# Jordan

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***Abstract.*** The Hashemite Kingdom of Jordan has witnessed changing mortality and fertility rates, which has transformed its demographic structure from a sparsely populated country to one with ten million people (Department of Statistics (DOS), 2017; Bloom, et al., 2001). The objective of this paper is to provide an analysis of population aging in Jordan and the implications and determinants of its pace of growth between the period 1950-2050. With the oldest-old age group growing faster than any younger segment, anticipates challenges of poverty and income-security; health-services an increase in disability, and chronic diseases, insufficient number of specialized home care service providers; lack of a legal framework, and overall lack of coverage in the government and private health insurance programs (Ajlouni, 2015). Absence of medical and nursing geriatrics is also a major challenge (Higher Health Council, 2015). Based on the analysis of the situation of older persons it is suggested that ageing becomes mainstream, by placing the integration and inclusion of older people's issues into wider national policymaking to build a "society for all ages".

***Keywords:*** *Jordan, population ageing, health-services, geriatrics.*

## Introduction

The Hashemite Kingdom of Jordan is a small, landlocked, modern, developing country divided administratively into 12 provinces. Economically, it is an upper middle-income country with a gross domestic product (GDP) per capita of $5,749 and with an estimated annual growth rate of 3.7% (United Nations, 2017). Due to the political conflicts the country has witnessed, and the changing mortality and fertility rates, Jordan's demographic structure has transformed from a sparsely populated country to one with ten million people with a larger share of the older population (Department of Statistics (DOS), 2017; Bloom, et al., 2001). The objectives of this analysis were to study population aging and the implications and determinants of its pace of growth in the period 1950-2050.

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## Overview of population ageing: 1950-2050

*Pace of ageing and changing share of older persons*

Population ageing is the process by which older individuals become a proportionally larger share of the total population. By 2050 all regions of the world except Africa will have nearly a quarter or more of their populations at ages 60 and above (United Nations, 2017). There have been no organized attempts to study the Jordanian population prior to 1952, except for rough estimates based on registers compiled by the United Nations (UNRWA). Table 1 and Figure 1 summarize these censuses and estimates. However, as highlighted in Table 2, Jordan's population is relatively young with 62% in the age group 15-64 years and 3.7% above the age of 65 (DOS, 2015; 2017).

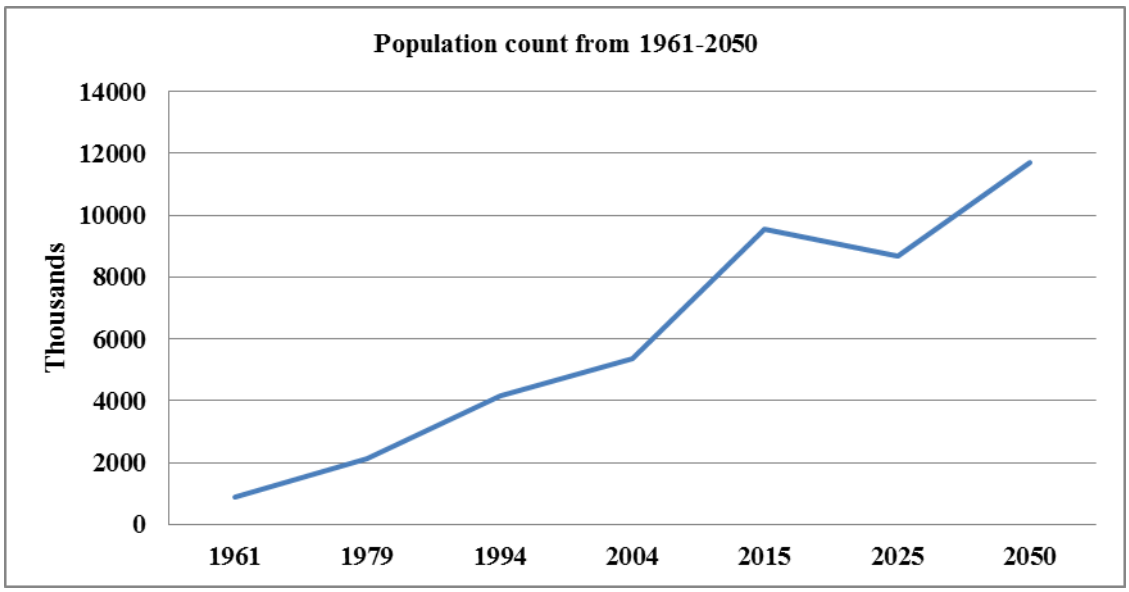
**Table 1: Summary of censuses done in Jordan**

| Indicator | 1952 census | 1961 census | 1979 census | 1994 census | 2004 census | 2012 estimate | 2015 census | 2017 estimate[a] |
|---|---|---|---|---|---|---|---|---|
| Population (millions) | 0.59 | 0.90 | 2.13 | 4.14 | 5.10 | 6.30 | 6.60 | 10.05 |
| Inter-censal growth rate (%) | - | - | 4.80 | 4.40 | 2.60 | 2.20 | 3.10[b] | 5.20[c] |
| Life expectancy/years | | | | | | | | |
| Male | - | - | - | 68.50 | 70.60 | 70.60 | 72.47[d] | 72.80 |
| Female | - | - | - | 69.20 | 72.40 | 74.40 | 74.00[d] | 74.20 |

[a] DOS, (2017)
[b] DOS, (2015)
[c] 2.4% for Jordanians only
[d] WHO, (2015)

