

Aging in Asia: A cultural, socio-economical and historical perspective

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Abstract

Asia has about 60% of the world population and population aging is occurring more rapidly in Asia than in Western countries. The group aged 65 years and above will increase from 207 million in 2000 to 857 million in 2050, a staggering increase of 314%. The diversity in economic, demographic, religious, cultural and geo-political factors in Asia is unparalleled by any other continent, and is, in part, contributory to the rapid rise in population aging. By 2050, those under 15 years old will have shrunk from 30% in 2000 to 19%, while those aged 65 years and above will increase from 6% to 18%. In addition, the gender divide still persists with 100 elderly women to 70 elderly men. These projected demographic changes pose three major challenges: 1) how best to address the rising population of the group aged 65 years and above, 2) how to address the shrinking population of the young as well as the working adults, and 3) how to address the problems arising from the disproportionate increase in older women than men. From now to 2050, it will be expeditious for each country in Asia to look into ways of reversing the decline in total fertility rates (TFRs) and restore to replacement levels. If not, at least introduce measures to halt its free fall. Due to the complexity of factors that have influenced the fall in TFRs in Asia, it will be a daunting task to reverse this fall. There is no "single size fits all" solution to this complex problem. Research work in this short-term strategy in addressing the aging population is urgent. In the longer term, the East-West Centre have suggested four modalities, 1) establish policies and programmes that enhance traditional Asian systems of family support for the elderly; 2) introduce policy reform that encourages the elderly who are still capable of remaining in the work force; 3) create institutions and systems that support high levels of personal saving; and 4) formulate public programmes, including pension schemes and national healthcare systems. We need to work while there is time.

Introduction

The new reality of the 21st Century is not so much a rising population as it is an increase in life expectancy, and thus a rising population of over 65 years. Population aging is occurring more rapidly in Asia than in Western countries. It has been predicted that by the year 2050, the age group of 65 years and above will increase from 207 million in 2000 to 857 million in Asia, a staggering increase of 314% [1]. Almost all countries in the world will face significant challenges in the coming years because of the dramatic increase in population aging. But to the least developed countries including those in Asia, the effects could be devastating. Many developing countries have yet to address the aftermath of the first population time bomb: overpopulation [2]. There has been an increasing awareness of the coming problems that will arise from the rapid aging of populations. There is an urgency to put the aging issue on the agenda of governments, non-governmental organizations, and health care institutions in Asia [2].

The process of aging is understandably complex and is dependent on geo-political, socio-economic, cultural, historical and religious factors. These

factors are, to a large extent, country-specific. Hence, the onus is on each country to conduct their own research and formulate appropriate strategies and management modalities to tackle the various issues caused by the rapid population aging.

About 60% of the world's population is in Asia. The diversity in economic, demographic, religious, cultural and geo-political factors in Asia is unparalleled by any other continent. Coupled with close to 1 billion people 65 years and above in Asia alone by 2050, active research into how best to address the impending problems of aging cannot be left to local governments alone. Various stake-holders including Non-governmental Organisations (NGOs), the pharmaceutical industry, health and educational institutions must join together to help to face this challenge. A failure to do so would bankrupt many Asian economies with its dire consequences spreading beyond the boundary of Asia.

The magnitude of the aging problem in Asia

In 2000, 30% were under age 15, 64% were in the working-age group of 15–64 and about 6% of the Asian population were age 65 and above. By 2050, it

Table I. Number of people age 65 and above (in 1000s).

