



United Nations

Department of
Economic and
Social Affairs

Leaving No One Behind In An Ageing World

World Social
Report 2023



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS

WORLD SOCIAL REPORT 2023:
LEAVING NO ONE BEHIND
IN AN AGEING WORLD



**United
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CHAPTER 2

TOWARDS LIVING LONGER, HEALTHIER LIVES

KEY MESSAGES

- There is no doubt that increasing human life expectancy is a long-term trend. Survival to older ages has become more common worldwide. Health among older people varies considerably, however, both among and within countries.
- Increased global life expectancy reflects better health overall. The number of years lived in good health, or at least without severe disability, has risen in many places.
- Men live, on average, fewer years than women. Yet older women experience a greater prevalence of morbidity and disability. Given the dominance of cardiovascular disease and cancer as causes of death, different personal behaviours and diverse exposures to environmental risks both contribute to group variations in morbidity and mortality, including by sex.
- Inequalities in income, education and living arrangements, including those due to race or ethnicity, help explain observed differences in the health of individuals and their risks of dying over the life course. Uneven access to affordable, quality health care can lead to unequal use of services and disparities in life expectancy.
- Rapid growth in the number of people reaching older ages highlights the importance of promoting health and preventing and treating illness throughout the life course, as conditions experienced earlier in life can have a substantial impact on a person's health and well-being at older ages. The concept of "healthy ageing" highlights the importance of maintaining functional ability as people grow older to enable their continued participation in society.
- Societies with ageing populations need to adapt to having increasing numbers of older persons with a wide range of functional abilities. The ability to perform critical functions and to participate in everyday activities depends not only on the intrinsic capacity of individuals but also on the social and physical environments in which they live. Supportive environments can help older persons to remain active and independent as they age.

Virtually all people aspire to live longer lives. Some may wonder whether the extra years of life will be spent in good health or consumed by disease and disability. For individuals, deteriorating health at older ages raises concerns about living independently and securing needed care and support. From a collective perspective, societies need to adapt to increasing longevity by adjusting labour markets, social security and health-care systems, and other institutions.

The United Nations has recognized that older persons have a right to supportive environments to enjoy healthy lives and fully participate in and contribute to their families, communities and broader societies. To advance action along these lines, Member States of WHO and the United Nations proclaimed 2021-2030 to be the United Nations Decade of Healthy Ageing. The Decade builds on previous international agreements, including the 2002 Madrid International Plan of Action on Ageing and programmes such as the 2016-2020 WHO Global Strategy and Action Plan on Ageing and Health.

A.

A LONGER LIFESPAN IS A SUCCESS STORY

Around the world, populations have shifted from high to low mortality rates as part of a larger process known as the demographic transition. Despite differences in the timing and pace of this shift, the

average length of life, or life expectancy at birth, has increased progressively in nearly all countries and globally. Declining mortality accompanies a change in the distribution of deaths from younger to older ages.

Figure 2.1 illustrates this pattern with historical data from Denmark from 1835 to the present. In the nineteenth century, a large share of deaths occurred among children and young adults, with a secondary concentration among people ranging in age from 60 to 80 years, approximately. Over time, infant and child mortality declined due to preventive health measures, better treatment of infectious diseases, and improvements in maternal and child health care.

Deaths in Denmark started to tilt towards adult ages in the early twentieth century, reflecting a decline in the number of premature deaths among both men and women. This shift intensified by the middle of the century, at which point there were very few deaths below age 30 and a large and increasing concentration among older adults, especially octogenarians, nonagenarians and centenarians.