***Sources***: DOS, (2017;2015); WHO, (2015).

**Figure 1: Population count from 1961 to 2050**




***Source:*** DOS, (2015); United Nations, (2002; 2017).

**Table 2: The share of older adults from 1950 to 2050[a]**

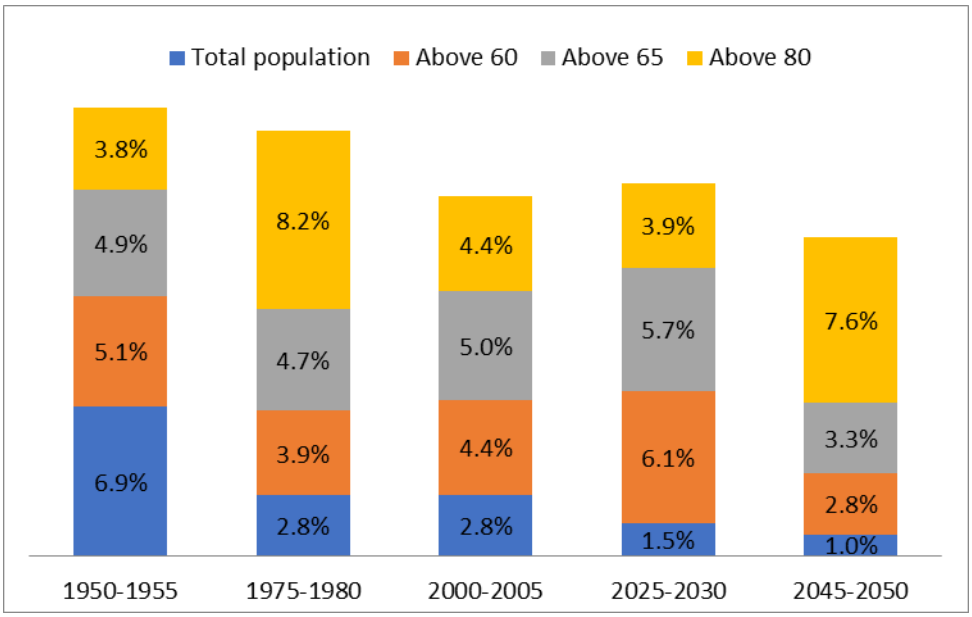
| Population | 1950 Thousand (%) | 1975 Thousand (%) | 2000 Thousand (%) | 2015[b] Thousand (%) | 2025 Thousand (%) | 2050 Thousand (%) |
|---|---|---|---|---|---|---|
| **Total** | 472.5 | 1 936.7 | 4 913.1 | 6613.6 | 8 666.1 | 11 709.1 |
| +60 | 35.1 (7.4) | 84.1(4.3) | 223.3 (4.5) | 406.2 (6.1) | 609.2 (7.0) | 1821.3(15.6) |
| +65 | 22.9 (4.8) | 55.0 (2.8) | 137.0 (2.8) | 278.0 (4.2) | 374.0 (4.3) | 1315.2 (11.2) |
| +80 | 2.0 (0.4) | 6.7 (0.3) | 17.8 (0.4) | 41.2 (0.6) | 63.7 (0.7) | 254.5 (2.2) |
| **Males/Total** | 245.2 | 990.7 | 2553.9 | 3368.1 | 4444.1 | 5931.0 |
| +60 | 18.8 (7.7) | 41.0(4.1) | 113.4 (4.4) | 204.7(6.1) | 300.7 (6.8) | 878.8 (14.8) |
| +65 | 12.2 (5) | 27.0 (2.7) | 68.3 (2.7) | 140.0 (4.2) | 178.0 (4.0) | 625.7 (10.5) |
| +80 | 1.1 (0.4) | 3.0 (0.3) | 8.5 (0.3) | 20.2 (0.6) | 28.6 (0.6) | 109.7 (1.8) |
| **Females/Total** | 227.3 | 946.0 | 2359.3 | 3245.5 | 4222.1 | 5778.2 |
| +60 | 16.3 (7.1) | 43.2 (4.6) | 110.0 (4.7) | 201.5 (6.2) | 308.6 (7.3) | 942.6 (16.3) |
| +65 | 10.7 (4.7) | 28.3 (3.0) | 69.0 (2.9) | 138.1 (4.3) | 196.0 (4.6) | 689.7 (11.9) |
| +80 | 0.9 (0.4) | 3.7 (0.4) | 9.3 (0.4) | 21.0 (0.65) | 35.2 (0.8) | 144.8 (2.5) |

[a] United Nations, (2002, 2015)

[b]DOS, (2015)

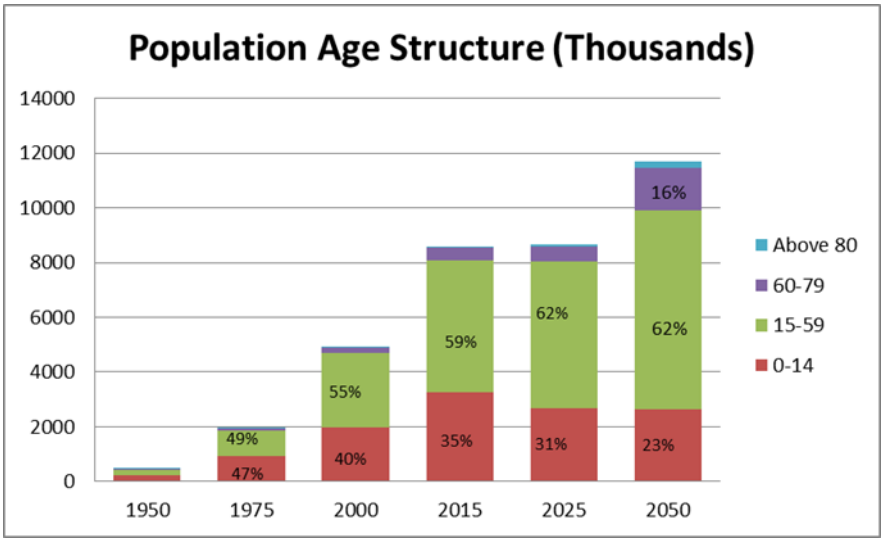
***Source:*** DOS, (2015); United Nations, (2002; 2015).

**Figure 2: Annual growth rate of the population**




***Sources***: United Nations, (2015; 2017).

**Figure 3: Age structure 1950 to 2050**




***Sources***: DOS, (2015); United Nations, (2002).

*Determinants: Decline in fertility and improvements in life expectancy:*

The immediate cause of population ageing is fertility decline and that, along with increases in longevity, is leading to an increased share of older persons (Figure 4) (United Nations, 2017). Fertility decline is due to contraceptive use and an increase in the age at first marriage due to the increase in females' education opportunities (The Higher Population Council, 2009). Nonetheless, fertility rates remain higher than the global rates (2.52 children per woman in 2010-2015) and reproduction continues to remain an important determinant of population doubling by 2050. Life expectancy at birth has markedly risen and is projected to surpass the global life expectancy of 76.9 years in 2050 (Table 3) and (Figure 4) (United Nations, 2017).

