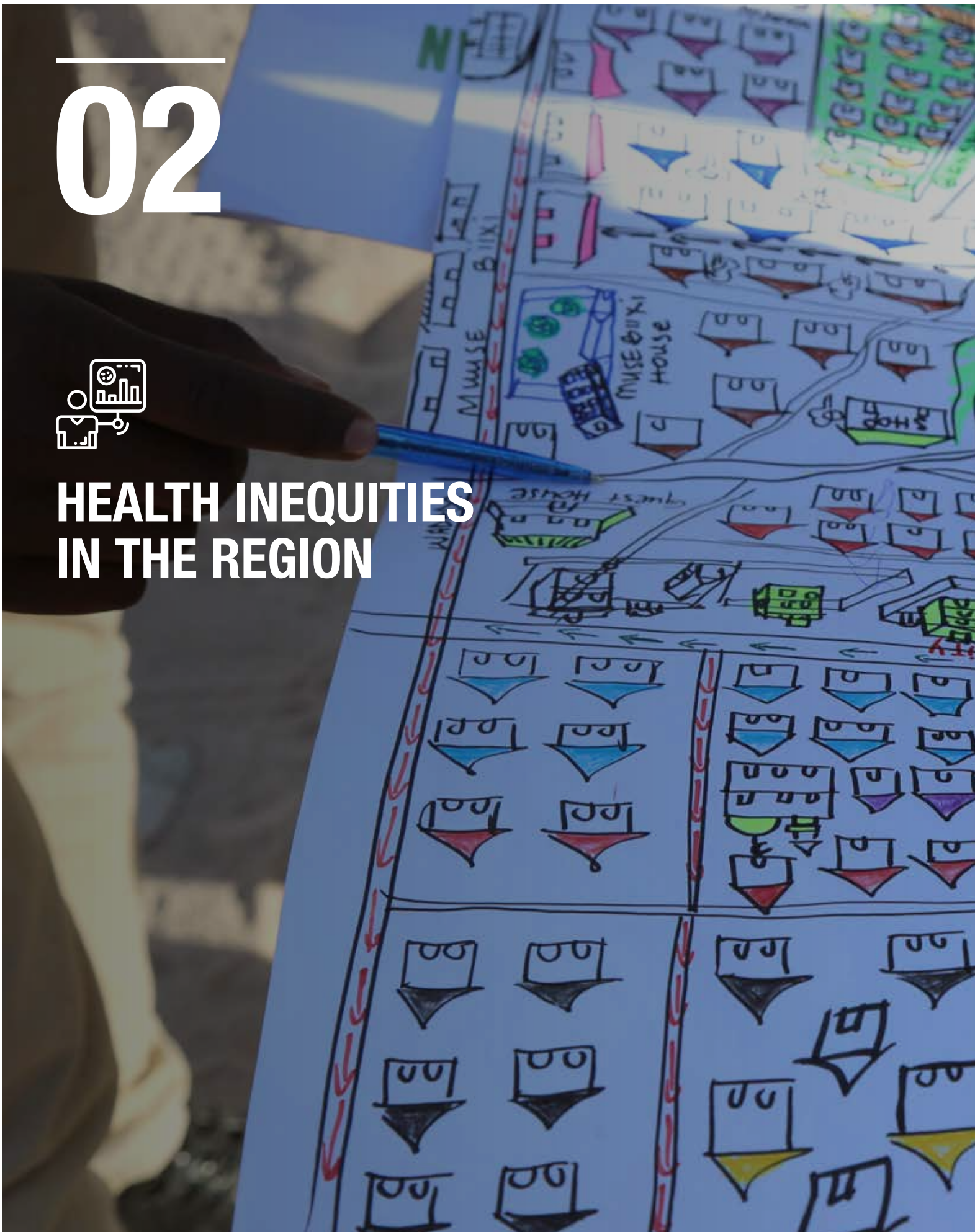


02



HEALTH INEQUITIES IN THE REGION





HEALTH INEQUITIES IN THE REGION

INTRODUCTION

There have been marked improvements in mortality and morbidity in the Eastern Mediterranean Region over the last 30 years. Premature death and disability caused by communicable, maternal, neonatal and nutritional diseases have been reduced by three quarters since 1990 (1). However, deaths from conflict are rising in many countries and territories of the Region, and obesity, undernutrition and food insecurity continue to pose significant challenges. Food security is being further impacted by COVID-19 containment measures (Chapter 3) as well as by the effects of conflict (Chapter 4) and climate change and land degradation (Chapter 7). Despite overall improvements in many health outcomes, health inequities between and within countries persist – and in some cases are widening. This chapter describes these inequities, as far as the available data allow. The lack of data to assess and monitor within-country inequities in the Region remains a considerable issue and needs to be addressed.

Life expectancy and levels of health in a country are related to the social determinants of health – the conditions in which people are born, grow, live, work and age, and the structural factors which underpin these conditions. Differences in levels of health and life expectancy between countries and territories in the Region are wide, reflecting differences both in structural factors, including those related to conflict, and in the conditions of daily life. While the causes and prevalence of communicable and noncommunicable diseases (NCDs) in the Region are related to socioeconomic position and to the social determinants of health, inequitable access to health care is also a reason for high levels of ill health and mortality.

In Chapter 8 of this report, we describe inequities in access to health care services for pregnant women and children; and in Chapter 12, we set out inequities in access to health care and public health and prevention services due to low levels of availability and prohibitive financial costs in many countries. We do not cover access to health care in this chapter.

DATA AVAILABILITY

Across the Region, there are some national data available about average mortality and morbidity from a range of health conditions (2). Much of the data is available from the WHO Regional Office for the Eastern Mediterranean and collected by countries with WHO's assistance. However, there is a distinct lack of disaggregated data which would allow understanding and monitoring of health inequities within countries and territories. There is far more that could be done in the Region to monitor within-country inequities in health, as is possible in other regions, which would support awareness and action on health inequities (3, 4). The types of data that are required to monitor even basic inequities in health and its social determinants are outlined in Chapter 13, but in this chapter we recommend the establishment of disaggregated data systems, capable of capturing and monitoring health inequities in every country and territory of the Region. Clearly, different countries will have different capacities to undertake this, and in some countries even basic surveillance data are not available.

Data required for monitoring the SDGs provides some information which is also helpful for monitoring the social determinants of health covered in this report. However, there is still a lack of disaggregated SDG data in the Eastern Mediterranean Region,

even though it is a requirement for SDG monitoring and reporting. Many countries do not have the necessary data systems to enable disaggregation and developing these would be of benefit to development of policies and interventions to reduce health inequities, as recommended in this report.

As outlined in a WHO 2016 report, health information systems including civil registrations often fail to capture information required for the planning, developing and monitoring of the health system, including reliable data on births and deaths (5).

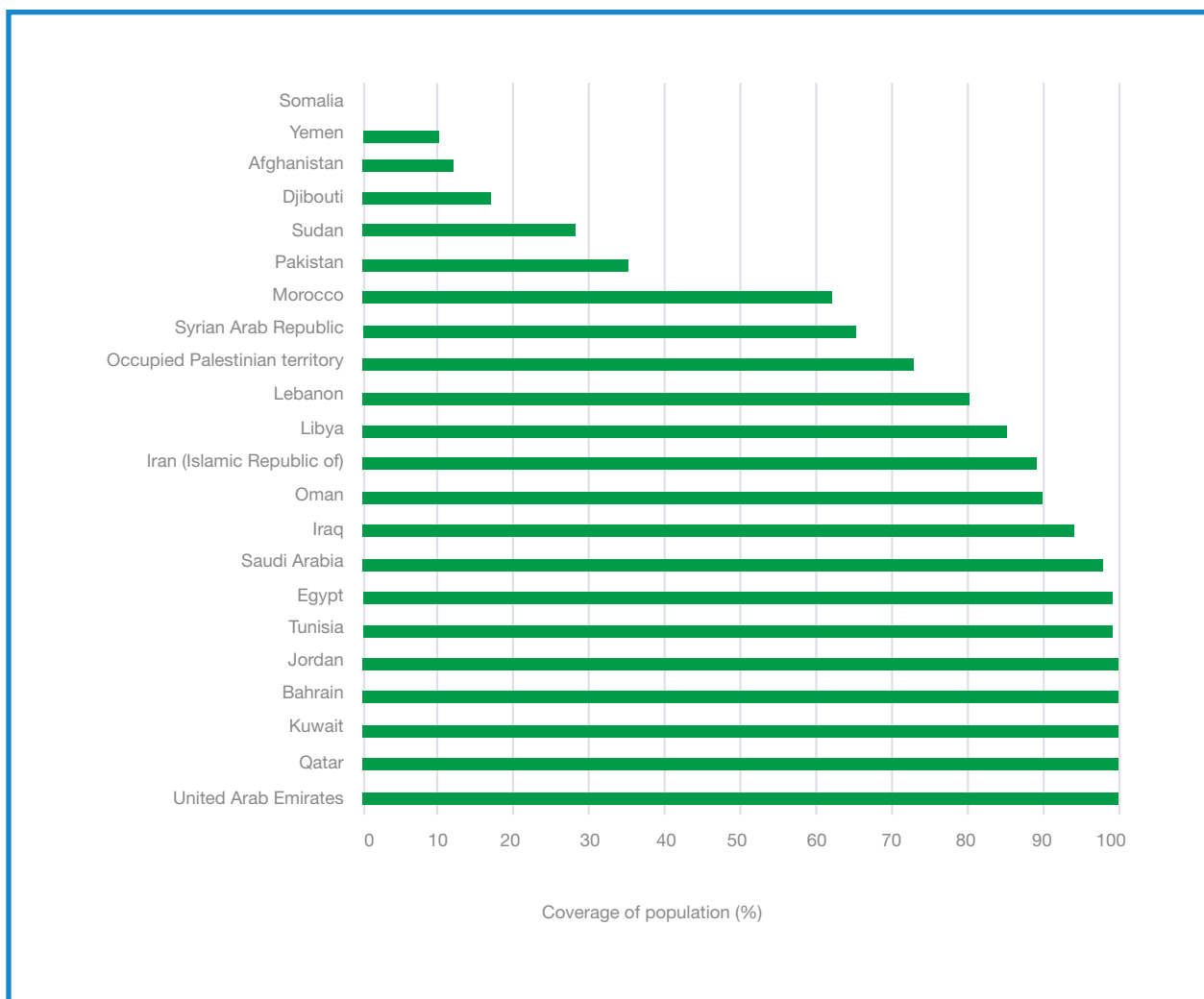
An assessment of civil registration systems in countries and territories in the Region was undertaken by WHO in 2012–2013 and a regional strategy for the

improvement of civil registration and vital statistics systems (2014–2019) was developed and endorsed by the Regional Committee for the Eastern Mediterranean in 2013 (resolution EM/RC60/R.7) (6).

Data on the coverage of birth and death registration in the Region was reported for the first time in WHO’s report *Monitoring health and health system performance in the Eastern Mediterranean: core indicators and indicators on health-related SDGs 2019* (2).

The data show that all countries and territories in the Region have some level of death registration, with the exception of Somalia, but there are wide variations between countries in coverage of these data, shown in Fig. 2.1 (7).

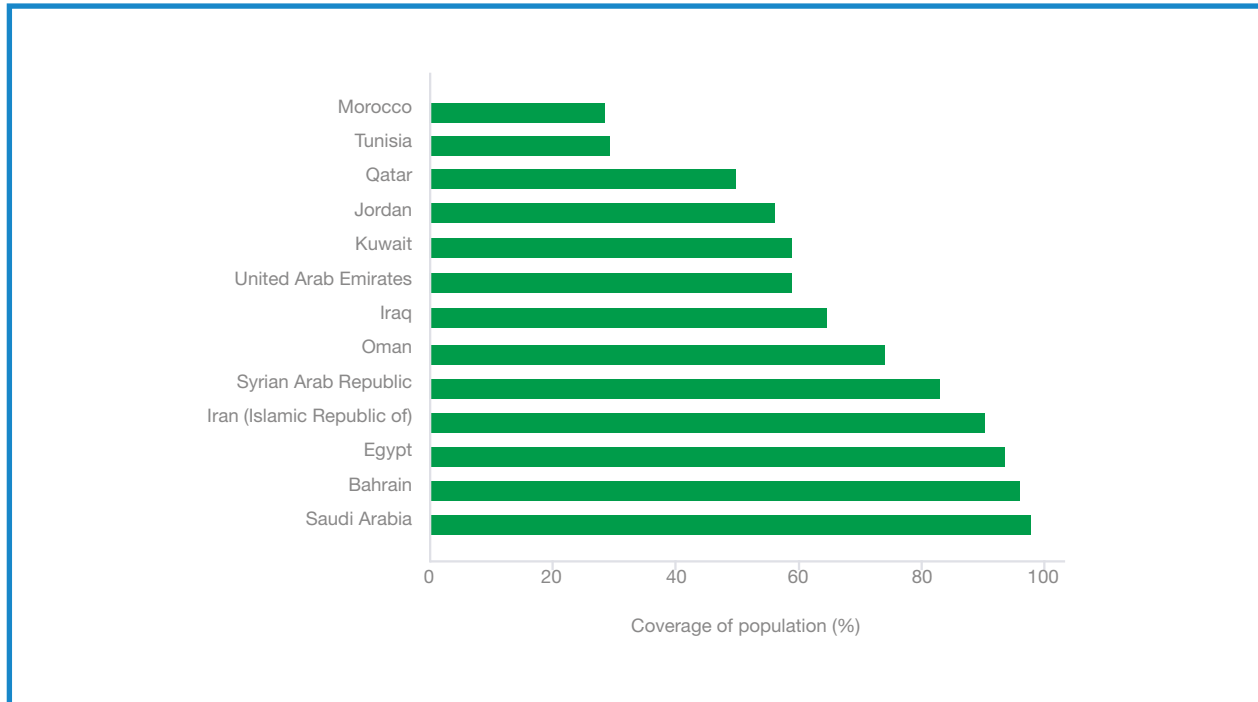
Fig. 2.1. Coverage of death registration (%) in countries and territories in the Region, 2015



Source: WHO (2020) (7).

In 2018, just over half of the 22 countries and territories in the Region reported mortality data disaggregated by cause of death based on the International Classification of Diseases (7). The completeness of cause-of-death registration between 2009 and 2017 for countries with available data is shown in Fig. 2.2. Overall for the Region, 32% of deaths are attributed to cause, which is lower than the global rate of 49% (7).

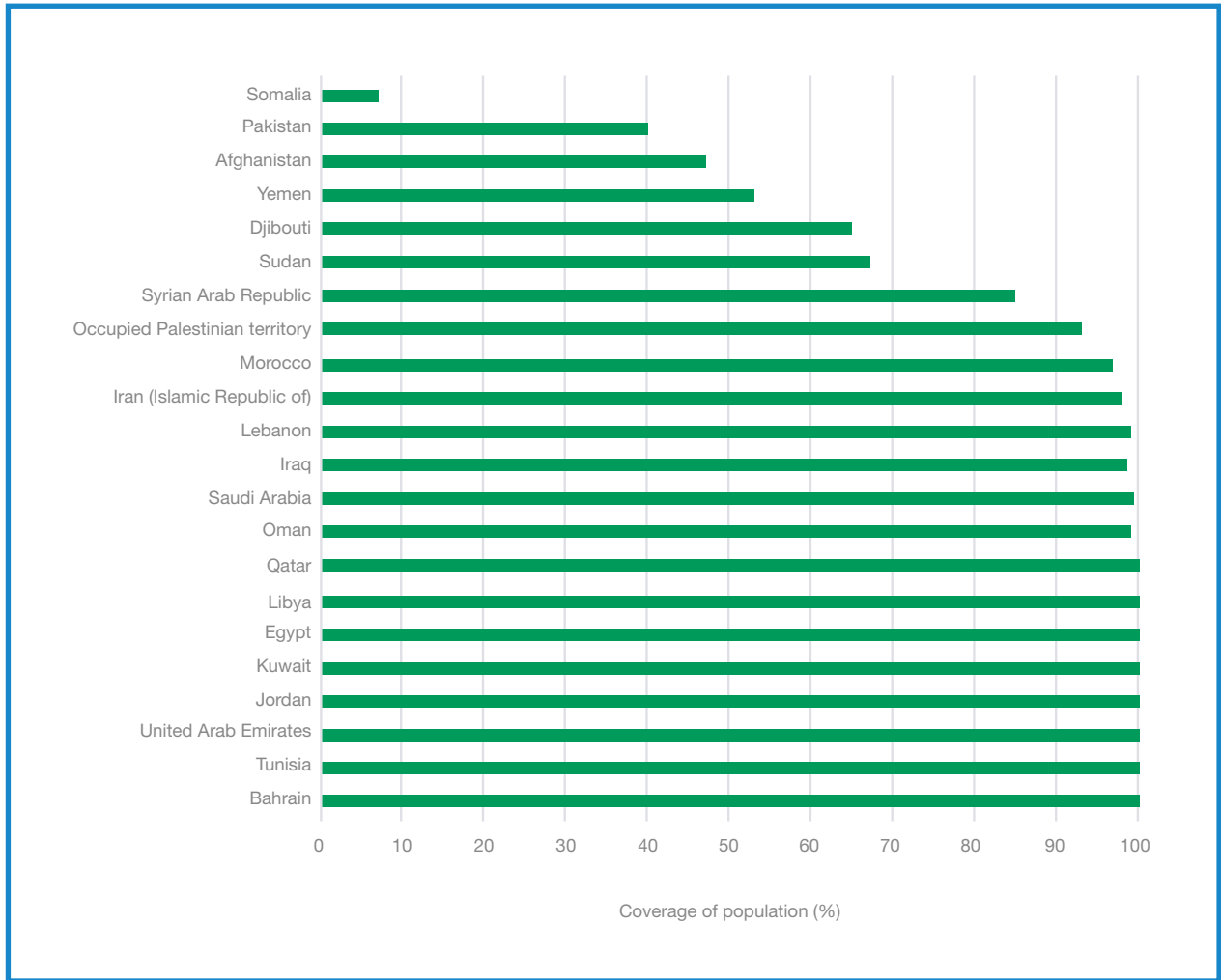
Fig. 2.2. Completeness of cause-of-death registration (%) by country, 2009–2017



Source: WHO (2020) (7) based on data from WHO Monitoring health and health system performance in the Eastern Mediterranean Region (2020) (2).

Additionally, while all countries and territories in the Region have birth registration systems, the coverage of this varies between countries from more than 90% for 14 countries and territories to less than 70% in a number of lower income countries, as shown in Fig. 2.3 (7).

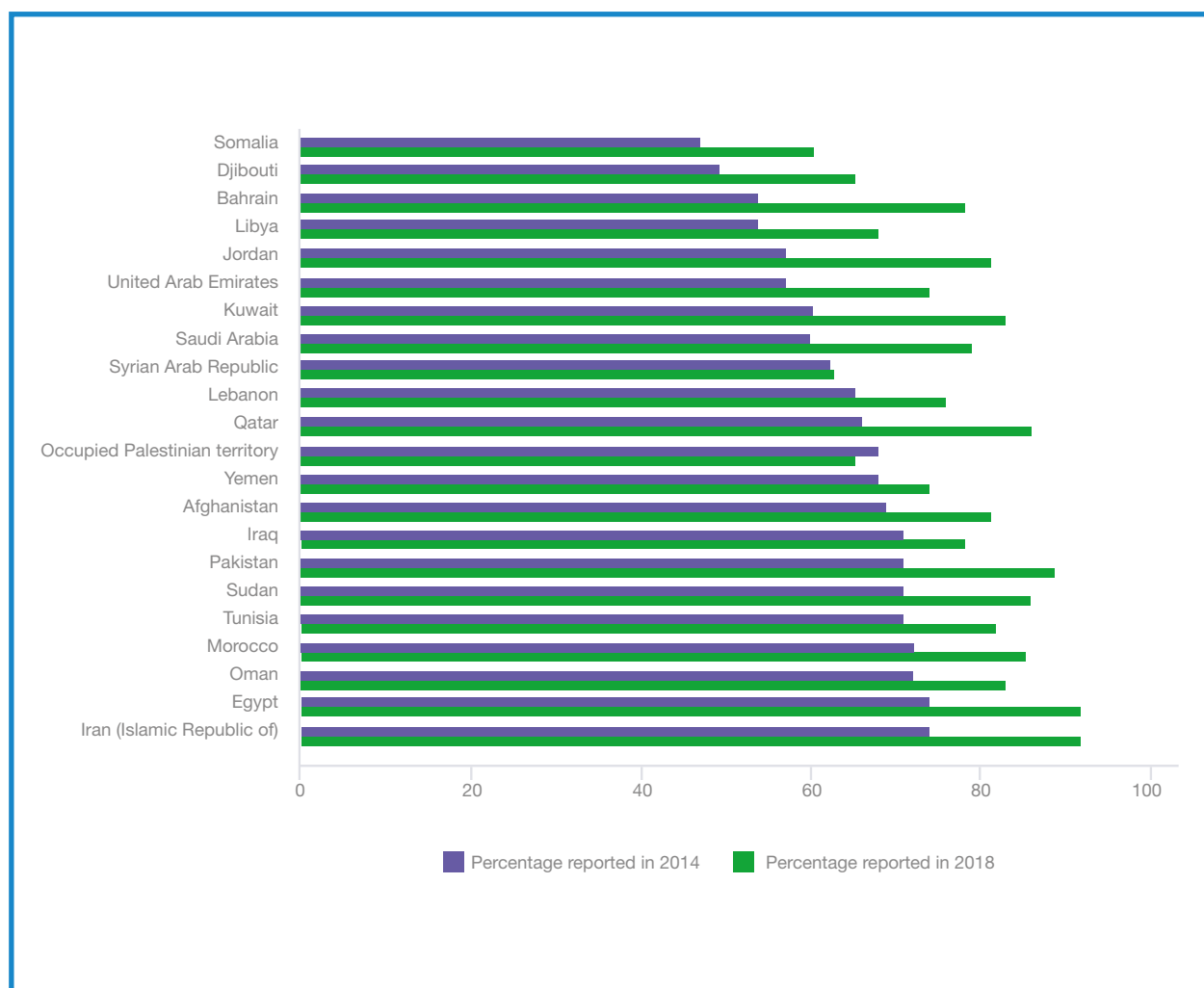
Fig. 2.3. Coverage of birth registration (%) in countries and territories in the Region, 2015



Source: WHO (2020) (7) based on data from WHO Monitoring health and health system performance in the Eastern Mediterranean Region (2020) (2).

A list of regional core indicators was endorsed by the Regional Committee in 2014 as a means of strengthening health information systems in the Region. These focus on three key components: monitoring health determinants and risks; assessing health status, including morbidity and cause-specific mortality; and assessing health system response (7). Additionally, a set of health-related SDG indicators were included in these core indicators in 2016, meaning that there are 75 core indicators in total (7). Data from WHO suggest that reporting on these core indicators increased in all countries in the Region, but not in the occupied Palestinian territory, including east Jerusalem, from 2014 to 2018 – a welcome improvement in health monitoring in the Region, although there are still significant gaps in many countries (Fig. 2.4).

Fig. 2.4. Reporting on regional core indicators and SDG indicators by countries and territories in the Region, 2014 and 2018



Source: WHO (2020) (7) based on data from WHO Monitoring health and health system performance in the Eastern Mediterranean Region (2020) (2).

There is very little data for the Region on inequities in life expectancy and health within countries and territories, but we illustrate these using what is available. There are, however, data on within-country inequities in maternal and reproductive health, early years and child health available from USAID's Demographic and Health Surveys (DHS) (8) and UNICEF's Multiple Indicator Cluster Surveys (MICS) (9). These survey data have been collated in WHO's Health Equity Assessment Toolkit (HEAT) (10) and Health Equity Monitor database (11). These data are reported in Chapter 8, and show widespread inequities in maternal and child health outcomes and access to services, related to maternal education and wealth. Academic studies and nationally commissioned analyses of health inequities also point to widespread within-country inequities and are included where available.

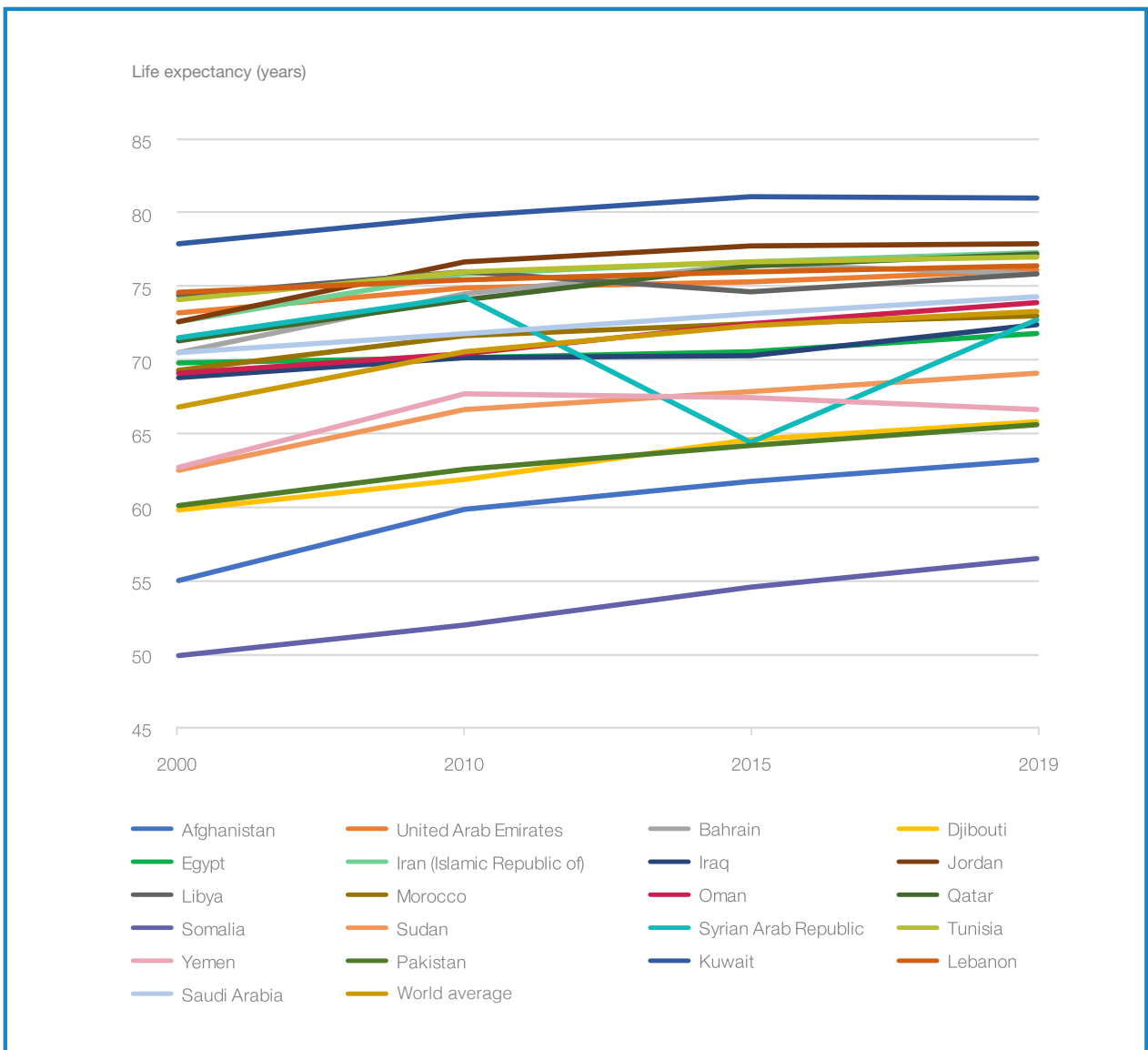
Inequities in health outcomes between countries and territories of the Region are available from several sources and are used in this chapter. They include the World Bank DataBank (12), WHO's Global Health Observatory (13) and the Eastern Mediterranean Health Observatory (14). Regional averages (all 22 countries and territories of the Eastern Mediterranean Region) and global averages (which were calculated depending on where the data are held) are used as a basis for comparison. In some circumstances, these have been calculated as population-weighted averages. Where data availability is poor, averages have not been calculated so as not to distort the analysis.

LIFE EXPECTANCY

Overall life expectancy in the Region improved by an average of 4 years between 2000 and 2019, from just over 68 years to just over 72 years. Some countries, mainly those with low life expectancies, experienced rapid changes over this period, including Djibouti where life expectancy increased from 59.8 years in 2000 to 65.8 years in 2019. Somalia, Afghanistan, Pakistan, Sudan and the Islamic Republic of Iran also experienced sustained improvement in life expectancy (more than 5 years) over the same period. However, other countries have experienced slow increases, or even declining life expectancy, as a result of conflict: life expectancy for both men and women has decreased in Yemen, Libya and the Syrian Arab Republic since 2010. Life expectancy in countries of the Region are shown in Fig. 2.5 a), b) and c).

