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Malaysia's Ageing Population: A Demographic Perspective

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ABSTRACT

Malaysia is currently undergoing a significant demographic transition characterised by a rapid increase in population ageing. Such shift is fundamentally driven by the sustained declines in both fertility and mortality alongside continued improvements in life expectancy across the population. This study examines the historical and contemporary trends of population ageing in Malaysia using secondary data obtained from the Department of Statistics Malaysia (DOSM) and other national agencies. Descriptive statistics were employed to investigate shifts in age structure, dependency ratios, sex composition, and ethnic distribution. The findings demonstrate a steady increase in the proportion of older adults, with the population aged 60 and above rising from 5.4% in 1970 to 9.7% in 2020 and is projected to exceed 16% by 2040. The ageing index and old-age dependency ratio have also showed substantial growth, indicating mounting socioeconomic and health-related demands. Furthermore, disparities across ethnic groups highlight important demographic nuances. These findings indicate that Malaysia's transition towards an ageing society is occurring more rapidly than the trajectories historically observed in numerous developed nations. Such demographic transitions have critical implications for healthcare provisioning, labour market sustainability, social support systems, and long-term policy planning. Strengthening integrated ageing policies, expanding geriatric care, enhancing social protection mechanisms, and promoting active ageing are essential to ensure a resilient and inclusive response to Malaysia's evolving demographic landscape.

1. Introduction

Population growth is an important events that occurs throughout the world. Its change is often continuous; number of people added to the world everyday is unprecedented and unparalleled its consequences. The past few years have witnessed a continuous in the global population, rising from 5.0 billion in 1986 to 6.0 billion in 1998, 7.0 billion in 2010 and 7.8 billion in mid-2020 [1]. However,

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compared to developed countries, most developing countries experiencing rapid changes in the number of children, the working age group, and the elderly population. Such occurrences are attributed the decline in fertility and mortality rates as well as the increase in life expectancy. Subsequently, this has a direct impact on the labour force supply (population aged 15-64 years), causing a country to become an ageing population much earlier.

Population ageing happens in both developed and developing countries. Its adverse impact is evidenced by the significant decline in fertility and mortality rates, particularly in developed countries like Japan, Italy, Germany and Bulgaria. In accordance with the United Nations World Assembly on Ageing held in Vienna in 1982 defined the elderly aged of 60 years and above. Malaysia has adopted this demarcation in formulating and implementing plans for senior citizens. However, its retirement age of 60 years old seems to suggest that the nation's threshold for ageing begins at that age [2].

Scholars believe that the demographic transition due to longer lives and smaller family sizes contributes to an ageing population [3]. According to the Department of Statistics Malaysia, the proportion of the population aged 65 and above is expected to increase from 6.5% in 2018 to 14.5% by 2040 [4]. Jacob [5] and Ibrahim *et al.*, [6] further, stated that 15% of the Malaysian population will be aged 60 and above by 2030. This will result in a significant demographic shift with far-reaching effects on the Malaysian society and its economy. As Malaysia progresses towards becoming an aging nation, it is essential to understand the demographic trends and their implications on various sectors. The changing demographic profile is expected to impact the country's savings and labour force participation rates, with potential consequences for economic growth. Additionally, the increasing burden on the healthcare system and the need for specialised services for the elderly population will inflict prominent budgetary implications for the government [7,8].

The elderly population's trend in Malaysia is increasing due to the demographic transition, which carries profound implications for various aspects of society, including the economy, healthcare and social support systems. Malaysia is projected to experience a significant demographic shift, with 17.6% of the total population is foreseen to comprise individuals aged 60 and older 2040 [9]. According to Ambigga *et al.*, [10], the phenomenon is primarily attributed to the decline in fertility rates and the rise in life expectancy, which was reported to be 76.5 years for women and 71.7 years for men as of 2007. As Malaysia transitions towards being an "aged nation" by 2040, the socio-economic impacts become paramount, especially regarding service provision for the elderly, healthcare management, and labour force dynamics [11].

