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Ageing Demographics and Social Protection in the Middle East and North Africa

Policy opportunities and challenges

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The MENARAH Network is a non-political and non-profit generating social enterprise founded to enhance the lives of older people and their informal carers in the Middle East and North Africa (MENA) region. The MENARAH Network was founded and led by Professor Shereen Hussein, with initial funding from the UKRI Global Challenges Research Fund in 2019-2021. Since then, the MENARAH Network has attracted several small grants from Research Councils and other funders. The MENARAH Network is currently hosted at the London School of Hygiene and Tropical Medicine (LSHTM), where the Director has a permanent professor position. The LSHTM is a registered charity in the United Kingdom.

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Population ageing is happening faster in the Middle East and North Africa (MENA) region than has historically been observed in many European countries. The MENA region is also characterised by relatively recent declines in fertility rates, resulting in large numbers and percentages of people within the labour market participation ages. The latter is referred to as population dividends or youth bulges, offering a window of opportunity to prepare for the shift towards aged populations. Within a few decades, the same cohorts of the ‘youth bulges’ will move into old ages, offering a second demographic dividend and highlighting an urgent need for policy reforms to maximise the social and economic contributions of older people while ensuring adequate social protection, health and long-term care (LTC) support and mechanisms are in place for those who might need it.

This report is focused on the experience of ageing demographics in the MENA region, detailing some of the policy opportunities and challenges associated with such a shift in population structures. We analyse national statistics and indicators collated primarily by the United Nations and the World Bank. These are complemented with academic literature reviews and policy analyses. The analyses and discussions presented here aim to open policy debates in response to population ageing in the region. It highlights the window of opportunity associated with current population dividends observed in the region, focusing on the potential value of closing the gender gap and disparities.

Furthermore, we consider the potential positive contributions of older people and opportunities to harness the benefits associated with the second demographic dividends through developing adequate opportunities for people’s social and economic contributions across the life course. This necessitates rethinking the notions of ageing around lifelong learning, re-employment, and retaining the human capital and expertise in the region's labour markets, with health, social and economic benefits. The discussion brings to the forefront the importance of implementing pension reforms and investing in new social protection, labour market mechanisms, and health and LTC systems.

The report is organised into eight sections. Following this introduction, Section 2 provides background information on the region's context and briefly introduces issues related to ageing demographics. Section 3 details the specific experiences of population ageing for different countries - and groups of countries - across the region. This is followed by presenting evidence related to the region’s financial, economic, and social consequences of population ageing in Section 4. In Section 5, we then focus on the demand and supply of LTC services in the MENA region. Section 6 provides relevant international experiences in funding and providing LTC services. Finally, Section 7 provides a brief discussion and conclusion of the issues presented in the previous five sections of this report. At the end of this section, some policy recommendations are provided to different groups of MENA countries based on their position within the ageing population transition and other characteristics.

2- Background and Context

The World Bank's definition of the Middle East and North Africa (MENA) region includes twenty countries with many commonalities and differences. The region expands from the Mediterranean basin (Malta, Morocco, Algeria, Tunisia, Libya, Egypt, Syria, and Lebanon), crossing the Levant (Iraq, West Bank and Gaza, Jordan) to the crossroads of Central and South Asia (Iran) with the Gulf Cooperation Council GCC countries (United Arab Emirates, Saudi Arabia, Qatar, Oman, Kuwait, Bahrain). Countries in the region share similar cultural, socio-political, and economic factors. However, they do not represent a homogeneous group, and specific country contexts are essential to understand when considering ageing policies and practices. Table 1 shows some of the similarities and diversity of the countries in the region. For example, their economies range from high-income (GCC countries and Malta) to low-income (Syria and Yemen), with 11 countries in the middle-income band. According to the latest World Bank Classification 2021-2022¹, only Iran has moved from an upper-middle-income to a lower-middle-income economy. They vary in the specific geographical sub-region, country area and population size. Malta and Bahrain represent very small countries with 316 and 765 Km² respectively, while Saudi Arabia, Libya and Iran have larger areas (2.2M, 1.8M and 1.6M Km² respectively).

Regarding population size, Egypt stands out as the most populous country in the region, with over 102 million inhabitants. In comparison, Malta and Djibouti have the lowest population sizes at 525 and 988 thousand inhabitants, respectively. Some sub-regions and groups of countries within the MENA region experience specific shared experiences. For example, concerning conflicts and wars or having high income and high levels of migration. To organise some of the discussions in this report, we will be grouping the MENA region countries into four sub-groups:

1. Malta as an EU, high-income country.
2. Gulf Cooperation Council (GCC) countries: Bahrain, Kuwait, Oman, Qatar, KSA and UAE
3. Fragile and Conflict Situations (FCS) countries: Iraq, Lebanon, Libya, Syria, West Bank and Gaza and Yemen
4. Rest of MENA Countries: Algeria, Djibouti, Egypt, Iran, Jordan, Morocco, and Tunisia

One of the most significant outcomes of human and scientific developments is the continued increase in life expectancy and longevity. The fact that we are all, on average, expected to live considerably longer than our grandparents and great-grandparents is a cause for jubilation, and the triumph of medicine and science in reducing the chances of dying from infections and diseases, especially during childhood. However, continued improvements in average life expectancy cannot be attributed solely to reductions in child mortality but to enhanced life expectancy at all ages. For example, life expectancy at age 60 has improved in most countries, especially in Europe, since the mid-20th century. The latter is attributed to improved treatments

¹ <https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2021-2022>

for non-communicable diseases such as cardiovascular conditions in old age (Office for National Statistics, 2015).

As individuals lived longer, other demographic factors have changed, too. Primarily among these is the decline in fertility rates, with a great tendency for women to have fewer or no children. These changes were derived from a complex array of factors, including individual choices in the face of changing social norms, the development of effective family planning and birth control methods, enhanced survival rates of early childhood disease, as well as policy and political dimensions (Winter & Teitelbaum, 2013).

The combination of declining fertility rates and enhanced life expectancy (reflected in reducing mortality rates across all age groups) underlines the demographic transition model, reflecting the dynamic population changes observed across the globe. Such transitions result in changes to the whole population structure towards aged populations. The latter reflects a sizeable relative size of the older age groups and a shift in the overall composition of the population. These demographic transitions have been occurring globally at different paces and speeds, reflecting individual countries' experiences and trends in fertility, mortality, and migration rates (Bongaarts, 2009).

Table 1 Key characteristics of different countries in the MENA region

Country	Analysis Group	Income level	Area (km ²)	Population (1000)
Malta	EU	High	316	525
Bahrain	Gulf Corporation Council (GCC)		765	1,702
Kuwait			17,818	4,271
Oman			309,501	5,107
Qatar			11,571	2,881
Saudi Arabia			2,217,949	35,587
UAE			83,600	9,890
Iraq	Fragile & Conflict Situations (FCS)	Upper Middle	438,317	40,220
Lebanon		10,452	8,825	
Libya		1,759,540	6,871	
West Bank/Gaza		Lower Middle	6,020	4,803
Syria		Low	183,630	17,500
Yemen			527,970	29,826
Jordan	Rest of MENA	Upper Middle	89,342	10,200
Algeria		Lower Middle	2,381,741	43,851
Egypt			995,450	102,334
Tunisia			155,360	11,818
Morocco			446,300	36,911
Iran			1,628,760	83,993
Djibouti			23,180	988

Global pandemics, natural disasters, wars, and conflicts are modern drivers of excess mortality with implications for expected life expectancy. For example, excess death associated with the recent COVID-19 pandemic is expected to reduce the average life expectancy at birth and all age groups by up to 2.2 years in some countries (Aburto et al., 2021). Political unrest and conflicts also rage in several countries, such as Syria, Iraq, Libya, Lebanon, West Bank & Gaza, and Yemen. For example, the Syrian conflict has displaced millions of its population, including older people, described by the United Nations as the worst man-made disaster since World War II². Political conflicts and wars, such as the Syrian conflict, have led to considerable losses in the average life expectancy across all age groups (Cheung et al., 2020).

Changes in the population compositions and the shift toward ageing populations necessitate a paradigm shift in the perception of ageing, including expectations from and opportunities for older people to continue their social and economic contribution to society; developing health and LTC systems to meet increased demands associated with the observed differentials between life expectancy and healthy life expectancy and designing innovative financial solutions to meet high needs for pensions and spending on health and care sectors. While these discussions and debates are taking centre stage in most the Organisation for Economic Cooperation and Development (OECD) countries, many countries in the MENA region still need to recognise or facilitate the role of older people in society regarding these new demographic and socio-economic realities. On the positive side, the debate for better work choices and opportunities for older workers is gaining momentum in the region, with three main components—rewarding work and later retirement to offset widespread early retirement and informal jobs, especially among women. Encouraging employers to retain and hire older workers, given that labour demand for older workers is weak. Promoting employability throughout life, as older workers participate in much less training than younger adults. In many countries in MENA, both the younger working-age population and more senior people continue to increase.

² United Nations High Commissioner for Refugees (2017) Syria Worst Man-made Disaster since World War II. <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=21373>.

3- Population Ageing in the Middle East and North Africa Countries

Population ageing is a by-product of a process known as demographic transition and entails a shift in the distribution of a country's population towards older ages. Trends in fertility and mortality rates primarily determine this process. Countries in the region have all observed declines in fertility and mortality rates but with variable degrees and speeds. Figure 1 presents the total fertility rate (TFR)³ and the life expectancy at birth (for both sexes) in different countries in the region.

Figure 1 shows that most countries in the MENA region had (in 2020) an average life expectancy between 75-80 years and a Total Fertility Rate (TFR) between 2 to 3. In twelve of the twenty countries in the region, the average life expectancy (for both sexes) was 75 years or more (reaching 80 years or more in Qatar and Malta). On the other hand, the average life expectancy at birth was lower than 70 years in Djibouti and Yemen. Figure 1 also shows some loose inverse relationships between fertility and life expectancy (countries with higher TFR and lower life expectancy and vice versa). Some countries stand out as outliers at both ends of this trend. Yemen and Djibouti have relatively high TFR and low life expectancy.

Figure 1 shows that in 2020, the TFR in most GCC countries ranged from 1.88 to 2.34, except for UEA (1.42) and Oman (2.93). For the same group of countries, life expectancy at birth ranged from 75 to 80 years, with the lowest figures observed in KSA (74.9) and Kuwait (75.3) and the highest in Qatar (80.0). The fertility and life expectancy patterns are much more diverse among FCS countries. The average life expectancy at birth in all FCS countries, except for Lebanon, was less than 75 years and was as low as 66 years in Yemen. Malta has a low fertility rate of 1.45, under the population replacement level of 2.14, while its average life expectancy at birth was 82.3. The rest of MENA countries varied in their total fertility and life expectancy indicators. Figure 1 shows that Iran, Tunisia, Morocco, and Algeria have an almost identical life expectancy at birth at around 76 years; however, they vary with their TFR. On the other hand, Egypt presents a case of lower life expectancy (71.7) and higher TFR.

Malta had one of the lowest TFR in the region at 1.1 in 2020, which closely matched this in the United Arab Emirates at 1.4. The latter might be explained by a range of factors, including the high prevalence of migrant residents and ex-pat communities who might have different fertility preferences compared to nationals, as well as trends of late ages of marriage for women and higher average ages of women when giving first births (Al Awad & Chartouni, 2014). Current levels of TFR reflect declining trends since the 1950s in most countries in the region; however, the change has not been linear in all cases. Low fertility rates (especially those under the replacement level) have caused alarm and triggered policy changes toward higher

³ The average number of children a woman can have during her life.

⁴ Total fertility levels of about 2.1 children per woman. This value represents the average number of children a woman needs to have to reproduce by bearing a daughter who survives to childbearing age. If replacement level fertility is sustained over a sufficiently long period, each generation will exactly replace itself in the absence of migration.

https://www.un.org/esa/sustdev/natlinfo/indicators/methodology_sheets/demographics/total_fertility_rate.pdf

fertility rates for some countries. In Iran, the TFR dropped from 6.5 in 1960 to 1.6 in 2012. The latter has prompted a shift in policy direction from the previous motto of ‘two children are enough’ in the 1970s to restricting access to publicly funded family planning services and contraceptives and the introduction of the new slogan ‘at least two children is ideal’ in 2012 by the Ministry of Health and Medical Education (Karamouzian, 2014). Indeed, the TFT in Iran started to increase slowly since 2012 and reached 2.1 in 2020.

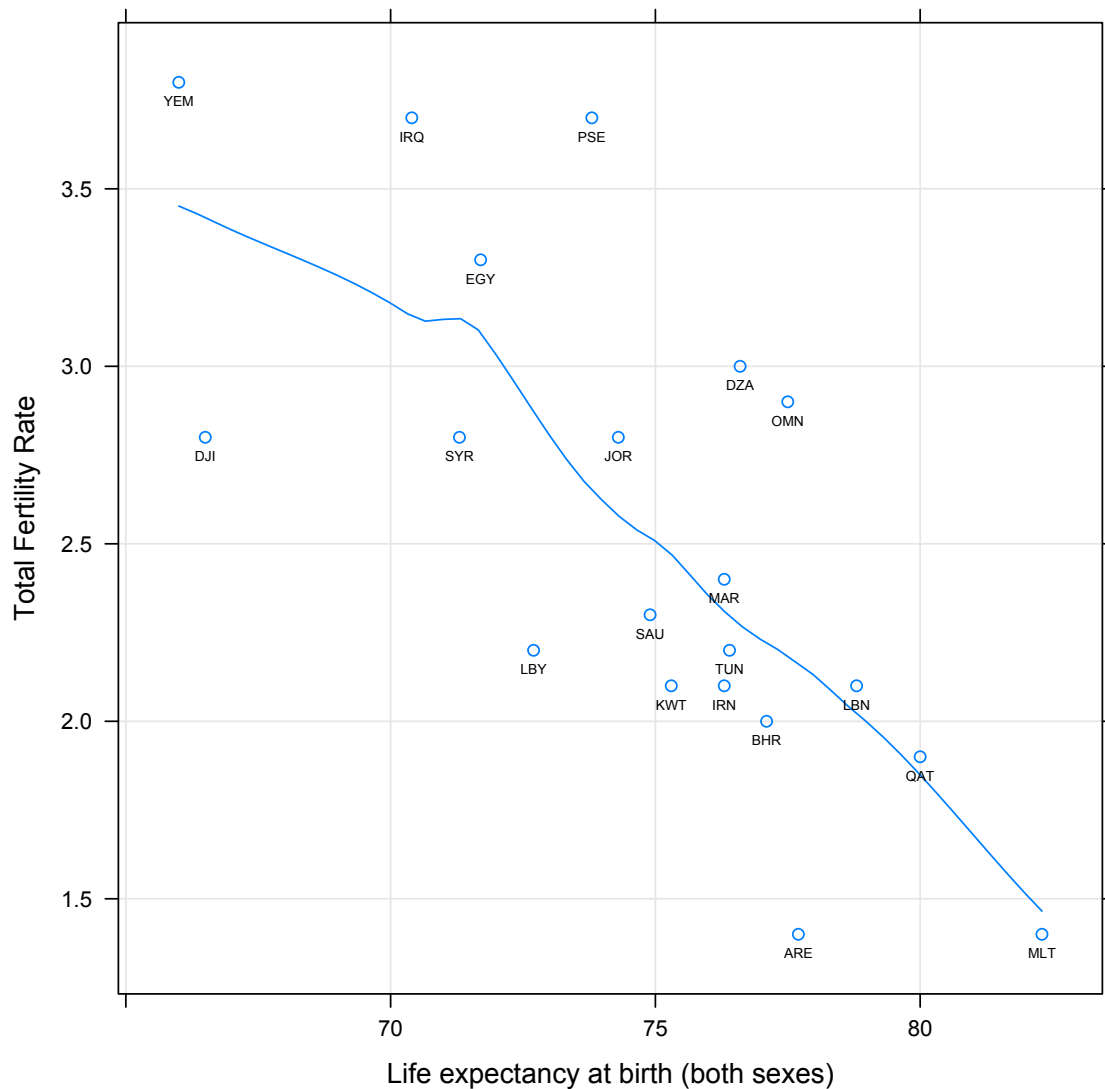


Figure 1 Life expectancy at birth and total fertility rate⁵ (2020) for MENA region countries⁶

⁵ <https://population.un.org/wpp/Download/Standard/Mortality/>;
<https://population.un.org/wpp/Download/Standard/Fertility/>

⁶ Using ISO-3 codes for each country: Algeria (DZA); Bahrain (BHR); Djibouti (DJI); Egypt (EGY); Iraq (IRQ); Iran (IRN); Jordan (JDR); Kuwait (KWT); Lebanon (LBN); Libya (LBY); Malta (MLT); Morocco (MAR); Oman (OMN); Qatar (QAT); Syria (SYR); Saudi Arabia (SAU); Tunisia (TUN); West Bank and Gaza (PSE); United Arab Emirates (ARE); Yemen (YEM).

Several indicators are often used to measure population ageing; a standard measure is the share of older people (65+) in a population. All countries in the region have observed an increase in the average life expectancy at birth (for both sexes) since the 1970s. In 2020, the percentage of those aged 65 or more of the total population ranged from as little as 2% (Yemen) to less than 10% in most countries. Figure 2 presents past trends in this percentage for some MENA countries, which are at different stages of the demographic transition and locations in the region.

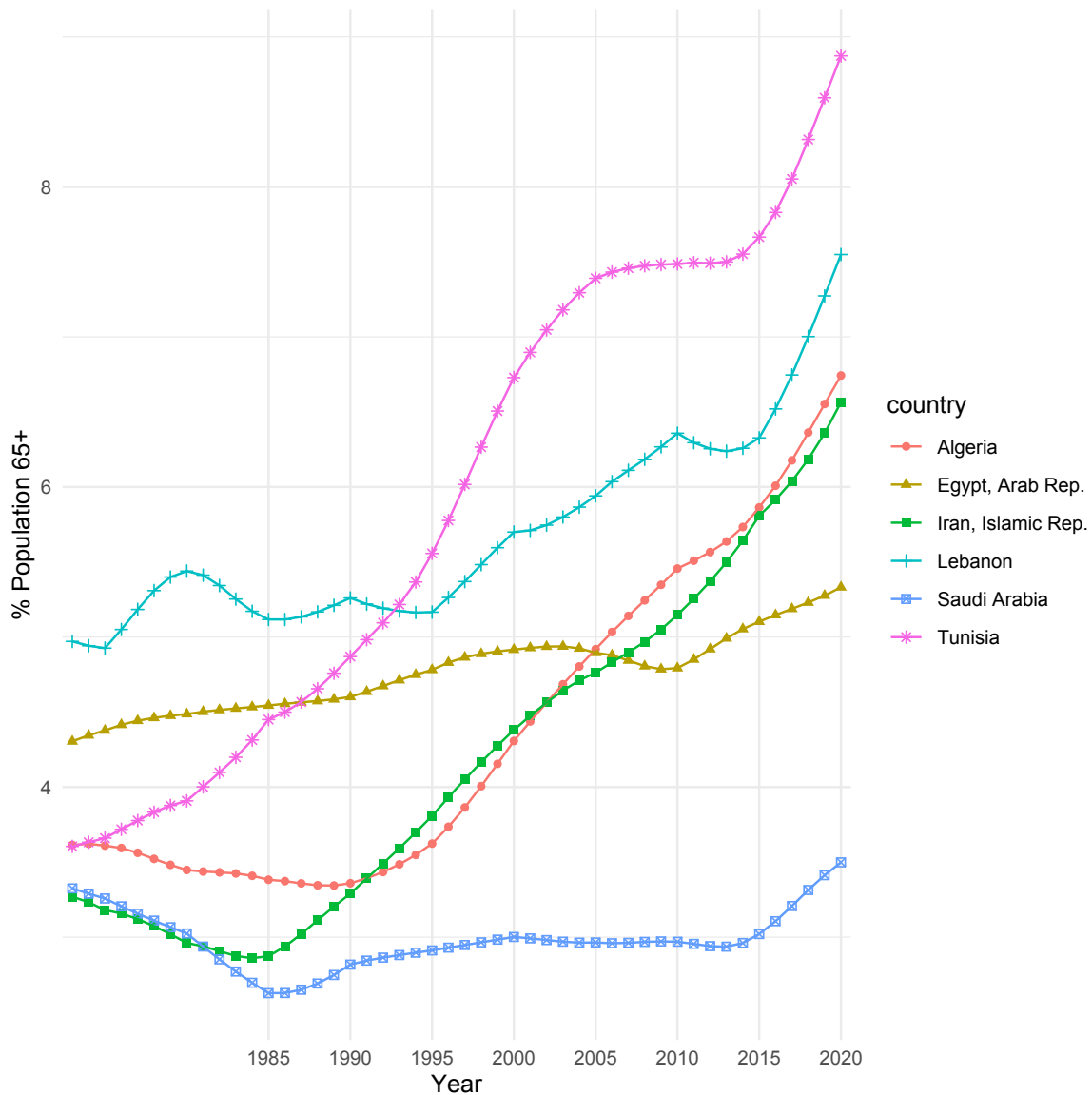


Figure 2 Trends in the percentage of people aged 65 or more in selected countries in the region⁷.