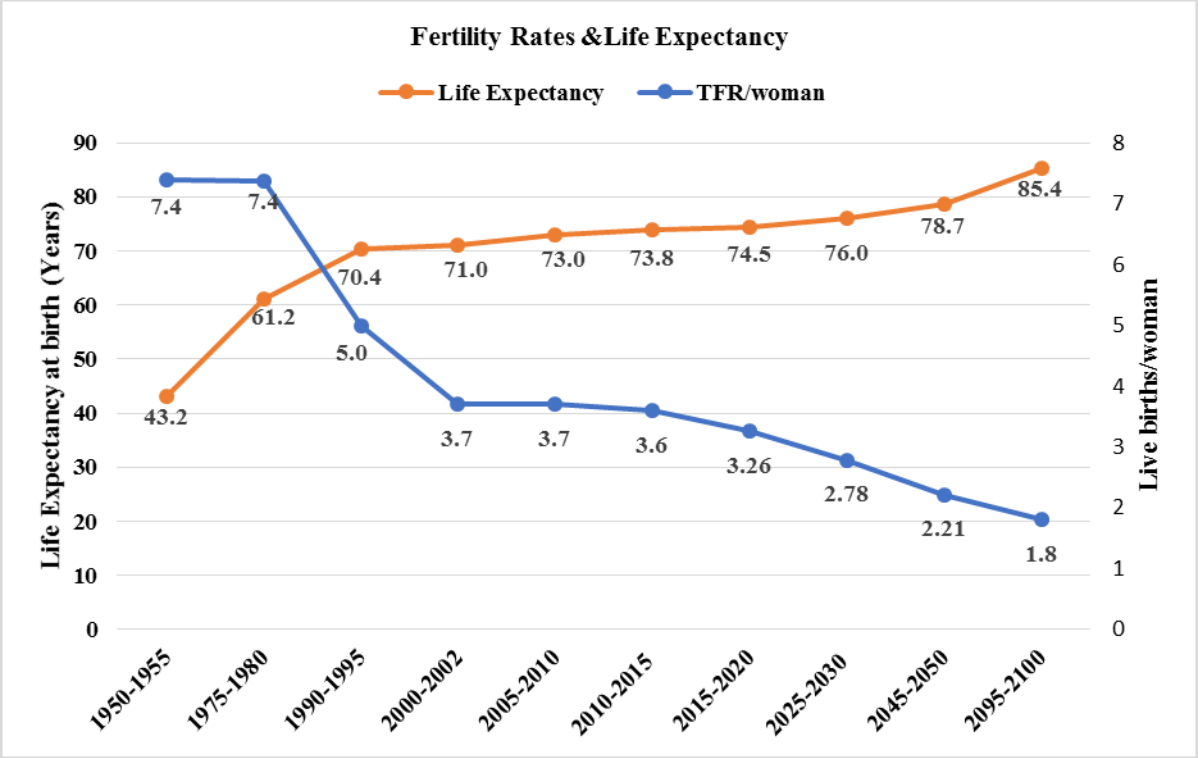
**Table 3: Life expectancy in the period 1950-2050**

| | **Age** | **1950-1955[a]** | **1975-1980[a]** | **2010-2015[b]** | **2030-2035[b]** | **2045-2050[b]** |
|---|---|---|---|---|---|---|
| **Both sexes** | At Birth | 43.2 | 61.2 | 73.8 (74.1) [c] | 76.8 | 78.9 |
| | 60 | -- | -- | 19.0 | 20.7 | 22.1 |
| | 65 | -- | -- | 15.2 | 16.7 | 17.9 |
| | 80 | -- | -- | 6.4 | 7.2 | 7.9 |
| **Females** | At Birth | 44.3 | 63.0 | 75.5 (75.9) [c] | 78.6 | 80.5 |
| | 60 | -- | -- | 20.2 | 22.0 | 23.3 |
| | 65 | -- | -- | 16.2 | 17.9 | 19.1 |
| | 80 | -- | -- | 6.8 | 7.8 | 8.5 |
| **Males** | Birth | 42.2 | 59.4 | 72.2 (72.5) [c] | 75.1 | 77.4 |
| | 60 | -- | -- | 17.8 | 19.4 | 20.8 |
| | 65 | -- | -- | 14.2 | 15.6 | 16.9 |
| | 80 | -- | -- | 6.0 | 6.6 | 7.2 |

[a] United Nations, (2002)
[b] United Nations, (2015, 2017)
[c] (WHO, 2014)

