













HOW well are seniors in Hong Kong doing?

An international comparison

by

Pui Hing Chau

Research Assistant Professor, CADENZA Project, Faculty of Social Sciences, The University of Hong Kong

and

Jean Woo

Director, CADENZA Project,
Head, Division of Geriatrics,
Department of Medicine and Therapeutics,
The Chinese University of Hong Kong







How well are seniors in Hong Kong doing? An international comparison

Authors: Pui Hing Chau

Jean Woo

Published by: The Hong Kong Jockey Club

Tel: 2966 8111 Fax: 2504 2903

Website: http://www.hkjc.org.hk

ISBN: 978-988-17464-1-2

First published 2008 Reprinted 2010

The copyright of this book belongs to the original authors. Interested parties are welcome to reproduce any part of this publication for non-commercial use. Acknowledgement of this publication is required.

CADENZA: A Jockey Club Initiative for Seniors

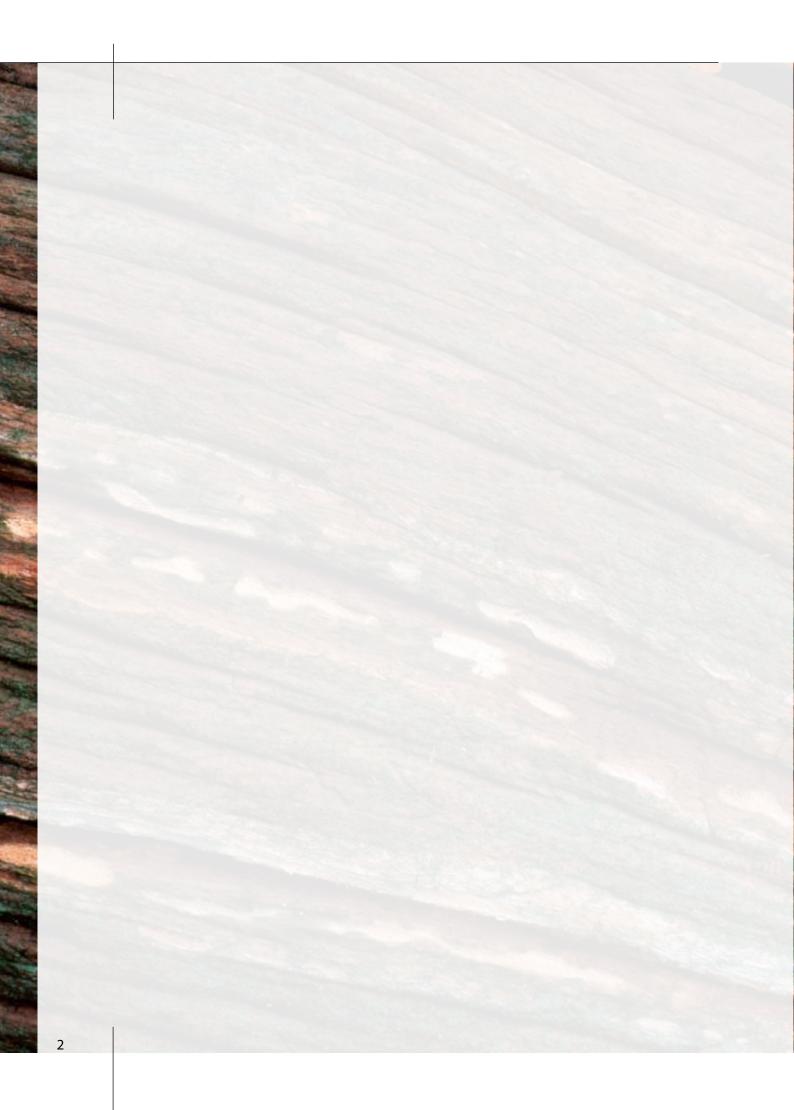
CADENZA: A Jockey Club Initiative for Seniors is a \$380 million project initiated and funded by The Hong Kong Jockey Club Charities Trust in light of a rapidly ageing population. Faculty of Social Sciences, The University of Hong Kong and Faculty of Medicine, The Chinese University of Hong Kong are the project partners. It aims at creating an elder-friendly community which fosters positive community attitude towards older people and continuously improves the quality of care and quality of life for Hong Kong's elderly.

CADENZA is an acronym for "Celebrate their Accomplishments: Discover their Effervescence and Never-ending Zest as they Age." In classical music, a 'Cadenza' is an extended virtuosic section, usually near the end of a movement in a concerto. The word is used figuratively to describe the apex of one's life and the celebration of a lifetime's accomplishments.

