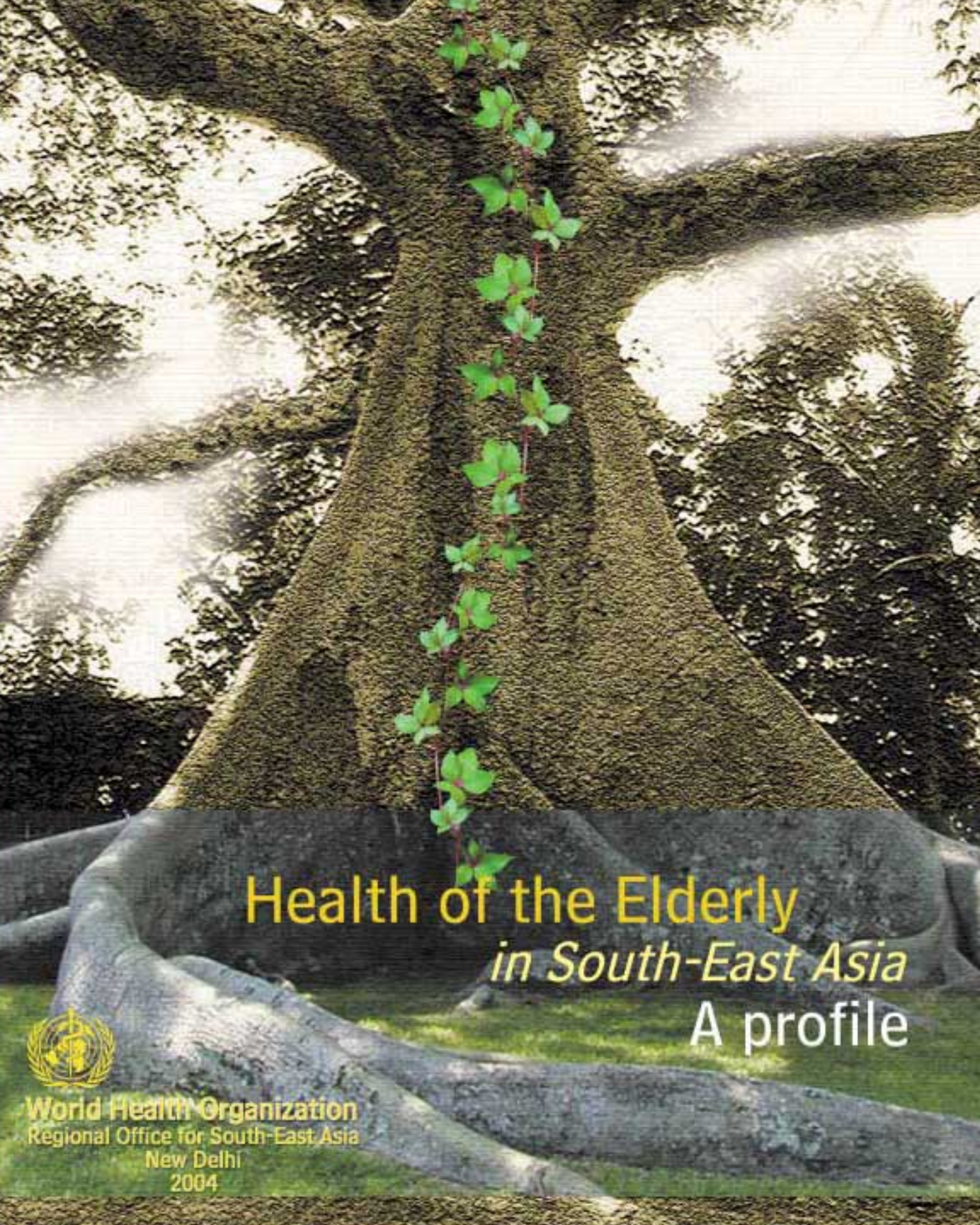

# Health of the Elderly
## *in South-East Asia*
## A profile

World Health Organization
Regional Office for South-East Asia
New Delhi
2004

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# List of Abbreviations

| | |
|---|---|
| CMU | Chiang Mai University |
| DPR | Democratic Peoples' Republic (of Korea) |
| SEAR | South-East Asia Region |
| UN | United Nations |
| WHO | World Health Organization |

# FOREWORD

For long, several nations across the globe have grappled with the problem of rapid population growth. The scenario is changing rapidly and it is projected that by 2050, there will be more elderly people in the world than children. This has far-reaching implications on the social, economic and health aspects of human development.

While population ageing is a global phenomenon, the South-East Asia Region has certain unique features of its own. Much of the ageing in the rest of the world occurred after the population became rich. By contrast much of the elderly population in the South-East Asia Region are still living below the poverty line. Of the various needs such as income security, health security, social support and psychological well-being, the elderly in the Region are already at a greater disadvantage because of poverty and lack of access to health care and stereotyping of the elderly by society.

This study was undertaken to address the generic problem related to ageing, and, more importantly, the specific problems confronting the elderly in the South-East Asia Region.

I hope that this document will help governments and voluntary organizations to articulate a science-based response to this ever-increasing concern. It will, I am confident, be found useful by all those interested and involved in ensuring a healthy and enjoyable life for the elderly.

Samlee Plianbangchang, M.D., Dr P.H.
*Regional Director*
*South-East Asia Region*

# About the Publication

The proportion of elderly persons in the South-East Asia Region is increasing rapidly as a result of demographic changes. This Regional profile on Care of the Elderly has been compiled for people who are interested and involved in caring for the elderly.

The profile is divided into eight sections. The first two sections introduce the subject, highlight the findings of literature review relating to the health of the elderly in general, and with specific reference to the Region, and discuss the methodology for collection of data. These are followed by the section on Demographic Changes and the Elderly, which focuses on the changing health indicators in the South-East Asia Region, while analyzing the figures for life expectancy at birth, and at 60 years of age, and for the crude death rate, and the dependency ratio.

The fourth section looks at the health status of the elderly in the Region, focusing on their common diseases and disabilities and causes of hospitalization. The fifth section discusses the factors determining the health status of the elderly, which include, among others, economic status and educational levels, religion, marital status and living arrangements, as well as behavioural risks to health. Participation of the elderly in community social activities is also explored.

In the sixth section, national policies on the care of the elderly, as well as the existing health care and social welfare services specifically available for older people, are summarized. This section further examines the focus of national policy on ageing, the development of research on the elderly, and laws and regulations specifically dealing with the rights of older people. The penultimate section deals with national elderly care programmes, both government as well as nongovernmental, in 10 of the 11 countries of the Region. It also outlines the programmes the countries are planning for elderly care. The final section looks at future challenges, and the strategies recommended to overcome them.

# Executive Summary

The 21st century is witnessing a rapid demographic change due to a worldwide increase in the number of people aged 60 and above. The dramatic increase in numbers of people in this age group is resulting from a significant decline in the number of babies born and consequent reductions in numbers of younger age groups, while simultaneously there is an increase in life expectancy attributed to advancement in medical treatment and technology, eradication of many infectious diseases, and improved nutrition, hygiene and sanitation. It can be postulated therefore that improvement in the quality of life found in many countries has also contributed to longevity. According to the United Nations Population Division, long life is seen as a major achievement of the 20th century.

While all nations are experiencing an increase in elderly populations, responses to this increase vary from one country to another. This Profile examines the response in ten of the eleven South-East Asia Region (SEAR) countries: Bangladesh, Bhutan, the Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka and Thailand.

In all countries worldwide, poverty is the single greatest obstacle to a secure old age. In less developed countries, the problems associated with old age are poor diet, ill-health and inadequate housing, which are all exacerbated by poverty. Furthermore, due to changes in lifestyles in the developing world, chronic illness is becoming endemic among many older people, because technical advances in medicine have far outrun social and economic development that allows for relatively disease-free living in developed countries.

In many SEAR countries, a large proportion of populations are people with low incomes or those living in poverty. Poverty prevents a person from satisfying the most basic human needs of food, shelter, safe water, and access to health services. Lack of basic needs leads to ill-health and inhibits an individual's ability to work, thus leading to further deprivation. The United

Nations has classified Bangladesh, Bhutan, DPR Korea, India, Myanmar, Nepal and Sri Lanka as low-income countries, and Indonesia, Maldives and Thailand as lower-middle-income countries.

The elderly poor people often have no access to health services. However, in Bangladesh, India and Thailand, the governments, nongovernmental organizations (NGOs) and the private sector provide some health care services, specifically for the elderly poor. In Myanmar and Bhutan, governments provide health care services to all people of all ages. Some governments, namely in Bangladesh, India, Nepal and Thailand, provide some social welfare services for elder people.

The normal biological process of ageing leads to functional decline and increased susceptibility to disease. In most SEAR countries, changes in lifestyles over the past few years have led to a change in the pattern of disease prevalence from infectious to non-infectious. Non-infectious diseases, particularly chronic diseases, are now the leading cause of death in Thailand, Bangladesh and India. Similar information on mortality is not available in the other SEAR countries. Mortality and life expectancy are health status indicators. Life expectancy is increasing in most SEAR countries: data is not available for Bhutan and DPR Korea. The mortality rate has decreased in Bangladesh, India and Thailand, and increased in DPR Korea and Myanmar. In all countries there is a rise in the dependency ratio because of increasing numbers of older people. The highest rate of hospitalization in India is for cardiac and respiratory problems, and in Bangladesh for asthma, while in Thailand it is for cataracts and diarrhoea, and at out-patient departments for diabetes and hypertension. Regarding disabilities, physical disabilities are seen as the most common in all countries where statistics are available. The most prevalent risk behaviour in all countries is smoking, which is far greater among men than women. In India and Thailand, alcohol consumption is the second greatest risk behaviour, again more prevalent among men than women. However, in Bangladesh, inappropriate eating is rated the second most prevalent risk behaviour. There has been some research into the personal perception of health in Sri Lanka and Thailand, and older people have been found to perceive their health at an average level.

Governments of most SEAR countries have formalized national health plans for elderly persons, except Bhutan, Myanmar, Nepal and DPR Korea. The plans focus on educating the elderly regarding self-care and risk behaviour awareness, and on improving their environments. Education is provided to both the elderly and health care providers. Research as a strategy for improving the quality of health, and therefore of life, is being undertaken in Bangladesh, Maldives, Sri Lanka, India and Thailand. Formal government policies on the rights for the elderly exist only in India and Sri Lanka. However, in India the implementation of rights for the elderly to public assistance and provision for their well-

being has been very slow, and is still not complete after fifty years of legislation. In Sri Lanka the legal rights of the elderly are established and moreover a government action plan is being successfully implemented.

Although some SEAR countries are endeavouring to address the problems of the elderly, particularly the poor elderly, others do not seem to be focusing specifically on the elderly, separately from the rest of their populations. Rising numbers of the elderly; particularly the dependent elderly; changes in patterns of diseases; continuing risk behaviours; and poverty, need to be urgently addressed by governments, NGOs and the private sector in order to provide for a secure and healthy old age for all peoples in the SEA Region.

# INTRODUCTION

The recent awareness of increase in the number of elderly people has brought about a subsequent increase in scholars analysing the concept of ageing and researching the attitudes, perceptions and situations concerning elderly people. Globally, there is a necessary movement for the care of these elderly people. Culturally, growing old is perceived differently, leading to ways of responding to ageing populations unique to different cultures. There is a need, therefore, to study the cultural attitudes together with the physical attributes associated with particular societies for a holistic understanding of the situation of the elderly. Similarly, the health of the elderly differs from country to country, affected by socioeconomic and environmental attributes. The care of the elderly therefore involves a holistic combination of health care, socioeconomic care, and the provision of a suitable environment. The purpose of this document is to compile data collected from ten SEAR countries in order to present a profile of elderly care in the South-East Asia Region.

## Ageing as a Concept

Negative stereotypes concerning ageing and older people are prevalent worldwide. This is particularly disturbing as these stereotypes can affect policy decisions and subsequent programmes (Grant, 1998). Ageism has been described as "thinking or believing in a negative manner about the process of becoming old or about old people" (Doty 1987, p. 213 cited in Grant, 1998). Although each society has attitudes and beliefs about ageing that are embedded in the culture, negative responses to ageing are prevalent. Ageism can subsequently affect health care providers, professional training and service deliveries, the behaviour of the older people and health outcomes, as well as policy decisions.

Health was previously conceptualized as the absence of disease, but the concept has since evolved through a number of different stages. In 1947 the World Health Organization (WHO) declared that health is "the state of complete physical, mental, and social well-being, and not merely the absence of disease." In 1986 the Health and Welfare Canada posited health in terms of "quality of life", stating that health is a dynamic process of interaction

between communities and individuals. Currently, it is widely accepted that health involves freedom of choice, and that this includes freedom of action for healthy ageing (Grant, 1998). The World Health Day in 1999 celebrated old age and "active ageing", and WHO called for the elderly to be viewed as active citizens with a positive contribution to make rather than as a burden.

The negative stereotype of ageing portrays the process as one of continual decline, which leads to systematic discrimination and devaluation of older people, and furthermore frequently denies them equality (Grant 1998). This negative stereotype is often internalized by elderly people, who adopt "ageing myths" and see decline as inevitable, becoming passive members of society (Rodin & Langer 1980 cited in Grant, 1998). Thus the response of elderly people supports the negative stereotyping and the two are reinforced, becoming firmly embedded in most societies. Moreover the expectation of disability becomes disabling in and of itself (Grant 1998). The "inevitable" deterioration is often the result of individual behaviour and environmental conditioning. The current research is also reinforcing this stereotype by focusing on the narrow view of ageing, thereby ignoring the substantial difference in functional ageing. The so-called "usual" disease processes can be modified and minimized (Rowe and Kahn 1987 cited in Grant 1998). Diet and exercise have been found to have significant effects on carbohydrate metabolism, osteoporosis, cholesterol levels, diabetes, blood pressure, respiratory functioning and hydration. Chronic pain can be greatly reduced by exercise and decreased medication use. However, the prevailing negative views lead to disease management rather than proactive interventions.

A further disturbing result of negative ageing stereotyping is the existence of neglect of the elderly, and of abuse. When older people are frail, dependent and mentally impaired there is a high risk for mistreatment (Fulmer 1998).

Psychological well-being plays a significant role in the preservation of health and functional capacity (Zantra, Maxwell & Reich 1989 cited in Grant 1998). Lack of social support has been correlated with decreased health promotion regimes (Rowe and Kahn 1987 cited in Grant 1998), whereas increased perceived control leads to improved memory, alertness, activity, physical health and decreased morbidity and mortality (Rodin 1986 cited in Grant 1998). A balance is necessary between independence and dependence for older people, and moreover, they should be given the right to choose their own position on the trajectory.

Stanley and Beare (1995) define ageing as the normal physical and behavioural changes that occur under normal environmental conditions as people mature and advance in age. Furthermore, Simon (1988 cited in Stanley and Beare 1995) defines successful ageing as an individual's ability to adapt or adjust to the process of ageing.

The society as a whole needs to examine the negative stereotypes of ageing and formulate ways in which stereotypes can be overthrown and ageing released from negative connotations that lead to unnecessary suffering for the elderly, whether caused by others or by themselves. Considering the changes that have been made in the global views on the concept of health, it would seem to be equally possible to bring about changes in the concept of ageing, which could thus enhance the quality of life of a significant proportion of the world's population.

## Global movement for care of the elderly

On World Health Day 1999, WHO stated that there were 580 million older people in the world, using the common measurement of the proportion of the population aged 65 and above. In 2020 WHO predicts a figure of 1000 million with 700 million of these persons living in developing countries (WHO 1999). The rising numbers of the elderly are the result of medical and social advances that have reduced deaths from infectious diseases, and of improved sanitation, housing and nutrition.

With the rapidly expanding numbers of older people, the inclusion of gerontologists, who are experts in the study of ageing, in political debate could be of great value and importance, as in the world as a whole there appears to be little understanding, discussion or policy development for issues related to ageing. Presently, the focus of policy-makers on ageing is fiscal in nature, and rarely addresses social issues (Torres-Gil & Puccinelli 1998).

However, there are other equally critical issues, such as worker productivity; housing; health care; long-term care and demographic changes affecting family and social structure with fewer children and more elderly living alone, that need to be addressed urgently. In many countries middle-aged people are responsible for their own children as well as ageing parents (Cutter and Devlin 1998). Special needs of women, who outnumber men in older age, need to be taken into account, as well as the situation of the disabled and the poor elderly. The demographics of ageing need to be situated in society and the family.

Ageing affects everyone. The study of gerontology is the study of the process of ageing over the life course, and sees the dynamics of middle age as central to the ageing process (Cutter & Devlin 1998). Looking to one's future can and should affect one's decisions today. For people earning surplus income, one motivation for personal saving is support for old age. In Asia, figures for domestic savings are higher than in the West. In 1993, the gross domestic savings were 36% of the gross domestic product (GDP) in Thailand, and 33% in Japan, as compared with 15% in the US.

However, in all countries there are proportions of society that earn an income sufficient only for living day to day, and some that earn even less. As these groups of people age, and as their

numbers multiply with the changing demography, governments need to develop plans for their care. Moreover, those governments who provide old age pensions are becoming aware that the number of retirees is increasing steadily. These retirees are paid for by taxpayers of working age, and their numbers are not increasing (Westley 1998).

Health is intrinsically connected to ageing. Health care is provided for their people to a greater or lesser extent, by most countries of the world. With an increase in numbers of the elderly, the cost of public health care is expected to increase. Health promotion is an invaluable tool to promote good health, and to prevent the onset of disease and accident, including the expenses involved. According to Pender (1987) health promotion can increase the level of well-being and promote self-actualization, thus decreasing the probability of specific illness or dysfunction. This is primary prevention. Secondary prevention is the early diagnosis and prompt intervention to prevent the deleterious effects of illness. Tertiary prevention sees the rehabilitation of the individual to restore an optimal level of functioning within the constraints of disability. By promoting health and preventing the loss of health at the level of nation, community and family, countries can assist their people to take an active role in their own health, thereby enhancing the quality of life in old age. Moreover, active ageing will lead to healthy older people with less demand on public health care services.

Thus it can be seen that the changing demographic situation affects all countries worldwide. It presents a clear challenge to all governments, communities and families to address and prepare for increasing numbers of elderly people.

## Need for a regional understanding

While all countries in the world have unique aspects, there are similarities across some national boundaries in certain aspects of geography, culture and economics. Within the countries of Asia, a number of similarities can be found, the sum of which point to general differences between Asia and, for example, Europe. And within the SEAR countries, certain similarities can lead to general differences between the region and Asia as a whole.

In Asia the number of children born reached a peak in 1999, before the beginning of a slow and steady decline (Lee & Mason 2000). At the same time, mortality dropped dramatically. Life expectancy at birth increased from 41 in the early 1950s to 60 by the early 1980s and is projected to reach 68 by 2005. With high fertility in the past and rising life expectancies in the future, the number of elderly in Asia will increase rapidly over the next 50 years.

Due to the previous high rate of births, there has been a substantial expansion in the proportion of the working age population. In 2000 the average working age throughout Asia was 29. However, the United Nations medium projections estimate that the average working

age in 2050 will be 40 (Lee & Mason 2000). As the bulk of the population ages further, this will lead to a correspondingly huge increase in the numbers of the elderly.

Care for the elderly in most Asian countries has traditionally been the responsibility of their families. However, there are clear indications that family-support systems are eroding. In rural areas traditional multigenerational farming families are breaking up and young people are migrating to urban areas in order to earn incomes. The elderly in higher-income countries in Asia are much more likely to live with their children than are the elderly in America or Europe, but even in Asia, co-residence is declining. The fact that many middle-aged women, who were the traditional caregivers of the elderly, are increasingly joining the work force, has important implications for the ability of families to care for elderly relatives.

Very few Asian countries have pension schemes that cover more than a fraction of the elderly population. In addition to funding and implementing pension schemes, policy-makers will face particularly hard choices in the allocation of health-care resources. The cost of treating chronic diseases that affect the elderly, such as cancer and heart disease, are rising steadily in countries where childhood diseases, such as polio and measles, are still widespread. In some of these countries, infectious diseases such as malaria, tuberculosis, and HIV/AIDS also affect large numbers (Lee & Mason 2000).

In many developing countries in Asia today, however, care still remains in the hands of the family rather than society. In 2000 there were nearly 12 people of working age for each person aged 65 and above. In 2050 there will only be 4. At the level of the individual family, this situation is more precarious than what even these figures suggest. With the decline in childbearing to low levels, elderly parents will be increasingly dependent on 1 or 2 adult children. The illness, death, or estrangement of even a single adult child can threaten the viability of the entire family support system (Lee & Mason 2000).

Values and beliefs are essential parts of the human spirit and affect all aspects of life. They play an important role in promoting health and in coping with illness, how we live, and how we die (Wold 1993). The nations of South-East Asia identified in this profile contain a rich diversity of cultures which necessarily play a part in the quality of life of the elderly. Individual nations are researching in the area of gerontology and developing plans for elderly care to address the anticipated steep rise in numbers of the elderly. Sharing such information, and collaborating across national boundaries can be of great value to all nations.

## Purpose of this document

Asia in general, and South-East Asia in particular as addressed in this profile, will necessarily be undergoing great socioeconomic changes concerning demography and the elderly, at both national and family levels.

It is hoped that by bringing together information on the current situation of elderly care, the SEAR countries can learn from each other, and develop ways of combating the various problems that will be affecting them all. The contents of this profile may also indicate gerontological research valuable to the societies and cultures of the SEA Region, that can be undertaken separately and collaboratively, and results shared for the betterment of health of peoples of all countries.

# Method of Compilation of Information

In order to obtain information from the ten countries chosen to be part of the profile of the SEA Region, namely Bangladesh, Bhutan, the Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka and Thailand, the focal points in each country were sought. The Faculty of Nursing, Chiang Mai University (CMU), who undertook to compile, analyse and synthesise the data for the profile, had contacts in a number of countries, due to the presence of an ongoing international short training course in elderly care which the Faculty has been conducting for some years, and which has been attended to by people from different countries in the Region. In countries where the Faculty had no previous contacts, the WHO Regional Office was requested to appoint a focal point.

## Contacts

The focal points in the ten countries were all experts in elderly care and currently working in the field in government and non-government institutions.

## Instrument

The Faculty of Nursing, CMU, appointed a team of experts in elderly care to develop the instrument. This was in the form of a questionnaire that was subsequently sent to the ten focal points. The team developed a draft questionnaire that was given to a representative of WHO, an expert on elderly health. The questionnaire was subsequently revised according to the suggestions received. The questionnaire was then sent to 5 experts for validation. Further revisions were suggested, and undertaken by the team, and the final instrument prepared and sent to the focal points in the ten countries.

## Communications

With most of the country focal points, communications were successful and without problems. However, in the case of Indonesia and DPR Korea, after the questionnaire was sent to the focal points, there were no subsequent communications from them, and the Faculty of Nursing, CMU, were unable to contact the focal points again. Therefore information on these 2 countries was obtained from other sources.

## Sources of information

Most of the focal points were able to obtain information from national surveys. Sri Lanka and Nepal were able to obtain information from research projects. A limited amount of information was obtained from the internet. The completed document was sent to WHO for review in January 2003, and was returned with suggestions in July 2003. The revision was completed in December 2003.

## Limitations of information

Most of the information was obtained from national information systems. However, these varied in substance from country to country, and information was particularly difficult to obtain in Myanmar.

Information from non-government sources and the private sector were rarely included in the completed questionnaire. Therefore a second contact was made with all the focal points requesting for further information, which was received from some countries.

While countries were able to supply a wealth of information, others were only able to supply a limited amount. Therefore the distribution of information in this profile is necessarily uneven.

# Demographic Change and the Elderly

In majority of the countries throughout the world, the demography of elderly people is undergoing a change. The number of people over 65 is increasing rapidly, due to a significant decline in the number of births, advancement in medical treatment and technology, eradication of many infectious diseases, and improved nutrition, hygiene and sanitation. However, the increase in developing countries is far more rapid than in countries that are already developed, leading to an urgent need for focus to be placed on this particular group of people in developing countries.

## The global picture of demographic change

Over the twenty-years period from 1950-1970, the proportion of people in the population aged 65 and over was 5%. In 1980 this age group began to increase. The United Nations has predicted that it will rise to 10% in 2050. In 1950, 34% of the world's population were children and 8% consisted of people over 60 years. In 1950, the life expectancy was 46 years, compared with 65 years in 2000, and it is projected that it will be 76 years in the year 2050. This means that the increase in absolute numbers of older people around the world will be dramatic. In 1970, the number of older people was around 200 million. This is expected to be as much as 828 million in 2025. The United Nations predicts that one person in seven in the world will be over 60 years by the year 2025. In 2050, in developing countries, the figures are expected to rise from 8% to 19%. (United Nations, 2000).

In industrialized countries, the increase in the older population has occurred gradually. However in developing countries, in East Asia, South-East Asia and Latin America, the demographic change in the ageing population is occurring at a more rapid rate. Out of the global population of people over 60 years of age 61% live in developing countries; this will rise

to 70% by 2025. In the year 2000, the older population was about 250 million in developing countries, compared with 173 million in more developed countries. By the year 2025, in the less developed regions, the number is expected to be as large as 700 million, which is more than two times greater than in developed countries. Within the countries of Asia, the ageing process in proportion to the older populations is more rapid in eastern Asia than in western Asia and much slower in South-East Asia. The number of older people in developing countries will more than double over the next quarter century, possibly reaching 700 million by the year 2025 (12% of the population), according to WHO (1999). This demographic change is having, and will increasingly have, an impact on the social, economic and intergenerational relationships.

A number of issues are becoming highlighted in the global demographic change. Females tend to outlive males in most countries, both developed and developing. For those over 80, females currently outnumber males by about 2 to 1. Older women are more likely to be widows, with this likelihood increasing with age. Typically less than 20% of men over 60 in developing countries are widowed, compared to 50% of women, which is the case for example in Thailand and Maldives, two of the countries in South-East Asia. Older women often suffer multiple disadvantages arising from biases of gender, widowhood and old age. According to United Nations statistics, in Asia in 1997, 16% of households were headed by men over 60 years of age compared to 34% of women over 60.