Such trends have unfolded now in countries in all world regions. A summary expression for the growing proportion of deaths within a short age interval is the “compression” of mortality (Wilmoth and Horiuchi, 1999; Kannisto, 2000; Robine, 2021). This term describes the clustering of deaths around the most frequent or modal age at death. A higher modal age indicates a shift towards more advanced ages at death (or mortality delay) and an increase in average lifespan. Recent rises

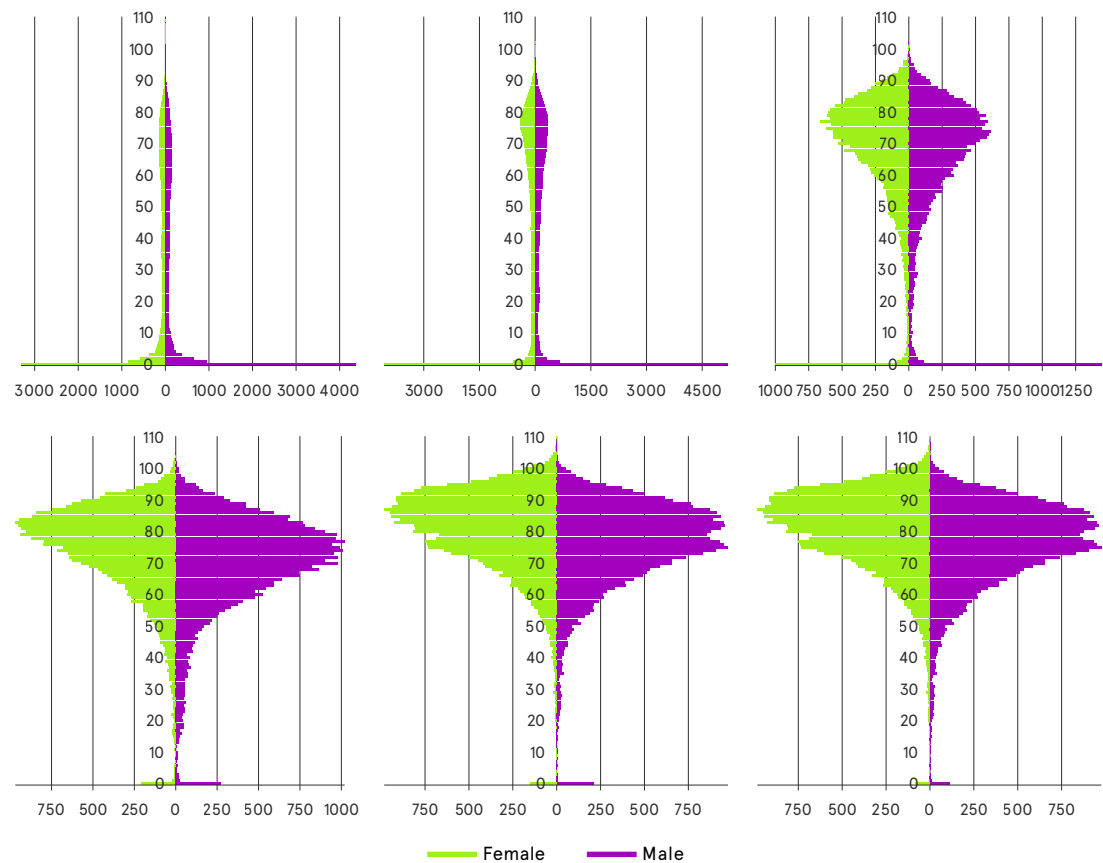
in external causes of death,¹⁰ however, have halted this compression, slowed the rise in life expectancy and increased the variability of ages at death for several countries in Europe and Northern America (Beltrán-Sánchez, Finch and Crimmins, 2015).

In the early twentieth century, increasing life expectancy in the more developed regions arose mostly from decreased mortality among infants and young children

(Thatcher and others, 2010). More recently, mortality decline at older adult ages has become a major driver of rising life expectancy in countries with already low levels of mortality. Indeed, since the early 1990s, more than two thirds of the average gain in life expectancy in low-mortality countries has come from extended years of life among those aged 60 or older. In countries with higher levels of mortality, recent increases in life expectancy have mostly resulted from reduced mortality at younger ages.¹¹

Figure 2.1

Number of deaths by sex and age in Denmark, 1835–2020



Source: Robine (2021), based on data from the Human Mortality Database. Available at www.mortality.org/.

