International Spotlight

Aging in Multi-ethnic Malaysia

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Abstract

Multiethnic Malaysia provides a unique case study of divergence in population aging of different sociocultural subgroups within a country. Malaysia represents 3 major ethnicities in Asia—the Malay, Chinese, and Indian. The 3 ethnic groups are at different stages of population aging, as they have undergone demographic transition at different pace amidst rapid social and economic changes. Between 1991 and 2010, the Malaysian population aged 60 and over has more than doubled from about 1 million to 2.2 million, and this is projected to rise to about 7 million or 17.6% of the projected population of 40 million by 2040. In 2010, the aging index ranged from 22.8% among the Bumiputera (Malays and other indigenous groups), to 31.4% among the Indians and 55.0% among the Chinese. Population aging provides great challenges for Malaysia’s social and economic development. The increasing prevalence of non-communicable diseases in older adults, coupled with the erosion of the traditional family support system has increased demands on health care services with an overwhelming need for multidisciplinary and specialized geriatric care. Following the adoption of the National Policy for the Elderly in 1995, issues of population aging have gained increasing attention, especially among researchers. There is an urgent need to increase public awareness, develop infrastructure, as well as support action oriented research that will directly translate to comprehensive and cohesive social strategies, policies, and legislation to protect not just the current older Malaysians but the future of all Malaysians.

Key Words: Aging population, Older adults, Health, Ethnic groups, Bumiputera, Malays, Chinese, Indians
Asia’s population aged 60 and over is projected to increase from 507.95 million (or 11.6% of the population) in 2015 to 1,293.7 million (or 24.6% of the total population) by 2050 (United Nations, 2015). The speed of aging in Asia is unprecedented and poses great challenges to existing models of caregiving and social support (McCutcheon & Pruchno, 2011). The policies and systems in some countries are lacking for this dramatic demographic shift (Arun, 2013; Sasat & Bowers, 2013; Zhang, Guo, & Zheng, 2012).

Malaysia, a multiethnic country, provides a unique insight into the diversity of population aging in Asia. Its population comprises of two of the largest ethnic groups in the world—Chinese and Indians, in addition to Malay which is the largest ethnic group in the country. Each ethnic community has largely maintained its own sociocultural values in terms of religion, language, dress, and food while developing an integrated national identity.

Like neighboring Singapore, Thailand, Vietnam, and Myanmar, Malaysia has reached replacement level fertility. Although the mortality rates for all ethnic groups have converged at relatively low level for several decades (with a crude death rate of below 6 per thousand population by the late 1970s), the fertility transition has not been uniform across all ethnic groups. Each ethnic group had high fertility of approximately 6 children per woman in the 1960s. However, differences in customs and cultural practices, as well as differential response to government policies have resulted in a divergence in fertility level across ethnic groups. Although the Chinese and Indians have attained below replacement level fertility level since 2000, Malay fertility has remained significantly above that level, at 2.6 in 2010 (Department of Statistics Malaysia, 2012). This dual fertility transition has resulted in vastly different levels of population aging among the ethnic groups.

The growth of the older population has outpaced that of the young, and this gap is projected to widen over time. Between 1991 and 2010, the population aged 60 and over has more than doubled from approximately 1 million to 2.2 million. The number of older persons is projected to rise further to about 7 million or 17.6% of the projected population of 40 million by 2040 (United Nations, 2015). Malaysia is representative of the sociodemographic changes and challenges facing Asia because of its population mix, rapidly aging population and industrial transformation. It may also be an example of the issues faced by aging Indian and Chinese communities worldwide.

### Population and Socioeconomic Development

Data from the 2010 Population and Housing Census of Malaysia showed that the total population stood at 28.3 million. Population growth had slowed during the first decade of the new millennium compared with the preceding three decades (1.97% per annum vs. 2.5% per annum). The Bumiputera (Malays combined with other indigenous groups), Chinese, and Indians each made up 61.8%, 22.6%, and 6.7% of the total population, respectively, whereas other ethnic groups and noncitizens each made up 0.7% and 8.2% (Department of Statistics Malaysia, 2011). Besides being culturally distinct, socioeconomic factors further differentiated the different ethnic groups in terms of rural–urban distribution and occupation.

