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The Trend of Age Distribution in WHO's EMRO countries during the Last Three Decades (1980-2010) and its Future Health Policy Requirements

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Abstract

Introduction: Investigation trend of age distribution can be helpful for policymakers to predict the potential challenges of health care systems in order to improve responsibilities to future health needs. Therefore the aim of the present study was to investigate the trend of age distribution in the EMRO region in order to determine future health policy requirements.
Methods: This study was conducted in 2013 using the general population data of 23 EMR (Eastern Mediterranean Region) countries during the last three decades (1981-1990, 1991-2000 and 2001-2010). Data included 3 main age groups: percentage of 0-14 year olds, 15-64 year olds and 65 and above year old population from the total population. The Descriptive statistics were used to study the growth of each age group by using the Excell2007 Software.
Results: The percentage of children in all EMRO countries (exempt Afghanistan and Somalia) have considerably decreased during the last three decades. On the other hand, in most (17 from 23) EMRO countries, the percentage of the elderly have considerably increased during the last three decades.
Conclusion: The region is going to be an old and elderly population therefore health care systems should be ready to response to this age groups' health needs. Future studies needs to clarify the old ages health needs such as diet, sport, health facilities and education.

Keywords: Age Distribution, EMRO, Health Policy

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1. Introduction

In 2012, there were 4.3 billion people living in the Asian and the Pacific region, which is equal to 60 percent of the total global population. Nowadays, Asian and Pacific region countries are in the middle or advanced stages of a demographic transition. The age structure in Asian countries is rapidly in change as a result of shifting from high fertility and high mortality levels towards low fertility and low mortality levels [1]. But the demographic transition can be an opportunity or a challenge for countries. Correct identifications and the use of population capacities along with timely response to economic and health needs of the population could lead to progress toward development goals.

Also, the Eastern Mediterranean Region with nearly 583 million people-living in parts of the both Asia and Africa-have demographic transition reflecting sharp reductions in mortality rates at all ages. Thus as a result of the demographic transition, health systems in EMRO countries are facing new challenges of change in disease patterns and socio-economic features of general population [2, 3]. In such situations, the investigation trend of age distribution can be helpful for policymakers to predict the potential challenges of health care systems in order to improve future health needs.

The main question of the present study was: How much should a country do investment in geriatrics or pediatrics? Determination trend of age distribution can be the first step to answer the above question. Therefore the aim of the present study was the investigation trend of age distribution in the EMRO region in order to determine future health policy requirements.

2. Methods

This study was conducted in 2013 using the general population data of 23 EMR (Eastern Mediterranean Region) countries during the last three decades (1981-1990, 1991-2000 and 2001-2010). Data were including 3 main age groups: percentage of 0-14 years old, 15-64 years old and 65 and above years old population from total population. The data was collected from the latest World Bank published data until 2013. The descriptive statistics were used to study the growth of each age group by using Excell2007 Software.

3. Result

The average percentage of each age group in each country by 3 decade (1981-2010) are presented in Table 1. While Afghanistan and Somalia have increasingly changed in the percentage of 0-14 year old population, other countries in the region have had a decreasing change in the percentage of this age group. Also except 6 countries (including Bahrain, Emirates, Iran, Jordan, Somalia and Yemen) that have had a decreasing change in the percentage of 65 and above year old population, the other 17 countries have increasingly changed in the percentage of this age group.

A change in the percentage of 0-14 year old and 65 and above year old population during the last three decades are presented in Figure 1 and Figure 2 respectively. According to Figure 1, most of the countries have had a considerable decrease in the 0-14 year old age group relatively.

Table 1. The average percentage of each age group in each country during the last three decades (1981-2010)