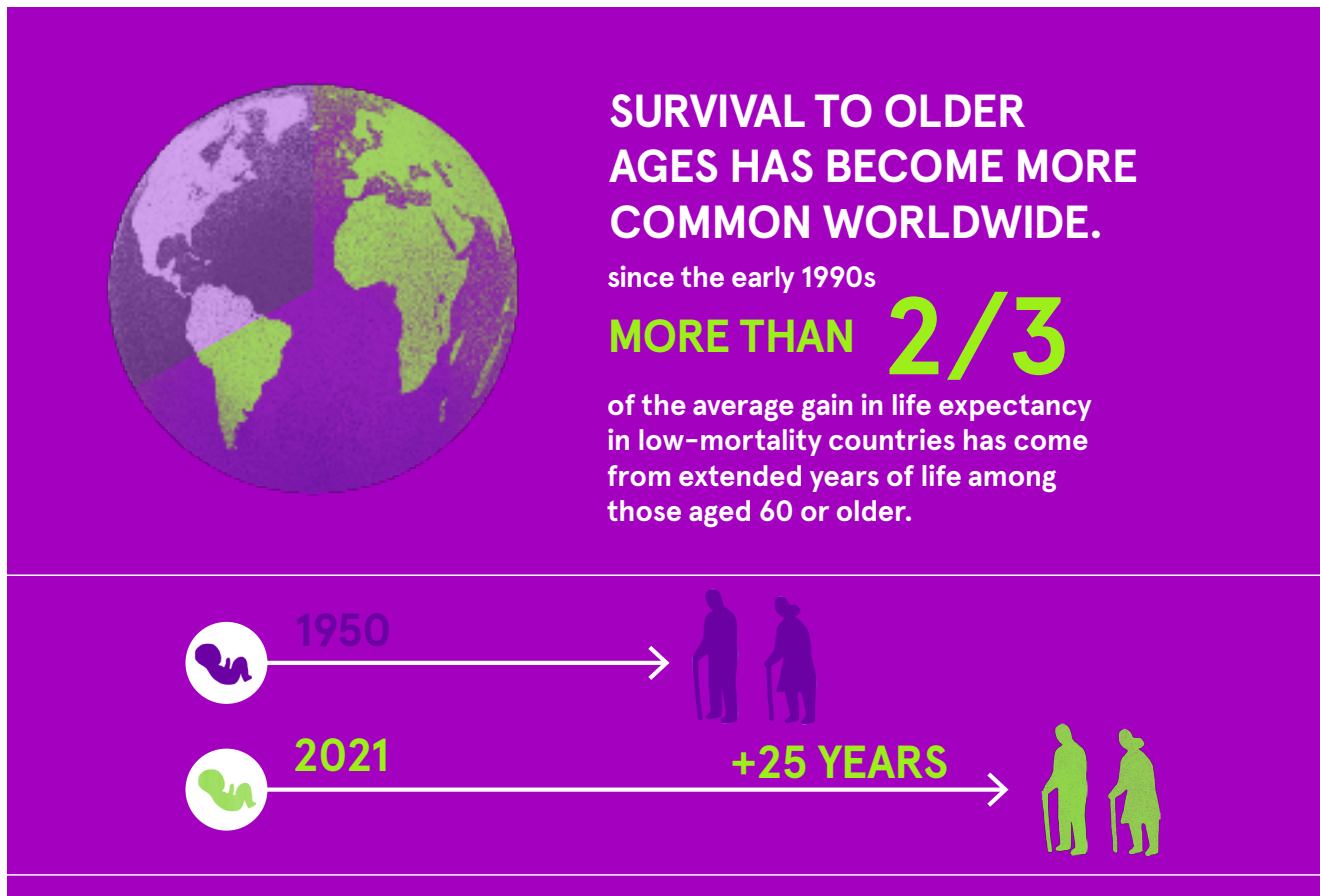
10 External causes of death include intentional and unintentional injury, poisoning (including drug overdose), and complications from medical or surgical care (WHO, 2022b).
 11 High-mortality countries refer to those where life expectancy at birth was below age 60 from 1990 to 1995; low-mortality countries had a life expectancy at birth of age 75 or higher in the same period.