Malaysia has made remarkable economic progress since independence. Prior to the Asian Financial Crisis in 1997–1998, Malaysia enjoyed consistent economic growth of more than 7% annually for over 25 years (Spence, 2008). The gross domestic product per capita (in constant 2005 US$) tripled from US$2,318 in 1980 to US$6,990 in 2013. The country has since transformed from a rural-agrarian based economy to a more diversified one, driven by manufacturing and service sectors. There have also been significant advances in human development, with a Human Development Index (HDI) improving from 0.577 in 1980 to 0.773 in 2013, ranking Malaysia 62nd out of 187 countries (United Nations Development Programme [UNDP], 2015).

### Demographic Transition and Population Aging

Changes in levels of fertility, mortality, and migration affect the age structure of a population directly, and hence population aging. To understand the ethnic differentials in population aging in Malaysia, we begin by examining the demographic and structural changes that have occurred between 1991 and 2010. Table 1 summarizes key demographic and population aging indicators for the three ethnic groups in 1991 and 2010.

Data show that the number of older persons has grown much more rapidly than that of the total population, and this has resulted in a rise in the median age of the population, percentage of population aged 60 and over, aging index and old age dependency ratio for all three ethnic groups. Between 1991 and 2010, the population aged 60 and over increased from 5.6% to 7.9% of the total population, and from 4.9%, 7.2%, and 5.5% to 7.1%, 12.2%, and 7.9%, respectively for the Bumiputera, Chinese, and Indians. The aging index for the Chinese, the “oldest” of the three ethnic groups, increased from 22.4% in 1991 to 35% in 2010.

The crude death rate of Malaysia, at 4.8 per thousand in 2010–2015 is much lower than that of the average for the less developed countries, which was estimated at 7.4 per thousand (United Nations, 2015). Besides the general...
improvement in the standard of living, the improved quality of the health care system has contributed significantly to mortality decline and gain in life expectancy. Life expectancy was highest among the Chinese, and females lived approximately 5–7 years longer than males. Life expectancy at 60 varied from 16.7 years among Malay and Indian males to 22.3 years among Chinese females.

The main causes of ethnic differentials in population aging can be attributed to the dual fertility transition, alluded to above. As observed by Leete (1996), the value systems, including Islamic practices and cultural norms of the Bumiputera are less supportive of the notion of birth control, as compared with the Chinese and Indians. In contrast, the Malaysian Chinese who hold a similar Confucian identity as the populations in East Asia, place great emphasis on “educational attainment, hard work and the striving for upward mobility for one’s children” (Kono, 1986) naturally opt for smaller family size in light of fierce competition in the field of educational attainment and in the job market. The 2004 Malaysian Population and Family Survey found that only 25.7% of the Bumiputera married women aged 15–49 were using a modern contraceptive method, as compared with 43.6% among the Chinese and 30.2% among the Indians.

### Morbidity and Geriatric Care

Population aging increases the strain on any existing health care system. Older adults tend to utilize health services far more than younger people as they are more likely to suffer from chronic diseases (Rechel et al., 2013; Rowe, 2015). According to a report by the Ministry of Health, the five most common morbidities among older Malaysians are hypertension, diabetes, arthritis, chronic lung disease, and eye problems. The National Health and Morbidity Survey III stated that the disease pattern among older persons has changed from diseases associated with aging to diseases associated with lifestyle, that is, hypertension, hypercholesterolemia, diabetes mellitus, and chronic obstructive lung disease. Records of admission to the public hospitals show that more than 400,000 older persons were admitted, making up 20.3% of total admissions. The trend indicates an increasing percentage of older adults being admitted. With population aging, older people will consume an increasing proportion of funds for health, and according to the estimate by the Ministry of Health about 30% to 60% of total health care cost is going toward older people (Ministry of Health Malaysia, 2010).

