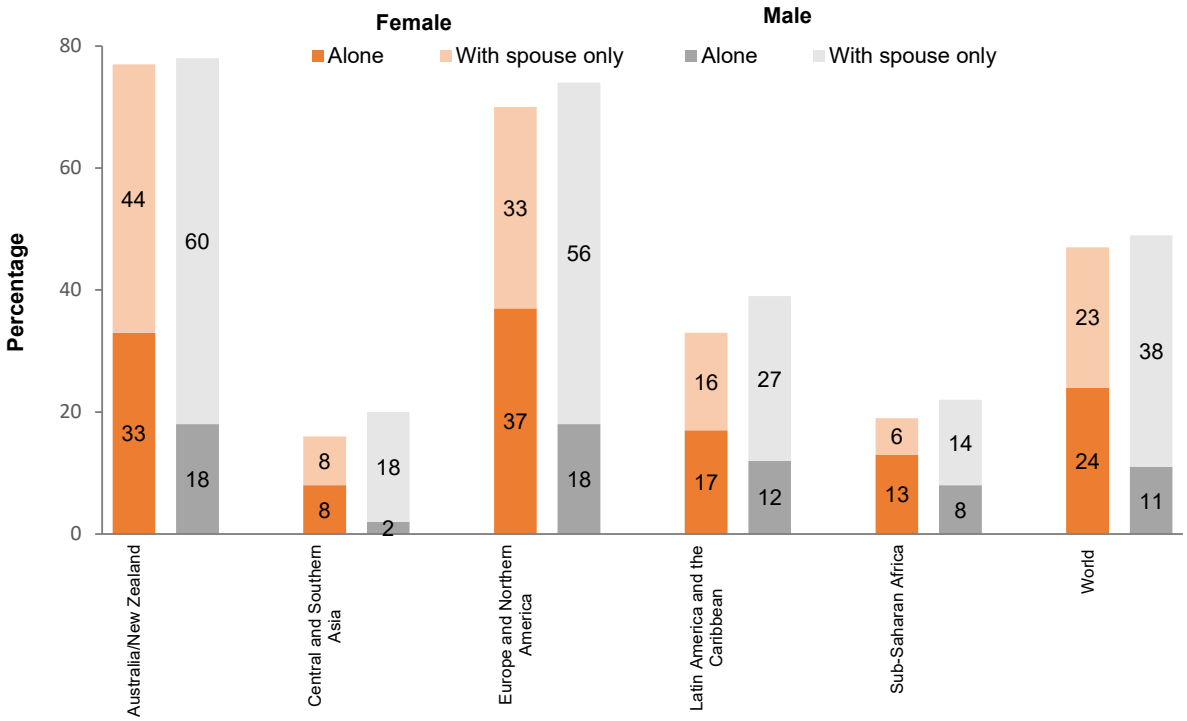
Source: United Nations, Department of Economic and Social Affairs, Population Division (2020a). *Database on the Households and Living Arrangements of Older Persons 2019.*

At the global level in 2006-2015, older women were more than twice as likely as their male counterparts to live alone (24 per cent and 11 per cent, respectively) (figure 2). The gender gap was especially wide in Europe and Northern America (37 per cent for women and 18 per cent for men) and Australia and New Zealand (33 per cent and 18 per cent). These regions were also marked by the largest gender differences in persons living with a spouse only. Whereas globally the difference between older men and older women living with a spouse only was 15 percentage points (38 per cent for men versus 23 per cent for women), the gap was wider in Europe and Northern America, where there was a difference of 23 percentage points (56 per cent versus 33 per cent).

Among older adults living alone, women report less satisfaction with life, which can be attributed to their relative disadvantage in terms of socioeconomic status and well-being, according to data from the first wave of the Survey of Health, Ageing and Retirement in Europe (SHARE) (Gaymu and Springer, 2010) For many women, the survivor benefits paid through a husband's contributory pension are the only source of income (United Nations, 2015).

Figure 2.

Percentages of men and women aged 65 years or over who live alone or with spouse only, by region, 2006-2015



Source: United Nations, Department of Economic and Social Affairs, Population Division (2020a). *Database on the Households and Living Arrangements of Older Persons, 2019.*
Notes: Regional aggregates were estimated for those regions with data available.

In general, older women living alone are more likely than men to be living in poverty.[7] In Europe, older women living alone are also poorer than women who are part of a couple (Eurostat, 2019). In the United States of America, older persons who live alone are about three times more likely to be poor than those who live with others.[8] In the United States of America in 2014, 19 per cent of older women who lived alone lived in poverty compared to 15 per cent of older men living alone. The risk of poverty at older ages is generally more pronounced in less developed countries, where social protection coverage is often inadequate or absent and where many older persons are entirely dependent on family support.

Older persons living with children

Until the mid-twentieth century, co-residence with children was the most common type of living arrangement among older persons even in countries of the more developed regions (Ruggles, 2007). Between 1940 and 1980, due in part to the expansion of social security and pension benefits, the share of older persons living with children began to decline. Since 1980, however, the trend toward more independent living has stalled in these countries, whereas the share of older persons living in multigenerational households has increased in some countries, including the United States of America (Pew Research Center, 2010). In some European countries, the economic downturn of 2008-2009 led to an increase in co-residence of older persons with their adult children (Grundy and Murphy, 2017). This development was caused by financial instability as a consequence of unemployment and underemployment and by an associated delay in the transition period to adulthood. For countries of Europe, co-residence of older persons with their children has been much more common in Southern Europe than in Northern Europe (United Nations, 2005).

Although it is often assumed that older parents are dependent on their children for economic and social support, co-residence with children typically entails mutual support, especially in the case of children who have never left their parental home or who have returned to cope with economic or personal hardship caused by job losses or other adverse life events such as divorce. Adult children may benefit from living with their older parents not just in financial terms, but also because the parents often help to care for grandchildren (Wang and Marcotte, 2007). The same dual motivation may apply to older persons who move in with their adult children: when older parents are widowed or in poor health, they may rely on their adult children for both personal care and financial support (United Nations, 2005; Wiemers and others, 2017).

In some societies, adult children are expected to remain with and support their ageing parents as a part of "lifetime reciprocity" or "filial piety" (Lestheghe, 1983). Japan, for example, has retained a strong tradition of filial obligation rooted in intergenerational co-residence (Tsutsui, Muramafsu and Higashino, 2014) despite its advanced stage of economic development and income security at older ages. However, norms of filial obligation in Japan have declined since the establishment of a nationwide insurance system in 2000, making long-term care a right for older adults regardless of income or availability of family support (Tsutsui, Muramafsu and Higashino, 2014).

In many developing countries, available data show a positive relationship between intergenerational co-residence and the proportion of the population living in urban areas, despite the greater likelihood of traditional norms and the prospect of land inheritance, which is a strong incentive for co-residence, in rural areas. Housing shortages along with unstable or declining employment prospects for adult children may contribute to co-residence in urban areas (Ruggles and Heggeness, 2008). In countries such as Brazil and South Africa, the introduction of universal pension systems had the effect of encouraging younger adults to remain longer in their parental homes (Edmonds, Mammen and Miller, 2005; Ruggles and Heggeness, 2008).

[7] United Nations (2015). *The World's Women 2015: Trends and Statistics.*

[8] Accurate information about old-age poverty is hampered by the absence of an international harmonized database of poverty rates disaggregated by age.

Most available data and research on the co-residence of older parents with their children does not differentiate between living with adult children and living with younger children. The database used for this analysis, however, provides information on whether older persons co-reside with children under age 20 or with children over that age (see box 2).

During 2006-2015, living with children aged 20 years or younger was most common in countries of sub-Saharan Africa. Because of the relatively high fertility levels in this region, childbearing, and living with children at older ages are more common. Globally, older men were more likely than older women to live with children under age 20 (figure 3), while older women were slightly more likely than older men to live with children over that age (figure 4). These differences by sex can be explained to a large extent by the typical age difference between spouses and by the shorter reproductive life span of women. In addition to being older than their wives on average, men typically retain reproductive capacity until later in life and therefore are more likely to co-reside with children under age 20 when they reach older ages.

Older persons living with extended family

Most older persons in Africa, Asia and Latin America and the Caribbean live in extended family households, which may include relatives such as grandchildren, nieces and nephews. Potential benefits of living in an extended family household include the availability of companionship and emotional and practical support, as well as benefits that derive from economies of scale.

A specific type of extended-family household is the skip-generation household, which is a household composed of grandparents and grandchildren without members of the intermediate generation (see box 2). Skip-generation households often suffer from socio-economic disadvantages and are more likely to fall below the poverty line (Dunifon, Ziol-Guest and Kopko, 2014). In the United States of America, for example, the prevalence of skip-generation households has increased in response to need, when parents are absent or no longer have custody of their children due to incarceration, substance abuse or premature death.[9] Financial difficulties and changes in family life, including increased levels of single-parenthood and divorce, appear to be additional contributing factors (Glaser and others, 2018). The prevalence of skip-generation households has also increased in some European countries since the 1980s, including in the United Kingdom of Great Britain and Northern Ireland, where the rise has also been attributed to increases in parental substance abuse and imprisonment (Shailen and Selwyn, 2011).

