

Wellbeing of Older People in Iran: An Application of the Global AgeWatch Index

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ABSTRACT

The world population is ageing as a consequence of demographic changes: the number of older persons will double from its current number of about one billion people to two billion by 2050. Iran is no exception in this respect as its population of older persons would reach approximately 29 million by 2050. This speed of ageing categorizes Iran as a fast ageing society, emphasizing the need for adopting comprehensive policies and interventions to address issues related to older ages. To this end, constructing monitoring instruments will facilitate evidence-informed policymaking. One such recently developed instrument is the Global AgeWatch Index (GAWI) which consists of four domains and 13 indicators, namely Income Security, Health Status, Capability and Enabling Environment. This paper constructed GAWI to measure well-being for older people in Iran and determine the country's relative position in comparison to 96 other countries included in the latest

estimates of the GAWI. The results show that Iran shares the 75th rank with the neighbouring Turkey out of the total of 97 countries covered by the Index. For Iran, domains of Health Status hold a relatively higher rank and the Capability and Enabling Environment being at the lowest rank.

Keywords: Global AgeWatch Index, Iran, population ageing, social policies for older people, well-being of older people

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INTRODUCTION

Motivation

Population ageing is a demographic trend arising from fertility decline and rising longevity through which the age structure of the population changes. In the majority of the countries, mortality transition happens earlier than fertility transition and this leads to an increase in longevity prior to fertility decline. In the earlier phases of population ageing, the number of older people goes up due to individual ageing or the rise in survival chance within the life cycle effect (Lee, 1994). The pace of population ageing is always affected by the level of fertility in the past, life expectancy and its alteration in the future, as well as the speed of fertility decline.

Within the context of such demographic changes, the world's population is said to be ageing. According to the latest World Population Ageing (WPA) Report, the number of the population aged 60 and above will climb from 901 million in 2015 to 1.4 billion in 2030 and 2.1 billion in 2050. Accordingly, the world's older population will be even more aged in the future as the number of those aged 80 and above would increase from 125 million in 2015 to 434 million in 2050: a rise from 14 percent to 20 percent (United Nations, 2015a).

The main objective of this paper is to present a brief picture of older population in Islamic Republic of Iran in the most important dimensions, namely living conditions, capabilities and enabling environments. In addition, this paper reports on the calculations of the Global Age Watch

Index for Iran which allows us to compare Iran's relative position in comparison to 96 countries already included in the Global AgeWatch Index (GAWI) calculations¹. Among the 96 countries, the number of Asian countries in the latest edition is 23, including the two most populous ones – i.e. China and India – and Japan. At the same time, these 23 countries account for 52% of the world's older population (HelpAge International, 2015a). Iran would be the 24th country in Asia that enters this internationally comparable instrument measuring the older population's wellbeing.

Challenge of Population Ageing in Iran

Iran is among those countries in which fertility has sharply declined (Mirzaei et al., 1996) from about seven children per women in the 1980s to beneath the replacement level in recent times (Abbasi-Shavazi et al., 2009). This sharp decline came about through major improvements in health and continuous progress in living standards that also resulted in higher life expectancy (Koosheshi & Niakan, 2016; Saraei, 1997; Sharifi, 2006). All these changes along with the demographic transition are adequate to expedite population ageing in Iran and place the country among the so-called hyper-ageing societies². Moreover, the baby boom of 1978-1985 has further accelerated the process of population ageing.

1 For further information on the methodology report see: Zaidi (2013)

2 Hyper-ageing societies are those in which 30 percent or more of the population are aged 60 years or more.

According to the latest population and housing census of Iran in 2016, approximately 7.4 million or the equivalent of 9.3 percent of the total population are 60 and above. Five years earlier, i.e. in 2011, this figure stood at 6.2 million constituting eight percent of the total population. This delineates a growth of about 3.8 percent in the population of older persons, which is approximately three times as much as the overall population growth that stands lower than 1.3 percent. According to the 2017 World Population Prospect medium variant, around 29 million people in Iran will be 60 and above and some 21 million 65 and above by 2050.

According to the 2015 GAWI Report, there was only one country (Japan) with over 30 percent of its population comprising older persons; in 2030, however, the number of hyper-ageing countries will reach 26 and thence 62 by 2050 (HelpAge International, 2015a). In the context of Iran, even if the number of the population reaches 110 million based on the high fertility scenario, the proportion of older people would still top 25 percent. Consequently, Iran would at any rate be one of the 62 countries dealing with rapid population ageing.