Globally, a baby born in 2021 could expect to live on average almost 25 years more than a newborn from 1950 (for a discussion of the impact of the COVID-19 pandemic, see box 2.1).¹²

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While all regions have experienced rising life expectancy, the greatest gains have

been in Eastern and South-Eastern Asia, where improvements in survival have added nearly 34 years to the average length of life. In 2021, people in that region could expect to live 76.5 years compared to just 43 years in 1950. Unsurprisingly, high-income countries and areas in Asia and the Pacific and in Europe feature at the top of life expectancies globally. Middle-income countries follow suit with multiple countries in Latin America and the Caribbean having also attained a life expectancy of 80 or more years. Most low-income countries, although subject to higher mortality rates, are also seeing significant gains in life expectancy (United Nations, 2022a).



¹² These values reflect “period” life expectancy, which shows the average age to which a newborn would live if current death rates continued during their entire life. The estimates do not predict actual lifespans.

BOX 2.1

COVID-19 HAS DISRUPTED STEADY GAINS
IN GLOBAL LIFE EXPECTANCY

Global life expectancy at birth fell to an estimated 71 years in 2021, down from 72.8 in 2019, due mostly to the COVID-19 pandemic. Some countries saw greater declines than others. In Central and Southern Asia and Latin America and the Caribbean, life expectancy fell by almost three years on average between 2019 and 2021. As with many causes of death, COVID-19 took many more lives among older people than younger ones. Older people have a greater risk of serious illness and higher case fatality rates.¹³

Environmental and social factors account for substantial variation across countries in old-age COVID-19 mortality. Such factors include the prevalence of comorbidities, the presence of robust old-age social protection systems and the capacity of health systems to protect those at increased risk.

The living arrangements of older persons in congregate settings emerged as a factor increasing the risk of contracting and dying from COVID-19 by heightening the efficiency of transmission (Comas-Herrera and others, 2020).

Based on the latest available estimates of the effect of the pandemic on mortality, global life expectancy at age 65 fell by 1.2 years between 2019 and 2021, representing more than 71 per cent of the total decline in life expectancy at birth. Outside Australia and New Zealand, all regions of the world experienced a drop-off in the average number of years a 65-year-old person could expect to live. This was sharpest in Central and Southern Asia (-2.3 years) and Latin America and the Caribbean (-1.5 years) (United Nations, 2022a, 2022b).

¹³ The case fatality rate refers to the share of people who died from COVID-19 among all persons infected with the virus during a certain period.

B.

WOMEN HAVE A SURVIVAL ADVANTAGE – BUT IT MAY NOT LAST

Women live longer, on average, than men. A female survival advantage exists in nearly all populations with available data, both past and present (table 2.1) (United Nations, 2020b). Historical data suggest that the sex

gap may have been no more than two or three years in pre-industrial populations (Beltrán-Sánchez, Finch and Crimmins, 2015). In more recent times, however, the gap has widened, especially where mortality levels are relatively low. In 1950, women could expect to live almost four years more than men globally. In 2021, although both men and women could anticipate living longer than in 1950, the difference between the two had increased to more than five years. Global life expectancy at birth is projected to increase further for both women and men, reaching 80 years for women and 75 years for men by 2050.

Table 2.1

Life expectancy at birth by sex, world, regions and income groups, 1950, 2021 and 2050

REGION	1950		2021		2050	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
World	48.4	44.6	73.8	68.4	79.8	74.8
Sub-Saharan Africa	38.7	36.2	61.6	57.8	69.1	64.3
Northern Africa and Western Asia	43.4	39.8	74.8	69.7	80.8	76.0
Central and Southern Asia	40.2	41.5	69.6	65.9	79.4	74.9
Eastern and South-Eastern Asia	45.6	40.3	79.6	73.6	84.1	79.4
Latin America and the Caribbean	50.8	46.5	75.8	68.8	83.1	78.1
Australia/New Zealand	71.6	66.7	85.6	82.7	88.6	85.4
Oceania (excluding Australia and New Zealand)	43.9	40.3	70.1	64.6	74.9	68.4
Europe and Northern America	66.6	61.2	80.4	73.9	86.1	81.6
World Bank income groups						
High-income countries	65.0	58.2	83.1	77.5	87.6	83.4
Middle-income countries	44.9	42.2	72.7	67.6	79.6	74.8
Low-income countries	35.1	28.6	65.0	60.0	71.6	66.0

Source: United Nations (2022a).