Country Name	Percentage of 0-14 year age group from total population			Percentage of 15-64 year age group from total population			Percentage of 65 and above year age group from total population		
	During 1981-1990	During 1991-2000	During 2001-2010	During 1981-1990	During 1991-2000	During 2001-2010	During 1981-1990	During 1991-2000	During 2001-2010
Afghanistan (AFG)	48.0	48.6	49.2	50.0	49.4	48.7	1.9	2.1	2.1
Bahrain (BHR)	33.5	30.9	25.6	64.1	66.7	72.2	2.4	2.4	2.2
Djibouti (DJI)	45.2	43.2	37.1	52.3	54.0	59.5	2.5	2.8	3.4
Egypt (EGY)	39.8	37.5	32.7	55.6	57.4	61.9	4.7	5.1	5.4
Emirates (ARE)	31.1	27.2	19.2	67.7	71.8	80.1	1.3	1.0	0.7
Iran (IRN)	31.1	27.2	19.2	67.7	71.8	80.1	1.3	1.0	0.7
Iraq (IRQ)	45.2	40.8	26.6	51.8	55.4	68.6	3.0	3.8	4.9
Jordan (JOR)	47.4	41.2	37.4	49.2	55.7	59.4	3.5	3.1	3.2
Kuwait (KWT)	36.8	28.1	25.5	61.8	69.6	71.6	1.4	2.3	3.0
Lebanon (LBN)	36.5	31.1	27.0	58.1	62.4	65.4	5.4	6.5	7.7
Libya (LBY)	44.0	37.3	30.7	53.0	59.1	65.0	3.0	3.6	4.3
Morocco (MAR)	42.3	37.3	30.5	54.6	58.5	64.5	3.1	4.2	5.0
Oman (OMN)	45.6	40.2	33.5	52.0	57.6	64.0	2.4	2.2	2.4
Pakistan (PAK)	43.3	42.9	38.0	52.9	53.2	57.8	3.8	3.9	4.1
Palestine (PAL)	32.5	29.1	27.7	58.8	61.2	62.2	8.7	9.7	10.1
Qatar (QAT)	29.6	26.6	21.3	69.2	71.9	77.3	1.3	1.5	1.4
Saudi Arabia (SAU)	42.9	40.7	34.0	54.4	56.4	62.8	2.7	2.9	3.2
Somalia (SOM)	44.2	46.1	47.7	52.5	50.9	49.5	3.3	3.1	2.9
South Sudan (SSD)	44.2	44.5	43.9	53.1	52.6	52.9	2.7	2.9	3.2
Sudan (SDN)	46.3	44.4	43.0	50.7	52.6	53.9	2.9	3.0	3.1
Syrian (SYR)	48.1	43.5	38.2	48.9	53.3	58.4	2.9	3.2	3.5
Tunisia (TUN)	39.9	33.8	25.8	56.3	60.9	67.6	3.8	5.3	6.7
Yemen (YEM)	50.9	50.2	45.2	46.4	46.7	52.1	2.7	3.1	2.7

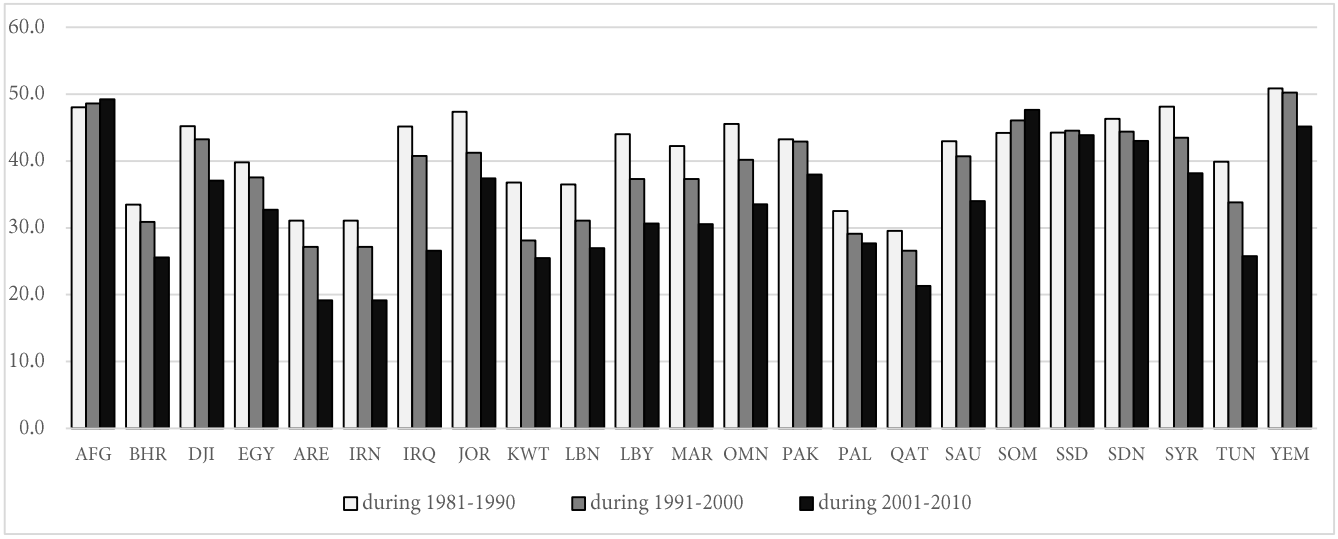

Figure 1. Percentage of 0-14 year old from total population in EMRO countries during the last three decades