***Source:*** United Nations, (2002; 2015; 2017), WHO, (2014).

**Figure 4: Fertility rate and life expectancy trends from 1950-2100**



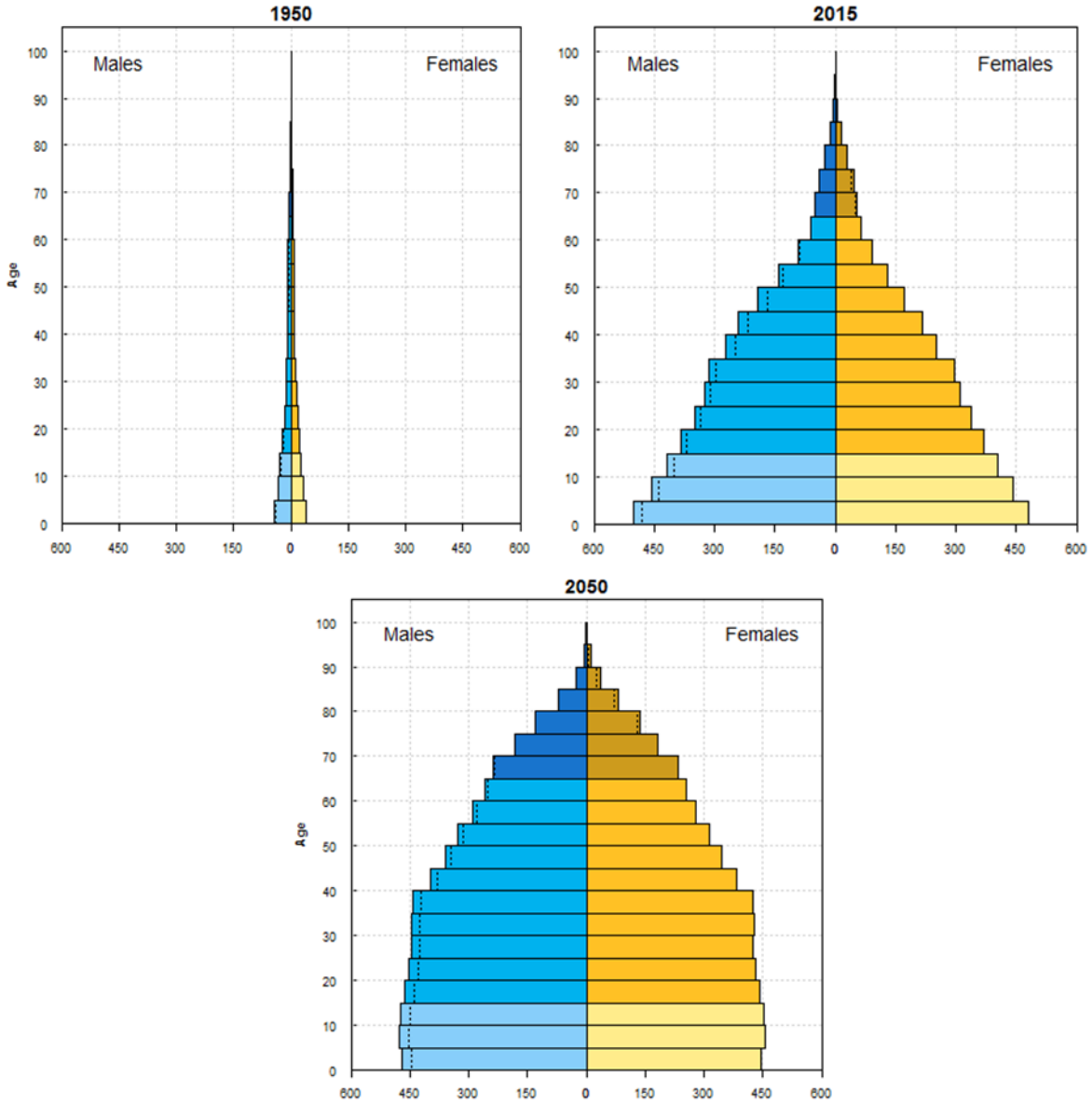

***Source:*** United Nations, World Population Ageing, (1950-2050, 2002); Abdel-Aziz, (1983;1992); DOS, (1983; 1990; 1997; 2002; 2007); Bureau of the Census (1983); JPFHS, (1998; 2008), Department of Statistics [Jordan] and ORC Macro, (2003); United Nations, (2017).

## Demographic impact of ageing, 1950-2050

*The changing age structure*

The changing age structure has many impacts on labour supply, savings, and human capital. The demographic opportunity is expected to be reached in 2030 during a demographic transition when Jordan witnesses a balance between fertility and longevity leading to maximizing the proportion of working age population, and minimizing the proportion of dependency (The Higher Population Council, 2009). Using this opportunity leads to economic growth and lower dependency rates on working Jordanians. After that, the demographic transition is expected to enter the next stage where the young and working age groups move to retirement age hence increasing the dependency ratio again (The Higher Population Council, 2009; NCFA, 2008). (Figure 5) shows the Jordanian population's pyramids.

**Figure 5: Jordan's population pyramids in the years 1950, 2015 and 2050**




The data are in thousands or millions.

***Source***: United Nations, (2015).

*Indicators of population ageing*

The ageing index is the number of persons 60 years old or over per hundred persons under age 15. Comparatively, global ratio is expected to reach 101 in 2050 (United Nations, 2002).

The median age is the age that divides a population into two equal groups. Although rising, it is expected to be lower than the world's median age of 36, and the median age of the less developed countries of 35 by 2050 (United Nations, 2002).

The potential support ratio is the number of people aged 20 to 64 per every person aged 65 or older. It expresses the numerical relationship between workers and retirees and is expected to drop globally by more than 50% over the next 50 years ranging from 2.2 in the more developed regions to 10.2 in the least developed countries (United Nations, 2002).

The parent support ratio assesses the demands on families to provide support for their oldest-old members. It relates the oldest-old to their presumed offspring, who were born when the older persons were young. Since it measures the number of persons aged 85 years or over per 100 of those between 50 and 64 years who are not necessarily related by kinship ties, it is a rough indicator of changes in the family support system (Kinsella & Taeuber, 1993) (United Nations, 2015), (United Nations, World Population Ageing:1950-2050, 2002). The ratio is predicted to continue to be lower than is expected in the least developed countries. (Table 4) through to (Table 7) summarise ageing indicators (United Nations, 2002), (United Nations, 2015) (DOS, 2015).

**Table 4: Ageing Index**

| Ageing Index | 1950 | 1975 | 2000 | 2015 | 2025 | 2050 |
|---|---|---|---|---|---|---|
| | 16.3 | 9.2 | 11.4 | 17.8 | 22.8 | 69.1 |

**Table 5: Median age**

| Median Age (years) | 1950 | 1980 | 2000 | 2015 | 2030 | 2050 |
|---|---|---|---|---|---|---|
| | 17.2 | 15.5 | 19.5 | 22.5 | 26.3 | 32.4 |

**Table 6: Potential support ratio (per person aged 65+)**

| Potential support ratio | 1955 | 1980 | 2015 | 2030 | 2050 |
|---|---|---|---|---|---|
| | 10.2 | 14.9 | 16.0 | 12.4 | 5.7 |

**Table 7: Parent support ratio per 100 persons 50 to 64 years**

| Parent support ratio | 1950-1955 | 1975-1980 | 2000-2005 | 2025-2030 | 2045-2050 |
|---|---|---|---|---|---|
| | 1.6 | 2.1 | 2.6 | 2.3 | 5.3 |

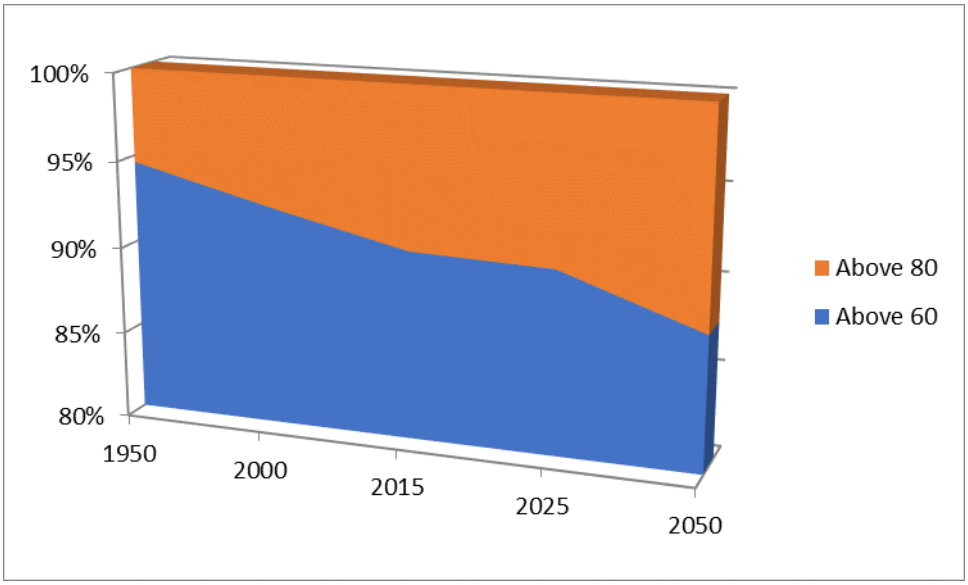
## Characteristic features of the ageing population, 1950-2050