⁷ <https://data.worldbank.org/indicator/SP.POP.65UP.TO>

Figure 2 shows that this percentage had started to increase earlier in some countries, with the rate of change steeper than in others. Malta is an exception, where the proportion of people aged 65 or older is considerably higher than in the rest of the region. For example, in 2020, over 20% of Malta's population was aged 65 or more compared to less than 10% in the rest of the region. The proportion of people aged 65 years or more out of the total population is affected by trends in fertility rates and average life expectancy at birth. In most of the GCC countries, the trends in the percentage of the population aged 65 years or more since the 1990s are clustered with similar patterns. Moving modestly upward from 1% to 3% in the early 1990s to 1% to 3.5% in 2020. Slightly steeper changes have been observed since 2015. In 2020, The lowest percentage of people aged 65 or more was observed in the United Arab Emirates (at just above 1%) and the highest in Saudi Arabia (3.5%). In all FCS countries, the same indicator started from a higher baseline in 1990 than in the GCC countries. In 1990, the percentage of people aged 65 or more ranged from 2% to nearly 4% in all FCS countries except for Lebanon, which was already as high as 5.3%. By 2020, the same percentage ranged from 3% in Yemen to 5% in Libya and a staggering 8% in Lebanon. However, this proportion declined in the West Bank and Gaza from 4% in 1990 to 3% in 2020. In Iraq, this proportion fell from 3.8% in 1990 to 3% in 2015, then increased to nearly 3.5% in 2020.

Among the rest of the MENA countries in 2020, Tunisia had the highest percentage of people aged 65 years or more at 9%, while Jordan had the lowest at 4%. The latter also had the flattest trend in this proportion among this group of countries since 1990, indicating a prolonged change in such proportion over the last three decades (data not shown on graph). While the percentage of people aged 65 or more in the population had started to increase steadily from the 1970s until 2005 in Tunisia, it continued to grow slowly until 2015. It escalated from around 7.5% to nearly 8.5% in 2020.

The ageing transition period is defined as the duration when the share of the population at or above 65 years of age increases from 7% to 14%. Table 2 presents the year each country in the region has started -or is projected to start- its ageing demographic transition, the year they have or are expected to conclude that transition and the actual or projected transition period (Formosa, 2019; UN, 2019⁸).

Table 2 shows that except for Malta, which completed its ageing transition in 2006, all countries in the region have recently -or are expected to start- such change within the next decade. Tunisia has begun its demographic transition relatively earlier than other countries (2001), and within the last five years, Lebanon, Morocco, Algeria, and Iran have all begun such a journey. However, even among this group, the projected duration of the ageing transition varies from 16 years in Lebanon (to be completed in 2034) to 25 years in Algeria (2046). The GCC countries are expected to age rapidly once they enter their ageing transitions during the 2030 decade (except for Kuwait, which is projected to start slightly earlier in 2029) and will

⁸ https://population.un.org/wpp/Publications/Files/WPP2019_Volume-II-Demographic-Profiles.pdf (with author elaboration)

take 10 to 20 years to complete their ageing transition. On the other hand, Egypt is expected to enter such a transition in the mid-2030s and take over 40 years to complete.

Table 2 MENA region countries by start and end of demographic transition and actual or expected duration of transition (in years)

Country	Year transition starts 7% aged 65 +	Year transition ends 14% aged 65 +	Duration of Transition
Malta	1957	2006	49
GCC countries			
Kuwait	2029	2039	10
Saudi Arabia	2033	2045	12
UAE	2034	2045	11
Bahrain	2035	2054	19
Qatar	2035	2051	16
Oman	2037	2052	15
FCS countries			
Lebanon	2018	2034	16
Yemen	2025	2051	26
Libya	2031	2045	14
Syria	2035	2052	17
West Bank & Gaza	2047	2072	25
Iraq	2049	2085	36
Rest of MENA			
Tunisia	2001	2034	33
Morocco	2018	2040	22
Algeria	2021	2046	25
Iran	2021	2041	20
Djibouti	2031	2053	22
Egypt	2036	2078	42
Jordan	2036	2058	22

Table 2 also shows that for all GCC countries, the transition is going to start within 15 years and will take between 10 to less than 20 years to conclude. Kuwait, Saudi Arabia, and UAE will start their transition in around ten years and will take under 12 years to conclude. Presenting a case of accelerated ageing transitions. Among FCS countries, only Lebanon has already started such a transition and is expected to conclude in 2034. The pace of ageing is also fast in some fragile states, especially in Libya and Syria, while Yemen will start its ageing transition within the next three years. For the rest of MENA, Tunisia had started their transition nearly 20 years while Morocco, Algeria and Iran followed in 2018 and 2021. The pace of such transition is faster in some countries within this group than in others but generally slower than that observed in all GCC countries. Among this group, Tunisia, Morocco, and Iran will conclude their ageing transition within the next 20 years, while Egypt is not predicted to reach such a milestone until 2078.

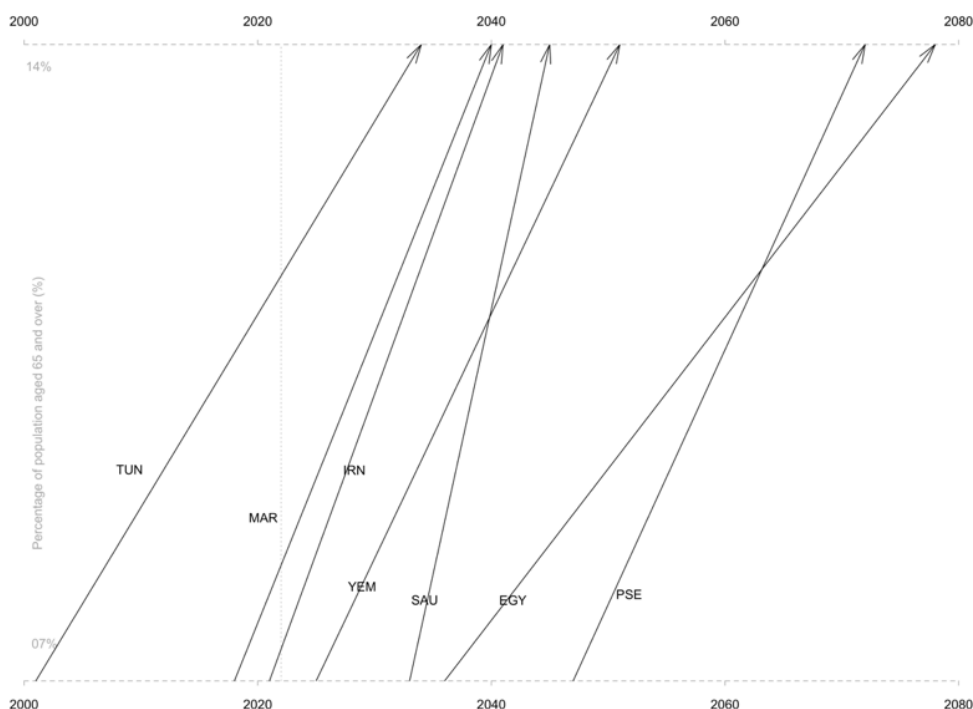


Figure 3 Ageing transition timing and speed in some selected MENA countries⁹

Figure 3 visualises the ageing transition stage for a selected group of MENA countries. The arrows represent when a country will move from 7% to 14% of its population aged 65 years and older. Figure 3 shows that some countries in the region have started their ageing transition considerably earlier than others. For example, Tunisia began this process in 2000, while it wasn't until around 2020 that Morocco and Iran began theirs. Yet the latter two countries are projected to take less time than Tunisia to complete their transition around 2040 (taking around 20 years compared to over 30 years in Tunisia). Figure 3 also visualises the fast transition duration projected for Saudi Arabia (like the rest of the GCC countries). Saudi Arabia is expected to start this process later but completes it earlier than Yemen. Similarly, the West Bank and Gaza is projected to start this process later but to finish it earlier than Egypt.

Another measure of longevity is the average number of years expected at age 60 (Life expectancy at 60). Figure 4 shows trends in the average life expectancy at age 60 for different countries in the MENA region from 1950 to 2020¹⁰. Figure 4 shows that life expectancy at age 60 has increased steadily in all countries, with smoother trends in some countries than others. The average life expectancy at 60 in 2020 ranged from around 17 to 24 years in the region (highest in Malta and lowest in Yemen).

⁹ Authors' elaboration.

¹⁰ The average number of remaining years of life expected by a hypothetical cohort of individuals alive at age 60 who would be subject during the remaining of their lives to the mortality rates of a given period, expressed as years. Source: <https://population.un.org/wpp/Download/Standard/Mortality/>

Figure 4 shows that the life expectancy at age 60 had increased from 16 years in 1960 in Malta to over 24 years in 2020. In GCC countries, the same indicator moved from less than 14 years in most countries to 18-20 years during the same period. Qatar seems to maintain a higher life expectancy at age 60 than other countries in this group; in 2020, people at age 60 were expected to live 22 more years on average. Some of the most significant improvements in the life expectancy at age 60 are observed in GCC countries (except Kuwait). For example, life expectancy at age 60 increased by 8.7 years in Oman but only 2.5 years in Kuwait between 1960 and 2020.

Among the group of FCS countries, Lebanon presents a case of continued improvement in the average life expectancy at age 60, increasing by nearly six years since 1960. On the other hand, Yemen has the least gains in life expectancy at age 60 (3.2 years) during the same period. Overall, the trends in the increases in life expectancy at age 60 directly reflect periods of wars and unrest among this group of countries (especially in Iraq, Syria, and Yemen). In the rest of MENA, improvements in this indicator were very modest at around 1.6 years in Egypt during the same period, while Algeria, Tunisia, Morocco, and Iran had observed significant gains.

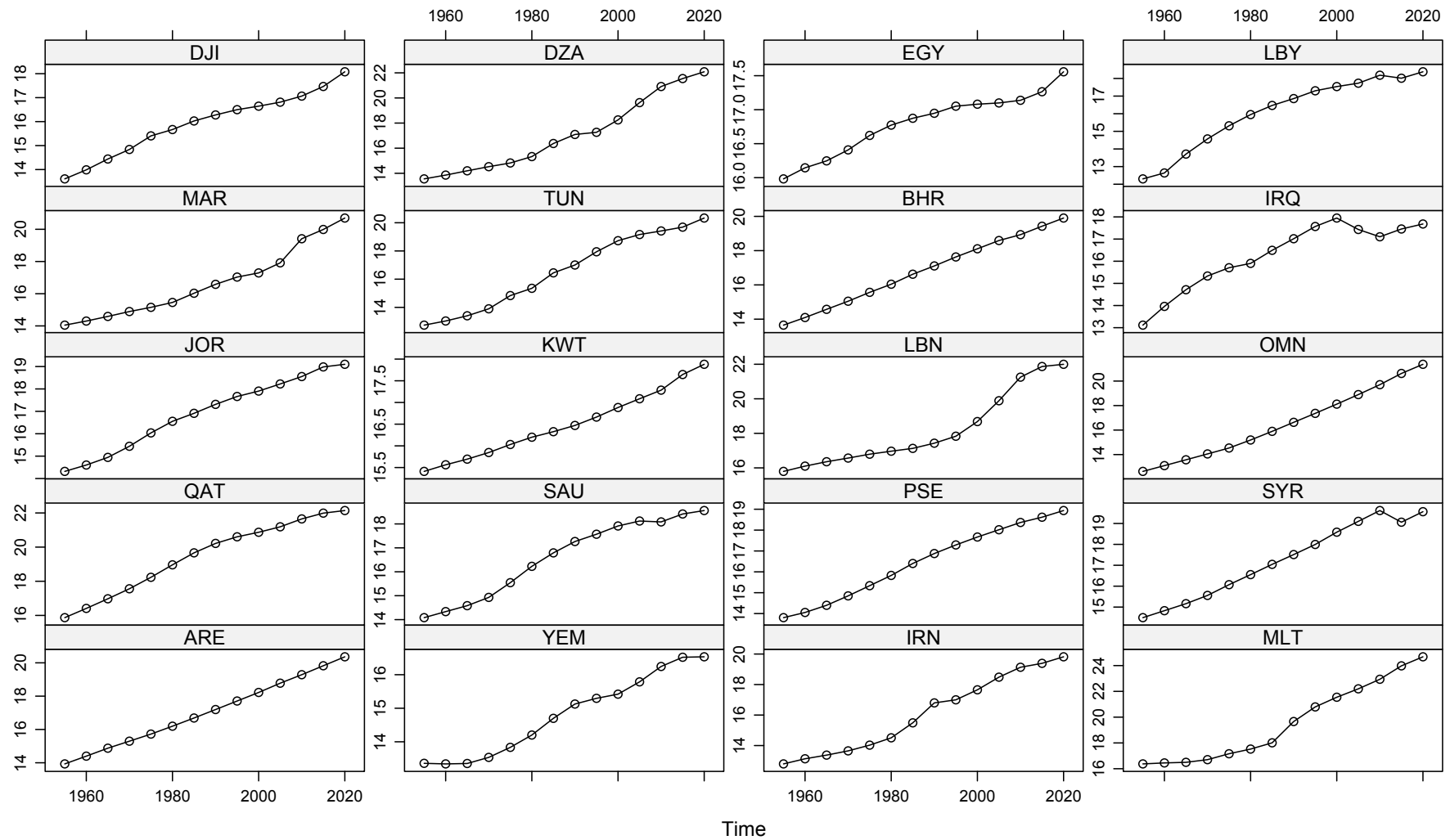


Figure 4 Trends in life expectancy at age 60 (both sexes) in different countries in the MENA region

4- Financial, Economic, and Social Consequences of Population Ageing in the Middle East and North Africa

4.1 Economic Dependency

The total age dependency ratio¹¹ is an age-population ratio of those typically not in the labour force (younger than 20 years and 65 years or older) and those typically in the labour force (20-64 years). It is often used to measure the pressure on the productive population. It provides a snapshot of the make-up of a population compared to its workforce and can shed light on the tax implications of dependency. The total age dependency ratio captures trends in both fertility and mortality. It reflects the pressure collectively on the working-age groups to support the younger population, who are usually in education or young children, and those who are retired.

A low dependency ratio means sufficient people can support the dependent population, assuming the working-age groups can enter employment and contribute to the country's income through taxation and other means. The average World age dependency ratio was 74.3, 67.3 in Europe and 83 in Japan in 2020. Table 3 provides the total age dependency ratio at three points in time: 1980, 2000 and 2020. In 2020, GCC countries had the lowest total age dependency ratio (ranging from 23.5 to 52.8), indicating that roughly for every economically dependent individual, there are between two to four financially independent individuals. On the other hand, in Iraq, West Bank & Gaza and Yemen, such a ratio is almost one-to-one, meaning there is just over one potentially economically productive individual for each 'dependent'.

Table 3 indicates a general trend of declining total dependency rates over time. However, it isn't possible from this aggregate figure to untangle the effect of ageing and increased life expectancy from the reductions in fertility rates. At one end, increases in the life expectancy and percentages of older people would increase the total dependency rate while reducing fertility would decrease it. Among GCC countries, in 2020, the total dependency ratio was lowest in Qatar and UAE, at less than 25. For FCS countries, Yemen had the highest total dependency ratio at 110, while Libya and Lebanon had corresponding ratios of less than 70. For the rest of the MENA region, Iran had the lowest ratio at 61, while Egypt had the highest at 91.

One measure that can capture the specific impact of increased life expectancy is the old-age dependency ratio¹², which separates the potential economic pressure due to ageing

¹¹ Total Age Dependency Ratio ((Age 0-19 + Age 65+) / Age 20-64) De facto population as of 1 July of the year indicated. Source: <https://population.un.org/wpp/Download/Standard/Population/>

¹² Old-Age Dependency Ratio (Age 65+ / Age 20-64) De facto population as of 1 July of the year indicated. Source: UN: <https://population.un.org/wpp/Download/Standard/Population/>

alone; this is presented in Table 4. The old-age dependency ratio is over 10% in seven countries in the MENA region (Egypt, Iran, Algeria, Lebanon, Morocco, Tunisia, and Malta).

Table 3 Total age dependency ratio in 1980, 2000 and 2020 for individual countries in the MENA region

Country	Total Age Dependency Ratio (under 20 and 65 or more/20-64)		
	1980	2000	2020
Malta	73.9	65.8	67.7
GCC Countries			
Qatar	77.9	52.8	23.5
UAE	54.4	50.9	25.0
Bahrain	87.1	67.8	35.4
Oman	133.8	101.8	41.2
Kuwait	102.5	61.4	42.4
Saudi Arabia	127.6	103.1	52.8
FCS Countries			
Libya	152.7	96.6	68.0
Lebanon	125.5	85.0	69.7
Syria	168.8	129	80.7
Iraq	156.5	135.1	106.1
West Bank & Gaza	171.9	154.1	107.1
Yemen	168.8	169.6	110.5
Rest of MENA			
Iran	133.6	107.7	61.0
Tunisia	133.2	88.2	66.2
Morocco	142.0	100.4	73.7
Djibouti	152.0	120.3	74.8
Algeria	155.6	103.1	79.1
Jordan	172.9	117.3	88.7
Egypt	125.7	112.0	91.4

Since Malta has already completed its ageing transition, its old-age dependency ratio in 2020 was considerably higher than the rest of the region at 35.7. The exact ratio ranges from 1.6 in UAE to 14.7 in Tunisia. Table 4 shows that the old-age dependency ratios are generally lower among all GCC countries, ranging from as little as 1.6 in the UAE to 5.3 in Saudi Arabia.

Except for Lebanon, the same ratio hovers around seven to eight among the group of FCS countries. For the rest of the region, this ratio is over 12 in Algeria, Morocco, and Tunisia.

Table 4 Old age dependency ratio for countries in the MENA region in 2020

Country	Old-age dependency ratio
Malta	35.8
GCC Countries	
United Arab Emirates	1.6
Qatar	2.1
Oman	3.5
Bahrain	3.6
Kuwait	4.3
Saudi Arabia	5.3
FCS Countries	
Yemen	6.2
West Bank and Gaza	6.7
Iraq	7.1
Libya	7.6
Syrian Arab Republic	8.8
Lebanon	12.8
Rest of MENA	
Jordan	7.5
Djibouti	8.2
Egypt	10.2
Iran	10.6
Algeria	12.1
Morocco	13.2
Tunisia	14.7

4.2 Capitalising on Population Dividends

Population dividends provide a window of economic opportunity associated with shifts in the population structures. The share of the working-age group in a population is still proportionally large in most MENA countries. However, such an opportunity assumes a high employment rate among the most productive age groups where revenue could materialise through high employment rates and effective taxation. Figure 5 presents the age distribution and the population's median age among all countries in the region. The distributions are shown according to broad age groups of potentially dependent children (0-14 years old), potentially productive labour groups (15-64 years), and older people likely to be in retirement (65 years or more). The age distributions reflect fertility, mortality and migration rates.

