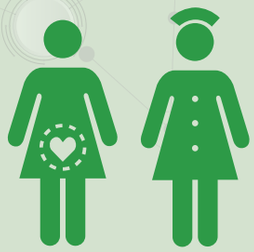


Chapter 3
Health and Well-being

Arab women witness various challenges in their life cycles. The female advantage in life expectancy at old age does not necessarily mean that women are healthier than men. Arab women's fertility has declined but remained relatively high above the world average. Fertility rates exceeded three live births per women in countries with unmet needs of more than 20 per cent. Utilization of health facilities for childbirth and access to contraceptives still depend on the level of education and the socioeconomic status of women, with marked variations between urban and rural areas.

Women living in rural areas are also disadvantaged in terms of using any method of contraceptives compared with urban women. High fertility rates occur in parallel with low contraceptive prevalence and high maternal mortality rates.

Health and Well-being

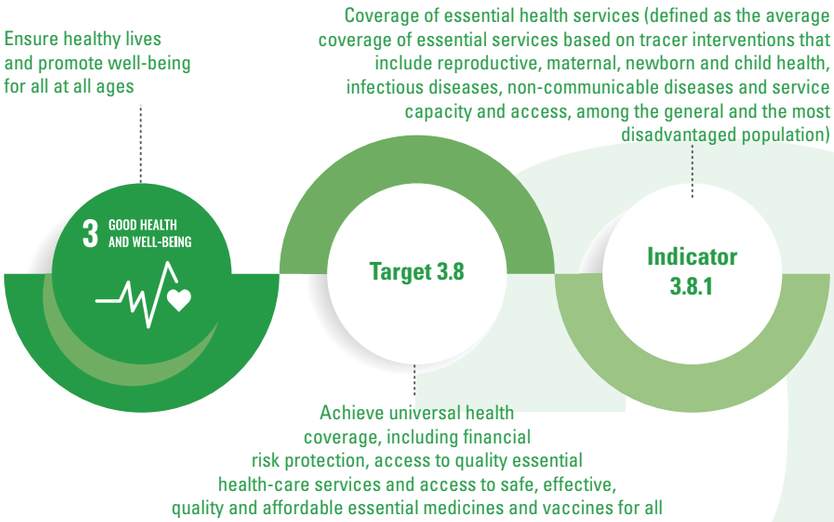
"Our greatest concern must always rest with disadvantaged and vulnerable groups. These groups are often hidden, live in remote rural areas or shantytowns and have little political voice." Dr. Margaret Chan, former Director-General, World Health Organization

A. Enabling environment

Access to care often varies based on race, ethnicity, socioeconomic status, age, sex, disability status, sexual orientation, gender identity and location. Women, men, girls and boys all face different risks to health and, as a result, have different health care needs. As the ones who bear children, women need care during pregnancy, childbirth and during the early stages of their baby's life. Babies are vulnerable to disease and male babies are more susceptible than girl babies. Women and men have different health issues and tend to die of different causes. This is due to biological factors as well as the role that gender norms play in taking health risks, such as smoking, alcohol consumption and diet.

With solid economic growth and development across the region, the health systems and health outcomes in the Arab States have improved significantly over the last 20 years. Life expectancy has increased, and non-communicable diseases are now the main causes of death and disability, replacing nutritional disorders and communicable diseases. Major investment in health systems has seen significant gains in child and maternal health, key markers of women's and girls' access to essential health services.[1]

The target of the global annual expenditure on health is 6.3 per cent of GDP. In 2017, the current health



expenditure ranged between lowest at 2.6 per cent of GDP in Qatar to highest at 8.2 per cent in Lebanon. Although expenditure on health care increased in most countries, in some it has reduced over time. In Comoros, for example, expenditure was 12.2 per cent of GDP in 2000 but was reduced to 7.4 per cent in 2017. Lebanon also reduced spending on health from 10.8 per cent of GDP in 2000 to 8.2 per cent in 2017.

The current health expenditure per capita in United States dollar PPP varies greatly among Arab countries. The current health expenditure per capita was lowest in Djibouti ($117) followed by Comoros ($123), Yemen ($139), the Syrian Arab Republic ($160) and Mauritania ($170) and was highest in Kuwait ($3,797) in 2017. In fact, all Gulf Cooperation Council (GCC) significantly outspend the rest of the Arab world in health care.

B. Life expectancy at birth

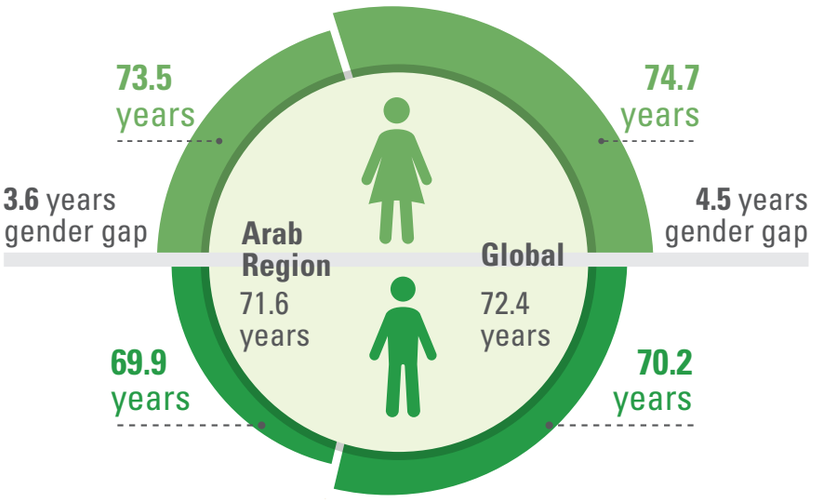
Medical and technological improvements have extended the lives of both women and men. Globally, the average life expectancy at birth was estimated at 72.4 years in 2017. Worldwide, women are expected to outlive men by 4.5 years (74.7 years for women at birth compared with 70.2 years for men).

In 2017, life expectancy at birth in the Arab States was 71.6 years with a gender gap of 3.6 years; (73.5 years for women and 69.9 years for men), slightly lower than the global gender gap by 0.9 years.

Life expectancy at birth for females in the Syrian Arab Republic at 9.5 years longer than that of males is the highest among Arab States by a significant amount. Life expectancy in the Arab countries seems to be not fully shaped by income levels, health expenditure and health coverage. In fact, Arab countries with a high per capita income such as the Gulf countries of Bahrain, Kuwait, Qatar, Saudi Arabia, the United Arab Emirates (but not Oman) or those with high current health expenditure as percentage of GDP such as Comoros, Jordan and Lebanon, had the lowest female life expectancy advantage not exceeding 3 years Table 6.

In contrast, the rest of the Arab countries which not only had lower current GDP per PPP but also had lower health expenditure and coverage, had a gender gap of an acceptable 3 years or more. This includes Saudi Arabia at a high GDP per PPP of $1,857 billion and Comoros at a low of $2 billion. These countries have managed to effectively exploit their relatively limited economic resources in avoiding premature mortality while others lagged behind the potential their income could provide.[2]

Arab Life expectancy below global average, particularly for women



C. Life expectancy at age 60

Life expectancy at age 60 is the average number of years that a person at that age can be expected to live, assuming that age-specific mortality levels remain constant. It is considered a better measure of survival within the adult life course than life expectancy at birth because life expectancy at birth is significantly influenced by high levels of infant mortality and therefore does not provide a complete analysis on the survival of adults.

Table 6. GDP, current health expenditure, universal health coverage services and gender gap in life expectancy, latest year

Country	Current GDP at PPP in 2018 (international $)	Current health expenditure (CHE) as percentage of GDP (%)	Current health expenditure (CHE) per capita in PPP (int $)	Universal Health Coverage (UHC) service coverage in 2015 (SDG 3.8.1)	Gender gap in life expectancy at birth in 2016 (Female-Male)
				Index	
Algeria	$ 659,686,582,357	6	975	76	2.0
Bahrain	$ 74,108,660,121	5	2,265	72	1.0
Comoros	$ 2,353,695,077	7	123	47	3.2
Djibouti	$ 2,342,710,799	3	117	47	3.3
Egypt	$ 1,219,509,677,236	5	614	68	4.8
Iraq	$ 672,978,507,595	4	495	63	4.7
Jordan	$ 93,068,215,795	8	757	70	3.3
Kuwait	$ 304,938,677,378	5	3,797	77	2.1
Lebanon	$ 89,433,526,962	8	1,185	68	2.6
Libya	$ 138,287,328,576	6	627	63	6.0
Mauritania	$ 18,449,706,763	4	170	33	2.6
Morocco	$ 314,241,266,659	5	438	65	2.2
Oman	$ 200,107,925,339	4	1,591	72	4.2
Qatar	$ 352,153,740,968	3	3,354	77	2.6
Saudi Arabia	$ 1,857,538,202,580	5	2,826	68	3.0
Somalia	…	…	…	22	3.6
Sudan	$ 198,945,278,662	6	314	43	3.5
Syrian Arab Republic	…	4	160	60	9.5
Tunisia	$ 144,374,363,231	7	863	65	4.0
United Arab Emirates	$ 721,770,277,976	3	2,469	63	2.2
Yemen	$ 73,258,299,699	4	139	39	2.9

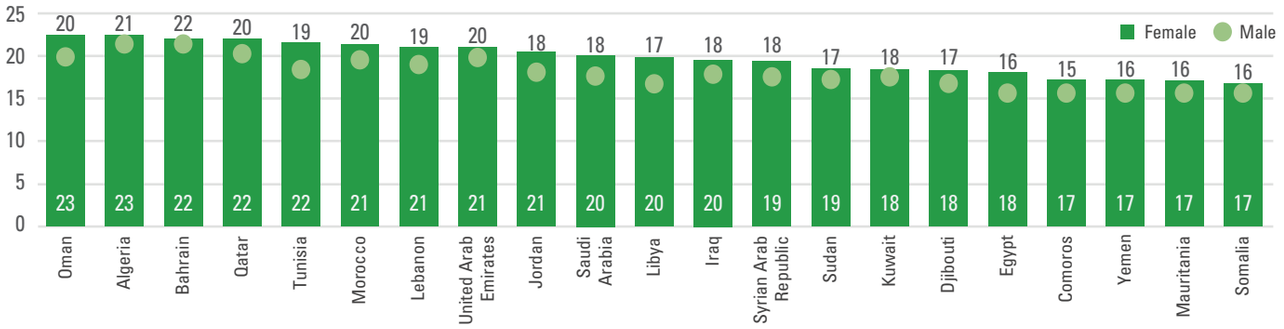
Source: World Bank, "GDP, PPP (current international $), 2018", World Bank Data (Current GDP in PPP); WHO, Global Health Observatory data repository (last updated on 23 January 2020) (CHE as % of GDP and CHE capita in PPP); UNSD, "SDG indicators", Global SDG Indicators database (UHC); and WHO, Global Health Observatory data repository (last updated on 06 April 2018) (Life expectancy at birth).

D. Gender differences in life expectancy among older persons

Worldwide, life expectancy at age 60 has increased steadily during the twentieth century, rising from 18.8 years in 2000 to 20.5 years in 2016. Similarly, life expectancy at age 60 in the Arab States increased in almost all countries. Notable increases of 4 years occurred for both women and men in Bahrain and by 3 years in Algeria, Morocco and Oman during the same period. Life expectancy at age 60, however, decreased by one year for both sexes in Egypt and only for women in the Syrian Arab Republic.

This considerable improvement has been uneven between men and women for the period 2000-2016. As seen in several other countries, women live longer than men and this gender gap in life expectancy has widened over time in 11 Arab States, namely Bahrain, Comoros, Djibouti, Iraq, Jordan, Kuwait, Libya, Morocco, Oman, the United Arab Emirates and Yemen. In Libya the gender gap widened from 1.9 years to 3 years, a significant increase in life expectancy at age 60 for women. Nevertheless, the female advantage in life expectancy does not necessarily mean that women are healthier than men. Elderly women are prone to suffering from a higher prevalence of functional limitations and poor

Figure 17. Life expectancy at age 60, in years, 2016



Source: World Health Organization (WHO), Global Health Observatory data repository (last updated on 06 April 2018).

health and the additional years may not necessarily be lived in healthy conditions Figure 17.

