

## Some Demographic Aspects of Population Aging in Malaysia

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**Abstract:** One of the most important demographic events occurred in the 21st century is the increasing number of older persons in community through a demographic event, known as demographic aging, or population aging. There are signs that population of Malaysia is starting to aging. As the percentage of older population continues to increase, the need for extensive and current information on this older population increases. This article attempts to review some emerging issues that form the context of demographic aging in Malaysia. To meet the objective, this article uses secondary data as its main devices. It reviews some published materials and highlights some emerging issues in terms of demographic aspects. Secondary data in this discussion are derived from the report of Population and Housing Census of Malaysia and various books on demographic aging in Malaysia. There are some related issues can be analyzed, include number of older people, median ages, dependency ratio, aging index and geographic distribution. From the discussion it is clear that the population of Malaysia is moving towards aging.

**Key words:** Population aging • Fertility • Older person • Demographic transition

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### INTRODUCTION

One of the most important demographic events occurred in the 21st century is population aging. Population aging, a term that used to refer to the increasing number of older persons in the community is underway in most of the countries in the world. Population aging is a by-product of the process known as demographic transition. Demographers use this term to refer to the changes in terms of mortality and fertility that took place in European countries beginning in the eighteenth century. Particularly, demographic transition refers to the transition from high rates of both fertility and mortality to a low rate of fertility and mortality. According to the demographic transition, every country will go through four stages of transition of fertility and mortality over time. This transition produces older people in society. Wan Ibrahim and Zainab [1] who review the works from Johnson and Falkingham, found that in the initial stage, the majority of populations are involved in

agriculture and both levels of fertility and mortality are high. The population has a youthful age profile with a high proportion of the young. In the second stage, the economy of societies starts to be modernized or industrialized. Mortality rates begin to fall. Because of the improvement in mortality is concentrated on younger ages, the population structure still younger at this stage. In the third stage, the economy is industrial. Fertility rates begin to decline along with mortality rates and the proportion of the elderly population begins to increase and in the final stage, the economy is postindustrial. Fertility and mortality level reach equilibrium. Population growth is again low and could be approaching zero population growth. The age structure of the population stabilizes with a relatively high proportion of the elderly people. The shift in fertility and mortality is closely related to the level of modernization or the states of economies of the societies. Thus, the absolute number and proportion of elderly people in a population varies according to the stage of demographic transition of a country.

In 1950 there were 205 million persons aged 60 years and older throughout the world [2]. At that time only 3 countries had more than 10 million people aged 60 or older, that was China (42 million), India (20 million) and the United States (20 million). Fifty years later, in 2000, the number of persons aged 60 years and older has increased to about 606 million, where the number of countries with more than 10 million people aged 60 years and older increased to 12, including 5 with more than 20 million: China (129 million), India (77 million), United States (46 million), Japan (30 million) and the Russian Federation (27 million). In the next 50 years, the global population aged 60 years and older is projected to increase to 2 billion and by then 33 countries are expected to have more than 10 million people aged 60 years and older and 5 countries with more than 50 million older people aged 60 years and older: China (437 million), India (324 million), United States (107 million), Indonesia (70 million) and Brazil (58 million) [2].

As the number and percentage of older population of Malaysia continues to increase, the need for extensive and current information on this older population increases and thus, issues regarding older persons are becoming increasingly important to be discussed. Since older persons receive attention in Malaysia, many of the issues of this population have been researched. This article presents the results of a secondary analysis on some demographic aspects of population aging in Malaysia in terms of number of older people, median ages, dependency ratio, aging index and geographic distribution.