Figure 5 shows that the population's median age is lowest in Yemen and highest in Malta and Kuwait. Most countries in the region have a median age between 25 and 35 years (a prime age for labour productivity). The population distribution by age group seems to be similar across the GCC countries, except Kuwait, with a median age of the population between

30-35 years. The high observed median age and corresponding large percentage of the working-age group in Kuwait are likely to reflect the significant contribution of migrant workers. The picture is more nuanced among FCS countries, with Iraq, Yemen and West Bank and Gaza having significantly younger median ages than Lebanon and Libya. Among the rest of MENA, Tunisia and Iran have similar median ages to that observed in the GCC countries.

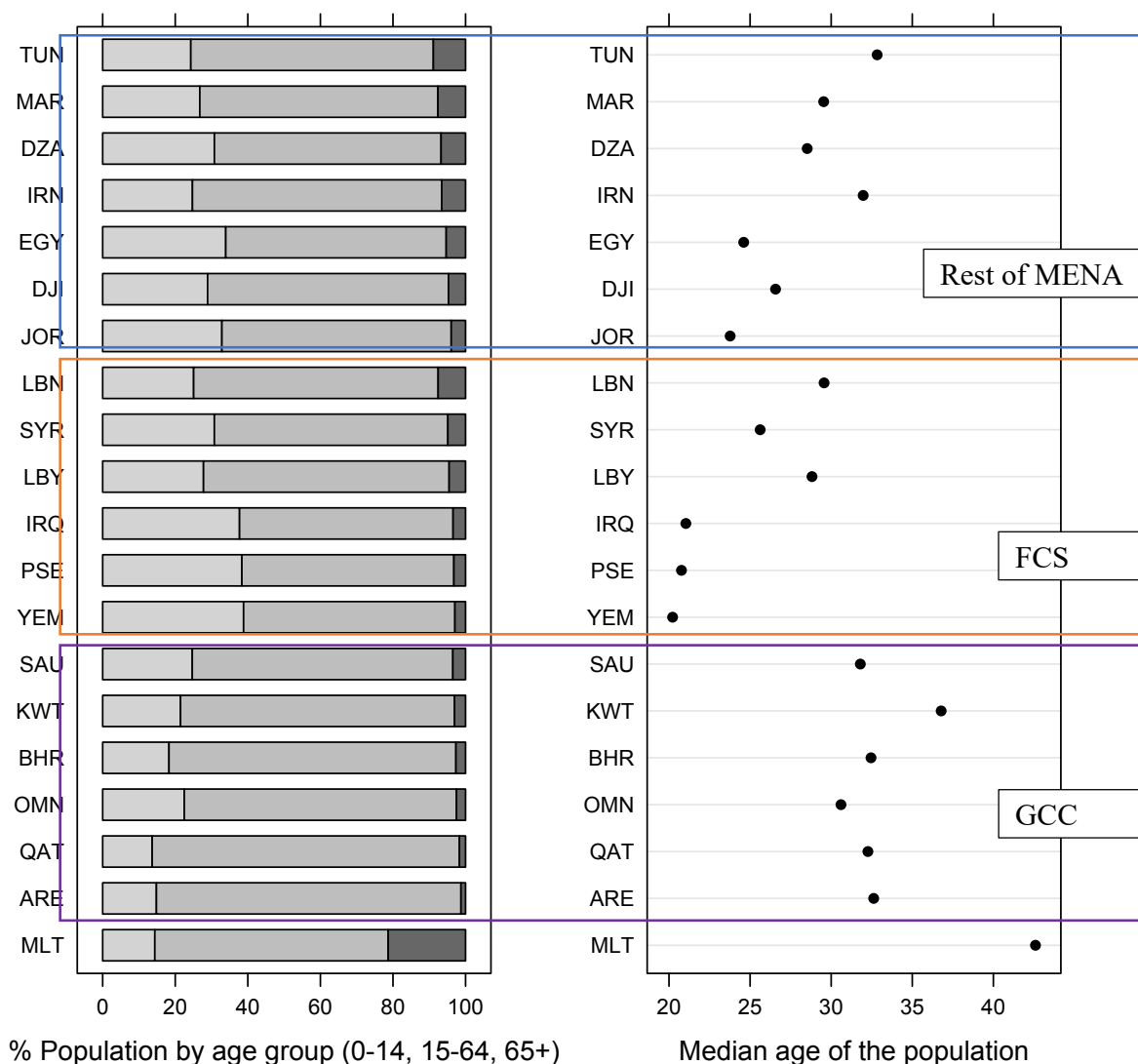


Figure 5 The distributions of the population by broad age groups (0-14, 15-64, 65) and the median age of the population in different countries in the MENA region in 2020¹³

Figure 5 shows that the working-age groups (15-64) constitute the largest group of all the MENA countries' populations, providing considerable economic opportunities if significant proportions of this group can enter the formal labour market and contribute to national taxation systems and pension schemes. However, the optimal utilisation of working-age groups in the region is far from being achieved. Labour force participation rates in the region are generally low, particularly among women, with considerable lost economic

¹³ <https://population.un.org/wpp/Download/Standard/Population/>

opportunities. Furthermore, the labour markets in the region are dominated by informal work arrangements leading to low formal contributions to pensions and national taxation systems (Gatti et al., 2014).

4.3 Later Life Learning and Employability across the Life Course

Longevity brings considerable human and social capital advantage, especially when extra years are healthy. Many European countries have introduced extending working lives, including increasing the statutory retirement age, to address population ageing and financial pressures associated with pension (and other fiscal) deficits. However, extending working lives brings broader social and health benefits beyond these economic arguments. Several studies provide evidence of health and social benefits to individuals working beyond retirement (Di Gessa et al., 2017). These benefits are particularly significant when the individual characteristics, including health status, align with their work and employment pace and environment.

The evidence points to significant positive effects of Later Life Learning (LLL) on all factors associated with the World Health Organisation's healthy ageing framework (Rudnicka et al., 2020). Several studies show that the involvement of older people in LLL activities has positive effects on older people's intrinsic capacity, including improved psychological wellbeing (Arkoff et al., 2014) and a decrease in depressive symptoms (Orzechowska et al., 2008). Taking part in formal LLL such as U3As significantly improves information-seeking activities, social activities (Simone et al., 2010) and self-perception of ageing (Fernández-Ballesteros et al., 2012).

Furthermore, several studies conducted in Spain and Indonesia showed some significant positive impacts of U3As and self-help groups on social support networks (Portero et al., 2007; Fernández-Ballesteros et al., 2013; Sahar et al., 2018). In addition, incidences of neglect were reduced in the self-help group compared to the control group (Sahar et al., 2018). The effects of LLL also extend to functional ability and enhance older people's ability to contribute towards more enabling environments. Improved coping strategies have been documented after enrolling in a socio-cognitive stimulation program for older women; participants improved effective coping strategies (Krzemien et al., 2005).

4.4 Enhancing Female Labour Participation and Gender Equality

One of the ways to reduce the financial burden associated with population ageing is to capitalise on the human capital across all age groups. Low female labour employment rates characterise the region; hence, developing policies and strategies to enhance these rates offers immediate and tangible results. In 2019, according to the World Bank figures, the female labour participation (FLP) rate ranged from less than 8% in Yemen to 41.9% in Malta. FLP rates have increased between 1990 and 2019 in all countries in the region except in four countries (Yemen, Syria, Egypt and Qatar).

The female labour participation rate dropped by 12.1% and 4% in Yemen and Syria, respectively, and is likely associated with political conflicts and wars. Egypt's FLP rate declined by 2.5% from 1990 to 2019, with a steep drop since 2017. Overall, the FLP in Egypt

remained relatively stable, between 20% and 23%, potentially due to high levels of undocumented work among women. However, it needs to be clarified why it has recently dropped further. LFP stood at 13.6% only in 2019, a decline of 1.3% in 1990 in Qatar. On the other hand, Malta witnessed the highest increase in FLP, with 13.9% between 1990 and 2019, followed by Iran (9%) and Libya (8.2%). FLP rate saw minimal improvements (less than 1% increase) during the same period in Oman (to reach 15.4% in 2019), Kuwait (25% in 2019) and Morocco (24.3% in 2019). FLP rates have been considerably high in Djibouti, compared to most countries in the region, since the 1990s, reaching 39.9% in 2019. Djibouti is one of the key transit countries for irregular migrants from the Horn of Africa (particularly female Ethiopian migrants) destined for GCC countries (Eresso, 2019). Many of these workers are women and end up working as domestic workers in Djibouti (Meron, 2018), which might explain the relatively high level of FLP in Djibouti. Another potential explanation might be the high level of female employment in the production of Khat (narcotic), which is sanctioned by the government and included in the country's GDP (Wilner, 2020).

Figure 6 presents trends in the Female Labour Participation rates between 1990 and 2020 in some selected countries in the MENA region. Figure 6 shows a decline in the FLP rate in several countries since 2015, including Bahrain, Algeria, Iraq and Egypt. Malta saw a sharp increase in the FLP rate since the 1990s, moving from under 28% to around 43% in 2020. In 2020, the FLP rate was clustered between 12% and 20% in GCC countries, except for Kuwait, which stood at under 25% in the same year. This rate fluctuated sharply in some countries in the GCC over the past two decades, especially in Oman, Qatar and UAE, potentially linked to trends in labour migration. It is worth noting that FLP rates observed a significant increase in Saudi Arabia since 2017.

Among FCS countries, Libya stands out with the highest FLP rate, moving from a high base of around 30% in the 1990s to nearly 36% in 2020. On the other hand, Yemen has witnessed a sharp decline in the FLP rate from about 24% in 1999 to 8% in 2020. In 2020, the FLP rate was closely matched between Syria and West Bank & Gaza at 18.2% and 19.2% respectively.

In 2020, the FLP rate ranged between 17-28% in the rest of the countries in the MENA region. The experience of Iran and Egypt with FLP warrants some discussion. The FLP rate had increased steadily in Iran between 1990 and 2005, reaching over 20%, before it started to decline in 2014 to only 16%, then slowly increasing again to around 17% in 2020. In Egypt, FLP rate has been between 20-25% since the early 1990s until 2017, when it declined sharply to less than 17% in 2020. The highest FLP rate at 28.3% is observed in Tunisia followed by Djibouti and Morocco at just under 26%.

In addition to a generally low female labour participation rate in the region, the ratio of female-to-male labour participation (F-M LP) ratio¹⁴ is also low across the region. A low F-M LP ratio indicates gender-inequality in accessing the labour market.

¹⁴ The female-to-male ratio of labour force participation rates is calculated by dividing the labour force participation rate among women by the corresponding rate for men. Derived using data from International Labour Organization, ILOSTAT database. Source: <https://data.worldbank.org/indicator/SL.TLF.CACT.FM.ZS>

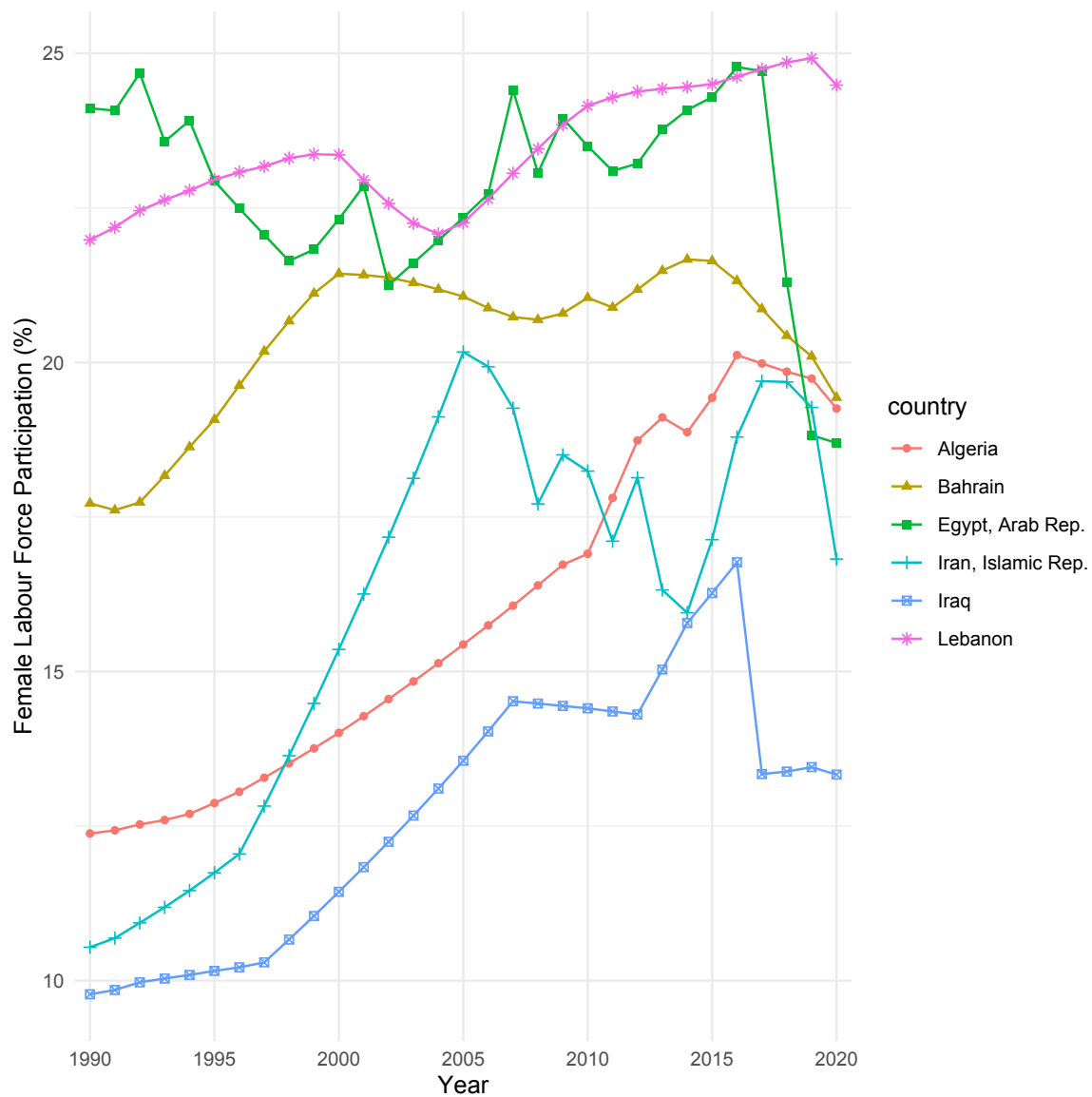


Figure 6 Trends in female labour participation rate in selected countries in the MENA region from 1990 to 2020¹⁵

Figure 7 presents trends in the F-M LP ratios from 1990 to 2019 in some selected countries in the region. In 2000, this ratio was lower in Malta than in Qatar. However, the speed of this ratio increased in Malta to overtake that in Qatar between 2010 and 2015. However, while this ratio continued to rise in Malta from 2015 to 2020, Qatar declined steadily.

¹⁵ Labour force participation rate, female (% of female population aged 15-64) (modelled ILO estimates). Source: <https://data.worldbank.org/indicator/SL.TLF.TOTL.FE.ZS>

In 2020, this ratio was less than 10%¹⁶ in Yemen and around 25% in four countries (Egypt, West Bank & Gaza, Algeria, and Iran); between 50-60% in five countries (Bahrain, Libya, United Arab Emirates, Kuwait, and Qatar) and reaches up to 74% in Malta. Most improvements in this ratio between 1990 and 2020 were observed in Malta, followed by the UAE.

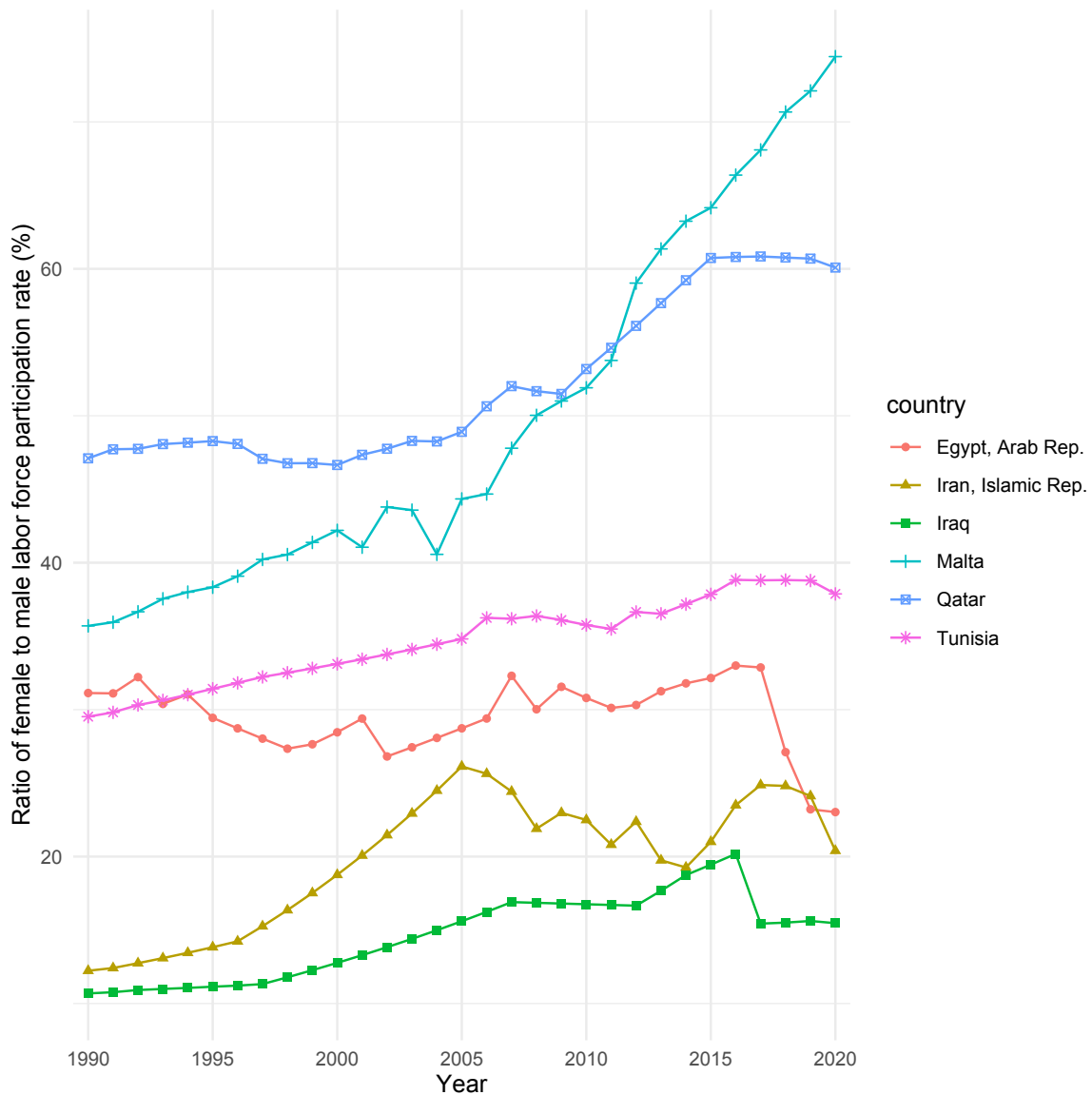


Figure 7 Trends in the female to male labour force participation ratio for different countries in the MENA region from 1990 to 2020

Among the GCC countries, the F-M LP ratio was consistently higher in Kuwait at around 55% in the early 1990s, reaching 57% in 2020. However, it was overtaken in the last

¹⁶ Meaning that the number of women in employment equates to less than tenth of the number of men in work.

few years by that in Qatar, reaching 60% in 2020. At the other end of the spectrum, the same ratio was lowest in Saudi Arabia in the 1990s at less than 20%; however, this ratio started to increase in 2017 to exceed that in Oman. By 2020, this ratio reached 40% in Saudi Arabia.