An analysis of data from the 2004 Malaysian Population and Family Survey, which covered a nationally representative sample of 3,406 persons aged 50 and over found that the prevalence of the most common noncommunicable diseases—arthritis, hypertension, diabetes, asthma, and coronary heart disease (CHD) varied widely across ethnic groups (Teh, Tey, & Ng, 2014). The study found that older females were more likely than males to have arthritis and hypertension, but the reverse was true for asthma, diabetes. CHD were most prevalent among Indians, whereas arthritis and hypertension were most prevalent among the Indigenous groups. The Chinese were least likely to report poor health, whereas Indians and Indigenous people were more likely to do so.

The rapid rise in the aging population has overwhelmed the health facilities, services, and trained professionals required to cater for the multidimensional needs of older people. Malaysia has a two-tiered care system. Although

### Table 1. Population Aging and Associated Factors

<table>
<thead>
<tr>
<th></th>
<th>All ethnic groups</th>
<th>Bumiputera</th>
<th>Chinese</th>
<th>Indian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>18,327,641</td>
<td>28,334,135</td>
<td>10,610,746</td>
<td>17,523,508</td>
</tr>
<tr>
<td>Population aged 60+</td>
<td>1,068,531</td>
<td>2,251,216</td>
<td>564,066</td>
<td>1,242,865</td>
</tr>
<tr>
<td>Urbanization level (%)</td>
<td>47.8</td>
<td>71.0</td>
<td>43.3</td>
<td>62.6</td>
</tr>
<tr>
<td>Median age</td>
<td>21.4</td>
<td>26.2</td>
<td>19.8</td>
<td>24.1</td>
</tr>
<tr>
<td>% 60+</td>
<td>5.6</td>
<td>7.9</td>
<td>4.9</td>
<td>7.1</td>
</tr>
<tr>
<td>Aging index</td>
<td>15.0</td>
<td>28.8</td>
<td>12.2</td>
<td>22.8</td>
</tr>
<tr>
<td>Young dependency ratio</td>
<td>65.7</td>
<td>42.9</td>
<td>73.2</td>
<td>50.4</td>
</tr>
<tr>
<td>Old dependency ratio</td>
<td>9.9</td>
<td>12.3</td>
<td>9</td>
<td>11.5</td>
</tr>
<tr>
<td>Male life expectancy at birth</td>
<td>69.2</td>
<td>71.9</td>
<td>68.8</td>
<td>70.5</td>
</tr>
<tr>
<td>Female life expectancy at birth</td>
<td>73.4</td>
<td>77.0</td>
<td>71.9</td>
<td>75.3</td>
</tr>
<tr>
<td>Male life expectancy at 60</td>
<td>17.6</td>
<td>16.7</td>
<td>17.6</td>
<td>20.2</td>
</tr>
<tr>
<td>Female life expectancy at 60</td>
<td>20.2</td>
<td>19.0</td>
<td>20.2</td>
<td>19.2</td>
</tr>
<tr>
<td>Crude death rate</td>
<td>4.6</td>
<td>4.6</td>
<td>4.4</td>
<td>4.5</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>27.9</td>
<td>17.2</td>
<td>32.1</td>
<td>20</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>3.4</td>
<td>2.1</td>
<td>4.2</td>
<td>2.6</td>
</tr>
</tbody>
</table>

*Note: Data from the 2004 Malaysian Population and Family Survey.*
there are more private than public hospitals in the country, over 70% of all admissions (over 2.2 million) are to public hospitals. Older persons make up over 20% of the total admissions and this percentage is increasing.