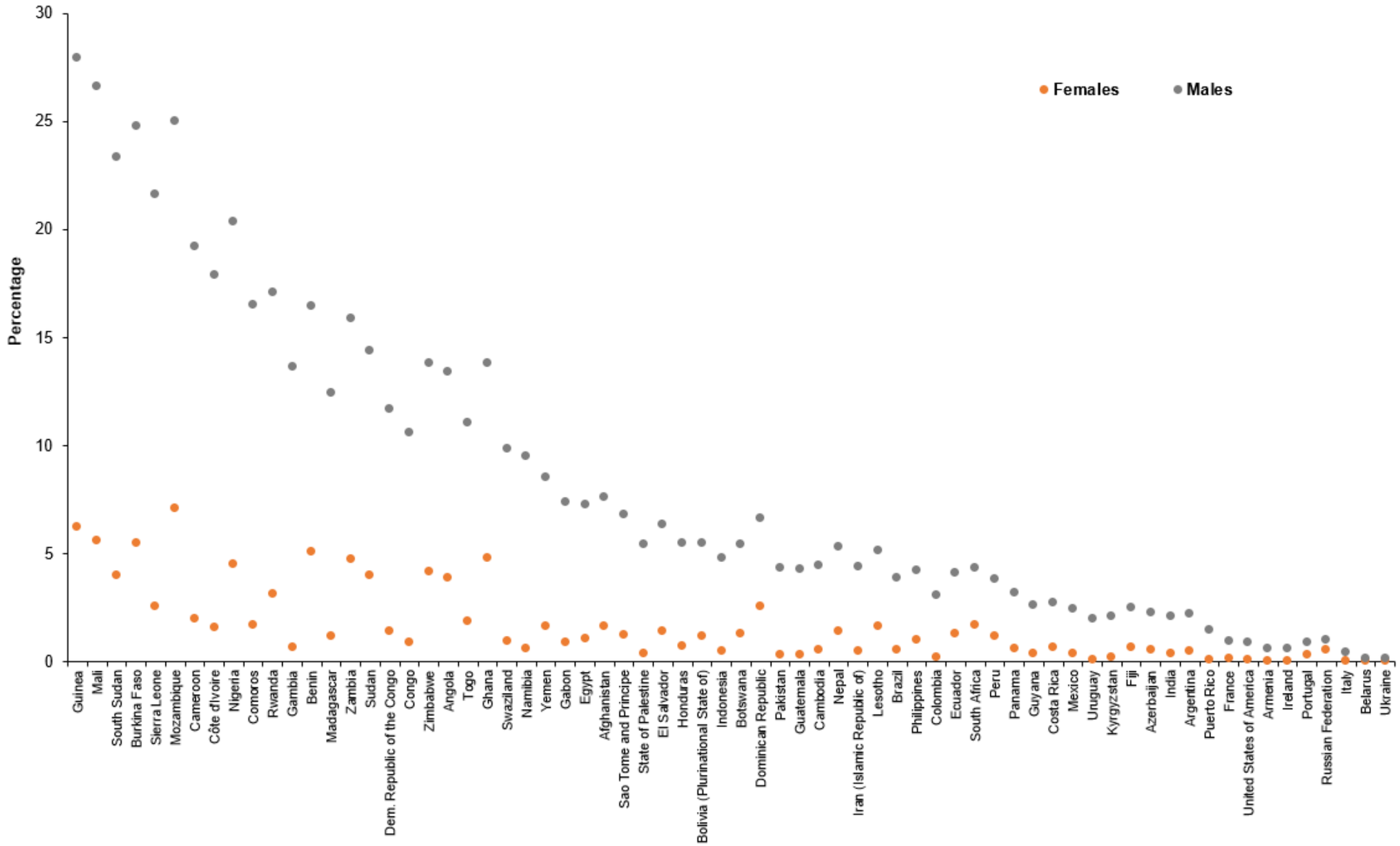
Skip-generation households are common also in sub-Saharan Africa, Asia, the Caribbean and Central America. In the Dominican Republic, Haiti and Honduras, more than 10 per cent of older persons live with their grandchildren only. In many sub-Saharan countries, the HIV/AIDS epidemic and associated mortality was the main driver behind the growing numbers of skip-generation households in past decades (Kakwani and Subbarao, 2007). In Lesotho, Malawi, Rwanda and Uganda, more than 30 per cent of older persons were living in skip-generation households. These countries also had a high prevalence of children orphaned by AIDS and other causes (UNICEF, 2015). In Asia, the Caribbean and Central America, rural-to-urban and international migration have led to an increased prevalence of skip-generation households. These households often benefit from remittances sent home by migrant parents or adult children (Gupta, Pattillo and Wagh, 2009). Lastly, civil war and armed conflict may cause a temporary or permanent absence of parents, who often leave children in the care of grandparents (Zimmer and Teachman, 2009).

Older women are more likely than older men to live in skip-generation households. In Burundi, Namibia and Uganda, more than 30 per cent of older women were living in skip-generation households during 2006-2015, while the share for men was about 15 per cent.

[9] This was observed during the crack cocaine epidemic of the 1980s and 1990s and the opioid epidemic during the early 2000s.

Figure 3

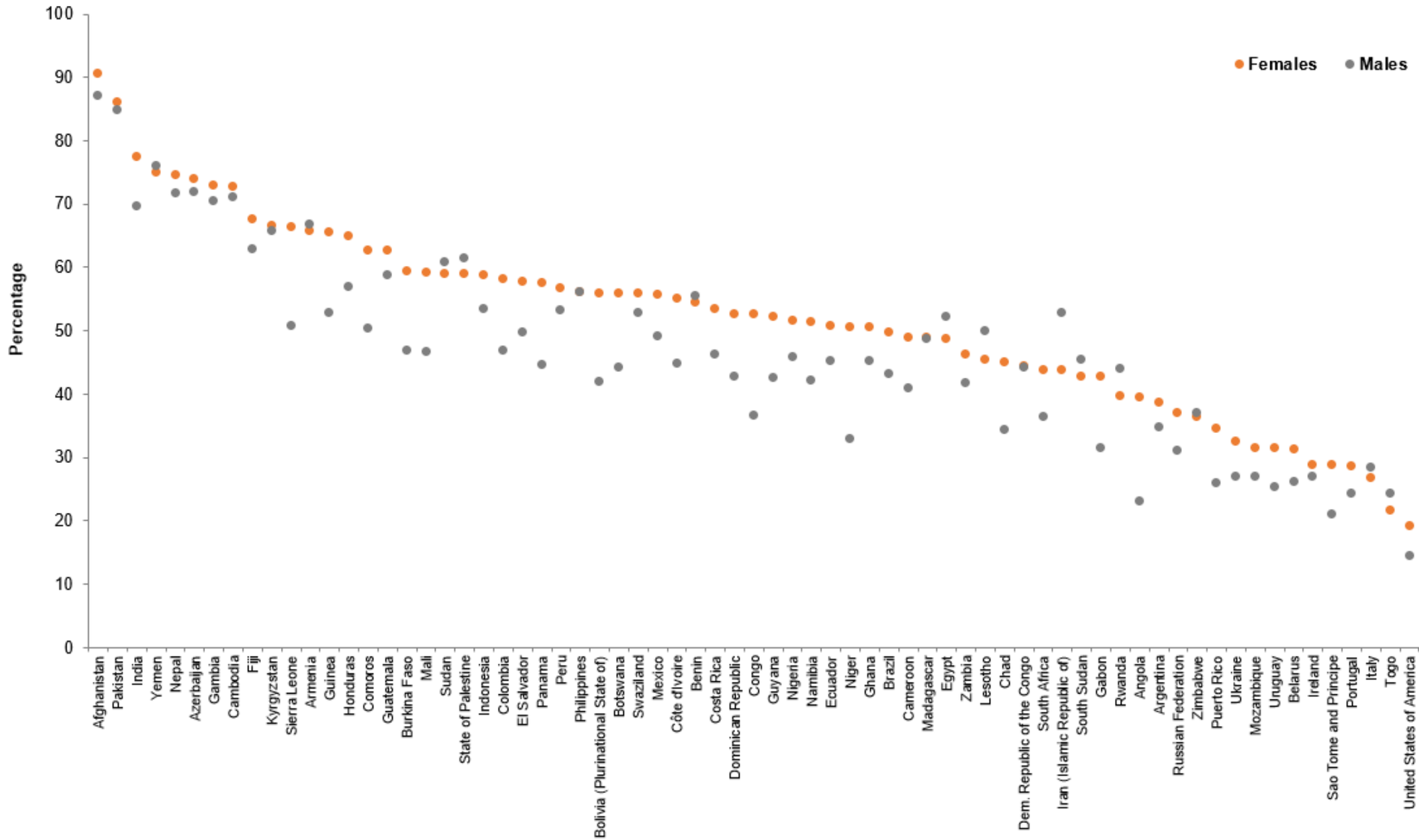
Percentages of men and women aged 65 years or over who co-reside with children under 20 years of age, countries and areas with available data, 2006-2015



Source: United Nations, Department of Economic and Social Affairs, Population Division (2020a). *Database on the Households and Living Arrangements of Older Persons 2019.*

Figure 4.

Percentage of men and women aged 65 years or over who co-reside with children aged 20 years or over, countries and areas with available data, 2006-2015



Source: United Nations, Department of Economic and Social Affairs, Population Division (2020a). *Database on the Households and Living Arrangements of Older Persons 2019.*

"Among the Bishari", by Carsten ten Brink , 2013

COVID-19 mortality among older persons

All countries have been affected by the coronavirus disease 2019 (COVID-19), but not all have fared the same. Some countries have successfully suppressed the virus at an early stage (Cambodia, China, Thailand, and Viet Nam), some have reduced a large initial outbreak but remain at risk of flare-ups (France, Spain and Turkey), and some have continued to experience high or rising infection rates (Brazil, India and the United States of America) (United Nations, 2020b). This chapter will address the following questions: Which population groups are at greatest risk of being infected and of dying from COVID-19? How much do these risks differ across countries? What are the factors behind the observed differences in risk? In particular, do differences between countries in the living arrangements of older persons contribute to differences in the risk of severe or fatal outcomes from COVID-19?

Age patterns of mortality from COVID-19

One of the key characteristics of COVID-19 is the role of age: older persons are at much higher risk of dying from the disease than any other age group. A large cohort study in the United Kingdom using the primary health care records of 17 million patients, including 11,000 who died from COVID-19, found that patients over the age of 80 years were at least 20 times more likely to die from the disease than those in their 50s, and hundreds of times more likely than those below the age of 40 (Williamson and others 2020). Age and underlying health conditions affecting the cardiovascular, respiratory, and immune systems confer an increased risk of severe illness and death (WHO, 2020). The results for the United Kingdom mirror roughly the age pattern of risk for COVID-19 that has been observed in many countries around the world.