For FCS countries, Libya has one of the highest F-M LP ratios. In 2020, this ratio was 56% in Libya, while it ranged between 9 and 32% in other FCS countries (lowest in Yemen and highest in Lebanon). The picture is varied among the rest of the MENA region, moving from a range between 14% to 30% in the 1990s to a range of 22-40% in 2020. The movement of this ratio showed a recent sharp decline since 2015 in Egypt and Iran. Egypt had historically a significantly higher F-M LP ratio than Iran until 2017, when this ratio declined in Egypt and increased in Iran, reaching similar ratios in 2020 at 20% in Iran and 23% in Egypt. In 2020, this ratio was highest in Djibouti and Tunisia (38% and 39%) and lowest in Iran and Egypt.

Figure 8 presents the relationship between the percentage of older people aged 65 years or more and the ratio of female to male labour participation in different countries in the MENA region in 2019. Figure 8 shows an inverse relationship between female participation and a higher percentage of older people, which might be related to an increased care burden on younger women who are usually informal care providers.

Figure 8 points to a U-shaped relationship between the two indicators. There is a clear inverse relationship among the GCC countries between the F-M LP ratio and the proportion of older people. At one end, Qatar has the smallest proportion of older people and the highest F-M LP ratio in contrast to Saudi Arabia, with the highest percentage of older and the lowest F-M LP ratio among this group. The relationship stabilises where similar FLP rates are observed within countries with different percentages of older people, less than 7% (Jordan, Syria, Egypt, Iran, and Algeria). However, once the percentage of people aged 65 or more exceeds 7%¹⁷, the F-M LP ratio starts to increase again, as is the case in Lebanon, Morocco, and Tunisia. These three countries have already started their ageing transition (see Table 2) and might indicate some adaptive strategies employed by women to balance labour participation and caring for older people. Malta represents an extension of this upward relationship, with relatively high F-M LP ratio and a high prevalence of people aged 65 or more, bearing in mind that Malta has already completed its ageing transition in 2006¹⁸. Table 8 indicates a few ‘outliers’, at one end, Yemen, and Iraq (both FCS countries) having lower F-M LP ratio than other countries with similar percentage of people aged 65 or more (Jordan and West Bank & Gaza). On the other hand, Libya and Djibouti have significantly higher F-M LP ratios than other countries with similar proportions of older people (Syria and Egypt).

¹⁷ Slightly above the 7% threshold of entering the ageing transition stage

¹⁸ Data not represented on Figure 8

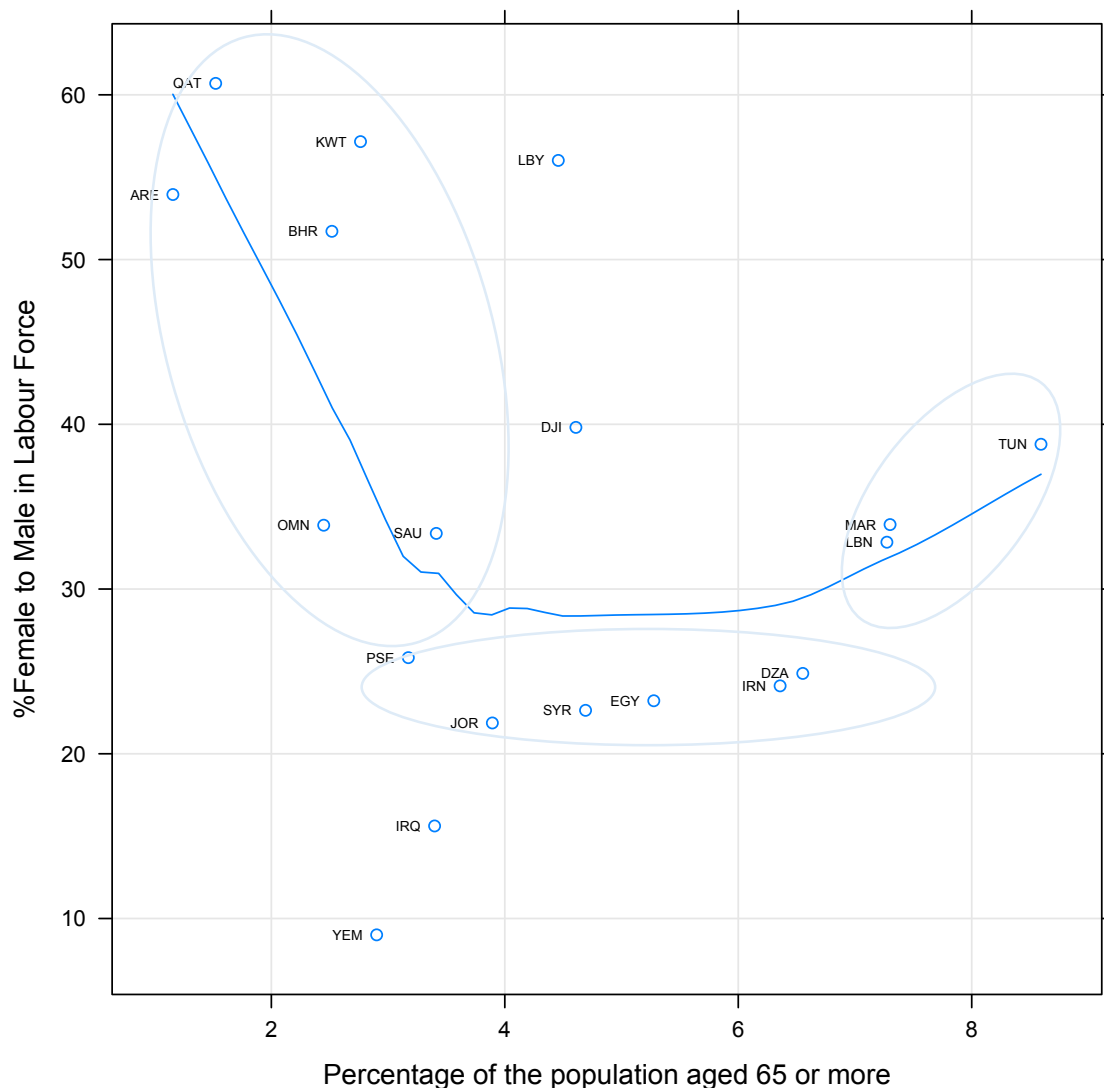


Figure 8 Ratio of female to males in the labour force and percentage of the population aged 65 or more in different MENA countries, 2020

The Gender Inequality Index (GII)¹⁹ measures gender inequalities in three essential aspects of human development: reproductive health, empowerment, and economic status²⁰. The GII measures the human development costs of gender inequality; thus, the higher the GII value, the more disparities between females and males and the more loss to human development. Overall, the GII reflects how women are disadvantaged in these dimensions. Table 5 presents the GII

¹⁹ Further information on GII: the GII is an inequality index. The GII ranges between 0 and 1. Higher GII values indicate higher inequalities between women and men and thus higher loss to human development. Source: <http://hdr.undp.org/en/content/gender-inequality-index-gii>;

²⁰ The GII includes measures of reproductive health, measured by maternal mortality ratio and adolescent birth rates; empowerment, measured by the proportion of parliamentary seats occupied by females and proportion of adult females and males aged 25 years and older with at least some secondary education; and economic status, expressed as labour market participation and measured by labour force participation rate of female and male populations aged 15 years and older.

values for different countries in the MENA region in 2020. This indicator ranges from 0.079 in the United Arab Emirates to 0.795 in Yemen.

Table 5 indicates that gender inequalities are relatively high across the region except for a few countries. For comparability, the GII was 0.025 in Switzerland and 0.045 in Norway in 2020. It is important to consider gender inequality, especially in countries that have already started their ageing transition, such as Morocco, Lebanon, Iran, and Algeria. It is likely that within these countries, the informal LTC burden will fall on the shoulders of younger women within the family and communities and is expected to hinder women’s ability to join formal employment or higher education and hence increase the gender gap further.

Table 5 Gender Inequality Index for different countries in the MENA region, 2020

Country	GI ²¹
Malta	0.175
GCC Countries	
United Arab Emirates	0.079
Qatar	0.185
Bahrain	0.212
Kuwait	0.242
Saudi Arabia	0.252
Oman	0.306
FCS Countries	
Libya	0.252
Lebanon	0.411
Syrian Arab Republic	0.482
Iraq	0.577
Yemen	0.795
Rest of MENA	
Tunisia	0.296
Algeria	0.429
Egypt	0.449
Jordan	0.450
Morocco	0.454
Iran	0.459

Among GCC countries, the UAE stands out as one of the lowest gender inequalities (lower even than Malta), while the same measure is highest in Oman. Among FCS countries, Libya had a GII of only 0.252. All other MENA countries had GII values around 0.5, except Tunisia, where this indicator is very similar to that in Libya and Saudi Arabia at 0.296.

Interestingly, the UAE appears to be an anomaly regarding GII, with a value of only 0.079, much lower than that observed in other GCC countries and Malta. The latter is linked to several reforms aimed specifically at empowering women in the UAE, including the Gender

²¹ This indicator is not available for West Bank and Gaze and Djibouti

Balance Council launched in 2017 (Hesketh & Williams, 2021). However, this might also be linked to the significant contribution of migrant women to the labour market in the UAE and the differentials in gender-based employment gaps by nationality (Al-Waqfi & Abdalla Al-Faki, 2015).

4.5 Economic Opportunities Associated with the Emerging LTC Market in the MENA Region

LTC markets and economies are among the fastest-growing employment sectors worldwide (Addati et al., 2018). The World Economic Forum estimates that 37% of new job opportunities in 2022 will be in care economies and encompass a range of health and social care professions (Ratcheva, 2020). The LTC economy describes jobs and skills required to increase the population's health and care needs, including older people. LTC jobs are primarily reliant on human interactions and relationships. This reliance will continue, unlike many other sectors where advanced technologies have substituted most human input. Furthermore, women make up the majority of the LTC workforce. Hence, an emerging LTC market will potentially create considerable job opportunities, particularly for women, who generally have a significantly low labour participation rate in the region (see Section 4.4).

However, evidence indicates that care economies are emerging in the MENA region within relatively unregulated structures. There are indications of increased demand for a formal LTC market in the region. For example, a recent public opinion survey (n=2,016) conducted by 'Baseera'²² in Egypt indicates that a small percentage of informal carers are keen to hire formal LTC workers immediately. This was explained by the lack of formal LTC specialist training among the currently unregulated LTC workers and concerns about safeguarding older people. However, the same study showed that over half of participants agreed or strongly agreed that formal LTC services are essential.

Furthermore, a more significant percentage (67.4%) agreed or strongly agreed that if the family cannot look after their parents, they may hire a formal home care worker (the preference was much lower for admitting the older relative to residential care at 27.5%). Almost all participants preferred that formal LTC workers be women over men. The study concludes by estimating the need for 107,000 LTC jobs to meet current demand.

4.6 Fiscal Implications of Population Ageing

As the previous sections show, there are considerable fiscal implications of population ageing, especially when labour participation rates are generally lower than optimal capacity. Such underutilisation of human resources results in different system demographics than observed population dividends, with much fewer contributors than the maximum potential contributors. Therefore, population ageing affects pension systems in the MENA region, mainly designed as PAYG-DB schemes²³. These financing mechanisms worldwide, where

²² <https://en.enow.gov.eg/الصفحة%20الرئيسية>

²³ *Contributory* means that participating employees in the pension scheme must support the scheme with contributions (often through payroll taxes). *Earnings related* means that pensions are based on the beneficiary's earnings. *Pay-as-you go (PAYG)*, in its strictest sense, is a method of financing whereby current pensions are paid out of current revenues from contributions. Some reserves can be accumulated when revenues are higher

current contributors pay for current beneficiaries, are being reformed to adapt to the changing demographic realities. Although demographic changes are not the sole cause of pension systems' unsustainability -most of these systems are unsustainable by design- the intergenerational transfers are increasingly less able to finance the gap for these schemes, where parameters are inconsistent with long-term balance²⁴. OECD countries with the highest percentages of the ageing population have already led extended waves of reforms in recent decades. These reforms span from parametric to systemic ones, but a common denominator is the extension of the working life and the adjustment of benefits. None of these reforms has been easy or widely accepted, but they result from an explicit acceptance that new realities can no longer afford the promises of the past.

The distinction between population demographics (population of the entire country) and system demographics (population covered by the pension system) has essential consequences²⁵. The considerable differences between population and system support ratios in the MENA region are due to labour market factors (low labour force participation, particularly women and youth) and the pension system design (young legal retirement ages, early retirement, and extended retirement survivorship benefits, among others). In fact, in the MENA region, the percentages of beneficiaries that are survivors (widows, orphans, others), or early retirees, are higher than in the rest of the world.

Population ageing is putting most of the MENA regions' social insurance systems precarious. Within a small window of time, many countries will complete their ageing transition. For example, in less than 15 years, the percentage of people aged 65 or more will be at least 14% in Tunisia and Lebanon (Table 2). Furthermore, unfavourable system demographics, that is a relatively lower number of pension system contributors compared to higher numbers of beneficiaries, add further pressures due to low employment rates and low retirement ages. For example, the International Labour Organisation estimates that in 2021 40.5% of people above retirement age receive pensions in the MENA region, compared to 77.5 per cent of the global average, with considerable gender bias²⁶. Loewe (2014) identifies

than expenditures; hence, PAYG can be fully or partially funded. *Defined benefit (DB)* means the pensions are calculated based on a prescribed formula that usually considers several factors: length of employment and salary history.

²⁴ In the early phase of PAYG schemes, favourable demographics (number of contributors vastly exceeding the number of beneficiaries) hid the parametric inconsistencies of the original design. As pension schemes have matured and the ratio of pensioners to contributors (the "system's dependency ratio") has significantly increased, reserves have been used to finance primary deficits. But even reserves have shown limited capacity to address the financing needs in the long term. Once the reserves are depleted, additional funding sources have served to support the pension schemes' survival. Increased contributions, earmarked taxes or transfers from the general budget have become standard practices, though none are recommended or long-term solutions.

²⁵ Population support ratio is the number of working age population divided by the number of old-age population, while system support ratio is the number of contributors to a pension system divided by the number of beneficiaries. Dependency ratios are the opposite of support ratios. For instance, in a specific representative country in the region there are roughly 16 people aged 15-64 for every person aged 65 or older, while there are only 5 contributors for each beneficiary.

²⁶ https://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_830406.pdf

MENA's employment crisis as one of the region's most critical challenges to sustainable pension systems. Loewe's analysis clearly shows that unemployment rates are highest among younger people and women and the extent of the informal labour sector in the region. Given current population demographics, including the region's youth bulge, significantly limit the ability of its pension systems to extend their coverage as a response to population ageing. High unemployment rates are within pension schemes primarily linked to the public sector with limited market coverage. Within such a structure, large parts of the labour force outside of the public sector are excluded from accessing social insurance schemes in some cases by law.

4.7 Social Implications of Ageing Populations

The increased proportions and numbers of older people bring potential benefits and social challenges. We discussed the potential benefits of extending working lives and Later Life Learning. Moreover, how society appreciates and treats older people is another crucial aspect. Elder abuse and ageism are multifarious and complex phenomena. For instance, elder abuse may take on markedly different forms – physical, psychological, and sexual abuse, neglect, and financial abuse. Inherent to it is a tension between preserving the autonomy and self-determination of older adults and safeguarding vulnerable and dependent (WHO, 2002).

The different manifestations of elder abuse across cultures also pose a challenge to addressing it at a global level; for example, in specific cultural contexts, it can be manifested in accusations of witchcraft in some African countries (Ferreire, 2005) or abandonment in care and health institutions in Asia (Yan, 2014). Almakki *et al.* (2020) conducted a study to explore the knowledge and attitudes of adult visitors to primary healthcare centres towards elder abuse in the Al Qatif region in Saudi Arabia. Most participants agreed that older people with physical or cognitive impairments are subjected to different forms of elder abuse. The findings of this study highlight the need to raise awareness of these issues in the MENA region even when the advocated narrative is treasuring and valuing older people, where culture and religion may play a role in silencing this problem (Sweileh, 2021).

5- The Supply and Demand of Long-Term Care Services in the Middle East and North Africa Region

5.1 Supply of Long-Term Care Services in the MENA Region

The primary sources of provision of LTC support in the region are the immediate family and charitable and community-based organisations (Kane et al., 2020; Hussein & Ismail, 2017). Cultural and religious norms govern the family structure, including expectations and types of inter-generational support within the region's responsibilities and filial obligations. Within such a structure, gender plays a crucial role in determining duties and responsibilities and the flow and structure of such relations (Emam et al., 2017).

The dominant patriarchal structure in the MENA region assigns different types of care and support responsibilities - for example, financial vs. personal care - to either men or women within the family. Typically, men are expected to meet financial needs, while women provide emotional and hands-on care with a bi-directional flow of responsibilities across generations. In that context, grandfathers might be expected to provide financial support to offspring and grandchildren while grandmothers support their grandchildren's care. On the other hand, sons are expected to provide financial contributions to the care of their parents, as well as social visits. In contrast, daughters and daughters-in-law are expected to offer intense personal care. Such structure creates a dynamic set of inter-dependencies and care burdens felt more significantly among women. These burdens can be particularly emotionally and economically taxing when the formal LTC system, including respite care, is under-developed, as is the case in most countries in the region (Sinunu et al., 2009, Lotfalinezhad et al., 2021). Furthermore, there is evidence that older people may feel guilty about seeking help from their offspring, exacerbating their health and care needs with adverse impacts on their wellbeing (Yazdanpanahi & Hussein, 2021).

The reliance on the family for LTC assumes the family's availability, willingness, and ability to provide an adequate level and type of support for older people. With trends related to migration and internal mobility, changes in family structures, the decline in the number of children, urbanisation, reduced proximity of living across generations and other factors, the viability of this model is highly questionable. For example, as life expectancy among women is on average higher than that of men and women are less likely to remarry after divorce or widowhood in the region (Hussein & Manthorpe, 2007), women are increasingly more likely to live alone in the region (Tohme et al., 2011; Fahmei et al., 2020).

One critical determinant of family carers' availability is migration, a considerably dynamic phenomenon in the MENA region. Data on internal migration and intergenerational residency patterns are unavailable for the region. However, Figure 9 presents trends in net international migration from the 1960s to 2020 for different countries in the region.

Reliance on the family
The 'invisible' welfare
scheme

(un)sustainability of family
care

- Socio-economic and demographic changes
- Emotional burden
- Competing opportunities

Suitability/adequacy of
care

Figure 9 shows that some countries in the region, especially GCC countries, include significant net migrants. In contrast, other countries, such as Morocco, Egypt and Libya, have larger groups of emigrants (negative net migration). The data also reflect the experience of FCS countries and the recent unrest within the region, with large groups of the population fleeing the Syrian war, usually to neighbouring countries like Lebanon and Jordan. The displacements of older people and their families due to wars and conflicts are particularly concerning (Syrian Commission for Family and Population Affairs, 2019).

Labour-migration pathways play a crucial role in the supply of LTC workers to most European and OECD countries. In the MENA region, migrant workers, especially women, contribute more informally to the care economy by providing LTC support as part of formal and informal domestic work arrangements. In GCC countries, recent data and reports indicate a reliance on migrant

women workers to provide care due to increased demand and limited formal LTC services (Kumar et al., 2022). In fact, domestic work is the most prevalent occupation among migrant women in GCC countries (ILO, 2018), especially among migrant women from African countries (such as Ghana) and East Asia (such as Nepal and the Philippines) (Kandilige et al., 2019).

Except for Malta, the formal LTC systems and services in the region are still embryonic. These include fragmented pockets of support usually organised, funded, and delivered by small charitable and community groups (Hussein & Ismail, 2017). Different countries in the region face various fiscal challenges associated with supporting adequate LTC services relative to their position within the demographic transition, their population size and the resources available to them. Furthermore, cultural norms, the availability of established training centres and public awareness all influence the ability of a country to develop and expand different LTC services.