With the rapidly increasing ageing population in developing countries, care of the elderly is creating challenges that will be exacerbated in the future. Often, older people are among the poorest people, and have lived in poverty all their lives; they have been unable to accumulate savings so that they can take care of themselves financially when they are older, and only a few developing nations have social security or pension schemes in place to care for them, unlike the case in most developed countries. At present the majority of older people in developing countries are cared for by their families. However, the older person support ratio is declining more rapidly in developing countries than in the developed countries. It is projected that between 1999 and 2050 in the Asian region, it will fall by over 60%. The burden of care of older, dependent parents is increasingly on fewer children, and the impact is greatest among the poorest.

In developing countries, the problems associated with old age are poor diet, ill-health and inadequate housing. Poverty contributes to these problems. Chronic illness is endemic among many older people in the developing world, where technical advances in medicine have far outrun social and economic development which have allowed relatively disease-free living in developed countries.

Many governments are facing the challenges of an ageing population, especially in developing countries in South-East Asia. The ageing population is predicted to be an encumbrance that will become harder to support in the future.

## Ageing population in the South-East Asia Region

The data contained in this profile is from ten SEAR countries. These are: Bangladesh, Bhutan, the Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka and Thailand. This Region is diverse geographically, culturally, socially and economically. Table 1 makes an attempt to give a comprehensive description of numbers of the elderly population in these ten countries. However, limitations were encountered with the data. It should be understood that not all countries responded and that some countries did not respond to all sections of the questionnaire, probably due to a lack of a database on the elderly. Focus on the elderly as a separate aggregate is relatively new in developing countries, and some countries may not have appropriate mechanisms in place to collect the data relevant to this study. The tables are based on the data received.

India has a population of over 1 billion and is the largest country in this Region. In comparison, Maldives has a population of less than 300 000. Bangladesh has a population of about 123 million while Thailand and Myanmar have populations 62 and 51 million representatives. Sri Lanka's population is about 19 million and is less than that of Nepal which is approximately 23 million. (Table 1)

The greatest numbers of both sexes of older people live in India. All the countries in the Region, with the exception of Nepal, Sri Lanka and Maldives, have more older female populations as indicated in the sex ratio of the population. For the 3 countries with lower ratios, this could be due to higher mortality in women than men in childhood, and also due to mortality in the reproductive age group of women. A small percentage increase in the number of older people of both sexes is projected in all countries, with the exception of Maldives. The older population in Maldives is expected to be nearly double its present figure (from 5.9% to 10.3%) by 2011. In most countries, the ratio of males and females has remained constant (Table 1 and Figure 1).

**Figure 1 : Projected ageing population in the South-East Asia Region, 2001 - 2011**

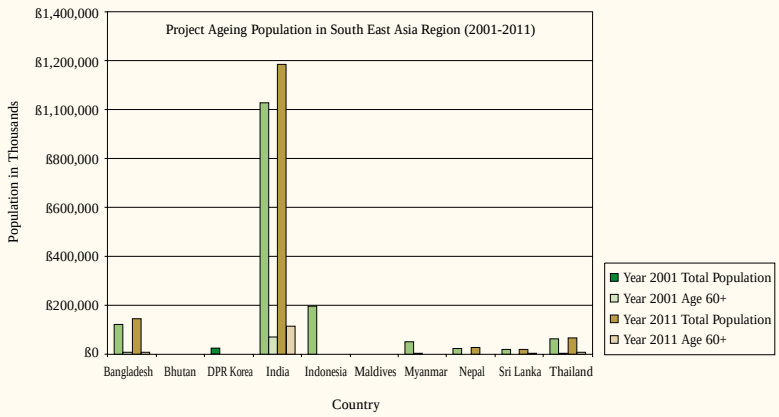


Table 1 : Projected Ageing Population in South East Asia Region (2001 –2011)

| | 2001 (Population in Thousands) | | | | | | | 2011 (Population in Thousands) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Country | Total Popula-tion | Males 60+ | % | Females 60+ | % | Males + Females 60+ | % | Total Popula-tion | % | Males 60+ | % | Females 60+ | % | Males + Females 60+ | % |
| Bangladesh | 123,151 | 3,501 | 2.8 | 3,198 | 2.6 | 6,699 | 5.4 | 144,201 | 17 | 4,833 | 3.3 | 4,589 | 3.2 | 9,422 | 6.5 |
| Bhutan* | 692 | NA | | NA | | NA | | NA | | NA | | NA | | NA | |
| DPR Korea* | 22,837 | NA (1988) | | NA | | NA | | NA | | NA | | NA | | NA | |
| India | 1,027,015 | 36,387 | 3.5 | 34,544 | 3.5 | 70,931 | 7.0 | 1,184,393 | 15 | 49,079 | 4.1 | 47,829 | 4.0 | 96,369 | 8.1 |
| Indonesia | 195,283 (1995) | NA | | NA | | NA | | NA | | NA | | NA | | NA | |
| Maldives | 270 | 9 | 3.3 | | 2.6 | 16 | 5.9 | 318 | 17.7 | 16.8* | 5.2 | 16.3 | 5.1 | 33.1 | 10.3 |
| Myanmar | 51,137 | 1,862 | 3.7 | 2,219 | 4.3 | 4,082 | 8.0 | NA | | NA | | NA | | NA | |
| Nepal | 23,453 | 652 | 3.8 | 695 | 3.0 | 1,347 | 5.8 | 29,234 | 17.9 | 922 | 3.1 | 968 | 3.3 | 1,890 | 6.4 |
| Sri Lanka | 19,177 | 952 | 5.0 | 965 | 5.0 | 1,917 | 10.0 | 21,028 | 9.6 | 1,412 | 6.3 | 1,412 | 6.7 | 2,735 | 13.0 |
| Thailand | 62,408 | 2,637 | | 3,096 | | 5,733 | 9.2 | 67,234 | 9.3 | 3,477 | | 4,162 | | 7,639 | 11.4 |

## Changing health indicators in the South-East Asia Region

The significant indicators used for the health status of the elderly are mortality rates and life expectancy. The following section includes data from the ten countries in this report, and includes figures on the dependency status of the elderly in the Region which is of significant importance to the care of the elderly who are often the sole responsibility of the family.

## Life expectancy

Life expectancy at birth is the average number of years a new-born child can be expected to live. As a result of the declining numbers in infant and age-specific mortality, life expectancy at birth has been increasing all over the world. Life expectancy at birth of the population of both sexes in SEAR countries is increasing in almost every country. In Bangladesh, the life expectancy at birth has increased from 56.5 years for men and 55.7 for women in 1990, to 58.4 years for men and 58.1 for women respectively in 2000. This trend is similar in India where life expectancy at birth increased from 58.1 years in 1990 for males to 64.1 in 2000, and 69.9 years is projected for 2010. For Indian women, the expectancy rose from 59.1 years in 1990 to 65.4 in 2000, and 68.8 years is projected for 2010. Life expectancy at birth of women in Bangladesh and Nepal is less than that of men, while women in DPR Korea, India, Myanmar, Sri Lanka, Maldives, Indonesia and Thailand live longer than men. Comparing the life expectancy at birth among SEAR countries, it was found that Sri Lanka, DPR Korea, Maldives, and Thailand are countries with a life expectancy of above 70 years. Bangladesh and Nepal are countries with a life expectancy below 60 years (Appendix, Table 1).

In Thailand, a report in 1998 (Kulpravit et al.) showed that the life expectancy at birth of Thai people increased from 55.9 years for men and 62.0 years for women from 1964 to1965, and is expected to increase from 72.2 years for men and 76.5 years for women from 2015 to 2020 (Appendix, Table 2). According to the Human Resources Planning Division of the National Economic and Social Development Board (1995), in 1995 the life expectancy of men was 66.48 years and women was 67.37 years, and the figures for 2000 were projected as 67.36 years for men and 71.04 years for women. Although life expectancy at birth differs according to different sources of data in Thailand, the statistics from all sources show an increase in life expectancy, especially that of men.

Life expectancy over 60 years of age is another indicator used to portray the mortality and health conditions of the population. Considering the life expectancy at age 60 in Myanmar (Table 2), women are expected to live longer than men, except upon reaching the age of 80, when men are expected to live longer than women. Comparing the elderly living in urban and rural areas, it was found that the life expectancy at age 60 of the urban elderly was higher than for the elderly residing in rural areas. However, in Bangladesh, the male elderly aged 60 and over live longer than the female elderly. By contrast, the elderly women in Thailand are more likely to live longer. Among the female elderly in Thailand in 1996, a higher life

expectancy was experienced at 60 years than that for the male elderly. In Maldives, at the age of 60 years, men are more likely to live longer than women, while at birth, females are less likely to live longer (Appendix,Table 2).

**Table 2 : Life expectancy of population after 60 years of age, by sex and age range, in Myanmar**

| Age range | | Year 1990 Male | 1990 Female | 1999 Male | 1999 Female |
|---|---|---|---|---|---|
| 60-64 | urban | 15.8 | 17.3 | 16.1 | 17.7 |
| | rural | 15.7 | 17.6 | 16.0 | 17.1 |
| 65-69 | urban | 12.8 | 13.9 | 13.1 | 14.2 |
| | rural | 12.7 | 13.4 | 13.0 | 13.7 |
| 70-74 | urban | 10.3 | 10.9 | 10.5 | 11.2 |
| | rural | 10.2 | 10.5 | 10.4 | 10.8 |
| 75-79 | urban | 8.2 | 8.4 | 8.4 | 8.8 |
| | rural | 8.2 | 8.1 | 8.3 | 8.4 |
| 80-84 | urban | 6.6 | 6.5 | 6.7 | 6.6 |
| | rural | 6.5 | 6.3 | 6.6 | 6.4 |
| 80-85 | urban | 5.3 | 5.0 | 5.4 | 5.1 |
| | rural | 5.3 | 4.8 | 5.3 | 4.9 |

Source: Central Statistical Organization (Statistical Year Book, 1995, 2000)

**Table 3 : Crude death rate of the population in SEAR countries (per 1000 population)**

| Country | 1983 | 1985 | 1986 | 1990 | 1991 | 1992 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bangladesh | | | | | 11.2 | | 8.5 | 7.9 | | | |
| Bhutan | | | | | | | 9.0 | | | | |
| DPR Korea | | | | | | | 5.5 | 5.5 | | | |
| India | | | | | | | | | | 9.0 | |
| Indonesia | 11.7 | 7.9 | | 7.5 | | | 7.5 | | | | |
| Maldives | | | | | | | | | 5.0 | | |
| Myanmar | | | | 8.8 | | 8.9 | 8.6 | | 8.6 | | |
| Nepal | | | | | | | | | | 10.3 | |
| Sri Lanka | | | | | | | | | | 5.9 | |
| Thailand | | | | | | | | | | | 7.16 |

Source: WHO, Country Health Profile, 2002

In Indonesia, from 1986 to 1995, the life expectancy at 65 increased very slowly from 11.8 to 12.0 years for men and 13.1 to 13.5 for women (WHO Country Health Profile, 2002). The life expectancy at 65 years of populations of Myanmar and Indonesia is similar, but is slightly higher in Myanmar.

Comparisons between countries show that life expectancy at age 60 in Myanmar is higher than in Indonesia. Among populations of Bangladesh, Indonesia, Myanmar and Thailand, the life expectancy at age 60 of the Thai population is the highest.

## Crude death rates

The crude death rate per 1 000 population among SEAR countries as per the third evaluation of the implementation of the health-for-all strategy in 1997 (WHO) is shown in Table 3. It was found that in 1995 Bhutan had the highest crude death rate per 1 000 persons and Maldives had the lowest mortality rate (Table 3). However, the crude mortality rates in the case of Bangladesh and Indonesia have declined because of the improvement of health care services, immunization programmes and disease control programmes. However, this is not the case in DPR Korea and Myanmar. From 1986 to 1995, the crude death rate in DPR Korea increased from 5.0 to 5.5 per 1 000 population. In Myanmar, the crude death rate did not change significantly.

## Mortality rates

Data on mortality rates by sex for all ages were found for 4 countries: India, Nepal, Sri Lanka and Thailand (Table 4). Data from all 4 countries revealed declining mortality rates. The male mortality rates were higher than for females in India, Sri Lanka and Thailand. In Nepal from 1986 -1987, the mortality rates for women were higher than for men. The data on mortality rates in India are shown in Table 5. It can be seen that the mortality rates for women were higher than for men until the late 1980s.

Figure 2 : Mortality rates by sex per 1000 population for all ages in India

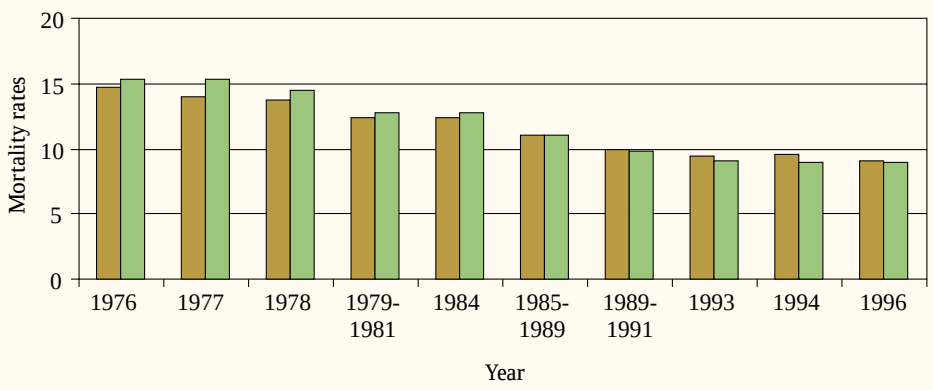


Table 4 : Mortality rate by sex per 1000 population for all ages in SEAR countries

| Country | Year | Male | Female |
|---|---|---|---|
| India* | 1979-1981 | 12.40 | 12.70 |
| | 1989-1991 | 10.00 | 9.80 |
| | 1996 | 9.10 | 8.90 |
| Nepal** | 1977-1978 | 17.90 | 16.20 |
| | 1986-1987 | 15.80 | 17.00 |
| Sri Lanka*** | 1980 | 7.00 | 5.30 |
| | 1989 | 7.90 | 4.50 |
| | 1995 | 7.40 | 4.20 |
| Thailand**** | 1991 | 5.50 | 3.90 |
| | 1995 | 6.70 | 4.30 |

Source: * Office of the Registrar-General, India
** Central Bureau of Statistics, 1988, 1995
*** United Nations Economic and Social Commission for Asia and the Pacific, Annual Health Bulletin, 1996,
**** Public Health Statistics 1995, Ministry of Public Health

Table 5 : Mortality rates by sex per 1000 population for all ages in India

| Year | Male | Female |
|---|---|---|
| 1976 | 14.7 | 15.3 |
| 1977 | 14.0 | 15.3 |
| 1978 | 13.8 | 14.5 |
| 1979-1981 | 12.4 | 12.7 |
| 1984 | 12.4 | 12.8 |
| 1985-1989 | 11.0 | 11.1 |
| 1989-1991 | 10.0 | 9.8 |
| 1993 | 9.5 | 9.1 |
| 1994 | 9.6 | 8.9 |
| 1996 | 9.1 | 8.9 |

Source: Office of the Registrar-General, India

The mortality rates for the population of Sri Lanka are presented in Table 6 and Figure 3. From 1935 -1955, the female mortality rate was higher than for males, while this statistic was reversed after 1965.

An age-specific indicator can also be used to used to indicate the mortality rate among each age group. The age-specific mortality rate of people over 60 is presented in Table 7, which shows one set of figures per country spanning the years 1992 - 1995. Not all figures were

**Table 6 : Mortality rates by sex per 1000 population for all ages in Sri Lanka**

| Year | Male | Female |
|---|---|---|
| 1935 | 34.1 | 39.4 |
| 1945 | 21.4 | 22.7 |
| 1955 | 10.7 | 11.3 |
| 1965 | 8.6 | 7.8 |
| 1975 | 9.6 | 7.4 |
| 1985 | 7.3 | 5.0 |
| 1995 | 7.4 | 4.2 |

Source: Annual Health Bulletin 1996, Ministry of Health, Sri Lanka

**Figure 3 : Mortality rates by sex per 1000 population for all ages in Sri Lanka**

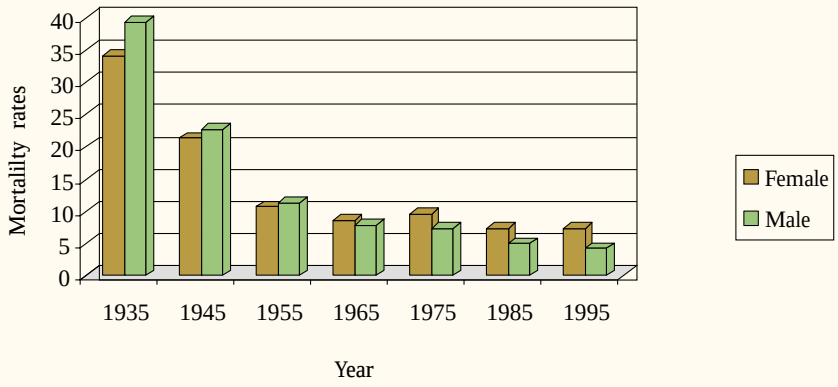



**Table 7 : Age-specific mortality rates by sex per 1000 population in selected SEAR countries**

| Age | Bangladesh (1992)* | | India (1994)** | | Nepal (1986-87)*** | | Thailand (1995)**** | |
|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| 60-64 | 31.4 | 30.6 | 30.7 | 24.2 | NA | NA | 17.7 | 11.2 |
| 65-69 | 43.4 | 42.3 | 46.2 | 34.6 | 82.1 | 99.1 | 26.7 | 18.1 |
| 70-74 | 66.7 | 72.6 | 94.5 | 81.1 | NA | NA | 64.7 | 55.6 |
| 75+ | 126.7 | 143.5 | NA | NA | NA | NA | NA | NA |

Source: * Sample Registration System1992, Bangladesh Bureau of Statistics

** Sample Registration System, Office of the Registrar-General, India

*** Population Monograph of Nepal, 1994, Central Bureau of Statistics, 1995

**** Public Health Statistics 1995, Ministry of Public Health

available for all age groups. However, a comparison can be made between male elderly and female elderly aged between 60-69, which reveals that the mortality rate of female elderly was lower than male elderly in three countries: Bangladesh, India and Thailand. However, after 70 years of age, the mortality rate of the female elderly in Bangladesh was higher than the male elderly. The mortality rate of the elderly in Thailand was the lowest.

## Dependency ratio

Due to the increase in life expectancy and the decrease in mortality rates, the proportion of older people has been increasing worldwide. With advancing age, physical, psychological, social which leading spiritual changes occur resulting in an increase of chronic diseases, which leads to dependency of older people. The age dependency ratio is defined as the ratio of those 60 years or over to those between 15 and 59 years of age. An increase in the age dependency ratio is an encumbrance to families, communities and nations. The data on the age dependency ratio among SEAR countries is presented in Table 8.

All countries have experienced an increase in the age dependency ratio because of the increase in the proportion of older people. The highest age dependency ratio can be seen in Sri Lanka. Bangladesh has the lowest age dependency ratio. Compared with other countries, Thailand and Sri Lanka present a substantial and rapid increase in the age dependency ratio.

Table 8 : Age dependency ratio of the population in some SEAR countries

| Country | Year 1995 | 2000 | 2005 | 2010 | 2015 | 2020 |
|---|---|---|---|---|---|---|
| Bangladesh(1) | 9.4 (1996) | 9.0 (2001) | 8.6 (2006) | 9.8 (2011) | 11.0 (2016) | NA |
| India(2) | 12.0 | 11.8 | 12.1 | 12.8 | 14.1 | NA |
| Myanmar(3) | 12.8 | 13.4 | NA | NA | NA | NA |
| Nepal(4) | 11.1 (1991) | 10.6 (2001) | NA | 11.5 (2011) | NA | NA |
| Sri Lanka(5) | 14.3 | 15.3 (1991) | 17.2 | 20.1 | 23.8 | NA |
| Thailand(6) | 10.7 (1996) | 14.3 | NA | 17.6 | NA | 24.6 |

Source: (1) Census Report, 2001 (Preliminary)
(2) Census of India
(3) Central Statistical Organization (Statistical Year Book, 1995, 2000)
(4) Population Projection of Nepal 1996-2016, Ministry of Population & Environnent
(5) National Census of Sri Lanka
(6) Kulpravit, C. Adjusted Estimates of Thai Population. 1990-2020, 1998.

# Health Status of the Elderly

The ageing process is a universal phenomenon occurring in all population groups all over the world. Normal ageing is a biological process defined as those time-dependent, irreversible changes that lead to progressive loss of functional capacity after the point of maturity (Moody, 1994). Ageing changes include physiological, psychological and social changes that are progressive, decremental and irreversible, of structural and functional body organs.

## Common health problems among the elderly

Normal ageing is not a disease but eventually leads to structural and functional decline and involves increased susceptibility to diseases. Ageing seems not to affect all physiological functions to the same degree, so that the total ageing rate of different organisms will differ. Factors related to ageing changes can be determined as intrinsic and extrinsic. The intrinsic factors are related to normal ageing such as genetic, while extrinsic factors include the environment and the lifestyle. The physiological changes occur in all body systems such as musculoskeletal, cardiovascular, respiratory, neurological and gastrointestinal systems. Significantly, these changes lead to diseases. For example, cardiovascular changes during old age, such as thickening of the blood vessels and of the ventricular free wall and the septum, lead to stiffness and decrease in contractility of the heart, and are considered as factors resulting in coronary artery disease and hypertension.

Ageing produces changes in the respiratory organ itself and in related organs, thereby resulting in the decline of lung function, which is a significant factor of chronic obstructive pulmonary disease, emphysema, asthma, and chronic bronchitis among the elderly. Age-related neurological problems include dementia and delirium due to the loss of neurons.

Disorders of the gastrointestinal system related to normal ageing changes include peptic ulcers, loss of appetite, dysphagia, hernia, carcinoma, and gastritis. The major change in the gastrointestinal system is the decrease of hydrochloric acid and atrophy of the gastric mucosa. Renal failure, prostatic hypertrophy, urinary incontinence, and vaginitis are common problems of the genitourinary system among the elderly. There are many age-related changes in the genitourinary system, such as loss of nephrons, loss of renal mass, the thickening of the glomerular and tubular basement membrane. A normal ageing change in the endocrine system is hormonal secretion, and the sensitivity of hormonal stimulation of the target organs decreases. This change leads to the disease of diabetes mellitus and thyroid diseases.

Not only physiological changes, but also psychological changes occur in older people. These changes are considered to be factors associated with illnesses among the elderly. Depression and anxiety are the most common psychological disorders.

## Changing health status in South-East Asia

Due to the increase in life expectancy, changes of lifestyles, and the influences of socioeconomic and environmental changes, the health status in South-East Asia is changing. With the rise of living standards in many developing countries, changes in health are following patterns in already developed countries. Consumption patterns of food have changed as people are developing new eating patterns that may not be as healthy as the old. An excess of food is leading to problems of obesity, and excesses of sugar have led to a significant rise in diabetes. Excess of alcohol and cigarettes is leading to various health problems, and changes in work and living environments have led to an increase in hypertension.

## Common health problems among the elderly in South-East Asia

Increased life expectancy and changes in lifestyle and the environment have led to changes in the pattern of diseases among the elderly in South-East Asia, especially the increase of chronic diseases. The most common chronic diseases found among the elderly are coronary artery disease, hypertension, stroke, diabetes mellitus, malignancies, chronic renal failure, and chronic obstructive pulmonary disease.

Noncommunicable diseases are the leading cause of morbidity, hospitalization and disability among the elderly all over the world. Since the impact of noncommunicable diseases is not only on the elderly themselves but also on the family and community, prevention and promotion are advisable. The data on morbidity among SEAR countries is presented from Table 9 to Table 15.

Data on the common health problems and diseases of the elderly in Bangladesh is presented in Table 9 and Figure 4. It reveals that peptic ulcers and arthritis were the most common

diseases among the elderly in Bangladesh in 1995. Hypertension and diabetes mellitus have not been reported to be among the top common diseases among the elderly in Bangladesh. However, the incidence of those noncommunicable diseases is increasing.

The data on acute and chronic diseases among the elderly in Bangladesh is presented in Table 10. The table shows that the elderly in Bangladesh mostly suffer from chronic diseases. Gastrointestinal problems, both chronic and acute, are the most common health problems among the elderly in Bangladesh.