Fig. 2.5. Trends in life expectancy at birth in countries in the Region, 2000–2019

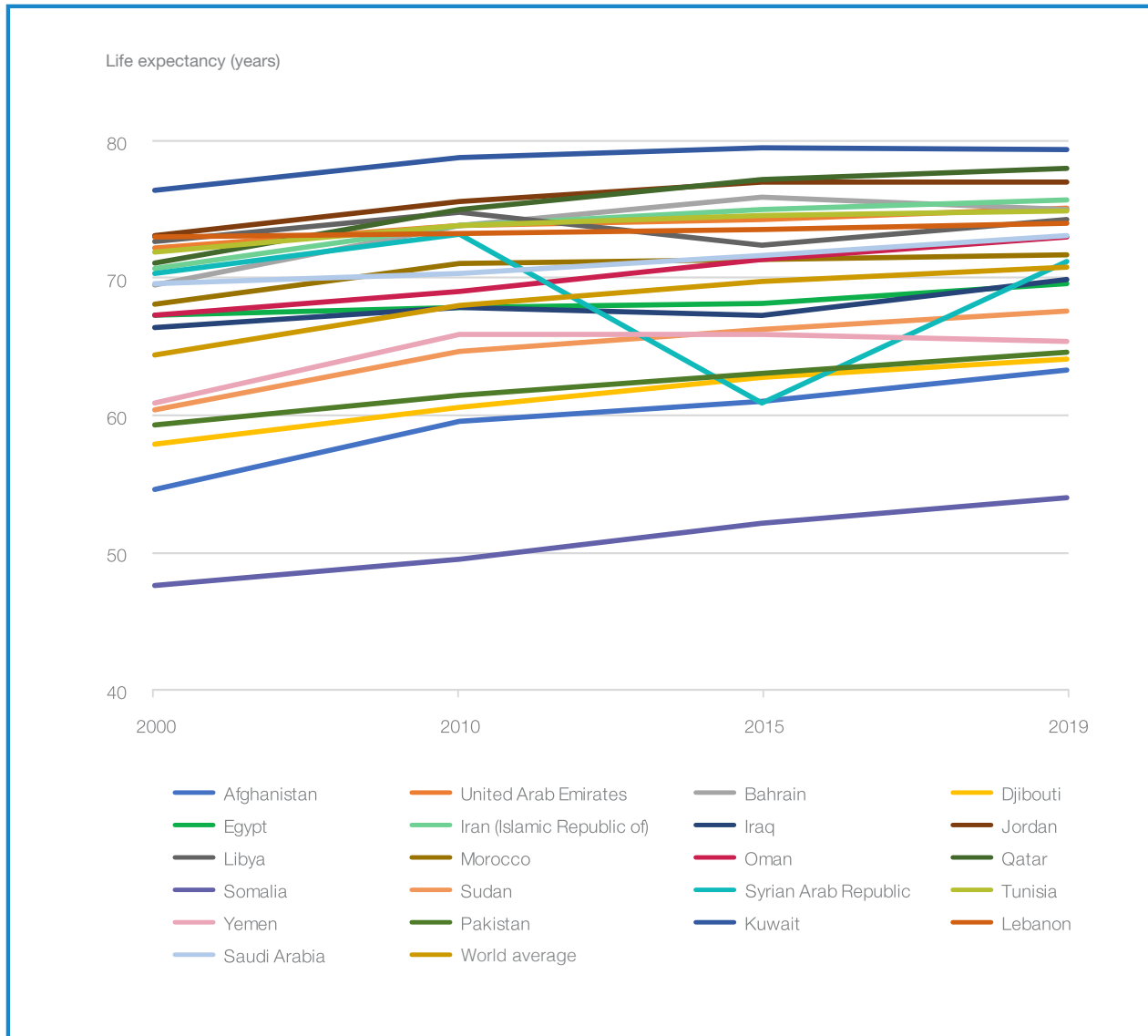
a) Life expectancy at birth, by country, 2000–2019



Notes: Life expectancy at birth refers to “the average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his birth, for a specific year, in a given country, territory, or geographic area” (15). No data available for occupied Palestinian territory.

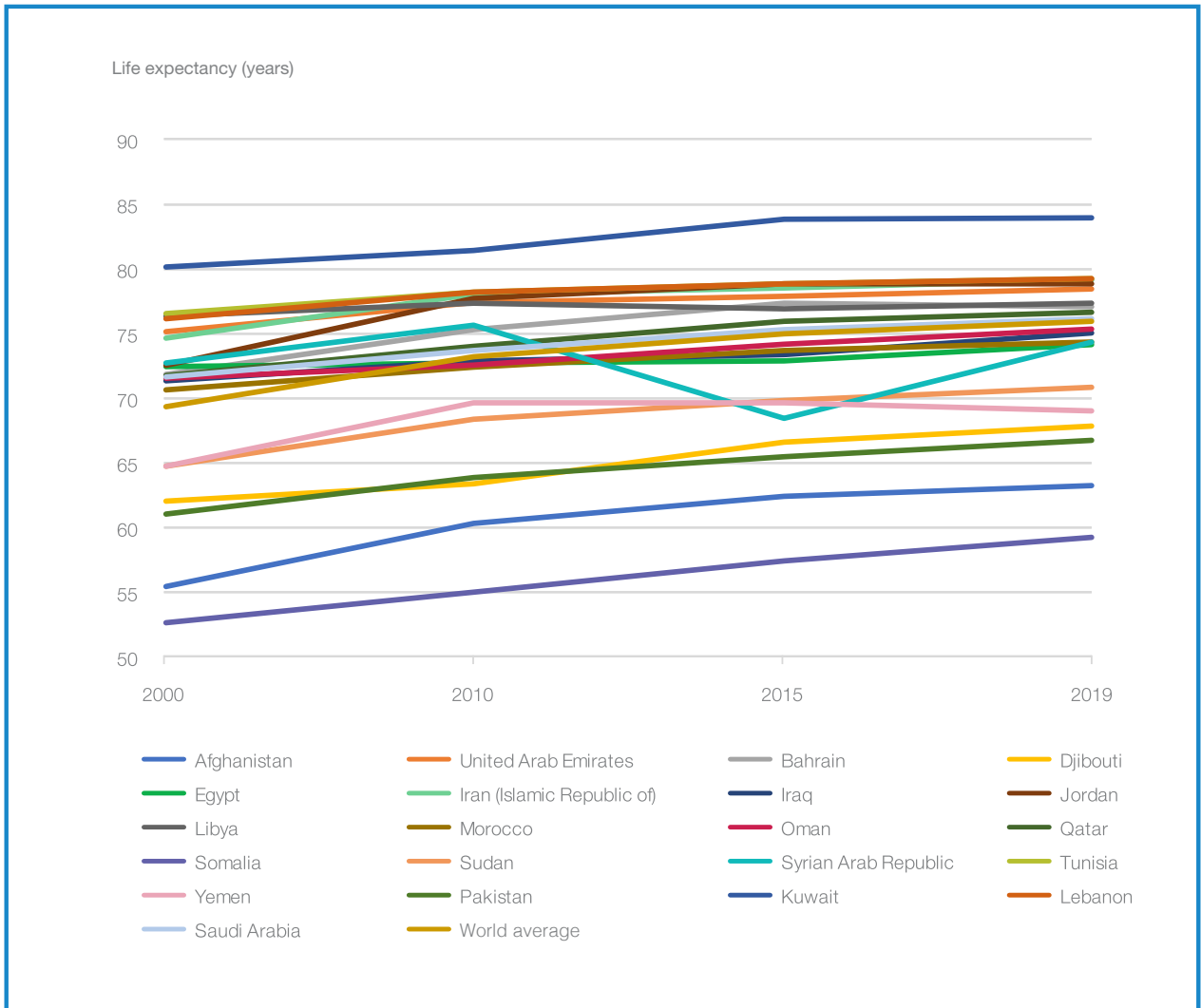
Source: WHO Global Health Observatory (15).

b) Life expectancy at birth for males, 2000–2019



Notes: Life expectancy at birth refers to “the average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his birth, for a specific year, in a given country, territory, or geographic area” (15). No available data for occupied Palestinian territory.
 Source: WHO Global Health Observatory (15).

c) Life expectancy at birth for females, 2000–2019

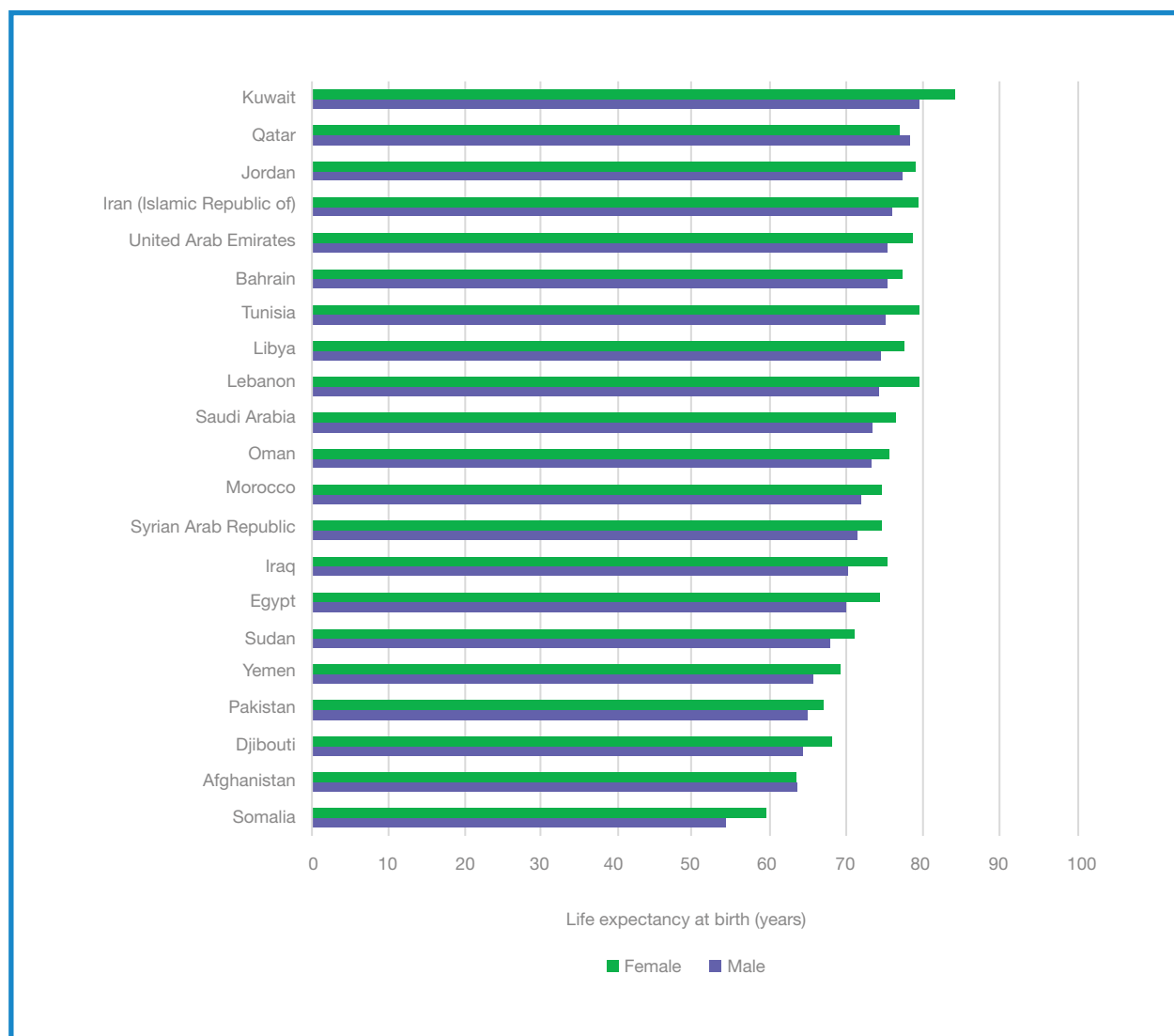


Notes: Life expectancy at birth refers to “the average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his birth, for a specific year, in a given country, territory, or geographic area” (15). No available data for occupied Palestinian territory.
 Source: WHO Global Health Observatory (15).

Much of the difference in life expectancy between countries, shown in Fig. 2.5 a), b) and c) above, relates to their levels of development and the effects of recent conflict. However, there are also sizeable differences in life expectancy between countries with similar levels of development, suggesting that the explanation for these differences lies partly with social and economic determinants including political governance, culture, economic policies, investments in education, living and working conditions, income and social protection, and in access to quality health care (which are discussed in later chapters). There is great scope for all countries and territories, whatever their level of development, to develop more effective policies to improve life expectancy and health and reduce health inequities within countries.

As depicted in Fig. 2.5 b) and c) above and in Fig. 2.6 below, in every country in the Region, as in the rest of the world, women have longer life expectancy than men. In Kuwait, the country in the Region with the highest life expectancy for both sexes, women can expect to live to nearly 84 years and men to just over 79. Somalia has the lowest life expectancy, at 59 years for women and 54 years for men in 2019.

Fig. 2.6. Life expectancy in countries in the Region, by sex, 2019

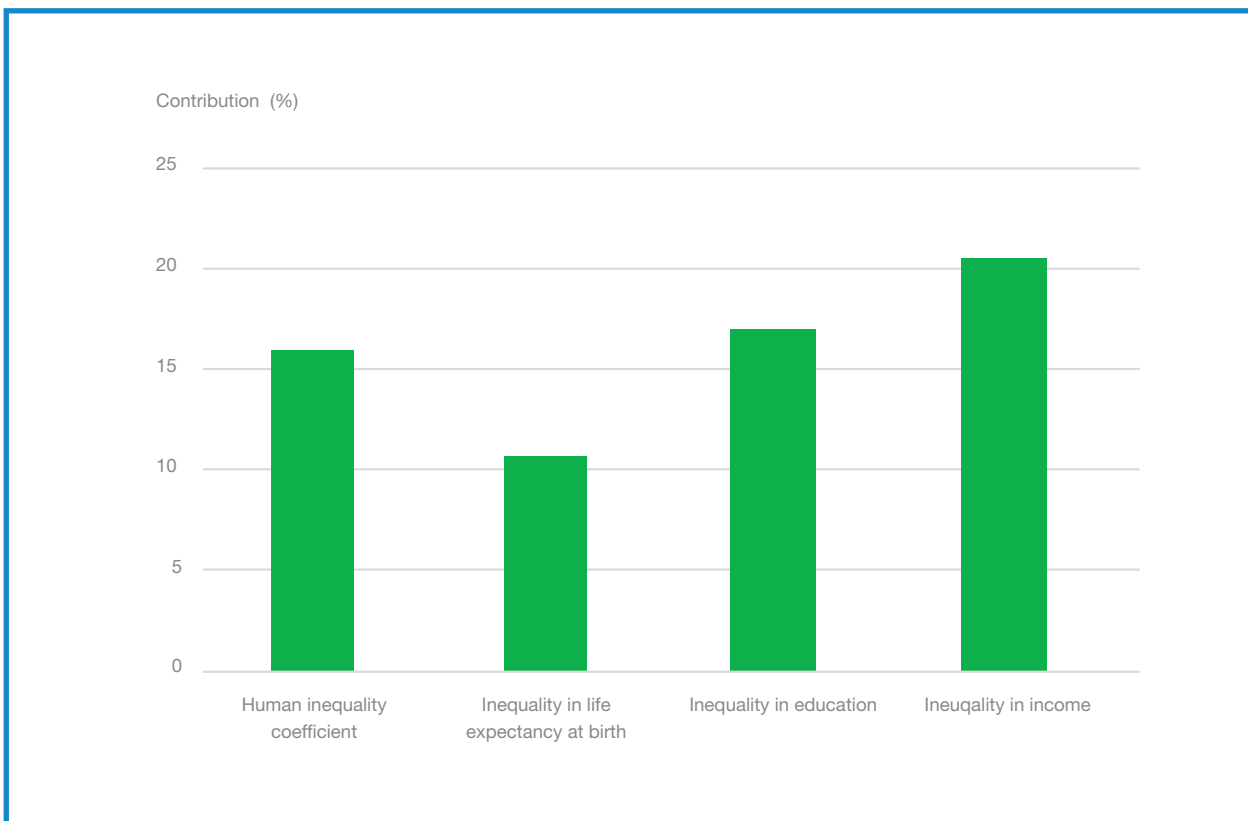


Notes: Life expectancy at birth refers to “the average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his birth, for a specific year, in a given country, territory, or geographic area” (15). No available data for occupied Palestinian territory.

Source: WHO Global Health Observatory (15).

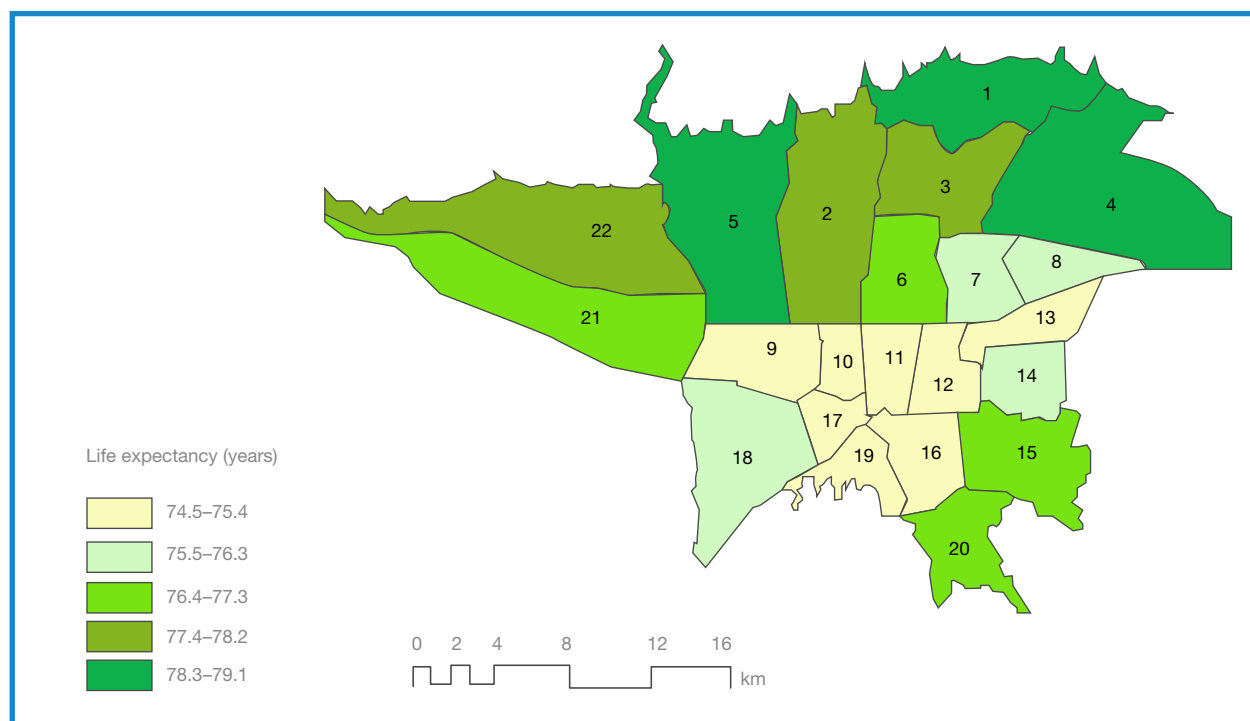
A 2019 report on inequities in health and social determinants of health in Jordan describes a range of inequities in health outcomes related to area, wealth, nationality and education (16). These health inequities are damaging to the overall level of development and progress in Jordan. In 2017, Jordan had a Human Development Index (HDI) score of 0.735, ranking it 95 among 189 countries and placing it among the high human development countries. However, when factoring in inequity, this HDI score decreases by 16% to 0.617, with income inequity being the highest contributing factor to this reduction (20.5%) and inequity in life expectancy being the least contributing factor to the reduction (10.7%), as shown in Fig. 2.7.

Fig. 2.7. Percentage contribution (%) of inequity in HDI dimensions to reduction in Jordan’s overall HDI, 2017



Source: Khadr et al. (2019) (16).

One of the few available analyses of within-country health inequities in the Region is based on analysis of life expectancy in the 22 districts of Tehran, Islamic Republic of Iran. The analysis shows differences in life expectancy related to levels of area deprivation (17). Five of the districts in the north of Tehran have higher socioeconomic conditions and life expectancies between 77.1 and 79.1 years. The 12 districts in the south of the city tend to have lower socioeconomic conditions and life expectancies (Fig. 2.8). An analysis of districts by socioeconomic level indicated a small gap of 1.14 life years between levels. A similar analysis by educational attainment indicated a gap of 1.38 life years between the highest and lowest education levels. Taken together, these indicate the existence of socioeconomic inequities in life expectancy in Tehran, although by global standards these inequities are low.

Fig. 2.8. Estimated life expectancy at birth (both sexes) in 22 districts of Tehran, Islamic Republic of Iran, 2010

Source: Mokhayeri et al. (2014) (17).

HEALTHY LIFE EXPECTANCY (HALE)

Life expectancy is an important measure of health, but how long people in a country can expect to live in good health is also a valuable indicator. WHO estimates for 2016 show that both life expectancy and healthy life expectancy (HALE) at birth are lower in the Region compared to the global estimates (Table 2.1). Healthy life expectancy at birth refers to the average number of years that a person can expect to live in “full health” by taking into account years lived in less than full health due to disease and/or injury (18). Life expectancy and healthy life expectancy in the Eastern Mediterranean Region were 69.1 years and 59.7 years, respectively, while globally they were 72 years and 63.3 years, respectively, in 2016.

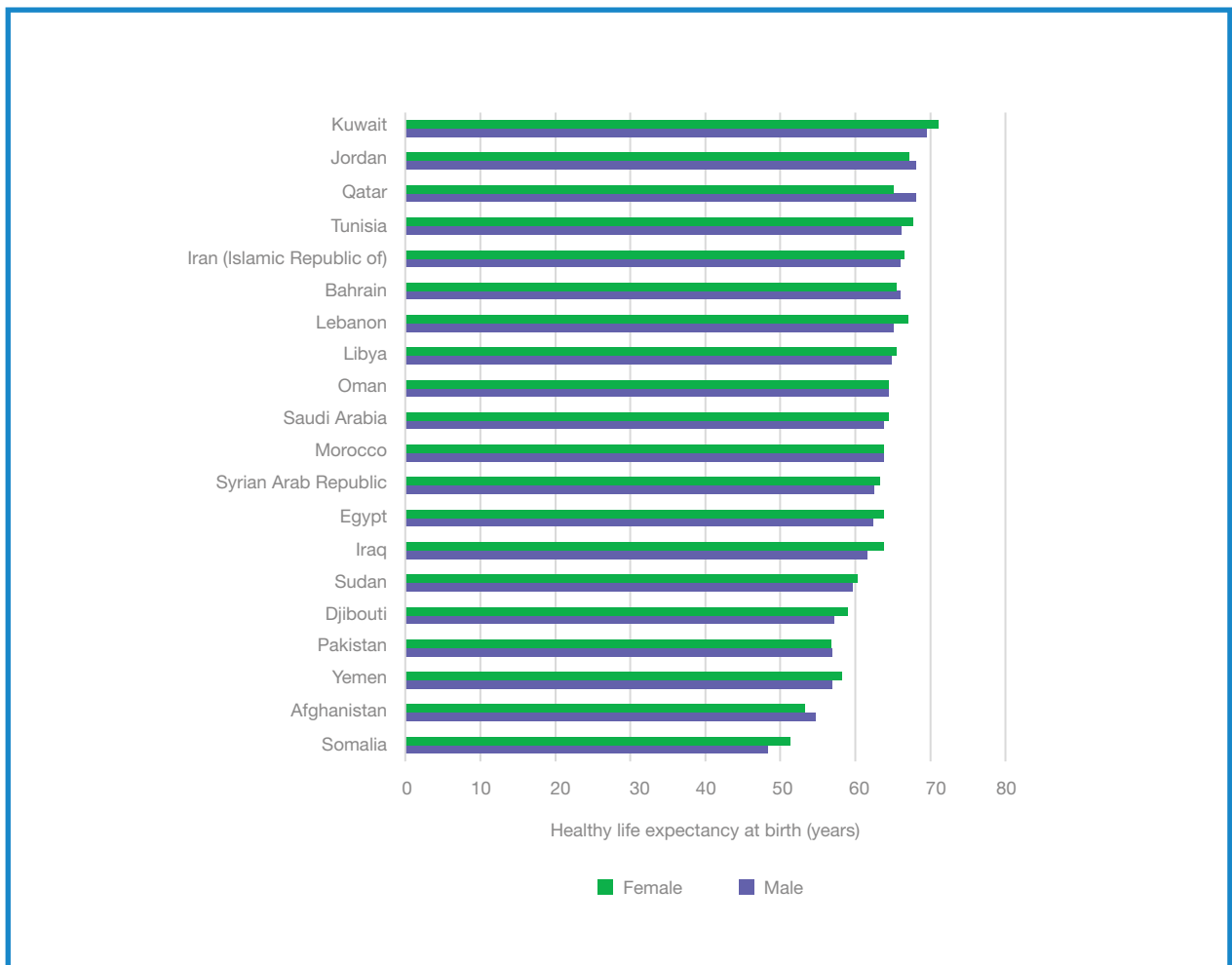
Table 2.1. Life expectancy and healthy life expectancy (HALE) at birth, regional and global estimates, 2016

	Total population (in thousands) 2016	Life expectancy at birth (years) 2016			Healthy life expectancy at birth (years) 2016		
		Male	Female	Total	Male	Female	Total
Regional	664 336	67.7	70.7	69.1	59.1	60.4	59.7
Global	7 430 261	69.8	74.2	72.0	62.0	64.8	63.3

Source: WHO (2020) (7) based on data from World Health Statistics (2019) (19) and WHO Monitoring health and health systems performance in the Eastern Mediterranean Region (2020) (2). Population data from WHO Global Health Observatory (20).

Fig. 2.9 shows that in Somalia (which has the lowest healthy life expectancy (HALE) at birth in the Region) women can expect to live 51 years in good health and spend a relatively short period of time (8 years) in poor health before death. For men in Somalia, the corresponding figures are approximately 48 years in good health and 6 years in poor health before death (based on life expectancy of 54 years). In contrast, in Kuwait (which has the highest healthy life expectancy (HALE) in the Region) women can expect to live until 71 in good health and spend an average of nearly 13 years in poor health before death. In all countries except Jordan, Bahrain, Qatar and Afghanistan, female healthy life expectancy (HALE) is higher than that for males.

Fig. 2.9. Healthy life expectancy (HALE) at birth in countries in the Region, by sex, 2019

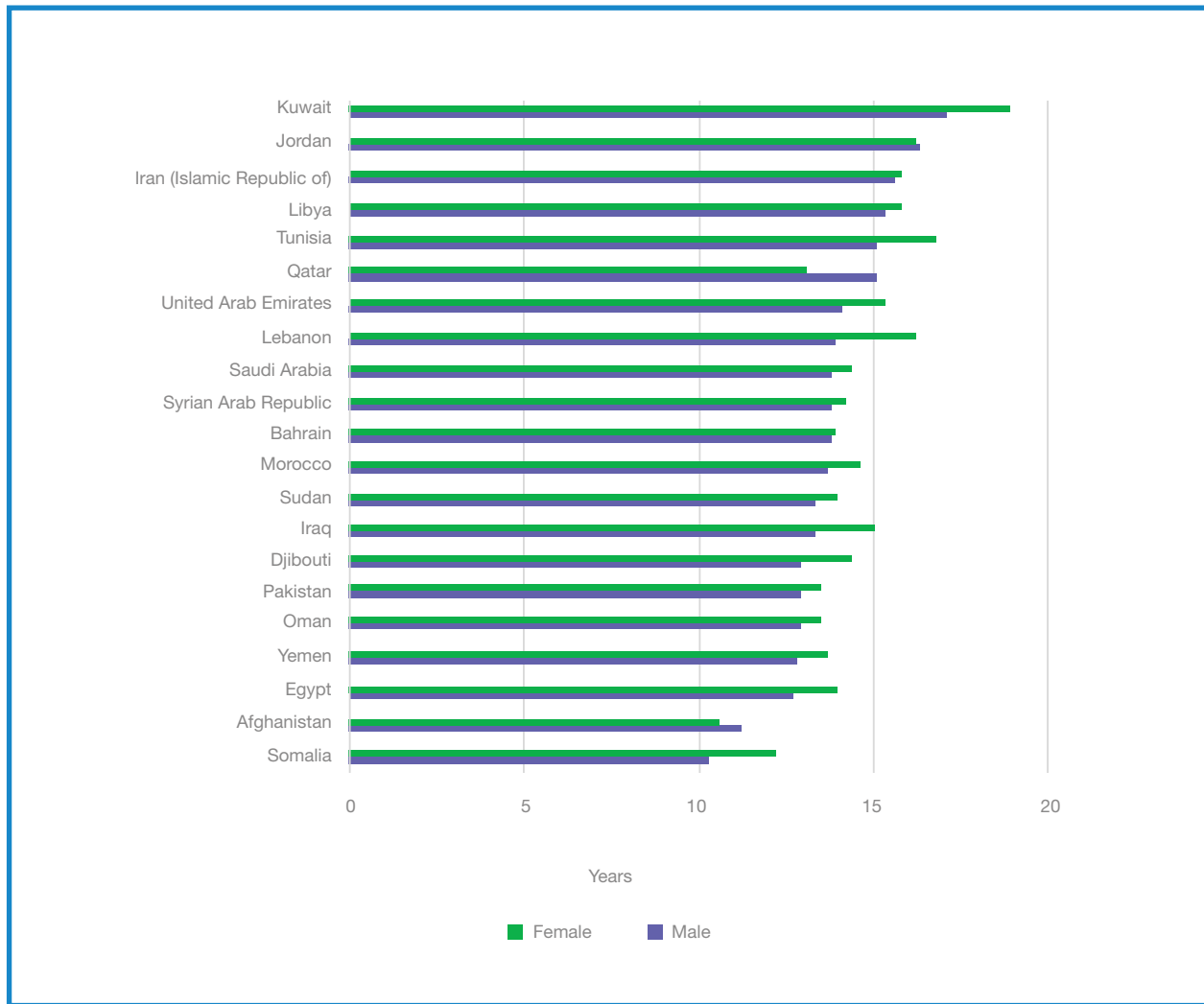


Note: No available data for occupied Palestinian territory.