Other Challenges Linked with Population Ageing

Some characteristics of population ageing such as feminization of ageing as well as regional disparities in the number of older persons are considerable. According to the population and housing censuses in Iran, sex ratio of some of the age groups of

older people which used to be 120 male to 100 female during 1970s to 2000s is now decreasing (Koosheshi et al., 2014), and according to the United Nations population projections will reach to around 91 men to 100 women by 2050. Taking into account the important differences in family and socio-economic life of older men and women in Iran, feminization of ageing can have significant implications for the well-being and health of older persons. On the other hand, due to different fertility rates in the provinces of country (Abbasi-Shavazi et al., 2009), the provincial ageing index varies largely from less than 10 to more than 40 older persons (65 years old and above) to 100 under 15 years old (Koosheshi et al., 2014).

Currently, developed countries, the majority of whom enjoy effective monitoring systems and intervention plans for older persons, are among the oldest populations around the world: in Japan 33 percent, in Germany and Finland 28 percent, and in Italy 27 percent of the population are aged 60 and above. Indubitably, the status quo will change. Based on UN projections and the World Population Ageing Report, 80 percent of the total population aged 60 years old and above would be living in developing countries by 2050, while the aforesaid proportion was in the neighborhood of 67 percent in 2015. Furthermore, the proportion of the population aged 60 and above in high income countries – where policies and intervention plans for older persons are well developed – takes a downward trend from 34 percent in 2015 to 23 percent in 2050. On

the contrary, in lower and lower-mid income countries, the same proportion increases from 30 to 38.5 percent in the same period (United Nations, 2015a, 2015b).

Older persons continue to be affected by social inequalities. In its 2013 World Social Situation Report, the UN announced that despite the improvement in the Gini coefficient between 1980 and 2010, income inequality has not yet lowered down to its level in 1980 (United Nations, 2013). In the same report, inequalities have been reported high among and within countries. In spite of the convergence in life expectancy at birth among countries, the gap increased from the highest level in Japan (thanks to the introduction of feasible longer life programmes) between the 1990s and 2010s. In other areas, namely educational attainments, the inequalities between and within countries have been declining although the level of educational inequality in developing countries is significantly higher than that in developed countries. The Gini coefficient of education (similar to the Gini coefficient of income) in developing countries was 0.19 in 2010, while the rate in developing societies is 37.0 (United Nations, 2013).

In HelpAge International (2015), inequalities between countries in health, education and income have been on the rise. According to the report, the difference in life expectancy of countries placed at the top (generally developed nations) and at the bottom (generally developing countries) in GAWI ranking varies from 5.7 to 7.3 years, the inequality of educational attainment has

grown by 50 percent from 1990 to 2012 and the economic prosperity gap has been particularly significant among the age-old cohorts (HelpAge International, 2015a).

While economic problems have always challenged the world, there is no guarantee that all governments and families can afford to provide adequately for older people. These conditions play a vital role in the life of older persons as they will enjoy security when they have enough resources to meet their basic needs, protect themselves from shocks and manage their resources independently (Zaidi, 2011). In addition, socio-demographic changes affect family composition, which in turn disturbs the relationships required for providing various modes of nursing and emotional support to older persons by family members.

The unbridled and unrelenting process of urbanization, especially in less developed countries, puts a proportion of the older population at risk, particularly those living in unconventional settlements and inappropriate physical environments. These changes may widen inequalities not only between countries, but also within them, and thereby exacerbate the anguish of older persons. All of these concerns are in the situation where, as noted above, the growth in number and increase in the proportion of the older population has been considerably accelerated.

In the context of socio-economic changes, population ageing, widespread inequalities between and within countries and uncertain economic conditions, effective response to the challenges of population

ageing requires the formulation of evidence-based strategies and interventions. Of course, the degree of the success of such programmes and interventions depends on the existence of comprehensive and strong datasets showing the status and characteristics of older people. In addition, the effectiveness of interventions as well as the monitoring of emerging needs of older people and their strengths and weaknesses require standard measures. Such measures can also support the identification and clarification of the context and causes of social inequalities among older people, and further determine the global ranking of countries in such areas. Fortunately, methods have already been developed for measures that are capable of representing the condition of older people and some regional disparities in their living conditions³.