Box 3. Data and methods used for the analysis of COVID-19 mortality among older persons

To examine the direct impact of COVID-19 on older persons, studying the mortality risk is the most practical option, since data on infection risks and infection fatality rates are difficult to obtain. Measuring the number or proportion of individuals who are infected is challenging because those who have mild or no symptoms often go undetected. In the United States of America, for example, the number of confirmed or reported cases may be less than 10 per cent of the true number of infected individuals (Centers for Disease Control and Prevention, 2020).

Ideally, an analysis of mortality from COVID-19 among older persons with different living arrangements would be based on records of individual COVID-19 deaths tabulated by age and type of living arrangement. Since such data are not widely available, the analysis presented here is based on aggregate data on numbers of deaths by age group for each country, as reported by national statistical offices and compiled in a harmonized database (Riffe and Acosta, 2020)[10] , and on the proportion of older persons living in institutions, obtained from the *United Nations Database on the Living Arrangements of Older Persons 2017* (United Nations, 2017a)[11] .

[10] Details on this database are available from https://osf.io/mpwjq/.

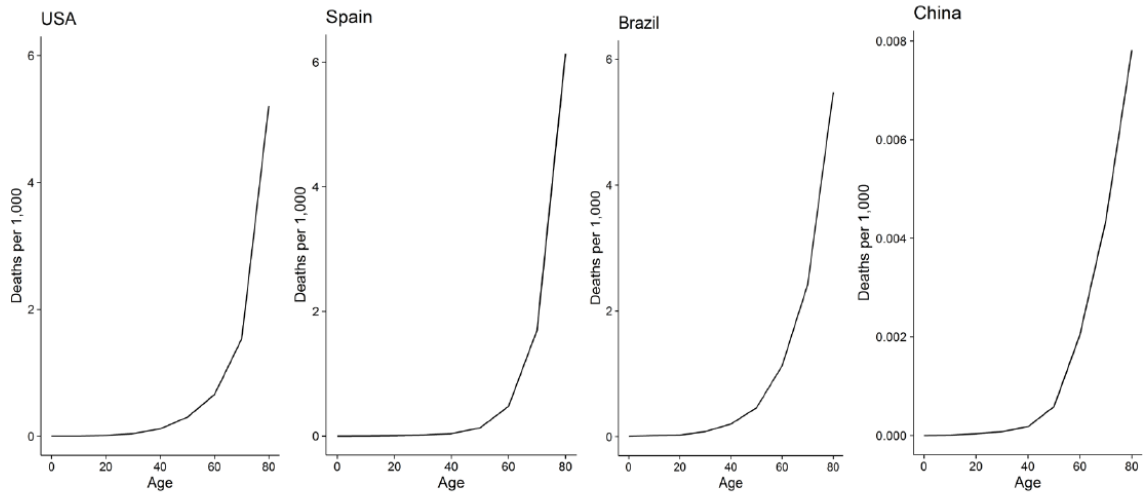
[11] The institutionalized population is the population residing in institutional group quarters such as adult correctional facilities, juvenile facilities, skilled-nursing facilities, and other institutional facilities such as mental (psychiatric) hospitals and in-patient hospice facilities. Based on the census reports from countries in USA and Europe, more than 90 percent of older persons living in institutions reside in nursing homes. Therefore, it is reasonable to use institutions as an approximation for nursing home.

Figure 5 presents age-specific COVID-19 death rates for Brazil, China, Spain and the United States of America. These rates equal the number of deaths attributed to COVID-19 in a given age group divided by the estimated 2020 population in the same age group, based on data through 20 August 2020.[12]

All four countries show increasing death rates as a function of age, confirming that an elevated risk of death among older persons is a common feature of COVID-19.

Figure 5.

COVID-19 death rates by age, selected countries, 2020



Sources: Calculations based on death counts by age from Riffe and Acosta accessed on 20 August 2020, and population estimates by age from *World Population Prospects 2019* (United Nations, 2019a).

Differences across countries in mortality risks from COVID-19

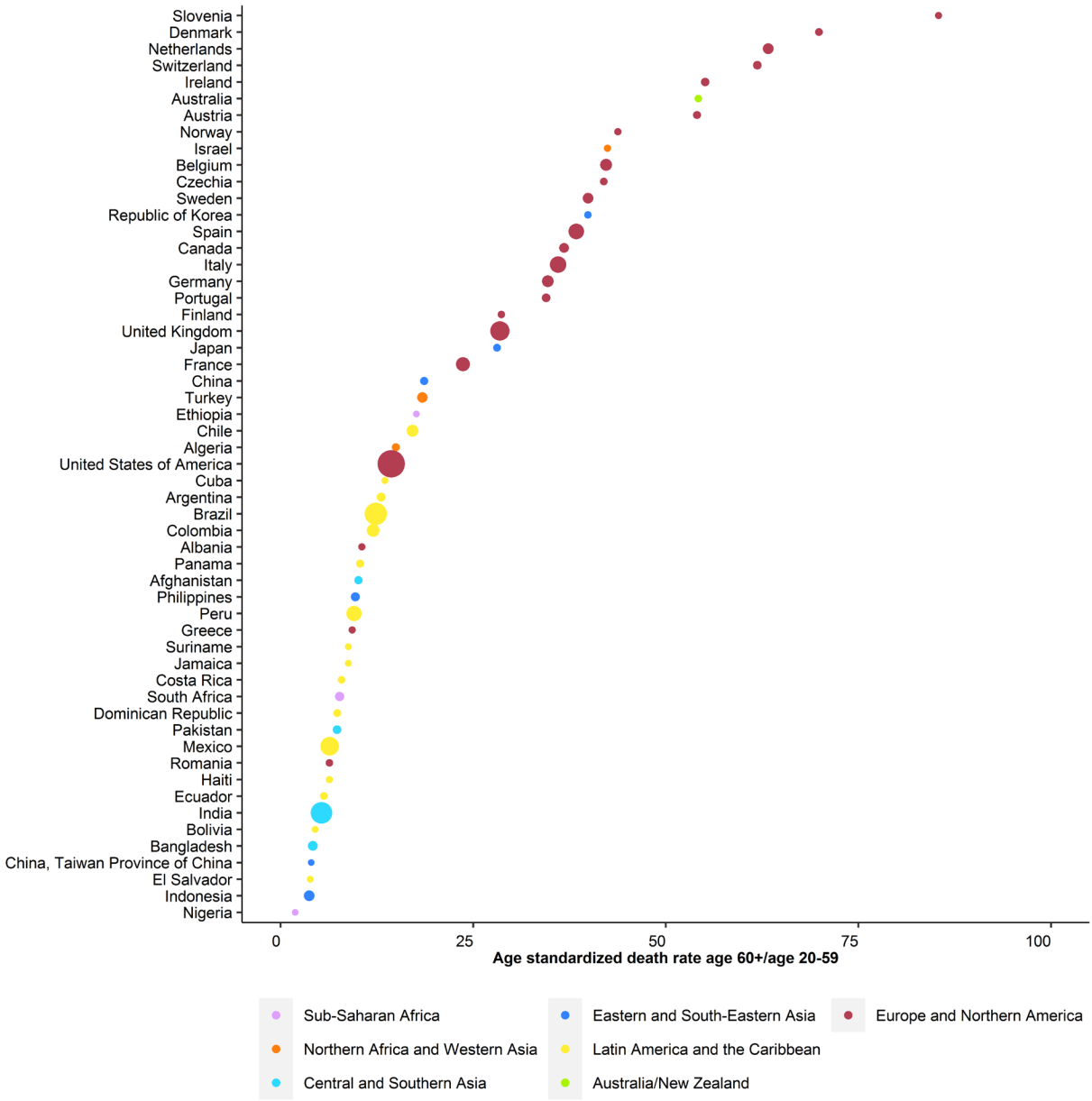
Even though the curves in figure 5 have a similar shape or age pattern, their levels vary across the four countries. For example, the death rate from COVID-19 at ages 70-79 years was about 2.4 deaths per 1,000 population in Brazil and about 1.5 per 1,000 in the United States of America. By contrast, China experienced a very low level, 0.004 deaths per 1,000, for the same age group over roughly the same period.

There are many factors affecting the risk of mortality from COVID-19 faced by older persons. The most important is the extent to which countries have been able to control the pandemic. COVID-19 death rates at older ages have been highest in countries that experienced prolonged periods of uncontrolled transmission or delays in containing or mitigating the pandemic. Initially, this scenario was observed in some European countries, in the Islamic Republic of Iran and in the United States of America. More recently, other countries in Asia and several in Latin America have had limited success in controlling the spread of COVID-19. By contrast, a few countries that implemented effective containment or mitigation measures relatively early have been able to reduce transmission rates in the population as a whole and thereby limit the number of COVID-19 deaths among older persons.

[12] As used here, a COVID-19 death rate equals the number of deaths attributed to the disease in a given age group divided by the estimated 2020 mid-year population in the same age group. Numerators include reported COVID-19 deaths through August 2020. Technically, this measure is not a death "rate" in the usual sense because there is no adjustment for time in the denominator: thus, the COVID-19 death rates presented here depict deaths per person, not deaths per person per year.

Figure 6.

Ratio of age-standardized COVID-19 death rates, ages 60+ compared to ages 20-59, countries and areas with available data, 2020



Sources: See sources for figure 5.
Notes: (1) The size of each dot is proportional to the number of COVID-19 deaths reported in the country through August 2020. (2) See note for figure 5. (3) Before computing the ratios plotted here, COVID-19 death rates for both age groups (20 59 and 60+) were adjusted (or standardized) to account for differences across countries in the population age distribution, using the population of the world in 2020 as the standard.