Source: WHO Global Health Observatory (21).

Once people have lived to the age of 60, both men and women in all countries in the Region can expect to live at least another 11 years in good health, except for men in Somalia and women in Afghanistan for whom healthy life expectancy is 10.3 and 10.6 years, respectively. For women in Tunisia and Lebanon, and for both sexes in Jordan and Kuwait, healthy life expectancy (HALE) at age 60 is over 16 years (Fig. 2.10).

Fig. 2.10. Healthy life expectancy (HALE) at age 60 years in countries in the Region, by sex, 2019



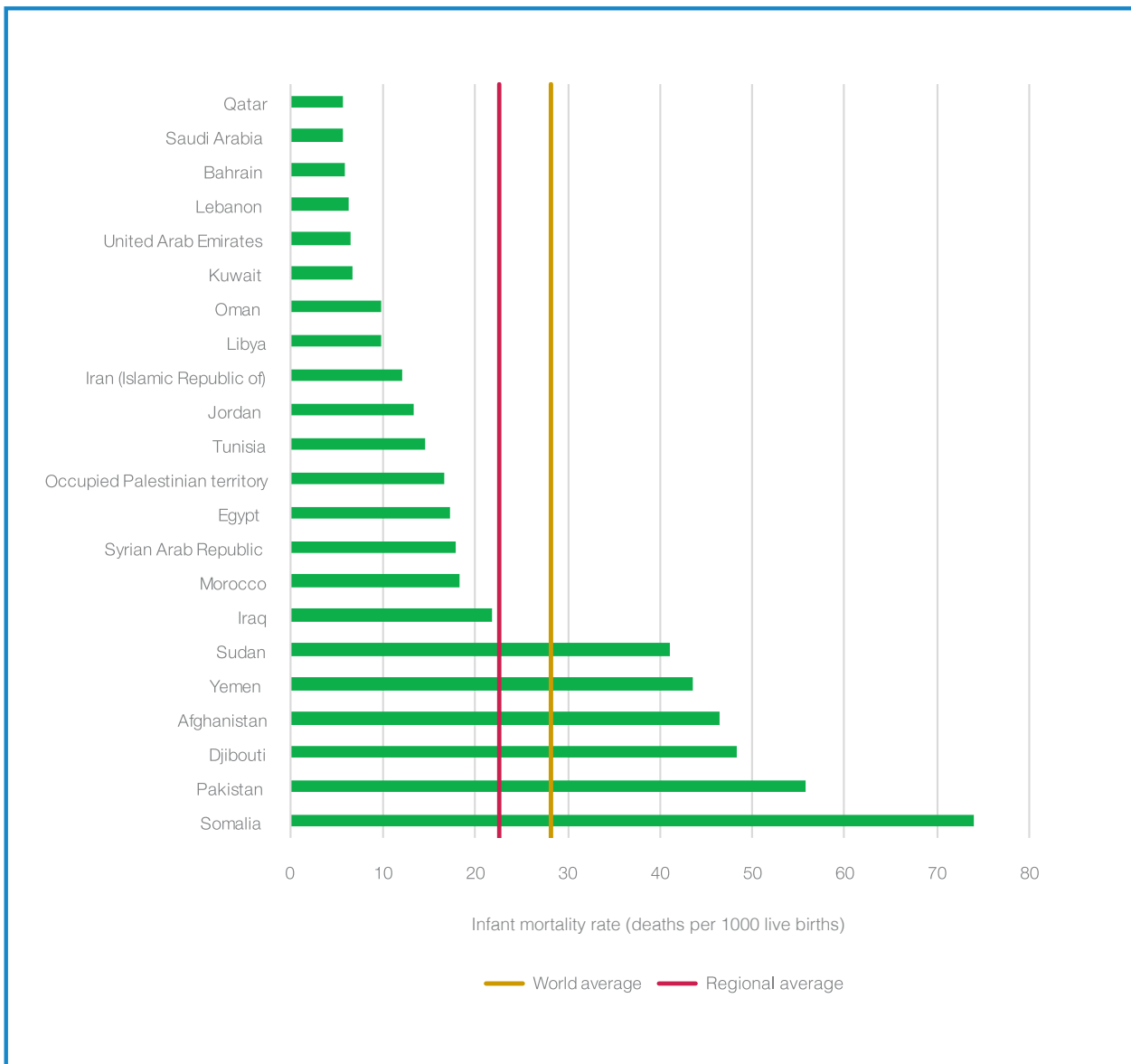
Notes: Healthy life expectancy at 60 (years) refers to “the average number of years in full health a person (usually at age 60) can expect to live based on current rates of ill-health and mortality” (22). No available data for occupied Palestinian territory.
 Source: WHO Global Health Observatory (21).

INFANT AND UNDER-5 MORTALITY

The Eastern Mediterranean Region has made great progress over the last 30 years in reducing infant mortality, although high rates persist in a number of countries. The Region’s infant mortality rate of

22.6 deaths per 1000 live births in 2019 is below the global average of 28.2. However, there are enormous differences between countries and territories of the Region, as shown in Fig. 2.11. In 2019, Qatar, Saudi Arabia and Bahrain had the lowest infant mortality rates at less than 6 deaths per 1000 live births. Somalia had the highest infant mortality rate in the Region in 2019 (and the fourth highest rate globally, behind only Sierra Leone, Nigeria and Central African Republic).

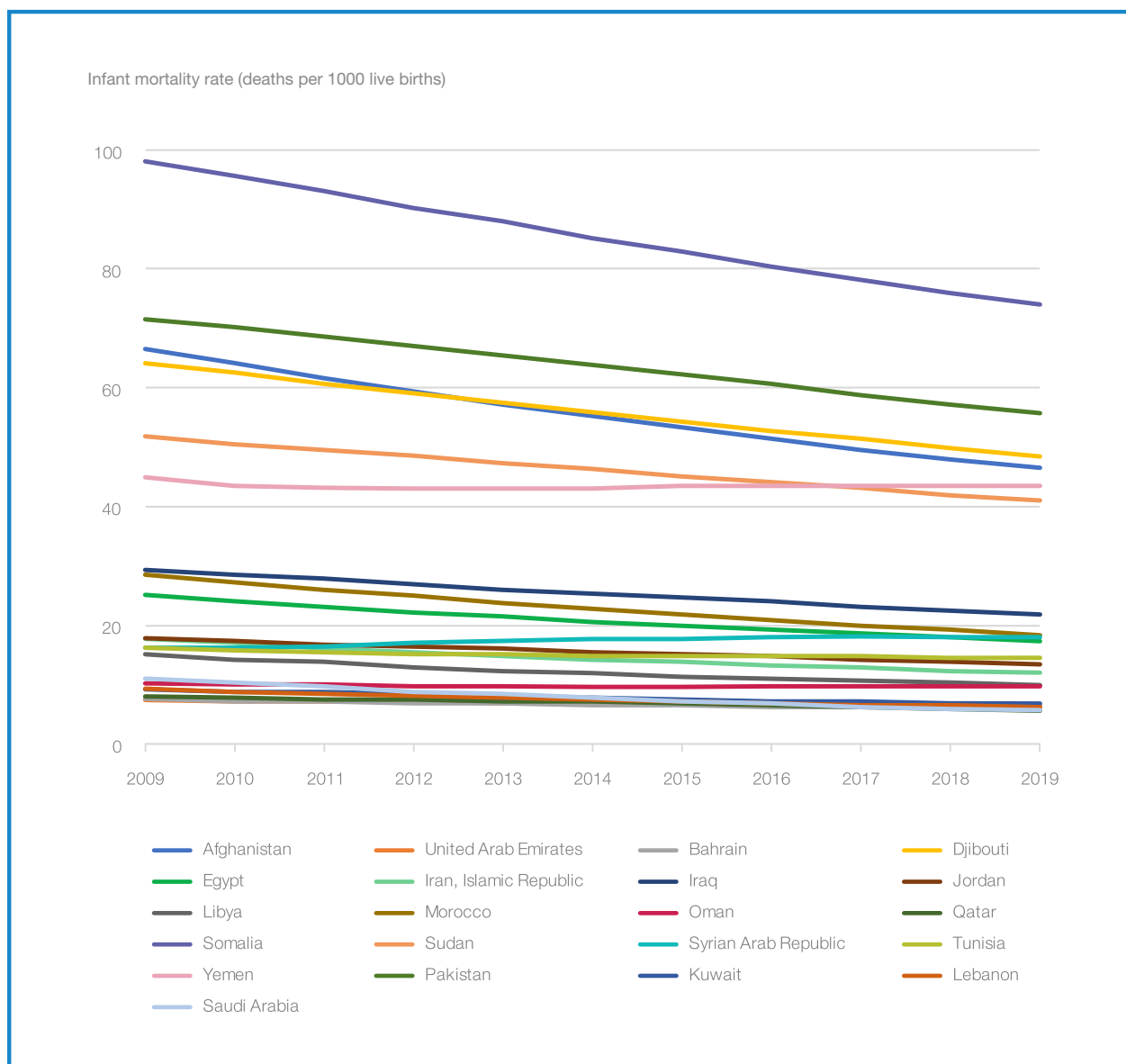
Fig. 2.11. Infant mortality rate in countries and territories in the Region, 2019



Note: Infant mortality rate refers to “the number of infants dying before reaching one year of age, per 1,000 live births in a given year” (23).
Source: World Bank (2021) (23) based on estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation.

In most countries and territories in the Region, there were reductions in infant mortality between 2009 and 2019, particularly in countries with high rates. In Yemen and the Syrian Arab Republic, however, infant mortality rates have increased in recent years largely due to the impacts of conflict (Fig. 2.12).

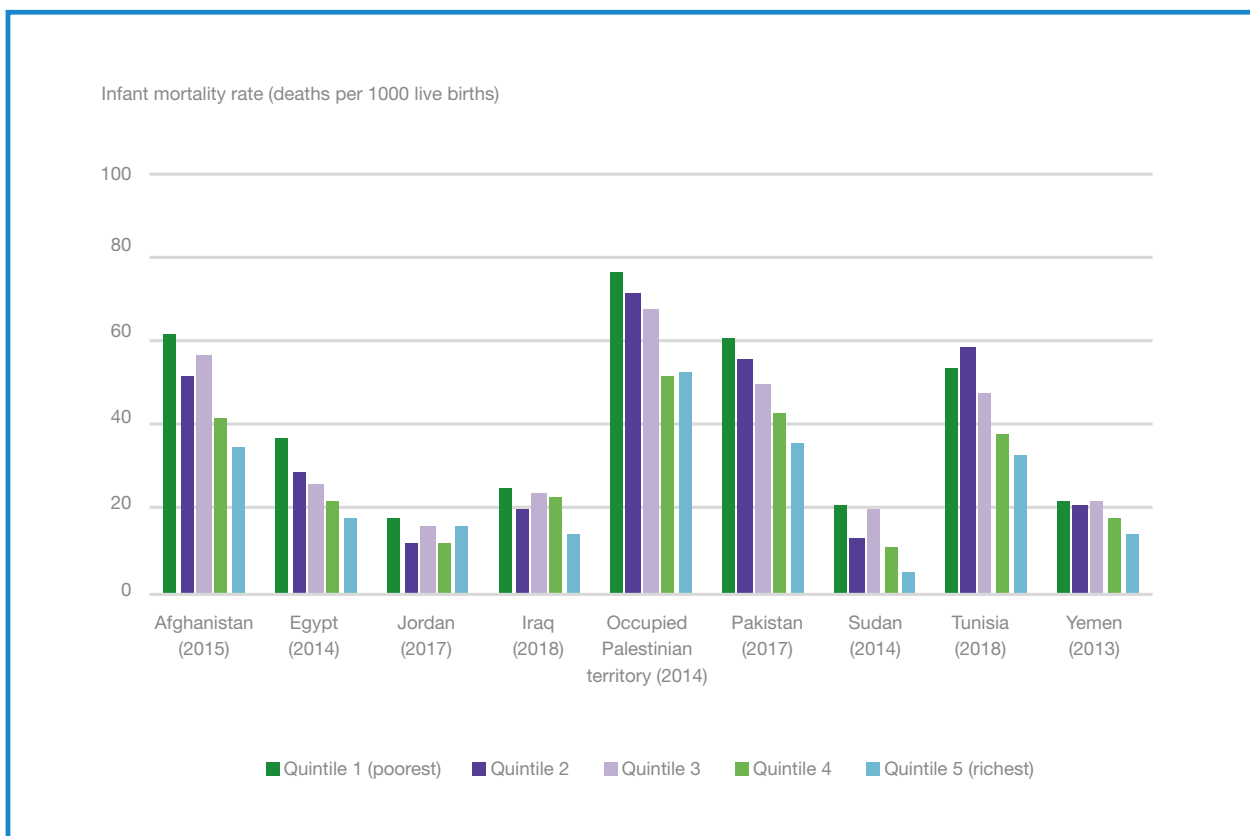
Fig. 2.12. Trends in infant mortality rate in countries and territories in the Region, 2009–2019



Note: Infant mortality rate refers to “the number of infants dying before reaching one year of age, per 1,000 live births in a given year” (25). Source: World Bank (2021) (23) based on estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation.

Fig. 2.13 shows inequities in the infant mortality rate related to wealth for countries and territories in the Region with available data. In each country or territory, the wealthiest quintile has the lowest infant mortality rate, except in Jordan and Pakistan which have slightly higher rates in quintile 5 than quintile 4.

Fig. 2.13. Infant mortality rate in selected countries and territories in the Region, by wealth quintile, 2013–2018

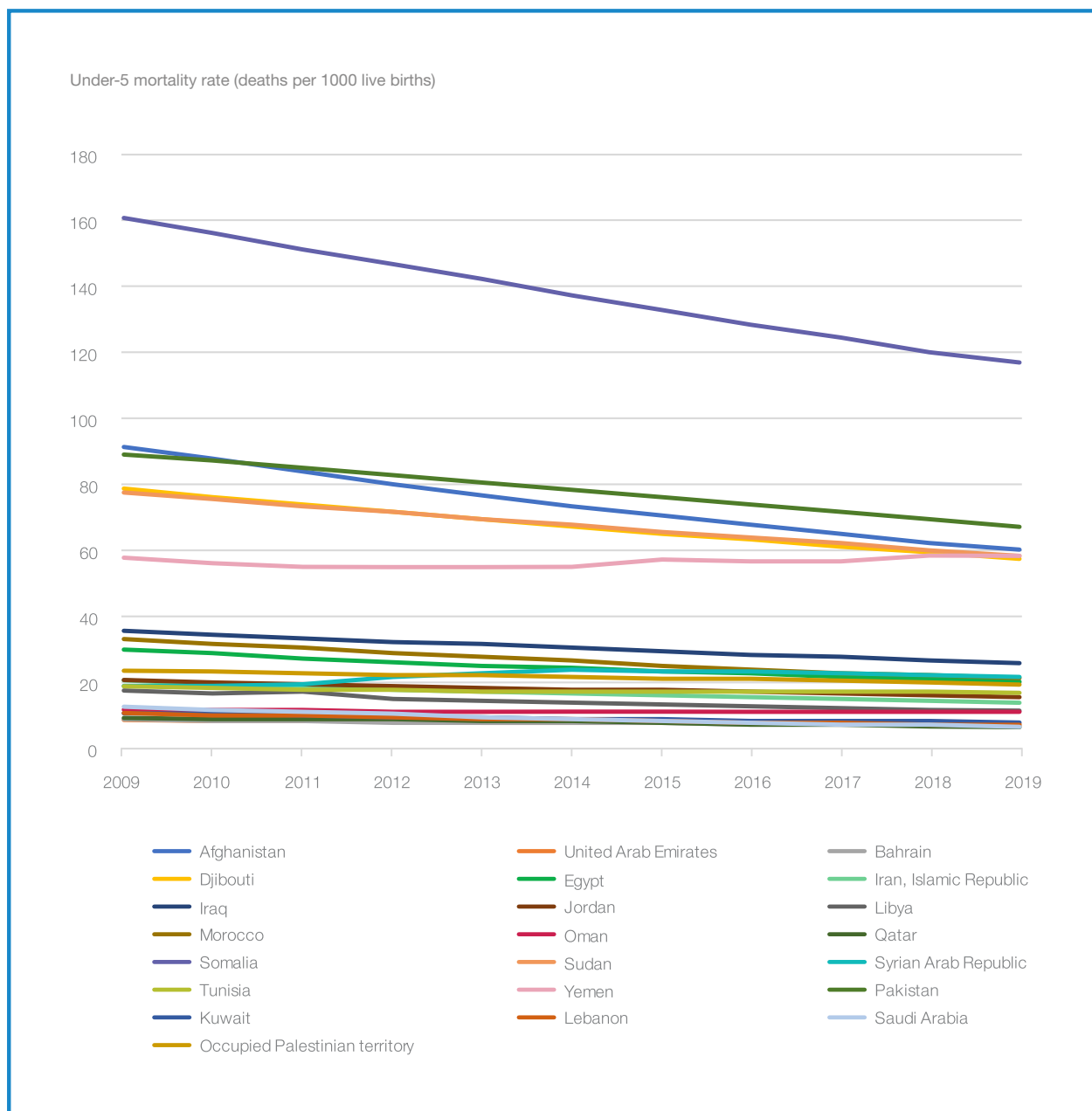


Note: Disaggregated data by wealth quintile were not available for Bahrain, Djibouti, Iran (Islamic Republic of), Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia. Syrian Arab Republic and United Arab Emirates, while data for Morocco and Somalia were from more than 10 years ago (from 2003 and 2006, respectively).

Source: WHO Global Health Observatory (29) and World Bank (23).

There is global evidence to suggest that there are wide differences in infant mortality rates within countries related to education, wealth, place of residence and refugee status (24–28). These inequities are explored further in Chapter 8. Fig. 2.14 shows trends in the under-5 mortality rate for countries in the Region for 2009–2019. In Yemen and the Syrian Arab Republic rates have increased due to the effects of conflict. In some countries there have been marked declines in rates, particularly in countries which had high levels at the start of the period.

Fig. 2.14. Under-5 mortality rate in countries and territories in the Region, 2009–2019



Note: Under-5 mortality rate refers to “the probability per 1,000 that a newborn baby will die before reaching age five, if subject to age-specific mortality rates of the specified year” (30).
 Source: World Bank (31).

While overall declines in under-5 mortality in the Region have been significant, it is important to note that these are averages for countries. In terms of the SDG target 3.2 relating to child mortality, seven countries in 2019 still had under-5 mortality rates that were higher than the global target (25 deaths per 1000 live births) for 2030 (32). Within countries and territories, widespread inequities in under-5 mortality related to socioeconomic factors and place of residence are prevalent, set out in Chapter 8.

LEADING CAUSES OF PREMATURE MORTALITY

This Commission is concerned with the social, economic, political and cultural drivers of health inequities. To understand how social determinants impact on health it is helpful to have an understanding of the leading causes of premature death, and to establish that premature deaths are both inequitably distributed and largely preventable.

Fig. 2.15 shows the leading causes of premature death in the Eastern Mediterranean Region in 2005 and 2015, and the changes between these years. Heart disease was the leading cause of premature death in both 2005 and 2015. There has been a significant increase (over 600%) in premature deaths as a result of war and legal intervention, measured by years of life lost [YLL], and a decline in YLL from natural disasters and diarrhoeal diseases. There are particularly high numbers of road traffic deaths in the Region.

Fig. 2.15. Leading causes of premature death (YLLs) in the Region, 2001–2015 and percent change

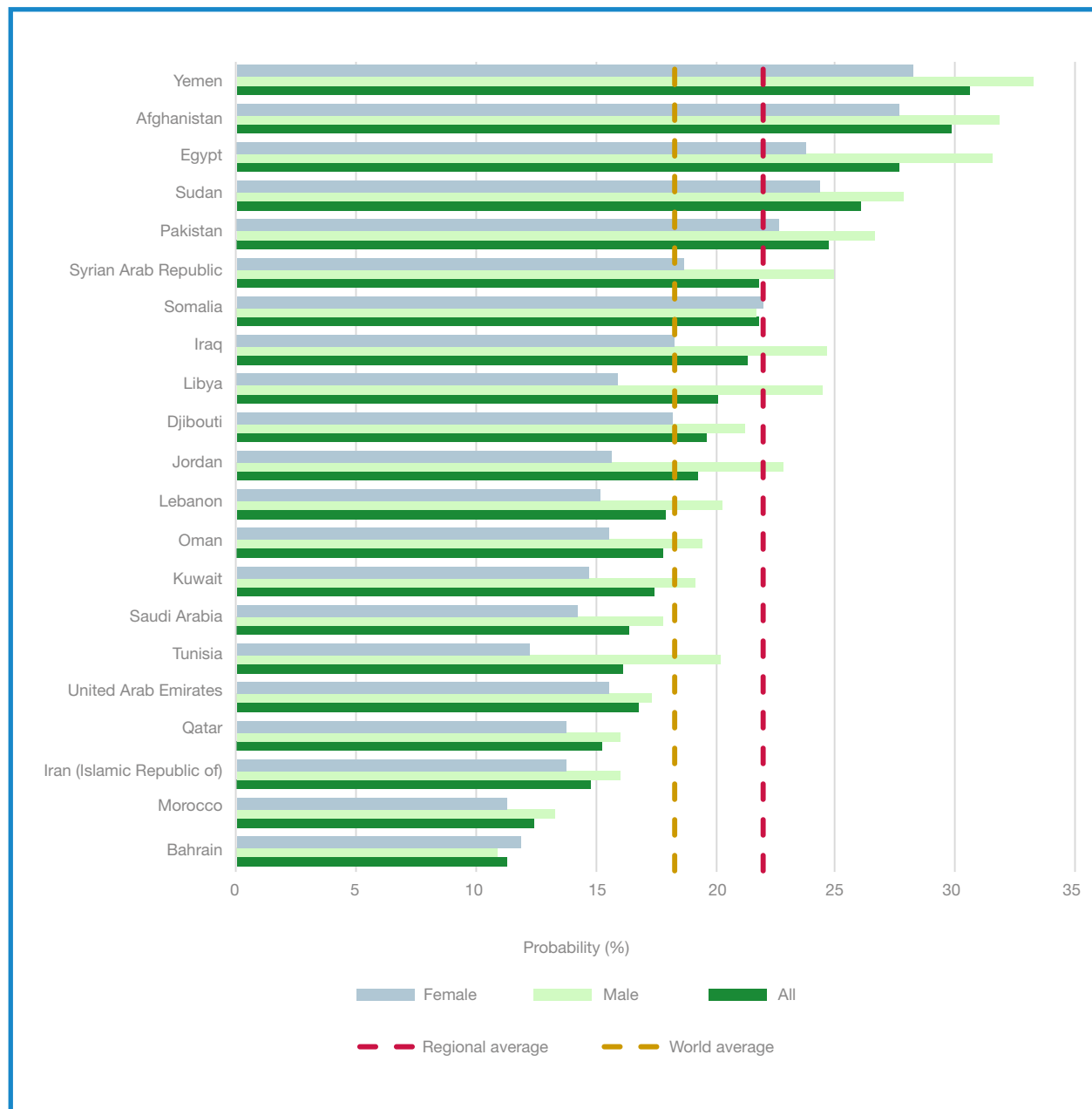


Source: Institute for Health Metrics and Evaluation (33).

NCDs

Levels of mortality from NCDs in the Region are high overall and the average for the Eastern Mediterranean Region is higher than the global average. There are, however, significant differences between countries and nearly half of countries in the Region have, on average, lower mortality from NCDs than globally. In all countries, except in Bahrain and Somalia, women have lower rates of NCDs than men (Fig. 2.16).

Fig. 2.16. Probability (%) of dying between exact ages 30 and 70 from any cardiovascular disease, cancer, diabetes or chronic respiratory disease, by country, 2016



Notes: Probability of premature death from target NCDs refers to “the percent of 30-year-old people who would die before their 70th birthday from any cardiovascular disease, cancer, diabetes, or chronic respiratory disease, assuming that s/he would experience current mortality rates at every age and s/he would not die from any other cause of death (e.g. injuries or HIV/AIDS)” (34). No available data for occupied Palestinian territory. Source: WHO Global Health Observatory (35).

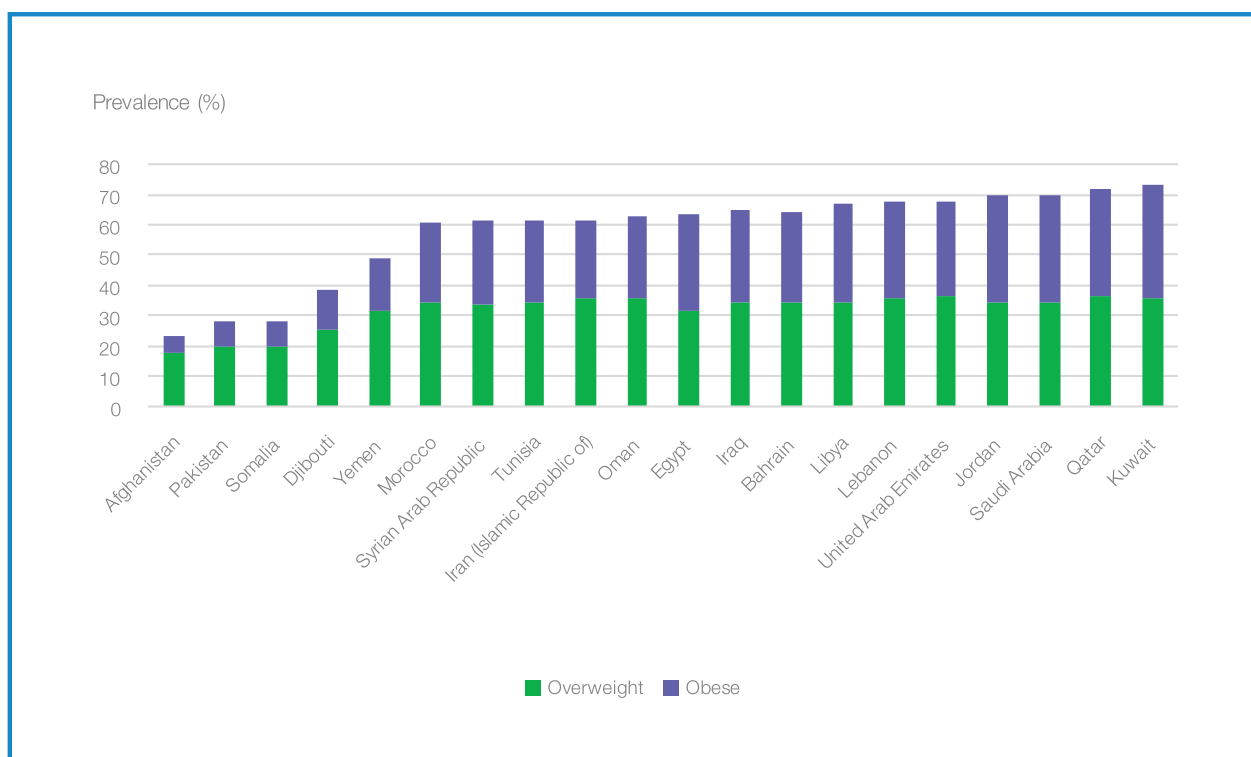
Many NCDs in the Region, as globally, are the result of poor nutrition and obesity, smoking, lack of physical exercise and exposure to carcinogens, as well as lack of access to appropriate health care. The Commission notes that while many of these health behaviours are the immediate causes of NCDs, the causes of the behaviours, or the causes of the causes of NCDs, relate to the social determinants of health. This means that poorer communities and migrants are more likely to have health behaviours that risk NCDs. Poor nutrition, underweight and stunting are closely related to poverty – not being able to afford sufficient nutritious food. Similarly, obesity is associated with poverty in many countries – purchasing cheap, calorie-dense food and refined sugars and wheat, and not having time or space to exercise. In addition, experiencing the stresses associated with poverty can lead to increased risk of NCDs. In many countries, both obesity and underweight are prevalent among poorer communities at the same time – the double burden of malnutrition. Additionally, the policies and corporate practices that, largely unregulated, support

the production of energy-rich foods without attention to nutrient content, and the proliferation of fast food outlets and low nutrition foods, have failed to secure adequate and nutritious food that is economically and socially acceptable (36–38). Foods with high levels of saturated fats, trans-fats, salt and free sugars are ubiquitous, contributing to unhealthy diets. In some countries, food subsidies increase consumption of calorie-rich foods and bread made with highly refined wheat flour, displacing healthier alternatives such as coarse grains and pulses (39–42).