CADENZA has 4 major project components:

- Community Projects are innovative and sustainable service models to cope with changing needs of seniors. One of the innovative projects is the establishment of The Jockey Club CADENZA Hub in Tai Po, which is an integrated primary health and social care centre for the old and the soon-to-be-old.
- 2. **Leadership Training and Research** is to nurture academic leadership in gerontology, and conduct research to advance gerontological knowledge and to evaluate the outcomes of different CADENZA projects.
- 3. **Public Awareness** seeks to promote positive ageing and highlight important issues pertaining to elderly population, covering 6 major themes: (i) health promotion and maintenance, (ii) health and social services in Hong Kong, (iii) living environment, (iv) financial and legal issues, (v) quality of life and quality of dying, and (vi) age disparities.
- 4. *Training* includes on-line courses, workshops and public seminars to train different levels of professional front-line workers, care givers and the general public.

The findings covered by this book are part of the CADENZA research championed by Prof Jean Woo, Dr Pui-hing Chau and the research team. It is the first study ever conducted in Hong Kong to systematically compare the well-being of the seniors in Hong Kong with other countries. This book is made available to the public with the compliments of The Hong Kong Jockey Club Charities Trust.



Acknowledgements

The authors wish to thank the Research Team, in particular Dr Edwina Yen, of the project entitled "CADENZA: A Jockey Club Initiative for Seniors" funded by The Hong Kong Jockey Club Charities Trust who have helped in the preparation of this book. In particular, we wish to express heartfelt thanks to Dr S.V. Lo, Head of Research Office, Food and Health Bureau of the Hong Kong Special Administrative Region Government and Mrs Edwina Shung, Senior Statistician of Statistics & Research Section of Hospital Authority for providing statistics and valuable comments to this book. Last but not least, we are grateful to all the officials and researchers who compiled the useful statistics that are quoted in this book. Without their efforts, this book would not have been made possible.

Notes in Using This Book

The Reference Population

The age reference of the population studied is stated explicitly each time when statistics are reported. For demographics and vital statistics, which are compiled from census or administrative records, the whole population (i.e. both the non-institutional and institutional populations) is covered. For other statistics, which are collected through sample surveys, most cover the non-institutional population only. For simplicity, the coverage of population refers to the non-institutional population unless otherwise stated. It is recommended that readers consult the cited references for the meta-data of the surveys.

International Comparison

As the statistics were complied from different sources, the conceptualization and compilation methods could vary a lot across countries. Hence, the international comparisons presented in this book can only be interpreted in a broad sense. It is recommended that readers consult the cited references for the meta-data of the surveys.

Accuracy of Statistics

While most data in this book are based on large-scale surveys, the estimates are subject to sampling error. In addition, reporting error, such as memory recall bias, might exist for self-reported items.

Rounding of Figures

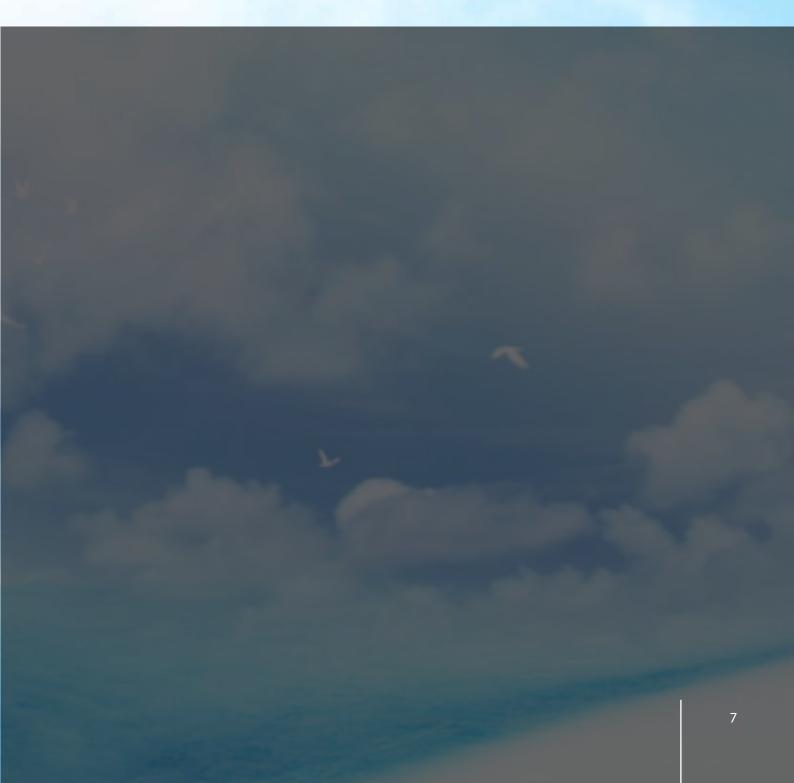
Owing to rounding of figures, there may be a slight discrepancy between the sum of individual items and the total.