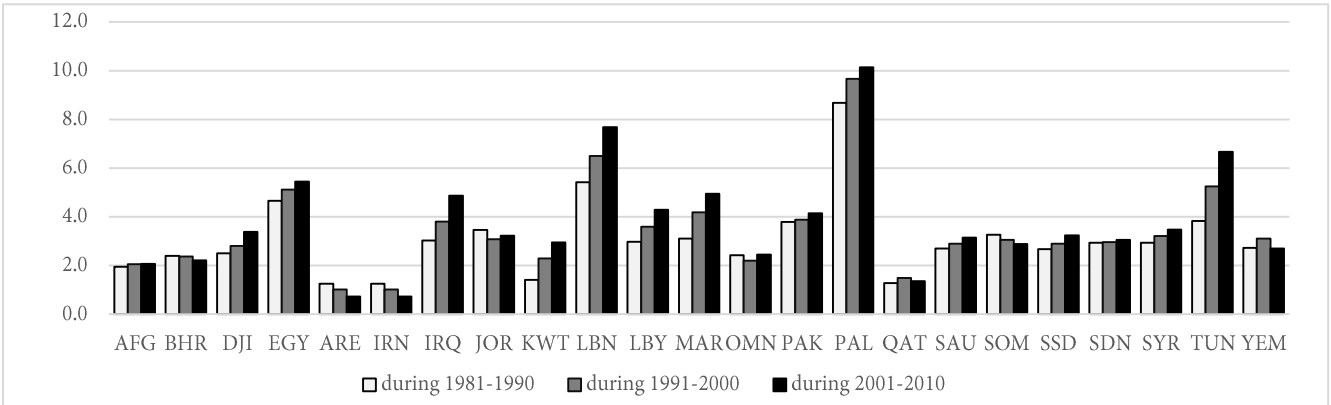

Figure 2. Percentage of 65 and above year olds from total population in EMRO countries during last three decades

On the other hand, according to Figure 2, most of them have considerable increases in age groups of 65 and above. The average percentage of growth in each age group in each country during 1981-2010 are presented in Table 2. According to Table 2, Iraq, Emirates, Iran, Tunisia and Kuwait respectively have the maximum decrease in the

percentage of 0-14 year old groups. Also Kuwait, Tunisia, Iraq, Morocco and Libya have respectively the maximum increase in the percentage of 65 and above year old group.

Table 2. Average percentage of growth in each age group in each country during 1981-2010

Country Name	Age 0-14 % total	Age 65 and above % total
	Average Growth During 3 decade (1980-2000)	Average Growth During 3 decade (1980-2000)
Afghanistan	2.6	6.0
Bahrain	-23.6	-7.8
Djibouti	-18.0	35.2
Egypt	-17.8	17.0
Emirates	-38.4	-42.4
Iran	-38.4	-42.4
Iraq	-41.2	60.7
Jordan	-21.0	-6.6
Kuwait	-30.7	109.5
Lebanon	-26.1	41.8
Libya	-30.3	43.9
Morocco	-27.7	59.4
Oman	-26.4	1.3
Pakistan	-12.2	9.5
Palestine	-14.9	16.8
Qatar	-27.9	6.0
Saudi Arabia	-20.8	17.0
Somalia	7.8	-11.7
South Sudan	-0.9	21.1
Sudan	-7.2	4.1
Syrian	-20.7	18.6
Tunisia	-35.4	74.4
Yemen	-11.2	-1.2
Total	-20.9	18.7

4. Discussion

The percentage of children in all EMRO countries (exempt Afghanistan and Somalia) has considerably decreased during the last three decades. On the other hand, in most (17 from 23) EMRO countries the percentage of the elderly has considerably increased during the last three decades. Also in some countries like Kuwait and Iraq the situation is worse, as these countries have a maximum decrease of children and an increase of the elderly together.

We should emphasize that the region is going to be an old and elderly population that would need special attention including a change of life style, special hospital for these age groups, health care facilities and special education for health care workers and also the families.

It should not be forgotten that a special diet and special care must be considered for looking after this population.

5. Conclusion

The region is going to be an old and elderly population therefore health care systems should be ready to response to this age groups' health needs. Future studies needs to clarify the old ages health needs such as diet, sport, health facilities and education.

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Authors' Contributions

All authors were involved in every stage of this study. All authors confirmed the final draft before submission.

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References

1. Statistical Yearbook for Asia and the Pacific, Flagship publications, 2012.
2. Musaiger A. Overweight and obesity in the Eastern Mediterranean Region: can we control it. East Mediterr Health J. 2004;10(6):789-93.
3. Siddiqi S, Masud TI, Sabri B. Contracting but not without caution: experience with outsourcing of health services in countries of the Eastern Mediterranean Region. Bull World Health Organ. 2006;84(11):867-75.