Regions/ subregions	2000	2050	% Increase from 2000 to 2050
Asia	206,822	857,040	314
East Asia	114,729	393,802	243
Southeast Asia	24,335	128,958	430
South Asia	67,758	334,280	393

has been predicted that the corresponding percents for the three groups will be 19%, 63% and 18%, respectively. Hence, we will see a dramatic drop in the group aged 15 and below, with a corresponding increase in the group aged 65 and above [1]. However, this scenario is not uniformly applied across all countries in Asia. Countries in East Asia, with the exception of Mongolia where the proportion of the elderly is still small, are aging the fastest, followed by Southeast Asia with the exception of Singapore, and then South Asia with the exception of Sri Lanka (Table I). Japan has the oldest population in Asia, with 17% aged 65 and above and this proportion will hit 36% by 2050. In contrast, Bangladesh has the youngest population with 3% 65 or older in 2000 and is predicted to increase to 11% by 2050 [1]. The rate of population aging in Asia is clearly reflected by the increase in the median age of the Asian population, from 29 years in 2000 to 40 years by 2050. Table I shows that the regions increases in the elderly will be dramatic, ranging from 2.4 to 4.3-fold from 2000 to 2050. In addition, the proportion of those in the oldest old group (age 75 and above) will increase from 15% in 2000 to 27% in 2050.

The gender divide among the elderly will persist. There will be more women than men in the older age group. Among those aged 75 and above, there are 70 men to every 100 women and the preponderance of women over men will not change significantly in the next 50 years [1].

Challenges arising from projected demographic changes

Arising from these projected demographic changes are three major challenges: 1) how best to address the rising population of the group aged 65 years and above, 2) how to address the shrinking population of the young as well as the working adults, and 3) how to address the problems arising from the disproportionate increase in older women than men.

There are two possible strategic approaches to meet these challenges. The dramatic increase in the population of those aged 65 years and above is concurrent with an equally dramatic decrease in those aged 15 years and below, a direct consequent of the very low total fertility rates (TFRs), below the replacement level, in many Asian countries. If the current trend of decreasing TFRs and increasing life

expectancy persists, the scenario beyond 2050 will be bleaker. Hence, the immediate approach that individual countries could adopt is to establish strategies to halt or reverse the falling trend in TFRs. Failing to do so would not only result in a fast aging population, but also a shrinking population in many Asian countries. The second strategic approach is a worse scenario management approach. If the projected demographic changes are true, each country needs to establish appropriate programmes to best address the problems associated with the rapidly aging population.

To redress factors leading to the great fertility divide among Asian countries – short-term strategic approach

The differential declines in TFRs among Asian countries are due to many factors, some of which are culture- or religion-based, while others are due to advances in socio-economic development. Whatever their origin, all determinants of the TFRs will impact on how the populations age and how best the aging population could be managed. Therefore, we need to examine these factors from the historical perspective and understand how they have impacted on population growth and aging and thereafter, derive at appropriate measures to counter their negative effects on the populations.

A historical divide in fertility was noted between developed countries in the West and developing countries including those in Asia. A major distinction is under-population in the former, and over-population in the latter groups. Most countries traditionally experienced high fertility rates. It was quite normal to have about six births per woman. However, in the early years, the high birth rates were compensated by high infant mortality rates. With rampant outbreak of diseases and poor health care, population growth in many countries was kept in check. With improved health care and infant mortality decline and birth rates stabilized, population growth was gradual in most countries in the West. With the advent of discoveries, immunization, antibiotics and better health care, and hence a resultant longer life expectancy, many countries in the West began to enjoy lives into the later decades. By the 19th Century, birth rates in the West began to decline dramatically and consequentially, population aging in Western countries started much earlier and from a smaller population base.

In Asia, only Japan began to mimic the slowing of population growth occurring in Western countries, but the steep decline in fertility rate only started in the late 1940s [3]. Most other Asian countries, on the other hand, were still trapped in the vicious cycle of high birth rates, poor health care, poverty and low life expectancy. By the early 1950s, Asian life expectancy was 41 years, and population growth rates had reached 2% annually. By the 1960s, life expectancy

was 48 years and population growth rates were 2.2% [3]. The improvement in health care and the increasing total fertility rates had results in a very rapid growth of population within a short time span and Asia has accounted for 60% of the world population with China, India and Indonesia among the most populous countries in the world. Consequential to this rapid population growth in many countries in Asia was the concentration of much of the economic resources in feeding the masses resulting in them still being in poverty. The resulting status is one of huge populations that are, at the same time, not very strong and healthy. While life expectancy might have increased, health expectancy has not increased in tandem resulting in more years of disabilities among the elderly with dire consequences on the economy, health care and family.