OBESITY

Levels of overweight and obesity relate closely to a range of NCDs, including cardiovascular disease and type 2 diabetes. There are high levels of overweight and obesity in the Eastern Mediterranean Region, where in most countries more than 60% of the population are overweight or obese (Fig. 2.17). Prevalence in Kuwait and Qatar is exceptionally high at more than 70%.

Fig. 2.17. Prevalence (%) of overweight and obesity (age-standardized estimates) in adults aged 18 years and older, by country, 2016 or latest available year

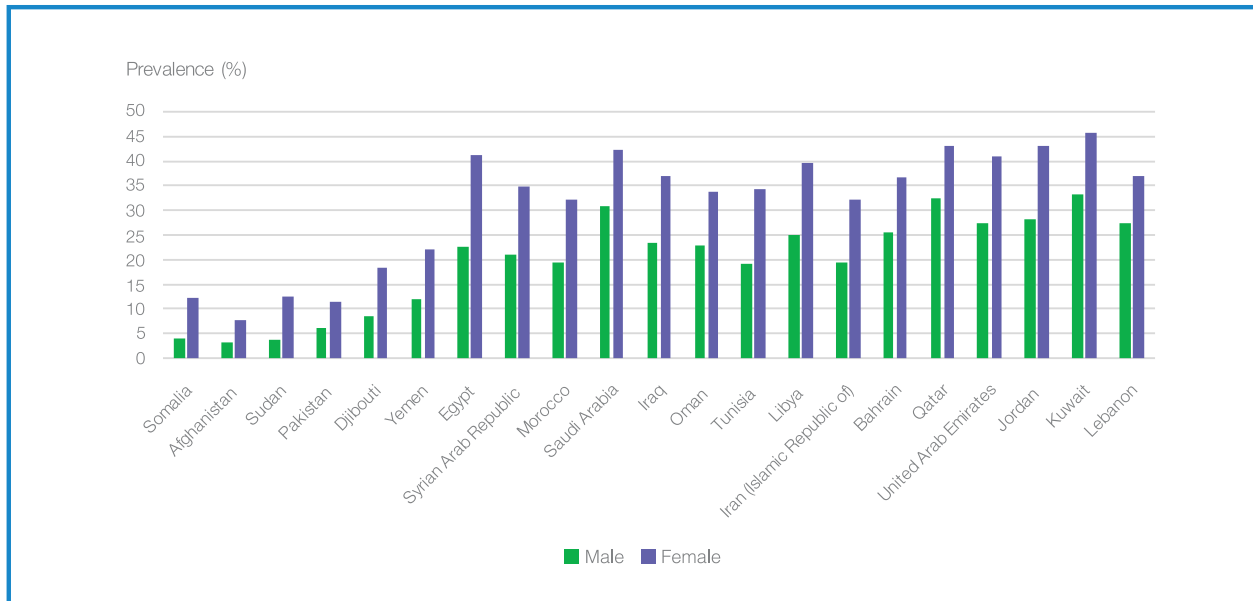


Notes: Overweight is body mass index (BMI) ≥ 25 kg/m² but < 30 kg/m² and obesity is BMI ≥ 30 kg/m². No available data for occupied Palestinian territory or Sudan.

Source: WHO Global Health Observatory (43, 44).

Fig. 2.18 shows that prevalence of obesity is higher among women than men for all countries in the Region with available data.

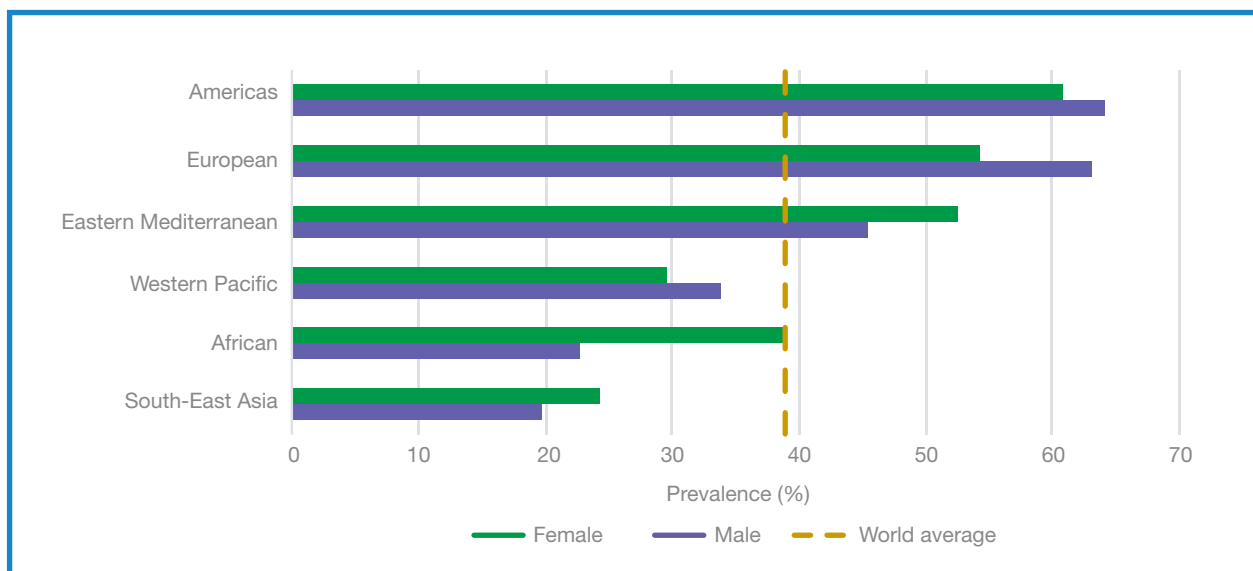
Fig. 2.18. Prevalence (%) of obesity (age-standardized estimate) among adults aged 18 years or older, by country and sex, 2016 or latest available year



Notes: Obesity is BMI ≥ 30 kg/m². No data for occupied Palestinian territory or Sudan.
Source: WHO Global Health Observatory (43, 44).

In 2016, the proportion of adults in the Region who were overweight was the third highest among WHO regions for both men and women, lower than Europe and the Americas. Unlike Europe and the Americas, rates are higher for women than men in the Eastern Mediterranean Region (Fig. 2.19).

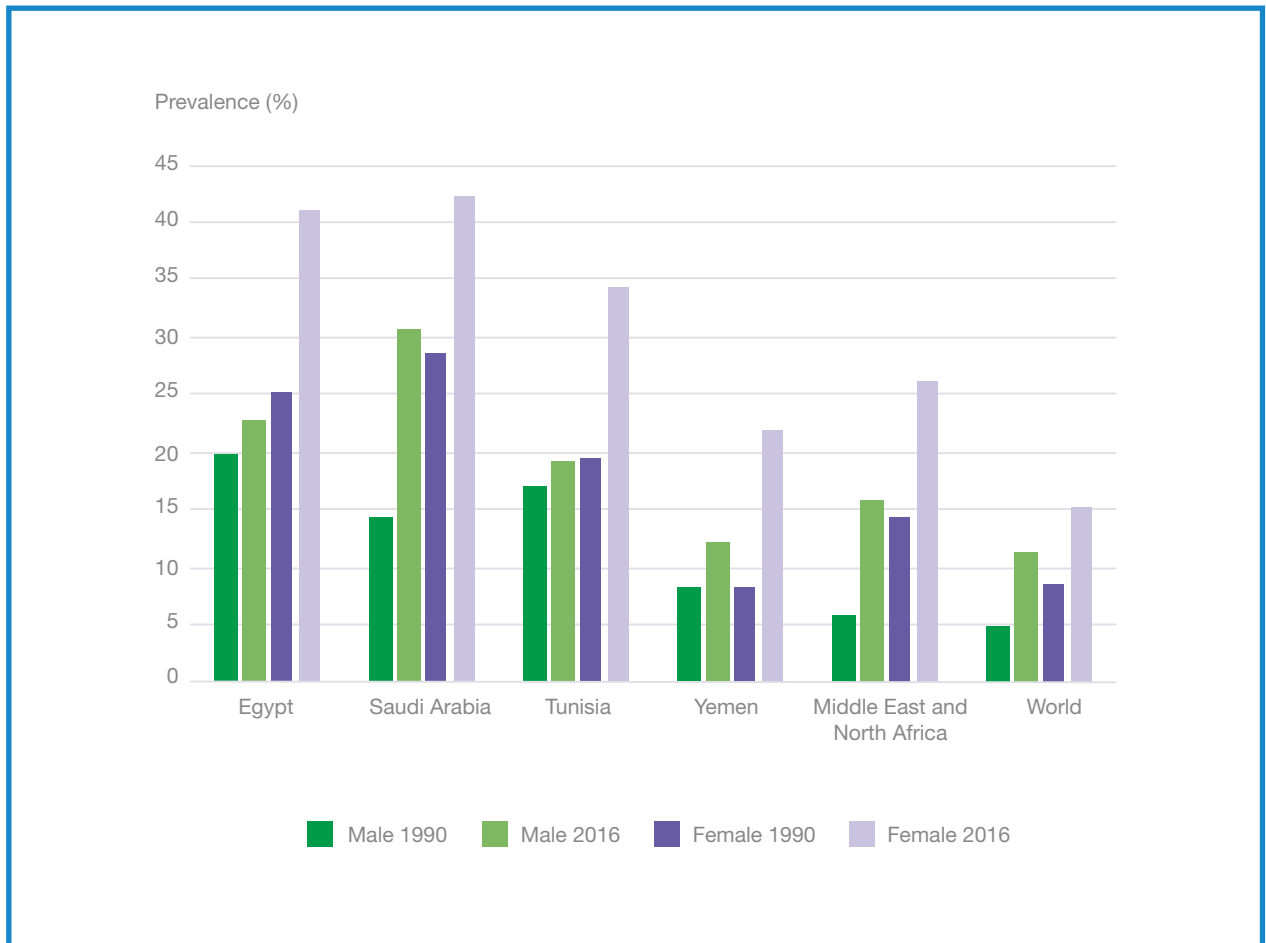
Fig. 2.19. Prevalence (%) of overweight (age-standardized) in adults aged 18 years and older, by WHO region, 2016



Note: Overweight is BMI ≥ 25 kg/m².
Source: WHO Global Health Observatory (43).

Fig. 2.20 shows obesity prevalence for selected countries between 1990 and 2016. Rates were higher and rose more rapidly in the Middle East and North Africa region than in the world. In Egypt and Saudi Arabia, female obesity rose from a little over 25% in 1990 to more than 40% in 2016. There were particularly steep increases for women compared to men in Egypt, Tunisia and Yemen, and the gender gap in obesity prevalence has widened. In Saudi Arabia, the opposite trend occurred: obesity increased more among men than women, and the gender gap decreased between 1990 and 2016, and rates among both men and women remain very high.

Fig. 2.20. Prevalence (%) of obesity in countries of the Middle East and North Africa, by sex, 1990 and 2016

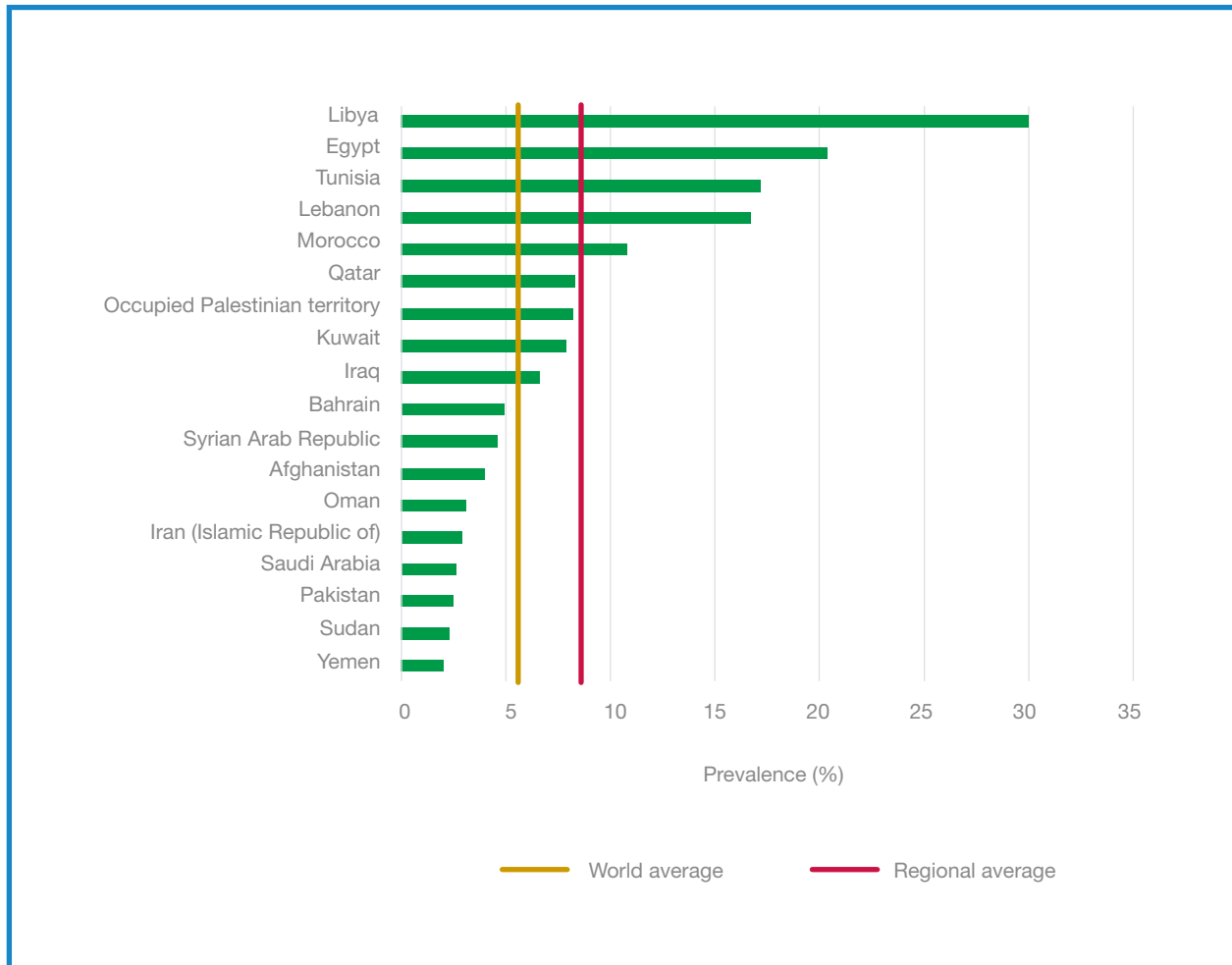


Note: Obesity is BMI ≥ 30 kg/m².

Source: Costa-i-Font & Gyori (2018) (45) based on data from WHO Global Health Observatory.

Within the Region there are also high levels of overweight among children aged under 5 years old, with nine countries and territories having rates above the global average of 5.6% (Fig. 2.21).

Fig. 2.21. Prevalence (%) of overweight in children aged under 5 in countries and territories in the Region, 2018 or latest available year



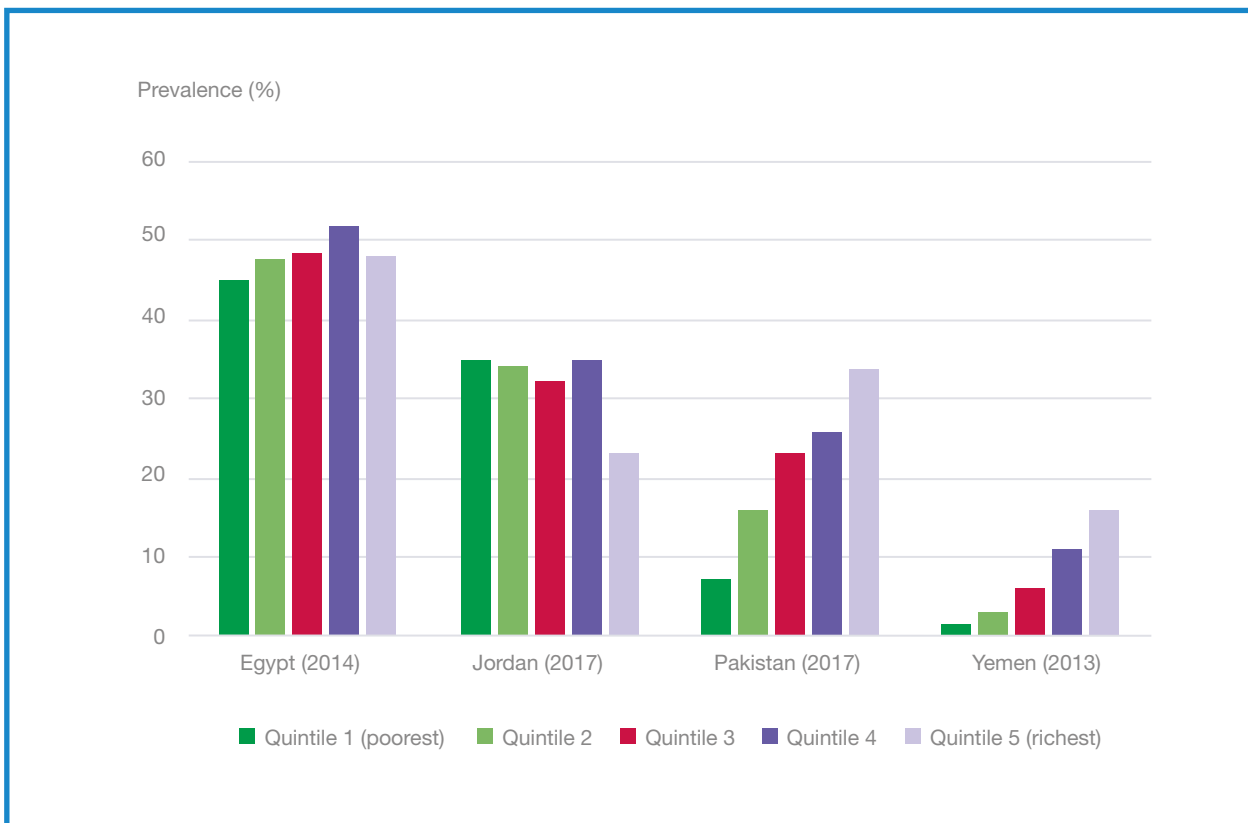
Note: No data available for Djibouti, Jordan, Somalia and the United Arab Emirates. Regional average calculated based on the countries for which data are available.

Source: World Health Organization (2020) (2). World average from WHO Global Health Observatory (46).

The patterns of socioeconomic inequity in obesity vary between countries and territories in the Region, reflecting different stages in the obesity transition. Stage 1 of the obesity transition is characterized by a higher prevalence of obesity in women than in men and in those with higher socioeconomic position than in those with lower socioeconomic position. In stage 2, there is an increase in prevalence and a narrowing of the gap between sexes and in socioeconomic differences among women. In stage 3, prevalence of obesity among those with lower socioeconomic position surpasses that of those with higher socioeconomic position, and plateaus or declines in women with high socioeconomic position (47).

Fig. 2.22 illustrates how countries in the Region are at different stages. It shows inequities in obesity prevalence for non-pregnant women aged 15–49 years. In Jordan, women in the highest wealth quintile had the lowest levels of obesity; however, in Pakistan and Yemen the wealthiest 20% of women had the highest level of obesity, as they are at an earlier stage of the obesity transition.

Fig. 2.22. Prevalence (%) of obesity in non-pregnant women aged 15–49 years in selected countries in the Region, by wealth quintile, 2013–2017

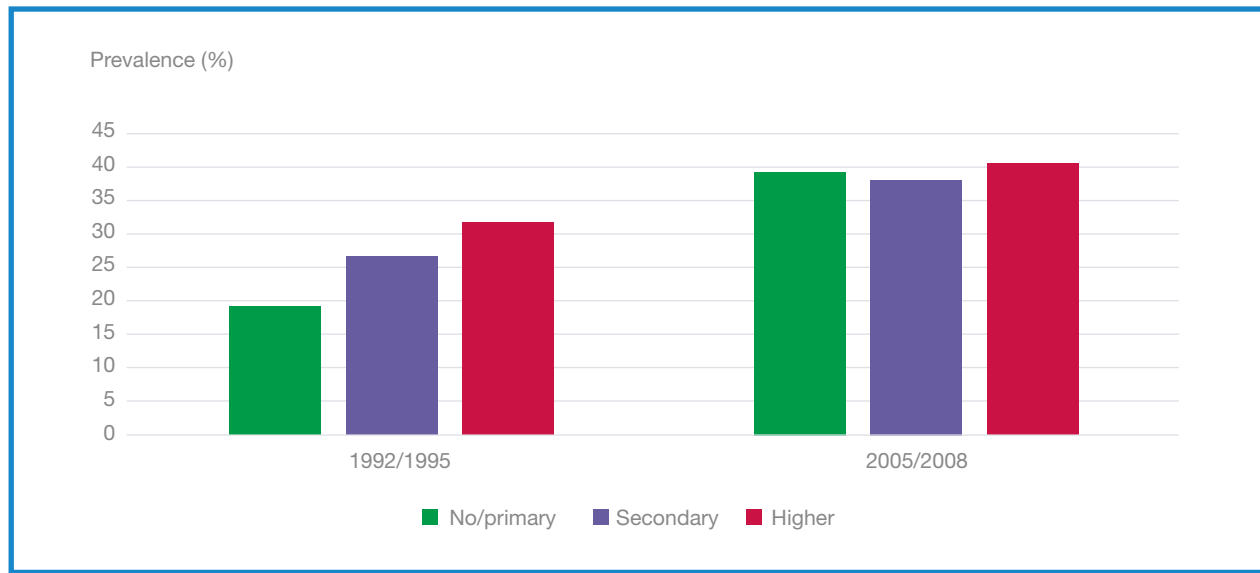


Note: Obesity is BMI ≥ 30 kg/m².

Source: WHO Global Health Observatory (48).

Within Egypt, there was a decrease in inequities in obesity related to education between 1992–1995 and 2005–2008, as shown in Fig. 2.23. In the earlier period, obesity was more prevalent among groups with higher levels of educational attainment. By 2005–2008, the prevalence was still highest in the most educated group; however, the increase in obesity was significantly higher in less educated groups (20.2%) compared to those with more education (8.2%).

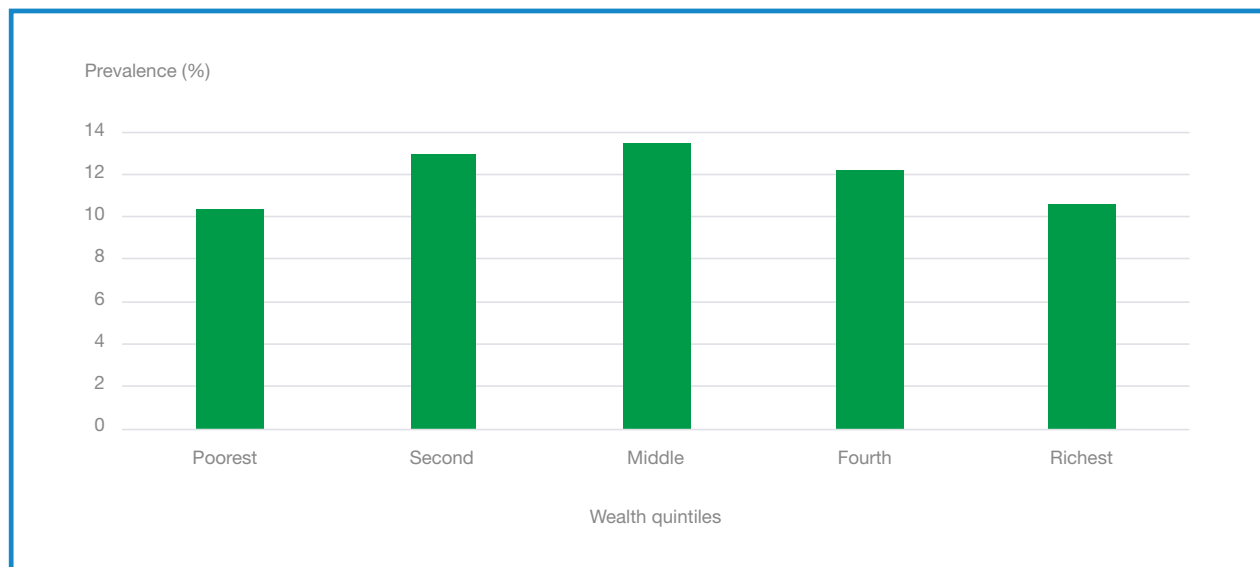
Fig. 2.23. Prevalence (%) of obesity by level of education in Egypt, between 1992/1995 and 2005/2008



Source: Aitsi-Selmi et al. (2012) (49).

Reflecting inequities in overweight and obesity in the Region, there are differences in prevalence of diabetes related to socioeconomic position. A study in the Islamic Republic of Iran in 2016 showed lower levels of diabetes in the higher wealth quintiles (Fig. 2.24). However, the lowest levels of diabetes were in the poorest quintile, which has relatively high levels of food insecurity and more traditional Middle Eastern diets that are low in processed food.

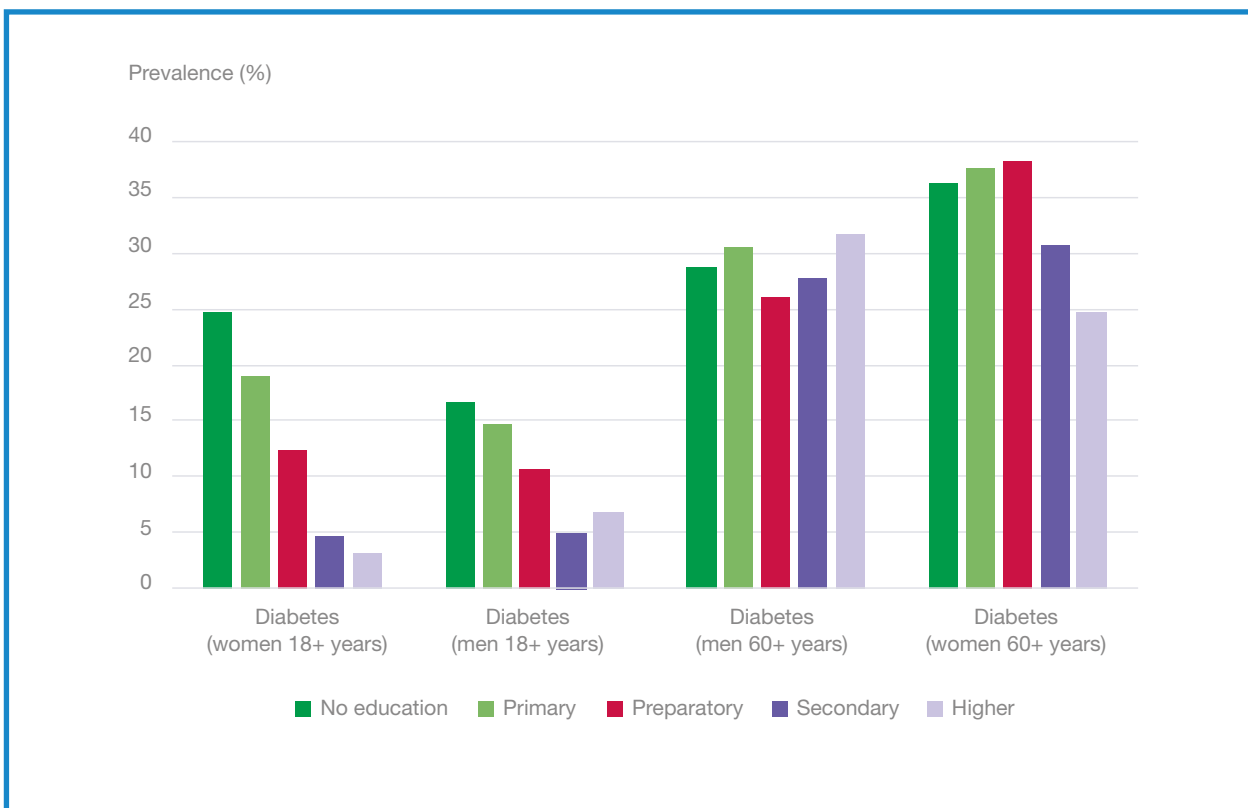
Fig. 2.24. Prevalence (%) of diabetes based on blood glucose level (HbA1c) in Islamic Republic of Iran, by wealth quintile, 2016



Source: VIZIT (2016) (50).