As societies grow older, the impact on the economy is twofold. On one hand, seniors often deal with rising healthcare expenses and greater reliance on support systems. On the other hand, their spending power and participation can drive growth, especially in industries designed to serve their needs. Past study shows that despite the challenges posed by the ageing population from 1991 to 2017, the Malaysian economy remains resilient and, supported by older individuals participating in various economic activities [12]. As the population structure changes, policies must adapt to better support the elderly, ultimately ensuring their welfare and easing the economic pressures that come with the demographic shift [13].

Healthcare systems are critically impacted by aging demographics. As the aged population grows, the healthcare system faces increasing pressure due to the demand for age-specific services and care facilities. Effective management requires not only expanding healthcare access but also ensuring that professionals are adequately prepared to address the unique needs of older Malaysians [10]. According to Omar *et al.*, [14], older adults are often underrepresented in digital healthcare adoption, with only 10.7% utilizing such services. Bridging this digital divide is essential to enhance healthcare delivery and promote better health outcomes among seniors.

Furthermore, social structures must evolve to accommodate the needs of a rapidly ageing society. There is an urgent need for specialized elder care facilities, as Malaysia will require significant expansion of elderly care centres to meet increasing demographic demands [15]. This need is further underscored by growing mental health issues among older adults, the including rising incidence of depression. Inequitable access to resources further complicates this situation, along with the varying levels of income and support across different ethnic groups [16,17].

As Malaysia experiences this demographic transition, both public awareness and infrastructural adaptations have become increasingly necessary. There is a crucial need for policy frameworks that address immediate health and social care requirements while promoting an inclusive environment where older adults can thrive. Recent studies highlight the significance of these developments, calling for strategic measures that not only secure sustainable living conditions for older adults but also strengthen their independence and active role in society [18,19].

In conclusion, the aging population in Malaysia presents unique challenges and opportunities. The demographic trend towards an increased proportion of elderly individuals requires comprehensive approaches to ensure economic sustainability and enhance the quality of life for older adults. Policymakers are urged to prioritise strategies that acknowledge the ongoing demographic transition, ultimately advancing adaptive healthcare systems and supportive social policies that can facilitate the development of an inclusive and sustainable ageing society.

2. Methodology

This study used secondary data obtained from various agencies, including the Department of Statistics Malaysia (DOSM), the National Population and Family Development Board (NPFDB), and the National Registration Department of Malaysia (NRD). The demographic analysis phase aimed to determine the demographic development in Malaysia by focusing on the elderly population. This was achieved through a descriptive analysis of secondary data, followed by an investigation of the past and present pace of population ageing using graphical representations, trends analysis, and tables.

3. Results

Malaysia is experiencing a rapid growth in its elderly population and is expected to achieve the status of an ageing country by 2035, with 14% of the total population consisting of individuals aged 60 years and above [20]. The He *et al.*, [21] projected that the Malaysian elderly population will reach 8.7 million or 22% of the total population in 2050. This phenomenon has positioned active ageing as a central feature for developing ageing policies in both Malaysia and the world.

The age distribution of Malaysia's population had drastically changed over a 40-year period from 1970 to 2010 due to the decline in fertility and mortality. This resulted in an 18.3% decrease the number of individuals aged less than 20 years old, from 55.6% in 1970 to 32.0% in 2020 (Figure 1). On the other hand, the older age group had increased steadily due to the increased life expectancy within the population.