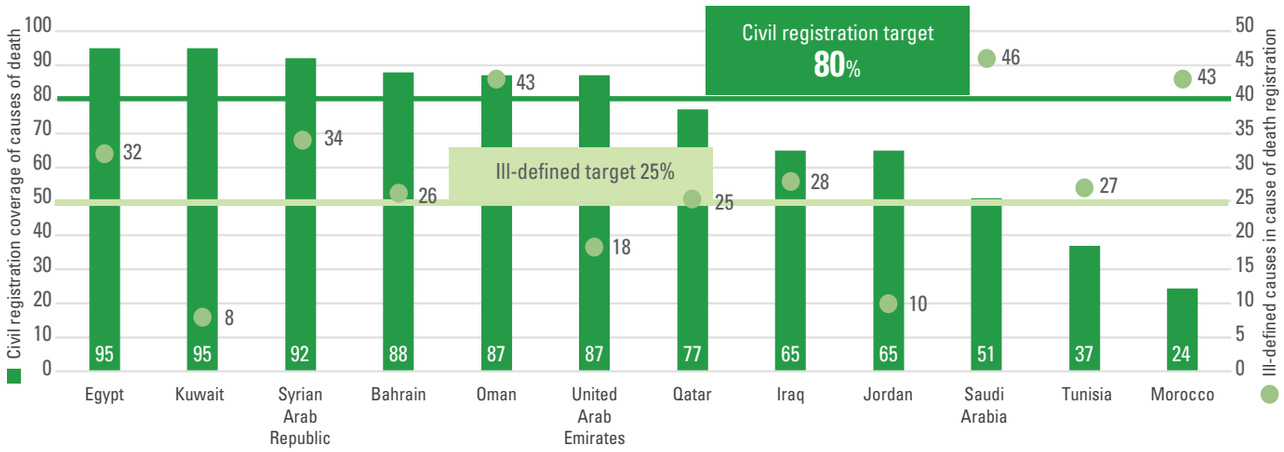
E. Causes of death

Road injuries, conflict and terror are major causes of death for men in the Arab region

Data on the causes of death are crucial for improving health services and reducing preventable deaths. Statistics in this area rely on an effective civil registration system and following standardized practices in identifying, coding and transmitting data about causes of death. With at least 12 of the 17 SDGs reliant on civil registration data[3] and a specific indicator (17.19.2) under Goal 17 on coverage of birth and death registration, civil registration and vital statistics are central to achieving sustainable development.[4]

Where available, data show that civil registration coverage of causes of death remains below the SDG target of 80 per cent in a number of countries. In Morocco, only one of every four deaths was registered. In Saudi Arabia, half of deaths were not registered and in Jordan only two thirds of deaths were registered Figure 18.

Figure 18. Proportion of civil registration coverage of causes of death and ill-defined causes in cause of death registration, latest available data (percentage)



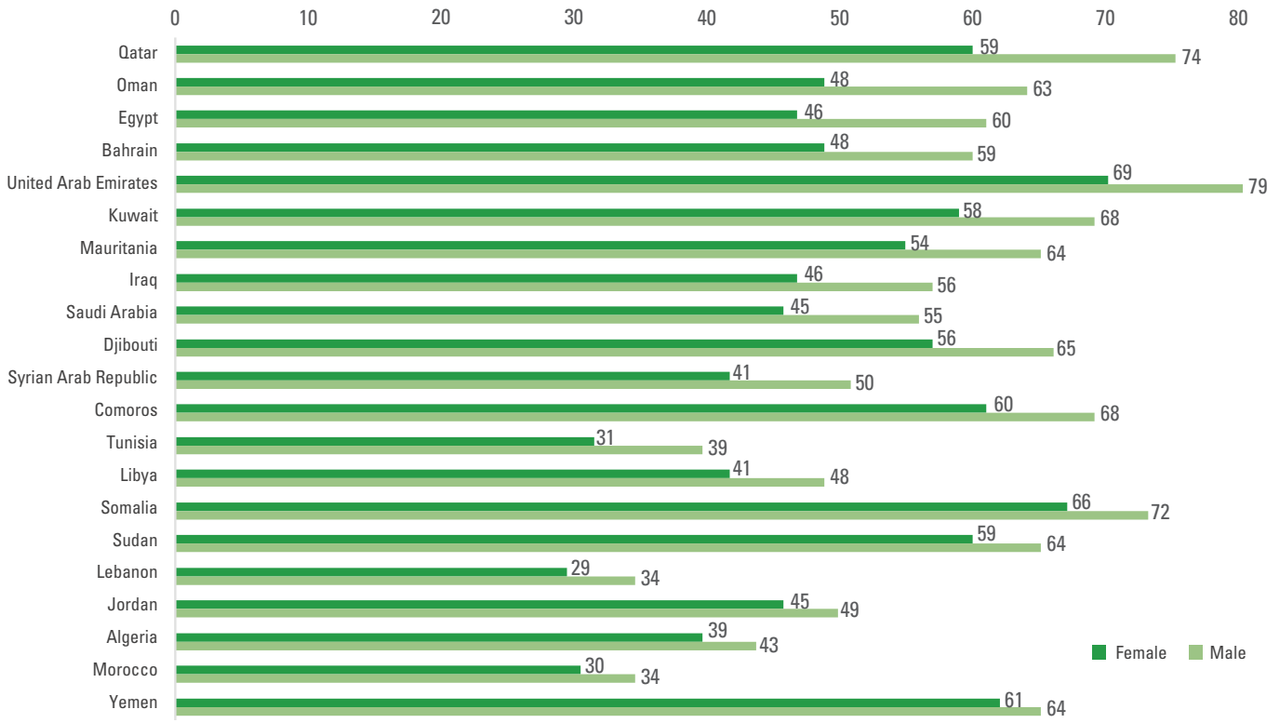
Source: WHO, Global Health Observatory data repository (last updated on 04 May 2018).

Another measure relevant to monitoring causes of death is the proportion of deaths that are classified as "ill-defined". Ideally, this should be below 25 per cent, so that at least three quarters of deaths have been attributed to a definitive cause. As mentioned earlier, in Morocco, in addition to having the lowest level of coverage, 43 per cent of deaths were classified as ill-defined, indicating there was much to be done to improve the system of civil registration and vital statistics in that country.

Non-communicable diseases (NCDs), including heart disease, stroke, cancer, chronic respiratory diseases and diabetes, are the leading cause of mortality globally and in the Arab region. The number of people, families and communities impacted by premature death from NCDs is increasing. Widespread risk factors are driving the increase in NCDs, including tobacco use, harmful use of alcohol, unhealthy diet, insufficient physical activity, overweight/obesity, elevated blood pressure, raised blood sugar and high cholesterol.[5]

NCDs are the leading cause of death for both women and men. Globally, latest data show that NCDs were responsible for 77 per cent of female deaths and 68 per cent of male deaths.[6] Heart disease is the leading cause of death for both sexes, within the region and globally Table 7. After that, some differences start to emerge. Road injuries are the second most common cause of death for men in Middle East and North Africa (MENA) region illustrating this was a major issue for the region.[7] However, they did not feature in the top ten causes for women and globally, road injuries were the sixth main cause of death for men. Conflict and terror, ranking as the fourth main cause of death for men and the seventh for women, were also a leading killer in the region Figure 19.

Figure 19. Proportion of premature death due to non-communicable diseases, 2016 (percentage)



Source: WHO, Global Health Observatory data repository (last updated on 25 June 2018).

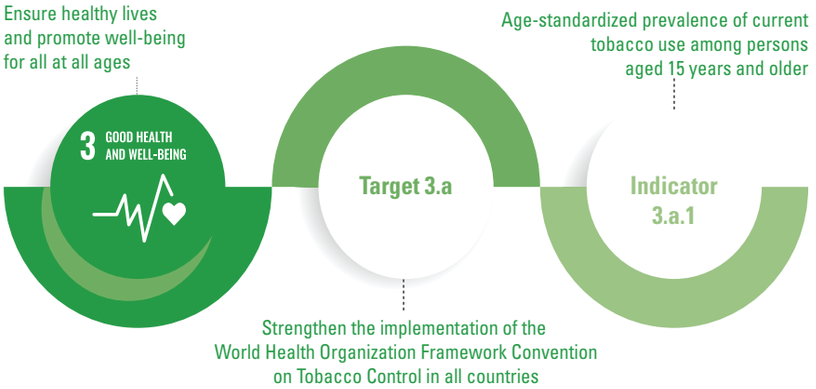
Table 7. Main causes of death in MENA region and the World by sex, 2016

MENA		World	
1. Ischemic heart disease	1. Ischemic heart disease	1. Ischemic heart disease	1. Ischemic heart disease
2. Stroke	2. Road injuries	2. Stroke	2. Stroke
3. Alzheimer disease	3. Stroke	3. Alzheimer disease	3. Chronic obstructive pulmonary disease
4. Diabetes	4. Conflict and terror	4. Chronic obstructive pulmonary disease	4. Lower respiratory infection
5. Lower respiratory infection	5. Lower respiratory infection	5. Lower respiratory infection	5. Lung Cancer
6. Chronic kidney disease	6. Diabetes	6. Diarrheal diseases	6. Road injuries
7. Conflict and terror	7. Chronic kidney disease	7. Diabetes	7. Alzheimer disease
8. Congenital defects	8. Alzheimer disease	8. Chronic kidney disease	8. Diarrheal diseases
9. Neonatal preterm birth	9. Chronic obstructive pulmonary disease	9. Breast Cancer	9. Tuberculosis
10. Chronic obstructive pulmonary disease	10. Neonatal preterm birth	10. Lung Cancer	10. Diabetes

Source: Institute for Health Metrics and Evaluation, GBD Compare Data Visualization. Seattle, WA: IHME, University of Washington, 2016. Available at http://vizhub.healthdata.org/gbd-compare (accessed on 12 May 2018).

F. Smoking

Lifestyle choices, such as diet, exercise and the use of tobacco and alcohol, are closely linked to good or poor health. Men are more inclined to smoke than women, but women are more likely to be overweight due to poor diet and exercise.



Tobacco use was prevalent in many countries of the region and there was a marked gender gap Figure 20. Women's tobacco use was highest in Lebanon, where more than one quarter (27%) smoke followed by Jordan (12%) and Yemen (8%). In contrast, in Egypt there was not much tobacco use by women. In comparison, the highest level of men's smoking was in Egypt and Tunisia where nearly half of the men smoke. In Lebanon 41 per cent of men smoke. Tobacco use among men is also high in Morocco, Jordan, Bahrain, the United Arab Emirates, Kuwait and Algeria. Tobacco use is lowest in Oman for men (16%) and women (1%).