Figure 6 presents ratios of age-standardized COVID-19 death rates at ages 60 and above compared to those at ages 20-59 for countries and areas with available data.[13] All ratios are greater than one, reflecting the elevated mortality of older persons due to COVID-19. The magnitude of this difference varies widely, however. For example, Bangladesh, Bolivia, El Salvador and Indonesia have recorded COVID-19 death rates at older ages that were about four times as high as those among younger adults. By contrast, in Belgium, the Republic of Korea and Spain, the COVID-19 death rate of older persons was about 40 times higher than that of younger adults. The highest relative risks of COVID-19 mortality among older persons (ratios above 25) were found in countries with relatively high levels of life expectancy at birth in Europe and elsewhere. By contrast, the lowest relative risks for older persons (ratios below 10) were observed mostly in countries of Africa, Asia and Latin America with moderate or relatively low levels of life expectancy (figure 6).[14]

Mortality risks from COVID-19 related to individual frailty

Mortality risks associated with communicable diseases typically comprise two components: the risk of becoming infected and the risk of subsequently succumbing to the disease. The risk of becoming infected with the novel coronavirus varies by age and country; it depends on levels of exposure via social contacts who may spread the virus. Once infected, the risk of dying from COVID-19 also varies by age and country; it depends on the innate ability of an individual's immune system to fight the virus, his or her pre-existing medical conditions and the level of medical care received. Thus, differences between countries in the level and age pattern of COVID-19 mortality risks are due to differences affecting the two components of risk. Unfortunately, data on the two components are not readily available, in particular due to a lack of reliable information about the number of infected persons. Consequently, the analysis presented here is limited to exploring the relationship between COVID-19 mortality risks and factors believed to influence the risk of becoming infected (such as living arrangements) or the risk of dying once infected (such as individual frailty).

In addition to the quality of health care received, the risk of COVID-19 mortality is associated both with age and with co-morbidities such as cardiovascular, pulmonary or kidney disease as well as cancer and obesity(Williamson and others, 2020). Increased age and the presence of such co-morbidities are indicators of increased "frailty" or susceptibility to illness and death from a broad range of causes. The level of underlying frailty in a population can be approximated using death rates from all causes combined, and the relative frailty of persons in different age groups can be approximated by comparing all-cause death rates by age. All-cause deaths rates are a useful yet imperfect proxy for the aggregate level of frailty, since deaths from some causes are not closely tied to any physiological vulnerability, such as deaths from violence and some accidents.

In countries with relatively high levels of life expectancy at birth, a comparison of all-cause death rates for different age groups suggests that frailty is concentrated in the older population, whereas in countries with lower levels of life expectancy, frailty is spread out across a broader age range. For instance, in Switzerland, with a life expectancy at birth of 84 years, the risk of dying (from any cause) for persons aged 60 years or over is about 30 times greater than for persons aged 20-59 years, whereas in Mexico, with a life expectancy of 75 years, the ratio of mortality risks in the same two age groups is about 16. Thus, using all-cause death rates as a proxy measure of underlying frailty, susceptibility to disease and death in Switzerland is concentrated among the older population, whereas in Mexico it is more spread out across the age range.

[13] The age distribution of the world population is used to control for differences in the population age structure across countries.

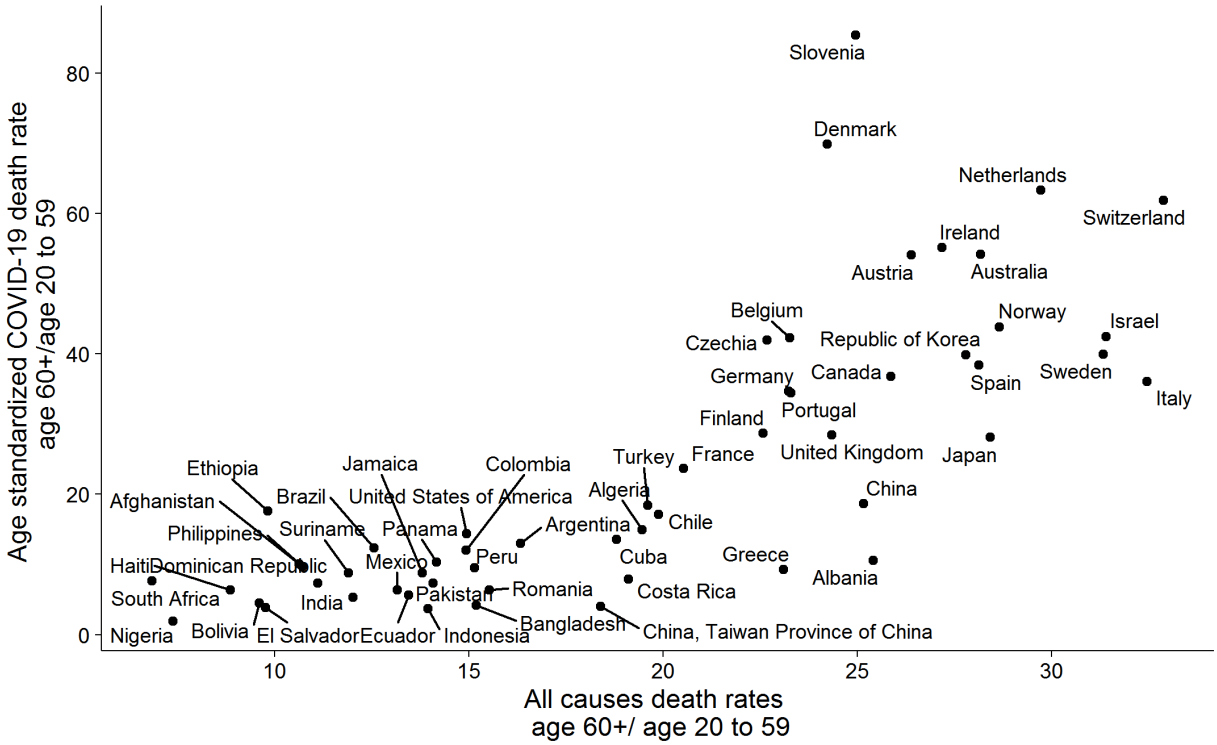
[14] In this section, life expectancy at birth is used as a proxy for the overall level of development.

Figure 7 displays ratios of death rates of older persons (ages 60 and above) to those of younger adults (ages 20-59). Specifically, the figure compares the relative risk of dying from COVID-19 in these two age groups to the relative risk of dying from any cause. The two ratios show a strong positive correlation, indicating that countries in which older persons face a higher relative risk of dying from all causes combined are also countries in which older persons face a higher relative risk of dying from COVID-19.

In Switzerland, for instance, the risk of dying from COVID-19 is about 60 times greater for older persons than for younger adults, whereas in Mexico the same relative risk is around 6. In short, an individual's underlying frailty, or general susceptibility to mortality, appears to be a key risk factor for dying from COVID-19. Frailty and therefore mortality from COVID-19 are more highly concentrated among older persons in countries with relatively high levels of life expectancy at birth and more spread out across the adult age range in countries with shorter life spans.

Figure 7

Ratio of age-standardized COVID-19 deaths rates, ages 60+ compared to ages 20-59, plotted against the comparable ratio of age-standardized all cause death rates, countries and areas with available data, 2020



Sources: See sources for figure 5. In addition, all-cause death rates are from World Population Prospects 2019 (United Nations, 2019a).
Notes: See notes 2 and 3 for figure 6.

Mortality risks from COVID-19 related to the living arrangements of older persons

Besides frailty, the amount of exposure to infection influences COVID-19 mortality risks. Differences across countries in rates of infection appear to be closely related to differences in the age pattern of mortality risks. The risk of infection depends on the frequency, duration and intensity of contact between individuals, which in turn may vary with the type of living arrangements.

In the absence of individual-level data on COVID-19 infections for older persons disaggregated by the type of living arrangement, this analysis uses aggregate data to examine the impact of the living arrangements of older persons on mortality from COVID-19. Among older persons, nursing home residents[15] appear to be at higher risk of contracting infectious diseases such as COVID-19 because they live in a congregate setting where they may be exposed to the virus by contact with medical personnel as well as fellow residents (CDC, 2020; Ladhani and others, 2020; NYS Department of Health, 2020).

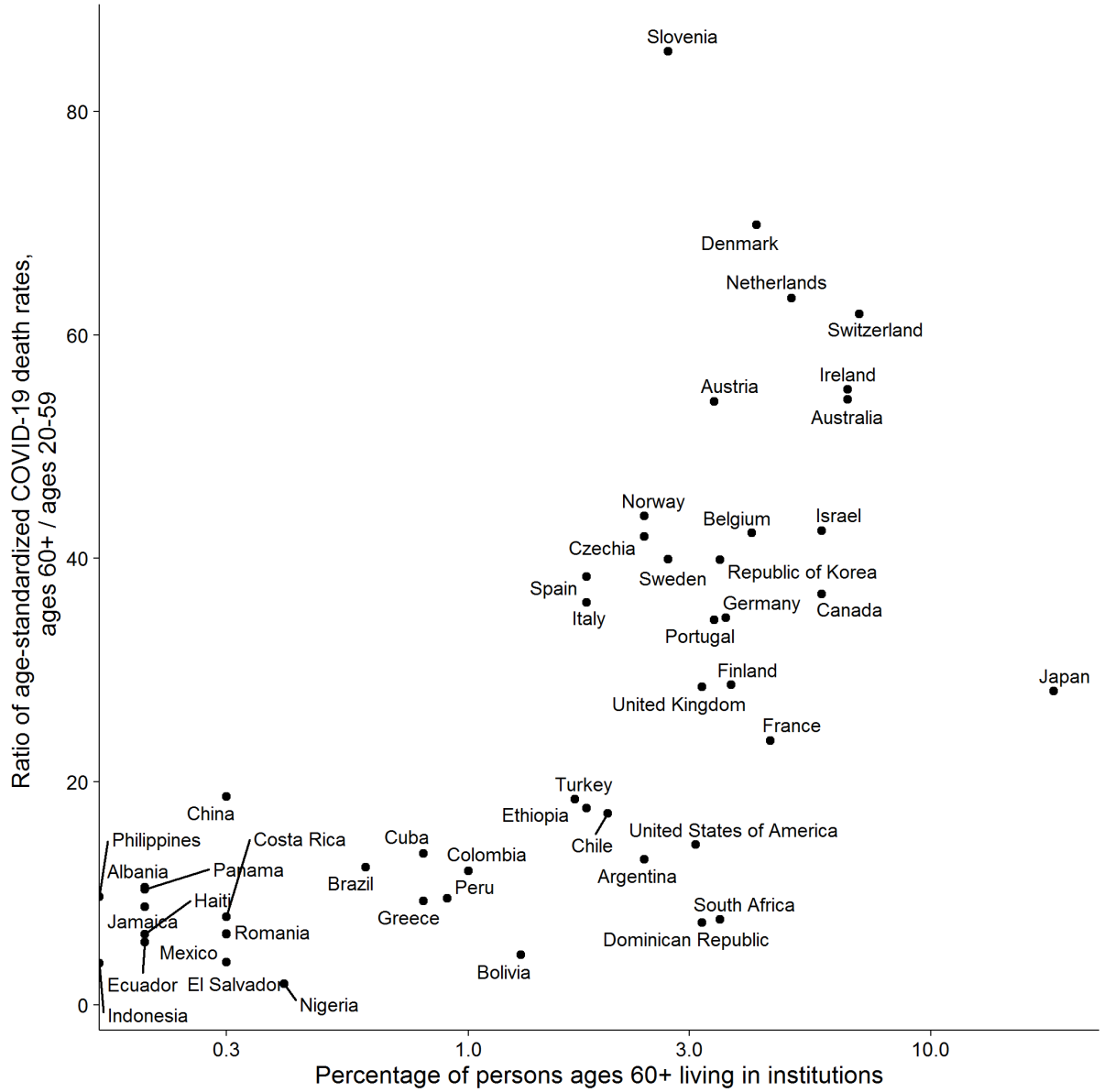
Older persons living in multigenerational households often have extensive and frequent contacts with other household members, which increases the risk of disease transmission. Even when multigenerational families do not co-reside, older persons who live close to extended family members may have frequent social contacts, as is the case in Italy (Tomassini and others, 2004). In developing countries, including in many countries of Africa, Asia, Latin America and the Caribbean, and Oceania, extensive social contacts are maintained, because families often act as primary caregivers in situations where home-care services and nursing homes tend to be limited or absent. Older persons living alone or with their spouse only would be expected to have the lowest infection rates due to their ability to limit social contacts.