Introducing Global AgeWatch Index

The GAWI was developed by Zaidi (2013) while working with HelpAge International. This index follows three main objectives: first, measuring and improving the quality of life and the wellbeing of older people; second, highlighting the strengths and weaknesses of strategic responses to the challenges of population ageing around the world; and third, encouraging the production and use of data needed to provide evidence-based policies for older persons (HelpAge International, 2015b). As can be seen in Figure 1 below, the GAWI is derived from the combination of four domains for older persons, each with defined indicators: income security, health, capability and enabling environment⁴.

DATA AND METHOD

Several sources were used to compute indicators in each domain of the GAWI,

3 See, for instance, the methods developed for the Active Ageing Index, cf. Zaidi et al. (2017).

4 For a discussion on methodology, see Zaidi (2013)

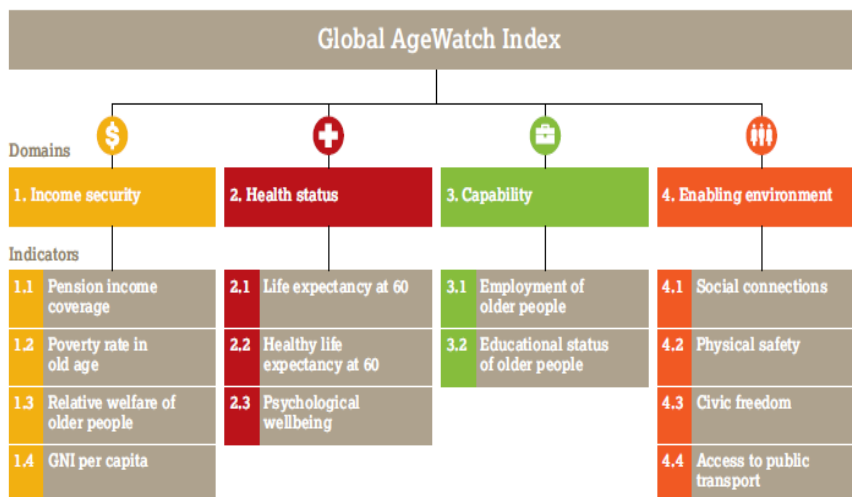


Figure 1. Global AgeWatch Index, domains and indicators

as shown in Figure 1. Population Censuses also provided concise information on some of the socio-economic characteristics of older persons. In the first domain, i.e. income security, the main source of data for calculating the three indicators of pension income coverage, poverty rates in old age and relative welfare of older people was Iran's Household Income and Expenditure Survey (HIES). For the fourth indicator, i.e. gross national income per capita (GNI), the sources were National Transfer Accounts released jointly by the World Bank and the UN National Accounts System.

In the second domain or health, there are three indicators: life expectancy at the age of 60, healthy life expectancy at the age of 60 and psychological wellbeing. The data for the first two indicators was available in the health profiles of countries which were prepared by the *World Health Organization (WHO)* and the information needed for the third indicator was collected through a national survey. Census and Labor Force Surveys were two sources available for calculating the indicators in the third domain (capability) such as older people's employment and education. Other than the estimates made by the Gallup Institute, there is currently no other source for calculating the fourth domain on enabling environment. These indicators include social connections, physical safety, civic freedom and access to public transportation.

The measuring of each domain is made possible by using the abovementioned indicators. To calculate the index value for

each domain, these values were first adjusted to express them as positive indicators: the proportion of households below the poverty rate indicator was reversed to make it the proportion of persons who are non-poor. One other adjustment included a use of the logarithm of the GNI per capita rather than its raw data. The final calculation was based on the normalized value of these adjusted values. The normalized value for each indicator was obtained by dividing the difference between the adjusted value and the observed minimum of that value by the difference between the upper and lower goalpost (which are specified for each indicator in the tables included in the paper). The final score of each domain was derived from the geometric mean of the weighting of normalized grades of indicators in each domain. The weight of each indicator in each domain is specified in the relevant table. The overall score of the GAWI was calculated with the geometric mean of the four domains with equal weights.

RESULTS

Income Security

Indicator 1.1: The pension income coverage is the ratio of older people aged 60 and above who receive pension. This ratio was estimated to be around 26% in 2013.