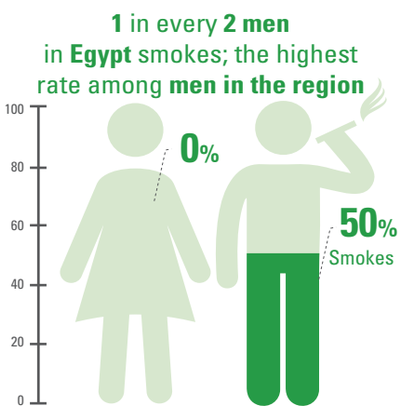
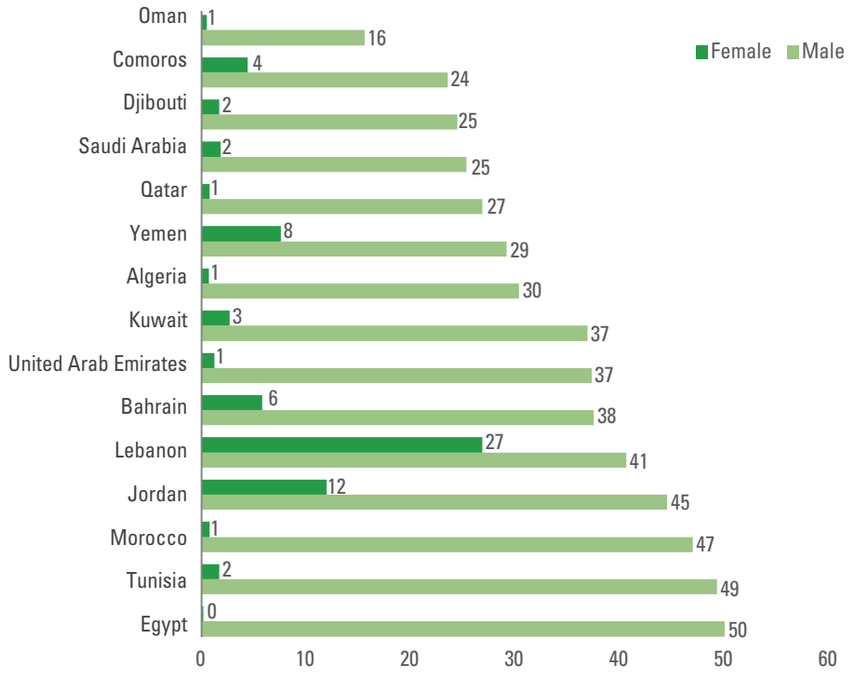


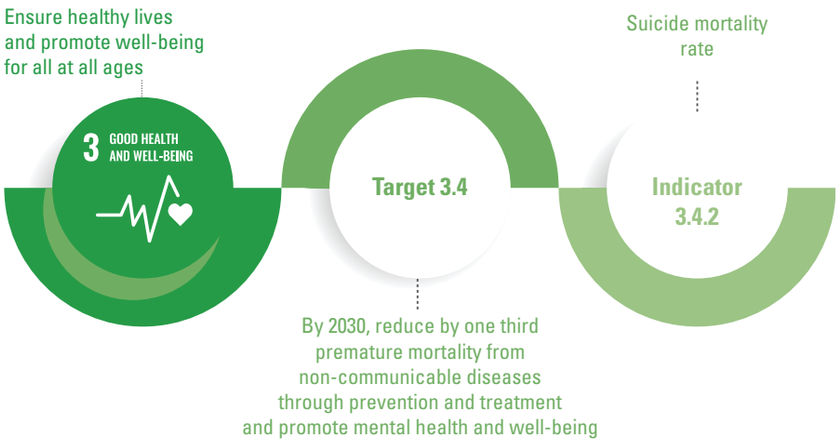
Figure 20. Age-standardized prevalence of current tobacco use among persons aged 15 years and older, 2016 (percentage)



Source: UNSD, "SDG indicators", Global SDG Indicators database; data for Jordan from: DHS 2017-2018 and for Tunisia from: MICS 2018.

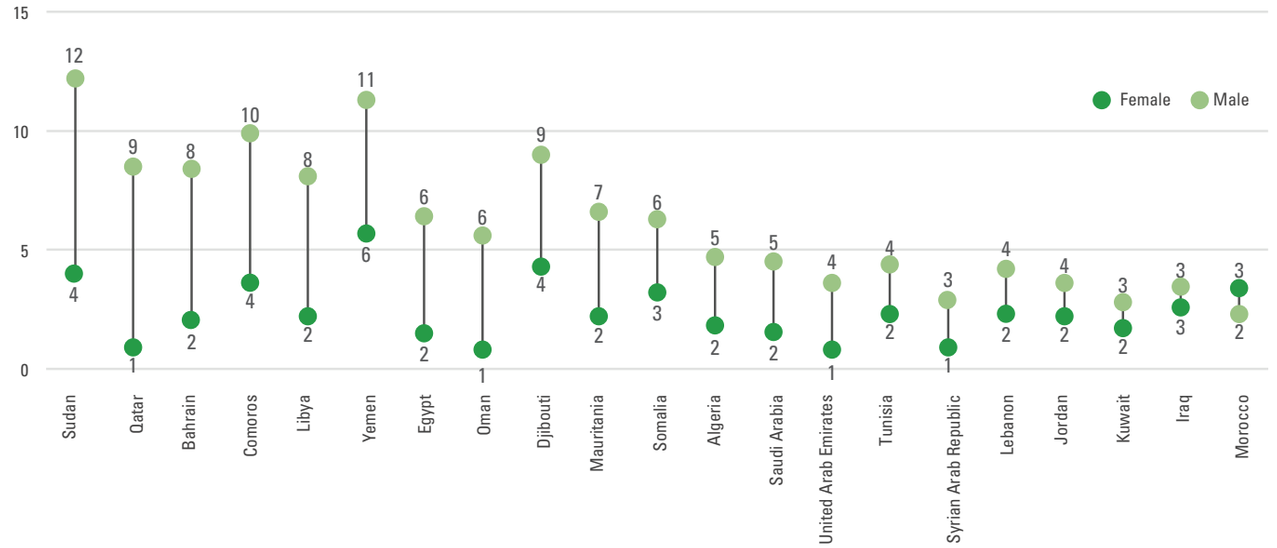
G. Suicide

Close to 800,000 people die due to suicide every year, which is one person every 40 seconds. Suicide is a global phenomenon and occurs throughout the lifespan. Effective and evidence-based interventions can be implemented at population, subpopulation and individual levels to prevent suicide and suicide attempts. There are indications that for each adult who died by suicide as many as 20 others have attempted suicide.[8]



There is a reverse gender gap in the rates of suicide between males and females in the Arab countries. The rates of suicide for males were higher than those for females, except in Morocco (females 3% and males 2%). The highest gaps were observed in the Sudan and Qatar at 8 percentage points, Bahrain at 7 percentage points, Comoros, Libya and Yemen at 6 percentage points. The gap was lowest in Jordan, Kuwait and Iraq at 1 percentage point Figure 21.

Figure 21. Suicide mortality rate, 2016 (percentage)



Source: UNSD, "SDG indicators", Global SDG Indicators database.

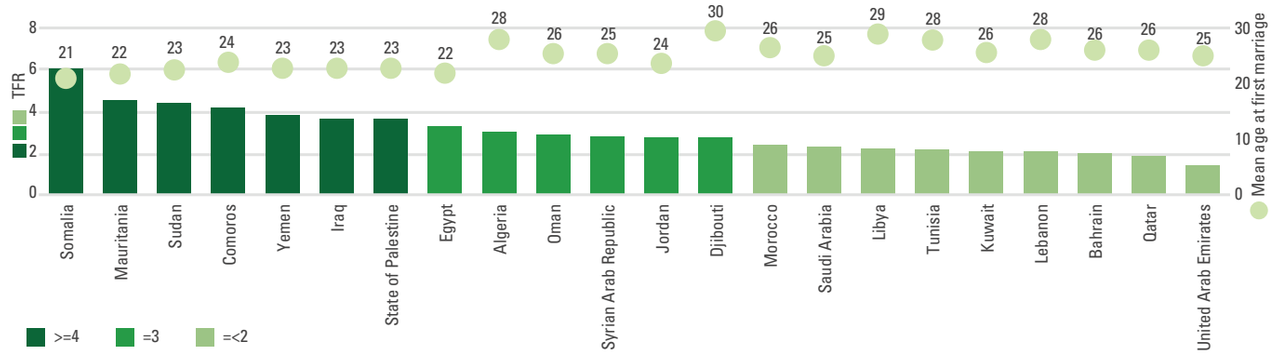
H. Maternal health and fertility

"No woman should die giving life."
- United Nations Population Fund

The Beijing Platform for Action affirms that "the right of all women to control all aspects of their health, in particular their own fertility, is basic to their empowerment".[9] This is closely linked to women's rights to reproductive health services, as well as their autonomy in family planning and their ability to influence decision-making at the household level. Not being able to choose the number, spacing and timing of children impacts women's empowerment, in particular the right to education and their ability to participate in the labour force.

The global fertility rate was just below 2.5 live births per woman currently. Over the last 50 years the global fertility rate has been halved. As societies have modernized, the

Figure 22. Total fertility rate (live births per woman) and mean age at first marriage, in years, latest available data



Source: DESA, *World Population Prospects 2019* (New York, 2019) (TFR); and DESA, Population Division, "World Marriage Data 2017" (mean age at first marriage).

number of live births per woman has decreased substantially. In the pre-modern era, fertility rates of 4.5 to 7 live births per woman were common. At that time, the very high mortality at a young age kept population growth low. As health improves and the mortality in the population decreases population growth accelerates. This rapid population growth then comes to an end as the fertility rate declines and approaches 2 live births per woman.[10]

Data for the last two decades, 1995-2005 and 2005-2015, indicate a slight decrease in total fertility rates throughout the Arab countries. In 1995-2005, total fertility rates stood at an average regional mean of 4.3 and decreased to an average regional mean of 3.2 in 2005-2015. Though declining, it was still relatively high above the world average of 2.5 in 2015.

The existing high fertility rates in some Arab countries are between 4 to 6 live births per woman. For example, the rates in Somalia (6.1), Mauritania (4.6), the Sudan (4.4), Comoros (4.2) and Yemen (3.8) were propelled by relatively low mean age at first marriage (below 24 years) for females and significantly by marriages below the age of 18 in those countries Figure 22.

As fertility declines and health outcomes improve, countries of the region will transition to a population structure where there are fewer dependents and more people to engage in economic activity, a key driver for sustainable development. Realizing this demographic dividend requires careful planning and policies.[11]

I. Education, wealth and reproductive choices

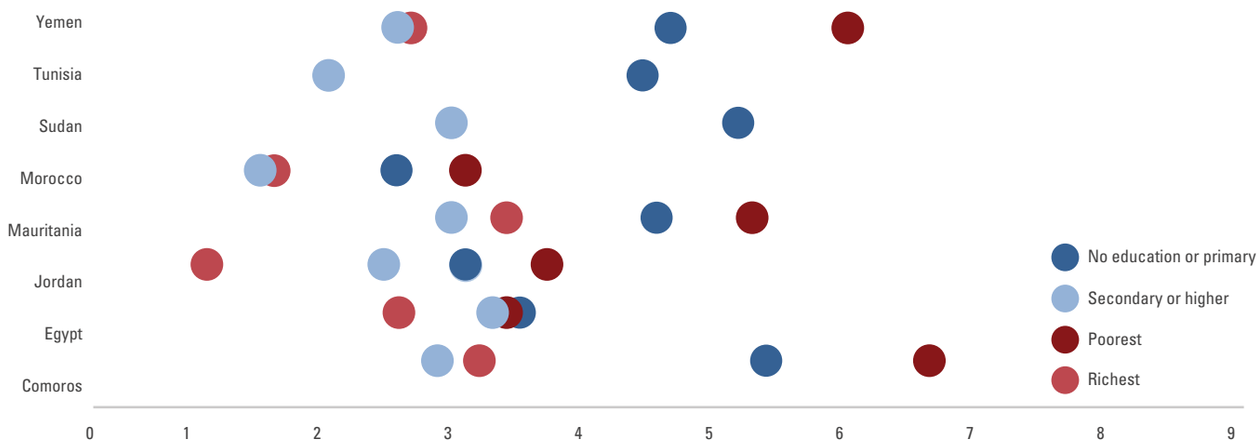
There is a strong association between fertility rates and the educational attainment of women and their wealth. Better educated women tend to have fewer children. Similarly, rich women tend to have lower fertility rates as shown in Figure 23 below. In Yemen, for example, the fertility rate for women with no education was 4.8 live births per woman while, in comparison, the fertility rate of women with education was 2.8 live births per woman. Similarly, Yemen data show the fertility rate of poor women was twice than those who were rich Figure 23.

J. Contraceptive use

Contraceptive use is higher among richest educated women and those living in urban areas.

