



Fact Sheet

Gender Gap in health and survival in Jordan

2021

Introduction

World Economic Forum global reports measure the gender gap in four criteria pertaining to economic opportunities, political empowerment, educational attainment, health and survival. Jordan's decline on the 'quality gap in health and survival' in the 2021 ranking of countries compared to 2020 caught the attention of the Higher Population Council which wanted to find out the reasons for this decline.

Introducing the Gender Gap Criterion in Health and Survival from the Global Reports of the World Economic Forum "Gender Gap 2020 & 2021"

The Global Reports of the World Economic Forum "Gender Gap¹" measure the criterion of 'Gender gaps in health and survival' through two indicators as follows:

First: the ratio of the sex (female/ male) at birth: The gender parity standard is the maximum value and is at 0.944 and not 1.000 i.e. female births must make up 94.4% of male births, and the biology of this ratio is constant and unchanging, and any deviation from it monitors the criteria of preference between males and females and selective practices of the sex of the newborn. The source of the report for these data is the World Bank Global Development Indicators Database, or the Databases of the United Nations Department of Economic and Social Affairs/ Population Division.

Second: Average life expectancy at birth with health and wellness—the average number of years one can expect to live in good health taking into account the lost years resulting from violence, disease, malnutrition and other related factors. The source of data for this report is WHO and The World Health Observatory database. Gender parity standard is 1,066 not 1.000, and as women naturally tend to live longer than men, as such, the report considers parity to be achieved if women live, on average, five years longer than men.

Table 1 shows Jordan's ranking on this standard and its indicators, according to the latest two reports.

	2020		2021				
	Jordan Ranking	Mark	Jordan Ranking	Mark			
Sub-standard: health and survival:	103	0.971	145	0.957			
Indicators							
Sex ratio at birth	1	0.944	1	0.944			
Life expectancy in good health	112	1.032	153	0.987			

¹ World Economic Forum, Global Gender Gap Report 2020, 2021

Analysis of Jordan's situation on health and survival criterion

Jordan's position on the criterion of health and survival can be summarized as follows:

First: Sex (female/male) ratio at birth:

- Jordan achieved a full gender parity mark 0.944 on this index according to the last five reports reviewed (2017, 2018, 2020, 2021); henceforth, Jordan ranked first among the countries covered by these reports. This may be attributed to Jordan's restrictions on abortion laws, as abortions in Jordan are limited to spontaneous (involuntary) natural abortions²; and intentional legal and medical abortion as a result of medical reasons such as the disposal of the already lifeless fetus in the mother's womb, or to save the mother's life in the event of complications with continued pregnancy, or such congenital malformations with which the fetus cannot survive after birth (this may require a legitimate/ legal intervention or Fatwa.) These are mostly safe abortion cases as they are performed in public hospitals under the supervision of a medical committee that determines the mother's health need for this process. Other than that, and any abortions that occur in cases of intentional and illegal abortion, are forbidden and criminal, and not to be permitted in Jordan.
- It should be noted that most Arab countries have also ranked first along with Jordan in this regard, such as, Algeria, Bahrain, Kuwait, Lebanon, Oman, Saudi Arabia, Qatar, Syria, Tunisia, UAE and Yemen.

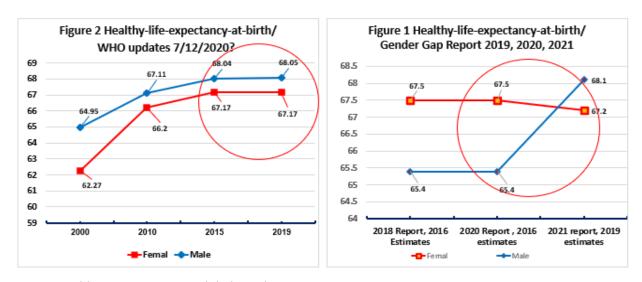
Second: Life expectancy at birth with health and wellness

According to the last two reports of the gender gap 2020, 2021 Jordan's ranking on this index witnessed
a drop from (112 out of 138 countries) in 2020 to (153 out of 156 countries) in 2021. This has negatively
affected Jordan's ranking among countries, with a drop on the "health and survival" standard from 103
in 2020 to 146 in 2021.