Indicator 1.2: The poverty rate in old age is the ratio of older persons living in households whose income or consumption is below the relative poverty line. This line comes from a 50-percent average income

or consumption. According to Iran's HEIS in 2013, the ratio was 20.3% meaning that 79.7% of the households of older people were above the poverty line (Table 1).

Indicator 1.3: The relative welfare of older people is the ratio of the average income/expenditure of the population aged 60 and above to the average income/expenditure of the rest of the population. The larger this ratio, the higher the relative welfare of people aged 60 and above. This ratio is 110.06 using the HEIS data (Table 1).

Indicator 1.4: The GNI per capita is the average income per person and equal to the total value added of all domestic producers plus taxes (minus subsidies) for products not subject to final product valuation together with the net income of the labor force (salary and property income) from the rest of the world divided by the population of the country. This average is proportionate to

the purchasing power of the dollar currency with the fixed prices of 2011 and represents individuals' living standards in a given country. According to World Bank (2013) estimates, the GNI per capita was USD13,451 as of 2013 (Table 1).

Health Status

Health is a major aspect in measuring the wellbeing of older persons. Longevity is associated with physical disability correlated with increasing the risk of the onset of illness and disability. The ideal of most people and communities is to maintain health in old age. As one ages, access to effective social and health care has a direct impact on individuals' personal lives. Maintaining health also affects the ability of older people to achieve other health-related outcomes. Another important aspect of life affected by health is the ability to

Table 1

Average values of "income security" for each indicator in Iran, 2013

Income Security	Pension income coverage	No Poverty rate in old age	Relative welfare of the elderly	GNI per capita
Indicators	1.1	1.2	1.3	1.4
Weight	40%	20%	20%	20%
adjusted (raw)	26.40(26.40)	79.7(20.3)	110.6(110.6)	4.1(13451)
Normalised	24.8	58.6	72.1	65.2
Upper goalpost	100	100	136	4.8(65000)
Lower goalpost	2.1	51	45	2.8(700)
Geometric Mean	44.3			

Source: Statistical Center of Iran (2013) for indicators 1.1, 1.2, 1.3 and World Bank for 1.4

* Adjusted value of poverty rate in old age is equal to 100 minus raw value (20.3) and that of GNI per capita is its logarithm.

live independently and remain self-reliant. According to the WHO, health is “a state of physical, mental, and social health, and not just a lack of disease or disability”; hence, mental health is considered as an important dimension of this concept. As a result, it was deemed appropriate to use the three indicators of life expectancy by the age 60, healthy life expectancy by the age 60, and psychological wellbeing to measure health outcomes (Zaidi, 2013).

Indicator 2.1: Life expectancy at the age of 60 is the average of years that a 60-year-old is expected to live under conditions that are at risk of the age- and sex-specific mortality rates expected at this age. As shown in Table 2, life expectancy at the age of 60 was estimated around 20 years in 2013.

Indicator 2.2: Healthy life expectancy at the age of 60 is the average number of years a 60-year-old is expected to live in full health, taking into account illness and injuries. The value of this index for Iran is

estimated to be 15.3 years based on WHO estimation (Table 2).

Indicator 2.3: Psychological wellbeing was measured using a question for two groups at the age of 35 and above. By answering this question, this measure was calculated from the ratio of people aged 50 years or more who felt their life was meaningful to people aged 35-49 who felt the same. As shown in Table 2, according to the Gallup Institute, the ratio of people 50 years or older who feel their life is meaningful is about 84 percent as against those aged 35-49.

Capability

Education and employment are two of the factors that empower older people to overcome ageing problems. Employment is introduced as an interface for economic empowerment: the access of older people to the labor market and, therefore, their ability to supplement pension income through wage-earning income and access to

Table 2
Average Values of “Health Status” for each Indicator in Iran, 2013

Health Status	Life expectancy at 60	Healthy life expectancy at 60	Psychological well-being
Indicators	2.1	2.2	2.3
Weight	40%	40%	20%
Adjusted (all raw)	20.0	15.3	83.90
Normalised	41.7	52.5	47.8
upper goalpost	27.0	21.0	110
lower goalpost	15	9.0	60.0
Geometric Mean			47.0

Source: WHO 2015 for Indicators 2.1 and 2.2; Gallup 2013 for indicator 2.3.

support networks associated with jobs and workplace (Zaidi, 2013). The third domain of the GAWI is defined by two indicators: first, the employment rate or ratio of older people who are employed and second, the proportion of older people with secondary and higher education.