Changes in the sex gap in life expectancy closely relate to shifting disease patterns. From the late nineteenth century until the early twenty-first century, an increasing share of deaths came from chronic and degenerative diseases and conditions. For several decades, cardiovascular disease has been the leading cause of death in most low-mortality countries. While the sex difference for some causes of death is small (for example, most infectious diseases and cancers), the male disadvantage is relatively large for cardiovascular ailments. Over the next few decades, continuing reductions in morbidity and mortality from cardiovascular disease may bring a gradual reduction in the life expectancy gap between men and women, at least for low-mortality countries (Crimmins and others, 2019).

Although girls and women tend to experience lower mortality rates across the age range, the female advantage in survival is most noticeable at older ages. Older women have lower cumulative exposures than men to lifestyle risk factors such as tobacco and alcohol use, along with differences in diets, occupational hazards, environmental exposures and use of health care. Men are more likely to die from cancer, cardiovascular disease and other ailments associated with exposure to lifestyle risks, particularly after age 65. Women often experience higher rates of chronic conditions, such as arthritis, osteoporosis and depression, which may be debilitating and diminish the quality of life but are less likely to result in death (Carmel, 2019; OECD, 2021a; United Nations, 2020c).

With men and women experiencing somewhat different health problems,

one sex cannot be characterized as enjoying better health. Much depends on historical time, geographic location and individual behaviours (Crimmins and others, 2019).

C.

MANY FACTORS DETERMINE HEALTHY AGEING

As with mortality risks, the health status of older people diverges considerably. Different experiences of illness and disability reflect diversity among individuals in genetics, life histories, environmental exposures, personal behaviours and access to health care, as well as random variation.

Ongoing examination has probed the relationship between the “quantity” and “quality” of life. The WHO defines healthy ageing as “the process of developing and maintaining the functional ability that enables wellbeing in older age” (WHO, 2020a, p. 8). Functional ability depends on having the capabilities “that enable people to meet their basic needs, learn, grow and make decisions, be mobile, build and maintain relationships, and contribute to society” (ibid., p. 11). Several factors influence functional ability, such as the presence and severity of disease or injury (morbidity) and age-related physiological changes (biological ageing or senescence), which affect a person’s intrinsic capacity. In addition, the physical, social and eco-

conomic environments in which people live can promote or hinder healthy ageing.¹⁴

Although healthy ageing centres on the health status and needs of older people, the term refers to a process that spans the life course. Changes conducive to increased longevity and greater well-being at older ages may occur early in life. Better nutrition in childhood, improved access to health care throughout life, reduced exposure to hazardous working conditions and favourable behavioural changes in terms of smoking, diets or physical activity can all contribute to healthier older lives (Crimmins and others, 2019). Risks of specific morbidities and mortality vary widely across individuals of the same age. This dynamic process across the life course produces great heterogeneity in the patterns and trajectories of both intrinsic capacities and functional abilities among older people (WHO, 2015, 2020).

Many indicators can assess the average number of years that a person can expect to live in good health, including disability-free life expectancy, health-adjusted life expectancy, chronic disease-free life expectancy, life expectancy in good perceived health and cognitive-impairment-free life expectancy. An assessment of health status and an estimation of expected years lived in good or poor health can vary by indicator.

Changes conducive to increased longevity and greater well-being at older ages may occur early in life

D.

LONGER LIVES ARE NOT ALWAYS HEALTHY, ESPECIALLY FOR WOMEN

Healthy life expectancy is analogous to life expectancy but adds a quality dimension to the quantity of life. It offers a summary measure of how many remaining years are expected to be lived in good health, free of disease or disability. A specific measure of healthy life expectancy is disability-free life expectancy. Whether disability-free life expectancy increases in proportion to total life expectancy is a question of debate.