Table 9 : Common health problems per 1000 among the elderly in Bangladesh

| Health problems | Year | |
|---|---|---|
| | 1995 | 2000 |
| Peptic ulcer | 13.6 | 11.4 |
| Arthritis | 13.1 | 8.0 |
| Fever with cold & cough | 9.3 | 10.0 |
| Asthma | 6.9 | 7.6 |
| Waist pain | 5.3 | 4.2 |
| Constant pain | 4.6 | 3.2 |
| Hypertension | 4.2 | 5.1 |
| Senility | 3.3 | 6.6 |
| Diabetes mellitus | 2.4 | 4.3 |

Source: Bangladesh HDS, 2000

Figure 4 : Common health problems among the elderly in Bangladesh

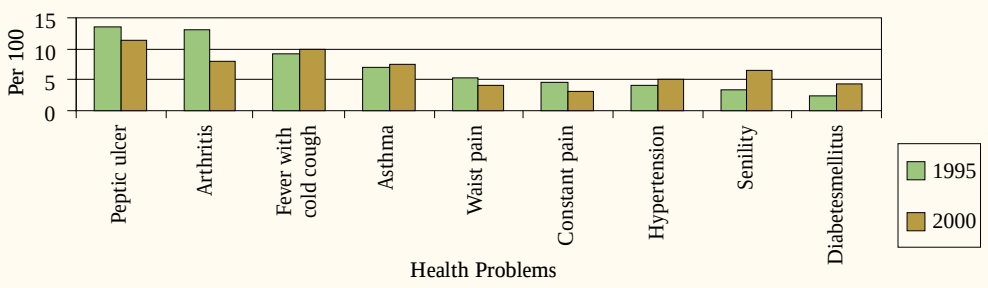


Table 10 : Common diseases and morbidity rate per 1000 among the elderly in Bangladesh

| Diseases | Year | | | |
|---|---|---|---|---|
| | 1997 | | 2000 | |
| | Male | Female | Male | Female |
| Chronic illness | | | | |
| Cardiovascular diseases | 2.3 | 3.1 | 1.2 | 1.3 |
| Respiratory diseases | 9.6 | 6.5 | 8.7 | 4.2 |
| Neurological diseases | - 0.1 | 0.1 | 0.1 | |
| Gastrointestinal diseases | 9.1 | 9.6 | 11.0 | 10.0 |
| Urological diseases | 1.6 | 0.9 | 2.5 | 1.5 |
| Musculoskeletal diseases | 3.7 | 4.2 | 2.1 | 3.3 |
| Immunological diseases | NA | NA | NA | NA |
| Acute illness | | | | |
| Cardiovascular diseases | 0.8 | 1.0 | 1.1 | 0.7 |
| Respiratory diseases | 7.1 | 4.8 | 5.1 | 5.1 |
| Neurological diseases | 0.7 | 0.5 | 0.2 | 0.1 |
| Gastrointestinal diseases | 1.3 | 1.4 | 8.0 | 8.1 |
| Urological diseases | 0.7 | 0.4 | 1.8 | 1.1 |
| Musculoskeletal diseases | 1.5 | 1.8 | 2.3 | 3.0 |
| Immunological diseases | NA | NA | NA | NA |

Source: Bangladesh SVRS, 2000

Figure 5 : Common diseases among the elderly in India

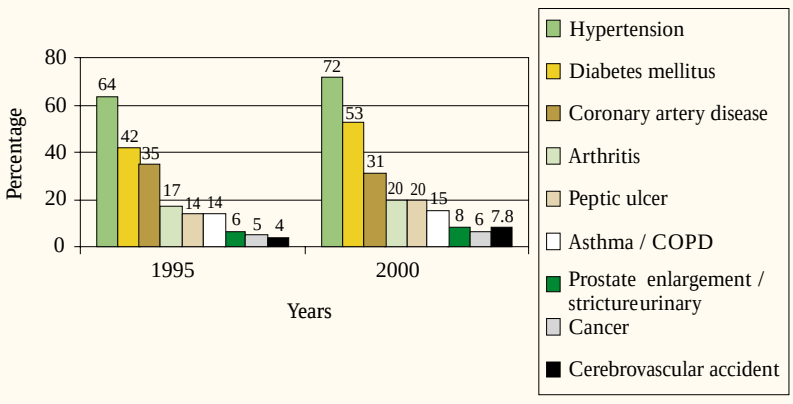


Table 11 : Common diseases among the elderly in India

| Disease | Year | |
|---|---|---|
| | 1995 | 2000 |
| | % | % |
| Hypertension | 61.0 | 72.0 |
| Diabetes mellitus | 42.0 | 53.0 |
| Coronary artery disease | 35.0 | 31.0 |
| Arthritis | 17.0 | 20.0 |
| Peptic ulcer | 14.0 | 20.0 |
| Asthma/COPD | 14.0 | 15.0 |
| Prostate enlargement/urinary stricture | 6.0 | 8.0 |
| Cancer | 5.0 | 6.0 |
| Cerebrovascular accident | 4.0 | 7.8 |

Source: Census of India

In India, hypertension, diabetes mellitus and coronary artery disease are the most common diseases of the elderly (Table 11 and Figure 5). These three diseases are considered as noncommunicable diseases that are showing a tendency to increase around the world, especially in developed countries, due to lifestyle changes. As seen in the Table 11 and Figure 5, the common diseases of the elderly of India in 1995 and 2000 were almost the same, but the incidence of those diseases increased slowly. Interestingly, not many elderly in India suffer from cancer and cerebrovascular accidents.

In Myanmar, data revealed that malaria, cataract, hypertension and pulmonary tuberculosis were the most common diseases among the elderly in 2000 (Table 12). However, there was little change in the incidence of these diseases, with the exception of cataract.

The data on common diseases among the elderly of Sri Lanka showed a similar situation to the elderly in India. Hypertension, heart disease and diabetes mellitus were the most common diseases. However, arthritis and asthma were also found to be major diseases among the elderly in Sri Lanka. Interestingly, a higher proportion rate of female elderly in Sri Lanka suffered from hypertension than the male elderly, but females suffered less from heart problems than the male elderly. Cancer is not the most common disease among the elderly in Sri Lanka. With regards to mental problems, the data of the elderly in Sri Lanka indicated that the incidence of mental disorders is not high (Table 13 and Figure 6).

Table 12 : Common health problems among the elderly in Myanmar

| Causes | 1998 | | 1999 | | 2000 | |
|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % |
| Malaria | 5,964 | 0.7 | 6,549 | 0.7 | 4,627 | 0.6 |
| Pulmonary tuberculosis | 3,361 | 0.4 | 3,770 | 0.4 | 2,776 | 0.3 |
| Cataract and other disorders of lens | 1,180 | 0.1 | 4,310 | 0.5 | 4,576 | 0.6 |
| Diarrhoea and other gastroenteritis | 4,129 | 0.5 | 4,761 | 0.5 | 2,633 | 0.3 |
| Hypertension | 2,620 | 0.3 | 3,075 | 0.3 | 2,973 | 0.4 |
| Other respiratory diseases | 2,538 | 0.3 | 2,187 | 0.3 | 2,203 | 0.3 |
| Stroke | 2,154 | 0.2 | 2,033 | 0.2 | 2,314 | 0.3 |
| Other ischemic heart diseases | 1,633 | 0.2 | 1,917 | 0.2 | 2,203 | 0.3 |
| Heart failure | 1,550 | 0.2 | 1,659 | 0.2 | 1,957 | 0.2 |
| Asthma | 1,605 | 0.2 | 1,338 | 0.2 | 1,479 | 0.2 |
| Gastric & duodenal ulcers | 1,386 | 0.2 | 1,428 | 0.2 | 1,368 | 0.2 |
| Bronchitis, emphysema and COPD | 1,344 | 0.2 | 1,287 | 0.1 | 1,273 | 0.2 |
| Other heart disease | 1,481 | 0.2 | 888 | 0.1 | 850 | 0.1 |

Source: Health Management Information System, Department of Health Planning, Myanmar

Figure 6 : Common health problems among the elderly in Sri Lanka

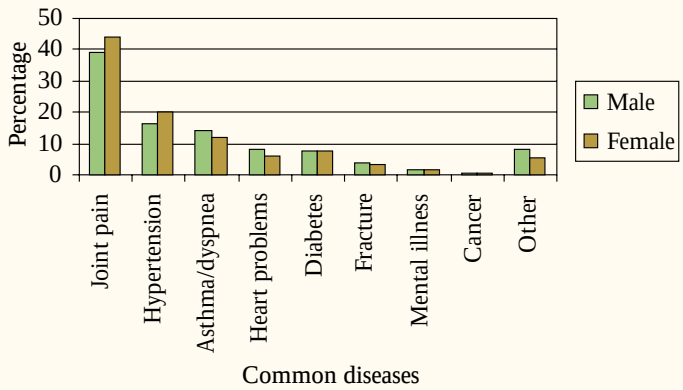


Table 13 : Common health problems among the elderly in Sri Lanka in 2002

| Health Problems | Sex | | | |
|---|---|---|---|---|
| | Male | | Female | |
| | No. | % | No. | % |
| Joint pain | 20,749 | 39.2 | 32,849 | 43.8 |
| Hypertension | 8,747 | 16.5 | 14,990 | 20.0 |
| Asthma/Dyspnea | 7,406 | 14.0 | 8,929 | 11.9 |
| Heart problems | 4,260 | 8.0 | 4,471 | 5.9 |
| Diabetes | 4,156 | 7.8 | 5,551 | 7.4 |
| Fracture | 1,983 | 3.7 | 2,471 | 3.3 |
| Mental illness | 824 | 1.5 | 1,055 | 1.4 |
| Cancer | 451 | 0.8 | 550 | 0.7 |
| Other | 4,298 | 8.1 | 3,993 | 5.3 |

Source: Needs Assessment: "Community Health Care for Elderly in 50 MOH Areas, Sri Lanka, 2002"

Over the past 10 years, the pattern of health problems among the Thai elderly has changed dramatically. During 1991-1992, the health problems commonly found were pain, malnutrition, anaemia and hypercholesterolemia (Appendix Table 4, Figure 1). However, noncommunicable diseases such as hypertension, arthritis, heart disease, peptic ulcer and diabetes mellitus became major health problems after 1995. The incidence of hypertension increased from 21.8 in 1996 to 26.3 in 1998, and diabetes mellitus increased from 5.6 in 1996 to 8.5 in 1998. Notably, peptic ulcer is more prevalent in the rural male elderly than in the urban male elderly (Appendix Table 6). In addition, elderly women in Thailand experienced a higher degree of health problems than men, except for asthma, paralysis, urological problems and tuberculosis (Table 14 and Figure 7, Table 15). Interestingly, few Thai elderly in the past suffered from cancer.

Advancing age does not always lead to major health problems or diseases. However, older persons often reported minor health problems. For example, common cold, headache and pain were the common minor health problems found within a month among the elderly in 1995 in Thailand (Appendix Table 6). Comparing elderly men and women, elderly women reported minor health problems more often than men.

Table 14 : Common health problems among the elderly in Thailand in 1996

| Health problems | Male (%) | Female (%) | Total (%) |
|---|---|---|---|
| Back / waist pain | 66.5 | 69.3 | 68.0 |
| Arthritis | 36.9 | 42.7 | 40.1 |
| Peptic ulcer | 21.6 | 22.0 | 21.8 |
| Hypertension | 18.7 | 24.4 | 21.8 |
| Heart disease | 7.8 | 18.1 | 13.4 |
| Cataract | 10.1 | 12.7 | 11.5 |
| Plerygium | 7.6 | 12.7 | 10.4 |
| Ear disease | 8.6 | 7.6 | 8.1 |
| Diabetes mellitus | 3.9 | 7.0 | 5.6 |
| Kidney disease | 6.0 | 4.8 | 5.3 |

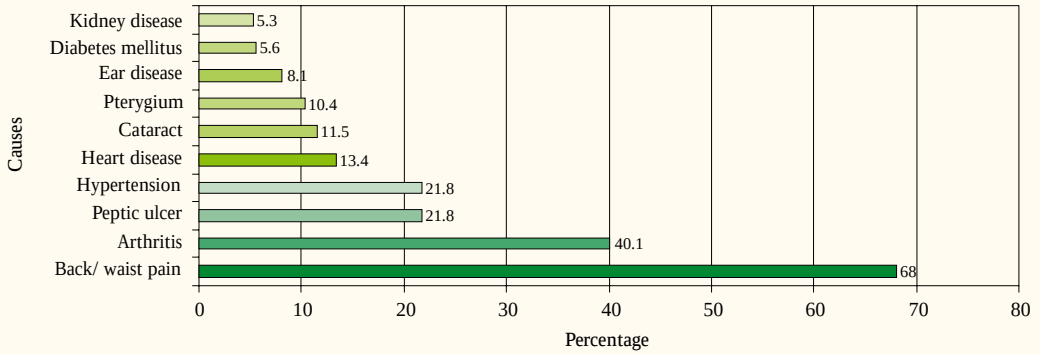
Source: Chayovan, N & Knodel, J.,1998

Table 15 : Percentage of symptoms or illnesses among older persons in communities in Thailand in 1998

| Symptom/illness | Urban area | | | Rural area | | |
|---|---|---|---|---|---|---|
| | Female | Male | Total | Female | Male | Total |
| Ache in the joint, knee, and back | 71.1 | 54.0 | 65.2 | 70.2 | 62.4 | 67.5 |
| Problems of the eye | 46.3 | 42.0 | 44.8 | 51.2 | 42.1 | 48.0 |
| Hypertension | 27.9 | 22.0 | 25.9 | 21.0 | 16.9 | 19.5 |
| Diabetes | 19.5 | 11.0 | 16.6 | 8.8 | 4.9 | 7.4 |
| Cardiovascular disease, angina pectoris | 13.2 | 13.0 | 13.1 | 8.9 | 5.8 | 7.8 |

Source: Choopravan, C., 1998

Figure 7 : Common health problems among the elderly in Thailand 1996




## Common reasons for hospitalization

Since the incidence of noncommunicable diseases among the elderly has increased all over the world, the rate of hospitalization has simultaneously increased. Hospital admission creates many problems for the elderly, their families and society as a whole. Such problems can be economic, social and psychological.

In Bangladesh, the elderly were most frequently hospitalized with asthma (Table 16 and Figure 8) since asthma is a disease that can attack frequently. Although noncommunicable diseases such as hypertension, diabetes mellitus and coronary artery disease are considered the most common diseases among the elderly, they are not the major causes of hospitalization among the elderly in Bangladesh.

The common cause of hospitalization among the elderly in India and Thailand is different. The elderly in India were mostly admitted to hospitals with cardiac causes (Table 17 and Figure 9), while most of the elderly in Thailand were hospitalized with cataract and diarrhoea (Table 18 and Figure 10).

Data on Table 19 reveals that heart disease and prostatic hypertrophy are the major causes of hospitalization among elderly men in Thailand, while cataract and diarrhoea are the most common causes of hospitalization of elderly women. The data also shows a difference in reasons for hospitalization between the rural and urban elderly. The elderly residing in rural areas were hospitalized with diarrhoea, gastritis, fainting, asthma, renal calculi, and pulmonary tuberculosis more frequently than the urban elderly. The urban elderly, however, were more often hospitalized with heart disease, diabetes mellitus, cataracts, and fractures.

Table 16 : Common causes of hospitalization in Bangladesh

| Common causes | Year | | | | | |
|---|---|---|---|---|---|---|
| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
| | % | % | % | % | % | % |
| Asthma | 18.1 | 14.2 | 12.9 | 14.8 | 15.1 | 15.1 |
| Peptic ulcer | 5.8 | 6.9 | 4.7 | 3.2 | 4.0 | 4.2 |
| Fever with cold cough | 4.3 | 3.5 | 4.4 | 6.4 | 5.0 | 5.1 |
| Arthritis | 3.4 | 2.5 | 3.0 | 2.3 | 2.4 | 2.1 |
| Senility | 1.1 | 2.0 | 1.4 | 1.6 | 1.8 | 1.1 |
| Hypertension | 3.5 | 3.8 | 2.5 | 2.8 | 2.3 | 2.2 |
| Diabetes | 6.7 | 5.9 | 6.1 | 4.3 | 4.0 | 3.1 |
| Waist pain | 3.7 | 4.2 | 3.1 | 2.5 | 3.0 | 3.5 |
| Constant pain | 1.0 | 1.9 | 2.0 | 1.4 | 1.3 | 1.2 |
| Blood dysentery | 6.0 | 5.2 | 4.6 | 3.1 | 2.1 | 2.5 |

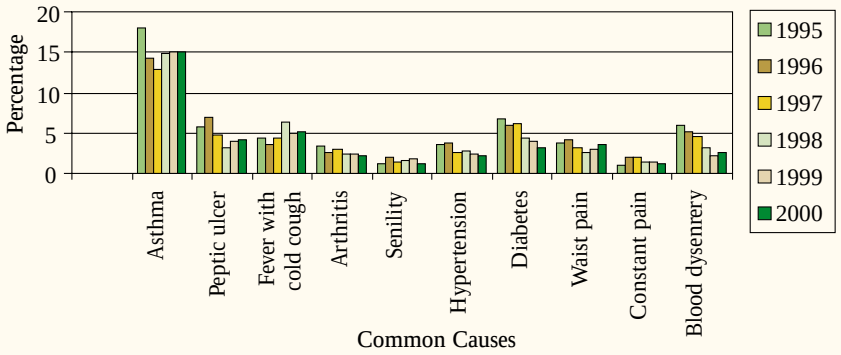
Source: Bangladesh HDS, 2000

Table 17 : Common causes of hospitalization in India

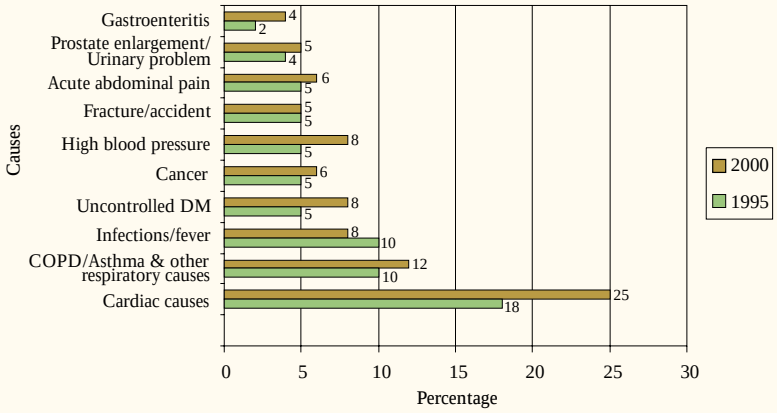
| Cause | Year | |
|---|---|---|
| | 1995 % | 2000 % |
| Cardiac causes | 18 | 25 |
| COPD/Asthma & other respiratory causes | 10 | 12 |
| Infections/fever | 10 | 8 |
| Uncontrolled Diabetes Mellitus | 5 | 8 |
| Cancer | 5 | 6 |
| High blood pressure | 5 | 8 |
| Fracture/accident | 5 | 5 |
| Acute abdominal pain | 5 | 6 |
| Prostate enlargement/Urinary problem | 4 | 5 |
| Gastroenteritis | 2 | 4 |

Source: National Sample Survey, 2002

## Figure 8 : Common causes of hospitalization in Bangladesh




## Figure 9 : Common causes of hospitalization in India




## Figure 10 : Common causes of hospitalization among the elderly in Thailand in 1996

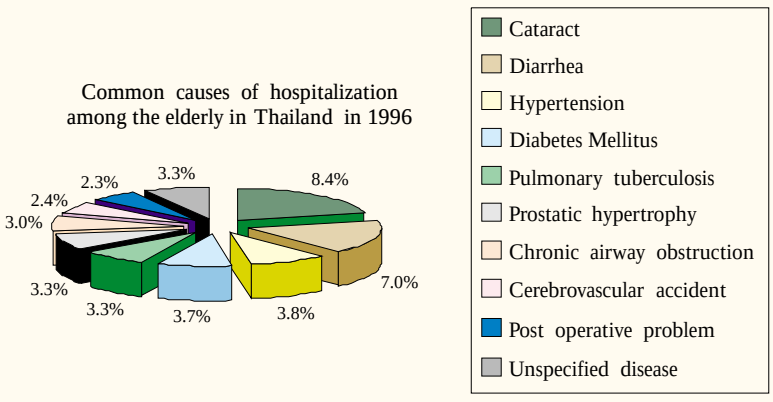


Table 18 : Common causes of hospitalization among the elderly in Thailand in 1996

| Cause | Percentage |
|---|---|
| Cataract | 8.4 |
| Diarrhoea | 7.0 |
| Hypertension | 3.8 |
| Diabetes mellitus | 3.7 |
| Pulmonary tuberculosis | 3.3 |
| Prostatic hypertrophy | 3.3 |
| Chronic airway obstruction | 3.0 |
| Cerebrovascular accident | 2.4 |
| Post operative problem | 2.3 |
| Unspecified disease | 3.3 |

Source: Chayovan, N. & Knodel, J.,1998

Table 19 : Common causes of hospitalization within 1 year among the elderly by sex and residential area in Thailand in 1995

| Cause | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| | Urban | Rural | Urban | Rural | Urban | Rural |
| Diarrhoea | 6.7 | 8.4 | 11.9 | 16.5 | 10.0 | 13.2 |
| Gastritis | 3.4 | 10.2 | 4.8 | 5.6 | 4.3 | 7.5 |
| Hypertension | 5.4 | 4.4 | 5.9 | 6.9 | 5.7 | 5.9 |
| Cataract | 5.4 | 4.4 | 12.2 | 3.7 | 9.8 | 4.0 |
| Heart disease | 7.4 | 1.8 | 5.2 | 3.2 | 6.0 | 2.6 |
| Fainting | 0.0 | 3.4 | 0.7 | 4.1 | 0.5 | 3.8 |
| Asthma | 2.7 | 4.4 | 1.1 | 1.4 | 1.7 | 2.6 |
| Diabetes mellitus | 4.7 | 1.2 | 3.7 | 1.2 | 4.1 | 1.2 |
| Renal calculi | 2.0 | 2.0 | 0.7 | 2.2 | 1.2 | 2.1 |
| Pulmonary tuberculosis | 0.7 | 2.4 | 1.5 | 1.7 | 1.2 | 2.0 |
| Fatigue | 0.7 | 1.4 | 1.5 | 2.2 | 1.2 | 1.9 |
| Fever | 0.0 | 1.2 | 0.4 | 2.9 | 0.2 | 2.2 |
| Car accident | 2.7 | 3.0 | 1.5 | 0.6 | 1.9 | 1.5 |
| Trauma | 1.3 | 1.6 | 1.5 | 1.8 | 1.4 | 1.7 |
| Fracture | 1.3 | 2.2 | 3.3 | 0.6 | 2.6 | 1.2 |
| Headache | 0.0 | 0.8 | 2.2 | 1.9 | 1.4 | 1.5 |
| Fall | 2.0 | 0.6 | 2.2 | 1.5 | 2.1 | 1.1 |
| Appendicitis | 0.7 | 1.6 | 0.7 | 1.4 | 0.7 | 1.5 |
| Prostatic hypertrophy | 6.0 | 2.4 | 0.0 | 0.0 | 6.0 | 0.0 |

Source: Choopravan, C.,1998

A comparison between the common diseases of in-patients and out-patients in Thailand shows diabetes mellitus and hypertension as the leading diseases of the out-patients (Table 20), and cataract and diarrhoea as the leading causes of in-patients.

Table 20 : Leading diseases among elderly in-patients and out-patients in Thailand in 1988

| Diseases (out-patient) | Percent N = 93,642 | Disease (in-patient) | Percent N = 11,309 |
|---|---|---|---|
| Diabetes | 9.7 | Cataract | 8.4 |
| Hypertension | 9.0 | Diarrhoea | 7.0 |
| Osteoporosis | 4.9 | Hypertension | 3.8 |
| Chronic ischemic heart disease | 3.7 | Diabetes | 3.7 |
| Pulmonary tuberculosis | 3.6 | Pulmonary tuberculosis | 3.3 |
| Cataract | 3.4 | Unspecified disorders | 3.3 |
| Chronic airway obstruction | 3.2 | Prostatic hypertrophy | 3.3 |
| Stomach discomfort obstruction | 2.6 | Chronic airway | 3.0 |
| Unspecified disorders | 2.5 | Cerebrovascular disease | 2.4 |
| Lower back pain | 2.3 | Post operative problem | 2.3 |
| Total | 44.9 | Total | 40.5 |

Source: Department of Medical Services, Ministry of Public Health, 1988

## Disability among the elderly

Disability is a condition commonly following chronic illness. It is found to be a major health concern among older people. Since the consequences of disability can seriously affect the economic, social and psychological aspects of life of persons with disability, as well as, their families and the community, health care services should be developed to alleviate and prevent disability and the impact of disability. In Bangladesh, visual impairment is a major disability among the elderly. Paralysis and hearing impairment were presented as another two significant disabilities among the elderly in Bangladesh (Table 21 and Figure 11). However, physical disability is the major disability among the elderly in India (Table 22 and Figure 12). Comparing disabilities of the elderly in India and Bangladesh, visual disability is experienced equally. However, dementia was not reported as a disability among the elderly in Bangladesh, while it has been found in India, though the incidence has decreased.

The disability situation in Thailand is similar to the situation in India. The most prevalent disability found among the elderly is physical (Table 23 and Figure 13). Rates of physical

disability are higher than mental disability. However, from the report of the Survey on Health and Services in 1996, the incidence of disability decreased from 1994 to 1996. However, after 1997 the incidence of disability did not change. Moreover, the types of disability reported among the elderly in the National Survey on Health and Service in 1996 showed the highest proportion as being paralysis, hearing impairment and blindness (Table 24).