Fear of overpopulation drove many countries to adopt family planning programmes that focused more on reducing population numbers

Figure 23. Total fertility rate (live births per woman) by education and wealth, latest available data



Source: ICF 2015, The DHS Program STATcompiler; and data for Morocco from: Census 2014.

rather than on what women, depending on their specific situation, may have needed or wanted. Many family planning programmes served to reinforce existing gender norms, as the focus was usually on women — married women in particular — and assumed their primary role to be wives and mothers. Little programming was directed towards men, aside from efforts to increase condom use.[12]

In 1994, 179 governments agreed that individuals have the right and should have the means to freely decide whether or when they want to start a family. Yet, an estimated 225 million women in developing countries are unable to exercise that right because they are not using or have no access to contraception. Unmet demand for family planning results in nearly 60 million unintended pregnancies annually in developing countries.[13]

While quality sexual and reproductive health services, including family planning, are increasingly available to affluent, educated and urban individuals, access to services in some countries is limited in poorer and rural communities, and among young people, including adolescents. According to UNFPA, "as unmet needs decline, disparities in use of family planning methods between rural and urban areas, less and more educated women, and the poor and non-poor tend to shrink".[14] In the Arab States 16 per cent of women married or in a union have an unmet need for family planning.[15]

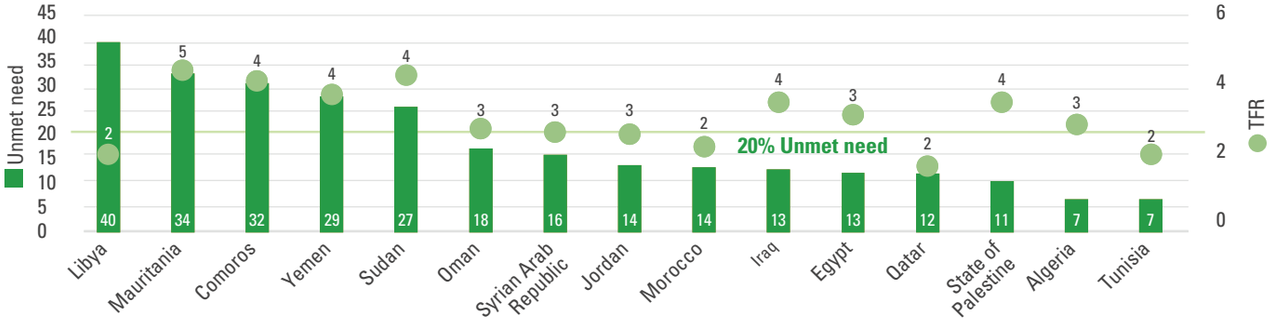
Unmet needs of more than 20 per cent of married women were greatest in five Arab States: it was estimated that 40 per cent of women in Libya, 34 per cent of women in Mauritania, and one third of women in Comoros, Yemen and the Sudan did not have access to family planning in 2019. The fertility rates in these countries also exceeded three live births per woman.

The lowest rates of unmet need for family planning of below 15 per cent were in Jordan, Morocco, Iraq, Egypt, Qatar, the State of Palestine, Algeria and Tunisia Figure 24.

Unwanted or unplanned pregnancies can have a detrimental effect on women's health. Worldwide, roughly 303,000 women (equivalent to 830 women a day)[16] and 3 million newborn babies die each year because of complications related to pregnancy and childbirth. Nearly all of these deaths occur in developing countries, where 10 to 15 per cent of pregnancies end in maternal death due to unsafe abortions.[17]

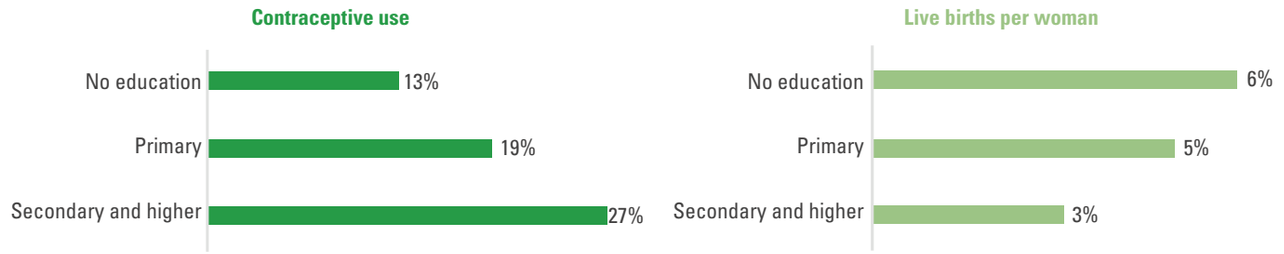
Educated women generally want smaller families and therefore use family planning to achieve their desired family size. Women in with no education Comoros, Jordan Morocco, and Yemen, for example, had more children and used less contraceptives than women with some education Figures 25, 26, 27 and 28.

Figure 24. Proportion of women, aged 15-49 years, with unmet need for family planning (percentage) and total fertility rate (live births per woman), latest available data



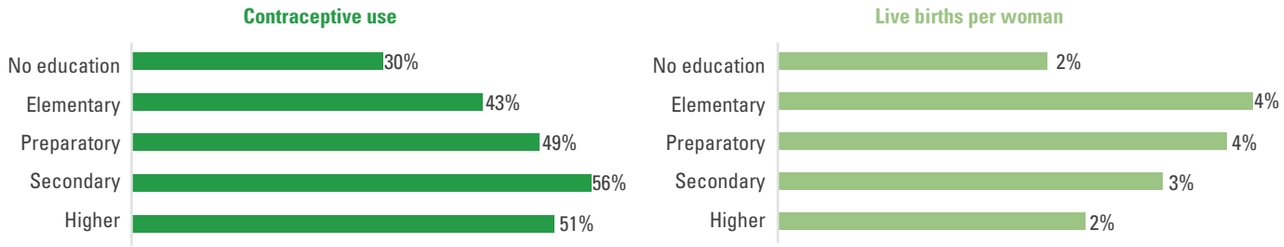
Source: DESA, Population Division, "World Contraceptive Use 2019" (unmet need for family planning); and DESA, *World Population Prospects 2019* (New York, 2019) (TFR).

Figure 25. Prevalence of contraceptive use and fertility rate by women's education in Comoros, 2012



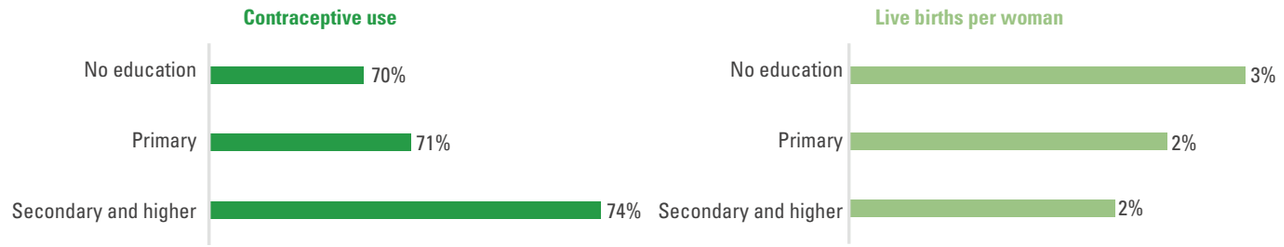
Source: DHS 2012, Comoros.

Figure 26. Prevalence of contraceptive use and fertility rate by women's education in Jordan, 2018



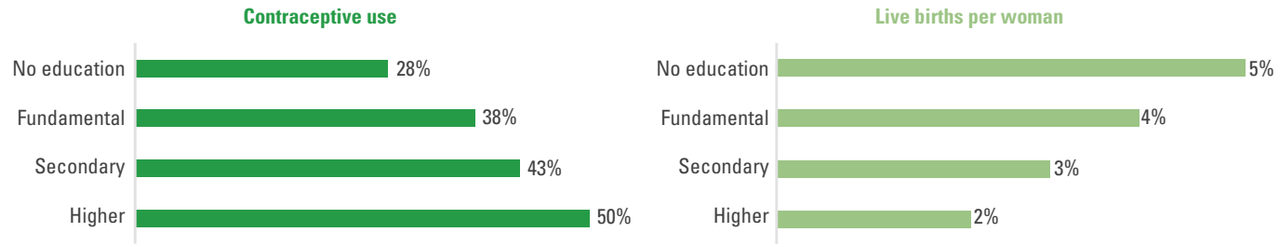
Source: DHS 2017-2018, Jordan.

Figure 27. Prevalence of contraceptive use and fertility rate by women's education in Morocco, 2018



Source: DHS 2018, Morocco.

Figure 28. Prevalence of contraceptive use and fertility rate by women's education in Yemen, 2013

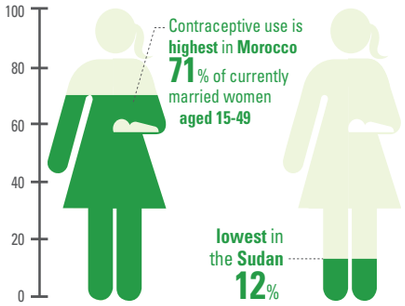


Source: DHS 2013, Yemen.

Modern contraceptive use worldwide has doubled from 36 per cent in 1970 to 64 per cent in 2016. Figure 29 shows the use of contraceptives by married women aged between 15-49 years. The percentage varies significantly across countries, with over two thirds of married women in Morocco using contraceptives compared with less than 10 per cent in the Sudan.

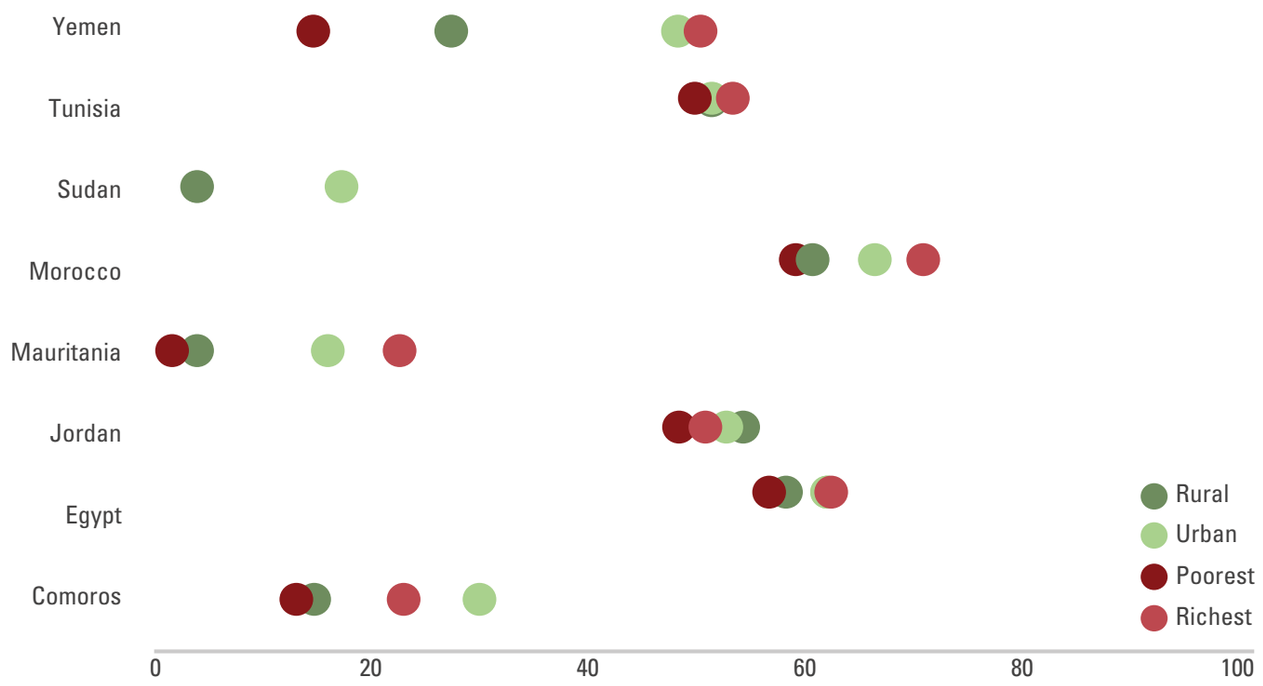
There are huge differences in women's access to contraceptives depending on socioeconomic status. Women from the poorest quintile have limited access to contraceptives. Rich women in Mauritania were almost 14 times as likely to use any method of contraceptives as women in the poorest quintile. In Yemen, women were four times as likely to use any method and in Morocco, they were twice as likely.