Fig. 2.25 shows that in Jordan there are educational inequities in rates of diabetes for people aged under 60 years old. This reinforces the point that obesity, and hence likelihood of diabetes type 2, is related to socioeconomic position.

Fig. 2.25. Prevalence (%) of diabetes in Jordan, by education, 2017

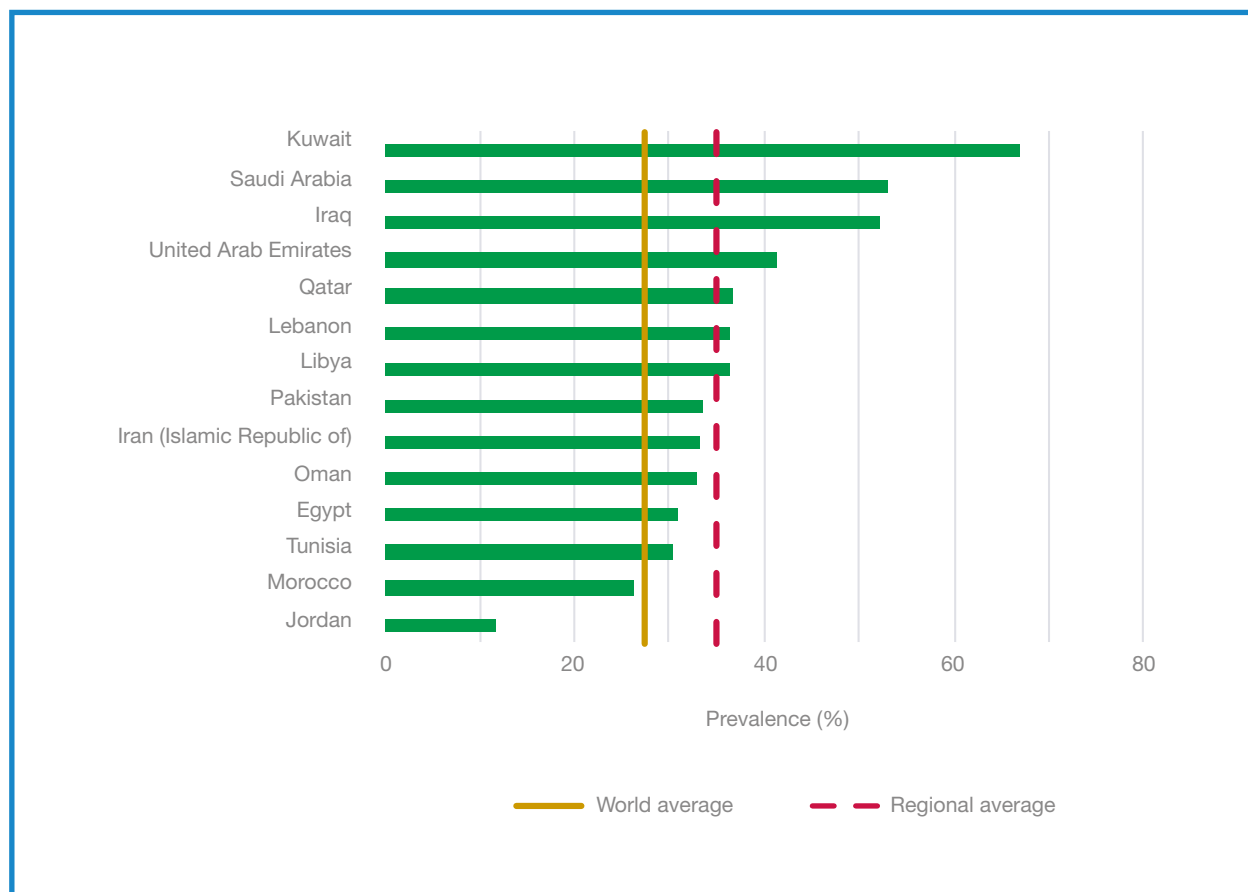


Source: Khadr et al. (2019) (16) based on data from Jordan Population and Family Health Surveys 2017.

PHYSICAL ACTIVITY

In many countries of the Region there are high levels of insufficient activity (defined as below 150 minutes of moderate intensity physical activity per week), which contributes to high prevalence of overweight and obesity and a range of cardiovascular diseases. In all countries shown in Fig. 2.26, more than 20% of the population do insufficient physical activity, and this rises to more than half of the population in Iraq, Saudi Arabia and Kuwait. Cultural expectations have been cited by WHO as a factor which may restrict the participation of women in exercise (51). As such, this could be a contributing factor for low levels of female physical activity and contribute to high levels of obesity.

Fig. 2.26. Prevalence (%) of insufficient physical activity (age-standardized estimate) among adults aged 18 years and older in selected countries in the Region, 2016



Notes: No available data for Afghanistan, Bahrain, Djibouti, Jordan, occupied Palestinian territory, Somalia, Sudan, Syrian Arab Republic and Yemen. Data for the regional and world averages provided by WHO.

Source: WHO Global Health Observatory (52).

FOOD INSECURITY

Most countries in the Region carry a double burden of malnutrition: the coexistence of undernutrition (wasting, stunting, underweight) and inadequate vitamins or minerals, alongside overweight, obesity and resulting diet-related NCDs (53). A 2019 report on food security and nutrition in the Near East and North Africa region¹ indicates that nearly 55 million people in the Arab states (13.2% of the population) are hungry and the situation is particularly worrying in countries affected by conflict and violence (1). The impacts of the COVID-19 pandemic are increasing levels of hunger and food insecurity in the Region, and actions to build back fairer must include alleviating food insecurity and building sustainable food systems. Agricultural productivity and food production in the Region are also threatened by the impacts of climate change and loss of productive soil and biodiversity – these issues are set out in Chapter 7, where proposals for action in the Region are outlined.

¹ The Near East and North Africa region for the Food and Agriculture Organization of the United Nations (FAO) includes Algeria, Bahrain, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritana, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, West Bank and Gaza Strip, and Yemen.

Fig. 2.27 shows the trend in moderate or severe food insecurity between 2014–2016 and 2017–2019 in countries with available data. There has been a concerning increase in food insecurity in Afghanistan, Libya, Sudan, Egypt and Tunisia. In the Islamic Republic of Iran, the prevalence of food insecurity fell, despite the impact of sanctions.

Fig. 2.27. Prevalence (%) of moderate or severe food insecurity in selected countries in the Region, 2014/2016 and 2017/2019



Note: No available data for Bahrain, Djibouti, Jordan, Iraq, Morocco, Oman, Lebanon, occupied Palestinian territory, Pakistan, Qatar, Syrian Arab Republic, Yemen and United Arab Emirates.

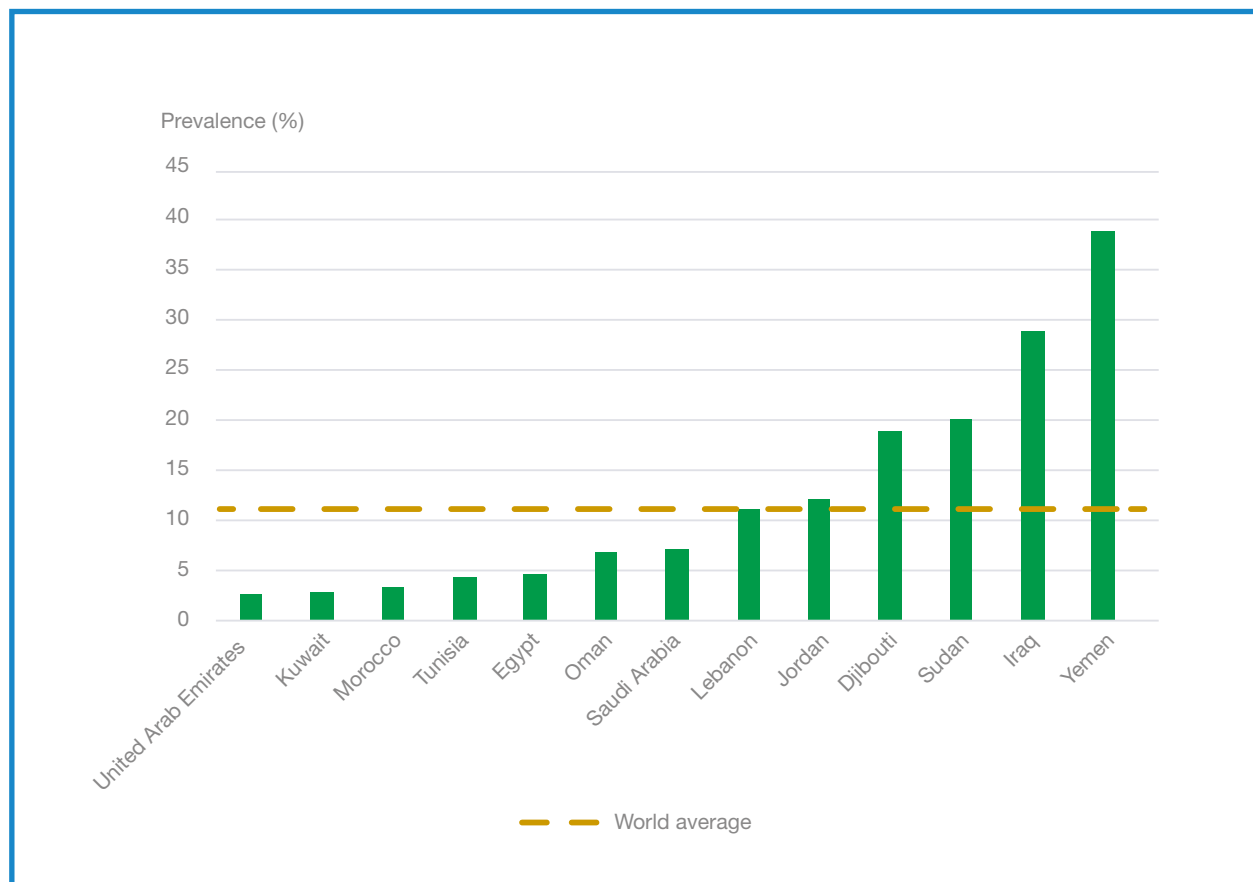
Source: WHO Nutrition Landscape Information System (54).

In Yemen in 2018, the food security status of 15.9 million people reached Phase 3 of the Integrated food security Phase Classification (IPC) system: “crisis, emergency or catastrophe”. In the Syrian Arab Republic, 6.5 million people are food insecure. In Iraq, 2.5 million people are food insecure and in need of assistance, while in Sudan 6.2 million people were classified as phase 3 or above in 2018 (55). These high rates of food insecurity are the result of conflict and fragility in these countries (1). The World Food Programme (WFP) has warned that hunger and food insecurity will increase as a result of the COVID-19 pandemic (56).

UNDERNOURISHMENT

Undernourishment is an important indicator of food insecurity (57). Undernutrition can have significant impacts on health, including an increased vulnerability to disease, stunted growth, chronic health conditions and death (53, 58). Developing solutions for reducing hunger and malnutrition is important to sustainable development in that undernourishment can have significant impacts on labour productivity and earning capacity (57). Among the countries shown in Fig. 2.28, five have higher rates of undernourishment than the global average of 10.8%.

Fig. 2.28. Prevalence (%) of undernourishment in selected countries in the Region, 2017

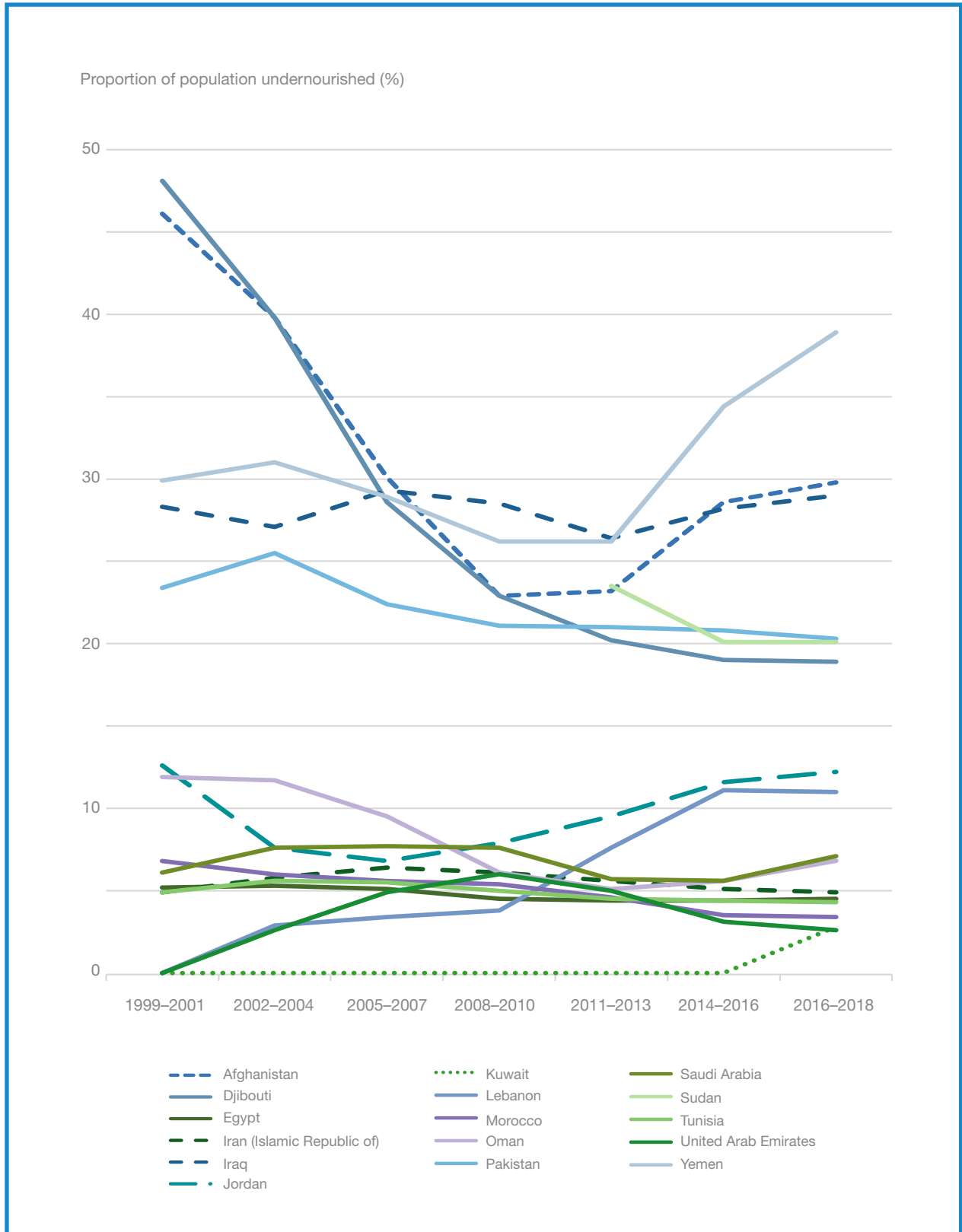


Notes: Prevalence of undernourishment is “an estimate of the proportion of the population whose habitual food consumption is insufficient to provide the dietary energy levels that are required to maintain a normal active and healthy life” (59). No available data for Afghanistan, Bahrain, Islamic Republic of Iran, Lebanon, Libya, Pakistan, occupied Palestinian territory, Qatar and Syrian Arab Republic. World average from World Bank, regional average not available due to missing data.

Source: Economic and Social Commission for Western Asia (ESCWA) (60).

Fig. 2.29 shows trends in the percentage of the population below the minimum level of dietary energy requirement (undernourishment) between 1999/2001 and 2016/2018. Across the Region, promising declines in levels of undernourishment reversed in 2010/2012 in Afghanistan, Oman and Yemen. Djibouti has seen a steep reduction in levels of undernourishment over the whole period, and Pakistan and Sudan have also experienced some improvement, albeit at slower rates and with persisting high levels.

Fig. 2.29. Population below minimum level of dietary energy requirement (undernourishment) (%) in selected countries in the Region, between 1999 and 2018



Note: No available data for Bahrain, Libya, occupied Palestinian territory, Qatar, Somalia and Syrian Arab Republic.
 Source: WHO Nutrition Landscape Information System (54).

The United Nations 2030 Agenda for Sustainable Development envisages “a world free of poverty, hunger, disease and want where food is sufficient, safe, affordable and nutritious” (61). The food system in the 2030 Agenda is expected to ensure availability and access to enough safe food to satisfy the nutritional needs and preferences of a growing population and their right to a healthy life, leaving no one behind. Alongside this is the adoption of sustainable agricultural practices, discussed further in Chapter 7. The impacts of COVID-19 have undermined progress towards these objectives, as set out in Chapter 3.

In 2019, WHO in collaboration with the Food and Agriculture Organization of the United Nations (FAO), UNICEF, WFP and the Arab League developed a nutrition strategy for the Region (1). *The Strategy on nutrition for the Eastern Mediterranean Region 2020–2030* (62) provides a framework for action towards achieving the SDG targets relating to nutrition and diet-associated NCDs, as well as for guiding implementation of the remaining United Nations Decade of Action on Nutrition (2016–2025). The overriding vision of the strategy is to strengthen “action on nutrition to achieve food security, end all forms of malnutrition and improve nutrition through the life course by 2030” (62). A 2020 report by FAO, the International Fund for Agricultural Development (IFAD),

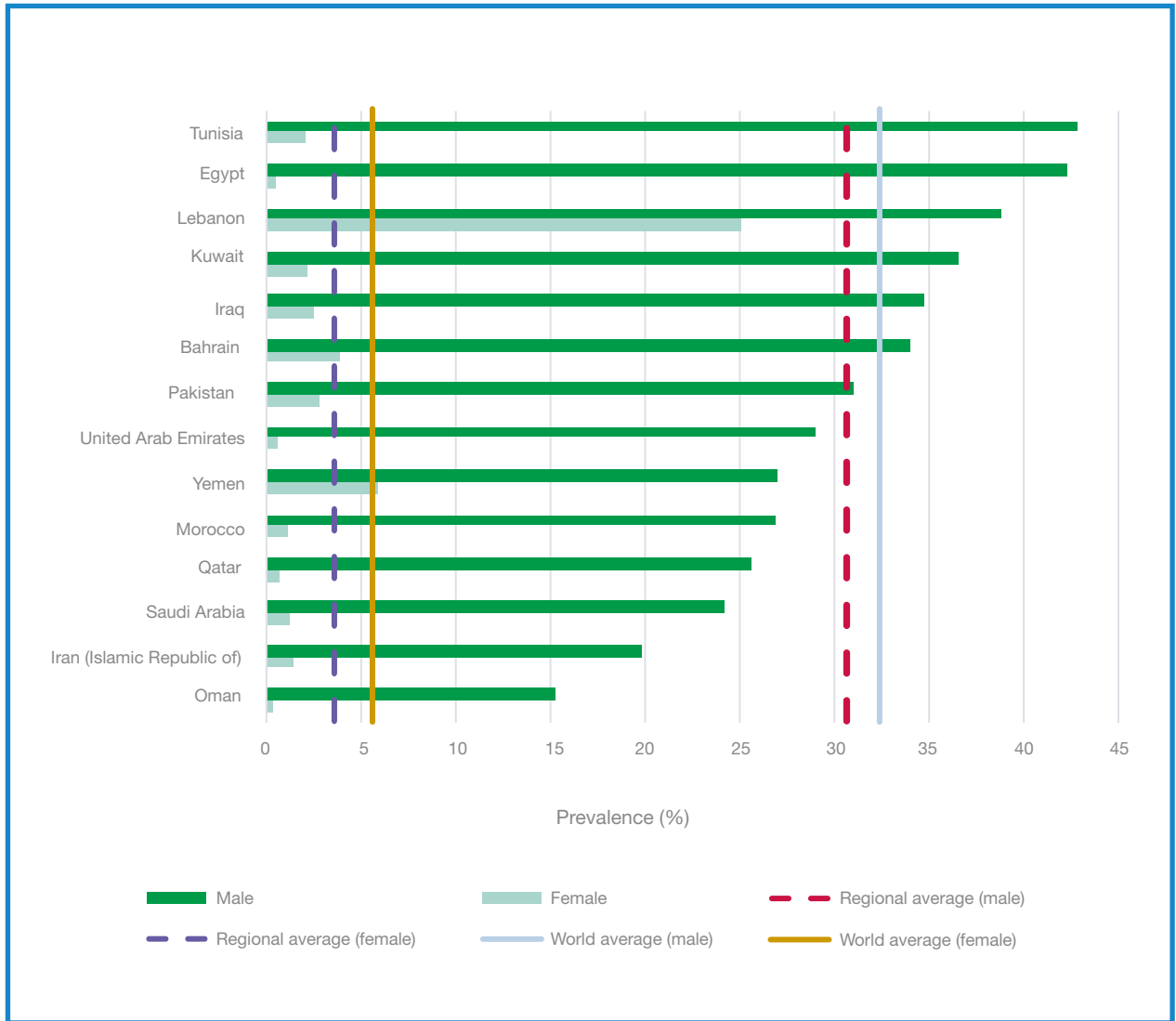
UNICEF, WFP and WHO also highlights the importance of addressing the root causes of undernourishment and food insecurity in the Arab region, such as conflict, as well as the importance of enabling drivers for success, such as empowering women and promoting gender equality, for progress in meeting SDG targets 2.1 and 2.2 (ending all forms of hunger and malnutrition, respectively) (1).

To achieve SDG 2 (zero hunger) action is needed to reverse many current trends in food security and nutrition. In Chapter 5, the widespread proliferation and marketing of unhealthy food products and lack of regulation in the Region is outlined, along with recommendations for strengthening the regulation of unhealthy food products.

TOBACCO USE

Fig. 2.30 shows that tobacco smoking rates among males (aged 15 years or older) are more than 10 times higher than for females in most countries in the Region. The smoking rates for men in six countries (Tunisia, Egypt, Lebanon, Kuwait, Iraq and Bahrain) exceed the global average for males of 32.4%. For females, two countries in the Region (Lebanon and Yemen) have smoking rates higher than the global average for females of 5.5%.

Fig. 2.30. Prevalence (%) of current tobacco smoking (age-standardized) among people aged 15 years and older in selected countries in the Region, by sex, 2018 estimates

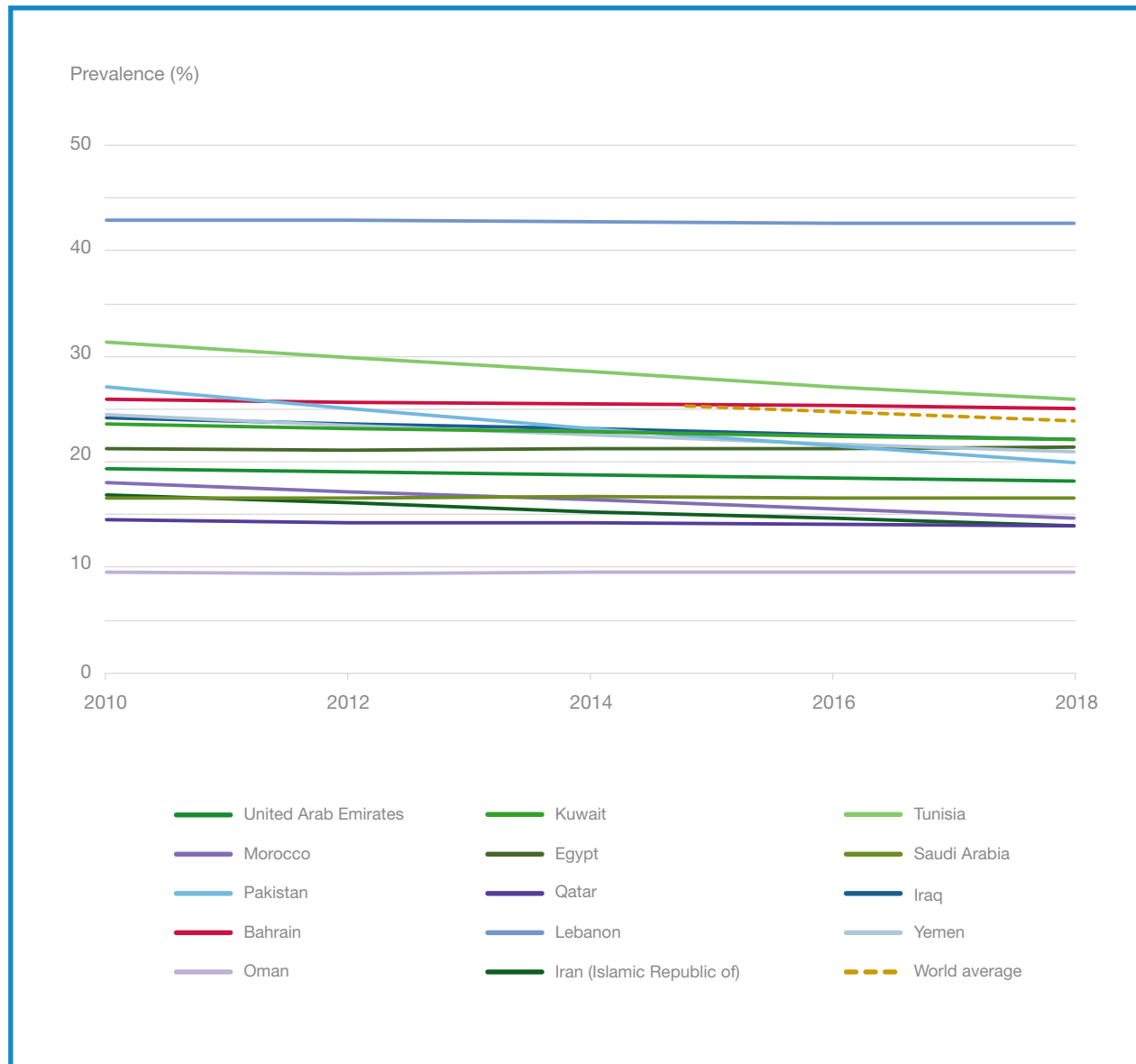


Notes: Prevalence of current tobacco smoking includes “cigarettes, cigars, pipes or any other smoked tobacco products”. Current smoking includes both daily and non-daily or occasional smoking (63). No available data for Afghanistan, Djibouti, Jordan, Libya, occupied Palestinian territory, Somalia, Sudan and Syrian Arab Republic.

Source: WHO (2019) (64).

Efforts to reduce smoking rates across the Region have not had great impact. While there was a decrease in tobacco use in some countries between 2010 and 2018, these decreases were marginal, and in many countries the prevalence remained largely unchanged. Declines in tobacco use have continued steadily, however, in Pakistan, Tunisia, Morocco and the Islamic Republic of Iran (Fig. 2.31).