Table 21 : Common disabilities among the elderly in Bangladesh per 1000 population

| Type of disability | 1995 | 2000 |
|---|---|---|
| Visual impairment | 45.2 | 29.8 |
| Paralysis | 16.7 | 23.6 |
| Hearing impairment | 15.3 | 17.0 |
| Physical impairment (leg) | 6.0 | 11.2 |
| Speaking impairment | 2.0 | 3.5 |

Source: Bangladesh HDS, 2000

Table 22 : Common disabilities among the elderly in India

| Type of disability | Year | |
|---|---|---|
| | 1995 % | 2000 % |
| Physical disability | 50.0 | 55.0 |
| Visual impairment | 20.0 | 26.0 |
| Hearing impairment | 16.0 | 20.0 |
| Dementia | 10.0 | 6.0 |
| Urinary incontinence | 1.0 | 1.0 |

Source: National Sample Survey, India 2002

Figure 11 : Common disabilities among the elderly in Bangladesh

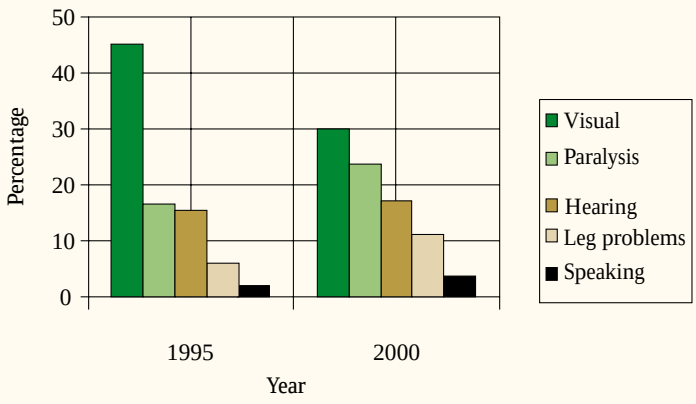


Figure 12 : Common disabilities among the elderly in India

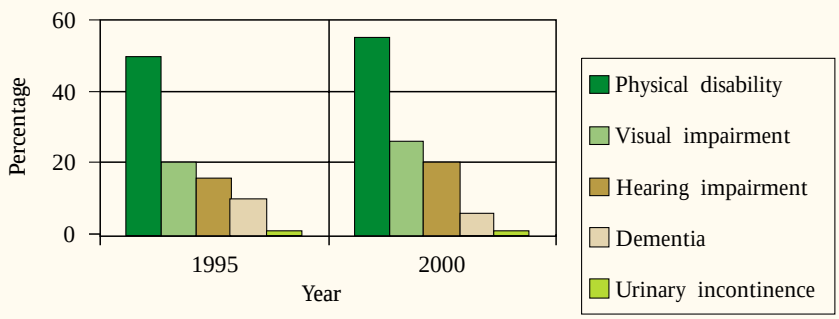



Table 23 : Common disabilities among the elderly in Thailand

| Type of disability | Year | |
|---|---|---|
| | 1994 % | 1996 % |
| Paralysis | 26.8 | 14.8 |
| Hearing impairment | 25.4 | 17.7 |
| Blindness | 24.4 | 9.1 |
| Deformity of limb | 6.3 | 6.8 |
| Amputation of limb | 5.3 | 2.5 |
| Deafness | 1.8 | 1.0 |
| Psychosis | 1.1 | 0.9 |
| Cognitive impairment | 0.8 | NA |
| Down syndrome | NA | 0.3 |

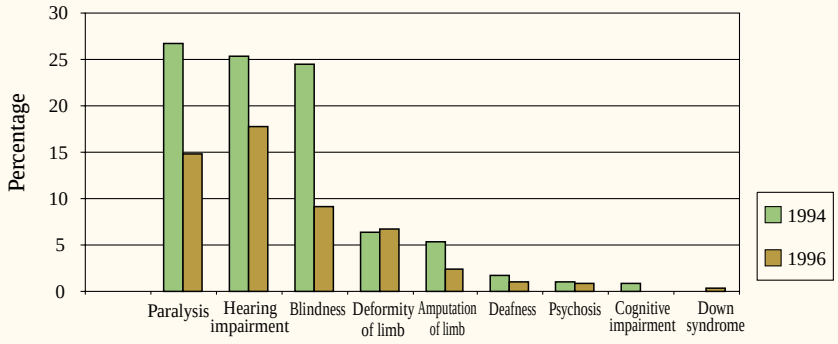
Source: Survey on Health and Services, National Statistics Office, Thailand 1997

Table 24 : Common disabilities among the elderly in Thailand in 1997 and projected for 2005 and 2010

| Disability | 1997 | 2005 | 2010 |
|---|---|---|---|
| Physical disability | 18.4 | 18.7 | 18.9 |
| Mental disability | 4.3 | 4.6 | 4.7 |
| Orthopaedic disability | 0.8 | 0.8 | 0.9 |
| Complete disability | 6.5 | 6.8 | 6.9 |

Source: Health Research Institute, National Health Research Foundation, the Institute of Policy and Planning, Ministry of Public Health, Thailand

Figure 13 : Common disabilities among the elderly in Thailand




With regard to the severity of disability, the data on severity of disability categorized in terms of movement was reported in 1999 (see Appendix Table 7). The report revealed that about 71% of the elderly experienced mild disability but could move outside their houses. About 5% experienced very severe disability.

In terms of the prevalence of disability among the male and female elderly in Thailand, the data showed that the female elderly in Thailand experienced higher rates of disability than the male elderly (Table 25 and Figure 15). In addition, the data showed that the incidence of disability increases with age.

Figure 14 : Prevalence of disability among the elderly in Thailand by age groups and sex

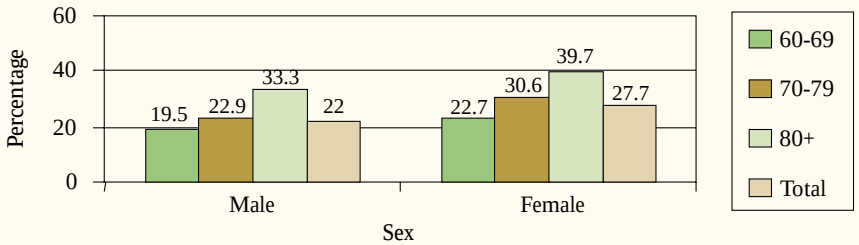


Table 25 : Prevalence of disability per 1000 population among the elderly in Thailand by age groups and sex

| Age | 60-69 | 70-79 | 80+ | Total |
|---|---|---|---|---|
| Sex | | | | |
| Male | 19.5 | 22.9 | 33.3 | 22.0 |
| Female | 22.7 | 30.6 | 39.7 | 27.2 |

Source: Jitapunkul, Suriyavongpaisal, National Survey on Ageing, 1999

## Common causes of mortality

Because of the changing patterns of health problems and disease among the elderly, the leading causes of death have also changed.

The data on the leading causes of death among the elderly in Bangladesh indicated that old age and diarrhoea were the most prevalent in 1996 and 1998 (Table 26 and Figure 16), while the leading cause of death in India in 1995 and 2000 was cardiovascular disease (Table 28). The mortality rate of cardiovascular disease is increasing, especially coronary artery disease (Table 27 and Figure 17). In comparison with elderly women, elderly men in India died more frequently from cardiovascular disease (Table 28). In terms of cardiovascular and respiratory causes of death among the elderly in Bangladesh, the data revealed that diseases of these two systems were equally the cause of death in the elderly (Table 26).

Notably, the mortality rate from infectious diseases has decreased, while non-infectious diseases have become the leading cause of death among the elderly of Thailand, Bangladesh and India.

According to the Health Management Information System, Department of Health Planning of Myanmar, death among the elderly in Myanmar is mostly caused by diseases of the cardiovascular system, respiratory system and gastrointestinal system (Table 29). However, mortality rates from diseases of cardiovascular and respiratory systems are decreasing. Stroke was reported as the leading cause of death among the elderly in Myanmar (Table 30). In 2000, malaria and pulmonary tuberculosis were reported as the second and the third leading causes of death. Heart failure and acute myocardial infarction were considered as major causes of death (Table 30). However, information from Myanmar was limited by the lack of or limited official data base.

Table 26 : Leading causes of death among the elderly in Bangladesh in 1996 and 1998, and projected for 2010 and 2020

| Cause | Year | | | |
|---|---|---|---|---|
| | 1996 % | 1998 % | 2010 % | 2020 % |
| Old age | 15.3 | 15.5 | 13.2 | 10.9 |
| Diarrhoea | 15.7 | 12.1 | 10.5 | 8.1 |
| Asthma | 5.2 | 5.4 | 5.6 | 5.9 |
| Cardiovascular disease | 4.8 | 6.7 | 7.2 | 8.2 |
| Dysentery | 4.1 | 3.7 | 3.1 | 2.1 |

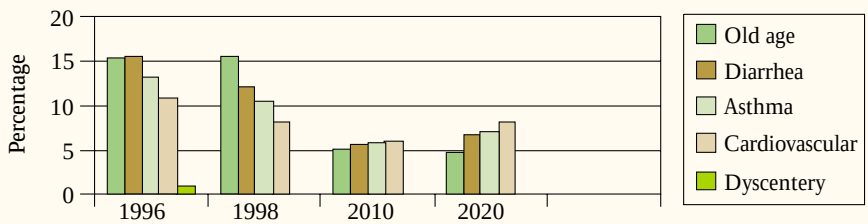
Source: Bangladesh SVRS, 2000

Table 27 : Causes of death among the elderly in India in 1990 and 2000, and projected for 2010 and 2020

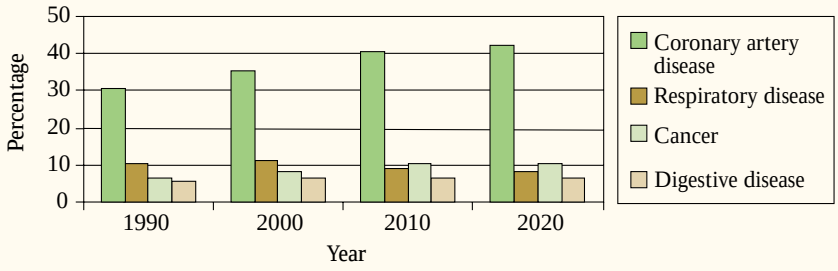
| Cause of Death | Year | | | |
|---|---|---|---|---|
| | 1990 % | 2000 % | 2010 % | 2020 % |
| Coronary artery disease | 30.0 | 35.0 | 40.0 | 42.0 |
| Respiratory disease | 10.0 | 11.0 | 9.0 | 8.0 |
| Cancer | 6.0 | 8.0 | 10.0 | 10.0 |
| Digestive disease | 5.0 | 6.0 | 6.0 | 6.0 |

Source: National Sample Survey, India, 2002

Figure 15 : Leading causes of death among the elderly in Bangladesh



## Figure 16 : Causes of death among the elderly in India




## Table 28 : Leading causes of death by sex among the elderly in India in 1995 and 2000

| Cause of Death | Year | | | |
|---|---|---|---|---|
| | 1995 | | 2000 | |
| | Male % | Female % | Male % | Female % |
| Cardiovascular disease | 38.3 | 36.6 | 40.0 | 38.0 |
| Immunological disease | 13.2 | 9.6 | 10.0 | 9.0 |
| Respiratory disease | 8.2 | 7.1 | 10.0 | 9.0 |
| Gastrointestinal disease | 5.1 | 3.5 | 6.0 | 5.5 |
| Neurological disease | 1.9 | 2.3 | 2.0 | 2.0 |
| Urological disease | 1.8 | 1.7 | 2.5 | 2.5 |
| Musculoskeletal disease | 0.1 | 0.3 | 2.0 | 2.0 |

Source: Census of India

## Table 29 : Causes of death and mortality rates among the elderly in Myanmar

| Causes | Year | | | | | |
|---|---|---|---|---|---|---|
| | 1998 | | 1999 | | 2000 | |
| | Male No. | Female No. | Male No. | Female No. | Male No. | Female No. |
| Cardiovascular system | 741 | 549 | 695 | 515 | 563 | 566 |
| Respiratory system | 151 | 123 | 141 | 116 | 104 | 87 |
| Neurological system | 27 | 14 | 26 | 13 | 2 | 6 |
| Gastrointestinal System | 137 | 178 | 129 | 167 | 205 | 80 |
| Urological system | 82 | 55 | 77 | 52 | 70 | 24 |
| Musculoskeletal System | - | - | - | - | - | 1 |
| Immunological system | - | 14 | - | 13 | 14 | 1 |

Source: Health Management Information System, Department of Health Planning, Myanmar

Table 30 : Causes of death among the elderly in Myanmar

| Causes | Year | | | | | |
|---|---|---|---|---|---|---|
| | 1998 | | 1999 | | 2000 | |
| | No. | % | No. | % | No. | % |
| Stroke | 535 | 2.2 | 335 | 1.3 | 454 | 2.1 |
| Malaria | 206 | 0.8 | 206 | 0.8 | 212 | 1.0 |
| Pulmonary tuberculosis | 192 | 0.8 | 399 | 1.6 | 184 | 0.9 |
| Heart failure | 178 | 0.7 | 180 | 0.7 | 144 | 0.7 |
| Acute myocardial infarction | 206 | 0.8 | 116 | 0.5 | 140 | 0.6 |
| Other disease of liver | 192 | 0.8 | 116 | 0.5 | 117 | 0.5 |
| Other diseases of respiratory systems | 137 | 0.6 | 129 | 0.5 | 88 | 0.4 |
| Diarrhoea and gastroenteritis | 137 | 0.6 | 77 | 0.3 | 76 | 0.4 |
| Bronchitis, emphysema, COPD | 55 | 0.2 | 116 | 0.5 | 51 | 0.2 |

Source: Health Management Information System, Department of Health Planning, Myanmar

The data on leading causes of death among the Thai elderly in 1995 is shown in Table 31 and Figure 18. In 1995, the leading cause of death was accidents, followed by stroke and coronary artery disease for those aged 60-64. However, after 75 years, the major cause of death was stroke. Coronary artery disease was the third highest cause of death overall, but this became the second cause of death among the Thai elderly aged 75 years and over. From the data, it can be seen that with advancing age, the risk of death from stroke and coronary artery disease increases. Conversely, death from cancer and accidents does not change with age.

However, the Bureau of Health Policy and Plans reported that the common causes of mortality among the Thai elderly from 1985 to 1997 consisted of heart disease, cancer, diabetes mellitus, liver disease, kidney disease, paralysis, pneumonia and traffic accidents (Table 32). Among all of these causes, heart disease was found to be the leading cause of death. Although the top 3 leading causes of death among the Thai elderly are different in different sources of data, heart disease or cardiovascular disease is still considered as one of the most common. From the report of the Bureau of Health Policy and Plans, Ministry of Health, it can be seen that the mortality rate of people with diseases has declined since 1996.

According to the Survey on Causes of Death of the Elderly in 1998, Policy and Plans Institute, Thailand, it was reported that circulatory diseases such as stroke and hypertension were the leading causes of death, both in the young-old elderly (60-74 years) and the old-old

elderly (75 years and over) (Table 33 and Figure 19). Cancer of all systems was indicated as the second leading cause of death among the young-old group at the rate of 564.4 per 100 000 population and the third leading cause of death for the old-old group, whereas chronic obstructive pulmonary disease was the second leading cause of death among the old-old elderly. Diabetes mellitus was the third leading cause of death among the young -old group, and fourth among the old-old group.

**Table 31 : Leading causes of death (per 100,000) among the elderly in Thailand in 1995**

| Cause of Death | Age Range | | | |
|---|---|---|---|---|
| | 60-64 | 65-69 | 70-74 | >75 |
| Stroke | 26 | 40 | 45 | 70 |
| Coronary artery disease | 10 | 18 | 22 | 45 |
| Cancer | 2.5 | 2.8 | 2.4 | 2.1 |
| Accident | 32 | 38 | 32 | 39 |

Source: The Division of Health Statistics, Office of the Permanent Secretary, Ministry of Public Health, 1996

**Table 32 : Causes of death among the elderly in Thailand in 1985-1997**

| Year | Causes of death (per 100,000) population | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Heart Disease | Cancer | Diabetes | Liver disease | Kidney disease | Paralysis | Pneu-monia | Traffic accident |
| 1985 | 245.0 | 169.1 | 28.8 | NA | NA | NA | NA | NA |
| 1986 | 259.3 | 177.6 | 24.9 | NA | NA | NA | NA | NA |
| 1987 | 304.3 | 199.1 | 30.3 | NA | NA | NA | NA | NA |
| 1988 | 331.1 | 209.6 | 32.4 | NA | NA | NA | NA | NA |
| 1989 | 372.3 | 231.9 | 37.2 | NA | NA | NA | NA | NA |
| 1990 | 379.2 | 248.8 | 39.4 | NA | NA | NA | NA | NA |
| 1991 | 386.7 | 253.9 | 39.9 | 62.6 | 8.3 | 49.5 | 42.0 | 16.9 |
| 1992 | 400.3 | 266.8 | 49.5 | 63.4 | 48.0 | 51.5 | 42.3 | 20.1 |
| 1993 | 389.7 | 262.9 | 50.8 | 57.1 | 45.9 | 42.4 | 45.3 | 19.5 |
| 1994 | 412.2 | 283.9 | 57.2 | 56.3 | 47.5 | 44.9 | 56.0 | 24.1 |
| 1995 | 440.7 | 242.1 | 56.2 | 52.2 | 55.3 | 45.5 | 51.0 | 26.3 |
| 1996 | 407.5 | 236.2 | 57.4 | 41.4 | 38.2 | 37.4 | 46.8 | 22.4 |
| 1997 | 356.1 | 199.4 | 48.5 | 33.1 | 40.5 | 32.0 | 33.7 | 17.1 |

Source: Bureau of Health Policy and Plan, Ministry of Public Health
Note: NA = Data not available

Figure 17 : Leading causes of death (per 100,000) among the elderly in Thailand in 1995

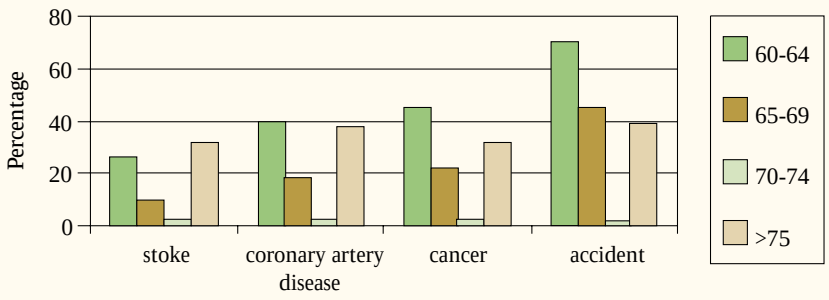



Table 33 : Causes of death per 100,000 among the elderly in Thailand in 1998

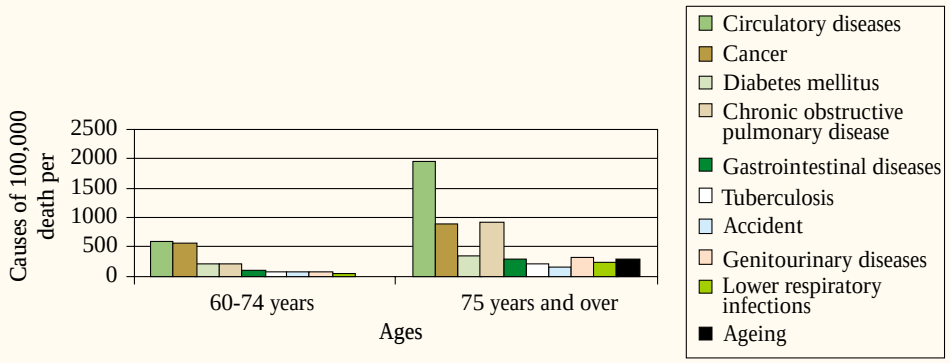
| Causes of death | 60-74 years | 75 years and over |
|---|---|---|
| Circulatory diseases | 574.5 | 1936.4 |
| Cancer | 564.4 | 897.1 |
| Diabetes mellitus | 213.6 | 348.6 |
| Chronic obstructive pulmonary disease | 209.7 | 920.7 |
| Gastrointestinal diseases | 114.3 | 301.5 |
| Tuberculosis | 82.5 | 199.7 |
| Accident | 81.5 | 153.8 |
| Genitourinary diseases | 80.4 | 321.1 |
| Lower respiratory infections | 35.5 | 241.7 |
| Ageing | 0 | 274.2 |
| Total | 2219.1 | 6357.9 |

Source: The Study on Causes of Death in Thailand in 1998, Bureau of Health Policy and Plans, 2000

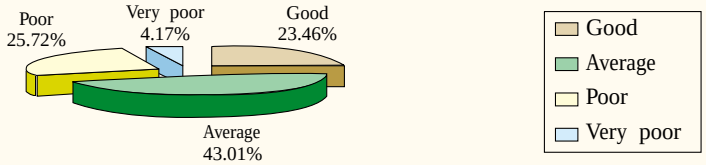
## Perceived health status

Health status can be measured in terms of the perception of the people concerned. The perception of health is the feeling of people about their own health. However, the perceived health status and the actual health status may not be congruent. The data on the perceived health status of the elderly in Sri Lanka revealed that most of the elderly rated their health status as average (Table 35 and Figure 20). Few of them rated their health as very poor, whereas an equal proportion of the elderly rated their health as good and poor.

## Figure 18 : Causes of death per 100,000 among the elderly in Thailand in 1998




## Figure 19 : Perceived health status of the elderly in Sri Lanka in 2002




## Table 34 : Perceived health status of the elderly in Sri Lanka in 2002

| Health Status | Number | Percent |
|---|---|---|
| Good | 38,143 | 23.4 |
| Average | 69,937 | 43.0 |
| Poor | 41,821 | 25.7 |
| Very poor | 6,774 | 4.1 |

Source: Needs Assessment on " Community Health Care for Elderly in 50 MOH Areas, 2002"

Similarly, the majority of Thai elderly perceived their health as fair (Table 36). With advancing age, the elderly showed a tendency to rate their health poorer and poorer. In addition, elderly Thai women perceived their health as poorer than elderly men. Moreover, the elderly residing in rural areas rated their health weaker than that of the urban elderly.

Data on the self-evaluation of the health status of the elderly in Thailand presented in Table 37 and Table 20 indicated that the elderly were more likely to evaluate their health status as better over the years, possibly because of the growing improvement of health technology and health services.

**Table 35 : Perceived health status among the elderly in Thailand ( age 50+) in 1996**

| Personal factors | Perceived health status | | | | |
|---|---|---|---|---|---|
| | Very healthy % | Somewhat healthy % | Fair weak % | Somewhat % | Weak % |
| Age groups | | | | | |
| 50-59 | 17.5 | 27.5 | 32.7 | 16.1 | 6.3 |
| 60 | 9.3 | 24.5 | 29.9 | 24.5 | 10.8 |
| 60-69 | 10.3 | 27.3 | 32.5 | 21.0 | 8.8 |
| 70+ | 7.7 | 22.5 | 25.7 | 30.1 | 14.0 |
| Sex | | | | | |
| Male | 12.3 | 28.3 | 30.5 | 21.2 | 7.8 |
| Female | 6.8 | 23.2 | 28.4 | 27.3 | 13.3 |
| Residential area | | | | | |
| Bangkok | 17.6 | 33.0 | 24.8 | 17.5 | 7.2 |
| Other cities | 12.2 | 31.5 | 27.1 | 19.2 | 10.0 |
| Rural | 8.1 | 24.0 | 30.8 | 25.9 | 11.3 |

Source: Choopraprayan, C.,1998

**Table 36 : Self-evaluation of health status of the elderly in Thailand**

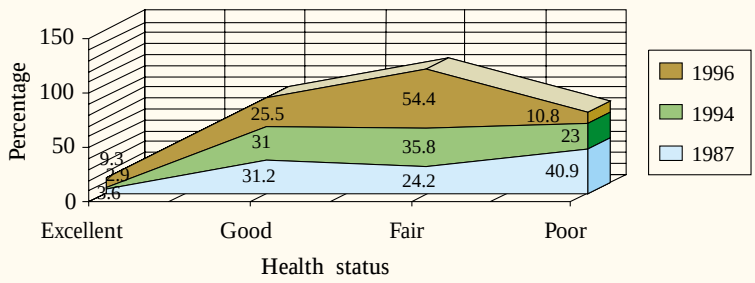
| Year | Excellent (Very strong) | Good (Strong) | Fair (Average) | Poor (Weak) |
|---|---|---|---|---|
| 1987* | 3.6 | 31.2 | 24.2 | 40.9 |
| 1994** | 2.9 | 31.0 | 35.8 | 23.0 |
| 1996** | 9.3 | 25.5 | 54.4 | 10.8 |

Source: * Chayovan, N. 1998
** National Statistic Office, Survey of the Elderly in Thailand, 1994
*** The National Survey of the Welfare of the Elderly in Thailand (SWET) Project, 1996

## Estimated future trends of health, disease and disability among the elderly

As the SEAR countries follow the lead of the developed countries with regard to increase of economic development, trends in diseases will repeat the patterns of the developed countries. These trends show an increase in noncommunicable diseases, and thus South-East Asia can expect a similar increase in chronic noncommunicable diseases. It is to be hoped that there will be a simultaneous increase in the access to medical care and in modern medical technology throughout the Region to cope with such an increase. Certainly, because of the expectation of an increase, countries will be in a position to make appropriate plans. Such plans may also include patterns of health promotion strategies to be adopted by developed countries in order to prepare populations for added wealth, in order that individuals, families and communities become aware of and involved in creating healthy populations.

Figure 20 : Self-evaluation of health status of the elderly in Thailand
Estimated future trends of health, disease and disability among the elderly



# Factors Determining the Health of the Elderly

Growing older is not necessarily a downward spiral. It is often viewed positively as a new beginning or a time when freedom and recreation can be enjoyed. However, successful healthy ageing depends on the individual's ability to cope with the effects of ageing, minimize risks to health, manage chronic illness, and confront changes using personal capabilities and as many existing resources as possible.

For the elderly themselves, health means a number of different things: being able to lead an active life, free of disability, for as long as possible: being able to get out and about; having a companion to confide in and access to a social network; being valued as a contributing member of society; being free of disease, and being able to live and act independently. Health is also considered to be dependent on living in a safe environment, with access to transport, financial security, and good housing (Action for Health, 1996 cited in Chiva & Stears, 2001).

There are many factors that can determine the state of health of a person. Factors and conditions which can affect health are income, social status, social support networks, education level, religion, employment and working conditions, social environment, physical environment, personal health practices and coping skills, culture, health services, gender, biology and genetic environment, and costs of participating in recreational activities and transport (Chiva & Stears, 2001; Alberta Center for Injury Control Research 2002; Population Health, 2000; Charlotte,& Shupert, 2002). According to the Alberta Center for Injury Control Research (2002), health determinants do not act alone or in isolation from each other. Interactions between determinants can have particular relevance and impact on the health status.

## Economic factors

Economic status is a crucial determinant of health. It has been found that health status, no matter whether measured by life expectancy at birth, infant mortality rate, maternal mortality rate or burden of disease, is associated with economic conditions. In Asia over the past three decades there has been considerable growth in the average annual income. However, the economic crisis following the collapse of the Asian financial markets in 1997 has had a direct impact on the people, and consequently the way of life and health status of the elderly.