There is a tendency within the region to prefer LTC at home, which is in alliance with the global direction of ageing in place and aligns with the rooted importance of the family as partners in the care delivery. Consistent with this direction, there have been some recent policy developments and recognition by different governments in the region of the increased need for

LTC support mechanisms for older people and those living with disabilities. Family solidarity remains a core pillar of LTC delivery within these policy developments, such as in the recent Omani Social Development Strategy (2016-2025) (Ismail and Hussein, 2019). In Egypt, the Ministry for Social Solidarity launched a pilot initiative, 'Al-Tadamun', in 2019 to train formal LTC workers in partnership with Beni Suef University and several charitable organisations²⁷. Saudi Arabia has invested in LTC, mainly home care, for older people for several years as part of its National Transformation Program as part of the Saudi Vision 2030, with increasing coverage yearly (Colliers International, 2020).

Current evidence indicates scattered residential care services in the MENA region²⁸, especially supporting people with dementia and frail older people with no family to look after them. The choice of this form of care is usually associated with feelings of guilt and stigma among the family. It appears to be the least preferred among older people in the region (Sinunu et al., 2009)²⁸.

²⁷ <https://www.baladnaelyoum.com/news/5d763345a24321309e6bc143/>-جنيه-التضامن-4000-بمرتب-ومتابعات/بمرتب-4000-جنيه-التضامن-تعلن-عن-وظائف-لرعاية-المسنين

²⁸ See also recent interview as part of the MENARAH activities: <https://www.menarah.org/research-activities/narratives-of-ageing-and-caring-voices-from-the-middle-east/>

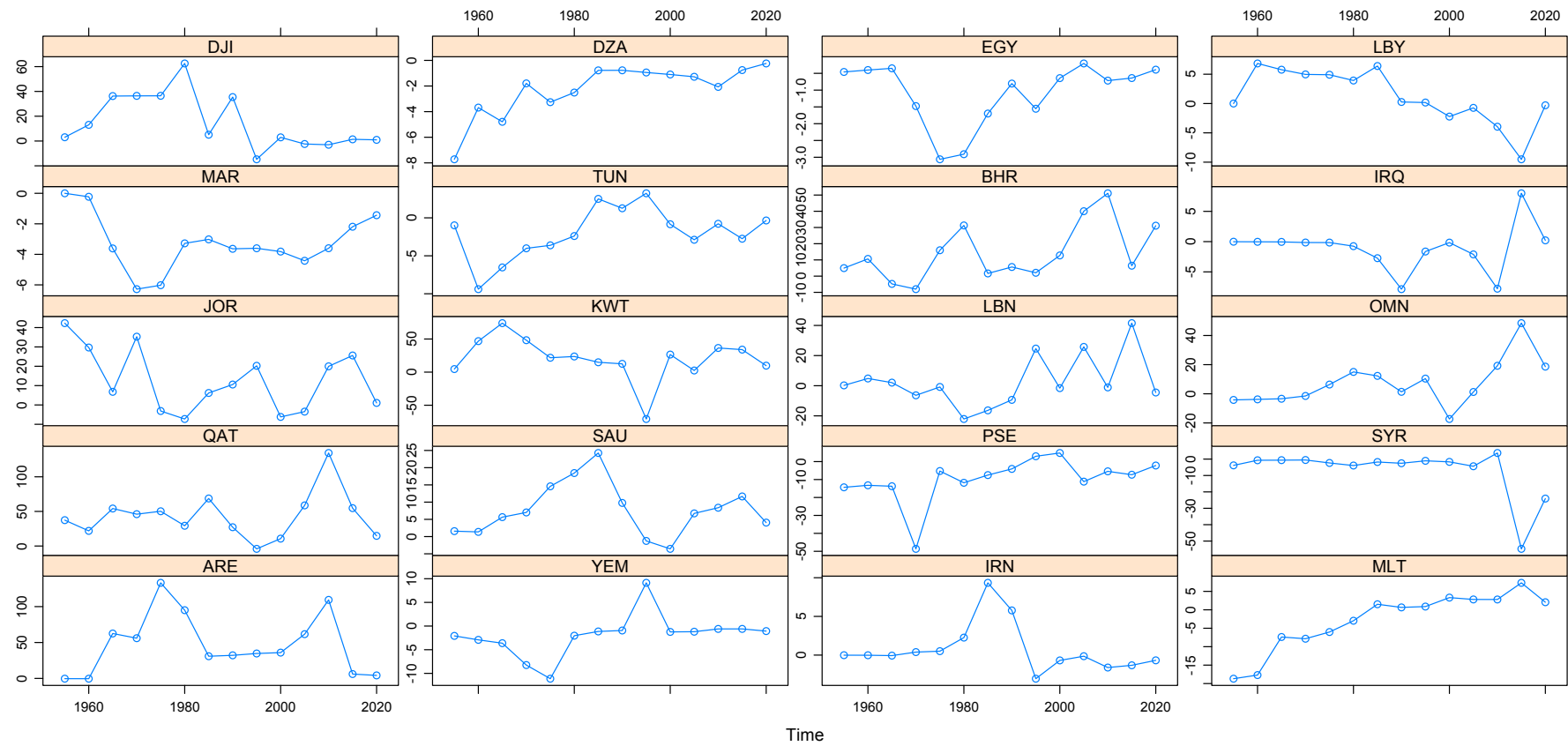


Figure 9 Trends in net migration in different countries in the MENA region from 1960 to 2020

Palliative care is an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness through the prevention and relief of suffering using early identification and correct assessment and treatment of pain and other issues, whether physical, psychosocial, or spiritual. The classification of palliative care development is used here as a country's proxy to recognise the need for formal LTC (WHO, 2020)²⁹.

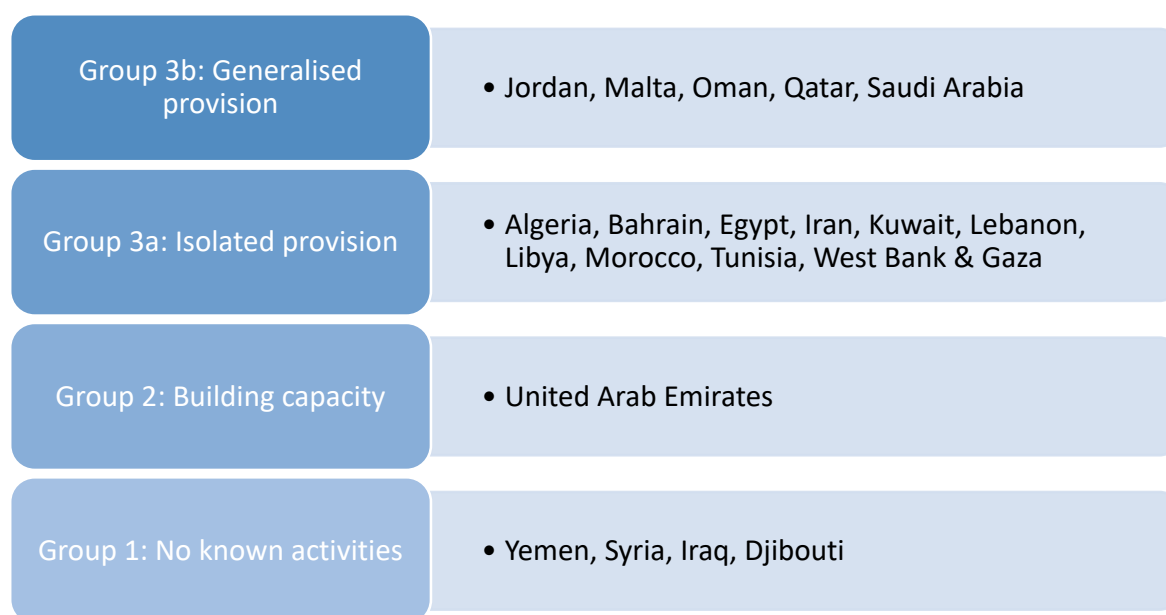


Figure 10 Distribution of the MENA region countries by level of palliative care development, WHO (2020)

The level of development in palliative care is classified into four main groups (two subgroups for each Group 3 and 4). Group 1 ‘*No known palliative care activity*’³⁰; Group 2 ‘*Capacity-building palliative care activity*’: A country in this category shows evidence of wide-ranging initiatives designed to create the organisational, workforce, and policy capacity for the development of palliative care services, although no services have been established yet³¹. Group 3a) *Isolated palliative care provision*: A country in this category is characterised by the development of palliative care activism that is still patchy in scope and not well supported. Group 3b) *Generalized palliative care provision*: A country in this category is characterised by the development of palliative care activism in several locations with the growth of local support in those areas with multiple sources of funding. Group 4a) *Palliative care at an early stage of*

²⁹ Worldwide Palliative Care Alliance and the World Health Organisation (2020) Global Atlas of Palliative Care 2nd Edition. London. [https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/csy/palliative-care/whpca_global_atlas_p5_digital_final.pdf?sfvrsn=1b54423a_3](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/csy/palliative-care/whpca_global_atlas_p5_digital_final.pdf?sfvrsn=1b54423a_3) (accessed 29/10/21)

³⁰ Although it was not possible to identify any palliative care activity in this group of countries, it is acknowledged that there may be instances where, despite best efforts, current work has been unrecognised.

³¹ Developmental activities include attendance at, or organisation of, key conferences, personnel undertaking external training in palliative care, lobbying of policy makers and Ministries of Health and emerging plans for service development.

preliminary integration: None of the countries in the MENA region has been identified to be in this category. Group 4b) *Palliative care services are at a stage of advanced integration*.

Figure 10 presents a classification of the countries in the MENA region according to their level of development in palliative care. None of the countries in the MENA region is at the highest stage of integrated palliative care development (Group 4). On the other hand, most countries (15 out of 20) are either in group 3a (isolated provision) or 3b (generalised provision), indicating an increased level of awareness of palliative care. All Group 1 countries with no known activities are FCS countries except Djibouti. At the same time, three GCC (Saudi Arabia, Qatar, Oman) are in Group 3b, along with Malta and Jordan.

5.2 Demand for Long-Term Care Services

LTC refers to a range of services to provide care and support for older people and those with long-term disabilities. These services are designed to meet a person's health or personal care needs and help people live independently and safely as much as possible. Demand for LTC support, either formal or informal, is related to several factors; the prime among them is morbidity and health of the older person. Table 6 presents the average life expectancy at birth, the healthy life expectancy at birth and the difference between both sexes (male and female).

Table 6 shows significant discrepancies between life expectancy and healthy life expectancy at birth for both sexes, particularly among women. On average, women are expected to live longer and healthier than men at birth in most countries. There are a few exceptions; however, while women in Jordan have a higher average life expectancy at birth than men (by 1.8 years), they have a lower healthy life expectancy (by nearly one year). The other anomaly is Qatar, where men have a higher life expectancy and a higher healthy life expectancy at birth than women. The differences between life expectancy and healthy life expectancy for both sexes are alarming in the region. For example, in Kuwait, women are projected to live nearly 13 years in ill health and men almost 10 years. It is worth noting that the projected number of years of ill health is considerably high for all countries, regardless of the value of life expectancy itself. The smallest observed differences, of 6.9 and 8.9 years for men and women, respectively, are observed in Djibouti, which has one of the lowest average life expectancies in the region (64.1 years for men and 67.8 years for women). The latter differentials reflect the health care system's development level, including access to timely and adequate diagnosis and treatments within countries.

While some of the highest average healthy life expectancies among males and females are observed in GCC countries, especially in Kuwait and the UAE, the differences in healthy and overall life expectancy are also high among these countries, especially for women. These appear to be linked to the observed high prevalence of non-communicable diseases in the GCC countries, including cardiovascular disease, diabetes, cancer, and chronic respiratory diseases (Budreviciute et al., 2020). Non-communicable conditions are, in turn, linked to lifestyles preferring sedentary activities and discouraging physical exertion, particularly among older people, combined with eating and smoking habits (Booth et al., 2012). Furthermore, the wealthy lifestyle in GCC may pose some challenges in promoting and maintaining healthy

lifestyles. Some specific health risks are mainly observed, such as obesity (Al-Kandari, 2005) and type II diabetes (Zaghloul et al., 2011), which was primarily attributed to sociocultural attitudes, lifestyles and (lack of) physical activities.

Table 6 Average life expectancy and healthy life expectancy at birth and the difference between the two by gender in different countries in the MENA region

Country	Life Expectancy at birth		Healthy life expectancy at birth ³²		Difference between life expectancy and healthy life expectancy in years	
	Male	Female	Male	Female	Male	Female
Malta	79.9	83.8	70.9	71.9	9.0	11.9
GCC Countries						
Kuwait	79.3	84.0	69.5	71.1	9.8	12.9
UAE	75.1	78.4	65.8	66.2	9.3	12.2
Oman	73.0	75.3	64.5	64.5	8.5	10.8
Qatar	78.0	76.6	68.1	65.1	9.9	11.5
Bahrain	75.0	77.0	66.0	65.5	9.0	11.5
Saudi Arabia	73.1	76.2	63.8	64.4	9.3	11.8
FCS Countries						
Lebanon	74.0	79.2	65.1	67.1	8.9	12.1
Libya	74.2	77.3	64.9	65.5	9.3	11.8
Iraq	69.9	75.0	61.6	63.7	8.3	11.3
Syria	71.2	74.3	62.5	63.3	8.7	11.0
Yemen	64.4	68.9	57.0	58.0	7.4	10.9
Rest of MENA						
Tunisia	74.9	79.2	66.1	67.7	8.8	11.5
Jordan	77.0	78.8	68.1	67.2	8.9	11.6
Iran	75.7	79.1	66.0	66.5	9.7	12.6
Algeria	76.2	78.1	66.7	66.1	9.5	12.0
Egypt	69.6	74.1	62.3	63.7	7.3	10.4
Morocco	71.7	74.3	63.7	63.7	8.0	10.6
Djibouti	64.1	67.8	57.2	58.9	6.9	8.9

The International Diabetes Federation (IDF) indicates that in 2019, 12% of people with diabetes across the world are from the MENA region. Furthermore, the Global Burden of Disease (GBD) study estimates that Qatar had the highest prevalence of obesity among adults in the region in 2015 (42.5% for males and 52.4% for females) (GBD 2015). Older people are among the region's highest groups at risk of non-communicable diseases (Aggarwal et al., 2020). The high disease burden among older people increases the demand for formal LTC services. Hence, in addition to the unsustainability of family care due to declined availability,

³² Based on the World Health Organisation estimates <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/gho-ghe-hale-healthy-life-expectancy-at-birth>

further questions are related to the adequacy of informal care when the disease burden is high among the older person and potentially the family carers.

Dementia is a significant and increasing public health problem that impacts individuals, their family and friends, carers and society. Dementia is characterised by symptoms that affect thinking, orientation, comprehension, calculation, learning capacity, language, and judgment. It is often accompanied by a decline in emotional control or motivation or a change in social behaviour. There are over 100 forms of dementia – the most common form is Alzheimer’s disease, which accounts for between 60 per cent and 70 per cent of all cases. Stigma, denial and inadequate financial resources remain critical barriers to seeking medical and LTC support and physical health, which adds to the indirect cost of dementia in society.

Dementia affects women disproportionately; for example, the World Health Organisation estimates that 65% of deaths due to dementia are women and disability-adjusted life years due to dementia are nearly 60% higher in women than in men³³. Dementia has far-reaching and often underestimated consequences for informal carers in the region regarding the quality of life, health and loss of income (Kane et al., 2020). For example, carers often need to reduce work and leisure activities; providing informal care to people with dementia results in severe feelings of burden and guilt and has a detrimental impact on carers’ mental health. People living with dementia in the region are mainly cared for at home and primarily by women adding to the care burden. However, the same group of older people are the primary users of the limited residential care services in the region (Tohme et al., 2011; Kane et al., 2020).

Figure 11 presents estimates of the percentage of dementia-related death³⁴ and life expectancy at age 60 among different countries classified by level of palliative care development (as a proxy of formal LTC services) across the MENA region. Figure 11 shows that in 2018, the prevalence of dementia-related death ranges from nearly 0% in Kuwait to almost 10% in Lebanon. However, these estimates need to be treated with caution, as they are usually based on very small local studies extrapolated to national figures and are subject to the level of awareness and seeking formal diagnosis and support, which are considerably variable across low and middle-income countries in general (Salcher-Konrad et al., 2019).

³³ <https://www.who.int/news-room/fact-sheets/detail/dementia>

³⁴ Based on the World Health Organisation aged-standardised estimates (2018) available: <https://www.worldlifeexpectancy.com/algeria-alzheimers-dementia>. Estimates are not available for all countries in the region.

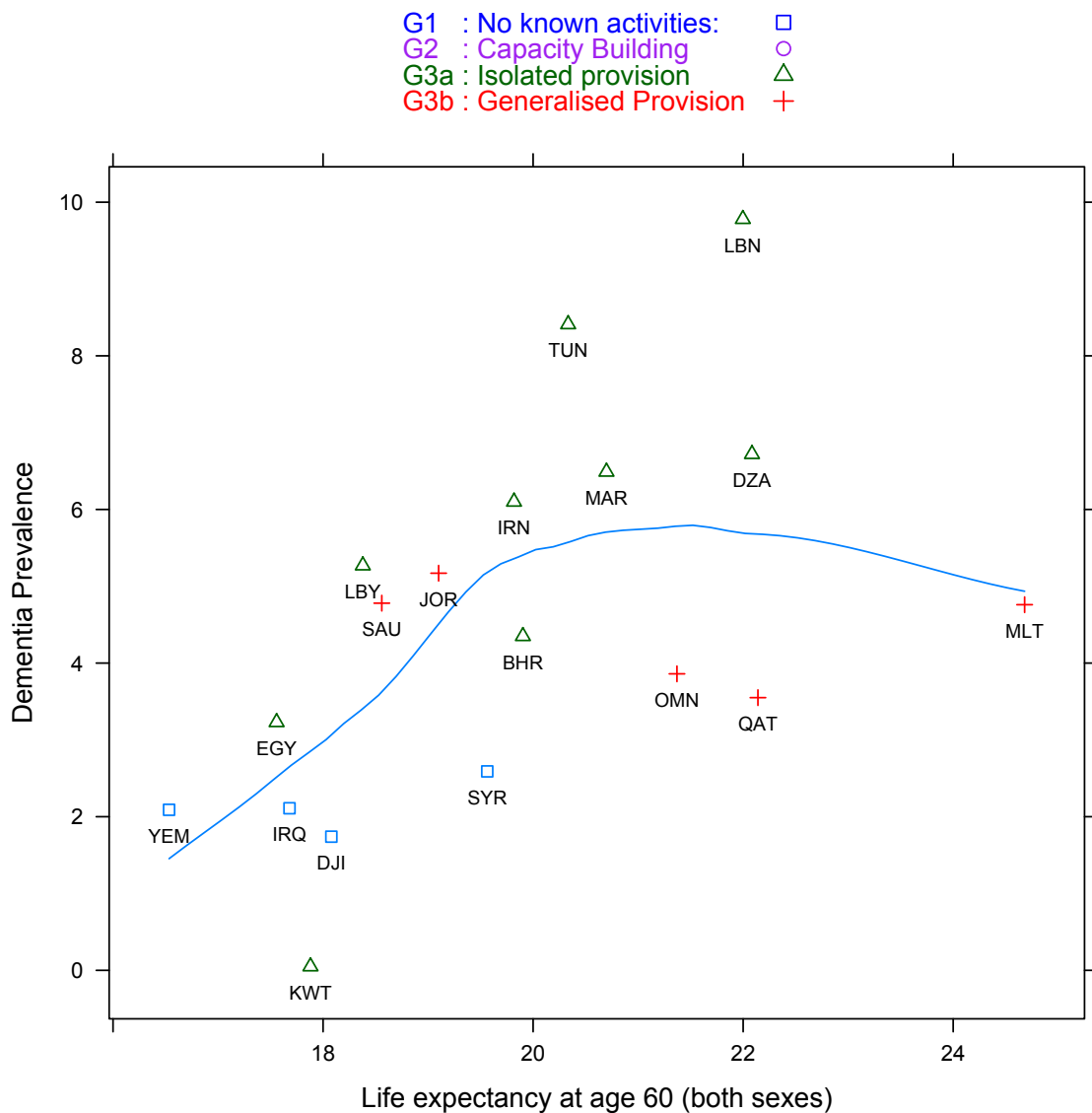


Figure 11 Estimates of the prevalence of dementia-related death (2018) and life expectancy at age 60 in different countries in the MENA region, distributed by the level of palliative care development (2020)

There appears to be a positive relationship between dementia-related death prevalence and life expectancy at age 60, with few outliers, such as Tunisia and Lebanon, where that prevalence is notably higher than the linear trend. On the other hand, current estimates of the prevalence of dementia-related death in Kuwait are particularly low (0.05%). These estimates are likely to be related to the paucity of dementia studies, under-reporting of dementia as a cause of death, lack of diagnosis and level of general awareness of dementia symptoms in Kuwait (Karam & Itani, 2013).