Based on national-level data from 53 countries, a strong positive relationship can be observed between the percentage of older persons living in institutions and the ratio of the COVID-19 death rate of persons aged 60 years or older to the same rate for those aged 20-59 years (figure 8). In countries with relatively high proportions of older persons living in institutions, such as Australia, Denmark and Switzerland, older persons are over 60 times as likely to die from COVID-19 than those at younger ages. By contrast, in countries with relatively low proportions of older persons living in institutions, such as China, Mexico and Nigeria, older persons are less than 9 times as likely to die from COVID-19 than those at younger ages. These differences in age patterns of COVID-19 mortality, combined with anecdotal evidence of the rapid spread of the virus within congregate living facilities, suggest that the disproportionate risk of dying from COVID-19 experienced by older persons in some developed countries may be closely related to their living arrangements, in particular the practice of residing in nursing homes.

[15] Nursing homes do not include long-term independent living or assisted living facilities.

Figure 8.

Ratio of age-standardized COVID-19 death rates, ages 60+ compared to ages 20-59, plotted against the percentage of older persons living in institutions, countries and areas with available data, 2020



Sources: See sources for figure 5. In addition, percentages of older persons living in institutions are from the United Nations *Database on the Living Arrangements of Older Persons 2017* (United Nations, 2017a).
Notes: See notes 2 and 3 for figure 6.

"Portrait from Kiyindi in Uganda", by Gunnar Salvarsson, 2013

Policy implications and recommendations

Differences across countries and regions in the living arrangements of older persons reflect differences in demographic and economic conditions, as well as in social norms and preferences. The type of living arrangements older persons choose depends also on the existence and adequacy of public programmes, such as for pensions and health care. The present analysis of the living arrangements of older persons has found that the majority of older persons live independently in the more developed regions, whereas in developing countries they more often co-reside with their children and extended families. While the prevalence of various types of living arrangements tends to change slowly over time, they can sometimes adapt quickly in times of need, for example during economic downturns or other individual or society-wide crises. The data show considerable differences between the living arrangements of older women and older men, highlighting the importance of taking sex or gender into account when formulating policies in this area.

As the process of population ageing continues to advance in both developed and developing countries, the living arrangements of older persons and the mechanisms of both formal and informal support for the older population have become increasingly important policy concerns. As populations age, it is essential to ensure continued and equitable access to disease prevention, treatment and rehabilitation during all stages of life. Healthy ageing, however, is more than merely the absence of disease and entails also the maintenance of key functional abilities throughout the lifespan. Health and long-term care systems need to be aligned to meet the needs of ageing populations by providing age-appropriate integrated care and by focusing on maintaining the intrinsic capacity of older persons to lead independent lives, so that they can grow older in their homes or other familiar settings.

Women tend to live longer than men, on average, and thus comprise the majority of older persons, especially at advanced ages. Older persons, especially older women who live alone, tend to face disadvantages related to poverty, loneliness and depression. In keeping with SDG 5 on women's empowerment, Governments should promote gender equality throughout the life course, which can contribute in the long run to more equitable outcomes in later life.

Governments should recognize the continuing contributions that older persons make to their families, communities and societies. The impact of such activities is especially evident in the context of skip-generation households, where older persons, particularly older women, care for their grandchildren, including in times of economic and personal hardship, or in situations where adult children are absent due to death or migration. Older persons sometimes also receive their adult children back into their home in times of economic hardship, or when in need of emotional support. Policy makers should explore means of easing the burden on older persons in such situations, who often draw on their own scarce resources to support other family members, increasing their own risk of poverty later in life.

Living arrangements are generally a reflection of individual needs, resources and preferences, and there is no single best policy response to enable older persons to live independent lives. Nevertheless, for older persons to live independently, some universal needs must be met, including for health care. In 2019, the United Nations General Assembly made a commitment to promote healthy and active ageing, to maintain and improve the quality of life of older persons, and to respond to the needs of the rapidly ageing population.[16]

Available evidence also suggests that older persons' living arrangements are closely associated with their chances of dying from COVID-19. An analysis of internationally comparable data has shown that older persons are, in general, at much higher risk of dying from the disease compared to younger persons. Moreover, the analysis has also revealed large variations across countries in levels of mortality from COVID-19 among older persons. In addition to the effectiveness of measures taken by countries to

[16] A/RES/74/2

contain or mitigate the epidemic, two other factors appear to be important: the level of individual frailty and the living arrangements of older persons. Frailty reflects a person's general susceptibility to poor health outcomes, with major implications in the context of the current pandemic, since underlying conditions that stress the cardiovascular, respiratory or immune systems confer an increased risk of severe illness and death from COVID-19.

Regarding living arrangements, nursing home residents are at high risk of being infected by the novel coronavirus and of dying from COVID-19. The disease is more lethal for older adults in general, especially those with underlying health conditions. In addition, the virus can spread rapidly through congregate living facilities, such as nursing homes, where many older persons live in a confined environment and workers move from room to room and from one resident to another. This situation calls for special policies and programmes to support and protect nursing home staff and residents from this deadly disease.

The response to the pandemic should include the establishment of standardized systems to collect and share data on morbidity and mortality due to COVID-19. Such data should be disaggregated by age, sex and residential status, including residence in nursing homes or other institutional settings. The analysis of such data could facilitate the development of better measures to minimize the spread of the novel coronavirus and to mitigate its devastating effects on the most vulnerable members of society.

References

Aboderin, Isabella (2000). *Intergenerational Support and Old Age in Africa*. New Brunswick, NJ, Transaction Publishers.

Adeyemi, Sidikat L., Gafar T. Ijaiya and Usman A. Raheem (2009). Determinants of poverty in sub-Saharan Africa. *African Research Review,* vol. 3, No. 2, pp. 162-77.

Barrett, Christopher B., Michael R. Carter and Peter D. Little (2006). Understanding and reducing persistent poverty in Africa: Introduction to a special issue. *Journal of Development Studies*, vol. 42, No. 2, pp. 167-77.

Alvarez-Galvez, Javier, and others (2019). The impact of financial crisis and austerity policies in Andalusia, Spain: disentangling the mechanisms of social inequalities in health through the perceptions and experiences of experts and the general population. *International Journal of Equity Health*, vol.18, No. 108, doi: 10.1186/s12939-019-1013-3.

Bongaarts, John, and Zachary Zimmer (2002). Living arrangements of older adults in the developing world: An analysis of Demographic and Health Survey household surveys. *Journals of Gerontology: Social Sciences*, vol. 57B, No. 3, pp. 145-157.

Bradbury, Mason, M. Nils Peterson and Jianguo Liu (2014). Long-term dynamics of household size and their environmental implications. *Population and Environment*, vol. 36, No. 1, pp 73–84, doi:10. 1007/s11111-014-0203-6.

CDC, Centers for Disease Control and Prevention (2020). Nursing Homes and Assisted Living (Long Term Care Facilities [LTCFs]). Available from www.cdc.gov/longtermcare/index.html. Accessed on 9 August 2020.

Dunifon, Rachel E., Kathleen Ziol-Guest and Kimberly Kopko (2014). Grandparent co-residence and family well-being: Implications for research and policy. *Annals of the American Academy of Political and Social Science*, vol. 654, No.1, pp. 10–126, doi: 10.1177/0002716214526530.

Edmonds, Eric V., Kristin Mammen and Douglas L. Miller (2005). Rearranging the family? Income support and elderly living arrangements in a low-income country. *Journal of Human Resources*, vol 40, No. 1, pp.186–207.

Eurostat (2019). Living conditions in Europe - poverty and social exclusion. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/Living_conditions_in_Europe_-_poverty_and_social_exclusion.

Feng, Zhixin, and others (2016). Changes in living arrangements and mortality among older people in China. *SSM-Population Health*, vol. 3, pp. 9-19, doi: 10.1016/j.ssmph.2016.11.009.