Women living in rural areas are also disadvantaged in terms of using any method of contraceptives in comparison to urban women. In Mauritania, for example, urban women were almost seven times as likely to use any method of contraceptives as rural women. The highest gaps between rural and urban were in Tunisia (26 percentage points), Yemen (21 percentage points), Comoros (15 percentage points) and Mauritania and the Sudan (both 13 percentage points) Figure 29.



It is no coincidence that high fertility rates in Somalia, the Sudan, Mauritania, Comoros and Yemen occur in parallel with very low contraceptive prevalence. All these countries also had high maternal mortality rates, in addition to girls' early marriage Figure 30.

Figure 29. Proportion of married women currently using any method of contraception by location and wealth, latest available data (percentage)



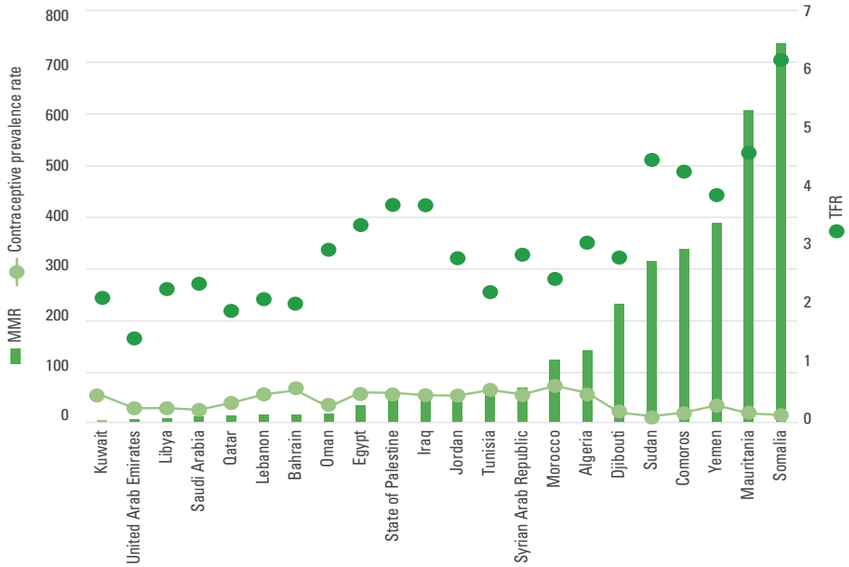
Source: ICF 2015, The DHS Program STATcompiler; and data for Tunisia from: MICS 2018.

K. Antenatal care and delivery services

Latest data show that antenatal care prevalence was higher in urban areas than rural, except in Jordan. Antenatal care visits were highest in Jordan both rural and urban 92%, followed by Tunisia (rural 77% and urban 89%), Egypt (rural 81% and urban 88%) and Comoros (rural 49% and urban 50%). Mauritania had the lowest prevalence of antenatal care visits in both rural (11%) and urban (24%) areas Figure 31.

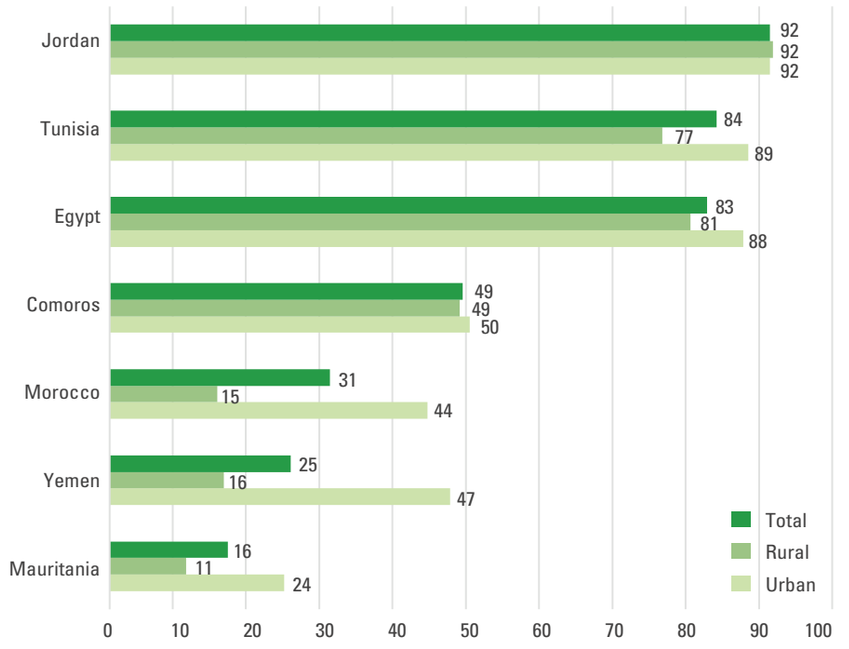
Utilization of health facilities for childbirth in the Arab States is still low for disadvantaged groups with marked variations between urban and rural areas, and the wealth and education of mothers. Educated mothers are more likely to give birth in a health facility than uneducated mothers, as seen clearly in Yemen, Morocco, Mauritania and Comoros. Similarly, poorer women have a lower probability of giving birth in a health facility than richer women. To increase access to health facility delivery, it is important to raise women's awareness on the benefits of delivering in health facility, increase women's decision-making power and address common barriers such as lack of transportation. Data on Jordan, however, showed very small disparity among women from different backgrounds Figure 32.

Figure 30. Prevalence of contraceptive use (any method) among currently married women, aged 15-49 years, TFR (live births per woman) and MMR (deaths per 100,000 live births)



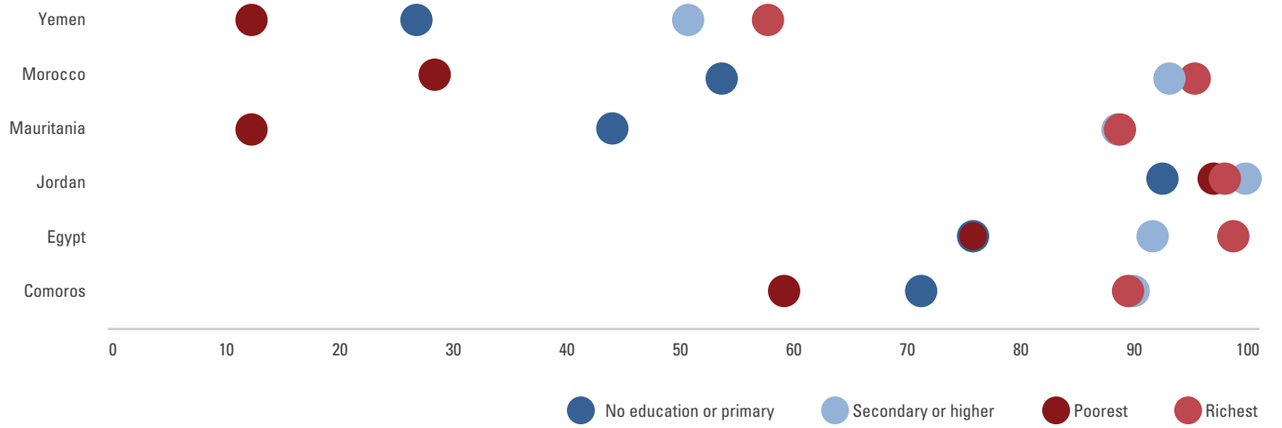
Source: DESA, Population Division, "World Contraceptive Use 2019" (contraceptive use); DESA, *World Population Prospects 2019* (New York, 2019) (TFR); and WHO, Global Health Observatory data repository (last updated on 18 October 2019) (MMR).

Figure 31. Antenatal visits for pregnancy: four or more visits by location (percentage)



Source: ICF 2015, The DHS Program STATcompiler; and data for Tunisia from: MICS 2018.

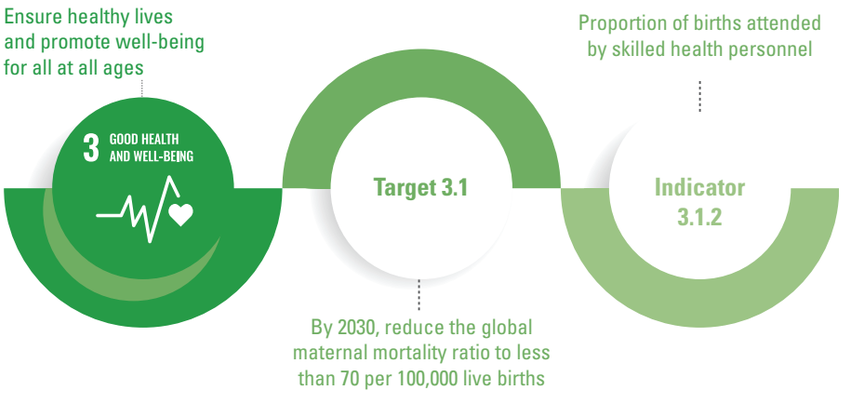
Figure 32. Proportion of live births delivered at a health facility by education of mother and wealth, latest available data (percentage)



Source: ICF 2015, The DHS Program STATcompiler.

L. Skilled health personnel

Antenatal care and skilled health personnel attendance at delivery are necessary to ending preventable maternal death. SDG 3 on good health and well-being includes indicator 3.1.2 on the proportion of births attended by skilled health personnel which was also one of the measures used to monitor the MDGs.



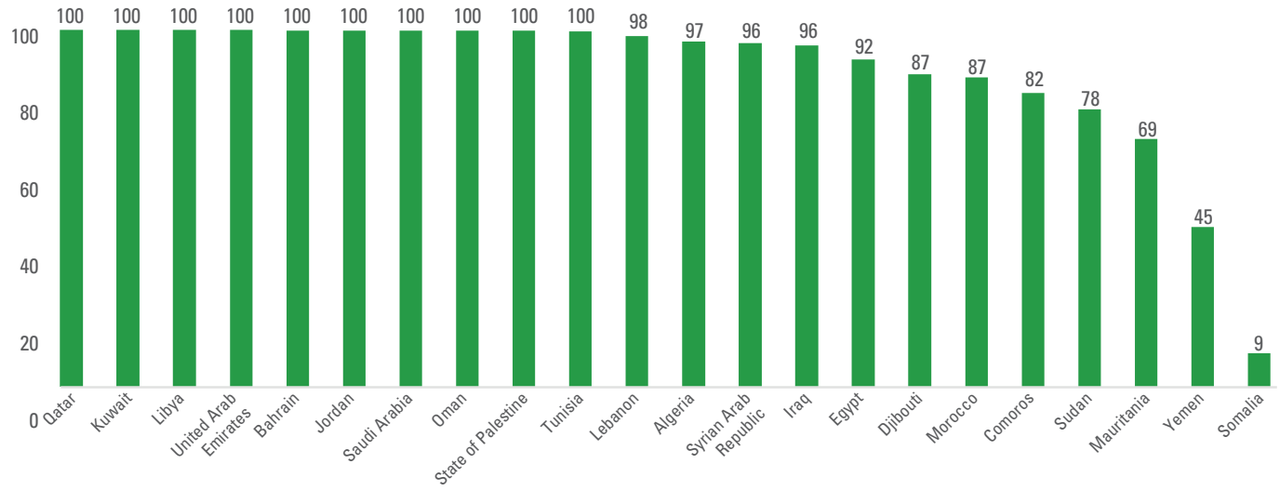
There has been a significant increase in skilled birth personnel attendance in the region, from 61 per cent of births in 2000 to 86 per cent in 2015. In 14 countries, more than 90 per cent of births were attended by skilled health personnel. The lowest attendance rates of skilled birth personnel were in Somalia (9%), Yemen (45%) and Mauritania (69%) Figure 33.