Indicator 3.1: The employment rate measures older persons' access to and presence in formal and informal sectors of the labor market, hence, their ability to complete payroll pensions as well as their access to work-support networks. This measure was calculated as the proportion of the population aged 55-64 who are employed. Although censuses provided the data needed for the calculation, the International Labor Organization (ILO) statistics were the basis for calculating this rate which, as estimated in Table 3, is about 35.5% for Iran.

Indicator 3.2: Older persons' education translates into the ability and adequacy of

those persons in terms of knowledge, skills and attitudes that increase the quality of life in ageing. Education is an indication of a long-term accumulation of skills and abilities that demonstrate human and social capital among older persons. This measure was derived from the proportion of the population of 60 and above who had high school and higher education. The data needed to calculate it internationally could be derived from the Barro-Lee databases and nationally from local censuses. International estimates depict that 29.8% of Iran's older people meet the minimum level of education mentioned. Table 3 shows the statistics in this regard.

Enabling Environment

Indicator 4.1: Social connection measures the mental dimension of relatives and friends in supporting older people. The data needed to measure this indicator was derived from this question through a survey: "If

Table 3
Average Values of "Capability" for Each indicator in Iran, 2013

	Employment of older people	Older people's education
Indicators	3.1	3.2
Weight	50%	50%
Adjusted (all raw)	35.5	29.8
Normalised	9.2	29.3
Upper goalpost	100	100
Lower goalpost	29	0.7
Geometric Mean	16.4	

Source: ILO (2013)

you were in trouble, do you have relatives and friends you can count on to help you whenever you need them?”. The percentage of people aged 50-plus who responded “yes” to this question determined the value of this indicator. This data is available for countries covered by the Gallup Analytics and is about 55 percent for Iran. The data is given in Table 4.

Indicator 4.2: Physical safety measures how safe people feel when they are in their neighborhood. This indicator was measured by the percentage of people aged 50-plus who responded, “yes” to the survey question: “Do you feel safe walking alone at night in the city or area where you live in?”. According to Gallup, 65 percent of Iranian respondents have answered “yes” The relevant data is presented in Table 4.

Indicator 4.3: Civic freedom measures how much control older people feel they have over their lives. This was measured by the percentage of people aged 50-plus who provided positive response to the survey question: “In this country, are you satisfied or dissatisfied with your freedom to choose

what you do with your life?”. Table 4 shows Gallup Analytics data for Iran which shows that as many as 59 percent report satisfaction with their civic freedom.

Indicator 4.4: Access to public transportation measures access to and quality of public transport which is key to older people’s quality of life. This indicator was measured by the percentage of people aged 50-plus who provided a positive response to the survey question: “In the city or areas where you live, are you satisfied with public transportation systems?” The Gallup Analytics data for Iran implies that close to 71% report satisfaction with their public transport system.

OVERALL INDEX VALUE AND RANKING FOR IRAN

Calculations based on estimates of the four domains of GAWI for Iran show that the lowest score (16.4) is in the domain of capability and the highest (62.2) in the domain of enabling environment. As shown in Table 5, in the two domains of income security and health status of older people,

Table 4
Average values of “Enabling Environment” for each indicator in Iran, 2013

Enabling Environment	Social connections	Physical safety	Civic freedom	Access to public transport
Indicators	4.1	4.2	4.3	4.4
Weight	25%	25%	25%	25%
Adjusted (all raw)	55.0	65.0	59.0	71.0
Normalised	55.0	65.0	59.0	71.0
Geometric Mean	62.2			

Source: Gallup (2013)

Table 5

Iran's index value in 2013: Overall and for each domain

Overall Index	Income Security	Health Status	Capability	Enabling environment
Domains	1	2	3	4
Weight	25%	25%	25%	25%
Value	44.3	47.0	16.4	62.2
Normalised	41.0	51.9	19.9	41.0
Geometric Mean	36.3			

the values of domain-specific indexes are 44.3 and 47.0, respectively, and are close to each other. With these figures, we are able to find the rank of the country globally. However, in order to calculate the final score based on GAWI methodology, it is necessary to convert the scores to normalized data. For this, as in the previous calculations, the value of each domain minus the minimum observed value is divided over the interval of the maximum and minimum. These scores are calculated and are presented in

Table 5. Accordingly, the geometric mean of normalized scores would be 36.3; the score would determine the international position of Iran in GAWI.