Glaser, Karen, and others (2018). Trends in the prevalence of grandparents living with grandchild(ren) in selected European countries and the United States. *European Journal of Ageing*, vol. 15, No, 2, pp. 37–250, doi: 10.1007/s10433-018-0474-3.

Gaymu, Joelle, and Sabine Springer (2010). Living conditions and life satisfaction of older Europeans living alone: A gender and cross-country analysis. *Ageing and Society*, vol. 30, No. 7, pp. 1153-1175.

Grundy, Emily, and Michael Murphy (2018). Co-residence with a child and happiness among older widows in Europe: Does gender of the child matter? *Population, Space and Place,* vol 24, No. 3, doi: 10.1002/psp.2102.

Gupta, Sanjeev, Catherine A. Pattillo and Smita Wagh (2009). Effect of remittances on poverty and financial development in sub-Saharan Africa. *World Development,* vol. 37, No. 1, pp. 104-115.

Kakwani, Nanak, and Kalanidhi Subbarao (2005). Aging and poverty in Africa and the role of social pensions. Social Protection Discussion Paper Series, No. 521. Washington, D.C.: World Bank.

_____ (2007). Poverty among the elderly in sub-Saharan Africa and the role of social pensions. *Journal of Development Studies,* vol. 43, No.6, pp. 987-1008.

Keene, Jennifer, and Christie Batson (2010). Under one roof: A review of research on intergenerational co-residence and multigenerational households in the United States. *Sociology Compass*, vol. 4, No.8, pp. 642-657.

Kowsari, Reza, and Hisham Zerriffi (2011). Three-dimensional energy profiles: A conceptual framework for assessing household energy use. *Energy Policy,* vol. 39, No. 12, pp. 7505-7517, doi: 10.1016/j.enpol.2011.06.030.

Ladhani, Shamez, and others (2020). Increased risk of SARS-COV-2 infection in staff working across different care homes enhances COVID-19 outbreak: Investigation in London care homes. *Journal of Infection,* vol. 81, No. 4, pp. 621–624. doi: 10.1016/j.jinf.2020.07.027.

Lesthaeghe, Ron J. (1983). A century of demographic and cultural change in Western Europe: An exploration of underlying dimensions. *Population and Development Review*, vol. 9, No. 3, pp. 411–435.

New York State Department of Health (2020). Factors Associated with Nursing Home Infections and Fatalities in New York State During the COVID-19 Global Health Crisis. Available from https://health.ny.gov/press/releases/2020/docs/nh_factors_report.pdf

Nzabona, Abel, James Ntozi and Gideon Rutaremwa (2015). Loneliness among older persons in Uganda: Examining social, economic and demographic risk factors. *Ageing and Society,* vol.36, No.4, pp. 860-888, doi: 10.1017/S0144686X15000112.

Ong, Anthony D., Bert Uchino and Elaine Wethington (2016). Loneliness and health in older adults: A mini-review and synthesis. *Gerontology,* vol. 62, No. 4 pp. 443-449, doi: 10.1159/000441651.

Pew Research Center (2010). The return of the multi-generational family household. Washington, DC. Available from http://pewsocialtrends.org/files/2010/10/752-multi-generationalfamilies.pdf

Reher, David and Miguel Requena (2018). Living alone in later life: A global perspective. *Population and Development Review*, vol. 44, No. 3, pp. 427-454.

Riffe, Tim, and Enrique Acosta (2020). COVerAGE-DB: A database of COVID-19 cases and deaths by age. doi: 10.17605/OSF.IO/MPWJQ (last created on 23 September 2020).

Ruggles, Steven (2007). The Decline of Intergenerational Co-residence in the United States, 1850 to 2000. *American Sociological Review*, vol. 72, No. 6, pp. 964–989.

Ruggles, Steven (2009). Reconsidering the Northwest European family system. *Population and Development Review*, vol. 35, No. 2, pp. 249-273, doi: 10.1111/j.1728-4457.2009.00275.x.

Ruggles, Steven, and Misty Heggeness (2008). Intergenerational co-residence in developing countries, *Population and Development Review,* vol 34, No. 2, pp. 253–281.

Shailen, Nandy, and Julie Selwyn (2013). Using census microdata to examine the extent and nature of kinship care in the UK. *The British Journal of Social Work*, vol. 43, No. 8, pp. 1649-1666, doi: 10.1093/bjsw/bcs057.

Smith, Carrie-Hennign, Tetyana Shippee and Benjamin Capistrant (2018). Later-life disability in environmental context: Why living arrangements matter. *The Gerontologist*, vol 58, No. 5, pp. 853-862.

Tomassini, Cecilia, Douglas A. Wolf and Alessandro Rosina (2004). Parental housing assistance and parent-child proximity in Italy. *Journal of Marriage and Family*, vol. 65, No.3, pp. 700-715, doi: 10.1111/j.1741-3737.2003.00700.x.

Tsutsui, Takako, Naoko Muramatsu and Sadanori Higashino (2014). Changes in perceived filial obligation norms among co-resident family caregivers in Japan. *The Gerontologist,* vol. 54, No. 5, pp. 797-807, doi: 10.1093/geront/gnt093.

Ugargol, Alen P., and others (2016). Care needs and caregivers: Associations and effects of living arrangements on caregiving to older adults in India. *Ageing International,* vol 41, No.2, pp. 193-213. doi: 10.1007/s12126-016-9243-9.

United Nations, Department of Economic and Social Affairs, Population Division (2005). *Living Arrangements of Older Persons Around the World.* Sales No. E.05.XIII.9.

_____ (2015). Income Poverty in Old Age: An Emerging Development Priority. Available at: www.un.org/esa/socdev/ageing/documents/PovertyIssuePaperAgeing.pdf.

_____ (2017a). *Living Arrangements of Older Persons: A Report on an Expanded International Dataset* (ST/ESA/SER.A/407).

_____ (2017b). *Household Size and Composition Around the World, 2017 – Data Booklet* (ST/SEA/SER.A/405).

_____ (2019a). *World Population Prospects 2019*. Available from https://population.un.org/wpp/.

_____ (2019b). *Patterns and trends in household size and composition: Evidence from a United Nations dataset.* (ST/ESA/SER.A/433).

_____ (2020a). *Database on the Households and Living Arrangements of Older Persons 2019*. Available at: www.un.org/development/desa/pd/data/living-arrangements-older-persons.

_____ (2020b). Differential success in mitigating the pandemic (UN DESA/PD). In *How COVID-19 is changing the world: a statistical perspective Volume II*. Available from https://unstats.un.org/unsd/ccsa/documents/covid19-report-ccsa_vol2.pdf.

_____ (forthcoming 2020). Measuring household living arrangements of older persons around the world: United Nations Database on the Households and Living Arrangements of Older Persons 2019.

United Nations, Department of Economic and Social Affairs, Statistics Division (2015). *The World's Women 2015: Trends and Statistics*. Available at: https://unstats.un.org/unsd/gender/downloads/worldswomen2015_report.pdf

UNICEF (2015). *The State of the World's Children 2015: Reimagine the Future: Innovation for Every Child*. Available from www.unicef.org/publications/files/SOWC_2015_Summary_and_Tables.pdf

Wang, Yang, and Dave Marcotte (2007). Golden years? The labor market effects of caring for grandchildren. *Journal of Marriage and Family*, vol. 69, No.5, pp. 1283-1296.

Wiemers, Emily, and others (2017). Living arrangements of mothers and their adult children over the life course. *Research on Aging*, vol. 39, No.1, pp. 111-134.

World Health Organization (WHO) (2020). *COVID-19 Strategy Update*, 14 April 2020. World Health Organization.

Williamson, Elizabeth, and others (2020). Open SAFELY: factors associated with COVID-19 death in 17 million patients. *Nature*, doi: 10.1038/s41586-020-2521-4.

Zachary, Zimmer, and Jay Teachman (2009.) Household composition among elders in Sub-Saharan Africa in the Context of HIV/AIDS. *Journal of Marriage and Family*, vol. 71, No. 4, pp. 1086-1099.

Zimmer, Zachary, and Suparna Das (2013). The poorest of the poor: Composition and wealth of older person households in sub-Saharan Africa. *Research on Aging,* vol. 36, No. 3, pp. 271-296.

Annex tables

Table 1. A.

Prevalence of selected living arrangements among persons aged 65 years or over, by sex, 2006-2015

Region, development group, country or area	Data source	Percentage of persons age 65 years or over who are:							
		Living alone		Living with spouse only		Living with child(ren)		Living with grandchild(ren)	
		Women	Men	Women	Men	Women	Men	Women	Men
WORLD		**24**	**11**	**23.0**	**38**				
Sub-Saharan Africa		13.0	7.9	5.8	13.7	..	..	..	..
Northern Africa and Western Asia		..	..	..	..	..	..	..	..
Central and Southern Asia		7.9	2.4	8.7	18.4	..	..	..	..
Eastern and South-Eastern Asia		..	..	..	..	..	..	..	..
Latin America and the Caribbean		16.9	11.9	16.2	27.6	..	..	..	..
Oceania excluding Australia and New Zealand		..	..	..	..	..	..	..	..
Australia and New Zealand		33.5	18.1	44.0	59.9	..	..	..	..
Europe and Northern America		36.8	17.7	32.8	56.0	..	..	..	..
AFRICA									
Eastern Africa									
Burundi	2012DHS	20.5	5.0	5.3	13.7	14.3	36.8	32.0	15.6
Comoros	2012DHS	4.2	2.0	4.4	8.4	5.6	21.8	10.3	9.2
Kenya	2009IPUMS	16.2	8.7	4.8	10.7	8.4	19.6	..	..
Madagascar	2011DHS	11.0	7.1	6.6	10.4	5.0	16.4	28.4	18.6
Malawi	2008IPUMS	15.8	7.9	8.3	16.5	11.0	22.3	..	..
Mayotte*	2012DYB	28.3	10.5	17.3	33.3	..	..	..	..
Mozambique	2007IPUMS	24.9	9.5	7.5	19.5	9.1	25.2	18.0	13.2
Réunion*	2015DYB	32.5	18.7	28.4	46.9	..	..	..	..
Rwanda	2012IPUMS	18.1	7.5	5.2	11.9	12.6	30.4	28.8	15.4
South Sudan	2008IPUMS	4.6	3.7	1.3	3.3	4.6	29.0	7.2	2.7