On the other hand, Figure 11 indicates that the level of palliative care provision in different countries is not directly associated with dementia prevalence or life expectancy at age 60. For example, Saudi Arabia and Jordan have one of the highest palliative care provisions in the

region. Still, they are estimated to have moderate dementia prevalence and relatively moderate average life expectancy at age 60 (less than 20 years). On the other hand, palliative care in Algeria and Lebanon are classified as isolated provisions. At the same time, the prevalence of death-related dementia and life expectancy at age 60 are relatively high.

5.3 Health Care Expenditures and Population Ageing in the MENA Region

There is an academic debate on whether population ageing and increased proportions of older people would directly *cause* higher health care expenditures (HCE) due to observed correlations, which might be based on untrue ‘red herring’ assumptions (Zweifel et al., 1999). One of these assumptions is that older age groups include more individuals who might require complex medical care during the last years of their lives (time-to-death hypothesis) with a high level of associated HCE. A recent review (Breyer and Lorenz, 2020) of the association between population ageing and HCE supports the time-to-death hypothesis (and the decedents/survivors’ hypothesis³⁵). In the context of the MENA region, where morbidity and disease burden are considerably high for a more extended period at the end of life, it is expected that HCE as a percentage of GDP will increase in countries with higher proportions of older people (due to differences between life expectancy and healthy life expectancy and other factors as explained in Section 4.2). However, HCE is affected by the country’s income level; simultaneously, HCE competes with other state expenditures such as investments in education, welfare, and infrastructure.

Figure 12 visualises the relationship between HCE as a percentage of GDP and GDP per capita with countries in the MENA region classified according to the level of preparedness in palliative care. Figure 12 does not show a linear relationship between HCE as a percentage of GDP and GDP per capita in the region. Many countries in the region have similar GDP per capita with diverse HCE. For example, Iran, Lebanon, and Jordan appear to have higher HCE when compared to Morocco, Egypt, and Iraq, albeit all having similar GDP per capita. These differentials are likely to be linked to healthcare reforms and competing policy demands and not solely dictated by their income. Iran, for example, launched two major healthcare reforms over the past few decades: the Family Physician Program (FPP) in 2005 and the Health Transformation Plan (HTP) in 2014, with increases in both healthcare utilisation and cost (Bayati et al., 2020).

³⁵ In a regression equation for individual HCE, the estimated age gradient becomes much smaller when the analysis distinguishes between decedents (persons in their last x years of life, where x is a small number, often three or four) and survivors (all the others) (see: Zweifel et al., 2004).

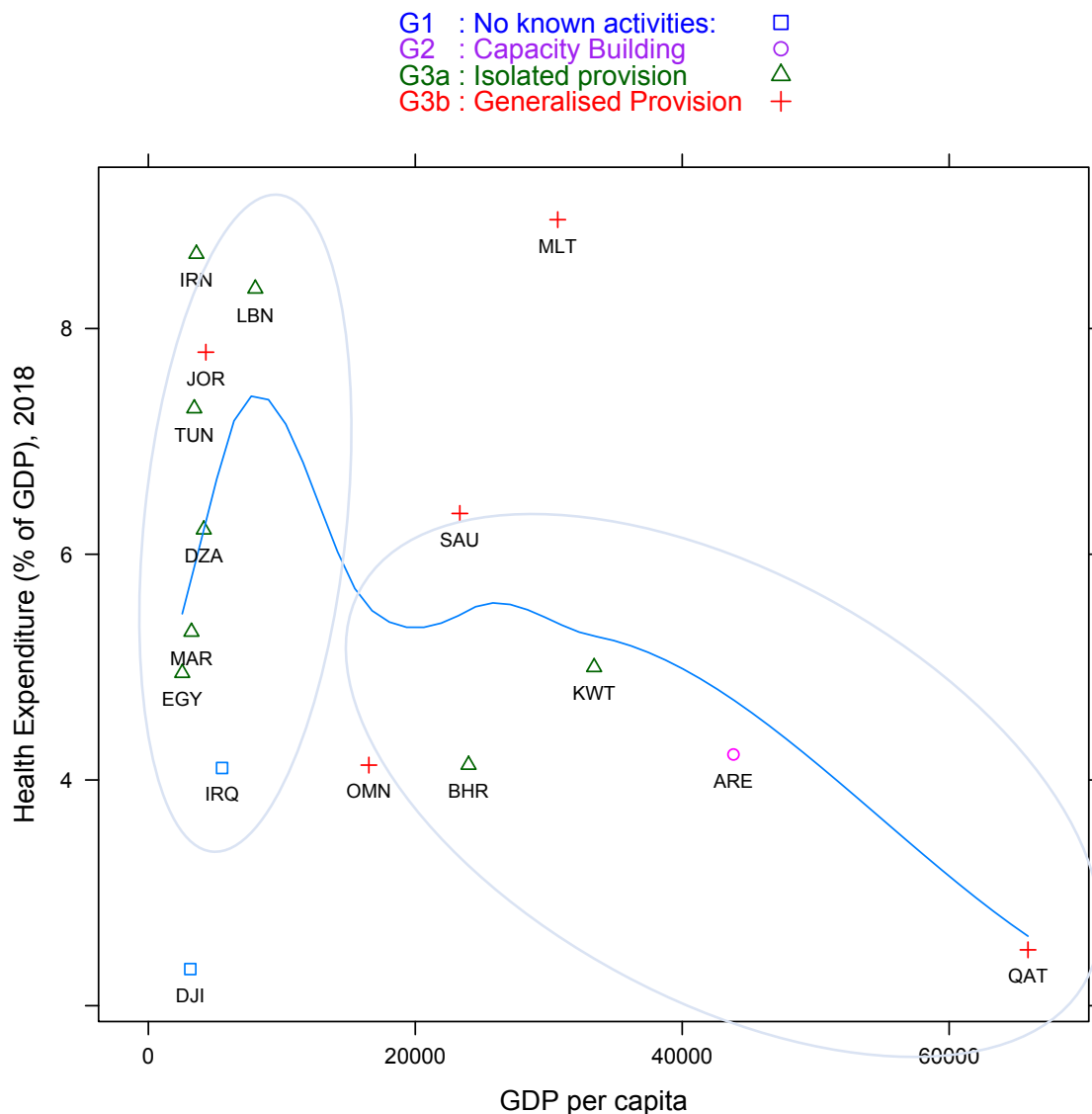


Figure 12 Health Care expenditure as a percentage of GDP and GDP per capita for some countries in the region in 2018; the level of preparedness to palliative care is also illustrated

Malta has the highest HCE as a percentage of GDP in the region at one end of the spectrum, yet it has a smaller GDP per capita than some GGC countries such as Kuwait, United Arab Emirates, and Qatar. On the other end, Qatar stands out as one of the highest GDP per capita in the region yet has one of the lowest HCE as a percentage of GDP (comparable only to Djibouti, which has one of the lowest GDP per capita). Furthermore, the level of palliative care preparedness across the region does not correlate with either GDP per capita or HCE as a percentage of GDP.

We investigate the relationship between HCE per capita and population ageing (measured by the old-age dependency ratio) in Figure 13. Data shows no direct association between the old-age dependency ratio and the region’s health expenditures per capita (US\$).

All GCC countries spend high levels of HCE per capita but currently have relatively low old-age dependency ratios. However, this is linked to a great extent to the countries' income (GDP in US\$) rather than the allocation of funding to health care expenditures. Yet, Oman and Lebanon appear to be spending similar amounts on health expenditures per capita, while their old-age dependency ratios are significantly different (3.5 vs. 12.8; see Table 4).

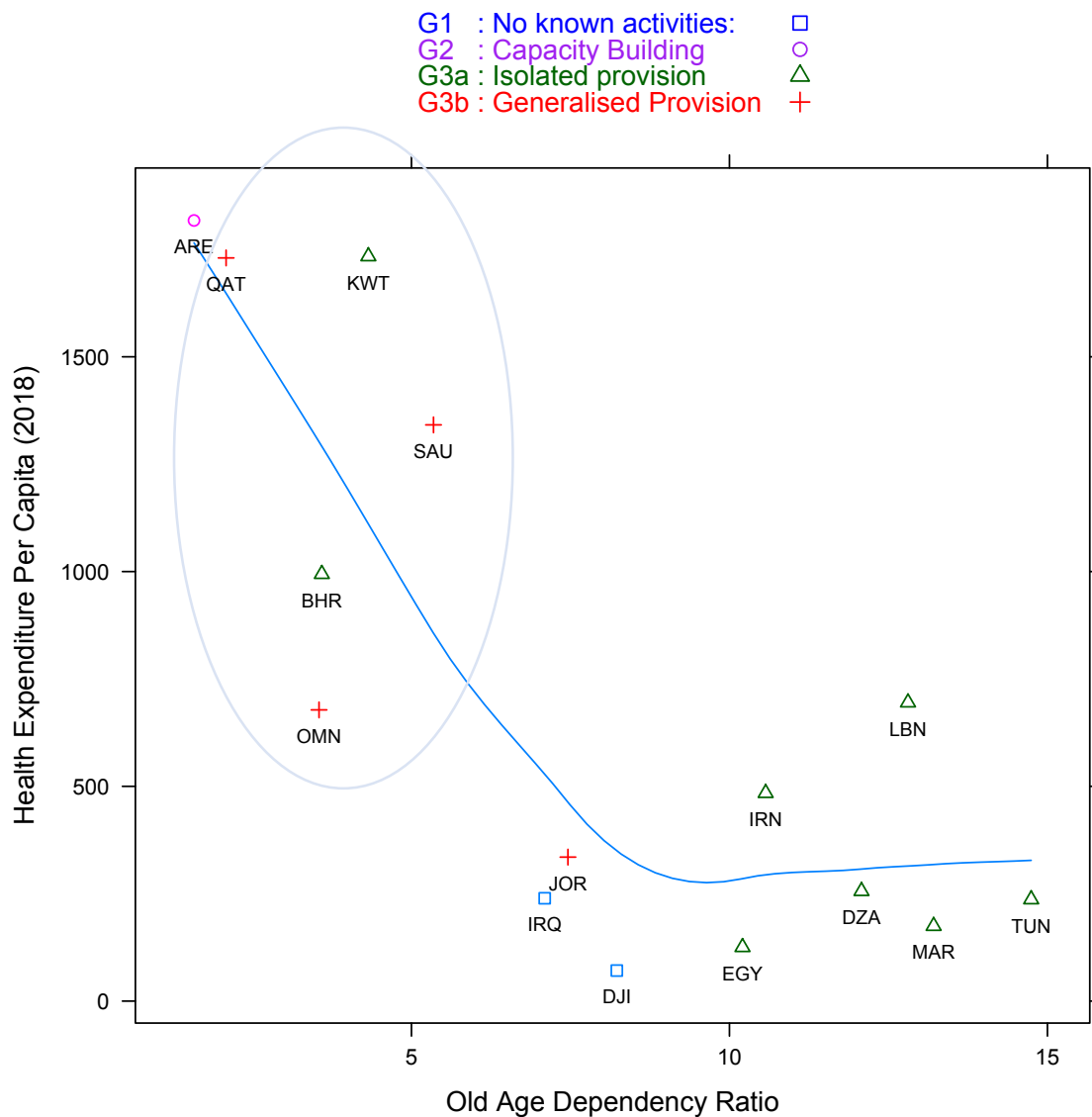


Figure 13 Health expenditure per capita (US\$) and old-age dependency ratio for countries in the MENA region. Countries are identified according to their level of palliative care development in 2018³⁶

³⁶ Most recent year when all data were available

6- Relevant International Experiences in Long-Term Care

6.1. Enhancing the Social and Economic Participation of Older People

Increased longevity and changing population structures in OECD countries, including shrinkage in the ‘more productive’ middle age groups, have driven policy changes to facilitate greater involvement of older adults in many aspects. One of the key goals is to improve the retention of expertise and knowledge of older people in the labour market for extended periods. The drivers for these policies are both fiscal and social in nature. On the one hand, increases in the population segments of older people and the instability of many pension systems have required more extended periods of contributions and delayed retirement ages. On the other hand, increases in life expectancy at age 60 meant that, on average, people continue to have the ability to contribute much longer than traditional retirement ages. Hence, raising the retirement age has two main benefits: 1- reducing the social security pension funds deficits and 2- promoting general economic and social gains among older people. However, it is essential to note that due to the differentials between gains in life expectancy and healthy life expectancy, a blanket higher retirement age is usually criticised with a call for more sensitive indicators when setting retirement ages that consider the chronicle age of individuals, their health status, and preferences (Alstott, 2017).

Several OECD countries have established programmes to enhance the social participation of older people through ‘extrafamilial’ inter-generation learning experiences. Such programmes initially operated within ‘learning’ settings such as schools, community centres or childcare facilities. These earlier initiatives motivated more diverse models to promote broader and ongoing resource and learning exchanges among older and younger generations and lifelong learning opportunities (Merriam and Kee, 2014). These programmes and initiatives might target different groups of older people, such as those living in the community and those living in residential homes or other care facilities. Evidence shows that these intergenerational experiences benefit both generations with considerable positive implications on their social wellbeing, inclusion, and health outcomes (Santini et al., 2018).

6.2 Long-Term Care Models in some OECD Countries

LTC systems are considered essential parts of a country's welfare regime; however, they are considerably different globally, including in OECD countries. LTC models across other OECD countries have been traditionally quite diverse, with variable involvement of the state in the organisation, funding, and delivery of LTC services. For example, high levels of directly funded and commissioned LTC in Nordic countries are provided universally according to needs. Other countries like the UK have more restricted and means-tested access to LTC services (ILO, 2018). Southern European countries, such as Italy and Spain, have traditionally relied heavily on family care.

Many countries in the OECD have seen their LTC service delivery model move towards marketisation and privatisation. These trends occur within a context of tighter public spending and austerity measures across the globe. Marketisation and an increased role of the private

sector in LTC delivery through competitive tendering processes are usually cost-saving and are associated with further changes in how LTC is organised, governed, and financed. The latter will be discussed further in the next section.

While some of the traditional differences across care models remain, most LTC models converge into mixed public-private LTC service provisions emphasising LTC markets, families and care communities (Wren et al., 2017). Figure 14 summarises European care regimes, how they are emerging and the increasing role of informal care and individual older people within the LTC systems. This convergence across the OECD further emphasises the informal spheres of care, including families and social capital. Hence, noteworthy developments and innovative ideas on facilitating and mobilising informal care, a critical component of the broader LTC markets, would be helpful in the MENA region.

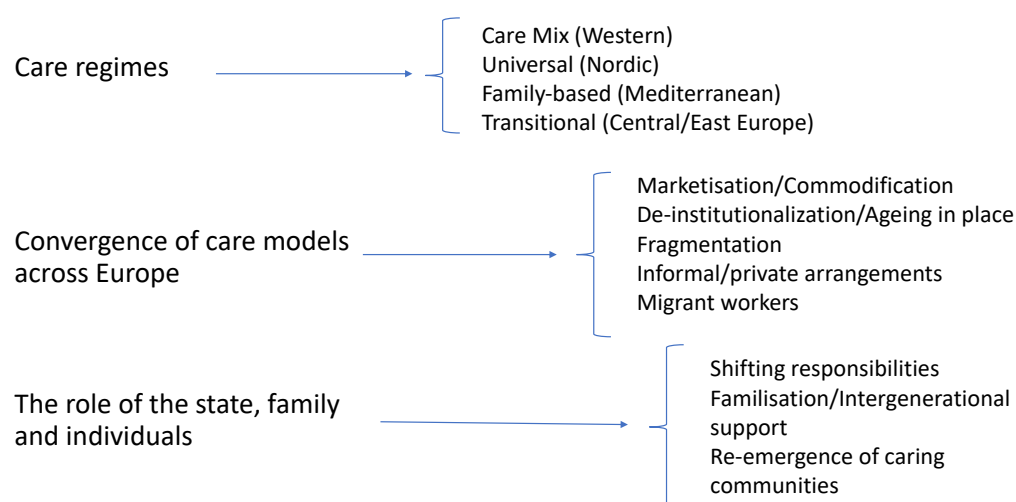


Figure 14 Illustrative categorisation of care regimes in Europe³⁷

One of the critical LTC policies aimed at indirectly supporting unpaid care within the family is cash-for-care schemes (Bruquetas-Callejo, 2020). Cash-for-care schemes allow eligible people for LTC with specific budgets to purchase care instead of services, allowing individuals to ‘purchase’ services from within the family if they wish. These schemes operate parallel with an increasing trend of ageing-in-place and home-based care. However, the reliance on cash-for-care schemes is variable across the OECD, with countries such as Italy, Spain, Austria, and Germany having systems heavily based around cash benefits. At the same time, Japan does not operate this model. It is also worth noting that these schemes can only function within a well-functioning LTC market so that individuals can choose high-quality services at competitive prices. The LTC markets are not yet developed in most of the MENA

³⁷ Author’s interpretation and illustration

region. Hence, a pre-request would be to establish a range of high-quality services regulated by the state before implementing similar schemes in the region.

6.3 Long-Term Care Funding Models in some OECD Countries

LTC funding models vary significantly across OECD countries, from universal coverage through general taxation in Nordic countries to LTC (social) insurance schemes with individual contributions in Germany and Japan. However, a privately funded LTC is uncommon in OECD countries and is only present in a few countries and for the proportion of the population who still need to meet means-tested eligibility criteria, such as in the UK (Colombo et al., 2011). Many countries manage LTC funds separately from general health funding by, for example, creating separate funding streams for LTC: Australia, France, Germany, Japan, the Republic of Korea, the Netherlands, and Spain. However, the separation of funding for LTC and health care may need to be revised in coordination across health and social care and integrated care models (WHO, 2021).

Countries spending on LTC varies and does not necessarily match the level or size of population ageing. For example, LTC spending in Southern and Eastern Europe is considerably lower than in Western or Northern Europe (OECD, 2021). Across OECD countries, on average, 1.5% of GDP is spent on the LTC sector. Recent modelling of LTC spending in Turkey estimates the corresponding figure to be only 0.02%, with the nearest spending observed in Hungary at 0.2% of GDP (Ismail & Hussein, 2021).

LTC insurance schemes have been implemented in Germany, the Netherlands, Luxembourg, South Korea, and Japan. However, all LTC insurance systems have a pre-request of a strong LTC market to allow privately insured individuals to purchase care services within a regulated, standardised, and competitive market.

Japan implemented public LTC insurance in 2000; within this model, individuals and employers contribute to the scheme. Coinsurance of individuals is around 10% of their income, but this increases to 20-30% among higher-income earners. Individuals over 40 years old and are assessed as eligible have a right to LTC services, regardless of their income or availability of family support. However, Japan opted to provide LTC service benefits only with no cash benefits. LTC benefits are set by seven eligibility levels, with the highest level offering US\$3,000 of services per month (Ikegami, 2019).