The overall index score and ranking of each of the domains for Iran are shown in Table 6 and Figure 2. Rankings are achieved by comparing the relative position based on each domain's score with the other 96 countries included in the 2015 GAWI. By definition, a higher score of the GAWI does not necessarily mean a higher rank, as

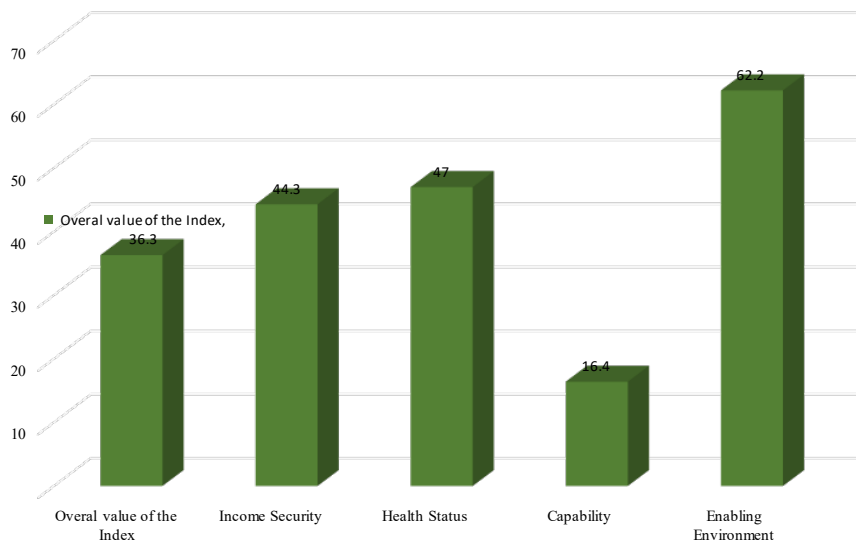


Figure 2. Iran's GAWI score in 2013: Overall and for each domain

the rank depends the spread of the index's score. Although the highest score for a domain belongs to the domain of enabling environment (62.2), Iran's relative position is given by its rank of 64 among 97 countries within this domain. Iran's weakest ranking among these countries is related to the domain of capability, which points to the areas of improvements for Iran in improving its relative position. The same goes for the domain of income security since the country is ranked 72. In terms of older people's health, Iran is ranked 58 among 97 countries which points to better relative positioning than the income security or capability.

The information provided in Table 6 in addition to giving the scores and rankings of countries in the highest 10 and lowest 10 ranks, shows also the six countries with ratings close to Iran. The table thus provides an opportunity to compare Iran with these countries. In general, the final GAWI score shows that Iran is in the middle of the two groups of countries where older persons' life is at very high and very low standard levels. However, comparing Iran with the top 10 countries which are generally developed and developing societies demonstrates that the living conditions of older persons is a bit alarming both in terms of rank and index

Table 6

Rankings and values for Iran (2013) and selected countries (2015): Overall and for each domain

Country/ GAWI Domain	Overall Index		Income Security		Health Status		Employment and education		Enabling environment	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value
10 countries ranked at the top:										
Switzerland	1	90.1	27	77.3	2	81.3	2	75.0	1	83.7
Norway	2	89.3	2	89.4	16	73.5	1	76.3	4	80.1
Sweden	3	84.4	7	83.5	12	75.2	5	65.6	6	79.4
Germany	4	84.3	15	80.9	11	75.6	3	68.4	11	78.6
Canada	5	84	10	82.9	4	80.3	10	61.2	9	78.9
Netherlands	6	83.0	5	85.9	13	74.8	12	59.6	5	79.6
Iceland	7	81.8	4	86.6	8	78.2	18	54.5	10	78.8
Japan	8	80.8	33	75.1	1	83.9	7	62.7	21	75
USA	9	79.3	29	76.3	25	70.1	4	65.7	17	76.8
United Kingdom	10	79.2	14	81.5	27	69.3	20	53.6	3	81.8
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Mongolia	72	37.4	31	75.8	93	20.5	64	27.9	62	62.9
Ukraine	73	37	42	70.9	85	27.3	44	34.8	85	54.8