The United Nations has classified seven countries of SEAR (Bangladesh, Bhutan, DPR Korea, India, Myanmar, Nepal, and Sri Lanka) as low-income countries with GNP per capita at US$ 765 or less, whereas Indonesia, Maldives and Thailand have been classified as lower-middle-income countries with GNP per capita at US$ 766 and US$ 3055 (Women of South-East Asia: A Health Profile, year 2000).

Poverty itself can prevent a person from satisfying the most basic human needs, such as food, shelter, safe water, access to health services, which can lead to ill-health, and which, in turn, can inhibit an individual's ability to work, thus reducing earning capacity and further deepening poverty (Drury, 2002). This is the greatest obstacle to a secure old age, and for many in developing countries, old age is simply the last phase of a lifetime of deprivation. Factors contributing to poverty vary, but include landlessness, discrimination in employment and lack of access to resources, formal education, and training opportunities, diminished physical strength and ill-health. Poverty for older people in poor countries means no pension, no savings and no loans. It forces many older men and women to work long past the national age of retirement. It prevents others from buying even basic necessities (HelpAge International, 2002).

Considering 6699863 as the number of elderly in Bangladesh in 2001, 35% were employed and 2.5% were unemployed while information on those who were self-employed, retired, and had sources of income were not available. Although 98% were employed and 1.97% were unemployed out of the 16341 elderly population of Maldives in 2000, sources of income were not available. The number of elderly reported in Nepal was 1064775 whose income was from government pensions, charities, investments, business, children, salaries, and others. In Sri Lanka, the total elderly population in 1981 was 982000 and the number of employed, self-employed, and unemployed was 47.12%; 7.8%, and 45.08%, respectively (Table 38). Sources of income were from pensions, children and relatives, spouses, occupations, and others. For Thailand, the elderly population was 5700000 in 2000, and the number of employed and unemployed elderly was 31.7% and 68.3%, respectively (Table 39), and the sources of income were pensions, children, spouses, relatives, and the government. The economic status and sources of income among the elderly of Bhutan, Myanmar, Indonesia, and the DPRK were not available.

In India, the total elderly population in 1991 was 56681640 and 7% were employed, 36% self-employed, 10% retired, and 47% unemployed (Table 38). The sources of income were government pensions, children, spouses, relatives, provident funds, and others. The Healthy Ageing: Agenda for the Coming Century in India, during the International Year of Older Persons, 1999, reported that studies conducted in India and other countries of the Region showed that the majority of elderly population were not in a position to lead an economically independent life after retirement age. In the absence of pensions, many old persons have to work for their livelihood until they are physically incapable to do so. Extended family systems and family values are eroding gradually. The report found that more than 12% of elderly men living in rural areas in India lived alone.

When considering the health status of the elderly reported in Tables 9 -36, it can be seen that lack of economic security must considerably add to the suffering of many of the elderly. In India, around 6% of older persons were found to be immobile due to various disabling conditions. Approximately 50% of the elderly were suffering from chronic diseases. Visual and hearing impairment were highly prevalent. Furthermore, a report on the Changing Age Structure in SEAR (WHO/SEARO, 2002) indicated that with the increasing proportion of older people, causes of morbidity and mortality in SEAR countries have shifted towards a greater incidence of chronic and degenerative conditions. Consistent with the data relating to health in the preceding section, the 10 most common diseases among the elderly in India and other SEAR countries are chronic and degenerative diseases.

Economic security at the end of one's life is not available for the majority of the elderly in SEAR countries. This lack exacerbates physical and emotional problems suffered by many elderly leading to poor and deteriorating quality of life, and often culminating in a lifetime of deprivation.

Table 37 : The gross national product per capita (US$) from 1995-1998 among ten of the SEAR Member Countries

| Country | US$ | Latest available data (year) |
|---|---|---|
| Bangladesh | 360 | 1997 |
| Bhutan | 400 | 1996 |
| India | 360 | 1996 |
| Indonesia | 1,585 | 1997 |
| DPR Korea | 479 | 1996 |
| Maldives | 1,180 | 1997 |
| Myanmar | 1,532 Kyats | 1995 |
| Nepal | 168 | 1998 |
| Sri Lanka | 709 | 1995 |
| Thailand | 6,100 | 1998 |

Source: World Health Organization 2002 and National Surveys

Table 38 : Economic status among the elderly from WHO SEAR Member Countries

| Country (year) | Bangladesh (2001) % | India (1991) % | Maldives (2000) % | Sri Lanka (1981) % | Thailand (2000) % |
|---|---|---|---|---|---|
| Employed | 35.0 | 7.0 | 98.0 | 47.1 | 31.7 |
| Self-employed | NA | 36.0 | - | 7.8 | - |
| Retired | NA | 10.0 | - | - | - |
| Unemployed | 2.5 | 47.0 | 1.9 | 45.0 | 68.3 |

Source: National sample surveys, 2002

Table 39 : Sources of income among the elderly of WHO SEAR Member Countries

| Country (year) | India (1991) % | Nepal (1991) % | Sri Lanka (1981) % | Thailand (1994) % |
|---|---|---|---|---|
| Pension | 10.0 | 8.1 | 8.3 | 4.1 |
| Children | 20.0 | 0.8 | Child+Relative 21.1 | 84.5 |
| Spouse | 25.0 | 1.6 | 9.4 | 21.4 |
| Relatives | 2.0 | Charity 0.8 | - | 14.9 |
| Government | - | 31.0 | - | 0.5 |
| Provident Fund | 3.0 | Investment 9.8 | Occupation 6.5 | - |
| *Other | 43.0 | Business 8.1 Other 6.5 | 3.0 | - |

Source: National sample surveys, 2002

## Education

The level of education of elderly people is another factor relating to health. Poorer people rarely have the opportunity to attain levels of education that can ensure well paying work. Education is also linked to health risk factors. The level of education of a person can influence information absorption, problem solving abilities, value systems, and lifestyle behaviours. In developed countries, people with good education often have more access to wellness programmes and preventive health options (Lueckenotte, 1996). The formal education of the

elderly in a number of Western countries has significantly increased in the 20 years since attention began to be focused on the situation of the aged (Ebersole & Hess, 1998). Education influences access to information and knowledge and it is known that mental stimulation through education and training has long-term health benefits (Cusack,1995). However, in SEAR countries, the educational level among the elderly is mainly at a primary level, and only a few people have attained higher degrees (Table 40).

In Bangladesh in 2001, most of the elderly (76.3%) were illiterate and only 0.1% had reached Master's Degree level. Similarly in 1991 in India, most of the elderly (74.1%) were illiterate, but 1.4% had completed graduate level and above. The most common education of the elderly in Maldives was informal education while most of the elderly in Nepal and Thailand had completed primary education, and most of the elderly from Sri Lanka had completed secondary education.

High risk behaviours pertaining to health among the elderly of SEAR countries could be linked to limited education, particularly tobacco smoking, alcohol consumption, tobacco-chewing, and inappropriate eating (Table 44-46).

Table 40 : Educational level among the elderly from WHO SEAR Member Countries

| Country (year) | Bangladesh (2001) % | India (1991) % | Maldives (2000) % | Nepal (1991) % | Sri Lanka (1981) % | Thailand (1994) % |
|---|---|---|---|---|---|---|
| No formal education | - | 1.6 | 15.8 | 18.0 | 30.3 | 31.2 |
| Illiterate | 76.3 | 74.1 | - | - | 28.1 | - |
| Primary | 13.1 | 10.9 | 7.7 | 32.3 | 17.2 | 61.3 |
| Secondary | 8.5 | 3.1 | 8.7 | 17.8 | 53.9 | 6.9 |
| High school | 0.8 | 0.7 | 0.0 | 5.7 | 1.3 | 0.4 |
| Vocational university | 0.8 | (below primary) 10.9 | 0.0 | - | - | - |
| Bachelor level | 0.2 | (middle) 4.9 | 0.0 | 1.2 | 0.8 | - |
| Master level | 0.1 | (nontech. Diploma) 0.1 | 0.0 | - | - | - |
| Higher than master | - | (Tech. Diploma) 0.1 | 0.0 | - | - | - |
| Graduate & above | - | 1.4 | - | - | - | - |
| Not stated | - | - | - | 3.6 | - | - |

Source: National sample surveys, 2002

## Social factors

Religion, marital status and living arrangements are social factors relating to the health status of the elderly. Religion can be interpreted as a belief system. It refers to the beliefs, attitudes, and behaviours that are associated with a particular community (Miller, 1999). The prevalence and importance of religious beliefs and activities in later life have been investigated with various conclusions. For example, a strong correlation has been found between well-being and religion, regardless of health, wealth, and social support. Correlations between well-being or adjustment to change and religion tend to increase over time, suggesting that as other sources of well-being decline, religion may become even more important (Ebersole & Hess, 1998). In many cultures, religious institutions play a vital role in the well-being of their members, especially their older members (Penn State Gerontology Center, 2002). The elderly from SEAR countries profess many doctrines. Most of the elderly in Bangladesh and Maldives are Muslims while those in India and Nepal are Hindus, and the majority of the people in Sri Lanka and Thailand are Buddhists (Table 41).

Table 41 : Religion in WHO, SEAR countries

| Country (year) | Bangladesh (2001) % | India (1991) % | Maldives (2000) % | Nepal (1991) % | Sri Lanka (1981) % | Thailand (1994) % |
|---|---|---|---|---|---|---|
| Buddhist | 0.5 | 0.7 | - | 77.8 | 71.7 | 94.6 |
| Christian | 0.3 | 2.3 | - | 0.1 | 8.9 | 0.4 |
| Muslim | 88.2 | 12.1 | 100 | 3.5 | 5.3 | 3.6 |
| Hindu | 10.5 | 82.4 | - | 86.5 | 13.7 | 0.2 |
| Kirati | - | - | - | 1.7 | - | - |
| Sikh | - | 1.9 | - | - | - | - |
| Jain | - | 0.4 | - | - | - | - |
| Burghers | - | - | - | - | 0.1 | - |
| Others | 0.2 | - | - | 0.2 | - | - |

Source: National sample surveys, 2002

Throughout the world marital status influences longevity, particularly for men. Whether it is the result of mutual caring by the couple that occurs in the relationship or because of a more regulated lifestyle has not been definitely established, but those who are married have a longer life expectancy than those who are single (Ebersole & Hess, 1998). In addition, the higher survival rates of women, along with the practice of women marrying men older than themselves, make it no surprise that in the USA more than half of the women older than 65

years of age are widowed (Eliopoulos, 2001). In SEAR countries, most of the elderly are married and there are more widows than widowers. Table 42 shows the marital status in some SEAR countries, and includes the numbers of divorced and separated people in India and Myanmar (Table 42).

Living arrangements are often the determining factors related to health. Since the family structure began changing worldwide with urbanization and migration of young people, coupled with decreased cohesiveness in family bonds, the number of elderly people living alone are increasing. As a result, the elderly may need to take care of their health themselves, and might be lonely or depressed, which could lead to psychological health disturbances. However, the focal points in the SEAR countries reported that this situation was only present in small numbers in SEAR countries. Most elderly live in a household with a spouse or other family members. Most elderly people have contact with their families and are not forgotten or neglected. From the 6699863 elderly of Bangladesh in 2001, 3.97% lived alone while 91.33% lived with spouses and/or children, and 4.50% lived with relatives. There were only 0.14% of the elderly living with others. For the 5700000 total number of the elderly population of Thailand in 1994, 7% lived alone and 91.33% lived with spouses and/or children, whereas 3% lived with relatives. Less than 0.1% of the Thai elderly lived with others.

Table 42 : Marital status among the elderly from WHO, SEAR countries

| Marital Status (year) | Bangladesh (2001) % | India (1991) % | Maldives (2000) % | Myanmar (1983) % | Nepal (1991) % | Sri Lanka (1981) % | Thailand (2000) % |
|---|---|---|---|---|---|---|---|
| Single | 0.6 | 8.5 | 1.1 | 4.8 | 35.6 | 5.7 | 2.2 |
| Married | 70.1 | 59.4 | 60.6 | 59.1 | 60.5 | 68.1 | 64.3 |
| Widowed | 29.1 | 31.5 | 25.4 | 35.1 | 2.9 | 25.5 | 33.4 |
| Divorced | - | 0.3 | 12.8 | 0.8 | 0.2 | 0.3 | - |
| Separated | - | 0.1 | - | - | 0.2 | 0.3 | - |

Source: National sample surveys, 2002

## Gender

Gender is fundamental to personal identity and is a primary way in which experiences are organized. Gender is a social construct rooted more in human culture than biological difference between the sexes. Gender refers to the array of socially determined roles, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to the two sexes on a differential basis (Gender as a Health Determinant, 2001). In many countries in the world, today's elders are socialized into masculine and feminine roles

Table 43 : Number of male and female elderly in SEAR countries

| Sex (year) | Bangladesh (2001) | India (1991) | Maldives (2000) | Nepal (1991) | Sri Lanka (2000) | Thailand (2000) |
|---|---|---|---|---|---|---|
| Male | 3,501,439 | 29,363,725 | 9,289 | 9,290,974 | 9,653 | 5,733,000 |
| Female | 3,198,424 | 27,317,895 | 7,052 | 9,270,123 | 9,524 | 3,096,000 |

Source: National sample survey, 2002

and the elderly have had a lifetime of experience with the understanding that men are to be aggressive, independent, and strong and that women are to be pretty, dainty, and dependent on their male counterparts. Although many persons are currently attempting to eliminate masculine and feminine stereotypes, existing stereotypes can lead to discrimination against women. Gender discrimination may be exacerbated by other factors that also can lead to discrimination, for example discrimination against older people, those living in poverty, people with disabilities, and women without husbands. Thus a poor older disabled woman who has been widowed may be subject to a very high level of discrimination which may take the form of emotional and even physical abuse. Poor older women commonly feel that they have little decision-making powers and low status in their households because their housework and the care they provide for their grandchildren are undervalued by other family members (HelpAge International, 2002). Interestingly, the number of older women in SEAR countries is very close to the number of men (Table 43). The health status of women and men has been reported. Remarkably, the number of common diseases and the percentage of health problems between men and women are very close.

## Community participation

Social participation of citizens in their communities has been argued to have positive effects on individual health, although with varied empirical underpinning (von Lengerke, 2002). There are many opportunities for social participation for the elderly. In 2001, according to the focal point for Bangladesh, the elderly in Bangladesh had the opportunity to participate in social activities. Similarly, in India (1991) and Thailand (2000), the elderly participated in policy-making, income generation, health, and in other social activities. Information from the Bhutan, DPRK, Indonesia, Maldives, Myanmar, Nepal and Sri Lanka on this topic was not available.

## Behavioural risks to health

Behavioural risks to health are problems for the elderly in both developed and developing countries. In terms of health risk behaviours, the evidence from several sources reveals that many elderly practise behaviours that are risks to health. For example, there are elderly people who smoke tobacco and drink alcohol. In some countries, the data supported the fact that some elderly have problems with drug abuse. Health risk behaviours are major factors leading to illnesses in the elderly.

In Bangladesh, the data on health risk behaviours among the elderly revealed that smoking is ranked as the most prevalent risk behaviour. Inappropriate eating and lack of exercise are rated as the second and the third leading health risk behaviours (Table 44).

In India, tobacco chewing is the highest-ranked risk behaviour and smoking tobacco the second (Table 45). The consumption of alcohol is another important risk behaviour of the elderly in India.

Table 44 : Ranking of health risk behaviour among the elderly in Bangladesh

| Behaviour | Ranking |
|---|---|
| Smoking tobacco | 1 |
| Inappropriate eating | 2 |
| Lack of exercise | 3 |
| Alcohol consumption | 4 |
| Substance abuse | 5 |

Source: Bangladesh HDS, 2000

Table 45 : Ranking of health risk behaviour among the elderly in India

| Behaviour | Ranking |
|---|---|
| Tobacco chewing | 1 |
| Smoking tobacco | 2 |
| Alcohol consumption | 3 |
| Inappropriate eating | 4 |
| Lack of exercise | 5 |
| Substance abuse | 6 |

Source: National sample survey, 2002

According to the analysis from the database in Thailand, (Health and Households Welfare Surveys, National Statistical Office, Thailand, 1994), the older age group is one of the biggest groups of tobacco smokers (Appendix Table 9 and Figure 2), although the biggest is the adult group. However, the incidence of smokers has declined. Research in 1986 revealed that 67.3% of smokers were male elderly and 8.7% were female elderly, while this statistic decreased to 45.1% for males and 4.8% for females in 1999. Comparing older women and men in Thailand, the proportion of male elderly smokers is about forty times higher than female smokers.

Table 46 : Health risk behaviour among the elderly in Thailand in 1996

| Behaviour | Urban | | Rural | | |
|---|---|---|---|---|---|
| | Male | Female | Male | Female | Total |
| Smoking tobacco | 35.5 | 7.3 | 58.6 | 11.0 | 27.3 |
| Alcohol consumption | 29.9 | 7.9 | 39.2 | 15.7 | 22.6 |
| Substance abuse | NA | | NA | | NA |
| Inappropriate eating | NA | | NA | | NA |
| Lack of exercise | NA | | NA | | NA |

Source: Chayovan, N. & Knodel, J.,1998
(NA = not available)

Comparing the data on health risk behaviours from SEAR countries, it can be seen that the most serious health risk behaviours among the elderly in Thailand and in India are smoking tobacco and excessive alcohol consumption. Moreover, the evidence from India showed that some elderly practise drug abuse, lack exercise, and have inappropriate eating behaviours (Table 45).

In Thailand, the results of a study (Chayovan, N. & Knodel, 1995) on the health status of the Thai population in 1995 revealed that about forty percent (40.3%) of older Thai persons performed exercise daily, and about thirty percent (31.8%) exercised three to six times a week. Elderly men exercised more than elderly women. The elderly residing in rural areas exercised more than the urban elderly.

Regarding smoking and drinking, data from the health status among the Thai population in 1995 showed that the proportion of smokers and drinkers decreased with age. The declining rate of smoking with increased age is less than that of drinking among elderly men. Interestingly, more elderly women chew tobacco than men. (See Appendix Table 10 Figure 3.)

Data is available from Thailand on food consumption patterns of the elderly, but not from other countries. Vegetables constitute about 70% of daily food consumption; with 28% being protein from meat and fish, and 20% milk. Coffee is consumed by 10% of the elderly daily (Appendix Table 8).

## Potential for prevention of risk behaviour

In terms of behavioural patterns leading to ill-health, the data on the health status among the elderly from SEAR countries reveals that most of the elderly are experiencing either acute or chronic health problems leading to a decrease in the quality of life, disability and death.

Contributing factors could be the high rate of self-reported inappropriate health behaviours such as smoking tobacco, alcohol consumption, and lack of exercise among the elderly, leading to the high incidence of either acute or chronic diseases or problems among the elderly in SEAR countries. A further important factor is the evidence that poverty leads to lack of nutritious food, safe water, adequate housing, and access to health care and thus is a prominent factor in the cause of diseases. Furthermore, lack of education can lead to lack of knowledge of ways to improve health and prevent disease.

In the following section data are presented concerning the facilities and services available in the SEAR countries for the elderly, and national policies and strategies for improving the care for the elderly. Health education is a vital tool that can be used to prevent disease and promote healthy ageing. Health promotion strategies are available in all countries to a greater or lesser degree, and there is awareness of the need to create strategies that are appropriate to target populations, taking into account socioeconomic and cultural differences, as well as gender-specific issues.

The health status of the elderly has been recognized by governments and organizations as an important issue requiring action. In Bangladesh, a report from the country focal point showed that health problems, especially hypertension, is a major concern, needing the development of health care services to fulfil the particular needs of the elderly to alleviate hypertension. According to a report on present problems among the elderly in India, lack of proper nutrition is the main concern in India and health care services and health care programmes are being developed to address this problem.

There is an urgent need for governments, institutions and concerned organizations to focus on health care for the growing numbers of the elderly, and to develop appropriate strategies for health promotion that can educate the elderly on patterns of behaviour that can lead to healthy ageing.

# National Initiatives for the Care of the Elderly

Every country is concerned about care for the elderly, particularly developing countries where the numbers of the elderly are rapidly increasing. During the recent past, SEAR countries have witnessed progressive developments in many sectors of society. The health sector in each country is no exception as evidenced by several concrete examples, such as an increase in life expectancy, the control and eradication of various diseases and the rapid expansion of health care services. However, attempts to develop the health sector are causing health crises in the Region. The health service system in each country is struggling to overcome its own inherent deficiencies in areas such as quality, efficiency and continuity. These deficiencies are frustrating to both clients and health care providers.

In response to this situation, all sectors of society are searching for ways to solve these problems, and coordinating to push for health system reform in their countries. Mechanisms at national levels have been adopted by many countries in the Region dedicated to the improvement of the health status of all people, including the elderly. The United Nations has put forward several plans for action on ageing during the past two decades (Table 47), and countries are developing national policies for their elderly. As we have seen, there are a number of similarities in the health, social and economic status of the elderly in the SEAR countries. However, countries have different health policies and strategies for the care of their aged populations.

All of the countries in the Region have national policies that encompass elderly care management. Some countries such as Bangladesh, India, Indonesia Maldives, Sri Lanka and Thailand have specific and precise national policies for the elderly, whereas in other countries such as Bhutan, DPR Korea, Myanmar and Nepal, the elderly are not specifically mentioned.

| Table 47 : United Nations and the advancement of the elderly | |
|---|---|
| 1982 | The international plan of action on ageing (First world assembly on ageing ) was endorsed in Vienna. |
| 1992 | The United Nations principles for older persons was announced |
| 1999 | The International year of older person was announced. |
| | The Macao plan of action on ageing for Asia and Pacific was declared |
| 2002 | The Second world assembly on ageing in Madrid was initiated. |

## National policies for care of the elderly

National plans for the health of the elderly in the Region have been developed by national committees in government organizations. Depending on the factors of health problems of the elderly, national health plans in some countries have been developed in cooperation between government and non-governmental organizations (NGOs).

Bangladesh works through the National Committee on Ageing, the Bangladesh Association for the Aged and the Institute for Geriatric Medicine (BAAIGM) in policy and strategic development for older persons. The Ministry of Health and Family Welfare, India have developed a plan for the health of the elderly in cooperation with the Ministry of Social Justice and Empowerment. The Ministry of Health in both Maldives and Thailand have developed their national plans for the elderly, while the Ministry for Social Affairs in Sri Lanka and Indonesia have developed policies for the health of their elderly population. The national health plan of Myanmar integrates health care of the elderly with community health care programmes under the National Health Committee. These national ministries are responsible for policy formulation, planning, coordination and advocacy.

There are no specific national plans for the health of the elderly in Nepal, Bhutan and DPR Korea.

## Primary focus of national policies on ageing

There are a variety of policy structures across different countries. The summarized objectives/goals of the focus of national policies on ageing of each country are given below.

Bangladesh : To declare elder persons as Senior Citizens of the country. Financial security for Senior Citizens should be ensured. Additionally, health care and educational programmes will be provided to Senior Citizens.

Bhutan : Primary health care will be enhanced for vulnerable groups including the elderly. The Ministry of Health and Education is the executing agency.

DPR Korea : No specific goals for the elderly. Nutritional programmes are one emergency issue, for children and older persons.

India : Focus on provision of financial security. Health care services for the elderly will be strengthened. Shelter and welfare for the poor elderly group will be provided. Education will be provided for developing the potential of the elderly and their care-givers.

Indonesia : Focus on health promotion and promoting the independence of the elderly. Health and social welfare services will be strengthened.

Maldives : To ensure the physical, mental and social well-being of the elderly, and to reduce the number of deaths due to non-communicable diseases for those aged less than 65 years by 50%.

Myanmar : To maintain existing traditions, to mobilize government agencies, NGOs and voluntary organizations and the community to actively participate in caring for older persons and to promote the existing health care services.

Nepal : Developing a family-based security system to enable the elderly to lead creative and dignified lives was an issue addressed in the Ninth National Plan (1997 - 2002).

Sri Lanka : To ensure independence, participation, care, self-fulfilment and dignity for the elderly.

Thailand : Developing strategies in the preparation for quality ageing, strategies for social security for older persons, strategies for management systems and personal development at the national level, and strategies for conducting research for policy and programme development for elderly support, will be integrated into the Second National Plan for Older Persons (2002-2021)

Bangladesh has a policy for developing health care for the elderly focused on the declaration of elder persons as senior citizens of the country, ensuring financial security for senior citizens and providing health care and educational programmes to senior citizens.

The Bhutanese government has no special policy for elders. The Ministry of Health and Education is the executing agency for developing the national policy that includes all ages. In the policy, primary health care will be enhanced for vulnerable groups including the elderly.

Similarly, there is no specific goal set for the older group in DPR Korea. The main focus of the policy is on food scarcity, caused by the country's agricultural crisis. Therefore nutritional programmes are an emergency issue identified for children and the elderly.

The policy for Indian elderly health focuses on strengthening the legitimate place of older persons in society. Areas of finance, health care, shelter and welfare of older persons will be supported, particularly in rural areas and for older women. The development of potential in

older persons and care-givers will also be developed by providing education (Ministry of Justice and Empowerment, 1999).

Indonesia has no detailed information about strategies for elderly care management, but the statement of the Minister for Social Affairs of the Republic of Indonesia at the Second World Assembly on Ageing, Madrid 2002, revealed that the government will strengthen health promotion and promote independence of the elderly. Health and social welfare services are also to be strengthened to improve the quality of life for older persons.

The National Maldives Policy of Health for the Elderly includes the issues of ensuring the physical, mental and social well-being of the elderly and reducing the number of deaths due to noncommunicable diseases in the aged group (Ministry of Health, 2002).

Myanmar and Nepal are both developing national policies for elderly health. There are national policies for health for all ages already in place in both countries though not specifically for the elderly. Health care of the elderly in Myanmar is integrated within community health care programmes. However, the statement of the Union of Myanmar at the Second World Assembly on Ageing (2002) revealed that the government will continue to make every effort to maintain existing cultural traditions, to raise public awareness of the importance of the role older persons play in society, to mobilize government agencies, NGOs and voluntary organizations and the community to actively participate in caring for older persons, to promote the existing health care services and conduct more research on the issues of old age (U Hlaing Win, 2002). The Ninth Plan (1997 - 2002) of Nepal will focus on developing family-based security systems and enabling older persons to lead creative and dignified lives (Sushila Swar, 2002).