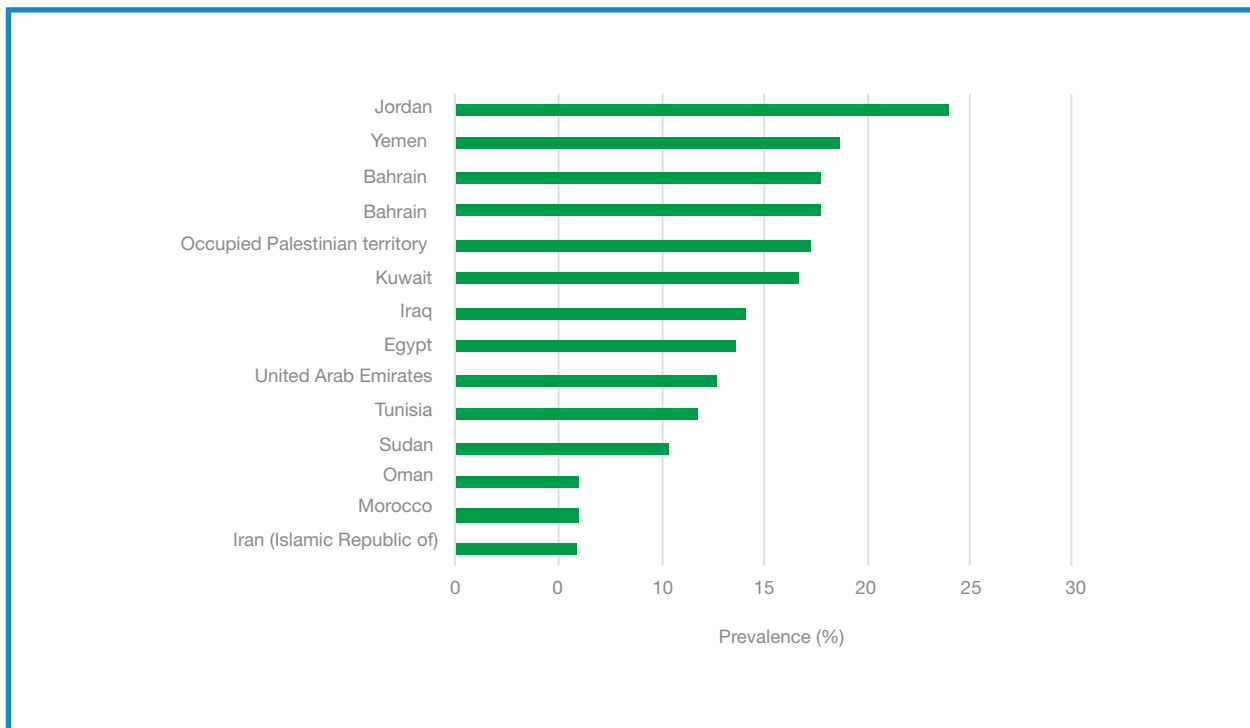
Fig. 2.31. Trends in prevalence (%) of current tobacco use among of adults aged 15 years and older in selected countries in the Region, 2010–2018



Notes: Prevalence of current tobacco use refers to “the percentage of the population ages 15 years and over who currently use any tobacco product (smoked and/or smokeless tobacco) on a daily or non-daily basis. Tobacco products include cigarettes, pipes, cigars, cigarillos, waterpipes (hookah, shisha), bidis, kretek, heated tobacco products, and all forms of smokeless (oral and nasal) tobacco. Tobacco products exclude e-cigarettes (which do not contain tobacco), “e-cigars”, “e-hookahs”, JUUL and “e-pipes” (65). No data available for Afghanistan, Djibouti, Jordan, Libya, occupied Palestinian territory, Somalia, Sudan and Syrian Arab Republic.
Source: World Bank (66) based on data from WHO Global Health Observatory.

In some countries and territories of the Region, there are high rates of tobacco use among young people, at an age when health impacts are particularly damaging and life-long patterns of smoking are set. Fig. 2.32 shows that tobacco use among 13–15-year-olds is highest in Jordan, which had prevalence four times higher than the Islamic Republic of Iran (the country with the lowest level of use among adolescents) in 2017.

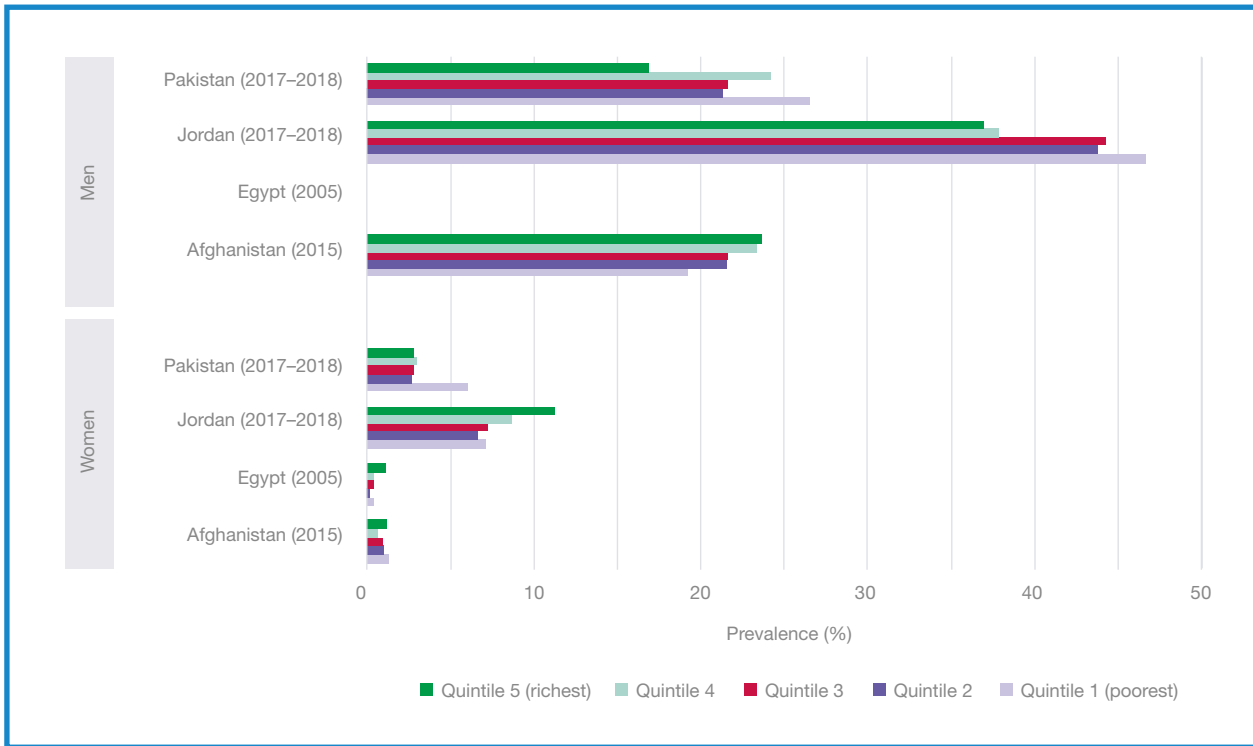
Fig. 2.32. Prevalence of current tobacco use among adolescents (aged 13–15 years) in selected countries and territories in the Region, 2018 or latest available year



Notes: Prevalence of current tobacco use in adolescents refers to the “prevalence of tobacco use (including smoking, oral tobacco and snuff) on more than one occasion in the 30 days preceding the survey, among adolescent 13-15 year olds” (67). Global and regional averages are not available. No data available for Afghanistan, Djibouti, Lebanon, Libya, Pakistan Saudi Arabia, Somalia, Syrian Arab Republic, Source: WHO Monitoring health and health system performance in the Eastern Mediterranean Region (2020) (2).

Where data are available for the Region, they show inequities in smoking within countries related to household income (Fig. 2.33). Smoking rates are highest in the lowest wealth quintile for both women and men in Pakistan, and for women in Afghanistan and men in Jordan. For women in Jordan and men in Afghanistan, however, smoking rates are highest in the wealthiest quintile. In Egypt, rates are highest in the wealthiest quintile for women. No data was available for smoking among men by wealth quintile in Egypt. If these countries follow the smoking trajectory of other countries globally, smoking is likely to decrease in the wealthiest quintile and stay high, or increase, in lower income groups, further widening health inequities.

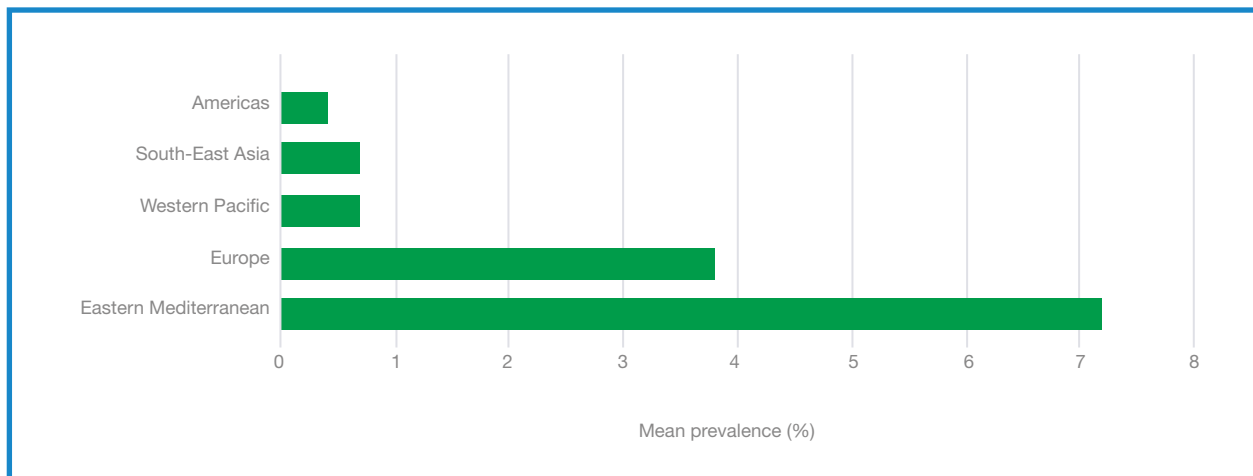
Fig. 2.33. Prevalence of cigarette smoking (%) in selected countries in the Region, by wealth quintile and sex, 2005–2012



Source: USAID STATcompiler (68).

Data from a systematic review establishes that regular and occasional use of waterpipe tobacco is far higher in the Eastern Mediterranean Region than in other WHO regions (Fig. 2.34). Waterpipe tobacco smoking is a method of consuming tobacco involving the tobacco being heated and drawn through water and then inhaled via a pipe (69). This method is also estimated to be particularly common among adolescents aged 13–15 years (69). Tobacco companies have been marketing waterpipe and other tobacco products, particularly to young people, through social media (discussed further in Chapter 5).

Fig. 2.34. Country-weighted mean prevalence estimates of regular or occasional use of waterpipe, by WHO region, 2018

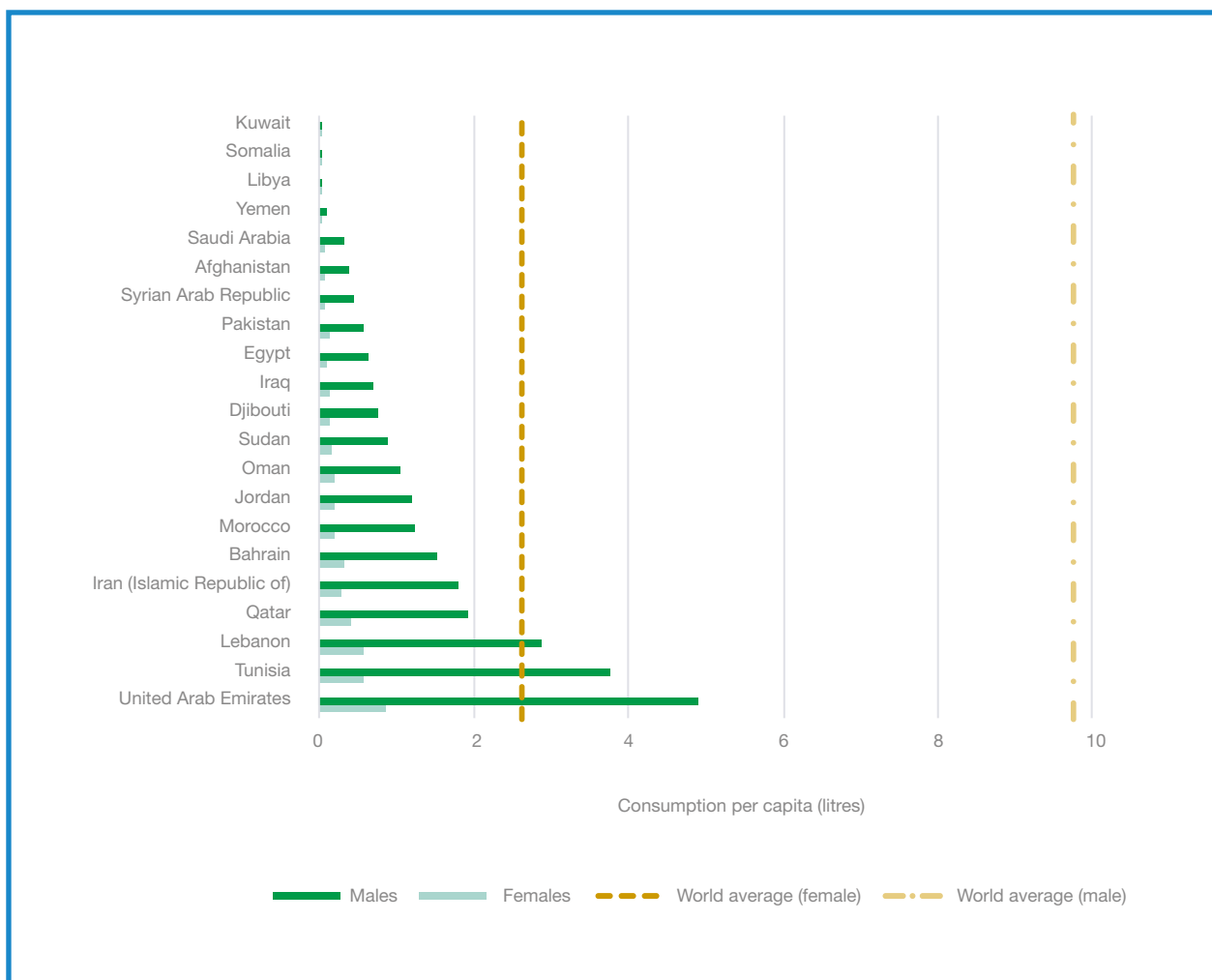


Source: Jawad (2018) (70).

ALCOHOL USE

Across the Eastern Mediterranean Region alcohol consumption is low, due to religious norms. Consumption is higher for men than women in the Region, but rates for both sexes are much lower than the global averages. Tunisia and the United Arab Emirates have the highest rates of alcohol consumption in the Region, for both men and women. GCC countries have large numbers of economic migrants who tend to have higher alcohol consumption, although Fig. 2.35 excludes consumption by tourists.

Fig. 2.35. Total alcohol consumption per capita per year (litres of pure alcohol, projected estimates), by country and sex, 2018



Notes: Total alcohol per capita consumption is defined as “the total (sum of recorded and unrecorded alcohol) amount of alcohol consumed per person (15 years of age or older) over a calendar year, in litres of pure alcohol, adjusted for tourist consumption” (71). No data available for occupied Palestinian territory.

Source: World Bank (72) based on data from WHO Global Health Observatory.

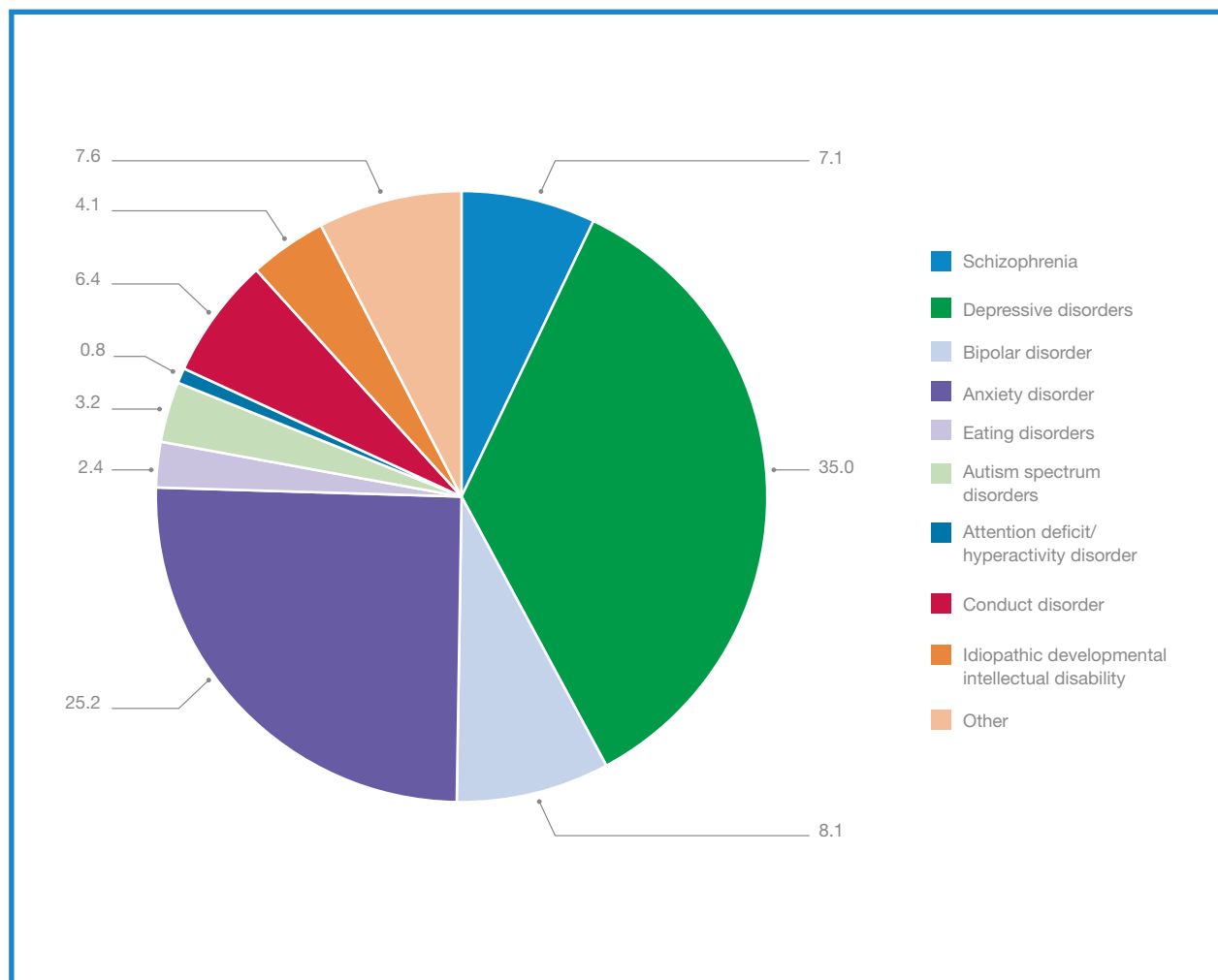
MENTAL HEALTH

Political, economic, social and cultural arrangements and inequities, high levels of conflict and fragility, and high levels of poverty and hunger all lead directly to poor and unequal mental health, which is a major component of health inequity. Across the Region, inequities in critical social determinants of health are likely to result in widespread inequities in mental health (3, 73) which are compounded by lack of access to appropriate therapies and treatments (3). In all countries and territories of the Eastern Mediterranean Region, as is the case globally, rates of mental ill health are likely to be much higher than those recorded

and presented here, due to low levels of awareness, identification and recording of mental health disorders.

Fig. 2.36 shows the distribution of disability-adjusted life years (DALYs) due to mental disorders in the Region, by diagnosis, based on data from the Global Burden of Disease Study (74). Depression and anxiety are the most common diagnoses in the Region, as is the case globally. Both of these types of mental disorders relate to social and economic conditions and are often preventable with improvements to those conditions and with effective therapies and treatments. Emerging global data about the impact of the COVID-19 pandemic, particularly the impacts of lockdowns, unemployment and increasing poverty, point to significant increases in mental health problems, particularly for younger people (75).

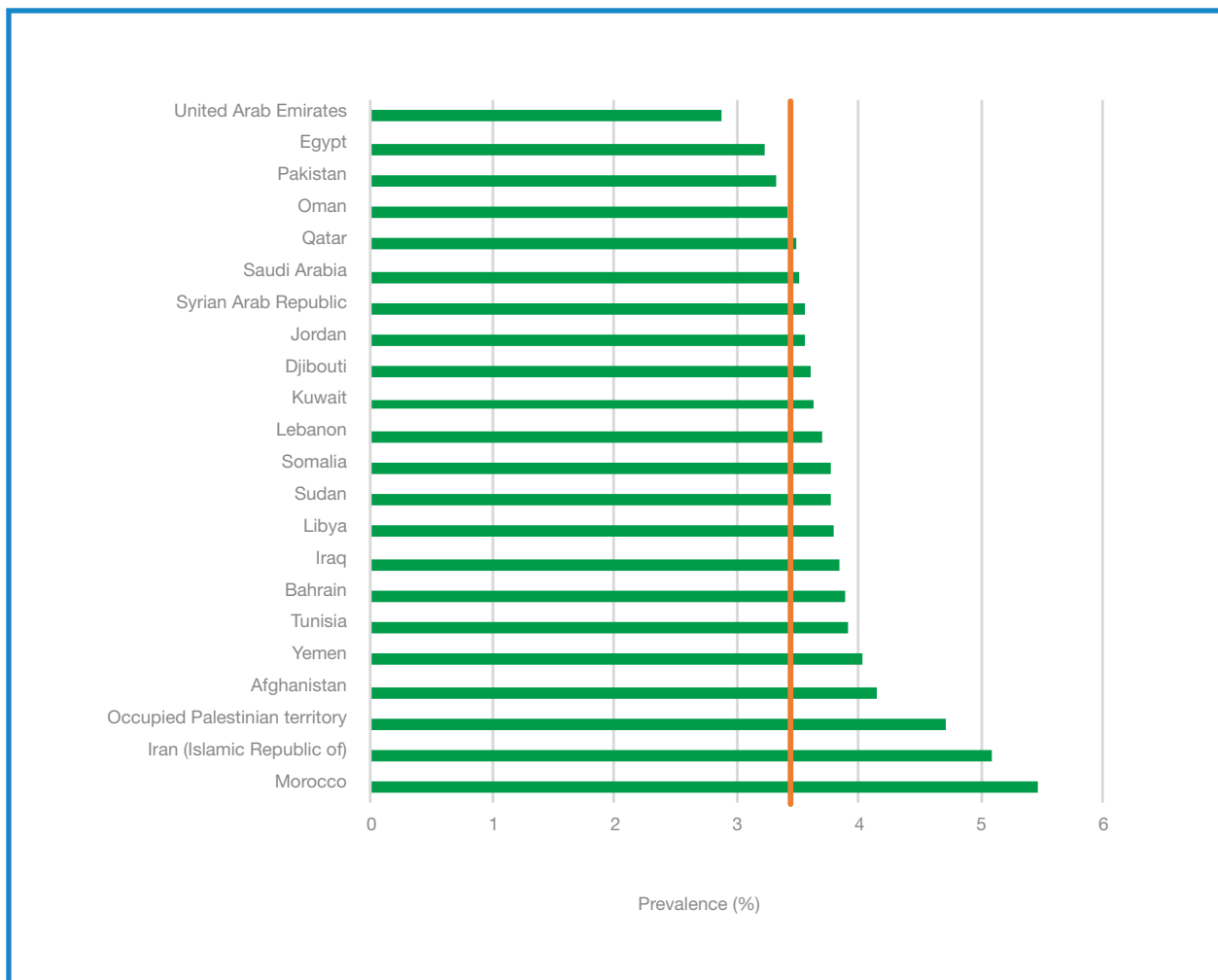
Fig. 2.36. Distribution of DALYs (%) due to mental disorders in the Region, by diagnosis, 2017



Source: Global Burden of Disease Study 2017 (74).

Across the Region, there is variation between countries and territories in the prevalence of diagnosed depressive disorders as shown in Fig. 2.37. These disorders are recorded as highest in Morocco and lowest in Egypt. Comparison between countries is not particularly informative, however, as identification and diagnoses differ between countries, and may relate to availability of health care and diagnosis rather than level of depressive disorders. However, despite the data limitations, rates are generally high in the Region and only three countries had rates lower than the world average in 2016.

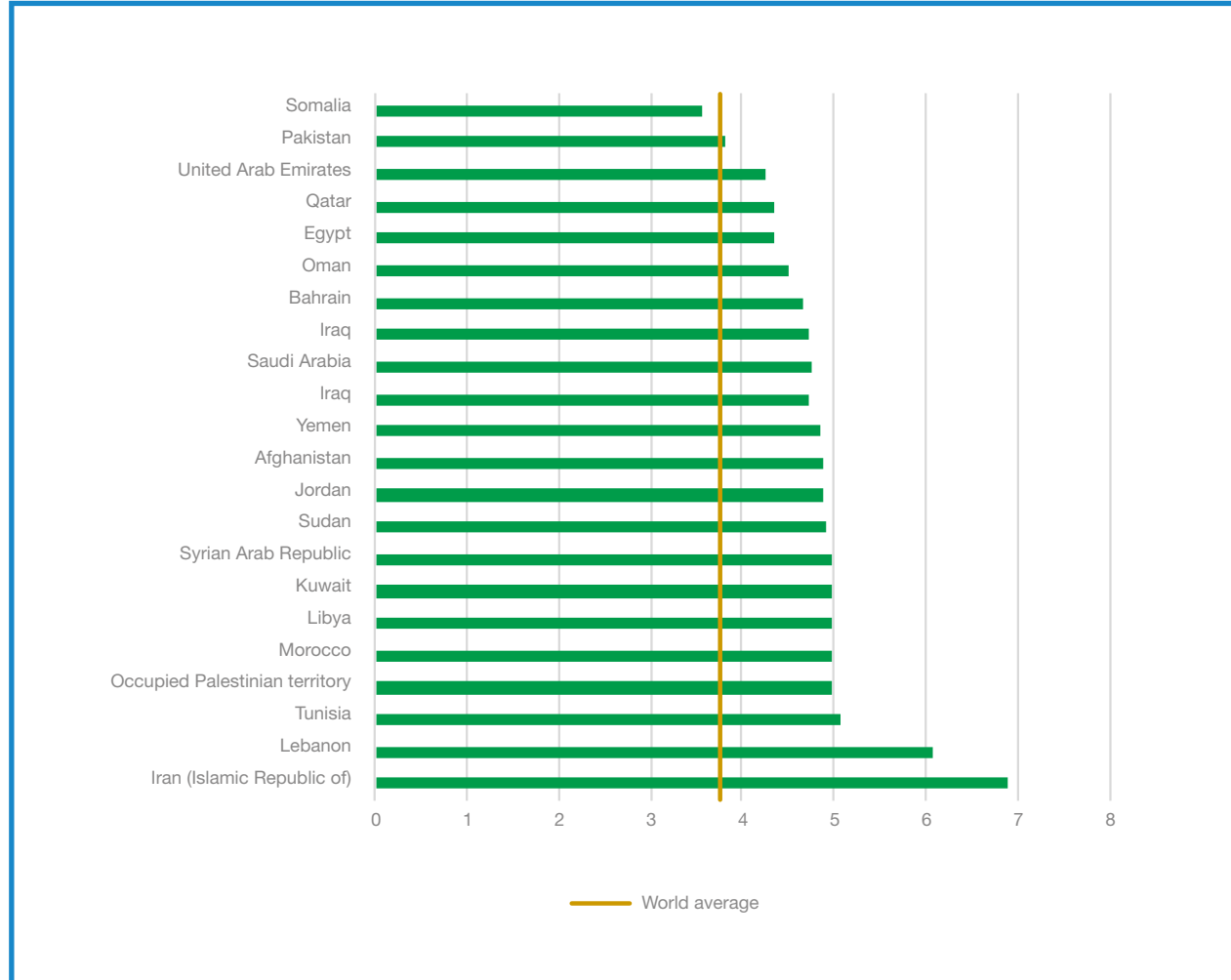
Fig. 2.37. Prevalence (%) of depressive disorders (age-standardized) in countries and territories in the Region, 2016



Source: Our World in Data (2018) (76) based on data from Global Burden of Disease Study 2017.

Prevalence of identified anxiety disorders in the Region is also high, and only one country (Somalia) has prevalence lower than the global average, shown in Fig. 2.38. Again, care must be taken with these data, as identification and recording systems vary widely in the Region and are not robust.