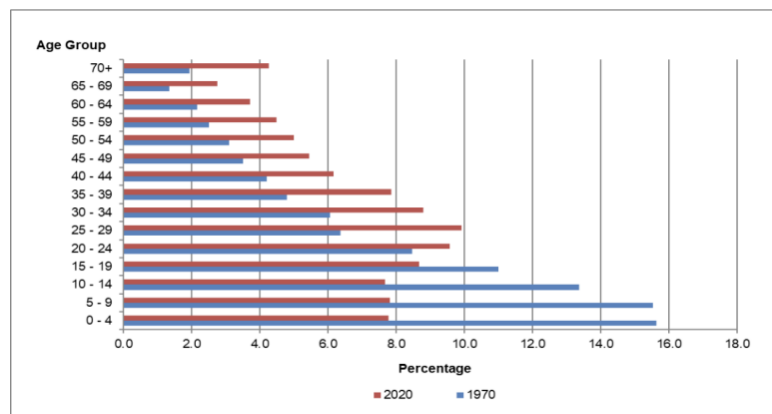


Fig. 1. Malaysian population percentage by age group from 1970 to 2020

Figure 2 shows the distribution of the Malaysian population by age from 1970 to 2020. For further analysis, the population was divided into three broad age groups: 0-15 as young-age, 15-59 as working-age and 60 and above age as old-age. The decline in Total Fertility Rate (TFR) had decreased the population of individuals below 15 years old by 17.1% between 1970 to 2010 and increased the number of elderly (age 60 years and above) from 5.4% in 1970 to 10.6% in 2010. Meanwhile, the working-age population of 15 to 64 years old recorded an increase of approximately 20.5% over the 50-year period. This situation denotes that the average number of approximate dependents must be supported by the working-age population. As Malaysia moves through the demographic transition from high to low fertility and mortality rates, the size of the working age population mechanically increases. The changes in this population age structure eventually create virtuous cycles of economic growth known as the “demographic dividend” [22,23].

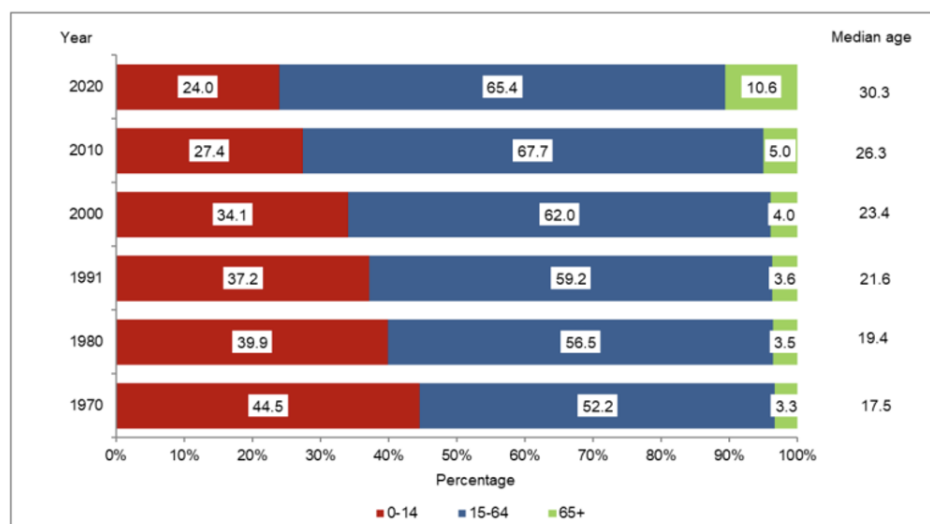


Fig. 2. Broad age group percentage and median age of Malaysia in 1970, 1980, 1991, 2000, 2010 and 2020

The dependency ratio measures the proportion of a population composed of dependent (less than 15 years old or 60 years and above). It serves as an indicator of the potential effects of changes in population age structures for social and economic development. The downward trend of the dependency ratio from 1970 to 2020 can be attributed to the declining in fertility rate. These changes indicated an improvement in the well-being of Malaysia’s population over the years [24].