*Ageing of the older population*

The 80 and over age group is growing faster than any younger segment. Figures 2 and 3 show that the growth rate of the population had slowed down in the past century and is expected to further go down to 1% per year in the period 2045-2050. This decline is offset by the increased growth rates of the older population particularly the oldest-old age group who are expected to increase their numbers six times from 18 thousand in 2000 to 255 thousand in 2050 corresponding to the increasing ratio of 8% and 14% of the total older people's generation,

respectively (Figure 6). The share of the oldest-old is still low, currently 0.6% of the total population, compared with 3% in the developed world (United Nations, 2002; DOS, 2015). The United Nations has estimated the number of centenarians in the year 2000 by 0.1 thousand, with a projected rise to 0.8 thousand in 2050 (United Nations, 2002).

**Figure 6: Ageing of the population in the period 1950-2050**




***Sources:*** United Nations, (2002, 2015).

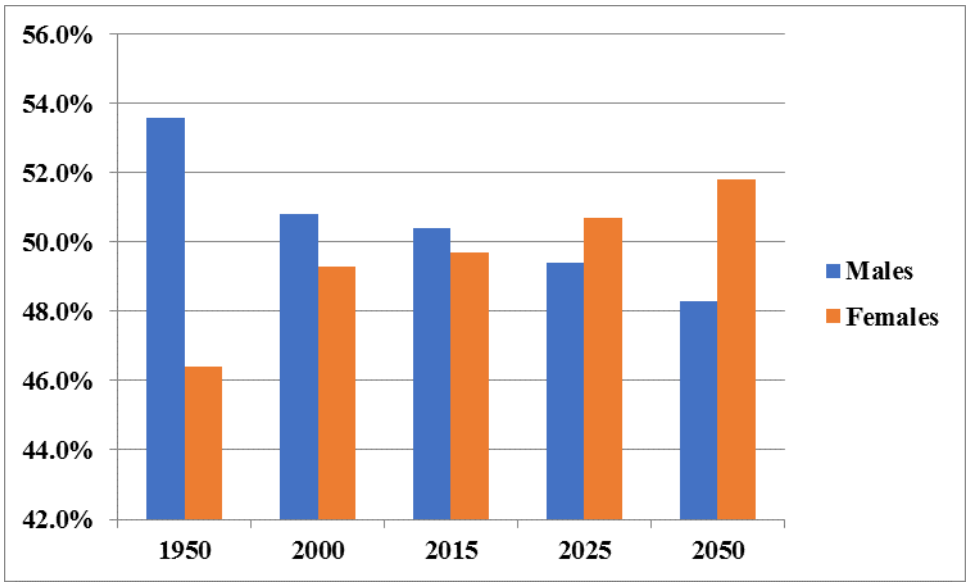
*Feminization of ageing*

Because their life expectancy is greater than men's, women comprise a significant majority of the older population. The number of men per 100 women (sex ratio) has changed during the past century from 115 for the 60-plus age group and 122 for the very-old older persons (aged 80-plus), to 103 and 91, respectively. In 2015, sex ratios were 102.2 for the 60-plus age group and 95.8 in the 80-plus age group with a projected ratio of 97 and 93 in the age group 60-plus during the years 2025 and 2050, respectively (DOS, 2015). The changes are more striking for the oldest elderly with expected ratios of 81 and 76 in 2025 and 2050, respectively (Figure 7). The global number of men per hundred women is expected to rise to 85 at ages 60 or over, and to 61 at ages 80 or over, by 2050 (United Nations, 2015).

*Spatial dimension: the rural-urban differences*

Rural-to-urban migration and immigration have contributed to rapid urban growth. The percentage of the population living in urban areas has increased by 13% between 1979 and 1994, reaching 83% in 2004 and 90.3% in 2016 (DOS, 2017). Urbanization of older people has increased from 44% in 1961 to 55% in 1979 and further to 80% in 2004 (Department of Statistics (DOS), [Jordan] & ICF International, 2012).

**Figure 7: Sex differences among older people aged 60-plus in the period 1950-2050**




***Sources:*** United Nations, (2002, 2015).

## Positive Side of Ageing

Culture, heritage, and religious norms dictate respectful family caregiving. Likewise, older people are involved in financial and domestic help to their offspring, including childcare. Day to day and hands on care duties are implicitly, and sometimes explicitly, placed on daughters or daughters in laws. (NCFA, 2008; Kamel, 2016; Hussein & Ismail, 2017).

Older parents are the source of wisdom and are responsible for conservation of customs and traditions. Their role in raising grandchildren is also pivotal due to increasing numbers of working mothers where 22-33% of young women are economically active (DOS, 2015, 2015). In unpublished master dissertations, most community elders showed a positive attitude and satisfaction towards their consultancy role and financial support of their families (Gharaibeh, 2003. Saleh, 2002). Their relationship with their extended family was based on respect and mutual support. The most common needs older people get through their families were housekeeping and help to get to doctors' appointments, in addition to shopping, cooking and consultancy roles in resolving conflicts (Saleh, 2002; Mady, 2002). Most older women were satisfied with the changing social roles yet more data are needed to better understand their social roles (Mady, 2002).

## Implications of population ageing

*Poverty and income security*

Worldwide, 1.2 billion older people are expected to lack income security by 2050. Studies show that older Jordanians are particularly vulnerable to sickness or disability proportionately as they age. Large numbers of children, low levels of education,

unemployment, and non-Jordanian nationality were all associated with increased probability of being in poverty (Department of Statistics [Jordan], 2008). The Government of Jordan adopted its first *Poverty Alleviation Strategy* in 2002, followed by the National Agenda 2006-2015, that implemented its key directions through the National Employment Strategy (2011-2020) and Poverty Reduction Strategy 2013-2020. The net result helped lowering the absolute poverty rate from 21.3% in 1997 to 14.2% and 13% in 2002 and 2006, consecutively (Elbers, 2003; Bank, 2004; UNDP, 2013).