A recent analysis of selected countries in Asia, Western Europe and Northern America found that increased life expectancy in recent decades was accompanied by a proportional increase in disability-free life expectancy, with the number of years lived without disability as a share of total life expectancy remaining fairly constant. The study concluded that all life spans are increasing, meaning that life expectancy without disability as well as life expectancy with disability are increasing in roughly the same proportion. The implication is that “while on the one hand, an increase in life expectancy in good functional health should be welcome, there should also be concerns about the increase in the number of years lived with disabilities” (Robine, 2021, p. 12).

¹⁴ Environments include the home, community and broader society, and all the factors within them, such as the built environment, people and their relationships, attitudes and values, health and social policies, the systems that support them and the services that they implement (WHO, 2020b, p. 10).

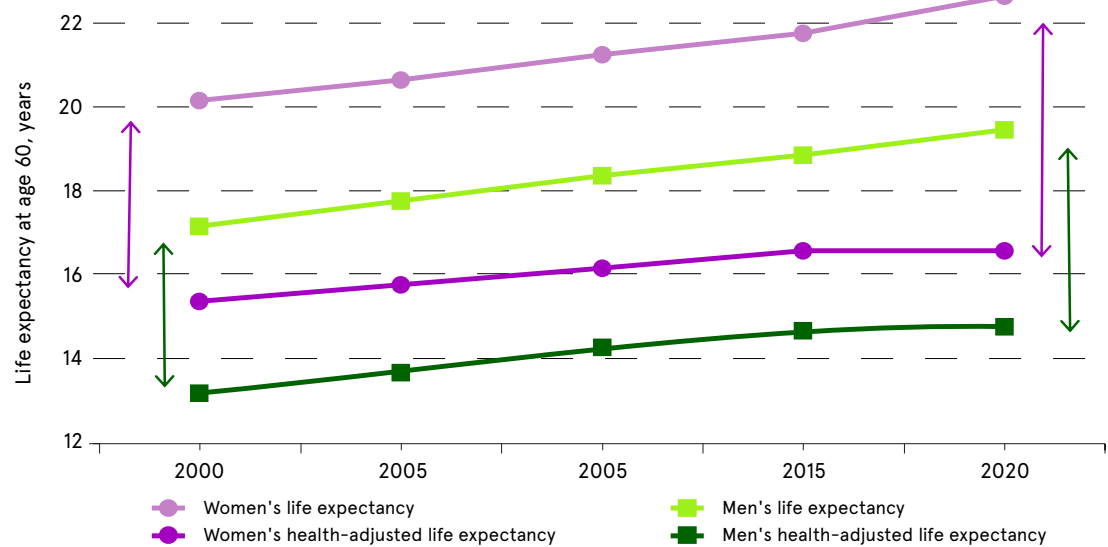
There is less evidence about levels and trends of healthy life expectancy for other parts of the world, including sub-Saharan Africa, Eastern Europe, Latin America, Northern Africa and the Middle East, and Southern Asia. In India, older people (aged 60 or over) experienced both an increase in life expectancy and in life expectancy without mobility limitations between 1995 and 2004 (Sreerupa and others, 2018). A relative compression of disability (i.e., the reduced proportion of remaining life with mobility limitations) took place among older men in rural areas compared to a relative expansion of disability (increased proportion) among older women in urban areas. In South Africa, healthy life expectancy based on self-rated health at ages 50 and above increased more than life expectancy from 2005 to 2012 (Chirinda and others, 2018). In São Paulo, Brazil, disability-free life expectancy at age 60 fell sharply between

2000 and 2010 while life expectancy kept increasing (Campolina and others, 2014). Life expectancy free of cognitive impairment at age 60, both the observed value in years and as a proportion of total life expectancy, increased from 2003 to 2016 in Chile (Moreno and others, 2019).