The population aged 60 and above in Malaysia was 2,248,600 at the end of December 2010, increasing from 591,550 people in 1970. Over the 50-year period, the nation’s older population rose

from 5.4% to 9.7%, with statistical projections indicating a possible increase over 6.2 million by 2040, constituting 16.4% of the total population. The old age dependency ratio refers to the number of individuals who are capable of providing economic support to the number of older people. In this study, the ratio is calculated by dividing the number of persons aged 15 to 64 years old by the number of persons aged 65 years old and above. As shown in Table 1 and Figure 3, the old age dependency ratio was consistent from 1970 to 2000; however, it stood at 9.9 in 2020, indicating that there were 99 people of pensionable age for every 1000 people of working age in Malaysia. The proportion of the elderly population over the young age group can be expressed by the ageing index, which is measured as the percentage of old people compared to the number of children under 15 years old. It was observed that a decline in fertility can cause a population to grow older and vice versa. The Malaysian population recorded a significant increase in the ageing index from 11.7 in 1970 to 44.2 in 2010. The index is projected to rapidly increase over the years, indicating the decreasing proportion of the young age group (0-14 years old) due to the decline in fertility rate. A key indicator of population ageing is an increase in the proportion of the older age group. In demography research, ageing index of less than 15 is considered young, while an index of more than 30 is considered old. By these standards, Malaysia is believed to have become an ageing nation by 2020 [25].

Table 1
Selected indicators of population ageing, 1970-2020

Indicators	Year					
	1970	1980	1990	2000	2010	2020
60+ proportion ('000)	591.5	759.5	879.2	1451.2	2258.6	3160.8
Percentage of 60+ proportion	5.4	5.5	5.6	6.2	7.9	9.7
Dependency ratio	91.7	76.9	68.7	61.4	47.8	14.5
Old age dependency ratio	6.3	6.3	6.1	6.4	7.4	9.9
Ageing index	11.7	14.3	15.2	18.5	28.7	44.2

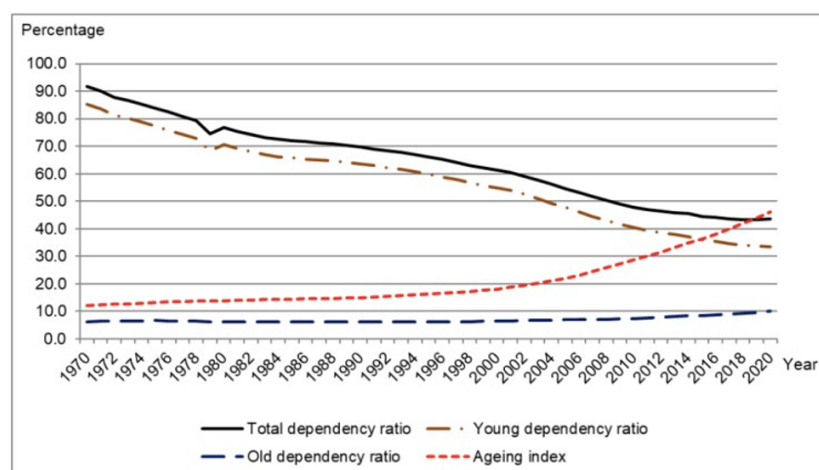


Fig. 3. Dependency ratio of population in Malaysia, 1970-2020

Another important variable to consider when discussing about older people is the sex ratio. Generally, the ratio of women to men is higher in the older age group than in the population as a whole. This phenomenon is particularly true for the three older age groups (Table 2). The sex ratio of the population aged 60 or above was 969 males per 1000 females in 1970, while the highest sex ratio was 981 males per 1000 females in 1980. This indicate that there were approximately 96 more women aged 60 years or older than men of the same age. Since female mortality rates are lower than male at older ages, the proportion of women in the older population grows substantially with

advancing age. In 2020, women outnumbered men by almost 69 persons at ages 65 or older. On the other hand, men outnumbered women by 28 persons per 1000 population at ages 85 or above.

Table 2
Sex ratio of elderly population, 1970-2020

Age group	Year					
	1970	1980	1990	2000	2010	2020
60+	962	981	904	914	966	953
65+	952	979	878	877	933	931
85+	n/a	n/a	n/a	704	759	1068

*n/a = not available

Table 3 summarises the ethnic distribution of the older population from 1980 to 2020. The elderly population explosion over the 30-year period was inevitable, as evidenced by the steady growth of this age group. The older Chinese population aged 60 and above has consistently been the largest, growing from 6.9% in 1980 to 12.1% in 2010. On the other hand, the Malay older population rose from 4.8% to 7.0%, while the Indian older population experienced an increase of 2.6% over the same period. These statistics suggest that current growth of the population aged 65 and older is one of the most significant demographic trends in Malaysia.