## **MATERIALS AND METHODS**

Secondary data in this discussion is taken from the report of Population and Housing Census of Malaysia as well as various books related to Malaysian population and the older persons in Malaysia. In the words of research methods, this study employed content analysis design. Content analysis is defined as any technique for making inferences by objectively identifying specific characteristics of messages [3, 4]. Content analysis is a powerful tool to help researcher examining certain information contained in any written documents. Content analysis is a technique for examining the content or information and symbols contained in written documents and it can discover and document specific features in the content of a large amount of material [5]. What was firstly done is the identification of relevant archival sources. The most important sources appropriate are the report of

Population and Housing Census of Malaysia [6, 7], socio-economic consequences of the aging of population survey 1986 [8], the elderly in Malaysia [9, 10] and several books regarding older population in Malaysia. All these relevant archival sources were selected purposively. There are several themes which are relevant in the study of population, particularly some demographic aspects of population aging had identified.

## **RESULTS AND DISCUSSION**

In line with the increasing in older population worldwide, the trend is also observed in Malaysia. As stated in the introduction above, the purpose of this article is to highlight the emerging issues of demographic aspects of population aging in Malaysia. The emerging issues of older population can be analyzed through a number of related indicators. By using secondary data from national censuses and books related to older population, some these emerging issues of population aging such as number of older persons, median ages, dependency ratio, aging index and geographic distribution have been traced.

**The Number of Older Persons:** Population aging globally occurs when the proportion of older people relative to younger generations increases [11]. The main process behind the global population aging is a process known as demographic transition in which mortality and then fertility decline from higher to lower levels. Modernization which started some decades ago, in the middle and the second half of the XX century, that all nations and cultures go with the same path [12], has created the demographic transition. Although the number of older persons aged 60 and over in Malaysia is still small [13], there are signs the population of Malaysia is moving towards aging [14]. In 1970 the population aged 65 and over was 316,852 and it has increased to 788,000 persons in 1995. The number of older persons aged 60 and over has increased from 3.1% (1970), to 3.9% (1995), increased further to 4.2% (2000) and 7.3% in 2020 [13]. In 2020, older person aged 65 and over in Malaysia is projected to be 7.3%.

**Median Age:** Countries with higher of median age shows the life expectancy of the country's population is higher. The median age indicates the status of youthfulness of the population. When it becomes higher and higher, the youthfulness of the population decreases [8]. The median age in Malaysia is increasing. Department of Statistics

Malaysia [6] defines median age as the age that divides the population into two groups of equal size where half the population is below this age and another half above that age. In 1970, the median age of the population in Malaysia was 17.4 years; this figure rose to 19.6 (1980) and 21.9 (1991) and is expected to increase further to 24.3 and 32.1 in 2000 and 2030 respectively [6].

In 2030 it is projected that the median age of the population in Malaysia to be 32.1, meaning that at that time there will be 50% of population in Malaysia would be aged 32.1 years or more and another 50% aged less than 32.1 years. In terms of its distribution, the median age is higher in states with higher rate of industrialization and urbanization such as Penang, Federal Territory of Kuala Lumpur and Selangor. Perak and Malacca who have high out-migration rate also have a high median age [6]. The increasing in the median age indicates the number of young people decreases and the number of older population increases, indicating the structure of Malaysia's population is moving towards aging.

**Dependency Ratio:** Dependency ratio can also be used as a measure of a population moving towards aging. Dependency ratio of the world's populations continues to rise. The aging of a population is often viewed to increase the support burden on the working generations and how far the support burden can be examined through the dependency ratio. The dependency ratio in general, is the ratio of the number of people under the age of 15 years and the number of persons aged 65 and over, in every 100 persons of working age 15-64 years. It reflects the extent to which the population in productive age population to bear the burden of non-productive, both senior citizens and children. In developing countries, the dependency ratio is higher, meaning that non-productive population, especially children, is many. In more advanced society this ratio is lower. Due to non-productive population is divided into two groups, that are children and older persons, the dependency ratio can be seen from three different aspects, that are the general dependency ratio, as described above; young age dependency ratio and the old age dependency ratio. In developed societies, the young age dependency ratio is rather low, while the old age dependency ratio is high, which reflects the number or proportion of older persons in developed countries is bigger.