Data from Arab States confirm that women from the poorest quintile were particularly excluded from the benefits of having a skilled attendant at birth. Women in the richest quintile in Mauritania were almost six times as likely to deliver with a skilled health attendant as women in the poorest quintile. Similarly, the richest women in Yemen were nearly four times as likely to deliver with a skilled health attendant as poor women.

Women living in rural areas were also left behind: the absolute gap in skilled birth personnel attendance between urban and rural population decreased by only 7 percentage points in 25 years – from 37 percentage points (around 1990) to 30 percentage points (around 2014).[18] Despite some gains over the years, large gaps still exist between rural and urban areas.

Poor women living in **rural areas** often **lack assistance** during childbirth

Figure 33. Proportion of births attended by skilled health personnel, latest year (percentage)



Source: UNICEF/WHO joint database, "SDG 3.1.2 skilled attendance at birth"; and data for Tunisia from: MICS 2018.

The largest gaps between rural and urban areas were reported in Mauritania at 57 percentage points, Morocco at 46 percentage points, Yemen at 39 percentage points, Tunisia at 37 percentage points and the Sudan at 27 percentage points Figure 34.

Skilled birth attendance has **increased significantly** across the region

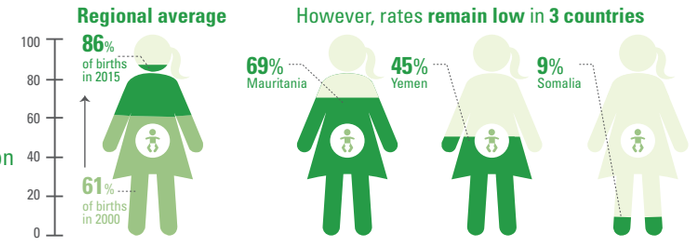
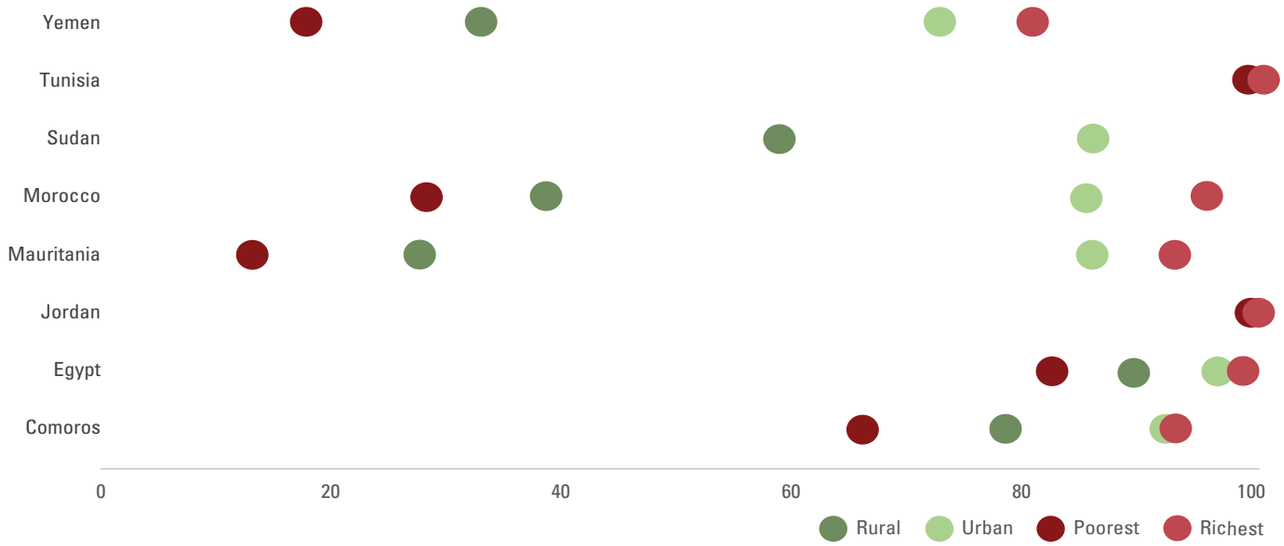


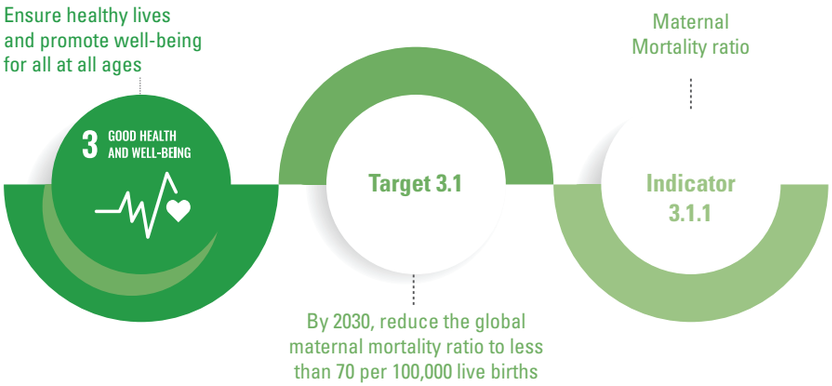
Figure 34. Proportion of women who received assistance during delivery from a skilled provider by location and wealth, latest available data (percentage)



Source: ICF 2015, The DHS Program STATcompiler; and data for Tunisia from: MICS 2018.

M. Maternal mortality

Maternal mortality remains high in Somalia, Mauritania, Yemen, Comoros and the Sudan

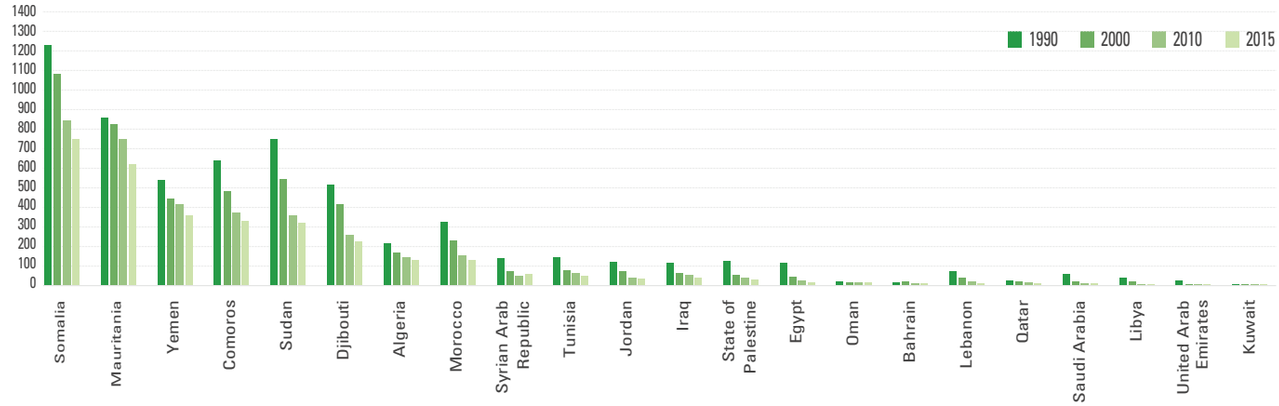


The health and lives of hundreds of thousands of pregnant women are endangered by conflict and natural disasters, and such is the case for many women in the Arab States. Women and adolescent girls bear extraordinary burdens as wars and disasters leave a trail of turmoil and destruction. Without the usual protection of family and community, women and adolescent girls frequently become victims of sexual violence, unwanted pregnancies and sexually transmitted infections. In addition, conflict has caused child marriages to rise.[19]

According to United Nations Children's Fund (UNICEF), "Providing quality reproductive health services and improving the health and nutrition of mothers-to-be are pivotal not only to reducing maternal morbidity and mortality, but also in addressing many underlying causes of neonatal and child mortality".[20] Maternal mortality has declined significantly over recent decades. Since 2000, the world has seen a 38 per cent decline in the maternal mortality (The number of women and girls who died each year from complications of pregnancy and childbirth fell from 342,000 in 2000 to 211,000 in 2017).

The Arab region has also witnessed a similar decline of around 40 per cent. It is estimated that maternal mortality declined from 250 maternal deaths per 100,000 live births in 2000 to 149 maternal deaths per 100,000 live births in 2017. Globally, some 830 women are estimated to die every day from causes related

Figure 35. Trends in estimates of maternal mortality ratio (deaths per 100,000 live births), 1990-2015



Source: WHO, Global Health Observatory data repository (last updated on 18 October 2019).

to pregnancy or childbirth. This is about one woman every two minutes[21] Figure 35.

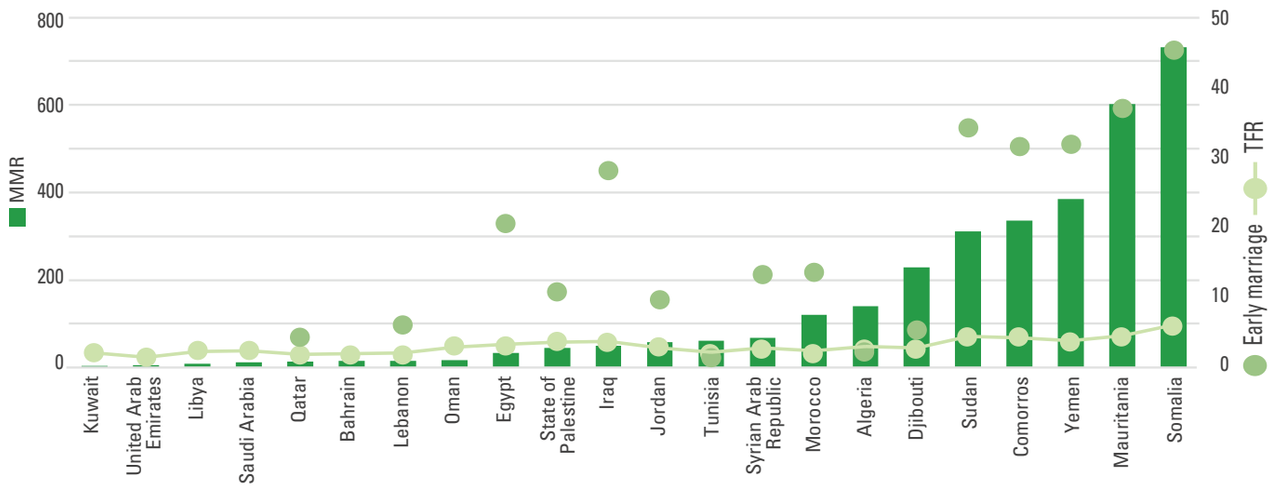
It was also reported that for every woman who dies in childbirth, 20 or 30 sustain injuries, infections or disabilities. Most of these deaths and injuries are entirely preventable.[22] For most of the Arab States maternal mortality ratio is well under 75 deaths per 100,000 live births. However, it is particularly high in Somalia (732 deaths per 100,000 live births), followed by Mauritania (602), Yemen (385), Comoros (335), the Sudan (311), Djibouti (229), Algeria (140) and Morocco (121).

Only two Arab countries, Kuwait and the United Arab Emirates, have managed to reduce maternal mortality ratio to a low level by international standards (not more than 5 per 100,000 live births). The other Gulf countries of Bahrain, Qatar, Saudi Arabia and Oman had moderately low levels (between 10 and 20 per 100,000 live births) but their levels remained relatively higher than countries with comparable levels of economic resources.

Lebanon also falls in the moderate level category similar to the latter Gulf countries, while in Libya maternal mortality ratio was estimated at 9 deaths per 100,000 live births. The remaining countries such as Egypt, Iraq, Jordan, the State of Palestine and Tunisia exhibited between 30 and 60 deaths per 100,000 live births. Given that most maternal deaths were preventable, this means that attention should be focused on those states with high maternal deaths.