Further analysis revealed significant differences in the relative size of the population aged 65 and above according to ethnic groups. In 1970, Malaysia's population aged 65 and over was predominantly Chinese (5.0%), followed by Indian (3.0%) and Bumiputera (2.9%). However major shifts in demographics occurred in 2010, where in the Chinese, Bumiputera, and Indian ageing populations increased to 7.7%, 4.4% and 4.6% respectively for the same year, which were lower than the Chinese elderly population.

Table 3
Older population of major ethnicities by age group in Malaysia, 1980-2020

	Year									
	1980		1990		2000		2010		2020	
Ethnics	60+	65+	60+	65+	60+	65+	60+	65+	60+	65+
Malay ('000)	379.8	230.4	562.9	354.9	803.5	520.5	1229.8	775.2	1969.8	1263.5
Chinese ('000)	311.7	220.8	359.2	244.8	511.0	328.1	778.0	499.4	1171.8	804.8
Indian ('000)	60.1	35.4	76.7	48.1	93.4	56.8	150.4	88.3	260.2	164.7
Malay (%)	4.8	2.9	5.0	3.2	5.6	3.6	7.0	4.4	9.5	6.1
Chinese (%)	6.9	5.0	7.2	4.9	8.7	5.7	12.1	7.7	17.5	12.0
Indian (%)	5.1	3.0	5.4	3.4	5.5	3.3	7.8	4.6	12.9	8.2

4. Conclusions

The decline in fertility and mortality rates together with a steady increase in the life expectancy of Malaysia's population will produce fundamental changes in the age structure. As a result, the elderly population will continue to increase over the years, leading to an ageing population that can present challenges to families, communities and countries. As the proportion of older persons in Malaysia increases, their health status becomes a concern. Bremner *et al.*, [26] suggest that countries must include and involve the older population as active and productive contributors to society to maintain their current standards of living.

The accelerating pace of ageing in the population carries profound implications for various aspects, such as pensions, health care, labour market and social services. It stands not only as an

intrinsic change in the age structure of the population, but also the speed of ageing at which this change takes place. Among the implications of the increasing ageing population is the strain on the health-care system. According to Rowe [27], older persons tend to utilise health services far more than the younger age group since they are more likely to suffer from chronic diseases. The Ujan *et al.*, [28] reported that people at older age will consume an increasing proportion (approximately 30% to 60%) of health care funds, with common morbidities include hypertension, diabetes, arthritis and chronic lung disease. Therefore, demand for medical services will exceed the population growth rate as the aged population grows rapidly.

Another main concern related to the elderly population is socioeconomic status and urbanisation. Tey *et al.*, [9] mentioned that many older adults are left in villages, whereas their children have moved to cities. Although older adults are deprived of family support due to out-migration of the young, they have benefited from the remittances sent by migrant children. In 2010, a census conducted by the Department of Statistics Malaysia revealed that 56% of men and 28% of women aged 60 to 64 were still working across various sectors, including service and sales (22%), craft and related work (11%), plant and machine operators (12%), and elementary occupations (13.7%). Additionally, about 80% of older workers were self-employed [29]. Further analysis revealed that their sources of income varied, from remittances from their children (73.2%) to (50%) and (27%) [30].

In conclusion, the increase in Malaysia's ageing population is inevitable. Mafauzy [31] postulates that, the aged population has its own unique problems and will impose new challenges and demands on the health and social services. This undoubtedly requires a sharing of responsibilities among the government, private sector, non-governmental agencies and the community. As a "newcomer" to population ageing, Malaysia has benefited from the experience of other developed and developing countries in formulating relevant policies and programmes to cope with the increasing number of older persons.

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