Despite Government incentives to encourage medical doctors and other health care professionals to take up geriatric medicine, the uptake has been poor (Poi, Forsyth, & Chan, 2004). Although geriatric medicine was recognized as a subspecialty in Malaysia in the early 1990s, over 20 years later, there are only 23 qualified geriatricians serving a population of over 1.4 million older adults. There are five geriatric units in the country, with a combined total number of less than 150 beds. Geriatric units function as predominantly multidisciplinary teams consisting of geriatricians, nurses, allied health professionals, and social workers. The infrastructure or continuum of care required in terms of effective primary care networks, community care, homecare services, day care, respite care, and rehabilitation are very much lacking (Ambigga et al. 2011). With rapid urbanization, the urban health care services have not been able to keep pace with the unprecedented increase in the needs of the population. Furthermore, the community health clinics throughout the country are supported by medical officers who have had limited or no training in geriatric medicine.

The task of providing the required quality health care services to older people in the immediate future is extremely challenging. This is further compounded by the differential utilization of these services by the different ethnic groups who differ in their cultural practice and religious beliefs which influence their attitudes toward aging (Abolfathi Momtaz, Hamid, Ibrahim, Yahaya, & Abdullah, 2012). Additional differences include their capacity to make use of the specialized health services. The use of private health care is often preferred by the more affluent segments of the population due to long waiting times and overcrowding in public hospitals and clinics (Chee, 2008). The use and practice of traditional medicine is also unique between and within each ethnic group and reflects the cultural practices and religious beliefs across in varying degrees across the ethnic groups.

Cultural factors may also influence the care practices of the dependent older adults (Choo et al., 2003). This is seen especially in the higher proportion of Chinese elders in nursing homes, partly on account of their higher income and lack of family support. Furthermore, spirituality and religion may also affect adult children’s decisions to send their parents to old folks homes, an option that is not socially acceptable for the Malays. The absence of a universal insurance system has resulted in financial hardships among some adult children who have to pay exorbitant medical costs to caring for their parents. There is therefore a need for innovative measures to address the many issues of an aging population, and to safeguard the health of Malaysia’s older population.

### Urbanization and Socioeconomic Status of Older Malaysians

Malaysia is the second most urbanized country in Southeast Asia, after Singapore. The proportion of population living in urban areas has increased from 51% in 1991 to about 73% in 2014, as a result of rural–urban migration and reclassification of semiurban to urban areas (World Health Organization, 2014). Many older adults were left in the countryside whereas their children have moved to the cities. Although older adults are deprived of family support due to out-migration of the young, they have however benefited from the remittances sent by migrant children.

The 2010 census report showed that 56% of men and 28% of women aged 60–64 were still working. Workers aged 60–64 were concentrated in service and sales (22%), agriculture (22%), craft and related work (11%), plant and machine operators (12%), and elementary occupations (13.7%). About 8 out of 10 older workers were self-employed (Department of Statistics Malaysia, 2013). Most older Malaysians depend on their children for financial support. An analysis of the sources of income based on a 2004 survey on economic and financial aspects of older Malaysians showed that 73.2% of older Malaysians (67% of males and 79.5% of females) received remittances from their children, whereas 50% received job related income, including pensions and 27% received investment related income. More than half of older Malaysians in this survey have a household income of less than RM20,000 (US$5,222) and 22% reported an income below the poverty level of RM8,292 (US$2,165) per year (Tey & Tengku Aizan, 2014). As such, older adults are more likely than the young to be at risk of living in poverty. Older women were more likely than older men to depend on financial support from their spouse and children.

### Policies, Programs, and Advocacy for Older Adults

The growing concern over the issues of population aging led to the adoption of the National Policy for the Elderly by the Department of Social Welfare, under the Ministry of Women, Family and Community Development in 1995, “to ensure the social status, dignity and well being of elderly persons as members of the family, society and nation by enabling them to optimize their self potential, have access to all opportunities and have provision for care and protection” (Department of Social Welfare Malaysia, 1995). An
action plan for older persons was subsequently formulated focusing on continuing education, active participation of older adults in the economy (job opportunities) and society, an enabling environment for older adults to carry out recreational activities, older adult-friendly transportation and housing, community support systems to assist the family to provide care to older adults, as well as the provision of health care facilities and comprehensive social security schemes. The National Health Policy for Older Persons was adopted in 2008 with its main objectives as follows:

- To improve the health status of older persons
- To encourage participation in health promoting and disease prevention activities throughout the life course
- To provide age friendly, affordable, equitable, accessible, acceptable, gender sensitive, seamless health care services in a holistic manner at all levels
- To advocate and support the development of enabling environment for independent living

A review of the National Policy for the Elderly led to the adoption of a revised policy on National Policy for Older Persons and Plan of Action for Older Persons in 2011. This revised policy seeks “to develop a caring society, enhance capacity building, advance health and wellbeing, and address the safety and social security of older adults. Strategies that are planned to achieve enabling and supportive environments for older adults include strengthening the human governance and the enforcement of law pertaining to older adults; accessibility and capacity-building of organizations; and intergenerational interdependence, through inter-sectoral and multi-disciplinary approaches involving various government ministries and agencies, non-governmental organizations, private sector and the community.”

The retirement age in Malaysia used to be 58 years for the public sector and 55 years for the private sector, but this was increased to 60 years for both sectors in 2014. Even with the revision, the retirement age in Malaysia is still lower than most European countries with a retirement age of 65 years. The government has been the main provider of services and benefits to older adults. Over time, the private sector has played an increasing role in the care and support of older adults, as part of their corporate social responsibilities.

Malaysia’s system of social security for old age consists of a compulsory saving scheme under which workers and their employers are mandated to deposit a stipulated amount every month from one’s income (11% by the workers and 12%–13% by their employers) to the Employee Provident Fund (EPF). Coverage is also extended to the self-employed on a voluntary basis. Public sector workers are covered by a pension scheme which pays retiree a monthly allowance of up to 60% of one’s last drawn salary, based on the length of service. The pension scheme is extended to cover widows/widowers of public sector workers. The EPF and the pension scheme together cover about 63% of the total employed labor force (Holzmann, 2014).

Many nongovernmental organizations (NGOs) and societies were set up at various levels to complement and supplement the efforts of the government on issues pertaining to older adults. The national umbrella body of these NGOs is the National Advisory Council for Senior Citizens of Malaysia (NACSCOM), which was established in 1990 to advocate for the development of policies, programs, projects, and services to improve the quality of life and well-being of the older adults in Malaysia. NACSCOM comprises of 44 senior citizen associations with a total of about 18,000 members and is an appointed member of the National Advisory and Consultative Council on Aging.

### Research on Population Aging in Malaysia

Following the adoption of national policies for older adults, the Institute of Gerontology (IG) was established at the University Putra Malaysia (UPM) in 2002 to spearhead research and education in gerontology. This was followed by the establishment of Social Security Research Centre at the University of Malaya in 2011 to carry out research, teaching, and dissemination of evidence-based knowledge in the area of social security, including old age protection. The year 2012 saw the setting up of a multidisciplinary research group called the Aging and Age Associated Disorders Research Group at the University of Malaya, and the Community Rehabilitation and Aging Research Centre at the National University of Malaysia. In April 2015, IG was upgraded to become the Malaysian Research Institute on Aging. The government, through the Ministry of Science, Technology and Innovation (MOSTI) and Ministry of Education, has funded many large-scale research projects on the health and socioeconomic aspects of aging, under the Intensification of Research in Priority Areas (IRPA) program, the High Impact Research Program, Fundamental Research Grant Scheme and others.