More systematic and comparable data to assess a population's health status come from measures of health-adjusted life expectancy commonly used by WHO since the early 1990s. Health-adjusted life expectancy is the number of years that a person is expected to live in good health plus fractions of years lived with some form of disease, injury or disability (WHO, 2020c). According to the latest estimates, between 2000 and 2019, global life expectancy at birth increased by six years, from 67 to 74 years.¹⁵ Healthy life expectancy also increased by six years, from 58 to 64 years.

Figure 2.2

Life expectancy and health-adjusted life expectancy at age 60, by sex, selected countries, 2000–2019



Source: WHO (2020c).

Note: Estimates for 183 countries with available data.

15 Slight differences exist between estimates from WHO and the 2022 revision of the *World Population Prospects*.

Figure 2.2 presents life expectancy and health-adjusted life expectancy at age 60 between 2000 and 2019. The difference between the two indicates the number of years lived with a given disease burden or disability. On average, life expectancy at age 60 increased faster than health-adjusted life expectancy for both men and women. In 2000, the gap for men was 4.1 years; for women, it was 5.3 years. By 2019, the gap had increased to 4.7 years for men and 6.0 years for women. Globally, the proportion of time spent in ill-health has slightly increased at birth and at age 60. These averages, however, mask significant variation within and across countries (WHO, 2020b).

Surveys based on self-reported disabilities often find that older women are more likely than older men to indicate that they are disabled. Disability in this context refers to an inability to perform certain activities of daily living, such as walking across a room, feeding oneself or using toilet facilities without assistance. This gap may indicate women's greater propensity to report health problems. Yet researchers have confirmed the higher prevalence of disability among older women through direct physical measurements. Overall, the available evidence supports the conclusion that the sex gap in disability at older ages is real, with women having a noticeable disadvantage (Crimmins and others, 2019).

E.

DISPARITIES IN HEALTH AND LIFE EXPECTANCY INTERSECT WITH MULTIPLE INEQUALITIES

While all regions of the world have seen substantial improvements in life expectancy, the risk of death differs from one person to another, depending on access to health care and socioeconomic status, among many factors. Increased inequality may emerge due to declining life expectancy among lower socioeconomic groups even as it continues to rise in higher socioeconomic groups.

Cost and other barriers can lead to disparities in access to and use of health care, adoption of technological innovations in medicine and preventive health behaviours. Those with higher socioeconomic standing have greater access to resources, including better and earlier medical care to avoid disease or minimize its impact. Wider societal, economic, environmental and cultural conditions influence some risk factors associated with many diseases affecting older persons. These dynamics can result in social stratification and lead to inequalities in health and ultimately life expectancy.

Recent increases in the inequality of life expectancy within a number of developed countries has coincided with widening gaps between the wealthiest and the poorest members of the population. For example, in the United States and Denmark, life expectancy has been stagnant or

even declined among low-income groups while the wealthiest continue to show gains (Kinge and others, 2019; Dahl and others, 2021). Inequalities in life expectancy associated with income levels are not uniform among men and women, however. In Sweden, the gap in life expectancy at age 65 for men from the highest and lowest income quartiles increased from 3.4 to 4.5 years between 2005 and 2016. For women the gap grew from 2.3 to 3.4 years (Fors, Wastesson and Morin, 2021).

Recent increases in inequality in life expectancy in some developed countries have coincided with widening gaps between the rich and the poor

A study of 15 European countries using level of education as a measure of socioeconomic status found the most educated consistently living longer than those with lower education (Mackenbach and others, 2019). The results varied among countries, with a 2.1-year difference between men in Spain with the highest and lowest levels of education and a more than 8-year difference between these two groups in Lithuania. The gaps were smaller for women but still persistent. Women in Spain had a 0.6-year difference in life expectancy between low- and high-income groups, while women in Lithuania saw a gap of more than 4 years.

Significant racial inequalities in life expectancy persist in the United States, partly attributable to racial differences

in education and income. In some cases, these gaps have narrowed. For example, between 1980 and 2018, college-educated adults lived three more years, on average, between ages 25 and 75 than those without a degree (Case and Deaton, 2021). This educational divide was present for college-educated Black and White people alike. Over this period, the racial divide in expected years of life narrowed by 70 per cent for those with or without a college degree, while the educational divide in average longevity doubled for both White and Black people.