Region, development group, country or area	Data source	Percentage of persons age 65 years or over who are:							
		Living alone		Living with spouse only		Living with child(ren)		Living with grandchild(ren)	
		Women	Men	Women	Men	Women	Men	Women	Men
Uganda	2014DHS	11.7	11.1	2.3	7.3	5.3	15.2	30.0	16.7
United Republic of Tanzania*	2012IPUMS	11.3	7.9	4.8	10.8	5.7	14.5		
Zambia	2010IPUMS	11.0	6.6	5.7	12.3	7.7	19.6	24.0	16.4
Middle Africa									
Angola	2011DHS	13.0	7.3	10.2	27.1	73.4	50.9	..	..
Cameroon	2011DHS	14.0	10.0	2.6	9.8	74.7	60.0	..	..
Chad	2015DHS	14.8	5.6	3.3	10.0	5.1	32.6	23.0	11.5
Congo	2011DHS	16.6	12.3	5.7	21.1	5.0	12.2	17.8	11.8
Democratic Republic of the Congo	2013DHS	16.4	6.0	5.0	16.0	3.6	16.3	25.0	16.9
Gabon	2012DHS	17.9	12.5	6.9	21.9	4.0	8.6	11.0	9.6
Sao Tome and Principe	2008DHS	30.9	38.5	6.3	16.6	4.3	10.2	27.2	12.4
Northern Africa									
Egypt	2006IPUMS	28.7	8.6	14.0	29.6	17.7	47.0	1.3	0.6
Sudan	2008IPUMS	8.4	3.5	3.2	6.5	14.0	33.4	7.0	3.4
Southern Africa									
Botswana	2011IPUMS	9.1	16.2	3.4	8.9	7.1	9.8	19.9	11.9
Eswatini	2006DHS	7.7	7.3	1.9	5.7	3.5	9.1	26.4	16.1
Lesotho	2006IPUMS	14.3	12.8	3.4	8.5	6.8	12.6	24.9	15.4
Namibia	2013DHS	5.4	9.0	5.3	12.9	2.4	7.2	28.8	14.8
South Africa	2011IPUMS	16.1	13.8	10.0	24.1	9.0	11.8	17.4	10.2
Western Africa									
Benin	2013IPUMS	13.8	8.1	2.1	6.1	8.3	23.7	12.4	4.9
Burkina Faso	2014DHS	5.2	3.6	3.7	9.2	2.6	14.2	16.4	11.4
Côte d'Ivoire	2012DHS	5.6	8.5	2.8	7.7	2.6	13.4	14.9	9.3

Region, development group, country or area	Data source	Percentage of persons age 65 years or over who are:							
		Living alone		Living with spouse only		Living with child(ren)		Living with grandchild(ren)	
		Women	Men	Women	Men	Women	Men	Women	Men
Gambia	2013DHS	2.4	2.2	0.2	1.9	1.6	10.4	3.3	1.9
Ghana	2010IPUMS	9.3	12.2	1.9	5.3	8.5	19.9	15.3	7.7
Guinea	2012DHS	3.0	0.8	1.7	4.4	2.1	15.3	12.4	7.8
Liberia	2008IPUMS	5.7	8.0	2.6	6.2	10.1	23.2	..	..
Mali	2009IPUMS	5.8	2.1	3.8	9.3	4.7	25.4	7.5	6.0
Niger	2012DHS	6.1	2.6	4.5	7.9	5.5	26.7	20.2	13.8
Nigeria	2015DHS	15.2	6.7	6.6	13.7	8.9	27.7	13.9	8.5
Senegal	2015DHS	0.8	1.6	0.2	1.6	0.6	8.0	5.4	1.9
Sierra Leone	2013DHS	1.9	2.3	1.1	3.1	91.8	78.6	..	..
Togo	2010IPUMS	10.2	8.2	1.6	5.6	1.2	7.2	16.4	12.2
ASIA									
Central Asia									
Kyrgyzstan	2009IPUMS	13.5	6.3	8.2	16.6	9.4	12.3	6.6	5.4
Tajikistan	2012DHS	4.9	1.5	3.1	4.4	2.7	6.2	3.0	1.8
Eastern Asia									
Japan	2015DYB	21.3	14.0	32.5	44.5	..	..	..	..
Republic of Korea	2015DYB	23.9	10.8	26.5	46.6	..	..	..	..
South-Eastern Asia									
Cambodia	2013IPUMS	6.5	1.6	6.7	13.7	13.0	25.7	7.1	6.7
Indonesia	2010IPUMS	16.8	4.9	11.3	26.8	9.4	20.6	6.0	5.9
Philippines	2010IPUMS	9.7	6.5	9.9	17.2	16.2	23.9	8.8	7.4
Timor-Leste	2009DHS	5.4	3.0	5.7	9.9	10.6	24.7	10.2	7.8
Viet Nam	2009IPUMS	13.9	5.2	13.0	26.3	11.3	18.2	..	..

Region, development group, country or area	Data source	Percentage of persons age 65 years or over who are: Living alone		Living with spouse only		Living with child(ren)		Living with grandchild(ren)	
		Women	Men	Women	Men	Women	Men	Women	Men
Southern Asia									
Afghanistan	2015DHS	0.1	0.4	2.0	2.9	4.6	17.8	0.4	0.3
Bangladesh	2011IPUMS	7.2	1.1	5.4	14.6	7.5	22.6	..	..
India	2009IPUMS	7.3	2.5	9.1	19.9	4.4	9.6	1.4	1.7
Iran (Islamic Republic of)	2011IPUMS	29.9	6.4	21.7	34.7	24.7	47.5	0.9	0.6
Nepal	2011IPUMS	6.4	2.5	7.5	12.7	3.8	9.1	3.1	2.9
Pakistan	2013DHS	1.0	0.8	2.9	4.5	3.5	13.2	0.5	0.7
Western Asia									
Armenia	2011IPUMS	16.6	7.2	9.7	20.6	10.1	14.2	1.8	1.5
Azerbaijan*	2006DHS	10.2	3.7	10.2	19.5	10.4	16.2	2.1	1.7
Cyprus*	2011DYB	25.4	9.2	42.4	62.5	..	..	..	..
Georgia*	2014DYB	19.5	..	..	25.7	..	..	..	..
Israel	2008DYB	34.2	12.6	38.7	60.3	..	..	..	..
State of Palestine*	2007IPUMS	17.8	3.7	12.5	26.2	22.5	41.7	0.7	0.5
Yemen	2013DHS	6.5	1.3	7.5	11.0	9.6	29.9	1.7	1.3
EUROPE									
Eastern Europe									
Belarus	2009IPUMS	42.6	17.6	20.5	51.6	12.9	12.9	2.0	1.5
Bulgaria	2011LFS	41.0	20.5	31.0	56.3	..	..	..	..
Czechia	2011DYB	38.7	18.1	32.6	55.8	..	..	..	..
Hungary	2011IPUMS	44.1	18.8	25.4	55.2	9.0	11.8	..	..
Poland	2011DYB	30.7	12.7	22.1	43.5	..	..	..	..
Republic of Moldova*	2014DYB	38.4	17.1	21.1	44.2	..	..	..	..

Region, development group, country or area	Data source	Percentage of persons age 65 years or over who are:							
		Living alone		Living with spouse only		Living with child(ren)		Living with grandchild(ren)	
		Women	Men	Women	Men	Women	Men	Women	Men
Romania	2011IPUMS	34.4	15.4	23.0	46.1	10.8	12.6	..	..
Russian Federation	2010IPUMS	35.8	16.3	16.2	42.1	13.7	13.9	3.7	2.9
Slovakia	2011DYB	31.7	13.2	21.5	40.4	..	..	..	..
Ukraine*	2007DHS	38.7	17.4	21.9	50.7	10.3	11.1	3.4	2.3
Northern Europe									
Estonia	2011DYB	45.3	21.4	25.2	54.8	..	..	..	..
Finland*	2010DYB	46.3	23.4	42.3	64.7	..	..	..	..
Ireland	2011IPUMS	30.9	20.2	31.7	44.4	20.2	21.7	0.9	0.7
Latvia	2011DYB	40.1	17.2	25.9	54.8	..	..	..	..
Lithuania	2011DYB	40.1	17.2	25.9	54.8	..	..	..	..
Norway*	2011DYB	44.4	23.0	45.4	64.8	..	..	..	..
Sweden	2011DYB	38.0	21.7	..	..	..	..	..	..
United Kingdom*	2011LFS	44.1	25.4	44.0	62.9	..	..	..	..
Southern Europe									
Albania	2011DYB	30.5	13.7	24.2	45.6	..	..	..	..
Croatia	2011DYB	30.5	13.7	24.2	45.6	..	..	..	..
Greece	2011IPUMS	31.0	11.1	31.0	52.4	18.4	22.4	..	..
Italy	2011IPUMS	38.0	16.3	30.6	50.7	18.6	23.5	0.9	0.5
Malta	2011DYB	27.3	14.3	35.9	49.6	..	..	..	..
Montenegro	2011DYB	25.0	11.2	19.5	36.1	..	..	..	..
Portugal	2011IPUMS	28.0	11.2	35.4	57.6	..	..	..	..
Serbia*	2011DYB	52.9	8.0	7.7	39.9	..	..	..	..
Slovenia	2015DYB	34.4	18.0	26.3	41.8	..	..	..	..
Spain*	2011DYB	26.3	12.2	32.9	48.5	..	..	..	..