In Germany, mandatory LTC insurance has been separated from health insurance since 1995, with residential care added in 1996. Social LTC insurance accounts for approximately 90 per cent of coverage, and private LTCI covers the remainder. The scheme enrollees contribute to the Social LTCI with a share of their income (3.05% to 3.30%). The contribution of individuals with no children is higher than those with children, assuming that informal care is accounted for in the calculations of needs from the insurance. Around 5 per cent of the population (4.25 million) received LTC benefits in 2019. Insured individuals have to apply for LTCI benefits and are assessed in seven dimensions on a 100-points scale solely based on their needs. They are then assigned to five “care degrees”; the degree defines the benefits. Beneficiaries can freely choose between home-based or residential care and in-kind or cash benefits. The German system favours home-based care over residential care. In 2019, they

could choose between 14,688 home care providers and 15,380 residential care providers. LTC providers negotiate state associations of Social LTCI funds on the scope and pricing of services.

Some researchers argue for the potential for introducing some forms of LTC insurance in the MENA region and other MICs because of its current relatively young population structure, providing opportunities for ‘savings’ for several years; because of the population dividends or ‘youth bulge’ while the ageing index is still modest (Ismail & Hussein, 2021; Rhee et al.; 2015). However, the benefits of introducing LTC insurance in the region assume two conditions: 1- high employment rates (preferential system demographics) where LTC insurance premium would exceed the outputs required to cover aged-care claims for several years, thus providing surplus for future increased demand; and 2: a well-functioning, regulated and varies LTC economy. However, the employment rate in some countries in the region is relatively modest, especially among women. Furthermore, LTC markets in the MENA region are still in their infancy with limited standards, regulations, and quality assurance measures. The current evidence recommends that the countries in the MENA region establish a range of regulated LTC services urgently and encourage public-private partnerships while facilitating (and rewarding) informal care from families and communities. At the same time, countries need to take adequate measures to improve employment rates among all age groups ensuring fine contributions to pension schemes and potentially LTC insurance shortly. For Middle-Income Countries (MICs), Rhee et al. (2015) recommend that countries develop LTC insurance early before they complete their ageing transitions. Based on a comparative analysis of different LTC insurance schemes in high-income countries, they recommend initiating LTC insurance schemes with limited benefits and strict eligibility criteria, expanding as the countries gain necessary and sufficient experiences.

The Middle East and North Africa (MENA) region has been traditionally viewed as one with young populations and high fertility rates. However, fertility and mortality rates have been declining faster than historically observed in most OECD countries, resulting in a dramatic and swift shift towards older populations. Simultaneous to the growing size and proportion of older people, the MENA region, unlike Europe, still has large groups of younger people in the labour market participation age groups. Recent high fertility rates observed in the region mean that not only the pace of population ageing is considerably fast, but also the cohorts entering old age will be sizable in numbers placing considerable societal and economic pressures that require policy and practical actions as well as cultural and paradigm shifts of the meaning and perspectives of ageing. There are also advantages associated with the population dividends of the youth bulge observed in the region. However, swift actions are essential to capitalise on this window of opportunity. Current evidence indicates that most countries in the MENA region, except for Malta, are not paying enough attention to this phenomenon, and the policy response is limited and fragmented (Hussein & Ismail, 2017; Khan et al., 2017; Ismail & Hussein, 2019, 2021).

The analysis presented in this report offers in-depth insights into the region's main drivers and implications of population ageing. It offers an opportunity to consider timely and appropriate responses specific to different groups of countries within the region. For example, the ageing, demographic, and socio-economic characteristics and feasible policy and practice responses can be differentiated across GCC countries, countries facing fragile and conflict situations and other countries in the region. The fourth Madrid International Plan of Action on Ageing (MIPPA) review marking twenty years of engagement starts in 2022³⁸. It provides a timely catalyst for countries to develop short to medium-term action plans focused on population ageing and associated dynamics. The global attention to societal ageing is further articulated in the United Nations Decade of Health Ageing (2021-2030), directly linking to the Sustainable Development Goals (2030).

Older people's social and economic participation, beyond traditional retirement ages, have been shown to positively affect people's health and quality of life with considerable financial gains through the increased productivity of all population groups and savings associated with medical and LTC spending. Not having viable opportunities to participate in old age socially and economically is associated with a higher prevalence of depression and loneliness (Fernández-Niño et al., 2018; Marques et al., 2020). The evidence presented in this report highlights that not all gained life years are healthy years, and the burden of disease at a later age is considerable within the MENA region. Moreover, there are considerable inequalities in life expectancies and healthy life expectancies, according to an array of factors ranging from individual characteristics such as gender, educational attainment, and income levels to societal factors such as the country's Gross Domestic Product (GDP) and level of investment in health

³⁸ <https://www.un.org/development/desa/ageing/fourth-review-and-appraisal-of-the-madrid-international-plan-of-action-on-ageing-2002.html>

care. The high morbidity burden observed in the region detailed in this report highlights the need to develop and implement sustainable LTC services and models tailored to the needs of older people within the region.

Societal and cultural norms associated with the presentation of, and expectations from, older people in the region can be polarised. At one end, older people are ‘treasured’ and present a source of wisdom and deserve respect but simultaneously considered dependent and frail with limited acceptable social roles pose considerable challenges. It is important to consider the individual and collective expectations in old age, including shifting perspectives to allow for healthier and more inclusive participation in old age. Nilsson (2016) argues that a sustainable working life should not be solely restricted by chronological age (or fixed retirement age). Instead, she identifies three more forms of ageing that should be considered interrelated. In addition to chronological ageing, biological ageing reflects on individuals’ health. In contrast, social ageing refers to the inclusion (or exclusion from) in different social groups and attitudes of employers and managers subject to the age of individuals. Finally, cognitive ageing reflects individuals’ motivations and skills in working life. The region has witnessed a considerable increase in life expectancy at birth and in later ages, such as age 60. The combination of significant and relatively fast changes in life expectancy at birth and life expectancy at age 60 has several implications on individuals and societal perceptions of ageing, participation, and expectations at old age. For example, the cohort aged 60-70 in 2020 were in their teens during 1965-1980, when life expectancy at birth and life expectancy at 60 was much lower than in the 2020s.

The views on ageing are formulated early in life; such views have significant implications on attitudes and behaviour at later ages (Westerhof et al., 2014; Wurm et al., 2017). The speed of changes in life expectancy observed in the region is likely to have been much faster than changes in the views and perceptions of ageing (Hussein, 2023). These perceptions and expectations affect older people and policymakers, health-seeking behaviour, social integration, and economic participation, among other critical life activities. At the individual level, retirement planning (both socially and financially) is likely to be suboptimal as it is unlikely to have considered the time available to continue being economically and socially productive. At the structural level, early retirement ages and a lack of opportunities for retirees and older people to meaningfully participate in the broader society in the region present further obstacles and challenges to healthy ageing.

While the MENA region needs to address the challenges associated with population ageing, different countries’ economic and geo-political positioning also dictates the feasibility of adopting various policy and practice responses and action plans. For example, high-income countries with relatively stable governments are more able to invest in large-scale initiatives and set longer-term national strategies and plans. On the other hand, FCS countries, which rely on external funding and global humanitarian responses, have no mechanisms to influence a broader policy agenda but are likely to work with international and local non-governmental organisations to address some of the current needs of older people. Furthermore, the position of individual countries within the ageing transition varies. Only Malta has completed its ageing transition, while all GCC and most FCS countries (except for Lebanon) along Egypt, Djibouti,

and Jordan, are still at the pre-transition stage. Among the rest of the MENA countries, Tunisia, Morocco, Algeria, Iran, and Lebanon (FCS) have already started their ageing transition process (see Figure 15).

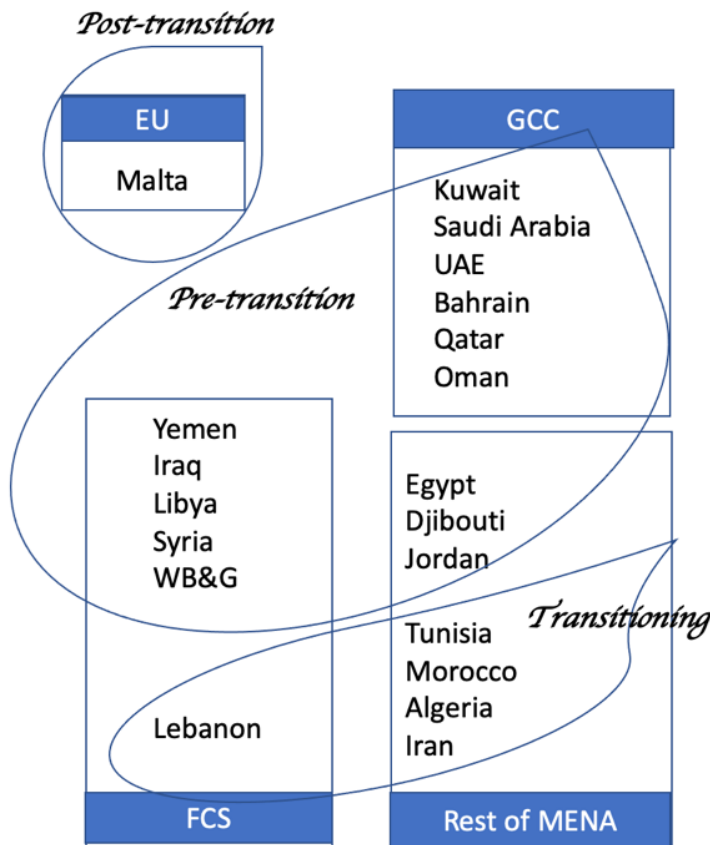


Figure 15 MENA countries according to the four groups and the stage of ageing transition

to be fragmented and to address this, Malta launched its National Strategic Policy for Active Ageing (2014-2020)³⁹ focusing on three pillars of active participation in the labour market, participation in society and independent living of older people (National Commission for Active Ageing, 2013).

The GCC countries are high-income countries that benefit from a significant contribution of formal and informal labour migrants. In 2020, this group of countries are the least ‘aged’ within the MENA region. However, they are projected to be some of the fastest countries to complete their ageing transition within 10-20 years. Female labour participation rates in most GCC countries have been steadily increasing. However, it is difficult to ascertain from the available data if certain nationality differentials exist in these rates. Due to their higher income, GCC countries have the highest healthcare expenditure per capita rates in the MENA

³⁹ Malta was recently consulting on the updated strategy for 2021-2027: https://meae.gov.mt/en/Public_Consultations/MSCA/Pages/Consultations/NationalStrategicPolicyforActiveAgeingMalta20212027.aspx

Figure 16 summarises some of the distinct characteristics of population ageing presented in this report in Malta, GCC, FCS and the rest of the countries in the MENA region. Malta presents a case of a high-income European country that has already concluded its demographic transition with current high old-age dependency ratio. Malta faces similar challenges like other European countries related to escalating demands of LTC combined with workforce shortages, competing policy priorities and limited integration across health and LTC systems (Formosa, 2019). Up until a decade ago, Malta’s response to population ageing appeared

region. However, the relationship between the level of spending and healthy life expectancy is not linear. The burden of disease is observed to be high within this group of countries, with a high prevalence of obesity and non-communicable diseases among people aged 65 or more.

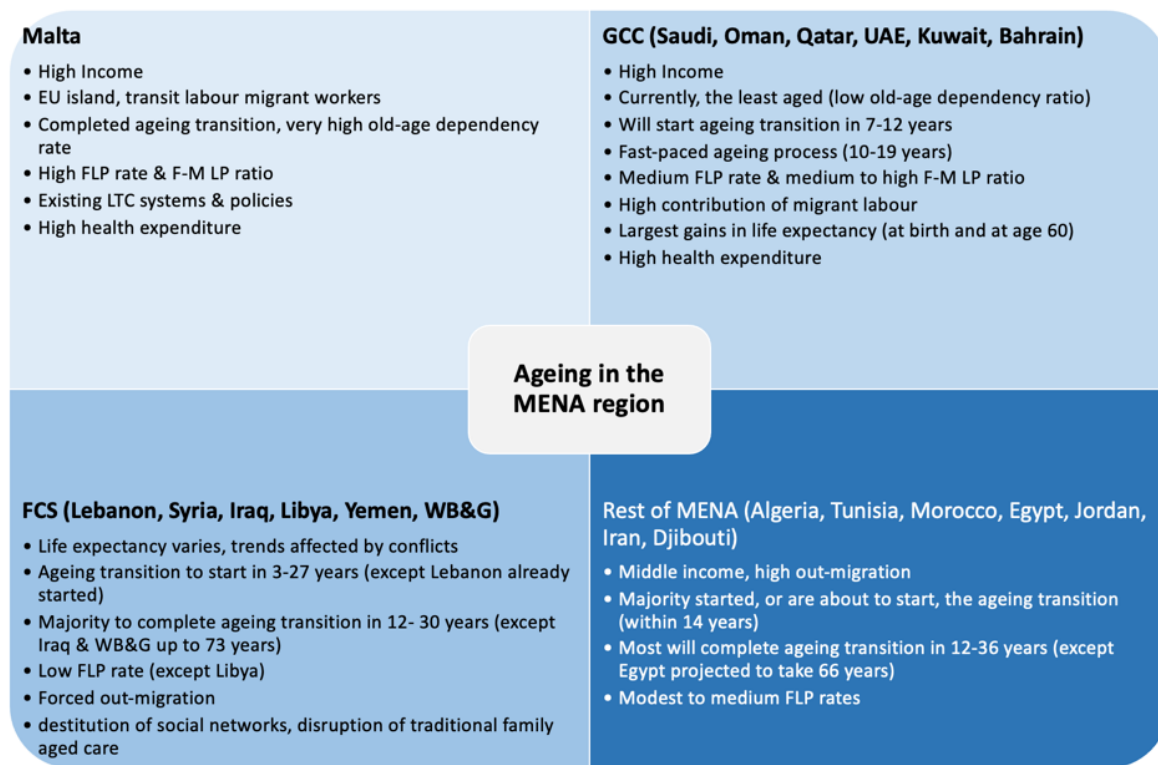


Figure 16 Ageing and demographic characteristics in different groups of countries within the MENA region⁴⁰

All FCS countries are still to start their ageing transition, except for Lebanon. However, some countries within this group are projected to start the ageing transition in as little as three years. Female labour participation rates are generally low among FCS countries, with high gender inequalities. Life expectancy, mortality, and morbidity have all been adversely affected across all age groups. The family and community aged-care model had been significantly disturbed due to forced migration, destruction and disruption of traditional kinship and community ties. The needs of older people in these countries are severely under-served due to a lack of state support, fiscal challenges, and the destruction of medical facilities and infrastructure. Furthermore, older people and their needs in conflict situations are almost invisible within the displacement policy discourse. FCS countries rely heavily on external actors and funds with limited internal resources leading to escalating extremely poor living conditions (OECD, 2016). Current world events, including the war in Ukraine, are expected to significantly impact FCS countries in the MENA region, including the diversion of limited fiscal flows, reduction in food imports and other material aspects (Belhaj, 2022). The war is likely to affect the whole MENA region, but especially FCS countries, negatively and

⁴⁰ Based on data and findings presented in this report. FLP: Female labour participation. F-M LP: female to male labour participation. WB&G: West Bank and Gaza

significantly, with implications on the quality of life of various vulnerable population groups, including older people.

The demographic structure in the rest of the MENA countries is less homogenous, with four countries already undergoing their ageing-transition (Tunisia, Algeria, Morocco, and Iran). In contrast, some countries are projected to take considerably longer periods of time to complete their ageing transition (Egypt). Female labour participation rates are generally low, and the disease burden at later ages is also high. Most countries in the group are low-middle-income countries with modest healthcare expenditures and competing fiscal pressures and priorities. North African countries in this group are characterised as both labour migration destination and departure, with remittance income estimated at around 40 million USD in 2019⁴¹. Current evidence indicates limited formal LTC and support for older people yet identifies several community-based and grassroots initiatives dedicated to supporting more senior people and providing long-term and palliative care services (Hussein & Ismail, 2017).

The findings and discussions presented throughout this report indicate that while there are common experiences of ageing in the region, different groups of countries appear to have distinct characteristics when it comes to ageing. The region faces a sea of change with the speed and volume of population ageing within specific cultural, political, and economic structures that are inadequate to the lived reality of demographic ageing. At the labour market level, the retirement and pension systems reflect dated life expectancy trends and old age expectations. For example, the average retirement age in the MENA region is 60 years for men and 55-60 for women, with some countries allowing early retirement among social insurance members at ages as young as 40 (Loewe, 2014). While these are the legal averages of retirement ages, the effective average retirement age in the region is around 58 for men and 55 for women (Arab Monetary Fund and World Bank Group, 2017). Given increased longevity, low retirement ages are not only economically disadvantaging but have considerable adverse health and social implications on people during their later lives. Interacting with this is the need to recognise the macroeconomic implications and opportunities associated with ageing.

The region's LTC care model primarily relies on informal care provided by the family or community groups. Hence, countries in the region must start to develop new care economies and markets to meet the growing demands for LTC. These new LTC economies can offer several advantages, including creating much-needed job opportunities, especially for women in the region, where female unemployment is staggeringly high in some countries. Mobilising the labour power of the youth bulge and the emerging silver economy in the region provides enormous potential to counter the financial implications of increased health and social care needs associated with population ageing.

the rapid shifts towards population ageing in the MENA region call for immediate responses at the individual, community, and policy levels. Behavioural changes and views on ageing are crucial to prepare the large cohorts entering older age groups. In its broadest terms,

⁴¹ <https://www.migrationdataportal.org/regional-data-overview/northern-africa>

an emphasis on healthy living must be promoted among all age groups. The burden of non-communicable diseases is considerable among older people; improving health services and enhancing participation, continued learning and healthy living across the lifespan are required to reduce such burden. Table 7 provides three sets of tailored policy recommendations for the different groups of GCC, FCS and the rest of MENA countries as well as some common ones.

Table 7 Policy recommendations to address population ageing for different groups of countries in the MENA region

MENA country group	Policy Recommendations
GCC countries	<ul style="list-style-type: none"> • Fast and immediate policy response and implementations are required • Develop and invest in an array of long-term care (LTC) services • Expand on home care programmes • Formalise domestic LTC work <ul style="list-style-type: none"> ○ Consider developing skills-development training programmes in sending countries • Introduce LTC training and skill development programmes for formal and informal LTC workers • Strengthen inter-ministerial collaboration to address different aspects of ageing coherently • Assess the introduction of a LTC insurance scheme • Expand social protection programmes to reduce inequalities at later age • Promote health and digital literacy and self-care among older people and their families
FCS countries	<ul style="list-style-type: none"> • Prioritise immediate poverty-based health and social care and support for older people • Capitalise on local care communities and neighbourhoods <ul style="list-style-type: none"> ○ Substitution of disrupted social networks and family support mechanisms ○ Foster voluntary aged-care activities rooted in solidarity and kinship ties ○ Develop peer-support mechanisms between older people • Work with local and international NGOs and agencies <ul style="list-style-type: none"> ○ Invest in services/initiatives that support older people directly and indirectly ○ Ensure the inclusion of health, care and financial support for older people

Rest of MENA

- Develop medium- to long-term strategies with detailed action plans
- Create formal LTC markets and capitalise on population dividends while still in the window of opportunity
 - Enhance the role of the state in governing, regulating and shaping the market
 - Enhance system contributions and address low FLP rates
 - Build image and trust in LTC as newly created sector of employment working with the media and local/national organisations
 - Focus on home and community care, ageing in place
 - Establish mechanisms for effective partnership working
 - Ensure the supply of well-trained care workers
- Pilot and evaluate reforms to pension schemes and social protection models
- Identify LTC cost estimates and projections
- Address health inequalities and enhance health literacy

Common Recommendations

- Develop and implement poverty-based support systems and mechanisms for older people
- Develop and implementation integration programmes across health and community care services
- Promote family and inter-generational support/services (social capital)
- Raise awareness and perceptions of ageing
 - Empower older people
 - Reduce stigma
 - Create gender sensitive initiatives
- Promote healthy ageing behaviour among current and emerging older cohorts
 - Public health awareness to promote healthy ageing behaviour among older adults (40+)
 - Target schools, colleges and other opportunities across the life cycle
- Design and implement policies to support informal carers (including those in employment)
- Create accessible participatory opportunities in later life
 - Including economic, social and learning activities
 - promote innovations and independence
- Improve the financial security at old age
 - Incentivise savings for old age, safety nets for disadvantaged groups
- Build stronger data and evidence base

- Generate and collate adequate relevant data for research, monitoring and evaluation purposes
- Build researchers' capacity
- Draft, consult and implement reforms including establishing and evaluating pilot schemes to address
 - Retirement age
 - Pensions
 - Employment laws/support mechanisms for informal carers
 - Health care coverage

Table 7 suggests that GCC countries need immediate policy development and implementation as they only have a considerably short time to complete their ageing-transition. Many countries in this sub-region have started considering developing LTC support mechanisms to reduce unnecessary hospital utilisation among older people by introducing home-care programmes. It is essential for all GCC countries to develop further an array of LTC services, including expanding on home and community care services. Given the significant contribution of migrant labour in domestic work in GCC countries, including providing informal care at home, it is recommended to invest in developing training programmes for domestic workers. Supporting LTC training and skill development in sending countries will also be beneficial. More generally, it is essential to establish a regulated LTC market with clear training standards and career progression opportunities. Funding LTC is expected to escalate significantly in the coming decades. Hence, it is important to establish accurate estimates of LTC cost and assess suitable funding mechanisms, including the value of establishing an LTC insurance scheme. A critical policy action area should focus on enabling and empowering older people and investing in their digital and health literacy.