The information on national policy on ageing in Sri Lanka occurs in the statement of the Head of the Delegation of Sri Lanka at the Second World Assembly on Ageing, Madrid 2002. The statement revealed that the objective of the Sri Lankan National Policy on Ageing is to give leadership and policy initiatives to create a healthy environment for older persons, focusing primarily on the preparation of the population for a productive and fulfilling life in frail old age, socially, economically, physically and spiritually, and ensuring independence, participation, care, self-fulfilment and dignity for the elderly (Chandra Wickramasinghe, 2002).

In Thailand, the committee of the National Commission on Ageing, has developed long-term policies and measures for the elderly (1997-2011). These include providing general knowledge to the elderly on life changes and environmental adjustment as well as health care. Care for the elderly should be generally provided by their families and communities, while support could be given by appropriate welfare services. Support would also be given for roles

of the elderly in families and society, in raising public awareness of responsibility for the elderly, and enabling the older population to live in society with dignity and happiness.

Based on the International Year of Older Person's principles, the Thai government adopted a Constitution for the Elderly in 1999. The three main goals of the Constitution are protection of rights and freedoms of older persons; the promotion of greater participation of the elderly in governing and accountability of the state, and also improving the political structure to increase stability and effectiveness by paying attention to the initiatives for the elderly.

In order to address the health and economic problems of the elderly, the Thai government adopted the Second National Plan for Older Persons (2002-2021) in 2002. Nine concepts including preparation for quality ageing, developing strategies for promoting well-being, social security, management systems and personal development at national level, and developing strategies for conducting research for policy and programme development are demonstrated (The National Commission on Ageing, 2002).

In summary, in all countries of the Region for which data were available, the policies for elderly care focused on the competency of elderly people, development and environmental management. Most policies were recent, and evaluation and revision will be conducted after the policies have been implemented for a sufficient time. There were no specific policies for the elderly population in Bhutan and DPR Korea.

## Health care services

Health is a state of complete physical, mental, social and spiritual well-being and not merely the absence of disease and infirmity (WHO, 2000). It is an individual's responsibility, but it requires collective action to ensure a society and an environment in which people can act responsibly (Edelman & Mandle, 2002).

Maintaining health is very important for the elderly, particularly for those from lower economic sectors who must continue to work for a living even when they have become senior citizens. Good health is central to their ability to work, to obtain food and money for themselves and families. However, many poor older people have little or no access to health services. Poor older people often cannot afford to pay fees and buy drugs (HelpAge International, 2002). In SEAR countries, health care services for the elderly are provided both by the government and the private sector.

In Bangladesh, all geriatric hospitals, geriatric clinics, and respite care services are provided by NGOs while in India geriatric hospitals, day care centres, and health promotion centres are provided by the private sector and NGOs, and geriatric wards and geriatric clinics are supported by the government. In Thailand, the government has provided homes for the aged

and supports day care centres while nursing homes are provided by the private sector (see Table 48 for numbers of settings).

Table 48 : Number of settings providing care for the elderly

| | Bangladesh | India | Thailand (1996) |
|---|---|---|---|
| Geriatric Hospital | 1 (NGO) | 1 (Private)<br>1 (Lions Club) | - |
| Geriatric Ward | - | 3 ( Govt.) | - |
| Home for the Aged | - | - | 16 (Govt.) |
| Geriatric Clinic | 45(NGO) | 7 (Govt.)<br>10 (Private)<br>1 (Lions Club) | - |
| Respite Centre | 1 (NGO) | - | - |
| Nursing Home | - | many | 13 (Private) |
| Day Care Centre | - | 425<br>(NGO & Govt.) | 13 (Govt.) |
| Senior Citizen Club | - | - | 3,487 (NGO) |
| Health Promotion Centre | - | 3<br>(NGO & Govt.) | |

Source: National sample surveys, 2002

The government, NGOs and the private sector of WHO/SEAR countries provide different types of health care services. In Bangladesh, the government provides free food, medical services, and home services along with recreational facilities while NGOs provide medical services, recreation (picnics, sports, cultural functions and religious discussions), special awards for care-givers, publications, library facilities, training to care-givers and senior citizens, goat rearing projects and handicraft projects for senior citizens. In addition, other organizations have provided small credit facilities for senior citizens to alleviate poverty.

In India, the elderly are taken care of at primary, secondary, and tertiary levels of health care, which is provided by the government, including geriatric clinics, and wards. There are separate queues for the elderly in clinics and hospitals, for billing and at pharmacy counters. There is a National Policy on older persons. Moreover, the government has provided services under each level of health care that will be strengthened to meet the requirements of the elderly. Health insurance policies at subsidised rates are also provided for poor older people. Interestingly, rural mobile health services are provided by medical colleges. Furthermore, NGOs like HelpAge India are running mobile medical services for the aged in remote areas and providing eye check-ups and cataract surgeries. Voluntary organizations like the Lions

Club are organizing free eye camps and cataract surgery. Besides the government and NGOs, there are 10 geriatric clinics and one geriatric hospital in the private sector in various parts of the country.

The Nepalese Government does not offer any special care facilities for the elderly. However, NGOs and private organizations have provided some day care centres, including an aged shelter, but these facilities are limited. The Nepal Medical College Hospital in Kathmandu provides free services to the elderly staying in a home for the aged.

In Thailand, health care services are classified into five levels: (Thailand Health Profile 1997-1990) the self-care level, which includes the enhancement of people's capacity to provide self-care and make decisions about health; primary health care level, organized by the community for providing services related to health promotion, disease prevention, curative care and rehabilitation; the primary care level, which includes medical and health services provided by medical and health personnel at various health units i.e. community health posts, health centres, and health centres of municipalities, out-patient departments of public and private hospitals at all levels and private clinics; the secondary care level, which is provided by medical and health personnel with various degrees of specialized facilities; and tertiary care, which is provided by medical and health personnel. Furthermore, specific care for the elderly is provided by both government and NGOs, such as government monthly subsidies, free medical care, elderly identification cards, day care services, mobile services, emergency shelter services, and assistive devices.

The Thai government launched a health policy on 26 February 2001 which insured all people who were not in any health scheme, charging them a flat rate of a 30 bahts ($0.75) for all government health services. Health cards have been given to appropriate people to enable them to access health services. However, there are limitations on the number of places registered where the health card can be used, and people need to present themselves first at primary care-level institutions, and follow the appropriate referral system to other levels of care. Health services covered in this project include most health services, except cosmetic care, delivery beyond two pregnancies, drug addiction treatment, haemodialysis, organ transplantation, infertility treatment, and other high-cost interventions. In addition, persons aged 60 years and over can request a health care card from the government hospital nearest to their homes. However, that card cannot be used in other government hospitals, unless the identified hospital cannot provide appropriate treatment or in cases of emergency. The services covered are drugs, intravenous solutions, oxygen therapy, investigations, basic dental care, health promotion activities and rehabilitation, regular room and food services, annual check-ups, and the use of therapeutic equipment. Moreover, people working for various government organizations can continue to use the health benefits of those organizations after retirement.

In Myanmar, the Ministry of Health has taken the responsibility to improve the health status of all the people in the country, promoting preventive and curative measures and health rehabilitative activities. Also, 12 community health care programmes focusing on disease prevention, provision of health services, maternal and child health care and nutrition through a primary health care approach, are provided by the government (National Health Committee, 1998). Special programmes and health care services for the elderly are not available. Similarly in Bhutan, the Bhutanese Government has provided health care services for all ages but no specific health settings or health care services for the Bhutanese elderly. In DPR Korea, the poor elderly are provided with shelter and welfare only during an emergency caused by flooding.

In Sri Lanka, the Medical Officer of Health (MOH) for the Wattala Area, the west part of Gampaha district in the western province of Sri Lanka, has provided two elderly eye screening clinics with the cooperation of HelpAge Sri Lanka, which are conducted every month, training of volunteers for caring for the elderly by HelpAge Sri Lanka, and a proposed Day Centre that is to be opened shortly. Also the MOH for the Ragama Area has started a project on active ageing with the objective of providing psychological, physiological and social well-being for the elderly. The activities include; health clubs sponsored by the Ragama MOH office, the general practitioners of the area, and NGOs (Lions Club), screening clinics for elders and community-based rehabilitation, a special counter for the elderly opened in the hospital premises for issuing registration and drugs; separate examination rooms for elderly patients; training programmes for public health care workers and community-based providers of elderly care; formation of groups of the elderly to promote their physical, mental and social well-being by themselves, and special programmes for the elderly, particularly on Elder's Day, such as recreational activities, and religious events.

Maldives and Indonesia have no specific provision of health care services for the elderly as yet.

## Social welfare services

Most countries in the South-East Asia Region provide some social welfare services for their elderly citizens.

In Bangladesh, 10 elder persons (five women and five men) are supported by the government with a monthly allowance of Takas 100 in each ward of the Union and municipalities, and there are Homes for the Aged run by the Department of Social Welfare, the Bangladesh Association for the Aged, the Institute of Geriatric Medicine, and the *Boishka Punarbashon Kendra*. Furthermore, the Department of Social Welfare runs free food services and provides other social welfare benefits for older people, including two government programs, the Vulnerable Group Development, and Vulnerable Group Feeding, which are for the benefit of all those who are destitute.

The Government of India has provided a 50% discount for bus transportation for older people (in one state free transportation is allowed on city buses), and monthly allowances according to the national Old Age Pension Scheme. Rupees 75 per month are given by the government to those who have no regular means of subsistence from personal sources of income or through financial support from family members or other sources. One thousand old age homes are run by government-assisted voluntary organizations and other private organizations. The free Food Service under the Annapurna Scheme provides 10 kg. of grain free of cost to destitute older persons not covered under the Old Age Pension Scheme. A tax discount (Rupees 10,000 deducted from the total tax) is given by the government and 1% extra interest on deposits given to senior citizens by banks. Moreover, wheelchairs are provided at railway stations and bus stands, separate reservation counters are available at railway stations and bus stands, and priority is given to the elderly while paying electricity bills, telephone bills and in hospitals. There are Sunday Clinics in New Delhi, and geriatric wards and geriatric OPDs in government hospitals in Chennai. There also are geriatric OPDs in government hospitals in Madurai, South India, and a geriatric hospital supported by the Lions Club at Coimbatore, South India. Moreover, in the case of the elderly, the court cases are disposed expeditiously and telephone connections provided on priority. Furthermore, one of the states is even supplying clothes to the indigent old twice a year.

In Nepal, the elderly get a 25% discount on transportation courtesy Nepalese Municipal Authority. The government gives Rs 150 per month to the elderly of age 75 and above, and Rs 701 per month to helpless widows. There are 10 homes for the elderly run by different NGOs and private parties, free food services available for old people in some private houses, and the government provides four free meals daily to those who are not covered by the Old Age Pension Scheme.

For the elderly in Thailand, only half price is charged for third-class journeys from June to September, and a 300 bahts monthly allowance is provided for the poor, besides a tax discount. Social welfare services are not available for the elderly in Bhutan, Indonesia and Myanmar, while DPR Korea provides social welfare services only in emergencies such as floods.

## Laws and regulations for the care of the elderly

Laws and regulations relating to the care of the elderly are international issues. Most of the countries in the Region have no specific laws for the elderly. However, some regulations have been developed as guidelines to protect the human rights of the elderly. This section will focus on countries that have adopted regulations or constitutions for the elderly, and that will become laws in the future.

In India, Article 41 of the Constitution of India makes it obligatory for the State to initiate measures to secure the rights of aged persons to public assistance, and make provisions for

their well-being. Nevertheless, it took the government almost half a century to formulate the National Policy on Older Persons (NPOP). Under the NPOP, the Union Government set out a plan of action for 2000-2005. But so far, not much has been done. Neither has the Union Finance Minister provided any relief for senior citizens in the 2002-2003 budget.

Sri Lanka announced the enactment of legislation regarding Act No. 9 of 2000 for the Protection of Rights of Elders which is indeed a significant achievement. Some of the salient features of the Act are as follows:

- Establishment of the National Council of Elders;
- Protection of the rights of elders;
- Registration of persons and organizations providing services to elders;
- Establishment of a National Fund for the Welfare of Elders; and
- Appointment of Boards to enquire into complaints of elders and determine claims for their maintenance and other miscellaneous matters relating to their problems.

There is a provision under the Act for older persons to take legal action if their rights are not secured. The Department of Social Services has already taken action to implement most of the provisions of the Act. Some older persons have responded positively, and are volunteering to participate actively in implementing the functions. They are pleased with the decision of the government to enact an Act and a Plan of Action for their welfare. A publication named `Elders' is popular among older persons as it provides information useful to them. All this has increased the awareness of the issues of older persons. Further, the across-the-board provision of free education and free medical service by the State affords substantial relief to families looking after their elderly parents and grandparents.

Thailand adopted the Thai Constitution for Elderly People in 1997. The objectives of the constitution include: the promotion and protection of the rights and freedom of the Thai elderly citizens; to promote greater participation of elderly people in governance and accountability of the State, and to improve the political structure in order to make it more stable and effective by paying attention to elderly people's initiatives. The government believes that elderly people will increase their well-being in the future (United Nations, 2002).

# Elderly Care Programmes: Present Situation and Future Directions

While some countries in the Region have no specific policies for the elderly, various programmes have been developed and implemented during the past five to ten years.

## Bangladesh

Since the Copenhagen Social Summit in 1995, Bangladesh has introduced social security and welfare programmes for the aged. These include old age pensions, allowances for widows, distressed and deserted women, and homes for the distressed, abandoned and disabled aged. Also, projects have been designed to provide shelter, security, food, clothing, health and recreation services to distressed persons over 60, with the objective of their rehabilitation.

Following a new draft policy on elderly health care launched by the Government of Bangladesh, various programmes are being strengthened. Strategies include providing 50% concession on transportation fees and providing other financial benefits as well as security programmes particularly for the poor older persons. In addition, tax rebates for the elderly are given as needed, and saving schemes and funds provided for them.

Concerning health care programmes, separate wards and diagnostic centres will be established for Bangladesh elders, and specific treatments such as cornea replacements and by-pass surgery will also be provided. Moreover, health insurance for the elderly will be adopted in the future. Homes for the aged *(Shanti Nibas)*, and hospices *(Aborsar)* will be strengthened. Micro-credit programmes have been successful in Bangladesh in alleviating poverty and making women, including older women, economically self-sufficient. These will be strengthened to assist in the provision of shelter and livelihood, and combined with healthcare in the future (Shahed Akhtar, 2002).

**Box 1 : Bangladesh National Strategic Plan for Elderly Health Development**

**Personal Development**

| Policy | Strategic Plan |
|---|---|
| 1. To declare elder persons as Senior Citizens of the country | ❍ Senior Citizens be given priority on a national basis.<br>❍ Senior Citizens be given 50% concession on transportation fees and at least 5 seats be kept reserved in all transport for them.<br>❍ For the care and rehabilitation of Senior Citizens, their working family members should not be transferred.<br>❍ Surveys to be conducted every five years to assess the socio-economic conditions of the Senior Citizens to update and narrow down data gaps. |
| 2. Financial security for Senior Citizens be ensured | ❍ Financial security of Senior Citizens be properly ensured.<br>❍ Financial benefits to be given to Senior Citizens who are living below poverty level through social security programmes.<br>❍ Pension scheme to be introduced for Senior Citizens in private enterprises.<br>❍ Rebates on taxation to be given to Senior Citizens when needed.<br>❍ Saving schemes and funds to be created for Senior Citizens. |
| 3. Health care programme | ❍ Arrangements to be made to admit Senior Citizens in hospitals on a priority basis, and special courses on Geriatric science to be introduced into the syllabus of Medical Colleges.<br>❍ Separate wards created for Senior Citizens in each hospital.<br>❍ Health insurance to be introduced for Senior Citizens.<br>❍ Separate diagnostic centres established for Senior Citizens.<br>❍ To avoid mental disorders, recreation and caregivers facilities to be created.<br>❍ Subsidies on purchase of costly medicines and treatment including pace makers, by-pass surgery and |

| | |
|---|---|
| | cornea replacements be given to the Senior Citizens who cannot afford these easily, and freely to Senior Citizens living below poverty level. |
| 4. Homes | ❍ Homes for Senior Citizens be made available.<br>❍ Priority on the ground floor be given to Senior Citizens at the time of allotting living quarters. |
| 5. Education | ❍ Publicity through press and mass media be made for awareness of Senior Citizens.<br>❍ Inclusion of problems and their solutions for Senior Citizens in the syllabus of educational institutions.<br>❍ Arrangements to be made to give sufficient training to care-givers and members of Senior Citizens and families. |
| **EDUCATION FOR THE ELDERLY AND CARE-GIVERS (Continuing education, life-long learning)** | |
| 1. To create awareness of ageing | ❍ Sufficient training through workshops, seminars and group discussions to be arranged to disseminate awareness of ageing to Senior Citizens and care-givers.<br>❍ People motivated to create sympathetic behaviour for elders through press and mass media. |
| 2. Health | ❍ Education of Senior Citizens on problems of ageing.<br>❍ Education of Senior Citizens to maintain good health covering areas such as cleanliness, eating habits, avoidance of loneliness, tension etc. |

Source: Bangladesh Association for the Aged and Institute of Geriatric Medicine

Presently, there is some training for providers of elderly care. A course on elderly care has been included in the syllabus of the Department of Social Welfare, Sociology and Population Science in the Universities.

With regards to provision of homes for the elderly, the Bangladesh Association for the Aged and Institute of Geriatric Medicine (BAAIGM) has homes available, and the *Boisko Punarbashan Kendra* has a home that accommodates 40 elderly with free food and boarding.

Community-based activities in Bangladesh are being developed and implemented. The Thanarbaid Health Care Centre is a model for health programmes in rural communities, being a centre running health programmes in 10 villages, including the Thanarbaid Clinic Outpatient-Inpatient (OP-IP) programme and the Kailakuli TB and Diabetes Sub-centre. Promoting health for all people in rural areas is the main goal of this centre (The Thanarbaid Health Centre, 2002).

The Bangladesh Association for the Aged and Institute of Geriatric Medicine (BAAIGM) in collaboration with the Ministry of Social Welfare has designated 1 October as the annual "Elderly Day". Discussions and seminars take place, and an art competition by schoolchildren and essay competition for college students organized on elderly people, to encourage awareness of the situation concerning the elderly. Furthermore, awards for the care of the elderly are given, such as a *momotamoyee* (affection) crest for a female caretaker and a *momotamoy* crest for a male caretaker.

Developing mass media campaigns on radio, TV, in newspapers, on posters, billboards, and handbills, and providing training for caretakers, teachers, social workers and health providers on issues regarding older persons, will be facilitated in the community.

## Bhutan

In Bhutan, specific health care services for the elderly are not mentioned in the National Ninth Five-Year Plan (1997-2002). The national plan focuses on developing the infrastructure to enhance the quality of life in Bhutan. Five overall goals of the plan include: improving the quality of life; ensuring good governance; promoting private sector development and employment generation; preserving and promoting Bhutan's cultural and environmental heritage, and achieving rapid socioeconomic growth and transformation.

Health care activity at Thanarbaid Health Care Centre, Bangladesh

However, the Gewog Plan, social and infrastructure development plan, makes a mention of promoting the capacity and knowledge of the village elders, women and men (Gewog Planning Commission, 2002).

## DPR Korea

Since 1995, the Democratic People's Republic of Korea has suffered from a shortage of food. In particular, the food shortages have affected the risk population groups, including children, pregnant and nursing women, and the elderly. In collaboration with UNICEF, the Government of DPR Korea is focusing on nutritional problems for risk groups. There is no formal policy on ageing although the President has announced "The Sunshine Policy", a health care model for all ages based on the Soviet model, and which is a state-funded and state-managed public health system. Preventive medicine is the foundation for health policies. There are hospitals providing health care to all ages at the provincial, county, ri (district) and dong (village) levels. Specialized hospitals, including those devoted to treating tuberculosis, hepatitis, and mental illness, are generally found in large cities. However, there are no special health care services for the Korean elderly (United Nations Population Division, 2002).

## India

India has developed a strategic financial security plan for the elderly, including the expansion of the old age pension plan for the elderly poor. Monthly allowances will be revised for those living in poverty. Long-term savings will be encouraged during the middle age so as to provide financial security in the old age. Concerning the health care system development for the elderly, the government plans to strengthen the secondary and tertiary care levels. Geriatric facilities in the community will be expanded. There will also be separate units for the elderly in general hospitals and geriatric wards in some hospitals. Mobile medical care vans and special camps for easy access to health care will be facilitated for the elderly in rural areas. In addition, NGOs will be encouraged and assisted to provide special care, and ambulatory and day care services for the elderly. Furthermore, the Government of India plans to provide shelters for the poor elderly in urban and rural areas (Ministry of Justice and Empowerment, 2001).

The government also plans to develop non-formal education regarding the ageing process for the elderly. Development of mass media educational promotion will be an important strategy for health education. Access of older persons to libraries of universities, research institutions and culture centres will be a valuable support. The government is also concerned about the younger generation, and are providing some sensitized programmes to develop inter-generation bonding in the family (see Box 2).

## Box 2 : Indian National Strategic Policy for Elderly Health Development

### Personal Development

| Policy | Strategic Plan |
|---|---|
| 1. Provision of financial security | ❍ Old age pension scheme to be expanded to cover those below the poverty line.<br>❍ Rate of monthly pensions to be revised at periodic intervals. Public distribution system should reach all older persons living below the poverty line.<br>❍ Settlement of provident funds and other retirement benefits to be made promptly.<br>❍ Base of pension coverage as income security scheme to be considerably expanded to include those in the private sector, the public sector, self employed and in NGOs.<br>❍ Long term savings to be promoted for financial security in old age. |
| 2. Health care - needs of older persons to be given high priority with a goal to provide good, affordable and heavily subsidis-ed health services | ❍ Primary health care system to be strengthened and oriented to meet health care needs of older people.<br>❍ Secondary and tertiary levels - Geriatric facilities will be expanded.<br>❍ Health insurance - Given high priority. Package catering to lower income levels to be entitled to state subsidies.<br>❍ Charitable societies and voluntary agencies concerned with elderly care will be assisted with grants and tax reliefs.<br>❍ NGOs will be encouraged and assisted to provide ambulatory services, day care and health care services.<br>❍ Separate counters in public hospitals for older persons.<br>❍ Geriatric wards in hospitals.<br>❍ Mobile medicare vans and special camps to facilitate easy access tohealth care. |
| 3. Shelter | ❍ To be provided for urban and rural lower income group.<br>❍ Group housing for older persons to be provided. |
| 4. Welfare | ❍ The poor and disabled will be identified for the provision of welfare services. |

| | |
|---|---|
| | ❍ Assistance to be provided to voluntary organisations by way of grants. |
| **EDUCATION FOR THE ELDERLY AND CARE-GIVERS** | |
| 1. Information and educational material relevant to the lives of older persons to be developed | ❍ Dissemination of information and educational material using mass media and non-formal communication channels. |
| 2. Continuing education programmes for older persons to be encouraged and supported | ❍ Access of older persons to libraries of universities, research institutes and cultural centres to be facilitated. |
| 3. Non formal education to be encouraged | ❍ Individuals of all ages, families and communities to be provided with information about the ageing process, associated changes and contribution of older persons. |
| 4. Programmes to be developed to promote family values | ❍ The younger generation to be sensitised for necessity and desirability of intergenerational bonding in the family. |
| 5. State policies for children to co-reside with their parents | ❍ Tax reliefs, rebates for medical expenses and preferences in housing will be encouraged. |
| 6. Counselling services | ❍ In order to resolve inter and intra family stress.<br>❍ Older persons and their families to be given access to educational material on the nutritional needs of people in older age. |
| 7. Concept of healthy ageing to be promoted | ❍ Health education programmes to be strengthened by making use of mass media, folk media and other communications. |

Source: Indian National Policy on Older Persons at a Glance

The National Policy on Older Persons (1999) that envisaged that medical and para-medical personnel in primary, secondary and tertiary health care facilities and institutions be given training and orientation in the health care of older persons. This led to plans within the Plan of Action 2000-2005, formulated by the government for the implementation of the National Policy on Older Persons, on the training of health personnel specific to elderly care. The primary health care system, moreover, is to be strengthened and oriented to be able to meet the health care needs of older people.

There are a number of programmes for the training of health personnel in elderly care already in place. The Indira Gandhi National Open University is one of the largest open universities in the world. It offers a one-year Postgraduate Diploma in Geriatric Medicine. The Government General Hospital in Chennai, South India, offers post-graduate medical courses in geriatric care, and has a separate Department of Geriatric Care and geriatric wards for the elderly. The Nizam's Institute of Medical Sciences, a tertiary care centre in Hyderabad, is recognized by the Indira Gandhi National Open University as a study centre for training and skill development in geriatric care. It has started a geriatric clinic that functions once a week. Various tertiary care centres and medical college hospitals in various states of India are recognized by the Indira Gandhi National Open University as study centres, and skill development centres in elderly care.

There are various specific facilities for elderly care in some tertiary hospitals. In Delhi, Sunday clinics are held at a number of hospitals for the elderly, which enables the patients' caregivers to accompany them to the hospital without having to take leave from their work. Many of these hospitals also have separate registration counters for senior citizens. On Fridays, the All India Institute of Medical Sciences has a geriatric clinic, and the Medical College Hospital, Trivandrum, has an outpatients wing every Monday for the elderly. A separate outpatients department for the elderly is run in the Government General Hospital in Madurai, South India, and the Government General Hospital in Trivandrum has a separate geriatric ward. In the State of Maharasthra, the municipal hospitals have separate geriatric wards.