Region, development group, country or area	Data source	Percentage of persons age 65 years or over who are:							
		Living alone		Living with spouse only		Living with child(ren)		Living with grandchild(ren)	
		Women	Men	Women	Men	Women	Men	Women	Men
Western Europe									
Austria	2011DYB	40.2	18.7	35.2	55.6	..	..	..	..
Belgium	2011LFS	34.2	16.5	41.0	65.8	..	..	..	..
France*	2011IPUMS	44.5	18.9	41.4	66.9	..	..	..	..
Germany	2011DYB	37.5	15.6	46.5	68.5	..	..	..	..
Liechtenstein	2010DYB	38.4	17.6	41.7	60.5	..	..	..	..
Luxembourg	2011DYB	35.7	16.6	39.8	57.2	..	..	..	..
Netherlands*	2011LFS	46.9	21.3	48.9	74.0	..	..	..	..
Switzerland	2011DYB	42.6	18.8	..	69.7	..	..	..	..
LATIN AMERICA AND THE CARIBBEAN									
Caribbean									
Bahamas	2010DYB	14.5	15.4	12.2	22.4	..	..	..	..
Dominican Republic	2010IPUMS	11.8	13.8	9.5	16.4	16.9	20.5	12.8	9.1
Guadeloupe*	2015DYB	39.8	26.8	26.5	44.3	..	..	..	..
Haiti	2012DHS	7.5	11.5	6.1	10.6	6.7	14.3	17.0	11.3
Jamaica	2011DYB	17.6	26.8	12.4	18.2	..	..	..	..
Martinique*	2015DYB	36.2	26.8	26.7	42.6	..	..	..	..
Puerto Rico*	2010IPUMS	27.6	17.7	26.5	43.3	18.7	18.5	4.1	3.6
Saint Barthélemy*	2015DYB	20.0	15.6	46.3	64.1	..	..	..	..
Saint Lucia	2010DYB	..	..	..	..	..	..	..	..
Saint Martin (French part)*	2015DYB	33.6	30.2	20.9	33.5	..	..	..	..
Trinidad and Tobago	2011IPUMS	16.3	16.6	12.0	19.3	19.4	23.1	..	..

Region, development group, country or area	Data source	Percentage of persons age 65 years or over who are:							
		Living alone		Living with spouse only		Living with child(ren)		Living with grandchild(ren)	
		Women	Men	Women	Men	Women	Men	Women	Men
Central America									
Costa Rica	2011IPUMS	14.6	12.6	16.0	25.2	22.9	26.8	4.8	3.2
El Salvador	2007IPUMS	10.6	11.6	8.3	15.2	13.4	19.5	11.0	8.3
Guatemala	2015DHS	7.9	6.2	12.2	16.7	12.6	19.3	8.8	7.0
Honduras	2012DHS	5.9	8.6	6.4	10.9	12.1	16.4	12.9	8.5
Mexico	2015IPUMS	14.1	10.8	16.4	26.5	19.6	22.3	4.6	3.7
Panama	2010IPUMS	11.0	16.6	12.5	18.8	17.0	18.9	7.1	5.4
South America									
Argentina	2010IPUMS	25.7	14.6	21.3	37.5	15.6	20.2	3.9	2.8
Bolivia (Plurinational State of)	2008DHS	16.7	14.3	21.1	29.9	53.9	38.6	..	..
Brazil	2010IPUMS	17.5	10.9	16.3	29.8	18.2	24.0	6.6	5.0
Colombia	2015DHS	12.4	11.1	11.5	23.8	64.6	43.7	..	..
Ecuador	2010IPUMS	14.6	14.2	14.1	19.7	16.2	19.5	6.7	5.2
French Guiana*	2015DYB	31.5	22.6	19.5	31.2	..	..	..	..
Guyana	2009DHS	16.3	19.5	9.7	23.0	13.1	13.1	12.0	5.7
Peru	2007IPUMS	11.8	11.6	11.4	15.8	14.4	18.9	6.3	4.9
Uruguay	2011IPUMS	32.0	18.9	22.7	42.6	12.7	15.5	3.4	2.7
NORTHERN AMERICA									
Canada	2011IPUMS	34.9	17.1	40.9	61.2	10.0	10.3	..	..
United States of America*	2015IPUMS	34.3	19.3	38.5	58.1	8.3	8.7	2.3	1.7

Region, development group, country or area	Data source	Percentage of persons age 65 years or over who are:							
		Living alone		Living with spouse only		Living with child(ren)		Living with grandchild(ren)	
		Women	Men	Women	Men	Women	Men	Women	Men
OCEANIA									
Australia and New Zealand									
Australia*	2011DYB	33.5	18.1	43.9	59.9	..	..	..	..
New Zealand*	2013DYB	33.7	18.0	43.6	59.5	..	..	..	..
Melanesia									
Fiji	2014IPUMS	6.6	5.2	8.9	15.8	9.5	14.4	6.0	5.5

Notes:
* For country notes, please refer to https://population.un.org/wpp/Download/Metadata/Documentation.

The estimates for groups of countries defined by region reflect averages weighted according to the population aged 65 years or over in 2010.
DHS: Demographic and Health Survey
IPUMS: Integrated Public Use Microdata Samples from Minnesota Population Center at the University of Minnesota
DYB: Demographic Yearbook of the United Nations
LFS: European Union Labour Force Survey
Two dots (..) indicates that data are not available, not applicable or not reported.
A full stop (.) is used to indicate decimals.

The database with complete estimates of indicators on household size, composition and living arrangements of older persons from 1960-2018 is available at https://un.org/development/desa/pd/.

Table 2. A.

Older persons and COVID-19

Country	SDG Region	Ratio of age-standardized COVID-19 death rates, ages 60+ / ages 20-59 (a)	Percentage of persons ages 60+ living in institutions (b)
Afghanistan	Central and Southern Asia	10.1	..
Albania	Europe and Northern America	10.6	0.2
Algeria	Northern Africa and Western Asia	15.0	..
Argentina	Latin America and the Caribbean	13.0	2.4
Australia	Australia/New Zealand	54.2	6.6
Austria	Europe and Northern America	54.1	3.4
Bangladesh	Central and Southern Asia	4.2	0
Belgium	Europe and Northern America	42.3	4.1
Bolivia	Latin America and the Caribbean	4.5	1.3
Brazil	Latin America and the Caribbean	12.4	0.6
Canada	Europe and Northern America	36.8	5.8
Chile	Latin America and the Caribbean	17.1	2
China	Eastern and South-Eastern Asia	18.6	0.3
China, Taiwan Province of China	Eastern and South-Eastern Asia	4.0	..
Colombia	Latin America and the Caribbean	12.0	1
Costa Rica	Latin America and the Caribbean	7.9	0.3
Cuba	Latin America and the Caribbean	13.6	0.8
Czechia	Europe and Northern America	42.0	2.4
Denmark	Europe and Northern America	69.9	4.2
Dominican Republic	Latin America and the Caribbean	7.4	3.2
Ecuador	Latin America and the Caribbean	5.6	0.2
El Salvador	Latin America and the Caribbean	3.9	0.3
Ethiopia	Sub-Saharan Africa	17.6	1.8
Finland	Europe and Northern America	28.7	3.7
France	Europe and Northern America	23.7	4.5
Germany	Europe and Northern America	34.7	3.6
Greece	Europe and Northern America	9.3	0.8
Haiti	Latin America and the Caribbean	6.3	0.2
India	Central and Southern Asia	5.3	..
Indonesia	Eastern and South-Eastern Asia	3.7	0
Ireland	Europe and Northern America	55.1	6.6
Israel	Northern Africa and Western Asia	42.5	5.8
Italy	Europe and Northern America	36.0	1.8
Jamaica	Latin America and the Caribbean	8.8	0.2
Japan	Eastern and South-Eastern Asia	28.1	18.4
Republic of Korea	Eastern and South-Eastern Asia	39.9	3.5
Mexico	Latin America and the Caribbean	6.4	0.3
Netherlands	Europe and Northern America	63.3	5

Country	SDG Region	Ratio of age-standardized COVID-19 death rates, ages 60+ / ages 20-59 (a)	Percentage of persons ages 60+ living in institutions (b)
Nigeria	Sub-Saharan Africa	1.9	0.4
Norway	Europe and Northern America	43.8	2.4
Pakistan	Central and Southern Asia	7.3	..
Panama	Latin America and the Caribbean	10.3	0.2
Peru	Latin America and the Caribbean	9.5	0.9
Philippines	Eastern and South-Eastern Asia	9.7	0
Portugal	Europe and Northern America	34.5	3.4
Romania	Europe and Northern America	6.3	0.3
Slovenia	Europe and Northern America	85.4	2.7
South Africa	Sub-Saharan Africa	7.7	3.5
Spain	Europe and Northern America	38.4	1.8
Suriname	Latin America and the Caribbean	8.8	..
Sweden	Europe and Northern America	39.9	2.7
Switzerland	Europe and Northern America	61.9	7
Turkey	Northern Africa and Western Asia	18.4	1.7
United Kingdom	Europe and Northern America	28.5	3.2
United States of America	Europe and Northern America	14.4	3.1

Notes:

Two dots (..) indicates that data are not available, not applicable or not reported
A full stop (.) is used to indicate decimals.
(a) Calculations based on death counts by age from Riffe and Acosta accessed on 20 August 2020, and population estimates by age from *World Population Prospects 2019* (United Nations, 2019a). COVID-19 death rates for both age groups (2059 and 60+) were adjusted (or standardized) to account for differences across countries in the population age distribution, using the population of the world in 2020 as the standard.
(b) Percentages of persons aged 60+ living in institutions are from the United Nations *Database on the Living Arrangements of Older Persons 2017* (United Nations, 2017a).

Population ageing is occurring alongside broader social and economic changes taking place throughout the world. Declines in fertility, changes in patterns of marriage, cohabitation and divorce, increased levels of education among younger generations, continued rural-to-urban and international migration, and urbanization, in tandem with rapid economic development, are reshaping the context in which older persons live, including the size and composition of their households and their living arrangements. This *Highlights* presents the key findings of the analysis of the dataset on *Household and Living Arrangements of Older Persons 2019* and reports on some provisional results of the analysis of COVID-19 morbidity and mortality risks faced by older persons and the factors behind those risks. The publications closes with a set of policy recommendations and provides a set of annex tables for selected indicators discussed in the report.

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