Several important factors have contributed to the dramatic decline in TFRs in some Asian countries.

- (1) Firstly, by the late 1960s, with rising incomes, educational level, and expectation, coupled with better health care and thence declining child mortality, the birth rates began to fall in some Asian countries including Japan, Singapore, Taiwan, Hong Kong, Macau, South Korea, Malaysia, the Philippines, Sri Lanka and Turkey, but not in South Asia. The new reality in many Asian countries is the advent of economic activities which transcend geographic borders and cross time zones resulting in many economic entities adopting a 24/7 operational mode. Work and family lives are so intertwined that effort in one means the less or neglect in the other [4]. This has further driven the formation of family by young couples into the background thereby reducing fertility rates further. This aspect, if not dealt with, will continue to impact on population aging.
- (2) The introduction of family planning starting in the late 1950s to the 1960s with strong support from government leaders saw the total fertility rates fall dramatically from about 6 in the 1950s to 2.5. Hong Kong and Macau record total fertility rates of 0.9, while those of South Korea, Taiwan and Singapore are at 1.3. China, the most populous country in the world is about 1.5–1.6 [3]. Many other Asian countries have registered TFRs below the replacement rate. Having 60% of the world population living in Asia, the dramatic decline in TFRs in Asia is perceived to be one of the world's great turning points in the demography of aging.
- (3) The cultural attitude towards marriage in many Asian countries has contributed, in a small part, to the changing demography. Motherhood of unwed women is much less accepted in most Asian countries than countries in the West. Coupled with the increasing trend of delayed marriage or single hood, it means that the

population growth is further dampened which, in turn, has contributed to the increase in population aging. This cultural factor is not uniformly applied throughout a given country. In fact it varies between cities as well as among different ethnic groups. This is reflected by the changes in profile of single hood among women aged 30–34 in the different cities and ethnic groups (Table II). The reasons for delayed marriage in South-East Asia are complex and have to do with the different pressures people face in modern urban society. Forty years ago, a substantial number of women in Southeast and Eastern Asian countries married the man their parents chose for them. However, with rising level of education together with being economic independent, women are less compelled to get married for the sake of marriage or would consent to marrying someone of their parents' choice. It is more likely that they would marry a man of their own choosing. Thus women in more urban settings tend to get married later than their rural counterpart [5]. Ethnicity also plays a part and this is clearly illustrated by the incidence of single-hood between Singaporean and Kuala Lumpur Chinese versus the corresponding Malay groups (Table II).

Factors contributing to the increasing trend of women remaining single or getting married much later are rather complex, but one common thread is the pre-occupation of becoming economically viable in a very urbanized setting in these cities.

- (4) In contrast to more developed countries, the gender role is a major factor in determining the demographic changes and their impact on Asian populations. The rigidly uphold and socially prescribed roles of the husband as the wage earner and the wife, a home maker, have been in place for thousands of years. In more recent history, more developed countries have challenged these traditional roles, and more women are now having more equal opportunities in terms of education, career etc. This has led to decline in fertility rates in many of the

Table II. Percent of female singles at age 30–34 in different cities in 1970 versus 2000.

Cities	Percent in 1970	Percent in 2000
Jakarta	3.5	13.4
Seoul	2.8	17.5
Yangon	8.9	31.4
Kuala Lumpur Chinese	13.6	25.5
Kuala Lumpur Malays	6.4	15.6
Metro Manila	20.8	20
Singapore Chinese	10.8	21
Singapore Malays	3.5	11.5
Bangkok	16.8	32

Source [5] – adapted.

more developed countries. In Asia, countries like Japan, Singapore, Taiwan, South Korea, Hong Kong, have seen women's role change dramatically and this has in turn affected the demographic changes over the last 25 years. Reduced TFRs have led to the decline in population growth. Even in these countries, this phenomenon is more evident in the urbanized centres, while the rural communities tend to adhere to the traditional roles of men and women. Many other countries in Asia including India, Pakistan, are still tradition-bound and hence, the decline in TFRs has been less acute.