Maternal mortality is linked to early marriage and the total fertility rate. As shown in Figure 36, Somalia had the highest rate at 45.3 per cent of women aged 20-24 married before age 18 and also the highest total fertility rate at 6.1 live births per woman.

Figure 36. Maternal mortality ratio (deaths per 100,000 live births) and its relationship to early marriage (percentage) and fertility (live births per woman)

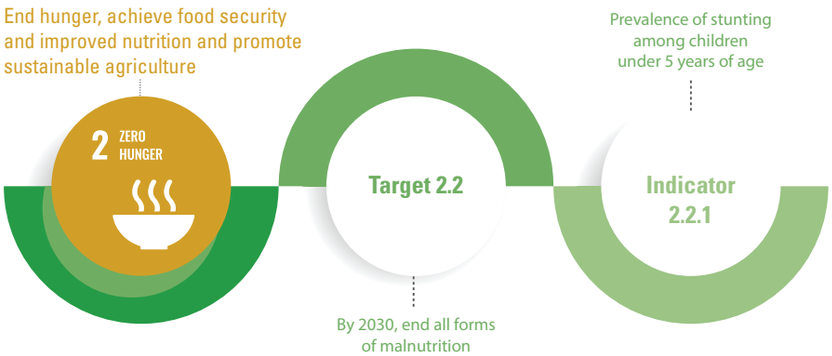


Source: WHO, Global Health Observatory data repository (last updated on 18 October 2019) (MMR); latest DHS and MICS surveys (see Annex- Maternal Health) (early marriage); and DESA, *World Population Prospects 2019* (New York, 2019) (TFR).

Child and adolescent health

"We cannot waste our precious children. Not another one, not another day."

Nelson Mandela and Graca Machel



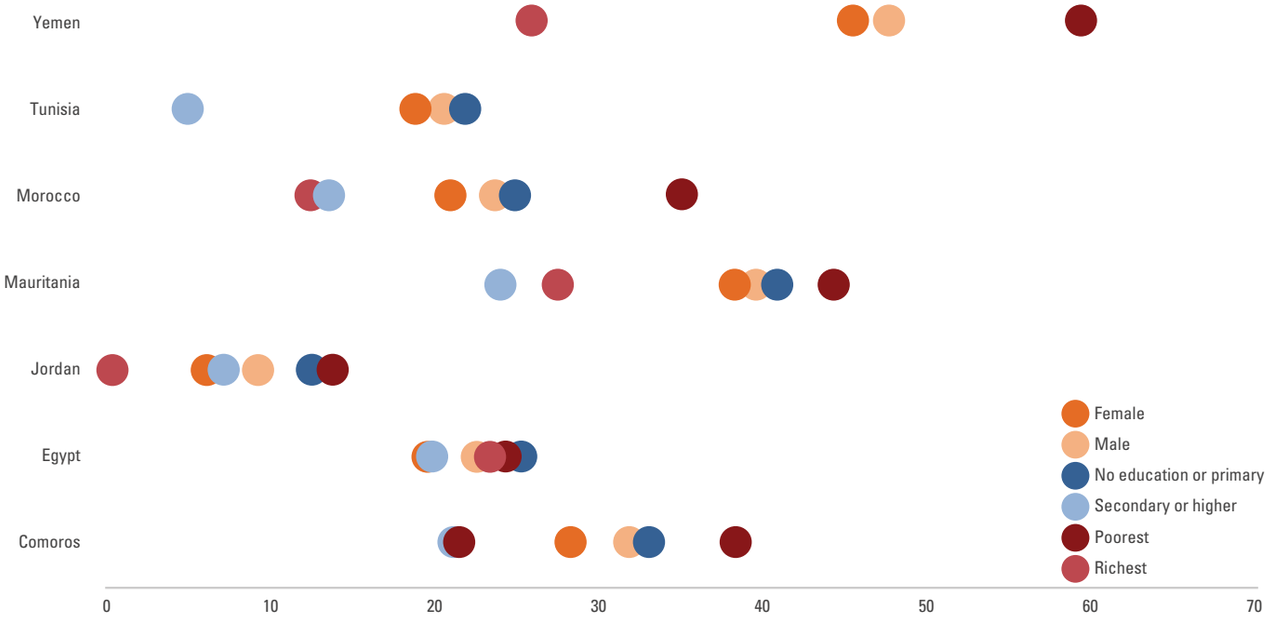
N. Child nutrition

Malnourished children, particularly those with severe acute malnutrition, have a higher risk of death from common childhood illness such as diarrhea, pneumonia and malaria. Nutrition-related factors contribute to about 45 per cent of deaths in children under 5 years of age.[23]

Stunting affected an estimated 21.9 per cent (149 million) of children under age five globally in 2018. While stunting decreased by about 10 percentage points at the global level, it decreased by only 6 percentage points in the region. At least one in every six children under five is stunted in the region (15.1 per cent in Western Asia and 17.2 per cent in Northern Africa) or 9.1 million children in total.[24]

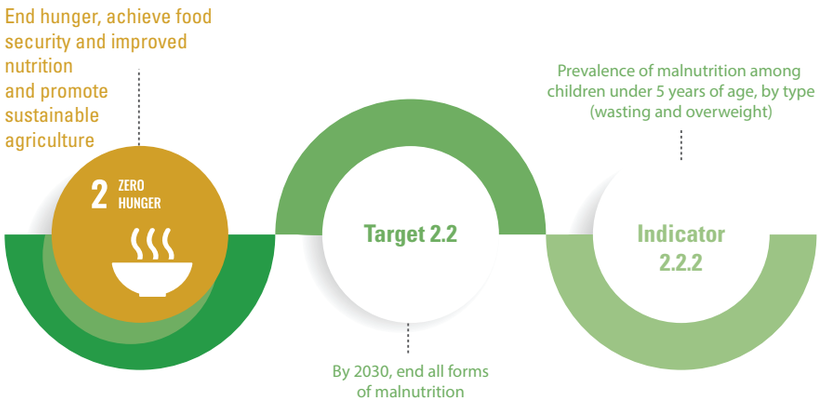
Stunting prevalence decreases with increases in wealth and higher educational attainment of the mother and, to a lesser extent, is less prevalent in urban than rural areas. There are no major gender gaps between female and male children, although latest data on child health differences show that boys had slightly higher rate of stunting than girls in all six Arab countries with available data as shown in Figure 37 below.

Figure 37. Proportion of children stunted by education of mother and wealth, latest available data (percentage)



Source: ICF 2015, The DHS Program STATcompiler.

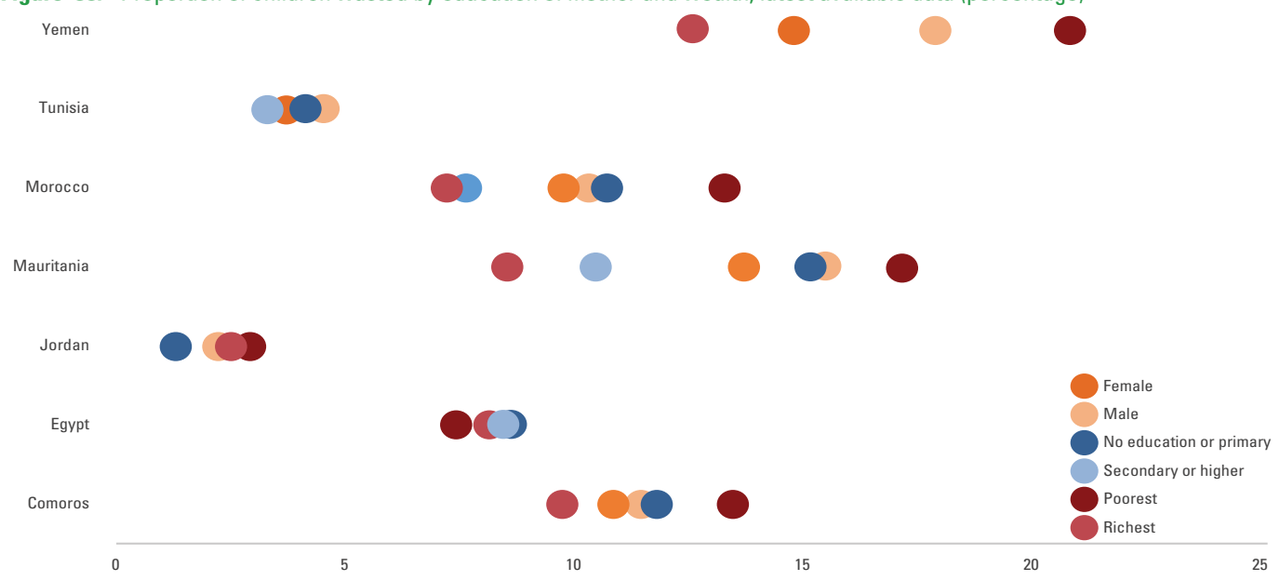
Prevalence of stunting varies among girls and boys in the same country. In 2003, the Palestinian Central Bureau of Statistics showed that prevalence of stunting and underweight children among Palestinian girls was higher than boys. However, the 2010 Palestinian family survey showed that prevalence of underweight children, stunting and wasting among boys under 5 years was higher than in girls.[25]



Wasting continued to threaten the lives of an estimated 7.3 per cent (49 million) children under five globally in 2018. In the same year, Western Asia and Northern Africa had 3.5 million wasted children under five. Although there are no major gender gaps, the gap for wasting between females and males decreases as poverty declines in countries. The gender gap was largest in Yemen followed by Mauritania. In both countries the proportion of wasted males tend to be higher than wasted females, particularly among the poorest families and those with no or minimal education of mothers. As disparity in wealth becomes smaller and there are fewer women with no education, the gender gap in wasting between girls and boys becomes smaller, as witnessed in Morocco and Comoros. The gender gap is nearly nonexistence in Jordan and Tunisia; there was a low percentage of mothers with no education and a small disparity between wealth quintiles Figure 38.

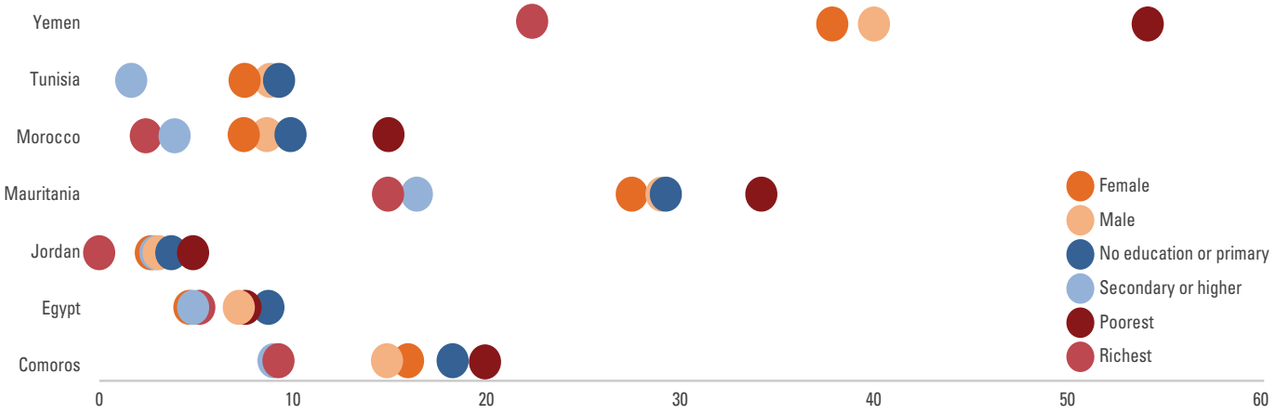
An estimated 5.9 per cent (40 million) children under five around the world were **overweight** in 2018. During the period from 2000 to 2018, Arab States witnessed an increase in the percentage of overweight children under five by around 2 percentage points (Western Asia from 6.7 per cent to 9.0 per cent and Northern Africa from 8.1 per cent to 10.6%). There are around 5.5 million overweight children in the Arab States.[26]

Figure 38. Proportion of children wasted by education of mother and wealth, latest available data (percentage)



Source: ICF 2015, The DHS Program STATcompiler.