FCS populations face considerable challenges, with older people suffering and lacking visibility and policy attention. It is essential to prioritise and advocate for immediate poverty-based health and LTC support for older people stripped of their traditional kin and support networks. There is a need to capitalise on local community and voluntary efforts, specifically focusing on older people, creating opportunities for peer support across generations and within older people, and working with local and international humanitarian agencies to address older people's health and financial needs.

The Rest of MENA region countries have a diverse experience of ageing, political and socio-economic situations. All countries in this group have the advantages of population dividends but also have high unemployment rates, especially among women. Migration, internal mobility and changing family dynamics threaten traditional LTC availability, and there is a clear need and opportunity to develop strong LTC markets and services. Governments should actively shape and regulate the LTC market, setting standards and minimum training requirements. Establishing public trust in these new services, such as employment

opportunities and formal support for older people, would require working with community groups and the public through awareness-raising campaigns through national and local media outlets and activities. Some countries will have a more extended period to complete their ageing transition and are better positioned to pilot, evaluate, and assess various reforms to their pension, welfare and healthcare models. Strong partnership working with different actors, including older people and families, along with non-governmental organisation and the private sector, is essential for the success of pilots and initiatives.

All MENA countries should invest in generating relevant and accurate data and knowledge to ensure evidence-informed policy and practice development. Data will also be required to monitor and evaluate new initiatives and assess progress, effectiveness, and reach. While reforms might take longer to implement, all countries should address the immediate needs of vulnerable groups of older people affected by poverty, illness, isolation or other conditions. A family-based holistic LTC approach, supported by a formal set of LTC services and support mechanisms, is more suited to the cultural context of the region. Within such a framework, empowering older people and promoting healthy behaviour and self-care can prove cost-effective and rewarding. Due to previous trends of high fertility rates, incoming cohorts of older people will likely be prominent in volume, placing sudden pressures on limited services. Hence, improving the preparedness of these groups to old age would be essential. This includes promoting healthy behaviour and financial preparedness for old age, which will enable new cohorts of older people to live healthier for longer with a higher likelihood of continuing economically and socially active into later life. Adequate policy responses, such as establishing LTC markets and improving the retention and re-employment of older people in the labour market, can mitigate some anticipated economic effects of population ageing. The cultural, socio-economic, and political factors of different countries in the region will guide the specific policy responses.

References

- Aburto, J. M., Schöley, J., Kashnitsky, I., Zhang, L., Rahal, C., Missov, T. I., ... & Kashyap, R. (2021). Quantifying impacts of the COVID-19 pandemic through life-expectancy losses: a population-level study of 29 countries. *International journal of epidemiology*.
- Addati, L., Cattaneo, U., Esquivel, V., & Valarino, I. (2018). *Care work and care jobs for the future of decent work*. International Labour Organisation. https://www.ilo.org/global/publications/books/WCMS_633135/lang--en/index.htm (accessed 21.11.21)
- Aggarwal, A., Patel, P., Lewison, G., Ekzayez, A., Coutts, A., Fouad, F. M., Shamieh, O., Giacaman, R., Kutluk, T., Khalek, R. A., Lawler, M., Boyle, P., Sarfati, D., & Sullivan, R. (2020). The Profile of Non-Communicable Disease (NCD) research in the Middle East and North Africa (MENA) region: Analyzing the NCD burden, research outputs and international research collaboration. *PloS one*, *15*(4), e0232077.
- Al Awad, M. and Chartouni, C. (2014), "Explaining the decline in fertility among citizens of the GCC countries: the case of the UAE", *Education, Business and Society: Contemporary Middle Eastern Issues*, Vol. 7 No. 2/3, pp. 82-97. <https://doi.org/10.1108/EBS-01-2014-0002>
- Almakki, Z. E., Alshehri, S. Z., & Wahab, M. M. A. (2020). Knowledge and attitudes regarding elder abuse in the community, Eastern Province Saudi Arabia. *BMC geriatrics*, *20*(1), 1-12.
- Alstott, A. L. (2017). A New Deal for Old Age. *BUL Rev.*, *97*, 19-33.
- Al-Waqfi, M.A. and Abdalla Al-faki, I. (2015), "Gender-based differences in employment conditions of local and expatriate workers in the GCC context: Empirical evidence from the United Arab Emirates", *International Journal of Manpower*, Vol. 36 No. 3, pp. 397-415. <https://doi.org/10.1108/IJM-10-2013-0236>
- Arab Monetary Fund and World Bank Group (2017). *Arab Pension Systems Trends, challenges and options for reforms*. Abu Dhabi and Washington.
- Arkoff A, Meredith GM, Dubanoski JP (2004). Gains in well-being achieved through retrospective-proactive life review by independent older women. *Journal of Humanistic Psychology*, *44*(2):204-14.
- Bayati, M., Keshavarz, K., Lotfi, F., KebriaeeZadeh, A., Barati, O., Zareian, S., ... & Delavari, S. (2020). Effect of two major health reforms on health care cost and utilization in Fars Province of Iran: family physician program and health transformation plan. *BMC health services research*, *20*(1), 1-9.
- Belhaj, F. (2022). *Compounded stress: The impact of the war in Ukraine on the Middle East and North Africa*. World Bank Blogs, 07/03/2022. Available at: <https://blogs.worldbank.org/arabvoices/compounded-stress-impact-war-ukraine-middle-east-and-north-africa>
- Bongaarts, J. (2009). Human population growth and the demographic transition. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *364*(1532), 2985-2990.
- Breyer, F., & Lorenz, N. (2020). The “red herring” after 20 years: ageing and health care expenditures. *The European Journal of Health Economics*, 1-7.
- Bruquetas-Callejo, M. (2020) ‘Long-Term Care Crisis in the Netherlands and Migration of Live-in Care Workers: Transnational Trajectories, Coping Strategies and Motivation Mixes’. *International Migration* *58*(1) (<https://doi.org/10.1111/imig.12628>).

- Cheung, F., Kube, A., Tay, L. et al. (2020) The impact of the Syrian conflict on population wellbeing. *Nat Commun* 11, 3899. <https://doi.org/10.1038/s41467-020-17369-0>
- Colliers International. (2020). Insights into long-term care, rehabilitation and home care in Saudi Arabia. <https://insights.omnia-health.com/hospital-management/insights-long-term-care-rehabilitation-and-home-care-ksa> (accessed 25/09/21)
- Di Gessa G., Corna LM., Platts LG., et al (2017), . Is being in paid work beyond state pension age beneficial for health? Evidence from England using a life-course approach. *J Epidemiol Community Health*;71:431–8.[doi:10.1136/jech-2016-208086](https://doi.org/10.1136/jech-2016-208086)
- Emam, M., Abdelazim, Y., & El-Keshky, M. (2017). Grandparents in the Middle East and North Africa: Changes in identity and trajectory. In *Grandparents in cultural context* (pp. 223-244). Routledge.
- Eresso, M. Z. (2019). Social Inequality and Social Mobility: The Construed Diversity of Ethiopian Female Labor Migrants in Djibouti. *AFRICAN Human Mobility Review*, 1749.
- Fahmei, T., Tanda, R., Haile, Z. T., Ruhil, A., Gartin, M., & GH, I. (2020). Changes in living arrangements of older persons in Egypt 2000-2014. *Egyptian Journal of Nursing and Health Sciences*, 1(First Issue), 38-53.
- Fernández-Niño, J. A., Bonilla-Tinoco, L. J., Manrique-Espinoza, B. S., Romero-Martínez, M., & Sosa-Ortiz, A. L. (2018). Work status, retirement, and depression in older adults: an analysis of six countries based on the study on global ageing and adult health (SAGE). *SSM-population health*, 6, 1-8.
- Fernández-Ballesteros R, Caprara M, Schettini R, Bustillos A, Mendoza-Nunez V, Orosa T, et al. (2013) Effects of university programs for older adults: Changes in cultural and group stereotype, self-perception of aging, and emotional balance. *Educational Gerontology*, 39(2):119-31.
- Fernández-Ballesteros R, Molina MÁ, Schettini R, Del Rey ÁL. (2012) Promoting active aging through university programs for older adults. *GeroPsych: The Journal of Gerontopsychology and Geriatric Psychiatry*, 25(3):145-54.
- Ferreira M (2005). Elder abuse in Africa: what policy and legal provisions are there to address the violence? *Journal of Elder Abuse & Neglect*. 16(2):17-32.
- Formosa, M. (2019) Measuring and Modelling Demographic Trends in Malta: Implications for Ageing Policy, *International Journal on Ageing in Developing Countries*, 2019, 4 (2): 78-90.
- Gatti, R., Angel-Urdinola, D. F., Silva, J., & Bodor, A. (2014). *Striving for better jobs: the challenge of informality in the Middle East and North Africa*. World Bank Publications.
- Hesketh, A. and Williams, J.B. (2021). Public Policy on Gender Equality in the United Arab Emirates: A Critical Appraisal. Available at <http://dx.doi.org/10.2139/ssrn.3798367>, accessed on 21/5/2022.
- Hussein, S. (2023). Reflections on the Intersectionality of Gender and Ageing in the Middle East. *Journal of the British Academy*, 11(s2), 55-70. <https://doi.org/10.5871/jba/011s2.055>
- Hussein, S. and Ismail, M. (2017). Ageing and Elderly Care in the Arab Region: Policy Challenges and Opportunities. *Ageing International*, 42(3), 274-289. DOI: 10.1007/s12126-016-9244-8
- Hussein, S. and Manthorpe J. (2007) Women from the Middle East and North Africa in Europe: understanding their marriage and family dynamics. *European Journal of Social Work*, 10(4) 465-480.

- Ikegami, N. (2019). Financing long-term care: lessons from Japan. *International journal of health policy and management*, 8(8), 462.
- International Labour Organisation [ILO] (2018) *Care work and care jobs for the future of decent work*. Geneva: International Labour Organization (www.ilo.org/global/publications/books/WCMS_633135/lang-en/index.htm).
- Ismail, M. and Hussein, S. (2019) Long-Term Care Policies in the Gulf Region: A Case Study of Oman. *Journal of Aging and Social Policy*. 31(4): 338-357.
- Ismail, M. and Hussein, S. (2021) An Evidence Review of Ageing, Long-Term Care Provision and Funding Mechanisms in Turkey: Using Existing Evidence to Estimate Long-Term Care Cost. *Sustainability*, 13(11), 6306. doi:10.3390/su13116306
- Kandilige, L., Teye, J., Setrana, M. et al. (2019) *Ghanian Domestic Workers in the Middle East*. Accra: IOM (www.iom.int/sites/default/files/country/docs/ghana/iom_ghana_domestic_workers_report_summary-finr.pdf).
- Kane, T., Hammad, S. H., Islam, N., Al-Wattary, N., Clark, J., & Daher-Nashif, S. (2020). Dementia caregiving in the Middle East and North Africa: A scoping review. *Transcultural Psychiatry*, 13634615211036404.
- Karam, G., & Itani, L. (2013). Dementia: A review from the Arab region. *Arab Journal of Psychiatry*, 24(1), 77-84.
- Karamouzian, M., Sharifi, H., & Haghdoost, A. A. (2014). Iran's shift in family planning policies: concerns and challenges. *International journal of health policy and management*, 3(5), 231–233. <https://doi.org/10.15171/ijhpm.2014.81>
- Khan, H., Hussein, S. and Deane, J. (2017) Nexus between demographic change and elderly care need in Gulf Cooperation Council (GCC) Countries: Some policy implications. *Ageing International*, 42 (4):466–487.
- Krzemien D (2005). Sociocognitive stimulation and changes in coping strategies for crises of female old age. *Revista Espanola de Geriatria y Gerontologia*, 40(5):291-9.
- Kumar, C., Dempster, M., O'Donnell, M. and Zimmer, C. (2022) Migration and the future of care: Supporting older people and care workers. ODI Report. London: ODI (www.odi.org/publications/migration-and-the-future-of-care).
- Loewe, M. (2014). Pension schemes and pension reforms in the Middle East and North Africa. In *Reforming pensions in developing and transition countries* (pp. 69-100). Palgrave Macmillan, London.
- Lotfalinezhad, E., Andersen-Ranberg, K., Bhalla, D., & Nadrian, H. (2021). Crucial Role of Respite Care in Supporting Informal Caregivers: A Challenge for the Care of Older Adults in the Middle East and North Africa. *Gerontology*, 1-5.
- Marques, A., Gaspar de Matos, M., Bordado, J., Gouveia, É. R., Peralta, M., & Gomez-Baya, D. (2021). Different levels of physical activity and depression symptoms among older adults from 18 countries: A population-based study from the Survey of Health, Ageing and Retirement in Europe (SHARE). *European journal of sport science*, 21(6), 887-894.
- Meron, Z. (2018). Close and yet far: Lived experiences of Ethiopian maids in Djibouti. *Research and Evidence Facility*. Series No 2. SOAS: University of London.
- Merriam, S. B., & Kee, Y. (2014). Promoting community wellbeing: The case for lifelong learning for older adults. *Adult education quarterly*, 64(2), 128-144.

- Nilsson K. (2016), Conceptualisation of ageing in relation to factors of importance for extending working life – a review. *Scandinavian Journal of Public Health*, 44(5):490-505. doi:10.1177/1403494816636265
- OECD (2016). *States of Fragility*. OECD, Paris.
- Office for National Statistics (2015) How has life expectancy changed over time? London: ONS.
<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/articles/howhaslifeexpectancychangedovertime/2015-09-09> (accessed on 19/11/21)
- Orzechowska A, Wysokiński A, Przybylska B, Jałosińska J, Florkowski A, Zboralski K, et al. (2008). Depressive disorders in the elderly depending on life activity. *Polski Merkuriusz Lekarski*, 25(150):503-6.
- Portero CF, Oliva A. (2007) Social support, psychological well-being, and health among the elderly. *Educational Gerontology*, 33(12):1053-68.
- Ratcheva, V., Leopold, T. A., & Zahidi, S. (2020). Jobs of tomorrow: mapping opportunity in the new economy. In World Economic Forum, Geneva, Switzerland.
- Rhee, J. C., Done, N., & Anderson, G. F. (2015). Considering long-term care insurance for middle-income countries: comparing South Korea with Japan and Germany. *Health Policy*, 119(10), 1319-1329.
- Rudnicka, E., Napierała, P., Podfigurna, A., Męczekalski, B., Smolarczyk, R., & Grymowicz, M. (2020). The World Health Organization (WHO) approach to healthy ageing. *Maturitas*, 139, 6–11. <https://doi.org/10.1016/j.maturitas.2020.05.018>
- Sahar J, Riasmini NM, Kusumawati DN, Erawati E. (2017) Improved health status and life satisfaction among older people following self-help group intervention in Jakarta. *Current Gerontology and Geriatrics Research*. vol. 2017, Article ID 3879067. <https://doi.org/10.1155/2017/3879067>
- Salcher-Konrad, M., Naci, H., McDaid, D., Alladi, S., Oliveira, D., Fry, A., Hussein, S., Knapp, M., Musyimi, C., Ndeti, D., Lopez-Ortega, M. and Comas-Herrera, A. (2019) *Effectiveness of interventions for dementia in low- and middle-income countries: protocol for a systematic review, pairwise and network meta-analysis*. *BMJ Open*. <http://dx.doi.org/10.1136/bmjopen-2018-027851>
- Santini, S., Tombolesi, V., Baschiera, B., & Lamura, G. (2018). Intergenerational programs involving adolescents, institutionalized elderly, and older volunteers: Results from a pilot research-action in Italy. *BioMed research international*, 2018.
- Simone PM, Cesena J. (2010) Student demographics, satisfaction and cognitive demand in two lifelong learning programs. *Educational Gerontology*, 36(5):425-34.
- Sinunu, M., Yount, K. M., & El Afify, N. A. W. (2009). Informal and formal long-term care for frail older adults in Cairo, Egypt: family caregiving decisions in a context of social change. *Journal of Cross-Cultural Gerontology*, 24(1), 63-76.
- Sweileh, W. M. (2021). Global research activity on elder abuse: a bibliometric analysis (1950–2017). *Journal of Immigrant and Minority Health*, 23, 79-87.
- Syrian Commission for Family and Population Affairs (2019) Assessment of the protection needs of the elderly: 2011-2019. Damascus. (in Arabic).

- Tohme, R. A., Yount, K. M., Yassine, S., Shideed, O., & Sibai, A. M. (2011). Socioeconomic resources and living arrangements of older adults in Lebanon: who chooses to live alone? *Ageing & Society*, 31(1), 1-17.
- Westerhof GJ, Miche M, Brothers AF, Barrett AE, Diehl M, Montepare JM, Wahl H, Wurm S (2014) The influence of subjective aging on health and longevity: a meta-analysis of longitudinal data. *Psychol Aging* 29:793–802.
- Wilner, L. L. (2020). Eastern Africa: Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Mauritius, Rwanda, Seychelles, Somalia, South Sudan, and Uganda. *Gender and Identity around the World* [2 volumes], 31.
- Winter, J. and Teitelbaum, M. (2013), *The Global Spread of Fertility Decline: Population, Fear, and Uncertainty*, New Haven: Yale University Press. <https://doi.org/10.12987/9780300195323>
- World Health Organisation (2002). Missing voices: views of older persons on elder abuse: World Health Organization, Geneva, Switzerland. 29p.
- Wren, M.A, Keegan, C., Walsh, B. et al. (2017) *Projections for demand for healthcare in Ireland, 2015-2030: First report from the Hippocrates model*. Dublin: Economic and Social Research Institute. (www.esri.ie/publications/projections-of-demand-for-healthcare-in-ireland-2015-2030-first-report-from-the).
- Wurm S, Wolff JK, Schüz B (2014) Primary care supply moderates the impact of diseases on self-perceptions of aging. *Psychol Aging* 29:351–358.
- Yan E (2014). Elder abuse in Asia - an overview. In: Taylor RM, editor. *Elder Abuse and Its Prevention: Workshop Summary*. Washington (DC): National Academies Press (US).
- Yazdanpanahi, M. and Hussein, S. (2021) Sustainable Ageing: Supporting Healthy Ageing and Independence Amongst Older Turkish Migrants in the UK. *Sustainability*, 13, 10387. <https://doi.org/10.3390/su131810387>
- Zweifel, P., Felder, S., Meier, M.: Ageing of population and health care expenditure: a red herring? *Health Econ.* 8, 485–496 (1999)
- Zweifel, P., Felder, S., Werblow, A.: Population ageing and health care expenditure: new evidence on the "red herrings". *Geneva Papers Risk Insurance* 29, 652–666 (2004)