- (5) The practice of polygamy is legally allowed in some cultures in Asia, while in others, its practice may not be actively prosecuted by law. This has given rise to the disproportionate changes in growth in some Asian countries in the different population groups.
- (6) More tradition-bound countries in Asia still view that sons are the ones who will be responsible for perpetuating the family line. It is therefore not uncommon for many families who have female offspring to continue to have children in the hope that they eventually have sons. In addition, in largely farming communities in Asia, more children are needed to help in the farming and to a large extent, more children are their only "insurance" for their retirement. These traditional practices, in part, have contributed to greater population growth in many of the Asian countries. Even in China, with the one-child policy in place for many years, it has been difficult to implement this policy, especially in rural farming communities.
- (7) Religious views have hampered acceptance of efficacious birth control methods leading to large families, for example, in the Philippines whose population is largely catholic.
- (8) Delay in marriage in many highly urbanized societies has meant a decrease in the TFRs as the age of women is a factor in fertility. For example, in Singapore, the age of the bride and groom marrying for the first time has been increasing from 25.3 and 28.0 years in 1990, respectively, to 26.3 and 28.9 years, respectively, in 2002.

Singapore is a fairly homogenous, cosmopolitan, highly urbanized society without any significant rural setting. It is one of the few multi-ethnic, multi-cultural, and multi-religious countries in Asia. It can be said to be a microcosm of East and South Asia, being the domicile of the three major races of Asia, Chinese, Indians and Malays. The influences of culture, tradition, religion, and expectation in life on the fertility rates that have been discussed above can be seen from the differential changes in TFRs of the three major ethnic groups in Singapore (Table III).

Table III. Total fertility rates by ethnic groups in Singapore.

Year	Total	Chinese	Malays	Indians
1990	1.83	1.65	2.69	1.89
2002	1.37	1.18	2.29	1.50

Source: Singapore's Demographic Trends 2002, from Statistics Singapore Newsletter, September 2003 [6].

As can be seen, the influence of the ethnic and thus cultural, traditional and expectation in life of the three groups on TFRs was noted by the rates in 1990 with the Chinese and Indians having TFRs below the replacement rate of 2.1, while the Malays had rates above the replacement levels in 2002. The impact of further economic advancement and its impact on life expectation on further decreases of TFRs of all ethnic groups was evident by rates in 2002. The impact on the Chinese was the greatest (-28.5%), followed by the Indians (-20.6%) and then the Malays (-14.9%).

The impact of a sharp increase in the population of the elderly is not only measured in terms of its burden on caring for the elderly, who by nature, would require more health care than the younger ones, but also on the dependency ratio. With the rapid decline in population growth, many elderly will face a sharp decline in surviving adult children, down from 4 to, in many cases, less than 2, in countries such as Japan, China, Hong Kong, Singapore, South Korea, Taiwan and Thailand [1].

Therefore from now to 2050, it will be expeditious for each country to look into ways of reversing the decline in TFRs and restore to replacement levels. If not, at least introduce measures to halt its free fall. As can be seen from the complexity of the various factors that have led to the dramatic decline in TFRs in some cultures and populations, the challenge in reversing the fall of TFRs is daunting. It would require in-depth study of the factors influencing the fall in TFRs in different population groups. There is no "single size fit all" solution to this complex problem. Research work in this short-term strategy in addressing the aging problem is urgent. We still have 46 more years before the projections of population aging in 2050 come true. We need to work while there is time.

Long-term view of managing the aging population in Asia

In the article which summarized the deliberation of various stake holders of how best to address the aging population, the Each-West Center report has recommended four policy options: 1) policies and programme that enhance traditional Asian systems of family support; 2) policy reform that encourages the elderly who are still capable of remaining in the work force; 3) institutions and systems that support high levels of personal saving, and 4) public

programmes, including pension schemes and national healthcare systems [1].