Risk factors explain much of the inequality in life expectancy by income and education. Behavioural risks (smoking, alcohol consumption, being overweight, physical inactivity) are key channels for socioeconomic status to impact lifespan (Al Snih and others, 2007; Tian and others, 2011). For instance, smoking prevalence and obesity have fallen much faster among well-educated and higher-income Americans than among those with lower socioeconomic status (Bor, Cohen and Galea, 2017).

Socioeconomic status has largely determined the unequal impacts of COVID-19 infection and disparities in mortality rates (box 2.1). Lower-status groups were less likely to work from home and more likely to face infection (Mena and others, 2021), even as they had more limited access to health care. Further, risk factors or comorbidities that increased COVID-19 mortality and morbidity (cardiovascular disease, diabetes, heart diseases and obesity, among others) are higher among lower socioeconomic groups.

In the United States, during the pandemic, ethnic and racial disparities in hospital

outcomes for Medicare beneficiaries aged 65 years and older included higher death rates (Song and others, 2021). People in counties with low socioeconomic status had higher rates of both COVID-19 cases and fatalities than those in counties with higher socioeconomic status (Hawkins, Charles and Mehaffey, 2020).

F.

PREMATURE DEATHS HAVE DECLINED BUT THE FUTURE IS UNCERTAIN

The COVID-19 pandemic reversed many recent gains in health and well-being. Global life expectancy at birth was lower in 2021 by 1.7 years compared to 2019. Eight years from now, however, when the 2030 Agenda for Sustainable Development and the Decade of Healthy Ageing come to an end, it is expected that life expectancy at birth will have recovered worldwide.¹⁶ At that point, average longevity is projected to be 82 years in the more developed regions and 73 years in the less developed ones. By then, life expectancy at age 65 is predicted to reach 21 and 17 years in the more and less developed regions, respectively, and the share of people aged 65 years or more will have risen globally from 10 to 12 per cent.

More and more people are surviving at younger ages and therefore dying at older ages. While few studies examine developing countries with high and intermediate levels of mortality, those countries may follow paths of mortality decline similar to those in the more developed countries. Many developing nations, however, are still struggling to prevent premature deaths from communicable and non-communicable diseases, including neonatal conditions, lower respiratory infections and diseases of the circulatory system (Gouda and others, 2019). Given this situation, and considering the global impacts of the COVID-19 pandemic on trends and patterns of morbidity and mortality, future trends are uncertain at least in the short term.

While all regions have seen substantial increases in life expectancy, striking inequalities persist both among and within countries. These are tied to income, education, race and other factors and to differences in living arrangements. They in part determine the health of individuals across the life course as well as their risk of dying. Disparities in life expectancy also arise from unequal access to affordable, quality health care.

While there is little doubt about the long-term trend towards longer lives, the relationship between longevity and health at older ages has varied over time and across countries. Although the length of a healthy life, or at least the number of years lived without severe disability, has increased in many places, it remains unclear if longer

¹⁶ In 2021, life expectancies globally were affected by the impact of the COVID-19 pandemic on death rates, particularly among older persons. For the projection period, all countries are assumed to catch up with their pre-COVID-19 pandemic levels and trends in life expectancy at birth between 2022 and 2025, depending on their mortality experience in 2020 and 2021 and their adult COVID-19 vaccination coverage in early 2022. Such recovery can be considered a reasonable assumption in a context of uncertainty about the implications of the pandemic over the short and medium term in different regions (United Nations, 2022b, 2022c).

lives go hand-in-hand with healthier ones in all situations. The answer depends on a population's health profile, the time period considered and the specific measure used to evaluate health status. A central goal of the Decade of Healthy Ageing is to ensure

that growing populations of older persons enjoy additional years of good health. Disease prevention, access to health care over the life course, and supportive and enabling environments all play key roles in achieving this objective.