With regard to research, in South India, the Sri Venkateshwara University in Tirupati has a Centre for Research on Ageing under the Department of Psychology. Researchers from the National Institute of Nutrition in Hyderabad have undertaken a research project "the study of nutrition in the elderly in rural India" which was published in the International Journal of Nutrition. The Institute has also published a book: "Diet for the Elderly". The Departments of Sociology, Social Work and Psychology in various universities in India have included research work and thesis topics on the elderly in their respective curricula.

In Coimbatore, South India, the Lions Club runs a geriatric care clinic and hospital. In the State of Gujarat, intra-ocular lenses are provided free of charge for the elderly for cataract surgery. HelpAge International, an international NGO concerned with the elderly, runs a number of programmes in India, including ophthalmic care, mobile medicare units, income generation projects, and Adopt a Granny Project, and provides support to old age homes and day care centres for the elderly, and to research and advocacy, as well as emergency relief.

The Little Sisters of the Poor, a religious organization, has established free old age homes in many countries including India. The Lions Club, a voluntary organization, has branches throughout India, and conducts many activities including elderly care. This organization also runs eye hospitals with nominal fees, and in Coimbatore runs a geriatric clinic and hospital.

There are approximately 728 old age homes in India. Of these, 325 are free of charge, 95 are on a pay-and-stay basis, and 116 have both free as well as pay-and-stay facilities. There are 278 old age homes available for the sick, and 101 homes exclusively for women.

In India, there is a policy focus on public awareness regarding the situation of elderly people. So far, the creation of such awareness has not matched that regarding AIDS or empowerment for women, but it is increasing. The society needs to be constantly reminded and prepared to accept the responsibility of growing old, and to care for the elderly. Research results need to be disseminated to the public, in order to provide information on changing situations. The mass media, such as newspapers, radio, TV and magazines are usually used for this purpose. Exhibitions and other special activities can also be organized in this regard. A special half-hour programme is aired on Hyderabad radio every Monday for elderly people.

## Indonesia

Based on the United Nation's Declaration in 1993, Indonesia has taken initiatives in the field of health services and social welfare for the elderly by empowering community participation in the promotion of health for older persons. Specific health care programmes have been implemented. Among others, integrated geriatric services in hospitals and community health services (PUSKESMAS) have been established. The recent National Conference on Gerontology, held in February 2002, recommends the need to create a healthy ageing programme for the poor. Moreover, PUSAKA, the home-based care centres in the community, provide assistance and services to the disadvantaged and/or poor older people in the neighbourhood (Kim and Yuifita, 2002).

The National Plan of Action for Elderly Welfare has been developed in co-operation between the United Nations Population Fund (UNFPA) and Indonesian Ministry of Transmigration and Manpower. This Plan has formulated provisions for social assistance and social security, especially for neglected older persons by developing specific Social Security Gotong Royong, and by empowering the traditional values of the community with a potential to promote and protect the status of the elderly (Minister for Social Affairs of the Republic of Indonesia, 2002). The strategy, "Three Generations Under One Roof" will be encouraged. In addition, training and schooling for the elderly are strategies in the National Plan aimed at improving the quality of life of the elderly in limited circumstance. However, technical support and financing from international trust funds are important issues in elderly health care development (Ministry of Health, Republic of Indonesia, 2002).

## Maldives

The Health Master Plan in Maldives (1996-2000) has set up strategies for the improvement of elderly health care. Home care for the aged who have no relatives, particularly the chronically ill and widowed, has been established at Guraidhoo. The strategies in the Master

Plan include strengthening health care institutions by providing training programmes for health care providers. Facilities and special equipment for treatment of the elderly will be provided. Home care for the elderly, and community care and health education will be strengthened by training health care providers. Counselling and early detection procedures will be reinforced in the community. Moreover, outreach programmes, particularly for the bedridden, in collaboration with NGOs and the private sector will be developed (Box 3). Furthermore, the government has also developed a strategy to provide special facilities for the assistance of the elderly in leading independent lives such as hearing aids, prescription glasses, wheelchairs and walking sticks (Ministry of Planning and National Development, 2002).

**Box 3 : Maldives National Strategic Plan for Elderly Health Development**

- Strengthen the health care institutions to cater to the needs of the elderly:

  Health care providers need to be trained in the recognition and management of ailments that are more specific to the elderly. The IGMH and the regional hospitals will also be provided with the facilities, including supplies and equipment needed to take care of the elderly.

- Outreach care:

  All elderly people are not necessarily sick people. But they may have specific ailments that need the care and attention of a health care provider, and these can be attended to at home, with some help from a health care provider. In a addition to this, some elderly people may be bedridden and their family may need the help of a trained health care provider. These specific needs can be addressed at low cost as outreach services. Thus, an outreach care programme will be developed with the collaboration of the community and non-governmental organisations as well as the private sector.

- Information, education and communication:

  Special projects can be implemented to provide information on the specific health needs of the elderly. These include providing information and skills related to diet, exercise, joint mobility, management of arthritic conditions, etc. Such information and skills can be made available to the elderly themselves so that they feel more independent and in control of their health. The same should be made available to family members, so that they can provide support to their elderly relatives. This strategy also includes the provision of counselling facilities to help the elderly to deal with issues such as having to depend on others for everyday chores and finances, as well as the social isolation that the elderly often feel.

- Early detection and management of potential debilitating conditions:

  The older one gets, the higher the risk of succumbing to cardiovascular diseases, diabetes, cancers and other debilitating conditions. Therefore, it is essential that screening facilities for the early detection and treatment of such conditions be provided. Activities aimed at encouraging the elderly to seek such services also need to be implemented.

- Sensitisation of the community to the special needs of the elderly:

  The community needs to be sensitised to the special needs of the elderly and motivated to be supportive and caring of the elderly. The community also needs to be helped to distinguish the physical and mental changes that accompany the normal ageing process from those that would be considered as abnormal and dispel certain myths about ageing. The community should be motivated to actively participate in taking care of the elderly and not isolate them.

- Promotion of home care for the elderly:

  Health care providers need to be trained in the care of the elderly so that they can in turn help to educate and train family members to provide the care and support needed by the elderly in order for them to lead healthy lives. The family should be supported to provide home based care, instead of institutionalising the elderly.

- Provision of aids:

  As we grow older, our ability to hear, see and move diminishes. Therefore, the elderly need the help of hearing aids, prescription glasses, wheel chairs, walking sticks, etc., to continue to lead independent lives. Thus, these aids should be made easily available to the elderly.

## Myanmar

Policy guidelines from WHO's International Plan of Action on Ageing encouraged the Government of Myanmar to launch the Elderly Health Care Project with the support of WHO in 1993 (U Hlaing Win, 2002). The project aims to promote the health of the elderly and increase the accessibility of geriatric care services. Beginning in 1993 with six townships, the project has expanded every year. To date there are 46 townships involved in the project in 12 states/divisions (Table 49). From 2004 it is proposed to increase the number of townships in the programme by 10 each year.

In each project township, all Basic Health Staff (Health Assistant, Lady Health Visitor, Midwives and Public Health Supervisors), usually 50-60 in number, along with a group of 20 - 30 doctors, nurses and Voluntary Health Workers (Community Health Workers and Auxiliary Midwives) and local NGOs, bringing the total to about 80-90 health care workers, are trained in elderly health care. Doctors and nurses are further trained in the case management of elderly patients in hospitals.

This project is supported by WHO, and project townships are provided with basic instruments for the care of the elderly such as blood pressure cuffs, stethoscopes and weighing machines, up to the rural health centre level. In addition, special instruments for eye, ear, nose and throat care for the elderly as well as for dental care are provided.

Table 49 : Elderly health care project in townships, Myanmar

| Year | State/Division | Number of townships | Total |
|---|---|---|---|
| 1994-1995 | Yangon | 3 | |
| | Bago | 2 | |
| | Ayeyardaddy | 1 | 6 |
| 1995-1996 | Sagaing | 2 | |
| | Mandalay | 2 | 4 |
| 1997-1998 | Shan South | 4 | 4 |
| 1998-1999 | Sagaing | 1 | |
| | Mandalay | 2 | |
| | Shan North | 1 | 4 |
| 1999-2000 | Sagaing | 1 | |
| | Magwe | 1 | |
| | Mandalay | 2 | |
| | Mon | 2 | |
| | Ayeyarwaddy | 2 | 8 |
| 2000-2001 | Taninthayi | 2 | |
| | Yakkhine | 6 | 8 |
| 2002-2003 | Ayeyarwaddy | 6 | |
| | Magwe | 6 | 12 |
| Total to date | | | 46 |

Source: Basic Health Services, Directorate of Health, Myanmar

The elderly clinic supported by this project takes place once a week. The elderly in the communities know that every Wednesday is their clinic day. Minor illnesses are taken care of and the seriously ill are referred to the nearest township hospital. During the weekly clinic, an exercise session and health promotion activities take place, and health education sessions are conducted among groups of elderly people who have similar problems.

The Basic Health Staff (BHS) are trained to conduct health education programmes with the elderly through focused group discussions or through counselling. They are trained to be patient with older people and to be considerate at all times. They all participate in role-play exercises to act as older people, and sometimes the elderly themselves participate in role-play of their feelings towards their surroundings. The BHS personnel are trained to conduct appropriate exercises for older people with the help of personnel from the sports and physical science departments. They are further trained to conduct baseline data surveys of the elderly in their community.

Providing oral health care for the elderly in the community, Myanmar.

Health volunteers, who are the first people to come into contact with the elderly in the community, are taught to understand the basic ideology of care for the elderly, and how to refer them for further treatment. Local NGO personnel are sensitized to the problems of the elderly and methods are discussed for the NGOs to assist in the care of the elderly.

Manuals of elderly care for the training of trainers and for the BHS are produced and distributed at training sites. Other materials to create awareness of elderly health promotion activities in the project townships are produced and distributed in the community.

Annual training of trainers is given, as there is usually a turnover of health professionals. Yearly evaluations are also conducted at central level to assess the work done for the elderly people in the community. All the medical officers from the project townships participate in assessing the previous year's work, and planning for the future.

Special attention is given to eye and oral care. In 15 of the project townships, during 2000-2001, eye specialists and dental surgeons examined the elderly, and 5000 pairs of reading glasses were distributed and 280 intraocular lenses were inserted free for those with cataract, and the nearly-blind patients. This activity will be expanded to other townships in the future.

In Myanmar, Elderly Day is held on 01 October, when the elderly all over the country are offered gifts, receive medical care and eye and oral care by health personnel, assisted by local NGOs. Health talks are also given to the elderly attending the celebrations.

A research protocol on frail elderly, with pathological, psychological and social components, was developed by ASEAN country members in January 2003. This will be used in future. Also proposed for the future is the promotion of home-based health care of the elderly.

Forty five homes for the aged are run by religious and voluntary social organizations throughout the country to provide food, clothes, shelter and health care services to older persons. However, elderly health problems in Myanmar are not considered as serious as childhood problems. Most elderly live with their families. Therefore, there is a new policy plan to enhance the quality of health care services. The government plan is to strengthen primary health care approaches for all ages in the community. The Government National Plan (1996-2000) focused on employing experienced and retired skilled personnel to be geriatric advisers. However, economic security for the Myanmar elderly was not provided for (U Hlaing Win, 2002).

## Nepal

In order to promote the quality of life of the elderly in Nepal, His Majesty's Government announced the Ninth National Plan (1997-2002). The government began distributing a monthly allowance to the elderly on the basis of their citizenship or electoral identity cards. The government also set up separate geriatric wards at all Zonal hospitals and began providing subsidised treatment to elderly citizens. The development of family-based security systems to enable the elderly to lead creative and dignified lives were also initiated. One day centre organized by the government and 29 centres developed by NGOs were opened in

Home for the Aged in Kathmandu, Nepal

Activity of male elderly persons at the Home for the Aged, Kathmandu

Kathmandu, the central city of Nepal (Sushila Swar, 2002). Recently, the Ministry of Women, Children and Social Welfare has drafted a guideline for the implementation of a new programme called the "Senior Citizen Treatment Service". The guideline envisages offering the poor and sick elders basic health care service free of cost. The Monthly Old Age Pension and the proposed Senior Citizen Treatment Service remain the two major programmes that can potentially contribute to the benefits of elderly people in Nepal (Sushila Swar, 2002).

## Sri Lanka

Sri Lanka established a National Committee on Ageing in 1982. Its objective was to initiate policy to create healthy environments for older persons within the cultural mores and religious practices of the country. The policy guidelines were put forth by the National Committee on Ageing for the Ministry of Social Welfare with the collaboration of ESCAP, UNDP, HelpAge International, and the NGOs in Sri Lanka. Day care centres for the elderly have been organized by the government, NGOs and voluntary organizations. Additional day care centres will be established in both urban and rural areas for the poorer elderly. Health care providers will be trained in order to improve the quality of care for the elderly.

Physical examination programme for the elderly in Sri Lanka

Lunch programme in a community, Sri Lanka

Regarding health promoting programmes, the government will develop awareness programmes, health camps, job placement services, distribution of spectacles and other devices to disabled elders. The Department of Social Services has introduced identity cards for persons over 65 years of age so that they may receive quality services from the government departments, hospitals and banks.

## Thailand

In Thailand, there are two national plans fro improving the health status of the elderly. The First Thai National Long-term Plan for the Elderly was implemented in 1982. Long-term policies and measures for the elderly were developed for providing, with dignity, general knowledge, physical and mental care for individuals and communities, raising public awareness of responsibility for the elderly, promoting capable elderly in society, and creating a setting in which they are empowered. A policy for improving elderly health was also added in the Eighth Plan for older persons. The Thai government has provided free health care programmes for the elderly, particularly the health service under the Ministry of Public Health which covers more than 80% of all health care in the country. Geriatric clinics are also provided in general hospitals. Some geriatric hospitals have been developed by the private sector (National Commission on the Elderly, 2002).

Waithong Village, Home for the Aged, Thailand

"Art for Health" Programme: Health promotion activity in Elders' Club, Thailand

For social security, several types of services have been offered, including residential homes for the aged, a monthly allowance for the indigent elderly, and service centres for the elderly. There are sixteen residential homes for impoverished elder people in Thailand. Various services such as basic health care and social activities are provided for the elderly. Based on a policy of community participation, the government has no plans for establishing new homes. Community funds which can be used to support older persons will be established in the future. Day centres, a service under the Ministry of Labour and Social Welfare, are provided for older persons in the community. Also provided

Elderly Care Training Programme for health volunteers at the Faculty of Nursing, CMU Thailand

Herbal product from the District Income Generation programme for Thai elderly

AgeNet activity during National Day of the Elderly, Chiang Mai, Thailand

for the community are social activities, religious activities and health care services (Knodel, Napaporn, Siriwan and Chutima, 1999).

For groups of the elderly at district level, Elders' Clubs have been initiated for creating appropriate activities in communities. Now there are approximately 4000 Elders' Clubs in Thailand. This project is very effective in improving the quality of life of the elderly. The Clubs are the centre of a network of elderly groups in the community and also raise self-awareness of the elderly and the community on issues concerning older people. The government encourages participation from the community for activities in these clubs. A volunteer system will be encouraged for strengthening these activities.

A monthly allowance programme for the poor was implemented in 1993. The number of the elderly who receive this service has increased dramatically. Therefore, the government plans to encourage income generation in the community. "One product-one district", a government-funded community initiative, is a project that will address the economic problems of all ages in the community, including the elderly.

Recently, a Brain Bank has been established at the suggestion of Her Majesty the Queen, as a centre comprising of senior citizens with knowledge and experiences, and who

are willing to contribute to society (Bangkok Post, 2002). There are currently 1057 persons who have registered, representing expertise in 17 fields including drug prevention, local organization management, and productivity in the private sector. Also, the Brain Bank has cooperated with the Department of Technical and Economic Cooperation and the Prime Minister's Office in defining Thailand's role and level of assistance to neighbouring countries.

There is a private organization, AgeNet, that strengthens the collaboration between health care professional teams and organization teams in Elders' Clubs. Various social and cultural activities, as well as educational programmes are provided to members. The Senior Citizens Council of Thailand has contributed to this project. Presently there is only one project in Chiang Mai province, in the northern part of Thailand. This will be extended to the other parts of the country in the future.

The budget for welfare and health care services has increased gradually. While the statistics showed that diseases generally remained under control during the past decade, it is forecast that chronic illness leading to disability will increase in the future (Sutthichai and Srichitra, 1997). Therefore, the Thai government has started implementing the Second National Plan for Older Persons (2002-2021). The strategies in the plan include five areas: preparation for quality ageing; promoting well-being in older persons; security for older persons; management systems and personnel development at the national level, and conducting research for policy and programme development and support. The measures listed in this plan will be the guidelines for both government organizations and NGOs in planning elderly care activities (See Appendix-Box 4).

## Strengthening the capacity of caregivers and health personnel

Strategies for strengthening the capacity for health care services are illustrated in national policies of countries in the Region. Educational programmes for both individuals and health care providers have been provided by most countries.

The Bangladesh government has developed a plan to organize workshops and seminars for the elderly, as well as for care-givers to the elderly, in order to raise the awareness on ageing. Moreover, workshops on health care for the elderly will be offered to senior citizens. However, there is a strong need to educate and train the health care workers about health care issues of older persons. More workshops and group training will therefore take place to increase and strengthen the knowledge of health care workers.

The Geriatric Educational Development in Maldives emphasises short training programmes for the elderly related to diet, exercise, joint mobility and management of arthritis (Ministry of Planning and National Development, 2002). There also are training programmes for family members on how to care for and support the needs of the elderly.

Workshops on geriatric care and long-term care will also be provided to health care workers in the future.

Indonesia has developed strategies for improving the life of the elderly in the economic and religious spheres. Training for the elderly and their schooling are addressed in the National Plan of Action for Elderly Welfare. The details of this strategy however were not available.

In India, educational strategies under the national policy for the elderly and care-givers include providing information and educational materials relevant to the daily living of older persons; encouraging continuing education programmes for older persons, developing family values promoting programmes, developing counselling services for the elderly and care-givers, and promoting the concepts of healthy ageing. Following these strategies, various educational development programmes have been initiated for health care providers such as special training in geriatric care in medical colleges, and in-service training on geriatrics. Nursing and geriatric medical training programmes are also provided in medical colleges (The National Policy on Older Persons, 1999).

In Sri Lanka, many training programmes for health care providers have been initiated. Nursing schools in Sri Lanka provide training programmes each year for 20-30 students, aged 25-35, with education up to the O-level, to be nursing aids, to work in nursing homes. This course has been supported by HelpAge International Sri Lanka. Furthermore, training programmes for all medical and paramedical personnel and community health nurses will be offered in the future.

The Thai government has many geriatric training programmes for the elderly, care-givers and health care providers, which provide knowledge and skills in elderly care for all groups of people.

The most active health personnel in the field of elderly care in Thailand are nurses (Sutthichai and Srijitra, 1997). There are many nursing schools providing education programmes to nursing students at bachelor and master levels (Appendix A, Table 64). Moreover, nurses and other health professionals are trained in basic rehabilitation skills for the disabled elderly. There are also some training programmes for care-givers and family members conducted by nursing schools, medical colleges and other organizations such as the Faculty of Nursing, Chiang Mai University, the Department of Public Welfare, the Thai Red Cross Society, some provincial hospitals, private hospitals and the Senior Citizens Society Association. In addition, the Thai Society of Gerontology and Geriatric Medicine, a member of the International Gerontology Society, sets up a meeting for health care professionals each year. Recommendations and suggestions in elderly care are invited from participants. Some

organizations in Thailand have collaborated with UN agencies; such as UNFPA and WHO, and with NGOs such as DTEC and ATCOA in providing training in elderly care for international personnel from neighbouring countries.

Continuing education for healthy older persons in art, music, cooking and the internet are provided in Elders' Clubs and at some universities and private organizations. Training programmes for pre-retirement persons are also conducted every year in some organizations. However, the Thai government plans to develop life-long education for all people beginning in childhood to prepare their health behaviour and awareness about the ageing process (The Second National Plan for Older Persons, 2002).

Education programmes in geriatric care are not available in Bhutan, DPR Korea and Myanmar. However, some countries are getting assistance from international organizations such as UNFPA, WHO, and HelpAge International to attend courses in elderly care in other countries of the Region, such as Thailand.

## Development of research in elderly care

Research in elderly care is a strategy for improving the quality of life of older persons. Governments in the Region are concerned about older persons, especially regarding issues of their health. Some countries are developing health care research following measures outlined in national plans. The measures themselves have in most countries been developed from research.

Bangladesh and Maldives have a policy to develop research on health of the elderly. In 2000, Bangladesh developed research on the situation of the elderly and a survey on health and economic problems of the aged (Resource Integration Centre, 2000). Some doctors surveyed aspects of health and social situations of the elderly. The result of these surveys forms the database for elderly health policy development. Although there is no specific policy about elderly health research in Maldives, the government is concerned about the status of health of the impoverished elderly, and research policy will focus on intestinal malabsorption leading to nutritional problems, which is one of the major health problems.

The importance of health research on the elderly is recognized in Sri Lanka, where research activities have expanded considerably during the last few years. The institutions and organizations involved include the Unit of Youth, Elderly, Disabled and Displaced Persons, and the Ministry of Health which is the focal point for elderly research, the Medical Research Institute which is mainly involved in biomedical research, the faculties of medicine of universities, the Traditional Medicine Institute and various NGOs. Research on elderly care in Sri Lanka has been developed and is to be strengthened. A survey of the economic status,

physical and mental health status, utilization of health facilities and family activities and skills will be developed. In addition, qualitative data in community participation will be initiated (Chandra Wickra Masinghe, 2002).

Although there is no specific detailed strategy of care for elderly health in Myanmar, the Deputy Minister for Social Welfare, Relief and Resettlement of the Union of Myanmar at the Second World Assembly on Ageing, Madrid, in 2002, revealed that iodine deficiency and goiter are important issues of the elderly. Research will be developed in the future.

India has also conducted research related to care of the elderly similar to other countries in the Region. Research focuses on health problems of older persons, nutrition and the elderly, problems faced by rural elderly, technology for improving the quality of life, social security, and income generation schemes for the elderly. Funding agencies for research development regarding the elderly include the Indian Council of Medical Research, the National Institute of Health, HelpAge India Research and Development Unit, and the sociology departments of every university. Research on the health of the elderly will be further developed in the future (The National Plan for Older Persons, 1999).

In 1994, Thailand established the Institute of Geriatric Medicine under the Department of Medical Services, Ministry of Public Health, for taking charge of study, analysis and research on the health of the elderly. In addition, the National Research Council, Thailand, developed a policy for research on people of all ages, of which health of the elderly is one issue. Budget from the government, NGOs, and international organizations have supported research development. The research conducted so far includes basic research and applied research, developed by health professionals and social science teams. The topic of health care research for the elderly covers health promotion and prevention, curative and rehabilitation schemes. The National Research Council, Thailand is developing a database.

Recently, the Thailand Research Fund, and the National Research Organization collaborating with the Health Systems Research Institute announced a research plan for the elderly, and also supported grants for research development. The research focused on six sub-projects including organizational development for the elderly, evaluation of the Second Plan of Older Persons, social protection, elderly network development, active ageing development and health problems (The Thailand Research Fund, 2002). In addition, during the past five years, the College of Population Studies, Chulalongkorn University has developed a database of issues relating to the Thai elderly people, and a linkage channel relating to other elderly issues databases in Asia and the Pacific and the United States of America. This database has proved very useful for health professionals. Research on the elderly population and research related to the status of the elderly were developed at this College and other organizations such as the Thai Ministries of Public Health and Education.

The National Research Council, Thailand conducted a seminar on research plans for the health of the elderly in 2002 in Bangkok. Research projects from the Faculty of Medicine, Mahidol University, Bangkok, funded by the National Research Council of Thailand in 1997 were presented. The areas of research consisted of neurology, focusing on balance, the cardiovascular system, respiratory system, and urological system. (For more detailed information see Appendix A.)

There was no information or mention of research policies concerning care of the elderly in DPR Korea, Indonesia and Nepal.

# Challenges for Further Action

It is evident that concerning the health status of the elderly in countries of the SEA Region, economic status, social welfare, education, religion, gender, marital status and living arrangements, health care services and community participation, are all factors leading to either good health or poor health.

While all countries are aware of the growing numbers of the elderly, not all of them have mechanisms in place to assess the existing situation and identify areas that need to be addressed. Following are some factors that have been indicated by some countries of the Region as present and future needs.

## Present and future needs

In Bangladesh the present needs in the area of care of the elderly are as follows:

- Organizing old age homes on no-profit no-loss basis for senior citizens who can bear the expenditure;
- Establishing additional *Shanti Nibash* (free homes) for senior citizens who cannot pay;
- Establishing separate free homes for disabled senior citizens to provide them with living facilities; and
- Providing financial help for senior citizens who need it for a daughter's marriage.

The future needs of Bangladesh have been identified as follows:

- Organizing medical banks, spectacle banks, hearing-aid banks, warm clothing banks, etc. for the elderly in need; and
- Helping in preparation for old age through promotion of the reading habit and pursuit of enjoyable hobbies, in order to lighten the burden of monotony and loneliness.

A major future need that has been identified in Bangladesh is the development of a health policy for the elderly to promote healthy elderly.

For the elderly in Nepal, the present needs are being addressed in the following areas:

- Health insurance system for the elderly population;
- Establishment of geriatric hospitals or wards in general hospitals for the elderly with free health services for older persons;
- Establishment of day care centres free of charge for elderly people, by the government, and
- Health prevention and promotion programmes for the elderly.

For India, the problems in relation to care of the elderly are as follows:

(A) Socioeconomic factors:

- Poor socioeconomic status;
- Lack of understanding/cooperation of the family towards the aged;
- Loss of extended family system (that previously provided care and respect to the aged) due to migration, increased urbanization and other causes;
- Lack of respect among children and the aged;
- Migration of children to cities in search for jobs resulting in lonely living for the elderly;
- Elderly living alone;
- Elderly abuse;
- Lack of proper planning for ageing; and
- Lack of awareness of the need for saving/insurance/pension funds for use in old age

(B) Housing problems:

- Inappropriate and unsuitable houses: slippery floors and toilets, unsuitable toilets, unsuitable stairs, old carpets, too many steps, unsuitable kitchens.