- (1) Asians are proud of their rich tradition in which the value of family holds supreme. For thousands of years, the Asian elderly live with and are cared for by their children. However, with modernization the pressure is mounting to threaten this highly honourable tradition. Overall, 75% of elderly were living with their children in the 1980s. But this dropped to 66% in the 1990s. This trend is continuing its downward trend as can be seen in Table IV.

Not only is the proportion of elderly staying with their children decreasing, but also the support the elderly can expect from children has declined. This, in part, is due to the shrinking size of the modern family in most Asian countries.

The challenge is to come up with policies which will support or compliment this valuable Asian tradition of having the family look after their elderly. Policy such as making children the legal guardians of their elderly parents and extended family-friendly public housing are some policies adopted by Singapore and Malaysia to support this family tradition [1].

- (2) A serious effect of the rapid increase in the population of the elderly is the reduction of the work force. This inevitability cannot be resolved by a programme of immigration for most countries in Asia which are saddled with too large a population in the first place. With economic development, more workers are likely to retire earlier, further adding to the burden of care on the younger generation. In 2000, the percentage of the elderly aged 65 and above who remain employed will decline from 38% to 22% in 2010. A gender difference is seen in the labor force. In Japan 41% of men aged 55 and above remained in employment in 2000. This figure is predicted to drop to 29% by 2050. Older women in Asia are less likely to work than older men. In 2000, there were about 250 working men aged 65 and above for every 100 working women [1].

In addition, many Asian countries still maintain unrealistic retirement ages. With the exception of Japan whose retirement age is 65 years, several others have retirement ages of 55 years or lower, specifically for women in some

countries. Many of the retirement ages were set during the world war period, at a time when life expectancy was low. Asian life expectancy in the 1950s was only 41 years [3]. In addition, the primary occupation was farming. However, the new reality today is that life expectancy in most Asian countries is well above 60 and reaching up to 80 years for women in some countries like Japan. Most people are engaged in white collar office vocations. Hence, the retirement age must be re-examined in light of these realities. Certainly, there is an economic cost in keeping workers employed longer. However, the cost and benefit must be weighed with the long term impact in mind, if the elderly are to be prematurely pushed out of the labor force.

In most Asian countries, nearly everyone has married, and very few have divorced. Therefore, most of the elderly are living with their spouse or are widowed. As life expectancies rise, the proportion of elderly who are widowed will decline sharply. Women will be especially affected because they are much more likely than men to be widowed. For example, 52% of all South Korean women aged 65–69 are widows. This number is expected to drop to 17% by 2050. In Thailand, 32% of women in this age group were widowed in 2000, and this is likely to decline to 17% by 2050. In contrast, only 8% and 10% of men aged between 65 and 69 years are widowed in South Korea and Thailand, respectively, and these numbers are unlikely to change in the next 50 years [1]. This trend, however, is changing among the more urbanized and economically advanced Asian countries. It is known that divorce rates in Singapore and in China have been rising. Remarrying, although not as common as in Western countries, is also on the rise. However, we still cannot get away from the fact that there will be more widows than widowers in Asia, especially in the more traditional societies. While many Asian societies, including those in Singapore, Japan, China, Hong Kong, South Korea, Macau, Malaysia and Taiwan are very much like the West with liberalization of women in the work force, many Asia counties are still tradition bound. The gender-based division of labor reigns, men go out to paid work and women stay at home to take care of domestic chores and childbearing [4]. This labor, however exacts a cost as women depend totally on their husbands, rendering women economically, socially, and politically powerless. This will make meeting the needs of older widows among the aging Asian population a particular challenge.

Several countries have already been addressing this issue. Creative modalities must be sought. Singapore has extended the retirement age

Table IV. Percent of elderly staying with children.