An on-going attempt to compile an annotated bibliography on aging in Malaysia, based on an internet search, found approximately 500 abstracts related to aging in Malaysia published in journals, books, and conference proceedings between 1980 and August 2015. About half of these articles were published since 2012. Nearly three quarters of the abstracts reported in the annotated bibliography dealt with various aspects of health and health care such as disability among the older adults. Many studies on aging also cover socioeconomic aspects of care and support, nutrition, and the general wellbeing of older adults.
This body of research shows an increasing awareness for the need for research into multidimensional aspects of aging in Malaysia. Research into many age-related disorders including dementia and falls, however, remains under-funded and far less established than other conditions of similar epidemiological proportions (Tan, Kamaruzzaman, Zakaria, Chin, & Poi, 2015). There is, therefore, an urgent need for Malaysia to invest more in research on age-related conditions in its own population, in order to avert a national “old age crisis.” Because previous data on the Malaysian population are cross-sectional which precludes an analysis of the cause-effect relationships, multi-dimensional cohort studies such as the Malaysian Elders Longitudinal Research (MELoR) and the Neuroprotective Model of Health and Longevity (TUA) cohorts have been initiated to provide comprehensive data on the overall needs and issues faced by older Malaysians. This crucial research will provide a foundation for strategic policymaking, legislative framework and ultimately a pragmatic implementation towards restructuring socioeconomic and other factors to increase the quality of life and well-being of the elderly.

Future Prospects and Emerging Issues

There are many issues that need to be addressed urgently in the context of rapid structural changes in Malaysia’s society and economy. There is a need to promote research from different perspectives in order to provide accurate data to guide decision making in formulating cohesive policies, legislation, and strategies to cater to the needs of older adults. Existing laws such as the Employment Act, Employees Social Security Act, Domestic Violence Act, Care Centre Act, Private Healthcare and Facilities Act and the Education Act are all general provisions which do not provide comprehensive social protection for older Malaysians. Currently, the health care and financial legislation does not extend beyond retirement. For instance, the increasing privatization of health care may leave older adults behind. Rapid urbanization and shrinking family size have resulted in the erosion of family and social support for older adults. Further, there exists a major gap within the legal and institutional frameworks which requires coherent measures in order to adequately address the impact of social changes on older adults.

Malaysia has adopted international guidelines toward the social and economic protection and inclusion of the older population in the National Policy for Elderly 1996 which was revised in 2011. The policies, however, need to be better reflected in the laws and institutional framework. There is also a need for more effective implementation and coordination of programs for older adults.

A review of the current situation indicates inadequate social provisioning for older Malaysians. Concerted efforts must be made to ensure that older adults receive sound health care and be protected by social security schemes that prevent them from falling into poverty. There is a need for a well-developed infrastructure that allows them to continue to work in a less stressful environment with a flexible employment structure. Older adults have skills and expertise required by a rapidly industrializing society and these resources need to be employed productively (Bloom, Canning, & Lubet, 2015; Rechel et al., 2013; Rowe, 2015). Intergenerational programs fostering interactions which facilitate the sharing of skills, knowledge, or experience between the old and young will ensure integration between the different generations. This integration could contribute toward the creation of a unified Malaysian identity that transcend ethnic differences. Rapid industrialization has also brought about social changes which may contribute to the erosion of cohesive family and social relationships preceding the erosion of family support, and a rise in elder abuse and abandonment. All these strategies need dual support, not only from Government, but with increasing collaborations of the private sector and NGOs.

Looking forward, multiethnic Malaysia has the option of being overcome by or weathering the aging tsunami. The solution requires a holistic and integrated multidisciplinary national strategy directed at all aspects of aging such as health, education, economics, housing, built environment, policies, and law. Issues concerning family, gender, religion, culture, and spirituality also need to be addressed. This task requires the full commitment of all involved in issues on aging to prepare the nation for the formidable challenges that lie ahead toward achieving active and productive aging.

Conclusion

Malaysia is a “newcomer” to population aging. The country has benefitted from the experience of countries such as Japan and Singapore, and other developed nations to formulate policies and programs to cope with the increasing number of older persons. This article will add pertinent information for informing practice, research, and policy regarding aging, especially in culturally diverse developing countries (McCutcheon & Pruchno, 2011). Malaysia responded almost instantly to the call for action on population aging made at the 1994 International Conference on Population and Development by adopting policies and programs to cater to the need of an aging population at an early stage and making the necessary revision to keep abreast with the changing socioeconomic environment. The experience in fostering public–private partnership to
promote active and productive aging and family and community care for older people, as well as improving the health services could provide valuable lessons to other developing countries that will experience population aging in the near future.

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