(C) Health service problems:

- Inadequate medical facilities;
- Difficulty of access to medical services;
- Shortage of health care personnel;
- Lack of supportive medical services such as physiotherapy, and laboratory equipment; and
- Lack of medical insurance for middle-and low-income people.

The present needs of the elderly in India have been identified as follows:

- Cooperation between GOs, NGOs, the private sector and the community;
- Family education;
- Elderly clubs/ elderly associations/ day care centres in villages;
- Homes or nursing homes for the aged;
- Mobile clinics;

- Strengthen all services: promotion, prevention, curative and rehabilitation services, and
- Low-cost improvements in housing for the elderly.

Future needs:

- Health insurance, provident funds;
- Pre-retirement counselling teams;
- Geriatric clinics and hospitals;
- Research development;
- Health promotion;
- Income generation;
- Consciousness-raising campaigns regarding old age and its problems, and
- Active ageing policy.

For Thailand, the future needs in relation to care of the elderly are proposed as follows:

- Development of a primary health care system focusing on elderly participation;
- Establishment of a health care system for the chronically ill elderly, with a proactive holistic approach;
- Strengthening the referral system and supporting systems;
- Enhancing the cooperation between health care services and social services;
- Extending and strengthening elderly clubs, volunteers, family systems and civil societies;
- Extending and supporting the system for home care services;
- Supporting income generation for the elderly, and
- Establishment of continuing education for the aged.

## Gaps

In order to make plans that will encompass the care of the elderly holistically and realistically, there needs to be adequate information on the existing status of care of the elderly.

## Information

Comprehensive assessments of the present situation need to be made, which will furnish information to assess the future problems with the necessary degree of accuracy. Thus information is a primary factor for the development of future plans for the care of the elderly. Research needs to be undertaken, and mechanisms put into place to collect data related to the elderly. Information can be shared among the countries of the Region, leading to a cumulative effect of information-gathering which will assist each country in its plans and policies in caring for the elderly. Such collaborative efforts can only benefit all countries.

## Policies and programmes

Information on policies and programmes that are already in place in some countries can be of great benefit to countries considering to undertake similar development at national, institutional

and community levels. Evaluation of plans already implemented, when shared with other countries of the Region, will assist those countries in the development of plans for the care of the elderly. Thus a regional exchange of information by government organizations, NGOs and the private sector could be of great service to all countries. Networking of those concerned with care of the elderly should be encouraged throughout the Region, and opportunities made available for the exchange of knowledge and experience in the field of care of elderly.

## Action at local level

Within countries, encouragement should be given to local communities, NGOs and the private sector to come together and pool their knowledge and experience on care of the elderly. Government organizations can facilitate such exchange of information, and can themselves benefit from the participation of those from different sections of society, with different modes of access to information, and having different points of view. It is vital to alert the media to the challenges of healthy ageing, and use media resources to inform the public of all ages of the necessity of planning for the future, of ways and means to support and assist older people in their particular time of life, with their particular challenges. Participation of the elderly themselves in plans for their care is essential: they are the ones who are experiencing the needs and challenges of growing older. The elderly from different economic groups, urban and rural, women and men, and from different countries of the Region, all can contribute to the pool of knowledge regarding care of the elderly in the Region.

## Recommendations for further action

The major challenge in the Region is to gather information on the existing situation of the elderly. Information gathered and shared at the grass-roots level, from communities, NGOs, the private sector and government organizations, and across all levels, can lead to the planning and development of informed planning of policies and programmes that will benefit all the elderly in every country of the Region. Sharing of this information will benefit all countries of the Region, and lead to the development of policies and plans that are valuable, practical and sustainable, for the care of the elderly throughout the Region.

Information has been identified as a primary necessity. With the development of information resources and research, nationally and regionally, informed policies and plans for the care of the elderly can take place, ensuring successful coping by the elderly and their families of the ageing process, economically, mentally, emotionally and physically. Government and the private sector can plan strategies to assist the elderly in the economic field. Health care institutions, both in government and the private sector, can assist in the physical care of the elderly, as well as in providing health promotion programmes. Health promotion strategies across national, institution and community levels can lead to the establishment of sustainable mental, emotional and physical good health for the elderly in all countries of the Region.

# APPENDIX

Table 1 : Life expectancy at birth of the population, by sex, Thailand

| | Sex | |
|---|---|---|
| Year | Male | Female |
| 1964-1965(1) | 55.9 | 62.0 |
| 1974-1976(1) | 58.0 | 63.8 |
| 1985-1986(2) | 63.8 | 68.9 |
| 1990-1995(2) | 68.6 | 73.4 |
| 2000-2005(2) | 70.2 | 74.7 |
| 2005-2010(2) | 71.0 | 75.4 |
| 2010-2015(2) | 71.6 | 75.9 |
| 2015-2020(2) | 72.2 | 76.5 |

Source: (1) National Statistics Office, 1994

(2) Chiraphan Kulpravit et al. Adjustments of Population Estimates of Population for Thailand in 1990-2020, June 1998

Table 2 : Life expectancy at birth (years) of the population, by sex, in the countries of SEA Region

| Country | Year | | | | | |
|---|---|---|---|---|---|---|
| | 1990 | | 2000 | | 2010 (projected) | |
| | Male | Female | Male | Female | Male | Female |
| Bangladesh(1) | 56.5 (1991) | 55.7 | 58.4 (1995) | 58.1 | NA | NA |
| Bhutan(2) | 66.0 (1996) | 66.0 | NA | NA | NA | NA |
| DPR Korea(3) | 68.5 (1996) | 76.1 | NA | NA | NA | NA |
| India(4) | 58.1 | 59.1 | 64.1 | 65.4 | 66.9 | 68.8 |
| Indonesia(5) | 60.8 (1992) | 64.5 | 61.5 (1995) | 65.3 | NA | NA |
| Maldives(6) | 69.2 (1997) | 70.1 | 70.7 | 72.1 | NA | NA |
| Myanmar(7) | 58.8 (1982) | 62.8 | 59.8 (1992) | 63.6 | 60.2 (1994) 60.3 (1997) | 64.1 63.3 |

Table 2 (Contd.) : Life expectancy at birth (years) of the population, by sex, in the countries of SEA Region

| Country | Year | | | | | |
|---|---|---|---|---|---|---|
| | 1990 | | 2000 | | 2010 (projected) | |
| | Male | Female | Male | Female | Male | Female |
| Nepal[8] | 55.0 (1991) | 53.5 | 55.0 (1998) | 54.0 | 58.95 (2000) | NA |
| Sri Lanka[9] | 71.1 | 74.8 | 71.5 | 76.1 | 72.2 | 77.1 |
| Thailand[10] | 62.2 | 66.1 | 67.3 | 71.7 | 68.8 70.1 (2015-2020) | 73.0 74.1 (2015-2020) |

Source: (1) WHO, Country Health Profile, 2002

(2) Nursing in the World: The facts, needs and prospects, 2000

(3) WHO, Country Health Profile, 2002

(4) Census of India

(5) WHO, Country Health Profile, 2002

(6) National Census 2000

(7) WHO, Country Health Profile, 2002

(8) Population projection of Nepal 1996-2016, Ministry of Population & Environment

(9) Nation Census, 1981

(10) Office of the National Economic & Social Development Board (1995)

Table 3 : Common causes of death among the elderly in Thailand in 1995

| Rank | Causes of death |
|---|---|
| 1 | Cardiovascular diseases |
| 2 | Cancer |
| 3 | Cerebrovascular accident |
| 4 | Septicaemia |
| 5 | Diabetes mellitus |

Source: The Division of Health Statistics, Office of the Permanent Secretary, Ministry of Public Health, 1996

Table 4 : Percentage of health problems among the Thai elderly, by sex and age groups, in 1991-1992

| Health Problem | Male | | | Female | | |
|---|---|---|---|---|---|---|
| | 60-64 | 65-69 | 70+ | 60-64 | 65-69 | 70+ |
| Joint pain | 51.9 | 52.5 | 55.7 | 64.5 | 69.4 | 64.9 |
| Back pain | 49.5 | 53.7 | 50.2 | 52.6 | 52.6 | 54.7 |
| Malnutrition | 35.0 | 35.2 | 52.8 | 30.3 | 34.1 | 43.7 |
| Anemia | 26.7 | 36.6 | 50.2 | 38.3 | 41.0 | 45.6 |
| Hypercholesterol | 15.1 | 13.9 | 11.8 | 25.5 | 25.1 | 21.4 |
| Chronic obstructive pulmonary disease | 4.3 | 5.3 | 7.9 | 3.4 | 4.6 | 5.0 |
| Diabetes mellitus | 4.1 | 4.3 | 4.2 | 4.4 | 6.8 | 5.5 |
| Coronary artery disease | 1.8 | 4.3 | 2.6 | 1.3 | 2.5 | 2.5 |

Source: Choopravan, C., 1996

Table 5 : Common health problems among the elderly in Thailand, by sex and residential area (self-reported), in 1995

| Disease / problems | Male | | Female | |
|---|---|---|---|---|
| | Urban | Rural | Urban | Rural |
| | % | % | % | % |
| Back / wrist pain | 14.3 | 15.7 | 24.2 | 20.6 |
| Hypertension | 19.2 | 12.9 | 29.9 | 17.1 |
| Arthritis / Osteoporosis | 12.9 | 12.7 | 24.2 | 18.0 |
| Heart disease | 11.2 | 3.8 | 13.3 | 8.5 |
| Diabetes mellitus | 11.0 | 2.3 | 12.7 | 4.6 |
| Cataract | 8.9 | 4.7 | 12.5 | 6.8 |
| Glaucoma | 3.5 | 2.1 | 4.7 | 4.6 |
| Asthma | 5.1 | 5.1 | 2.4 | 2.7 |
| Urological problems | 4.0 | 3.1 | 3.1 | 2.4 |
| Paresis / paralysis | 6.1 | 2.1 | 2.8 | 1.2 |
| Tuberculosis | 1.6 | 2.5 | 0.3 | 1.6 |
| Ear problem | 2.8 | 1.8 | 1.3 | 1.8 |
| Fracture | 1.4 | 0.9 | 1.1 | 0.7 |
| Liver disease | 0.7 | 0.7 | 0.8 | 0.3 |
| Cancer | 0.5 | 0.2 | 0.4 | 0.5 |

Source: Choopravan, C., 1998

Figure 1: Percentage of health problems among the Thai elderly, by sex and age groups, in 1991-1992

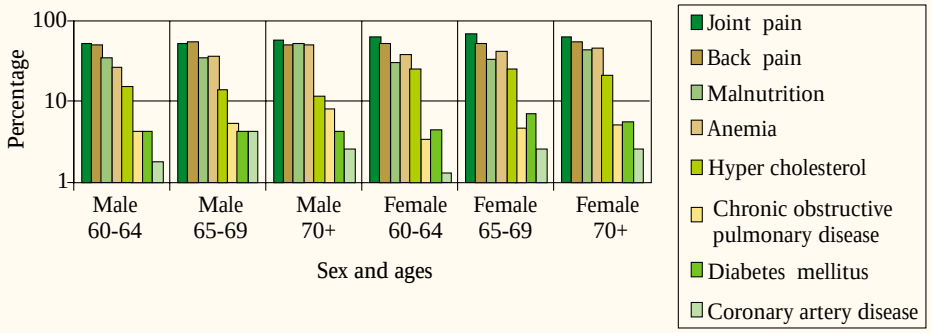



Table 6 : Common minor health problems among the elderly in Thailand, by sex and residential area, in 1995

| Health Problem | Male | | Female | | Total |
|---|---|---|---|---|---|
| | Urban | Rural | Urban | Rural | |
| Common cold | 31.3 | 27.3 | 25.7 | 20.3 | 25.7 |
| Headache | 10.0 | 8.9 | 12.7 | 14.8 | 12.5 |
| Muscle ache | 4.6 | 9.3 | 7.5 | 7.5 | 9.1 |
| Gastric pain | 2.3 | 4.1 | 3.3 | 4.3 | 4.6 |
| Joint pain | 3.1 | 7.4 | 8.1 | 5.7 | 7.0 |
| Dizziness | 4.6 | 3.4 | 5.2 | 6.1 | 5.3 |
| Peptic ulcer | 1.5 | 4.1 | 1.6 | 1.5 | 2.8 |
| Fever | 1.5 | 3.1 | 2.3 | 2.7 | 3.3 |
| Fainting | 0.0 | 2.7 | 3.6 | 5.3 | 3.8 |
| Wrist pain | 0.0 | 3.1 | 0.7 | 3.3 | 3.5 |
| Hypertension | 3.8 | 0.7 | 4.9 | 2.1 | 1.6 |
| Diarrhea | 3.1 | 1.7 | 2.0 | 2.9 | 2.7 |
| Fatigue | 3.8 | 1.7 | 1.6 | 2.7 | 2.5 |

Source: Chayovan,N. & Knodel, J.,1998

Table 7 : Severity of disability (long-term) among the elderly in Thailand in 1999

| Severity | Disability | No. | Percentage (of total population) | Percentage (of total disabled persons) |
|---|---|---|---|---|
| None | No disability | 3279 | 81.0 | - |
| Mild | Being able to move around outside house | 576 | 14.2 | 70.9 |
| Moderate | Being able to move around inside house | 126 | 3.1 | 16.4 |
| Severe | Being able to sit but cannot move around | 29 | 0.7 | 3.8 |
| Very severe | Confined to bed and needing total care | 38 | 0.9 | 4.9 |

Source: Jitapunkul, Suriyavongpaisal, National Survey on Ageing, 1999

Table 8 : Percentage of daily food consumption among older persons in Thailand

| Type of foods | Urban | | Rural | | Total |
|---|---|---|---|---|---|
| | Male | Female | Male | Female | |
| Vegetables | 75.0 | 73.8 | 77.2 | 76.9 | 70.6 |
| Fruits | 57.9 | 57.3 | 39.9 | 44.5 | 39.2 |
| Meat | 55.6 | 48.5 | 32.6 | 29.4 | 28.2 |
| Fish | 38.6 | 40.6 | 41.5 | 39.8 | 28.2 |
| Milk | 44.9 | 35.0 | 24.1 | 18.1 | 20.1 |
| Bean | 16.4 | 11.6 | 3.9 | 3.5 | 4.0 |
| Coffee, tea | 42.1 | 24.5 | 16.5 | 6.6 | 10.7 |
| Carbonated juice | 8.6 | 5.0 | 3.5 | 3.5 | 3.1 |

Source: Choopravan, C.,1998

## Table 9 : Proportion of smokers in age groups, by sex and year, in Thailand

| Age group (years) | 1986 | | 1991 | | 1996 | | 1999 | |
|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| 10-14 | 0.7 | 0.3 | 0.8 | 0.1 | 0.5 | 0.1 | 3.5 | 0.0 |
| 15-19 | 23.6 | 0.8 | 23.4 | 0.7 | 18.3 | 0.3 | - | - |
| 20-24 | 54.2 | 1.7 | 54.3 | 1.3 | 47.7 | 1.1 | 31.4 | 0.5 |
| 25-29 | 65.3 | 3.0 | 62.6 | 2.5 | 54.4 | 1.5 | 49.8 | 3.0 |
| 30-34 | 66.6 | 4.0 | 64.0 | 3.4 | 55.9 | 2.4 | - | - |
| 35-39 | 69.6 | 5.8 | 63.7 | 5.6 | 58.3 | 2.6 | - | - |
| 40-49 | 71.7 | 8.8 | 65.2 | 7.5 | 56.4 | 3.8 | - | - |
| 50-59 | 75.5 | 10.5 | 64.8 | 9.0 | 57.9 | 5.9 | - | - |
| 60+ | 67.3 | 8.7 | 56.7 | 8.2 | 48.7 | 4.8 | 45.1 | 4.8 |
| Whole Country | 48.8 | 4.1 | 44.8 | 3.4 | 44.6 | 2.5 | 38.9 | 2.4 |

Source: Analysis from the databases of the Health and Households Welfare Surveys, National Statistical Office., 1994

*Preliminary data

## Figure 2 : Proportion of smokers in age groups, by sex and year, in Thailand

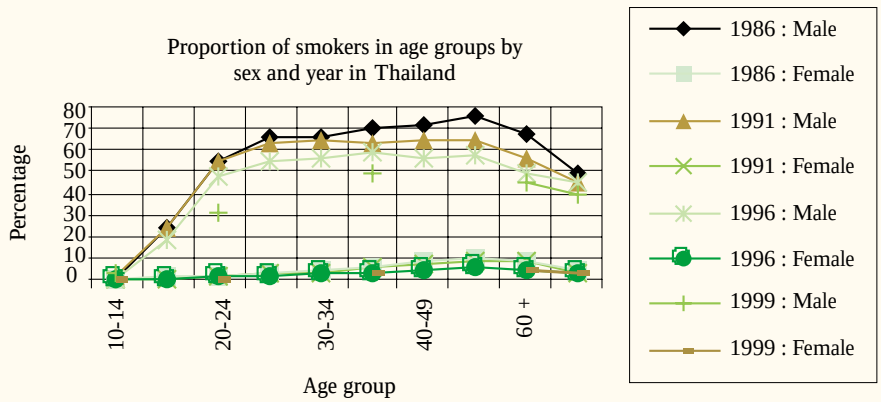


Table 10 : Percentage of smoking and drinking, by age and sex, among the elderly in Thailand in 1995

| Risk behaviours | 60-69 | | 70-79 | | 80+ | |
|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female |
| Tobacco smoking | 56.5 | 48.1 | 52.5 | 22.5 | 48.8 | 18.0 |
| Alcohol abuse | 48.0 | 4.4 | 22.5 | 12.1 | 18.0 | 5.6 |
| Chewing tobacco | 7.5 | 48.1 | 16.2 | 65.6 | 28.9 | 78.5 |

Source: The Study on Health Status of the Thai Population in 1995, Health Systems Research Institute, 1997

Figure 3 : Percentage of smoking and drinking, by age and sex, among the elderly in Thailand in 1995

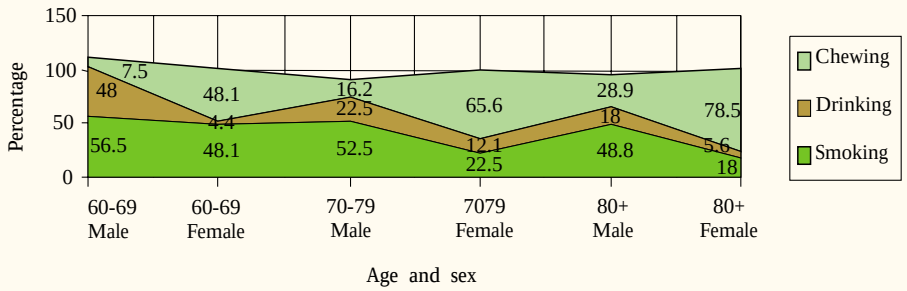



Table 11 : List of nursing schools which provide curricula for care for the elderly at Master's Degree level in Thailand

Faculty of Nursing, Chiang Mai University

Faculty of Nursing, Chulalongkorn University

Faculty of Nursing, Khon Kean University

Faculty of Nursing, Burapha University

## Box 4 : The Second National Plan for Thai Older Persons 2002-2021

| Strategies | Measures |
|---|---|
| Preparation for quality ageing | Measure 1 Income security<br>1.1. Extend across-the-board income security for old age.<br>1.2. Encourage saving at an early age.<br>1.3. Introduce tax incentive measures to promote savings for old age.<br>Measure 2 Integrating life-long education for all.<br>2.1. Encourage desirable childhood good health behaviours into school curricula.<br>2.2. Provide, on a life-span and continuous basis, formal and informal education to prepare the public for ageing.<br>2.3. Promote public awareness on the importance of ageing with quality of life.<br>2.4. Offer pre-retirement schemes as incentives for the transition into old age.<br>Measure 3 Public education initiatives to promote the dignity of life in old age.<br>3.1. Utilise education as a mechanism to engage and assist people in society to embrace responsibility in taking care of their families, especially older persons in the community.<br>3.2. Offer formal and informal educational programs on older persons and life in old age.<br>3.3. Promote understanding of a multi-generational society and strengthen solidarity between generations through education, religion, culture and sports activities.<br>3.4. Raise social awareness of the contribution of older persons to society for the purpose of promoting harmony in a multi generational society. |

**Box 4 (Contd.) : The Second National Plan for Thai Older Persons 2002-2021**

| | | |
|---|---|---|
| Promoting well-being in older persons | Measure 1 | Health promotion, disease prevention and self-care for older persons. |
| | 1.1. | Provide appropriate training programs for diverse groups of older persons according to their needs. |
| | 1.2. | Make counselling services for older persons available in government and community health centres. |
| | 1.3. | Continually and systematically disseminate useful information to older persons to improve their lives. |
| | Measure 2 | Support and strengthen co-operation amongst organisations and networks supporting older persons |
| | 2.1. | Promote linkages between NGOs and Government networks to form senior citizen networks. |
| | 2.2. | Support the activities of organisations working with ageing and older persons. |
| | Measure 3 | Promote income security and employment for older persons |
| | 3.1. | Promote employment for older persons. |
| | 3.2. | Provide job training and job opportunities. |
| | 3.3. | Promote income generating projects in the community for older persons. |
| | Measure 4 | Raise awareness of older persons as mentors of society capitalising on their past contributions. |
| | 4.1. | Honour older persons who have made outstanding contributions to society and the nation. |
| | 4.2. | Encourage and promote the participation of older persons in social activities. |

Box 4 (Contd.) : The Second National Plan for Thai Older Persons 2002-2021

| | | |
|---|---|---|
| | Measure 5 | Employ various means of communication to disseminate information about the activities of older persons to the public. Access to a wide range of information must be provided for older persons |
| | 5.1. | Encourage the mass media to broadcast programs/information for older persons. |
| | 5.2. | Support programs produced by older persons. |
| | 5.3. | Ensure availability of and accessibility to information for older persons. |
| | Measure 6 | Provide accommodation and suitable living environment for older persons |
| | 6.1. | Set up standards of accommodation and living environments for older persons. |
| | 6.2. | Arrange for both the government and the private sector to play a part in providing and co-ordinating accommodation for older persons. |
| | 6.3. | Provide incentives to acquire low interest loans for older persons to buy or renovate their accommodation/houses. |
| Social security for older persons | Measure 1 | Income security |
| | 1.1. | Provide welfare support for poor and incapacitated older persons. |
| | 1.2. | Promote establishment of a community fund which can be used to support older persons in the community. |
| | Measure 2 | Health security |
| | 2.1 | Improve the quality of health care systems and health security for older persons. |
| | Measure 3 | For Family, care-givers, and protection of the rights of older persons |
| | 3.1. | Provide tax deductible incentives for care-givers who look after their disabled and dependent parents or elderly relatives. |

**Box 4 (Contd.) : The Second National Plan for Thai Older Persons 2002-2021**

3.2. Pass laws on older persons' rights so as to protect older persons who might be exposed to abusive, unfair treatment or negligence.

3.3. Encourage and promote the multi-generational family in society so that older persons may live with other members of the family throughout their lives.

Measure 4 Service systems and support networks for older persons

4.1. Improve public service systems to facilitate older persons' mobility

4.2 Reduce the fares for mass transit systems

4.3 Improve the mass transit systems to accommodate older persons' needs.

4.4 Improve public facilities such as roads, walkways, buildings and toilets to accommodate the needs of older persons including older persons with disabilities.

4.5. Provide appropriate facilities for older persons in public areas such as roads, walkways, buildings and toilets.

4.5 Set up standards for facilities in parks and places where older persons can exercise and relax.

4.7 Provide parks and places where older persons can exercise and relax.

4.8 Develop health and social services in the community, focusing on home visits. The services should include:

4.9 Multipurpose senior citizen centres

4.10 Day care centres, home visits

4.12 Home care, home health care, mobile service units, particularly for remote areas, surveillance systems in the community.

4.13 Volunteer systems

4.14 Education and training for care-givers and volunteers

Box 4 (Contd.) : The Second National Plan for Thai Older Persons 2002-2021

4.15 Encourage local authorities and religious institutions / community religious centres to contribute and to participate in the welfare and services for older persons by:

4.16 Making available funds for improving older persons' quality of life.

4.17 Supporting the community in providing services and welfare for older persons.

4.18 Supporting older persons in counselling services.

4.19 Encourage the private sector in providing standardised health care and social services for older persons.

4.20 Provide alternative medical care for older persons such as traditional Thai medical care.

4.21 Set up geriatric clinics, geriatric wards and long-stay care facilities to meet the needs of older persons.

Management systems and personnel development at the national level

Measure 1 Management systems at the national level

1.1. Encourage the National Commission on the Elderly to act as co-ordinator among various organisations, both at national and international levels.

1.2. The National Commission on the Elderly will undertake to revise and update the Second National Plan for Older Persons as needed.

1.3. Set up and develop ageing administrative networks at the local level.

Measure 2 Personnel education and training

2.1. Support and promote education and training in health care and social work for elderly care for professionals, volunteers and care-givers.

2.2. Evaluate the demand for producing and improving knowledge and skills of health

**Box 4 (Contd.) : The Second National Plan for Thai Older Persons 2002-2021**

| | | |
|---|---|---|
| | | care and social work professionals and staff and arrange for further education / training programs for these personnel according to the demand in health care services of the country. |
| Conducting research for Policy and Programme development support, monitoring and evaluation of plan | Measure 1 | Conducting research for the purpose of data collecting as a basis for analysis, review and development of policy and programs pertaining to older persons. |
| | Measure 2 | Conducting research focusing on policy and program development, service improvement and other knowledge which is useful for the improvement of older persons' quality of life. |
| | Measure 3 | Developing mechanisms for continuous monitoring and evaluation of the second National Plan for Older Persons. |
| | Measure 4 | Developing data processing and information systems on ageing. |

Source: National Commission on the Elderly, Thailand

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