Unpublished World Bank Aspire's data show that 4.6% of the elderly were poor in 2006, versus 6.6% in 2010 (Department of Statistics (DOS), [Jordan] & ICF International, 2012). Unemployment further contributes to the problem as data show that only 2.9% of the Jordanian workforce was made up of older persons aged 60-plus; 3.6% of the workforce constituted males versus 1.1% females (NCFA, 2013) (DOS, 2015, 2015). Further, low average wage coupled with high prices of the various commodities have led to a greater pressure on the social security systems helping those subjected to poverty. These challenges have worsened after the influx of Syrian refugees (Awad, 2016).

Social protection systems are mainly governmental; they include Social Security Corporation (SSC), civil and military retirement pensions, professional associations pensions, Ministry of Social Development (MoSD), and some institutions including inter alia Takiyet Um Ali (Food for Life), National Aid Fund (NAF), and National Zakat Fund (NZF). Private non-governmental engines are not well developed.

MoSD manages a range of social assistance services to vulnerable groups. It "buys" beds in nursing homes for those unable to afford institutionalization, and it implements an emergency cash transfer similar to NAF activities. This program is not linked to NAF assistance database and it might lead to duplicated efforts.

SSC has become one of the key players in providing Jordanians with social protection, particularly those retired, ill, and unemployed. The successive governments have established social security reforms by directing all pensions to the SSC to be the main and the only body providing pensions.

The problem that many retirees face is that they (helped by their employer) have to pay for the SSC for 15 years (equal to 180 contributions) before they are able to get a retirement pension at the age of 60 for males and 55 for females. If they were unable to pay the 180 contributions, they can "BUY" them ahead. Current estimates forecast a cash deficit for the SSC by 2053 threatening social security and necessitating policies to prevent or even mitigate its consequences (Ministry of Government Performance, 2006). 25% of older Jordanians are not covered by retirement pensions and 66% of the provided pensions are below the national poverty line (Table 11.9).

These laws need revision to protect the poor older people who are unemployed and unable to "buy" pension, and to keep enrolling them in jobs that they are capable of doing.

**Table 8: Pension coverage for older Jordanians**

| Source of Retirement pension | Percentage of older people covered in 2009 | Percentage of older people covered in 2013 |
|---|---|---|
| Social Security Corporation's pension | 10.9% | 12.2% |
| Total Civil and Military pensions | 58% | 62.5% |
| Total pension coverage from all resources | 68.9% | 74.7% |

***Source:*** NCFA, (2013)

Jordan's National Zakat Fund (NZF) is one of the oldest funds under the Ministry of Awqaf. It provides cash and rehabilitation assistance programs. If a poor person receives recurring cash assistance from NAF, he or she is not eligible to receive the minute Zakat assistance which is around 40-70 USD per month (Fund, 2012).

In a nutshell, although Jordan has higher public social protection expenditure on pensions and other benefits for older persons than most of the Arab countries, the social protection system needs substantial reforms and organization to avoid duplication and to ensure it covers all recipients as a right, including vulnerable categories.

*Health services and increased disability*

The health situation in Jordan is one of the best in the Middle East due to a set of effective development plans that included health as a priority of sustainable development (Higher Health Council, 2015). The per capita total expenditure on health is 359 USD, and the general government expenditure on health is 13.7% of the total government expenditure which, in turn, makes 70% of the total health expenditure and is one of the highest among Middle East countries (WHO: Regional Office for the Eastern Mediterranean, 2019) (WHO, 2014). Some of the major challenges include the increased demand for health services due to steady population growth and the influx of refugees, in addition to population ageing and rising health care costs.

Health services providers include Ministry of Health (MOH), the Royal Medical Services, university hospitals, and the private sector. The international and charitable sectors provide services through UNRWA clinics, the UNHCR, King Hussein Cancer Center and charity association clinics. Civil Insurance Program (CIP) is a mandatory service provided by the MOH to cover all government employees, in addition to those receiving beneficiaries from the National Aid Fund. Private health insurance is provided either by private insurance companies or by self-insured firms. In 2006, the CIP expanded to include those uninsured older persons 60+ under the umbrella of health insurance in public hospitals against a small nominal amount from each beneficiary (six dinars per month/8.4$). These efforts have helped widening of the insurance coverage to include more seniors from all social classes, with a rate of coverage going up from 67.3% in 2010 to 73.3% in 2015 (Higher Health Council, 2015) (DOS, Population and Housing Census 2015, 2015). The SSC's law was modified in 2014 to include health insurance for all SSC beneficiaries. Nonetheless, this requires a deduction of 17% from

the beneficiary's salary, making the implementation of this law unfeasible (Ghaith Zureiqat, 2015).

Regarding accessibility and equality, health care services are unequally distributed, where those living in the north and in urban areas have better chances compared to those living in the south and rural areas (Abu-Kharmeh, 2012). A survey showed that 19% of elderly believed that health care was unavailable and the main reasons for not receiving care were high cost and absence of health insurance (Mahasneh, 2000).

Tables 10, 11, and 12 show the prevalence and distribution of chronic diseases and disabilities among older people emphasizing the necessity of available and accessible health services.

**Table 9: Prevalence of selected chronic, non-communicable disease risk factors**

| Chronic disease | Prevalence among +65 [a] (%) | Prevalence among population[b] (%) |
|---|---|---|
| Obesity | 43.6[b] | 36 |
| High Blood Pressure | 53% | 29.8 |
| High Blood cholesterol | 30 | 13.9 |
| Diabetes Mellitus | 25 | 19.5 |
| Current smoking | 19.4 | - |
| Heart Disease | 13 | - |
| Asthma | 10 | - |

[a] (Higher Health Council, 2015). [b] CDC data 2012 (Al-Nsour et al., 2012).

***Source:*** Higher Health Council, (2015); Al-Nsour et al., (2012).

**Table 10: Functional disabilities and dependency among older age groups**

| Age Groups | Total number (Thousands) | Presence of *any*[1] functional disability N in thousands (%) | Presence of *severe* functional disabilities and/or *dependency* N in thousands (%) |
|---|---|---|---|
| 60-64 | 166.0 | 52.7 (32%) | 14.5 (8.7%) |
| 65-69 | 135.1 | 53.8 (40%) | 17.5 (13%) |
| 70-74 | 99.5 | 48.1 (48%) | 17.6 (17.7%) |
| 75-79 | 64.0 | 36.2 (57%) | 15.4 (24%) |
| 80-84 | 30.9 | 19.8 (64%) | - |
| Above 85 | 20.3 | 14.0 (69%) | 17.9 (34.9%)[2] |
| Overall +60 | 515.8 | 224.6 (43.5%) | 82.9 (16%) |

[1] Disability includes any one or more of: hearing or vision impairment, mobility/walking difficulty, difficulty concentrating or remembering, needing help in Activities of Daily Living and communication difficulties.
[2] Above 80
***Source:*** Authors Calculations based on DOS data. (DOS, 2015).