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² Higher Population Council, 2018, Position paper on abortion in Jordan

By tracking the life expectancy at birth on which the gender gap reports were based (2018, 2020, 2021)
 and the corresponding 2020 World Health Observatory database as shown in the following figures, it appears that:



Source: World Economic Forum, Global Gender Gap Report 2020, 2021 https://www.who.int/data/gho/data/indicators/indicator-details/GHO/gho-ghe-hale-healthy-life-expectancy-at-birth

The Gender Gap Reports for the years (2018 and 2020) relied on the 2016 life expectancy projections for Jordan43 prepared by WHO, and then moved on in its 2021 report to be based on the 2019 index values published on the WHO World Observatory database (2020 update series), which notes in its publications that the new estimates in this series are not comparable to previous WHO estimates.

Because these estimates draw on new data and on the results of the GBD 2019 study, and there have been substantial revisions to methods for many causes, these estimates for the years 2000-2019 are not directly comparable with previous WHO estimates of DALYs.

SOURCE: WHO methods and data sources for global burden of disease estimates 2000-2019

On the other hand, the trend of female health life expectancy values in the Gender Gap Reports (2018 and 2020) takes on a different trend from that of the 2021 report, which used values from the 2020 WHO updated series of estimates. Figure 1, shows how the trend changed in the 2021 report using 2019 values from the 2020 WHO updated series.

Therefore, the transition from using the 2016 index forecasts which were standardized in the 2018 and 2020 gender gap reports to using the index value for 2019 from an updated 2020 series to reflect Jordan's position on the index in the 2021 gap report is the reason why Jordan's ranking on this index has declined.

As shown in [Table 1], Jordan ranking in 2020 was 1.032. According to the 2021 report, it dropped to 0.9868, while as shown in Figure 2, the average number of expected health years for both sexes remained stable in 2015-2019, i.e. there was no change in the ratio of female health life expectancy to male health life expectancy during 2015-2019, and the decline was the result of the transition to using values from a whole different new series from the previous series.

Third: Gender gap in life expectancy at birth and factors of relevance

• Males were superior to females in terms of healthy life expectancy at birth as shown in Table 2 which reflects a key issue: Jordanian women spend longer years than men in unhealthy conditions, especially since they outperform men in terms of life expectancy at birth. Table 2 highlights expectations of the indicators for women and men for the period 2000-2019,5 and shows:

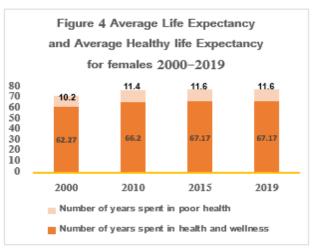
Table (2) Life expectancy at birth and healthy age projections at birth by sex for 2000-2019

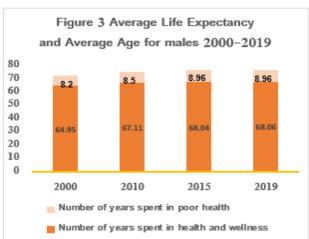
	Life	expectancy at b	irth	Healthy life expectancy at birth				
	(LE)			(HALE)				
	Females	Male	Both sexes	Females	Male	Both sexes		
2000	72.5	73.1	72.6	62.27	64.95	63.6		
2010	77.6	75.6	76.6	66.22	67.11	66.7		
2015	78.8	77	77.8	67.17	68.04	67.6		
2019	78.8	77	77.9	67.17	68.06	67.6		

- Between the years 2000 and 2019, life expectancy at birth for both sexes combined went up from 72.6 years to 77.9 years in 2019, ie by 5.3 years; for males it went up from 73.1 in 2000 to 77 years by 3.9 years and for females it went up from 72.5 in 2000 to 78.8 years in 2019 by 6.3 years.
- While life expectancy for both sexes at birth in Jordan was 77.9 years in 2019, at the global level, it was 73.3 years, meaning that life expectancy at birth for both sexes in Jordan is 4.6 years higher than the global average, while males in Jordan were at 70.8 years, with a difference of 6.2 years; females in Jordan reached 78.8 years in 2019, compared to 75.9 years and with a difference of 2.9 years.
- After 2010, the average life expectancy for females in Jordan exceeded that of males with an average gap of 1.9 years, compared to the global level for the same period, where female life expectancy was 5.1 years higher than that of males globally, meaning that females in Jordan had a longer virtual life expectancy at birth than males at the national level and a lesser difference compared to the difference between the level of life expectancy between females and males globally.
- Between 2000 and 2019, life expectancy at birth for both sexes combined went up from 63.6 years in 2000 to 67.6 years in 2019, ie by four years; and for males it went up from 64.95 years in 2019 2000 to 68.06 in 2019 by 3.11 years; and for females increased from 62.27 years in 2000 to 67.17 years in 2019 ie by 4.9 years.
- While life expectancy for both sexes at birth in Jordan was 67.6 years in 2019, it was 63.7 years at the global level, at a difference of 3.9 years; and males in Jordan reached 68.06 years in 2019, compared to 62.9 years globally at a difference of 5.56 years; females in Jordan reached 67.17 years in 2019 compared to 64.9 years globally and by a difference of 2.27 years indicating that the healthy life expectancy at birth in Jordan exceeds its equivalent at the global level for the year 2019 for both sexes.
- Between 2000 and 2019, the female life expectancy went up from 72.5 years in 2000 to 78.8 years in 2019, while the female life expectancy (HALE) went up from 62.27 in 2000 to 67.17 years in 2019; this indicates that the number of health years lost to females in Jordan went up from 10.23 years in 2000 to 11.63 in 2019.