Countries	% Staying with children	% Staying with children
Japan	1950 – 80%	1990 – 50%
South Korea	1984 – 78%	1994 – 47%
Taiwan	1973 – 82%	1986 – 70%

from 55 years to 62 and perhaps beyond 62. A programme of continual re-training of older workers has been instituted. However, these are mainly targeted at the lower skilled work force. More creative strategies need to be found on how to harness the big pool of highly skilled professionals who have many more years of productivity beyond 60 or even 65 years, into some form of continued employment which is actively contributing to the economy. In many countries, many women are not in the work force, yet the demographic reality is that they will out live men by an order of 5–8 years. It is important in these countries to start now to formulate work strategies that will harness this vast population of women into the work force. Older workers, at all levels of skills, must be tapped into the work force to counter the pressure of the demographic changes which will shrink the work force in most countries.

- (3) In most Asian countries today, the burden is to care for the vast population brought about by the rapid overpopulation during the last 50 years. Therefore, the challenge for meeting the needs of the elderly and those after retirement is not apparent at the moment. Only few countries, notably the more economically advanced countries like Japan, Singapore, South Korea, China, Malaysia, Philippines and to a lesser extent, Indonesia have some kind of programmes to meet the retirement needs of the citizens. With the predicted increase in the elderly population, it would be wise to create both private as well as public programmes to encourage saving for retirement needs. In Singapore and Malaysia, the provident funds – a personal saving programme, has been introduced for many years now. Government pension schemes in several countries are still in place. However, in the light of the shrinking pool of those contributing to taxation, and a growing number of beneficiaries, it is important the each country develops their own appropriate programmes of saving to meet the needs of the elderly.
- (4) Health systems have evolved differentially in different countries in Asia. As the populations age, incidences of major age-related illnesses such as cardiovascular disease, cancer, chronic obstructive pulmonary disease, osteoporosis, vision impairment, and dementia will rise. To meet the needs of a growing aging population will drain the economic resources of most developing countries in Asia. Even in the more developed countries in Asia, the diversion of funds to meet the health needs of the enlarged aging population will limit their economic progress. It will be important to establish preventive measures to either prevent the onset

of these age-related illnesses or to delay the onset for as long as it is possible.

The study of aging is a relatively new science, and is not the exclusive domain of any subspecialty of medicine or paramedical discipline. Hence, it would be expedient to adopt a holistic approach by incorporating the biomedical, social, economical, and behavioral aspects into the management of aging [2,7–9]. The key to establishing a holistic approach in the management of the aging population is to develop a comprehensive diagnostic paradigm. Since the aging process affects every compartment of the human system and no single compartment functions independently from the other, it is unlikely that a concentration on a particular functional area would lead to the identification of the primary cause or determinant of the dysfunction. In our attempt to develop a holistic and public health approach to the management of aging in Asia, we have sought to establish a broad-based diagnostic paradigm covering several major areas in health and lifestyle that might be specific to our local Asian populations. Within each area of concern, we hope to identify key determinants of ill health and thereafter help to establish preventive management modalities to help our population age gracefully [10].

From a study in Singapore and through the use of such a diagnostic paradigm, several areas of health concerns have been identified and further research works are needed in order to establish realistic preventive modalities for their management so as to help prevent the preventable and delay the inevitable. For developing countries in Asia to be more effective in tackling the health needs of the aging population, these management modalities must be at minimal cost and with maximum public accessibility [10].

Conclusion

Today, population aging in Asia is not as advanced as in Western countries, other than in a few developed countries, notably Japan, Singapore, South Korea and Taiwan. However, over the next 50 years, as predicted by the United Nations, the level of population aging that has occurred in 50 years in Western countries, will be compressed in 20–30 years for Asia. Asian populations will age dramatically, overall, continent-wide, there will be a more than 3-fold increase in the population aged 65 years and above by 2050 as compared to 2000. Hence, it is important that the issues of aging and how to address the multi-faceted impact of rapidly aging populations, are on the developmental agendas of all countries.

The great economic, social, cultural, religious diversity among the Asian countries, coupled with the varying rates of population aging pose a challenge for each country to examine the aging issue in their own peculiar context and arrive at modalities that are

appropriate for each country. The key in the management strategy is to create preventative measures, which are affordable and freely accessible to the masses.

Disclaimer

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