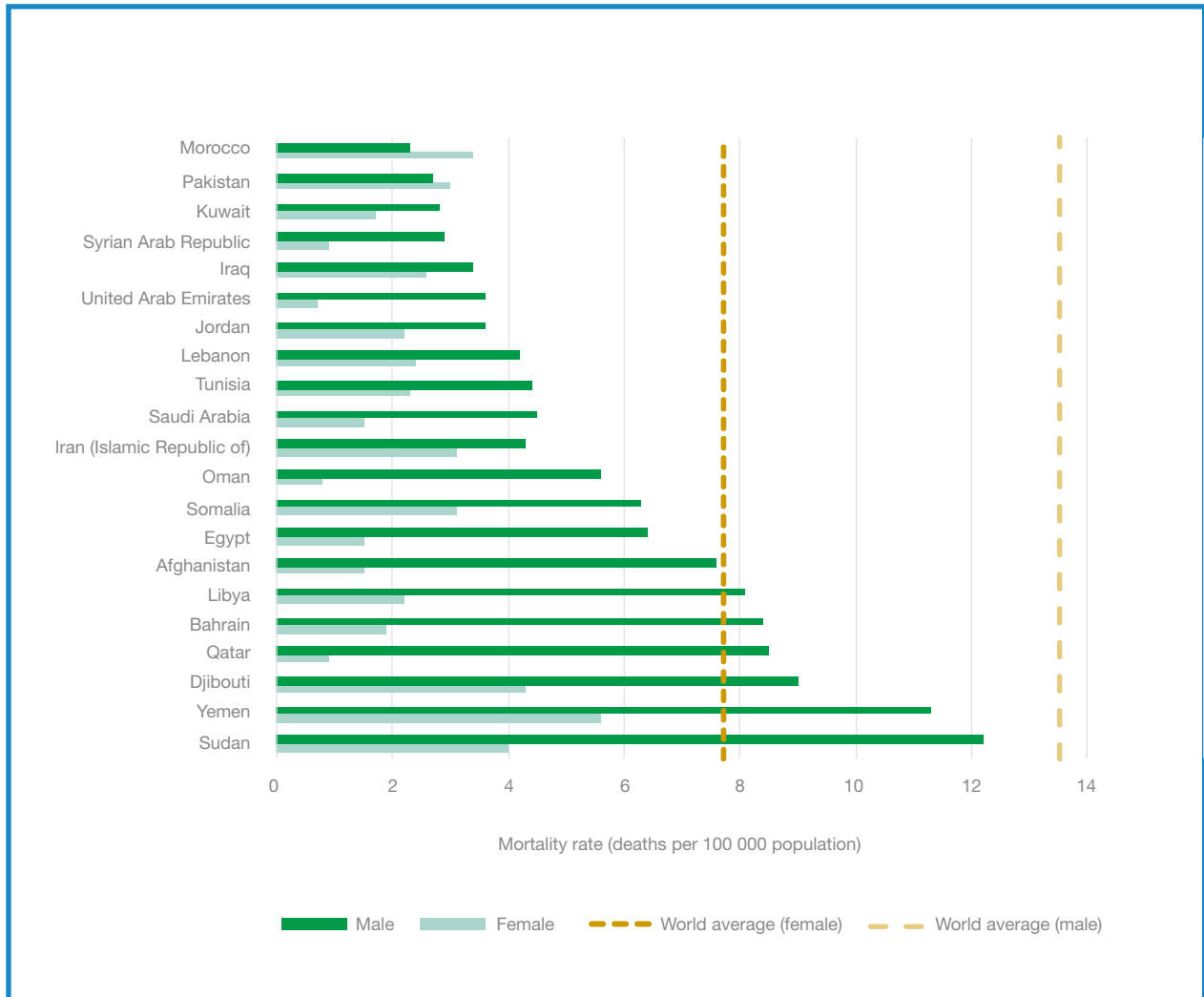
Fig. 2.38. Share of population (%) with anxiety disorders (age-standardized) in countries and territories in the Region, 2017



Source: Our World in Data (2018) (76) based on data from Global Burden of Disease Study 2017.

While not all mental illness leads to suicide, and not all suicide relates to mental illness, suicide is one possible outcome of mental illness (3). As in most countries of the world, recorded suicide rates are higher among men than women in all countries of the Region, with the exception of the two with the lowest rates for men (Morocco and Pakistan). Recording of suicide differs between countries, which makes comparisons between countries unreliable. Overall, recorded suicide rates for both sexes combined for the Region are lower than the global average (Fig. 2.39).

Fig. 2.39. Suicide mortality rate in countries of the Region, by sex, 2016



Note: No available data for occupied Palestinian territory.
Source: World Bank (77, 78) based on data from WHO Global Health Observatory.

COMMUNICABLE DISEASES

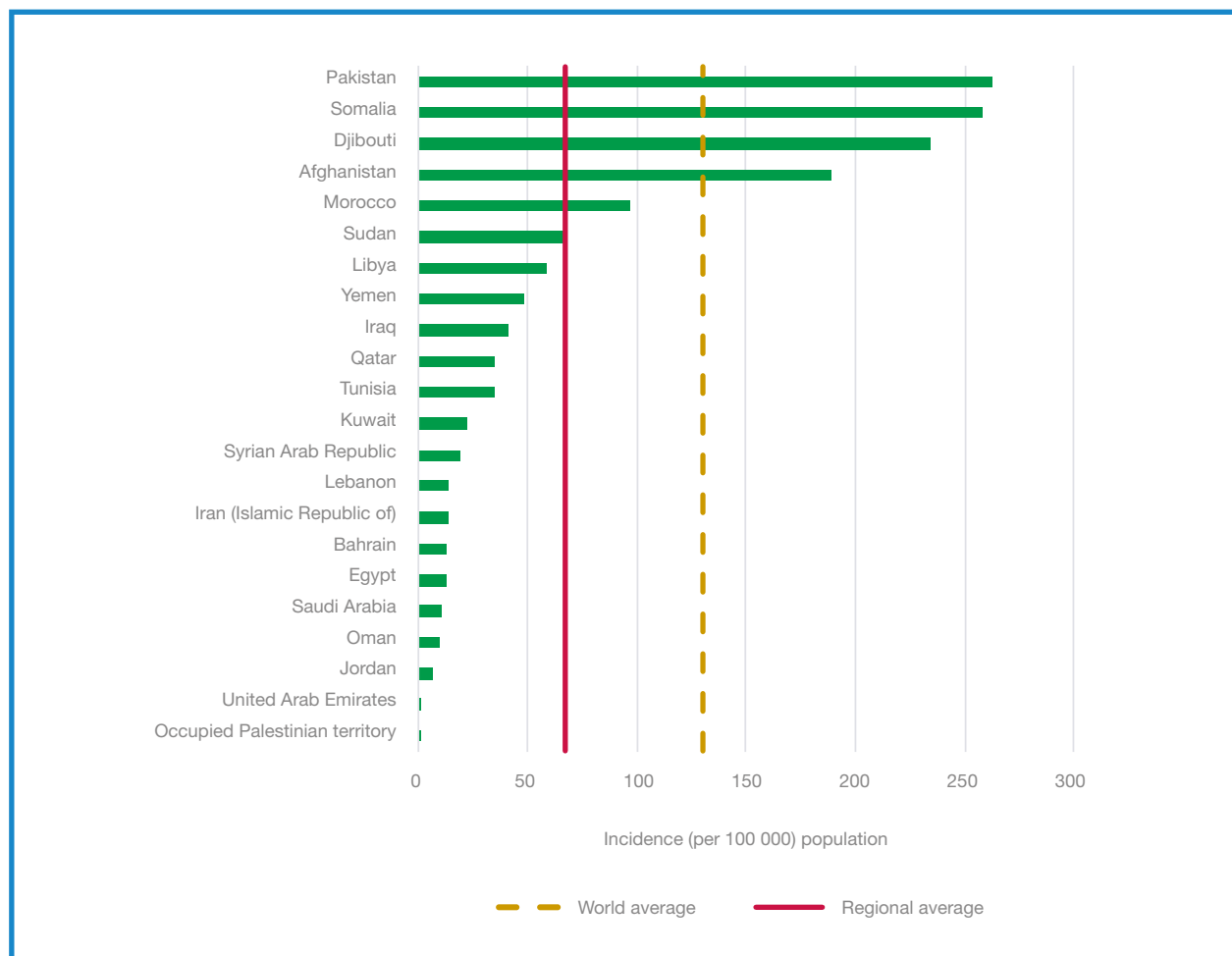
In addition to high rates of NCDs, the Region has high levels of many communicable diseases including tuberculosis, HIV, and respiratory and diarrhoeal diseases. Communicable diseases are highly inequitable in that they are far more prevalent among poorer, marginalized and excluded communities who live in conditions that support high transmission rates. These conditions include unsafe and insufficient water and sanitation, crowded living and working spaces, and unsafe food production and storage systems. Lack of access to health care is particularly relevant, and many treatable and preventable diseases have continuing

high prevalence due to lack of access to services. Conflict, instability and environmental harms also increase risk and prevalence of many communicable diseases.

TUBERCULOSIS

Tuberculosis has high global prevalence and is closely associated with transmission in crowded living conditions and poor working environments. Four countries in the Region have higher incidence of tuberculosis than the global average, although the overall rate for the Region is lower than the global average as some countries and territories have very low incidence levels (Fig. 2.40).

Fig. 2.40. Incidence of tuberculosis in countries and territories in the Region, 2019

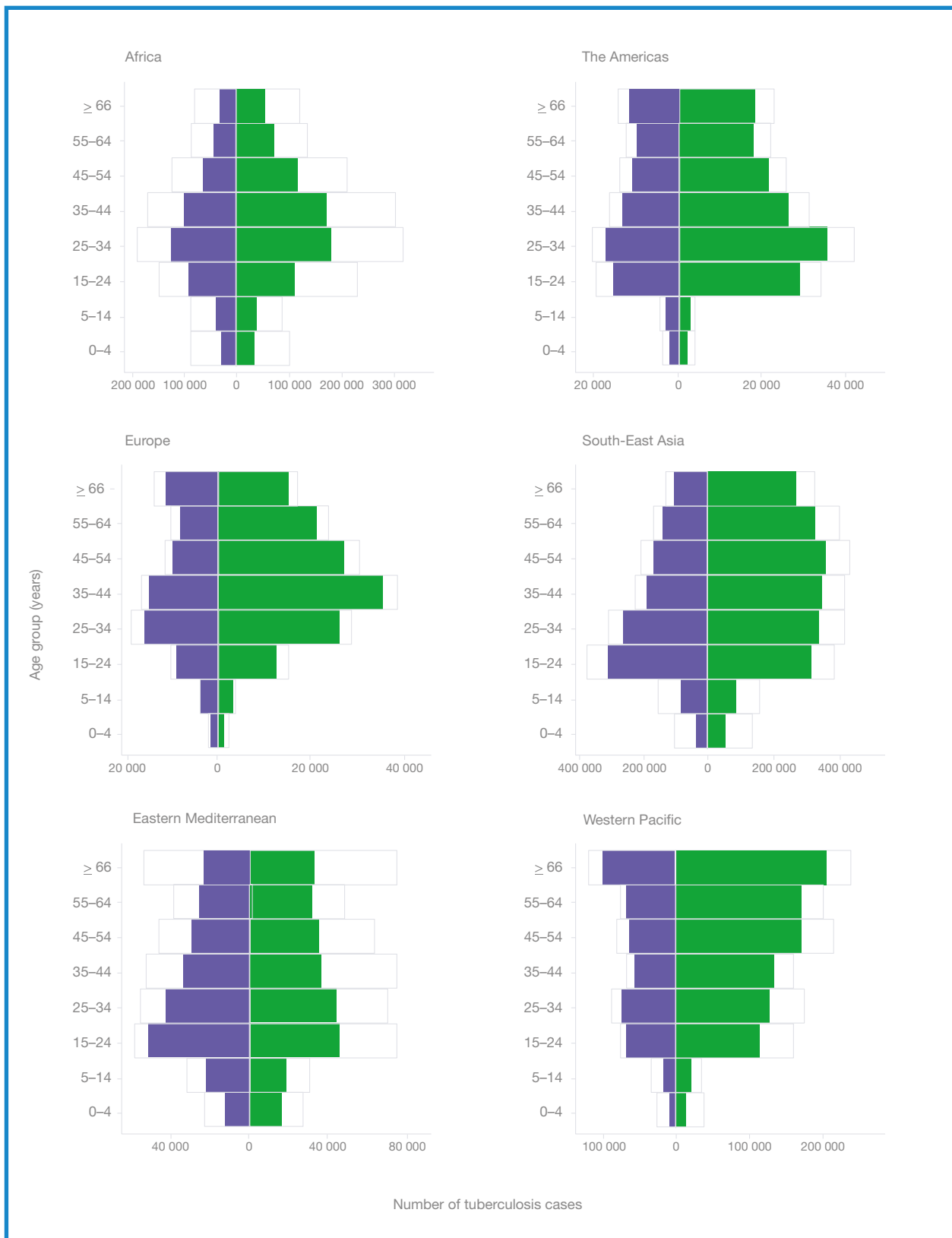


Source: World Bank (79) based on data from WHO Global Tuberculosis Report 2019.

Compared with other WHO regions, the Eastern Mediterranean Region has proportionately high incidence of tuberculosis for women, younger people

(under 25 years) and children, although overall rates are lower than for the African, South-East Asia and Western Pacific regions (Fig. 2.41).

Fig. 2.41. Regional estimates of tuberculosis incidence (black outline) and case notifications disaggregated by age and sex (female in purple; male in green), 2019

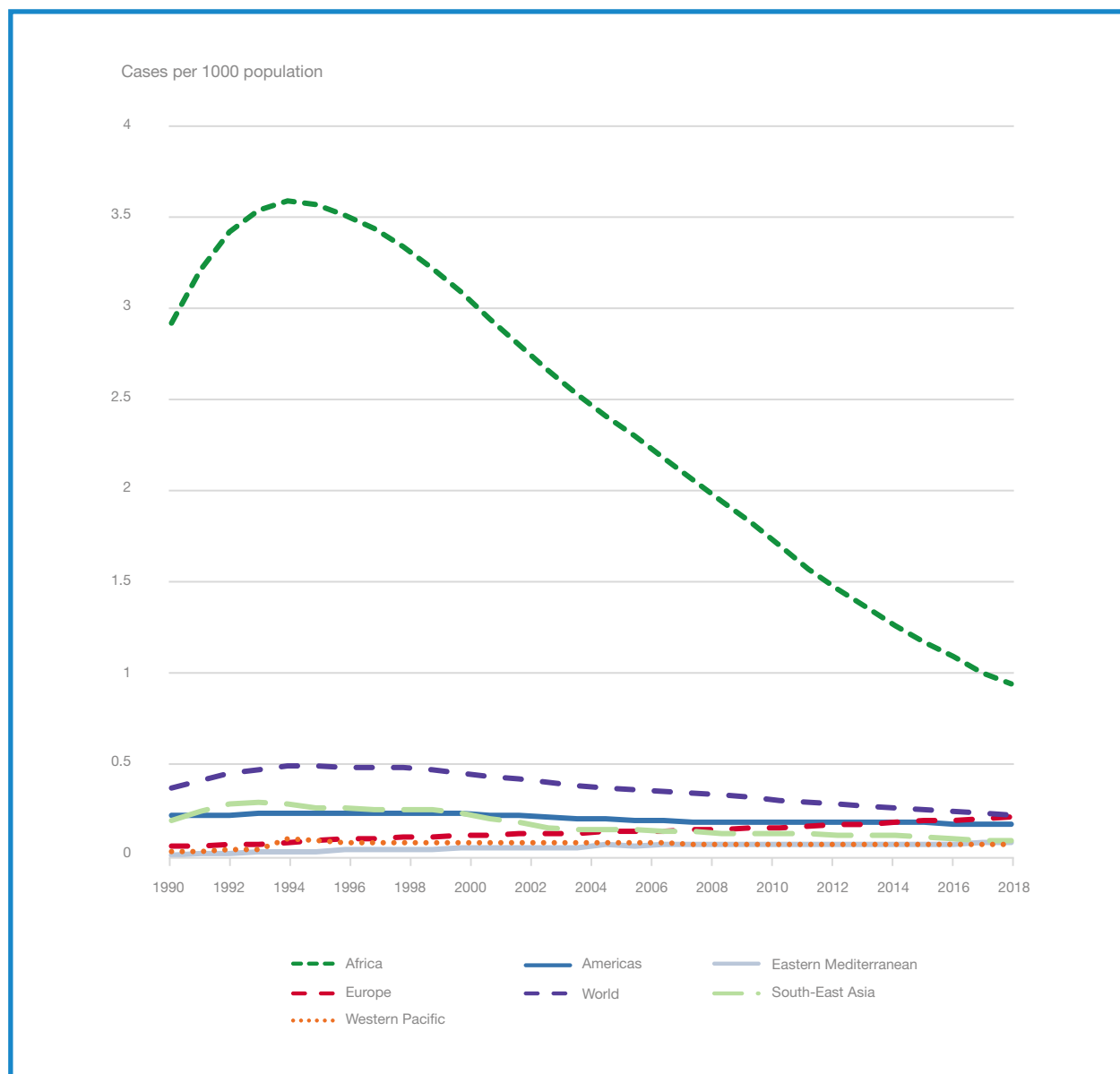


Source: Global Tuberculosis Report (2020) (80).

HIV

Compared with other WHO regions, there is relatively low prevalence of diagnosed HIV across the Eastern Mediterranean Region; however, rates are increasing as shown in Fig. 2.42. WHO reports a rise in HIV incidence in the Region from 0.04 cases per 1000 population in 2001 to 0.07 cases per 1000 in 2019, representing a 75% increase (81). However, rates of HIV may be underestimated, as there are high levels of stigma about the disease in some countries and areas.

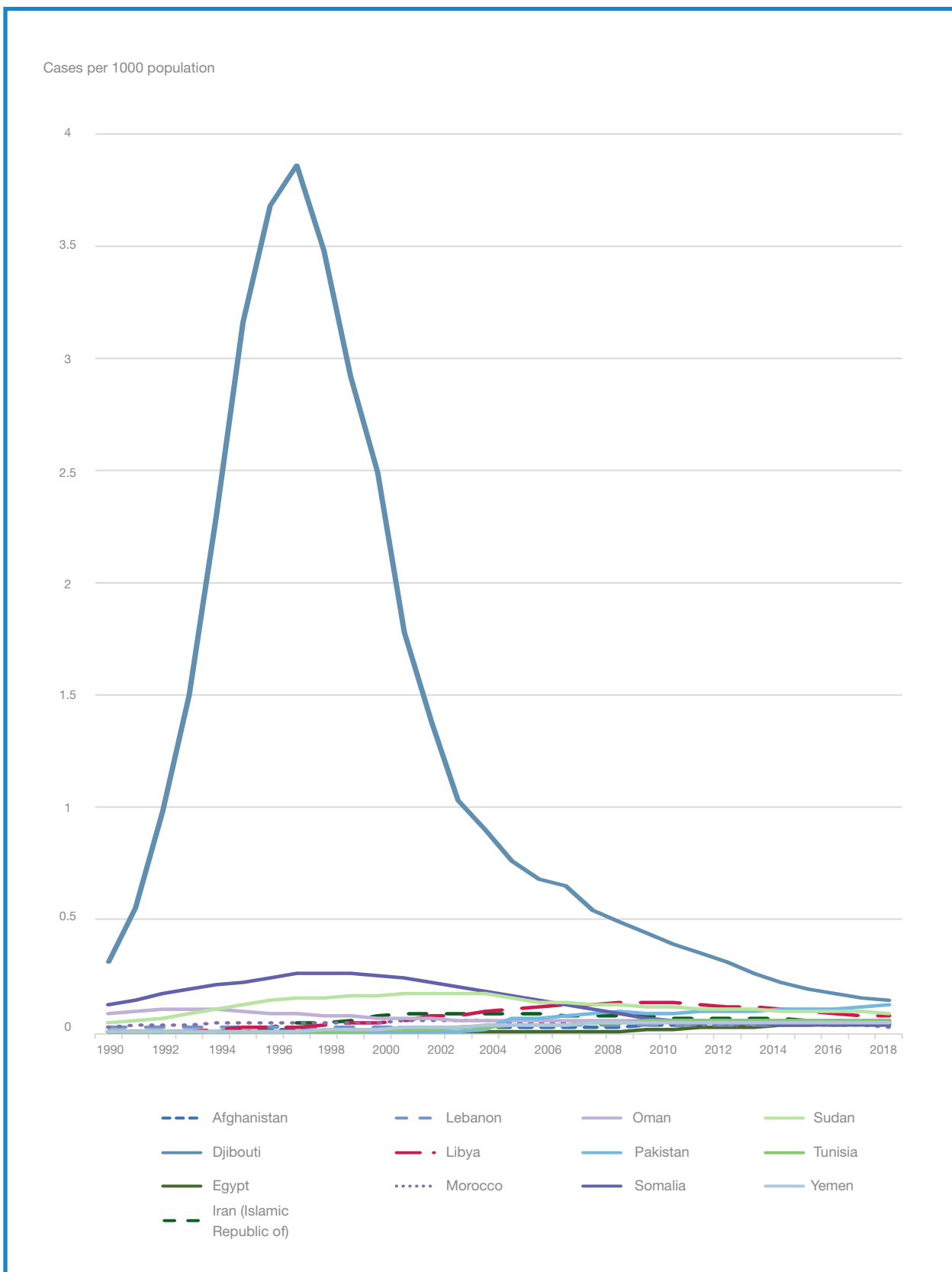
Fig. 2.42. HIV incidence by WHO region, 1990–2019



Source: WHO Global Health Observatory (81).

Fig. 2.43 shows declines in new HIV infections (per 1000 uninfected population) in Djibouti, Somalia and Sudan, and increases in Yemen. Djibouti has consistently had the highest incidence, reaching a peak in 1997 (3.86 new cases per 1000), although the rate has been declining since and in 2019 was at 0.14. This is still, however, the highest HIV incidence rate in the Region. Incidence has generally been increasing in Pakistan from 2004 onwards, with the rate increasing from 0.01 in 2004 to 0.12 in 2019. Incidence rates have remained relatively stable at 0.05 or below in Egypt, Lebanon, Morocco, Oman and Tunisia since 2003.

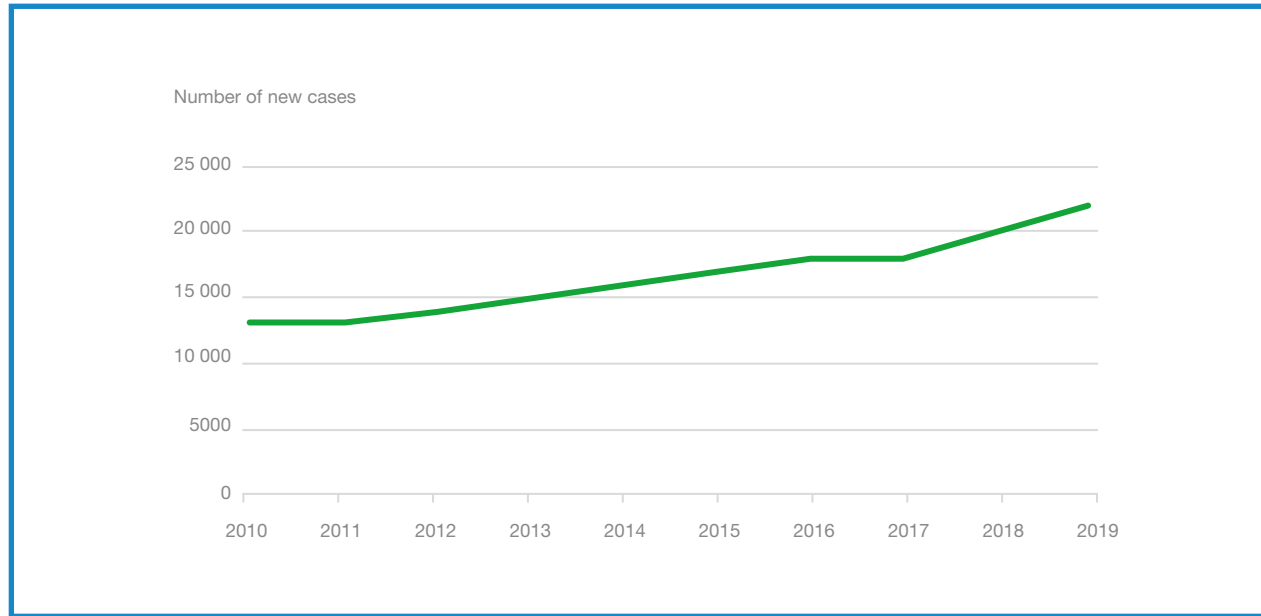
Fig. 2.43. Incidence of HIV infections (per 1000 uninfected population) by country, 1990–2019



Note: No data for Bahrain, Iraq, Jordan, Kuwait, occupied Palestinian territory, Qatar, Saudi Arabia and the United Arab Emirates.
 Source: World Bank (82) based on Joint United Nations Programme on HIV and AIDS (UNAIDS) estimates.

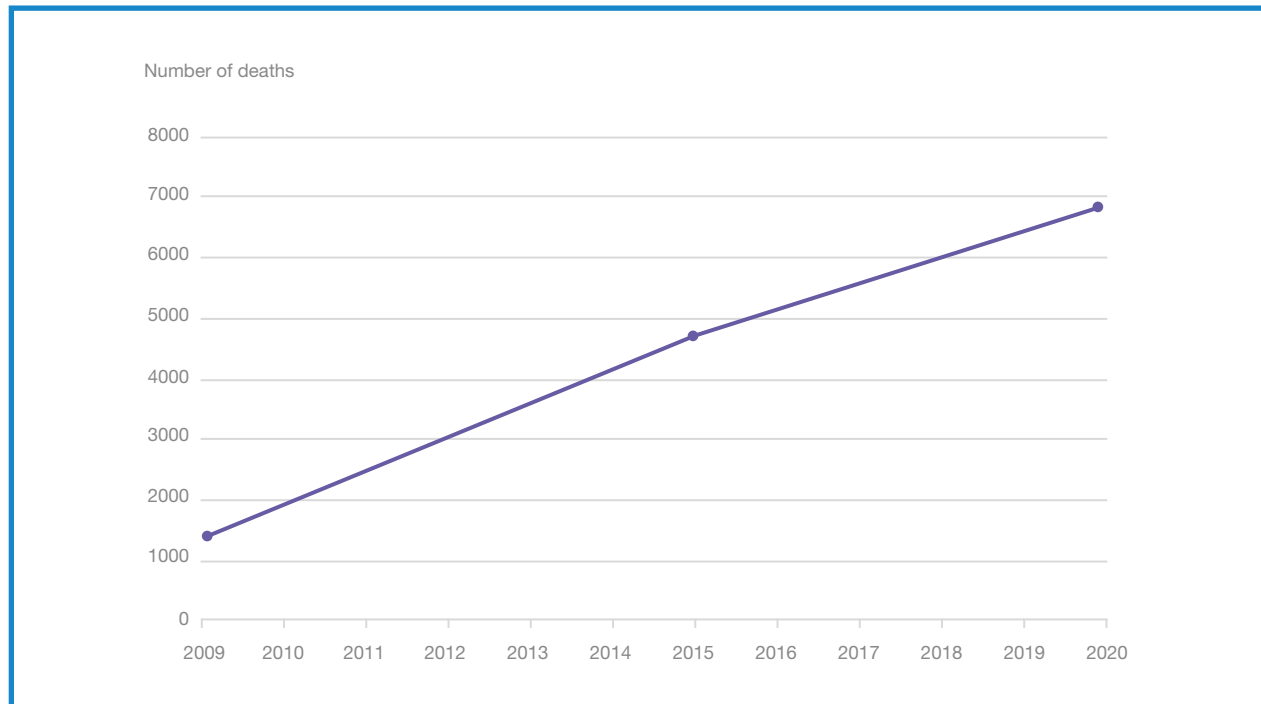
In Pakistan, the estimated number of new infections of HIV increased between 2010 and 2018 (Fig. 2.44) and the estimated number of AIDS-related deaths increased between 2010 and 2019 (Fig. 2.45).

Fig. 2.44. Estimated number of new HIV infections in Pakistan, 2010–2018



Source: World Bank (83) based on UNAIDS estimates.

Fig. 2.45. Estimated number of AIDS-related deaths in Pakistan, 2010–2019



Source: UNAIDS (2020) (84).

There are several factors which may contribute to low levels of diagnosis and treatment for HIV in the Region including legal, religious and sociocultural restrictions, and taboos against sex work, same-sex relations and drug use. There are low levels of testing of at-risk groups, as well as poor use of harm reduction and health care services particularly gender-specific services for women (85), all of which contribute to gaps in knowledge about HIV and how to prevent transmission.

VECTOR-BORNE DISEASES

Table 2.2 describes the regional and global burden of vector-borne diseases in 2015. Most of these diseases are found in poorer areas in the Region and are effectively diseases of poverty. As in the world as a whole, malaria contributes the largest burden among vector-borne diseases.