Between 2000 and 2019, Jordan's life expectancy for females dropped compared to males with an
average gap of -1.33 years, compared to the global gender difference level for the same period when
life expectancy at birth for females exceeded male life expectancy by a difference of 2.5 years globally,
meaning that females in Jordan have a lower virtal life expectancy at birth than males at the national
and global levels compared to the difference between the two genders.

Females have a higher average age at birth than males, and females have a healthy life expectancy at birth below the male life expectancy. This means an increase in the number of years spent by females in Jordan with the loss of full health, expressed in additional years that are not always healthy compared to males. For the period 2000-2019, it reached an average of 11.63 years for females compared to 8.94 years for males as shown by Figure 3 and Figure 4





Source: WHO Database

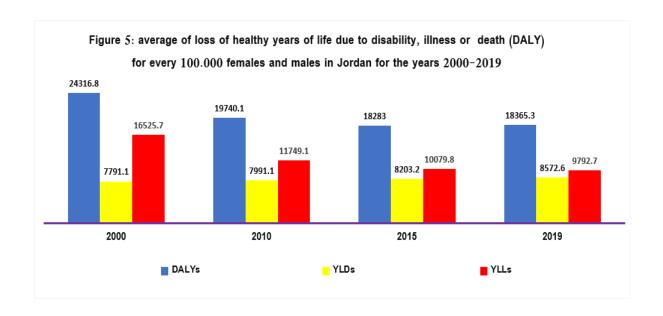
Fourth: The trend in the number of unhealthy years spent by both males and females in Jordan for the period 2000-2019

WHO has developed a time-based measure that combines years of life lost to premature deaths, years of life lost due to time lived in less than full health or years of healthy life lost to disability, or Disability-Adjusted Life Years DALY and one DALY loss is equivalent to one year of full health. Thus, it includes the total years of life lost (YLL) due to early or premature deaths and years of life lost due to disability or disease (YLD.) WHO exhibited the estimates for 2019 based on disease burden analysis for 2019 and the use of data from multiple

resources including national bioregional data, latest estimates from WHO technical programs, and from United Nations partners and inter-agency groups.³

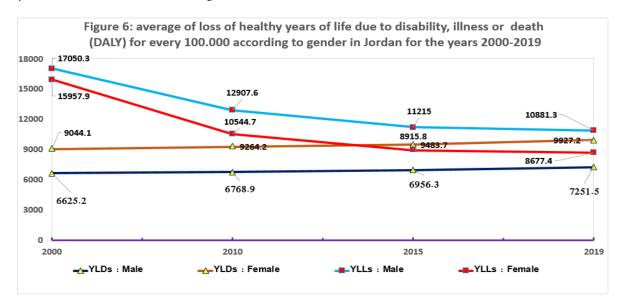
Analysis of DALY and relevant indicators show years of life lost due to premature deaths (YLLs) and years of healthy life lost due to disability or disease (YLDs) according to gender in Jordan to:

• The average number of years of life lost due to death per 100,000 population tended to decline during the period 2000-2019 for both sexes, falling from 16,526 years per 100,000 to 9,793 years per 100,000 as shown in Figure 5, while at the same time, the gap between males and females is apparent and shows that the average number of years lost goes up for males versus females; in 2000 males had 17,050 years per 100,000 males compared to 15,958 years per 100,000 females; and in 2019 males had 10,881 years per 100,000 males compared to 8,677 years per 100,000 females, as shown in Figure 6.



³ https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/global-health-estimates-leading-causes-of-dalys

• On the other hand, the rate of health years lost to disability or illness went up from 7,791 years per 100,000 persons in 2000 to 8,573 years per 100,000 persons in 2019, as shown in Figure 5, while the gap between males and females is shown by this indicator as the rate of lost years goes up amongst females versus males, in 2000 females had 9,044 years per 100,000 females compared to 6,625 years per 100,000 males, and in 2019 females had 9,927 years per 100,000 females, compared to 7,252 years per 100,000 males as shown in figure 6.