Figure 39. Proportion of underweight children by education of mother and wealth, latest available data (percentage)



Source: ICF 2015, The DHS Program STATcompiler.

The prevalence of **underweight** children under five years of age reflects child growth. According to a technical paper published by the World Health Organization (WHO) in 2010, it was estimated that globally 30 per cent of deaths in children under five years of age are attributed to malnutrition. In the Arab region, the overall proportion of underweight children below five years of age has increased from 14 per cent in 1990 to 17 per cent in 2004.[27]

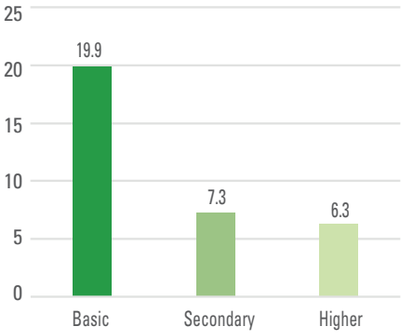
Similar to wasting and stunting there are no major gender gaps, however, underweight children mostly live in rural areas, are among the poorest and their mothers have minimal or no education attainment. The gender gap for underweight children decreases as poverty declines in countries. In almost all the countries (except Comoros), with available data, boys had slightly higher rate of underweight than girls Figure 39.

0. Child mortality

Child mortality – a key indicator for child well-being – reflects a country's social and economic development. It is indicative of children's access to basic health interventions such as vaccinations, medical treatment, and adequate nutrition. Over the last two decades, the world made substantial progress in reducing mortality among children. Since 1990, the global under-five mortality rate has dropped by 58 per cent, from 93 deaths per 1 000 live births in 1990 to 39 in 2017. Still, in 2017 alone, an estimated 6.3 million children and young adolescents died, mostly from preventable causes the majority of deaths (85%) occurred during the first five years of life.[28]

Educational attainment of the mother has an inverse relationship with infant mortality. Data from the State of Palestine Multiple Indicator Cluster Surveys (MICS) in 2014 showed evidence that children of educated mothers had lower mortality rates than those of uneducated mothers. Figure 40 on **post-neonatal mortality** by educational attainment of the mother revealed that mortality rates for children born to mothers with only primary education were higher than those born to mothers with secondary and higher education.

Figure 40. Post-neonatal mortality rate by education of mother in the State of Palestine, 2014 (percentage)



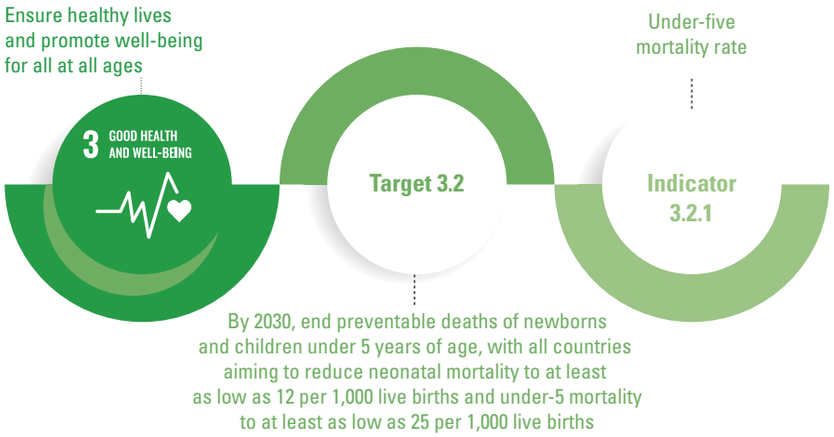
Source: Palestinian MICS 2014.

Under-five mortality: the world made remarkable progress in child survival in the past few decades, and millions of children have better survival chances today than in 1990-1995. One in 26 children died before reaching age five in 2018, compared to one in 11 in 1990.[29] Most children under five die from preventable or treatable causes like complications during birth, pneumonia, diarrhoea, neonatal sepsis and malaria.
On average, under-five mortality rates among children in rural areas are 50 per cent higher than children in urban areas.[30]

The number of countries with gender disparities in child mortality continues to decline. On average boys are expected to have a higher probability of dying before reaching age five than girls. The estimated global under-five mortality rate in 2018 was 41 deaths per 1,000 live births for boys and 36 for girls.

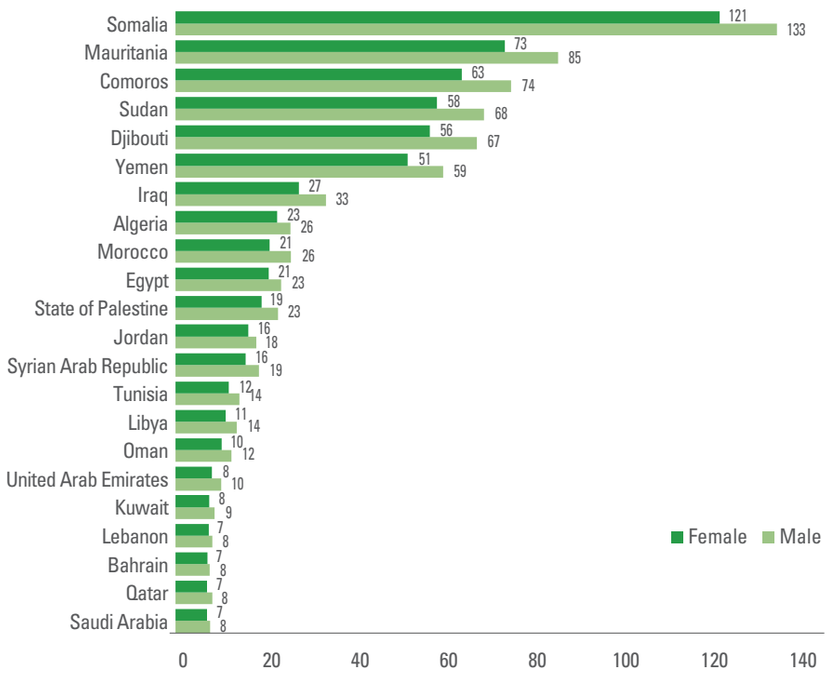
In the Arab region, the under-five mortality rate dropped by more than half during the period (1990-2018). The rates decreased by 56 percentage points for males and by 58 percentage points for females. However, inequities persisted among and within countries.

Latest data available for 118 countries show that under-five mortality rate below the SDG target of at least 25 deaths per 1,000 live births, out of which 15 countries were from the Arab region. Among the remaining countries, namely Somalia, Mauritania, Comoros, the Sudan, Djibouti, Yemen and Iraq, progress needs to be accelerated



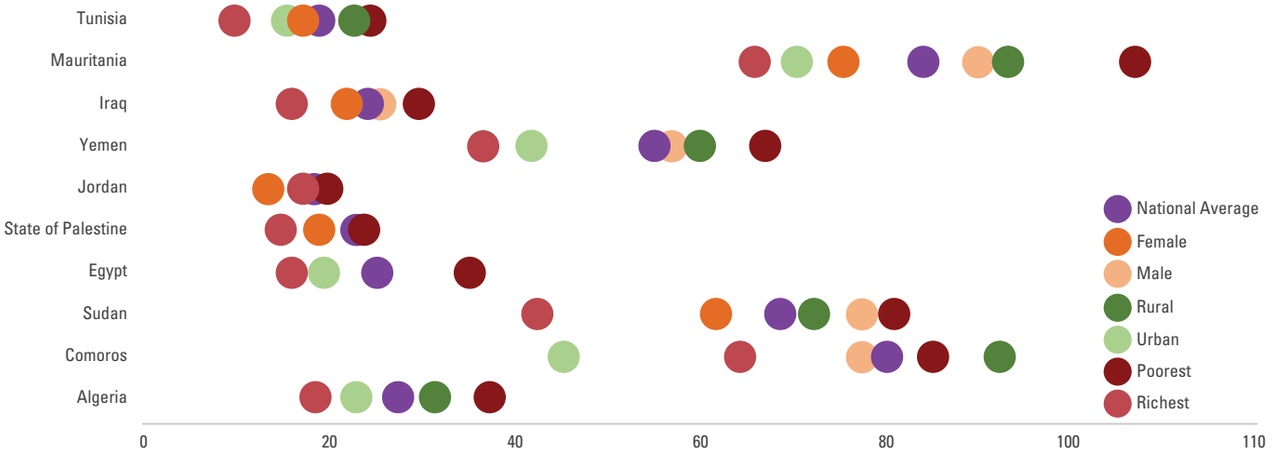
to achieve the SDG target by 2030. In all the Arab countries, boys had higher rates of under-five mortality than girls. This reverse gender gap in under-five mortality rate was the highest in Somalia among all Arab countries, by 13 percentage points Figure 41.

Figure 41. Under-five mortality rate (deaths per 1,000 live births), latest year



Source: UNSD, "SDG indicators", Global SDG Indicators database.

Figure 42. Under-five mortality rate (deaths per 1,000 live births) by location and wealth, latest available data

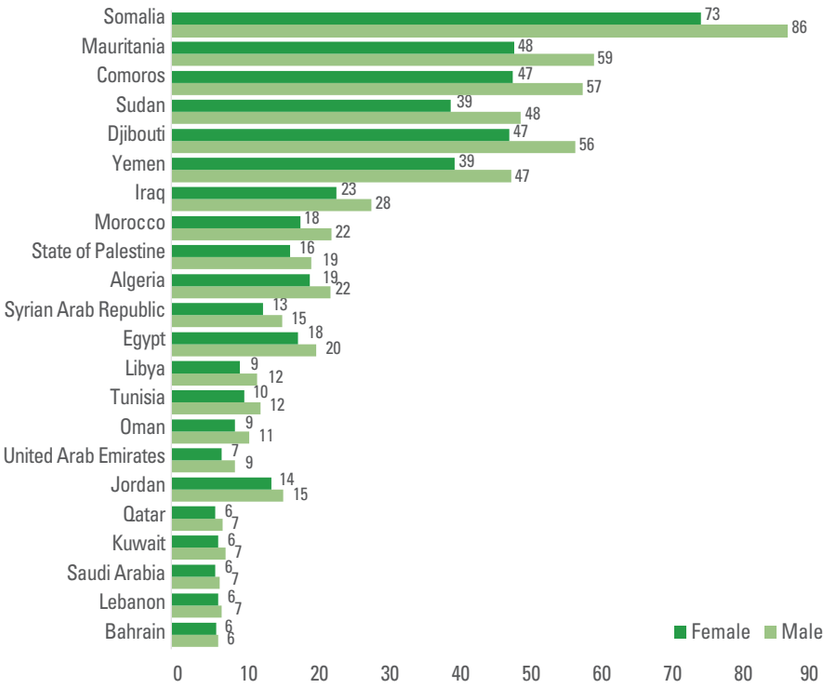


Source: Save the children 2019.

Under-five mortality is highest among the poorest quintile of a population and those living in rural areas, and lowest among the richest and those living in urban areas. Figure 42 shows that in all countries the under-five mortality rate for both sexes increased with the probability of being poor and living in rural areas. The gender gap for under-five mortality rates between females and males, however, decreased as poverty declined in countries.

Infant mortality: similarly, the infant mortality rate among boys is higher than for girls. Data and studies related to the first year of life across the world clearly shows that infant mortality rates are higher in boys than in girls, with biological factors playing an important role in the higher mortality of infant males. In 2018, the global infant morality rate for boys was 31 deaths per 1,000 live births in comparison to 27 for girls. In the Arab States the infant morality rate for boys was 29 deaths per 1,000 live births in comparison to 24 for girls. There were more infant boys dying than girls by around 10 percentage points in Comoros, Djibouti, Mauritania, Somalia and the Sudan Figure 43.

Figure 43. Infant mortality rate (deaths per 1,000 live births), latest year



Source: UNSD, "SDG indicators", Global SDG Indicators database.