**Table 11: Distribution of disabilities among older people, 2015**

| Disability | Number in Thousands (%)[1] | Number of males in Thousands (%)[2] | Number of females in Thousands (%)[2] |
|---|---|---|---|
| Vision | 140.6 (62.6) | 69.5 (49.4) | 71.0 (50.6) |
| Hearing/Speech | 102.4 (45.6) | 48.4 (47.3) | 54.0 (52.7) |
| Mobility | 161.1 (71.7) | 69.0 (42.8) | 92.1 (48.2) |
| Trouble remembering & concentrating[3] | 79.0 (85.2) | 34.5 (43.6) | 44.5 (56.4) |
| Dependence in ADLs[4] | 66.0 (29.4) | 26.8 (40.6) | 39.2 (59.4) |
| Communication with others | 40.8 (18.2) | 17.3 (42.3) | 23.5 (57.7) |
| Total | 224.6 (43.5) | 107.3 (47.8) | 117.2 (52.2) |

[1] The percentage of the older people with the disability out of the total number of disabilities among the population

[2] The percentage of each gender within the same functional disability group.

[3] By informant without a formal diagnosis of dementia.

[4] ADLs: Activities of Daily Living

***Source***: DOS, (2015).

In summary, there are lots of health challenges including financial destitution, the high prevalence of disabilities and chronic diseases, insufficient number of specialized home care service providers, the lack of a legal framework to protect them as well as the high cost of these services if they were available, in addition to the lack of their coverage in the government and private health insurance programs (Ajlouni et al., 2015). Absence of medical and nursing geriatrics is also a major challenge as the few doctors who practice geriatrics in the country are trained abroad without obtaining an accreditation from the Jordan Medical Council. They provide geriatric care individually and their number is less than 10 in the whole country! (Higher Health Council, 2015). They are the principal doctors defining the medical, social, physical and psychological needs of the older people, in addition to coordinating their care plans (Hayajneh, 2015).

*Living arrangements and family support*

It is part of the Arabic culture and religion that children care for their older parents and it is not acceptable to let them live alone. These traditional norms work against the proliferation of residential care and institutionalization (Hafez G, 2000, July). Despite that, the latest DOS census showed that only 16.7% (324.4 thousand) of the total households in Jordan were headed by older people aged 60-plus. Of those, 73.5% were males and 26.5% were females (DOS, 2015). Mahasneh (2000) found in her study that only 6.7% were living alone and elders with long-term care needs, rejected the idea of going to a nursing home and relied exclusively on their families to help. The few that accepted this level of care was a necessity had severe physical disabilities and/or were neglected by their children. A more recent study representing all of the nursing homes in Jordan, found that 90% of the residents were single at the time of institutionalization and the majority did not have adult children living in the

country (Rawajfah, 2009). This study reflects the changing socio-economic conditions where the family size has declined, and children are now working abroad leaving some older people to manage on their own.

There are only ten licensed houses for older persons in Jordan that are not evenly distributed and most of them are either privately run or are part of the voluntary sector. Although the Ministry of Social Development defrays the residency costs for those unable to afford it, the actual occupancy rate does not exceed half of their capacity, and the monetary allowance paid by the government is less than the actual cost of residence (Ministry of Social Development, 2017).

*Vulnerability of the older people, particularly older women*

Vulnerability is the outcome of complex interactions of discrete risks, namely of being exposed to a threat, and of lacking the defenses or resources to deal with a threat (Schröder-Butterfill & Marianti, 2006). Common threats affecting older people include low levels of education and employment, weak financial security, and limited participation in the economy. Women are particularly vulnerable given lower marital rates (53.5% of older women were single vs. only 9.4% of older men), higher illiteracy rates (48.5% vs 17.9% in men), higher economic dependency, and increased susceptibility to non-communicable diseases and the presence of at least one functional disability (52.2% vs. 47.8% in men) (DOS2015, 2015) (United Nations, 2017). In terms of economic vulnerability, only 12% of those receiving pensions were females and their average benefits were lower than male counterparts (UNDP, 2013) (ILO, 2014).

*Other relevant implications*

The retirement age in Jordan is 60 for males and 55 for females. Retirees are "young" older people who are, mostly, physically and mentally capable to continue working. Only 12.8% of older persons are still working because it is forbidden by social security laws to continue working once the senior gets his pension paid (DOS2015, 2015). These laws render a good portion of productive members in the society spending their days at home.

Regarding political contribution, data from the Independent Election Commission show that the percentage of seniors in the Cabinet of Ministers in 2013 went up to 52% (from 25%), whereas the percentage of seniors in the Upper House of Parliament has declined from 81 to 78%. 11.02% of those who voted in the last parliamentary elections in 2013 were aged 60-plus.

Absence of adequate recreational services is another challenge; data show that boredom was an important problem the older population faces, and entertainment and social interactions were the most important motives behind institutionalization (Gharaibeh, 2003) (Rawajfah, 2009). Although the MoSD has set elderly-friendly regulations and very affordable fees for establishing day centers for the older people, there are only three non-governmental day-centers serving 140 older persons. The relatively high membership costs make it unlikely for the average-income person to join them, in addition to the absence of inspection and control

roles of the MoSD which rather sets the legislations and criteria of approving establishing new homes (Rights, 2017).

## Policy response and measures

*Policies and programs introduced by the Jordanian government*

*Jordan's National Strategy for Older Persons,* prepared in 2008 by the National Council for Family Affairs (NCFA), is the first document endorsing older Jordanians' rights (NCFA, 2008). It stems from the Islamic values and the Madrid International Plan of Action for 2002. It included priority areas structured along the following pillars:

- Contribution of senior citizens to the development process
- Advancement of health care for senior citizens
- Provision of a supportive physical environment and social care to senior citizens.

*Highlight measures taken since Madrid 2002*

After the Madrid Plan was initiated, the initiative "Amman, age-friendly city" was launched in 2007 where access of older persons was set as a priority.

The Disabled Persons Act No. 31 of 2007 caters for older persons with disabilities. It enables them to access different services without discrimination. Further, directives governing exemptions for special vehicles for the use of persons with disabilities set forth the conditions whereby such vehicles may be obtained duty free.