Table 6 (Continued)

Country/ GAWI Domain	Overall Index		Income Security		Health Status		Employment and education		Enabling environment	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Indonesia	74	36.6	86	19.9	70	37.8	61	28.8	8	79
Iran	--	36.3	72	44.3	58	47.0	88	16.4	64	62.2
Turkey	75	36.3	35	73.6	52	52.5	93	7	40	67.6
Venezuela	76	35.9	66	50.6	29	69.1	51	31.6	93	49.5
Moldova	77	35.1	63	53.4	90	25.8	50	32	76	57.7
.										
.										
10 countries ranked at the bottom:										
Iraq	87	23.2	60	59.1	75	32.8	92	11.9	92	49.6
Uganda	88	23.1	92	15	92	22.1	45	34.4	70	58.9
Rwanda	89	22.7	93	12	81	30	90	13.8	13	78.2
Zambia	90	22.3	89	18.8	91	24.7	67	26.2	84	54.8
Tanzania	91	15.9	94	9.3	69	39.8	89	13.8	88	54.5
Pakistan	92	12.7	95	6.4	78	31.8	70	25.8	81	56
West Bank & Gaza	93	12.3	81	24.7	73	36.6	96	1.8	63	62.3
Mozambique	94	4.5	84	22.8	94	18.9	94	4.5	96	45.1
Malawi	95	4.1	96	5.6	95	18.8	84	19	94	48.4
Afghanistan	96	3.6	83	23.3	96	7.1	91	12.1	95	47

Source: Authors' calculations for Iran, and HelpAge International (2015a)

score. The proximity score in the domain of empowerment with less developed countries and also having a lower score than countries such as Venezuela, Uganda, Zambia and Pakistan further exacerbate existing concerns.

DISCUSSION

Other than many benefits that can be derived from the GAWI, including international comparisons and identification of areas of

differences across countries, the Index has a high potential for providing guidance towards formulation of policies for the implementation of Article 14 of the Islamic Republic of Iran Population Decree on ageing related issues. This Index is also able to monitor the strengths and weaknesses of ageing programmes and is, therefore, a very useful tool for the monitoring and evaluation of the effectiveness of such programmes. In this way, it can help us monitor the condition of older persons and its policy orientation

can highlight the strengths and weaknesses of ageing policies.

The GAWI has its limitations of course. To begin with, it is necessary to point out that as indicated in the 2015 report (HelpAge International, 2015a), the index covers only 97 countries due to lack of access to data. In other words, around half of the countries of the world are not included in this international scale. Another significant limitation is the current inability of the index to incorporate certain issues of ageing such as representing some of the notable discrepancies between and within countries with regard to gender disparities.

Hopefully, over time and with the improvement of ageing studies, the GAWI will be able to provide more comprehensive insights regarding the betterment of older persons' living conditions.

CONCLUSIONS

The main objective of this paper was to calculate the GAWI for Iran and include this country in the list of those considered for international comparisons with respect to the older population's wellbeing. The results of this calculation and comparison – i.e. Iran's overall rank being 76 shared with Turkey among 97 countries – indicates a huge gap with developed countries and also those developing countries whose development index is close to that of Iran. Naturally, bridging this gap necessitates several policy options for older persons in Iran. Firstly, a major challenge in enhancing older people's lives in Iran is over distributing resources equitably and ensuring income security. Although recent findings from

the National Transfers Accounts show that pension coverage will continue to improve in subsequent generations (Koosheshi et al., 2017), promoting the economic wellbeing of older people requires further initiatives. Secondly, comparing Iran's score and rank in the domain of enabling environment with other countries portrays that despite the higher score, the conditions of the country are closer to those countries that have almost no comprehensive ageing plans. Resolving this problem of course requires more determination in provision of facilities based on age-friendly plans. Finally, the lowest score and the most unfavorable position of the country is in the capability domain. However, as explained earlier about pension coverage, the cohort changes are promising in bringing forward changes and improvements in this domain of the GAWI. As generations replace each other in the mid and long term, the ratio of older people with higher education will increase and as the socio-economic conditions of the ageing phase would most probably improve in particular due to increasing life expectancy, older persons will participate more in the labor market.

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