Table 2.2. Estimates of the burden of major vector-borne diseases in the Region, 2015

Disease	Burden in DALYs (in thousands)		Percentage (%) of global cases occurring in the Region
	Global	Regional	
Malaria	38 520	574	1.5
Schistosomiasis	3 514	233	6.6
Leishmaniasis	1 357	285	21.0
Lymphatic filariasis	2 071	32	1.6
Onchocerciasis	1 136	0	0
Dengue	613	26	26
Trachoma	279	31	31
Yellow fever	556	128	15
Total	50 345	1 309	

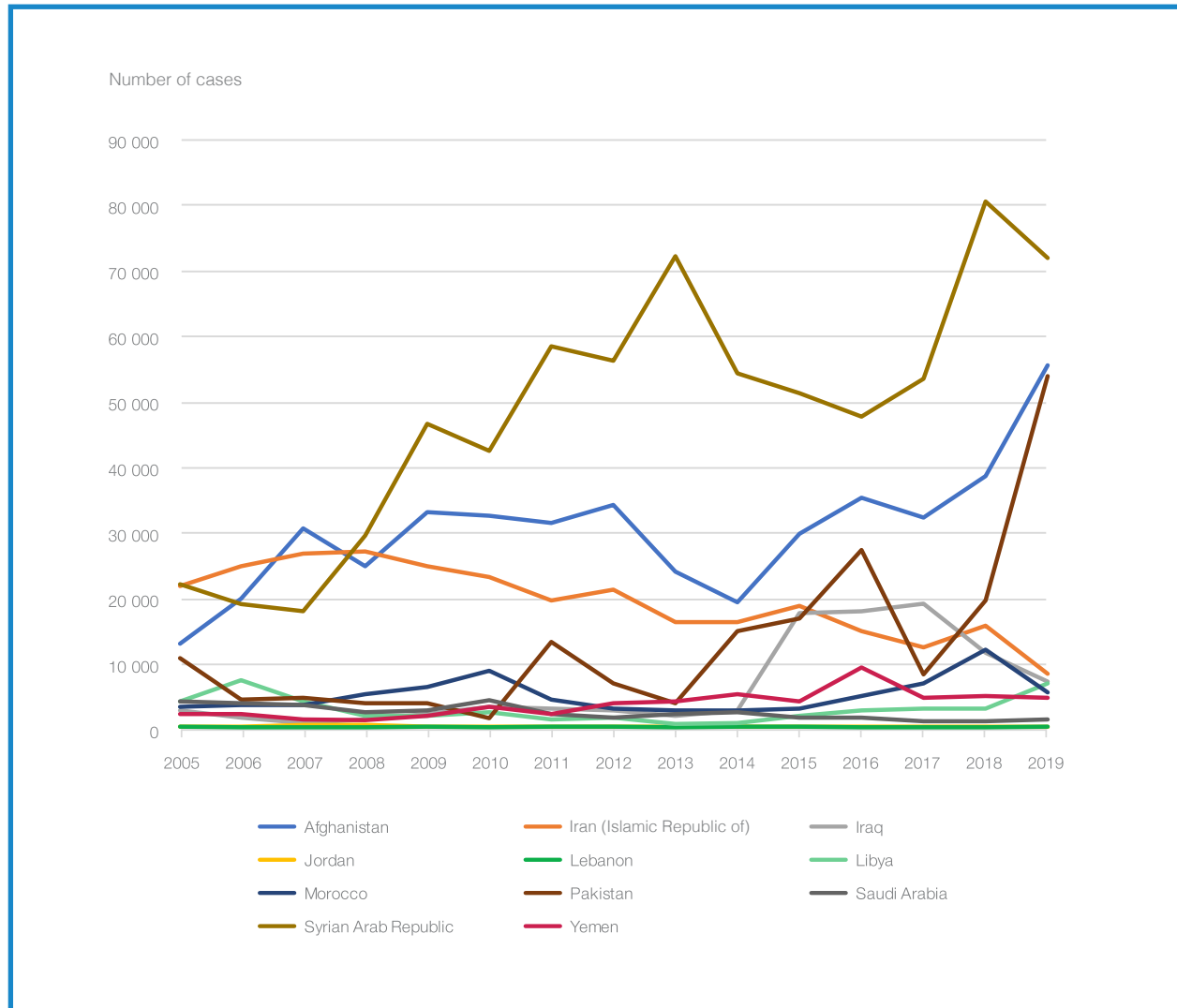
Note: DALYs refers to disability-adjusted life years, which is the “sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability” (86).

Source: WHO Global Health Estimates (2015) (87).

A number of neglected tropical diseases continue to afflict some countries in the Region due to contextual factors such as conflict, emergencies and migration. Both cutaneous and visceral leishmaniasis are endemic in the Eastern Mediterranean (88). A significant re-emergence of cutaneous leishmaniasis (Fig. 2.46)

has occurred in the Syrian Arab Republic due to the impacts of conflict, collapse of the public health system and exposure of non-immune populations. Afghanistan, Pakistan, Iraq, Yemen and Morocco have also experienced increases since 2013.

Fig. 2.46. Cases of cutaneous leishmaniasis reported, by country, 2005–2019



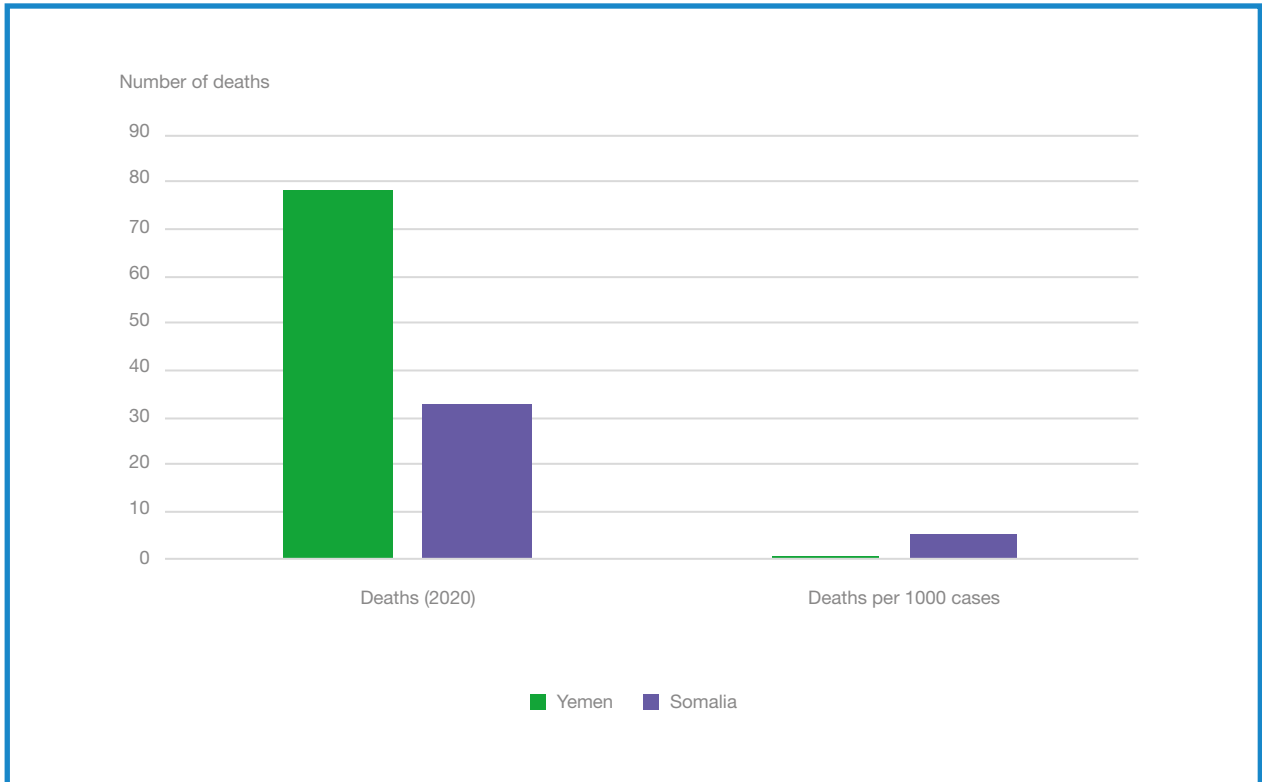
Source: WHO Global Health Observatory (89).

CHOLERA

Cholera epidemics most frequently occur in countries affected by conflict and humanitarian crises, such as Somalia and Yemen (90). Ongoing cholera outbreaks have led to 33 deaths in Somalia (91) for 2020, as reported on 17 December 2020, and 78 deaths in

Yemen between 1 January and 27 December 2020 (92) (Fig. 2.47), although outbreaks in 2017 and 2019 in Yemen were much worse. In 2020, there have been 6409 cases of cholera in Somalia and 229 887 cases in Yemen, leading to a much higher case fatality rate in Somalia (5.15 deaths per 1000 cases) than Yemen (0.33 deaths per 1000 cases) (91, 92).

Fig. 2.47. Cholera deaths and case fatality rates (deaths per 1000 cases) in Somalia and Yemen, January–December 2020



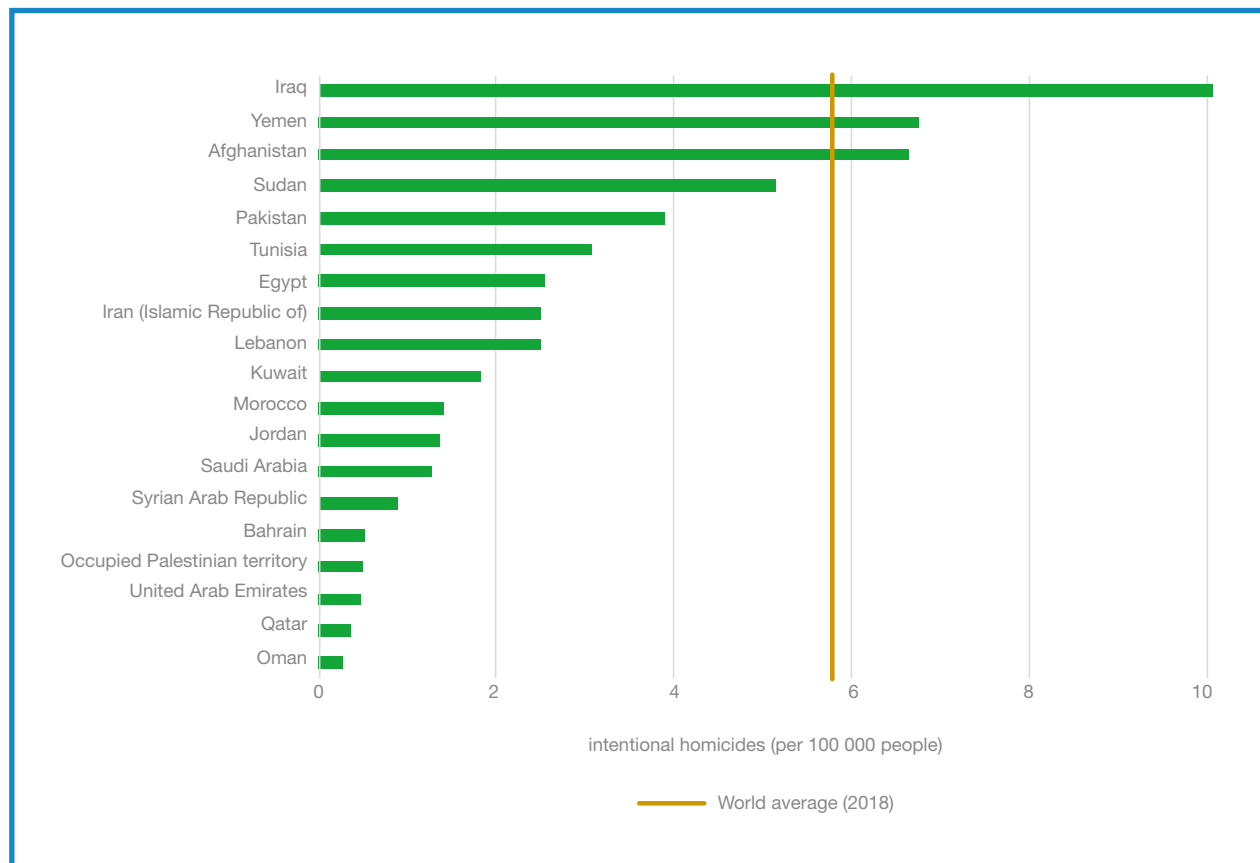
Source: WHO (91, 92).

VIOLENCE AND ROAD TRAFFIC DEATHS

There are high levels of mortality and morbidity from violence in the Region. Chapter 4 assesses the impact from conflict and its consequences, including forced displacement and migration. In Chapter 6, we set out the high levels of violence against women, particularly in relation to intimate partner violence, which is driven in part by wide gender inequities and structural (political

and economic) inequities in the Region. In this section we present levels of intentional homicide, although – as with so many of the factors assessed in this report – availability and reliability of data is a concern. For countries and territories with available data from the World Bank, for 2018 or the latest available year, there are lower rates of intentional homicide than the average globally. Afghanistan, Yemen and Iraq have significantly higher rates than other countries and territories in the Region and higher than the global average, based on the latest available data (Fig. 2.48).

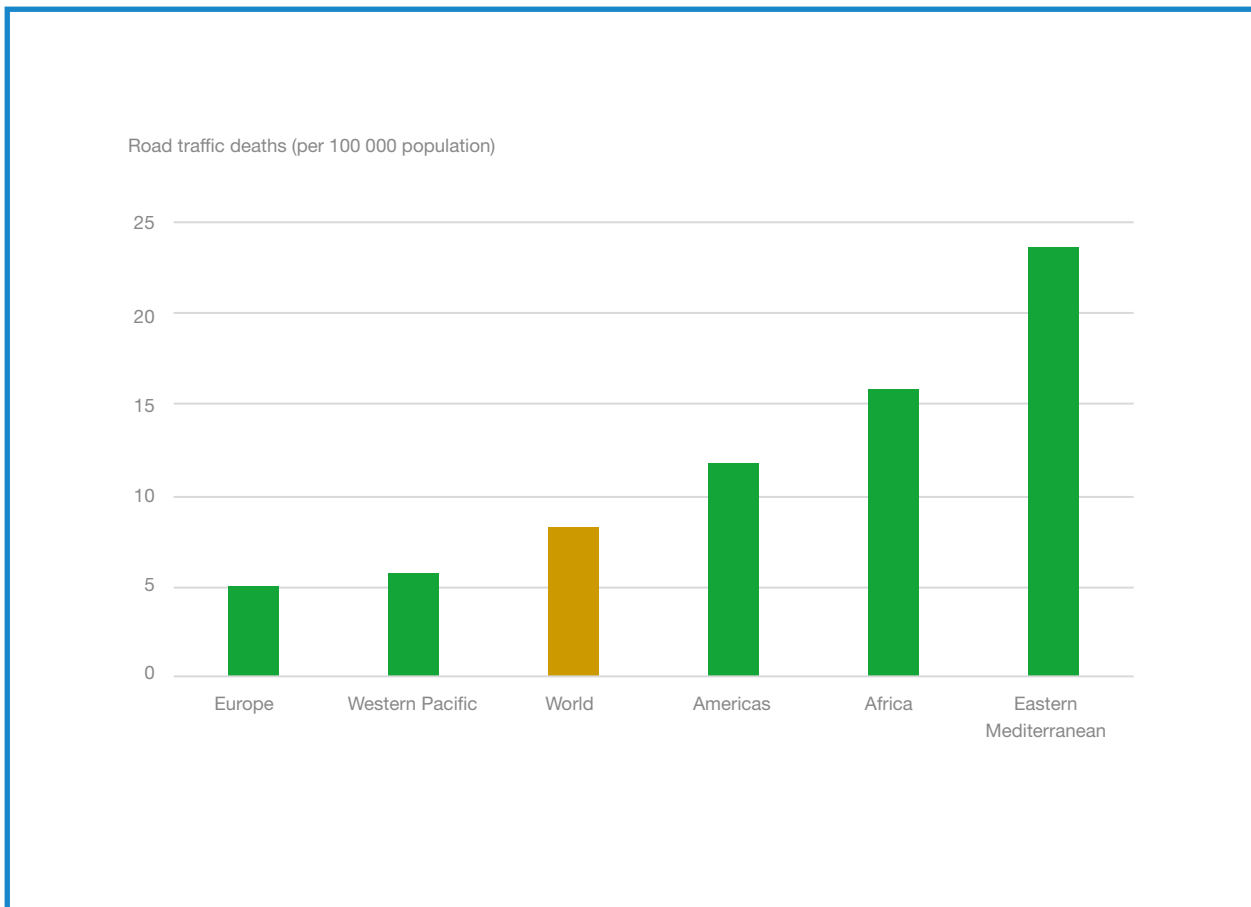
Fig. 2.48. Intentional homicides in countries and territories in the Region, 2018 or latest available year



Note: No available data for Djibouti, Libya and Somalia.
Source: World Bank (93).

There are very high levels of road traffic deaths in the Eastern Mediterranean Region. WHO reports that the Region has the highest rates of road traffic deaths for high-income countries compared with other regions, with more than double the world average in 2016 (Fig. 2.49).

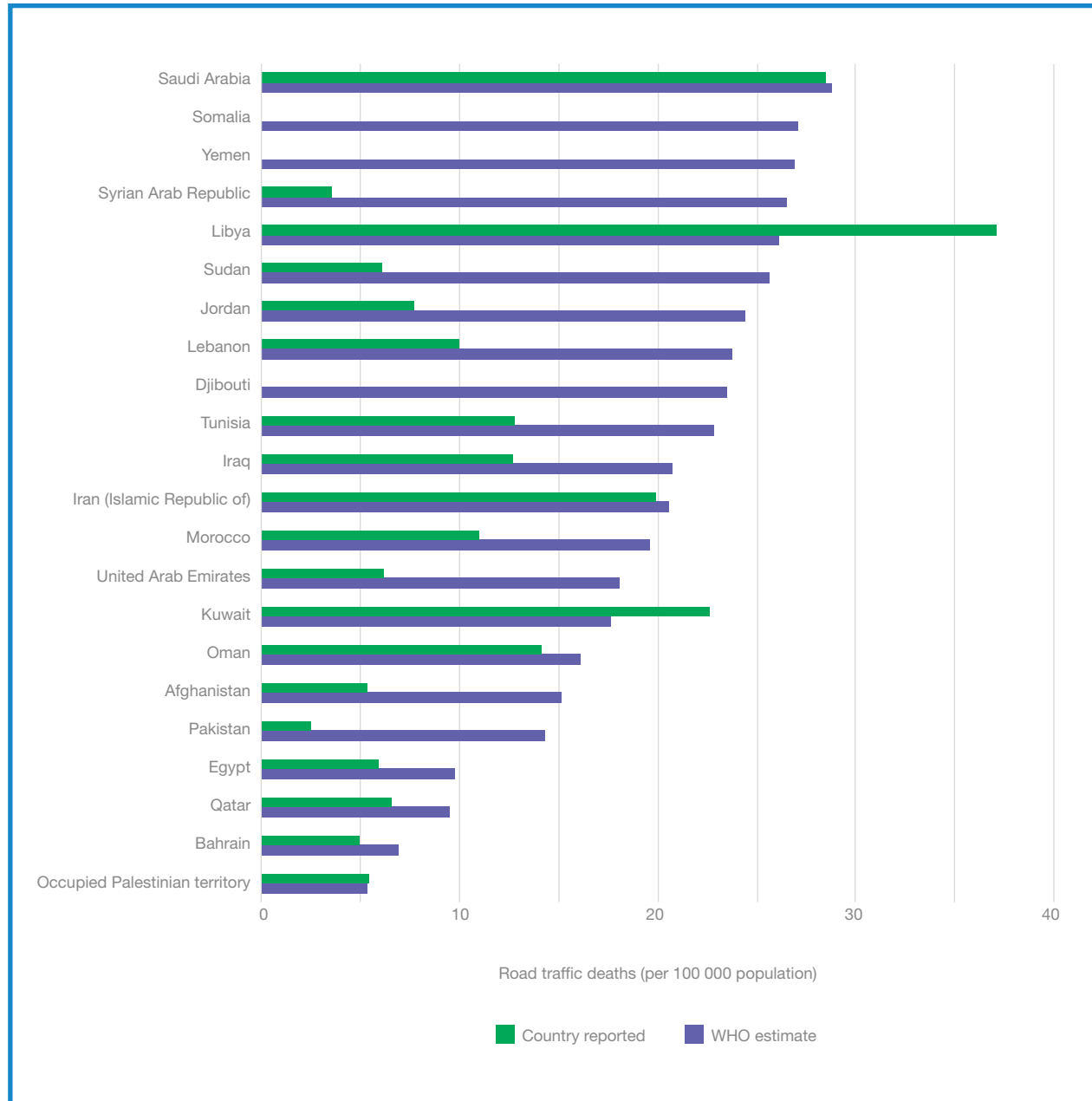
Fig. 2.49. Road traffic fatality rates (per 100 000 population) in high-income countries, by WHO region, 2016



Note: "High-income countries" refers to: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates.
 Source: WHO (2016) (94).

According to WHO-reported data, Saudi Arabia has the highest rate of road traffic deaths in the Region; however, WHO data and country estimates vary considerably for some countries and territories. Both estimates are shown in Fig. 2.50.

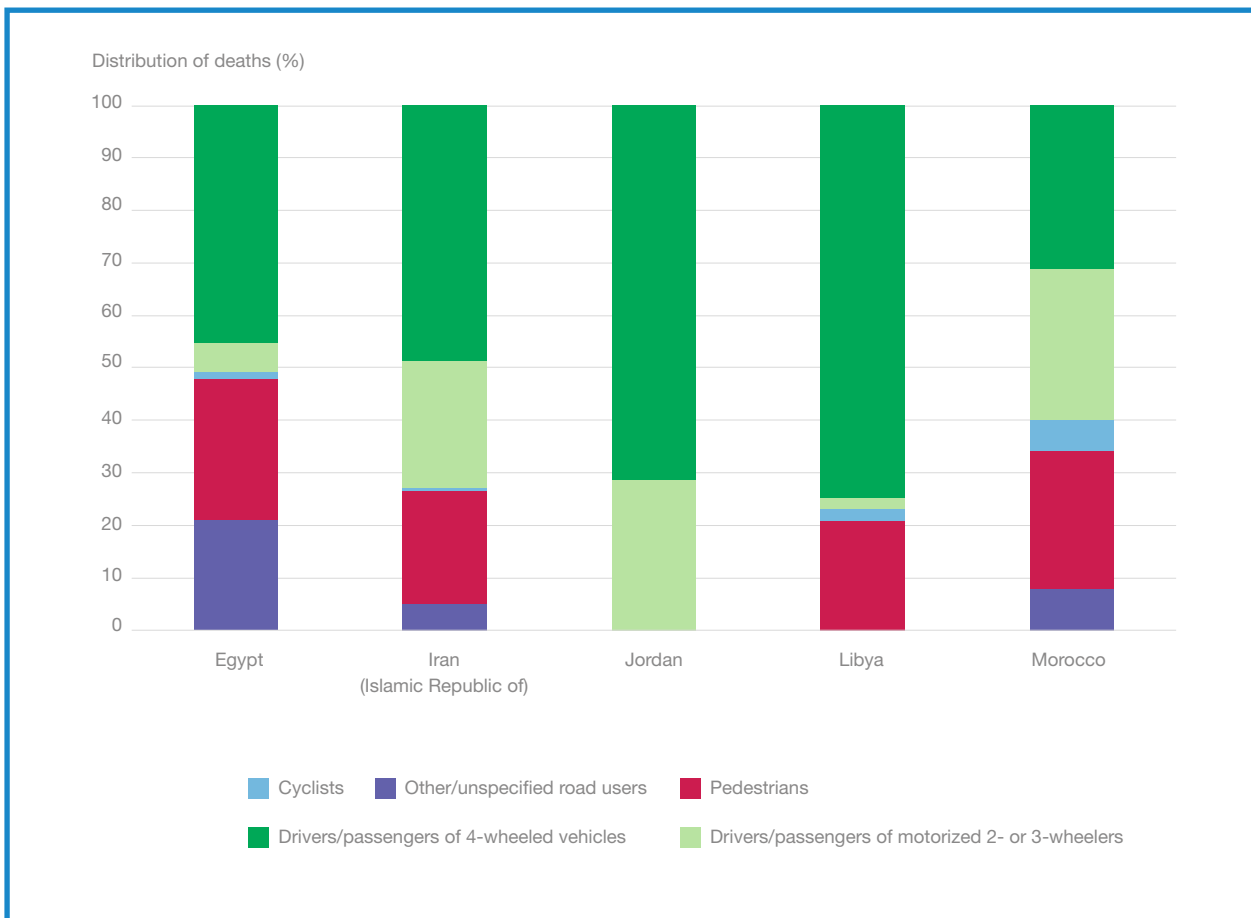
Fig. 2.50. Road traffic deaths in the Region, WHO estimates and country-reported data, 2017



Source: Eastern Mediterranean Health Observatory (95).

While there are high rates of road traffic death among users of 4-wheel vehicles in selected countries the Region, there are also high rates among pedestrians and users of motorized 2- or 3-wheelers, particularly in countries where large numbers of the population travel by foot or motorcycle (Fig. 2.51).

Fig. 2.51. Distribution (%) of road traffic deaths in selected countries in the Region, by type of road user, 2016



Source: WHO Global Health Observatory (96).

SUMMARY AND RECOMMENDATIONS

This Commission’s primary remit is to assess levels of health inequities in the Eastern Mediterranean Region related to the social determinants of health, and to make proposals for action. As has been outlined in this chapter, there are enormous differences in average levels of health and life expectancy between countries. This is not unexpected, given the differences in countries’ wealth and development. However, inequities in health within countries are the main focus for the Commission, as it is here that the potential to reduce health inequity is greatest. Systematic

inequalities in health between social groups that are judged to be avoidable by reasonable means, but are not avoided, are unjust – that is, inequitable. The relatively good health enjoyed by those with higher socioeconomic positions in every country of the Region provides the marker of what is possible within each country to “level up” health for the rest of the population. Evidence has been difficult to identify in some areas, but where evidence on health inequities within countries is available it shows clear socioeconomic inequities in many areas: maternal and child health outcomes and behaviours that give rise to NCDs and poor health including undernutrition, obesity and smoking. The rest of this report outlines inequities in the social determinants of health that give rise to health inequities.

Our main recommendation for this chapter is for every country to develop a national social determinants and health equity plan. These plans should include analysis of available national data on inequities and a clear plan of action based on the framework of this Commission's report, with the ambition of reducing inequities in health and the social determinants. Chapter 13 explains this in more detail, but in this chapter we note that health equity plans can be tailored for countries at different stages of development and cover the social determinants of health.

To understand and act on inequities in health within countries it is essential to have reliable information

about those inequities – information which is lacking in countries of the Region. Reliable data on inequities help to encourage and inform action, make the issues visible to the population, monitor progress on inequities and facilitate accountability for levels of inequity within countries. Our second recommendation is that all countries and regional bodies undertake further research into health inequities and the social determinants of health, and establish systems to enable monitoring of health inequities within countries appropriate to countries' different development levels. A full research agenda is set out in Chapter 13, and that chapter also includes further details of data requirements and monitoring systems.

Recommendations	Relevant SDG targets
<p>1. Develop national social determinants and health equity plans.</p> <ul style="list-style-type: none"> Use the framework of this report to develop a national plan with a monitoring framework. 	<p>1b 3.8, 3c</p>
<p>2. Establish a monitoring framework and generate data on inequities in social determinants and health.</p> <ul style="list-style-type: none"> Develop minimum standards for the data required for equity analysis, including the engagement of transnational organizations that collect or collate data. Research funding bodies should create a dedicated budget for the generation and global sharing of evidence on social determinants of health and health equity, including research on interventions to enhance health equity. Establish different monitoring frameworks for countries at different levels of development. 	<p>10.2, 10.3 16.6, 16.9 17.6, 17.14, 17.18, 17.19</p>
<p>3. Do something, do more, do better.</p> <ul style="list-style-type: none"> Do something – Develop and improve coverage of vital registration of births and deaths. Develop mortality and morbidity indicators that can be stratified by sex as well as at least two social markers (e.g. education, income, occupation, ethnicity/race) and at least one geographic marker (e.g. rural/urban). Ensure that a survey such as DHS or MICS is conducted regularly. Obtain data on the health of vulnerable/disadvantaged groups. Do more – Ensure universal vital registration coverage, including of people in vulnerable situations. Ensure regular, timely reporting of SDG indicators that relate to the conceptual framework set out in this report. Develop regular household surveys covering health, income, living conditions and labour market participation. Do better – Ensure that SDG indicators relevant to this report all accord with United Nations General Assembly resolution 71/313: high-quality, timely and reliable data disaggregated by sex, age, geography, income, race, ethnicity, migratory status, disability and other characteristics relevant in national contexts. The system should include full monitoring of human rights and those in vulnerable situations. 	