The National Strategy for Older Persons 2008-2012 was followed by an analytical evaluation in 2015 that included recommendations guiding its update for the years 2018-2022.

In 2008, some legislation was updated including the modified Public Health Act No. 47 that included an article (4 g) about the responsibility of the Ministry of Health to collaborate with related partners in order to implement programs related to the health of older persons and to monitor the institutions which provide them with care. Article 3 (c) of the Domestic Violence Act No. 6 was also updated stating that "the father or the mother of either of the spouses" shall be considered as members of the family. Moreover, under article 54 of the Criminal Code (Act No. 16 of 1960), as amended, account may be taken of the age of anyone convicted for major or serious offences, and the court may suspend the sentence if the offender is an older person.

The years between 2009 and 2013 witnessed a noticeable drop in the number of cases involving support for older persons by their children at the sharia courts emphasizing the success of the Personal Status Act.

In 2011, Jordan amended an important constitutional provision in article 6(5) of the Jordanian Constitution to shield older persons from violence. The article, currently, states that "The law

protects motherhood, childhood and the elderly,....etc., and protects them from offense and exploitation".

In 2014, the Higher Education Council issued the Decree No. 295 allowing persons over the age of 70 who hold the rank of professor to remain in their posts as full-time lecturers on an annual contract without administrative duties.

*Role of NGOs and civil society*

The Civil Society Organizations (CSOs), NGOs have a limited role in the provision of health services through facilitating dialogue with stakeholders and decision makers. Major local NGOs implementing social protection include: Tkiyet Um Ali (TUA), National Alliance Against Hunger and Malnutrition (NAJMAH), and The Islamic Centre Charity Society (ICCS) (Higher Health Council, 2015).

## Recommendations

Based on this analysis of the situation of older people, we propose the following suggestions to enhance their quality-of-life, and to enable them to continue to live with their families, in their own homes.

*Mainstream ageing*

Mainstream ageing is the integration and inclusion of older people's issues into wider national policymaking to build a "society for all ages". To be successful, it is critical that both policymakers and policy implementers view mainstream policy through the lens of the Madrid Plan (Ageing in the Twenty-First Century: A Celebration and A Challenge, 2012). Despite the recent legislative developments, Jordan's current society does not have sufficient awareness nor the resources to support implementing them. To best meet the elders' care needs, stakeholders must become intimately aware of the implications of population ageing and invest in strengthening Jordan's capacity to provide them with an excellent quality of life. Stakeholders that need to engage synergistically in meeting these needs include governments, civil society, private sector, communities, and families. In order to move forward with mainstream ageing, there are key issues that must be addressed. First, databases on older persons need to be completed. Many organizations should be encouraged to classify information by age and to incorporate issues relating to older persons into their strategies or set performance indicators that are in line with the Jordanian National Strategy for Older Persons. Allocation of financial resources to the budgets of agencies dealing with older persons should be prioritized.

*Recreational services*

To succeed in mainstream ageing, we must rectify the low levels of community involvement of older persons. There should be priority on developing recreational services for the elderly, whether based in the community or in nursing homes in order to increase stimulation and reduce depression, loneliness and isolation. Programs to encourage late-life community

engagement, such as volunteer activity, attending various hobby-groups or religious-groups, should be pursued.

*Health care*

To encourage healthy ageing, health care should be accessible by all older adults. The lack of universal health insurance and pension systems currently limits accessibility and should be addressed. Jordan must also address the lack of specialized home-care services within the state system and the increased cost of such services in private sector institutions. Innovative practices to meet the care needs of our older population include establishing mobile units and outreach teams that provide health and care services to older people in their own home, in addition to improving accessibility to such care through establishing widely available community-based health-care services. Skilled nursing facility care should also be available for those who do require it. We recommend improving upon the currently limited private sector participation in supporting older people's nursing homes. To further improve health care, geriatric training should be incorporated in health-schools' curricula, in addition to residency training that needs to be established and accredited by the Jordan Medical Council. These efforts will dually lead to increased interest in addressing the paucity of geriatric research.

*Voluntary sector initiatives*

Volunteer initiatives, usually staffed by volunteers and students, play an important role in providing basic health and care services to poorer older people. These might be expanded and encouraged by providing volunteer network infrastructure, developing policies and offering financial incentives for volunteers in the form of tax relief or other benefits.

*Caregiver recognition and support*

The literature highlights the importance of flexible and supportive work environments in enabling people who provide informal care to participate in the labour market. Similar to maternity care; cash allowances, tax-breaks and relief and other financial support should be provided to those who cannot work fully due to their caregiver duties. Working caregivers, especially women, are particularly in need of support to help in their work-life balance. They often have multiple competing demands in addition to their caregiving role, which render them at heightened risk of caregiver burnout and frustration. Caregivers should, also, have ample access to other services, such as psychosocial support and respite care, in order to maintain their own health and wellbeing which, in turn, helps them better support their older ones.

*Financial security*

All older adults should have access to pension funds to prevent impoverishment in older age.

*Develop evidence-informed policies for older adults*

Encourage gender and culturally sensitive research that focuses on the older adult, through the provision of research grants and other incentives. This will help develop a sound evidence base to inform policy. Older adults should be integrated into all national development policies and programmes. Older persons should be included in national humanitarian response, climate change mitigation and adaptation plans, and disaster management and preparedness programmes.

*Enhancing society's perception and support of older persons*

The key to changing the society is to start off from within to build a culture of equity and justice. The smallest unit is the family institution; hence educating the younger generations and grandchildren is the most important tool in changing the attitudes and perceptions of the upcoming generations towards our older persons. Fortunately, Jordanian culture has a high level of social support, which in turn, contributes genuinely to assist in setting up successful interventions that rely on the social context in Jordan. The main pillars of interest should include:

- Modelling the religious values of taking care of the older parents
- Enabling and educating children to support their older parents as much as possible in their own homes among their families. This role can be facilitated through governmental support that includes caregivers training, involving social workers and volunteers, and financial assistance to subsidize the expenses beyond those covered by health insurance plans.
- Enhanced monitoring and identification of elder abuse. For older adults in whom there is a suspicion of elder abuse or neglect, there should be a system for reporting and support available.
- Involving older parents in taking care of the grandchildren and emphasizing intergenerational interaction to reduce loneliness and boredom while increasing self-esteem and satisfaction.
- At last, public education and awareness campaigns on celebrating older adults, especially in October celebrating the International Older People Day, should be created.

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