Fifth: The top 10 causes associated with lost years of life due to disability (DALY) amongst males and females in Jordan based on WHO databases

WHO estimates allow the burden of disease in Jordan to be calculated using the Disability-Adjusted Life Year (DALY)4 as shown in Table 3, with a total of 1,855.3 years of health years lost in Jordan due to disability, illness or death in 2019, distributed by 50.1% missing years for females and 49.9% for males. Years lost by disease for both sexes accounted for 16.2% for communicable diseases, 72.4% for noncommunicable diseases and 11.4% for road injuries. The table shows that noncommunicable diseases were the leading cause of loss of health years because of disability or death for both sexes, but were the most effective among females, accounting for the loss of 76.9% of health years compared to 67.9% of males. On the other hand, road injuries accounted for 15.4% of the years lost in males compared to 7.5% for females.

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 $^{^4\} https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/global-health-estimates-leading-causes-of-dalys$

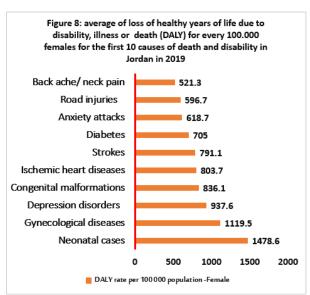
Table 3 Distribution of the number of years of healthy life lost due to disability (YLDs) 2019

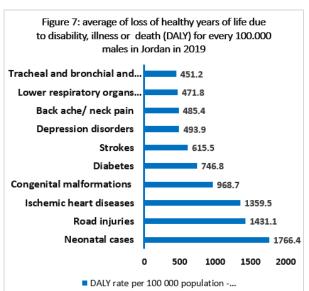
	Total years of healthy life lost (000") due to disability, illness or death (DALY)						
	Male		Females		Both sexes		
	Years	%	Years	%	Years	%	
Communicable diseases (infectious and parasitic							
diseases), maternal and perinatal conditions, nutritional	154.4	16.6	145.7	15.7	300.0	16.2	
conditions							
Noncommunicable diseases	629.9	67.9	713.3	76.9	1343.2	72.4	
Injuries	142.9	15.4	69.2	7.5	212.1	11.4	
Total	927.2	100	928.1	100	1855.3	100	

WHO databases allow the classification of the causes of loss of healthy years of life due to disability, illness, or death (DALY), and Figures 7 & 8 highlight the top 10 causes liable for the healthy years lost to males and females in Jordan in 2019 from these databases, showing the following:

- Neonatal conditions were the primary source of loss of healthy years for both sexes, causing a loss of
 1,479 years per 100,000 females and an average of 1,766 years per 100,000 males.
- The 10 causes of death amongst females were uniquely different to those corresponding to them in males with the existence of gynecological diseases which came in the second order and anxiety attacks in the eighth order, whereas the 10 causes in males were uniquely different to those corresponding to them in females with the existence of lower respiratory infections in the 9th order, and bronchial and lung cancers in the tenth order.
- What distinguishes the 10 causes for females from males are the high rates of loss of healthy years due to depression at a rate of 938 per 100,000 females, compared to 494 per 100,000 males. Strokes also counted as a cause of death and the rate of loss due to strokes was 791 years per 100,000 females, compared to 616 years per 100,000 males, as well as back and neck pain, which accounted for a loss of an average of 521 years per 100,000 females compared to 485 years per 100,000 males.

- Road injuries were the second reason liable for the loss of an average of 1,431 years per 100,000 males, while it ranked nineth among the 10 causes responsible for female disability years at an average of 597 years per 100,000 females.
- Noncommunicable diseases constitute eight of the 10 causes in females and seven of the 10 in males responsible for the loss of health years.



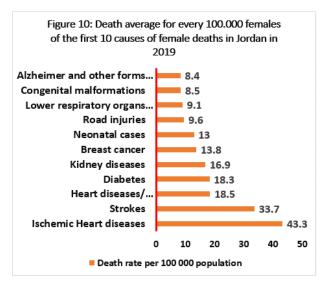


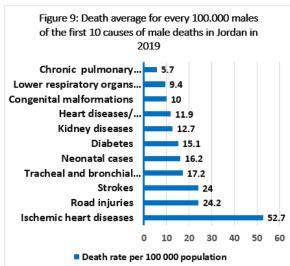
Source:https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/global-health-estimates-leading-causes-of-dalys

Sixth: Top 10 causes of male and female deaths in Jordan for 2019 based on WHO databases

WHO estimates provided comprehensive and reliable data on the causes of male and female mortality in Jordan for 2019, as well as prioritization and needs in areas where additional investments in health services are most needed to reduce the effects of these 5 diseases and improve people's lifestyles and patterns. Figure 9 and Figure 10 highlight the top 10 causes of male and female mortality in terms of prevalence and widespread in Jordan for 2019.