Malaysia is now experiencing a gradual decline in the total dependency ratio. The same is true for the young dependency ratio. The total dependency ratio was declined from 99.6 per 100 populations in 1970, to 81.8 in

1980 and declined further to 77.3 in 1990. In terms of young dependency ratio, the figure was declined from 88.9 per 100 populations in 1970 to 71.0 in 1980. It was estimated to decline to 54.6 per 100 populations in the year 2000. While these two dependency ratios were experiencing a gradual decline, old dependency ratio, on the other hand, will be experiencing a gradual increase. The old age dependency ratio is projected to increase from 10.4 in 1970 to 13.9 in the year 2000 [8].

**Aging Index:** Aging index is a concept that shows the number of population aged 65 and over in every 100 population aged 15 years and less. Country with a low aging index will have a small number of older persons and at the same time the population will have a large number of the young. The bigger the aging index the greater the older persons per 100 populations aged 15 years and less. Today the aging index is higher in developed countries. The aging index presently is highest in Europe and lowest in Africa and the Near East [15]. In Malaysia, this aging index too is increasing. This index was 10.5 (1957) and has been risen to 11.6 (1970) and 14.6 (1980). This figure shows that in every 100 population aged (0-14) there were 11 people aged 65 and above (1957). In 1970, there were 12 aged people in every 100 young people aged (0-14), while in 1980 it increased to 15. It is expected to reach 18.2 in 2000 [8], showing there is a progressive increase of the older population in Malaysia.

**Geographical Distribution:** The geographical distribution of older population is another aspect worth noting. Aging, at the individual level, in general, involves a gradual deterioration of physical ability which normally leads to changing the lifestyle. The distribution of older population however is not distributed equally across the states in Malaysia. Largely older population is concentrated in rural areas, where older people are more in rural areas than in urban areas. One explanation can put forwards is that most of older person in Malaysia nowadays, although they are working in urban areas, they are from rural areas. Most of them, when they were young, they moved to urban areas to seek better opportunity for education and working environment. The older populations normally, when they reached a retirement age, they likely to choose to live in a suitable environment and close surrounding of their adult children. Thus, the high concentration of older population in rural areas is due to the fact that besides the high rate of out-migration of the younger generations, many of older population from urban areas migrated to rural areas after retirement.

Time series censuses data on older population in Malaysia reveal that older population in rural areas is becoming progressively larger [10]. In 1970 for example, the majority of older population aged 60 years and above in Malaysia lived in rural areas. There were only 26.9% of older population at that time lived in urban areas. In 1980 and 1991 censuses, although these figures were declined, the proportion of older people in Malaysia was still concentrated in rural areas. In 1980 there was about 67.1% of older population lived in rural areas [9]. Although the proportion of older population in rural areas in 1991 was still larger than of urban counterpart, as the definition of urban areas has been changed in the 1991 census, the proportion living in rural areas at that time became smaller (54.4%).

### CONCLUSION

By looking at the number of population aged 60 and over, the median age, dependency ratio and aging index as measures of the aging of population, it is clear that there is a progressive increase of older population in Malaysia. Although the number of older persons aged 60 and over is still small, there are signs the population of Malaysia is moving towards aging. The median age in Malaysia, the age that divides the population into two groups of equal size in terms of age, is also increasing, indicating that the population of Malaysia is aging. Old age dependency ratio is also continues to be increasing. Aging index is one more indicator of aging of the population. Country with a high aging index will have a big number of older persons. In Malaysia, this aging index too is increasing steadily indicating the older population in Malaysia is moving towards aging. In terms of geographical distribution, the older population increased more substantially in rural areas. As the percentage of older population in Malaysia continues to increase, the need for extensive and current information on this population increases. Until now older person is not facing problems related to support, but there were signs they will be abandoned. Thus, support system of older persons should be an important agenda for the government in facing the future older persons.

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