⁵ https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/global-health-estimates-leading-causes-of-dalys





- The total number of deaths in Jordan for 2019 was estimated at 26990 deaths by the World Health Organization (WHO) with 47.5% female and 52.5% male.
- The top 10 causes accounted for 19,102 deaths of males and females, equivalent to 70.1% of the total deaths in Jordan in 2019 at a percentage of 71.8% of all female deaths and 69.8% of all male deaths.
- Seven of the 10 leading causes of death in Jordan in 2019 were the result of noncommunicable diseases (ischemic heart disease, strokes, heart diseases, hypertension, diabetes, kidney diseases, female breast cancer, trachea and lung cancer, and congenital malformations.) The first seven causes in females led to the equivalent of 82.8% of the 10 causes of death among females; 74.2% of deaths are due to the 10 causes in males.
- Ischemic heart diseases were the leading source of mortality in males and females, accounting for 52.7
 per 100,000 males, while females accounted for 43.3 per 100,000 females.
- The 10 causes of female mortality were characterized by deaths from breast cancer which ranked sixth among the 10 causes of female mortality, at 13.8 deaths per 100,000 females; Alzheimer's and other types of dementia ranked tenth at 8.4 deaths per 100,000 females. The 10 causes of male mortality were deaths from bronchial and lung cancers. It was the fourth of the 10 causes of male mortality, with 17.2 deaths per 100,000 males.
- Male road accident deaths accounted for 24.2 deaths per 100,000 males and ranked second among the 10 causes of male mortality. Road accident deaths also maintained a relative importance among

- the 10 causes of female mortality, but were less prevalent than males, ranking eighth with an average of 9.6 deaths per 100,000 females.
- Strokes, heart diseases, hypertension, diabetes and kidney diseases are among the most important
 diseases that cause deaths in females; they ranked second, third, fourth, fifth and sixth respectively,
 while in males (strokes ranked third, heart diseases and blood pressure ranked eighth, diabetes ranked
 sixth and kidney diseases ranked seventh).
- Deaths among female births rank seventh, while they rank fifth among the 10 causes of death among males.

Conclusion:

This paper was prepared for two objectives: the first of which was to show the reality of Jordan's decline in the Gender gap index in health and survival and its causes, according to the World Economic Forum, Global Gender Gap Reports 2020, 2021. The second is to show the gender gap in the field of health in jordan. The analysis that addressed two main indicators of the gender gap standard in the field of health and survival showed two indicators. The first indicator is the sex ratio at birth. Jordan ranked first on this indicator, and it achieved gender parity according to the global report on gender gap. The second indicator is the gender gap in life expectancy at birth. Analysis in this paper indicated that the gender gap is based on this indicator, but there has been no real decline in the values on which the index is based, and that the decline is the result of the use of values by those who wrote and prepared the World Gender Gap Report for values from a new updated series for 2020 prepared by WHO, and therefore comparability with the 2020 report would be impractical.

The second objective of this paper is to show the gender gap in health status. The analysis in this paper addressed the gender gap in life expectancy at birth and the trend in the number of unhealthy years spent by both males and females in Jordan for the period 2000-2019. The analysis showed male-to-female superiority in terms of life expectancy and the higher number of years spent by females in Jordan with complete health loss compared to males in 2000-2019 at an average of 11.63 years for females compared to 8.94 years for males. Analysis also revealed the top 10 causes associated with missing years of life due to disability or death (DALY) among males and females in Jordan, and the top 10 causes of male and female mortality in Jordan for 2019. The overall analysis also revealed that diseases and health conditions that cause most deaths are the same as those responsible for losing the biggest number of healthy years.

Eight of the 10 causes in females and seven of the 10 male causes responsible for losing health years are due to noncommunicable diseases, as well as 7 of the 10 leading causes of death in Jordan in 2019 in

noncommunicable diseases (ischemic heart diseases, strokes, heart diseases, hypertension, diabetes, kidney diseases, female breast cancer, tracheotomy and congenital malformations). The first seven causes in females led to the equivalent of 82.8% of the 10 causes of death in females; 74.2% of deaths are due to the 10 causes in males.

Fact Sheet Gender Gap in health and survival in Jordan

This report was prepared by Ghaleb Al-Azzah, the technical director in the Higher Population Council and the senior researcher in the Share Net-Jordan