Contents

Acknowledgements		003
Notes in Using This Book		004
Introduction		007
Chapter 1	Demographic Profile	011
1.1	Life Expectancy	012
1.2	Mortality Rate	013
1.3	Number and Proportion of Seniors	015
1.4	Male to Female Ratio	017
1.5	Marital Status	018
1.6	Educational Attainment	021
1.7	Summary	025
1.8	References	026
Chapter 2	Nutrition and Health-related Lifestyle	029
2.1	Underweight and Overweight	030
2.2	Dietary Habits	032
2.3	Smoking	039
2.4	Alcohol Drinking	041
2.5	Physical Activity and Exercise	042
2.6	Summary	045
2.7	References	045
Chapter 3	Social Networking and Engagement	047
3.1	Living Arrangement	048
3.2	Social Participation	052
3.3	Care and Support	058
3.4	Abuse and Neglect	061
3.5	Summary	063
3.6	References	063

Chapter 4	Financial Security	067
4.1	Personal Income	068
4.2	Expenditure	074
4.3	Health Insurance	078
4.4	Summary	081
4.5	References	081
Chapter 5	Functional Status	083
5.1	Sensory Functions	084
5.2	Oral Functions	086
5.3	Activities of Daily Living (ADL)	089
5.4	Instrumental Activities of Daily Living (IADL)	092
5.5	Summary	094
5.6	References	094
Chapter 6	Health Status	097
6.1	Self-rated Health Status	098
6.2	Chronic Illnesses	100
6.3	Cognitive Status	107
6.4	Depression	111
6.5	Healthy Life Expectancy	112
6.6	Summary	114
6.7	References	114
Chapter 7	Health Seeking Behaviour	119
7.1	Not Seeking Treatment/Medication	120
7.2	Taking Over-the-Counter Medication	121
7.3	Seeking Treatment	122
7.4	Hospitalization	124
7.5	Summary	129
7.6	References	130
Conclusion		121

Introduction



Introduction

One of the world's advancements in the 21st century is the increase in longevity. An increase in life expectancy, together with a decline in fertility rates, has led to an expanding proportion of seniors in the population. This is well-documented in the population pyramids of many countries. In recent years, much effort has been put into promoting a healthy and active ageing framework for seniors.¹ To facilitate healthy ageing, policy makers and service providers have to address the health, social, economic and spiritual needs of seniors, according to their different profiles.

The most commonly used methodology for collecting information on seniors is through conducting surveys. Throughout the years, government departments and individual researchers have conducted numerous surveys to shed light on profiles of the ageing population. As each of these surveys has a slightly different focus, including demographics, physical and social health, lifestyle and nutrition, behaviour etc., results from any one of them might not give a full picture. Nevertheless, these survey findings collectively form a powerful database for ageing research.

Being aware of this gap, some researchers have prepared handy reference books collecting valuable statistics about seniors in their own countries (for example the United States and Australia) or regions (for example, Europe).^{2,3,4} In Hong Kong, an attempt was made by the Department of Health of the Hong Kong Special Administrative Region (Hong Kong) Government to compile a report entitled "Topical Health Report No. 3—Elderly Health" in 2004 to describe aspects related to seniors' health status.⁵

With the same objective of providing a handy statistical reference for researchers, stakeholders and services providers, this book represents the most updated statistics on the multi-dimensional profile of Hong Kong's seniors in terms of the active ageing framework. In addition, international comparisons with economically developed countries in both the East and the West are made, as much as possible, to facilitate readers in assessing how well seniors in Hong Kong are doing with reference to these countries.

While there is no universal standard in defining "elderly" or "seniors", the senior population in this book generally refers to those aged 65 and above. Nevertheless, subject

to the availability of statistics, other classifications, such as aged 60 and above, may be adopted. When a finer breakdown by age group is possible, the senior population may be described in two or more groups, such as those aged 65 to 74 and those aged 75 and above. In each section of this book, the classification of age groups is explicitly stated with the statistics being quoted.

As the book title suggests, the statistics presented here aim to describe the well-being of the senior population in Hong Kong in recent years. While much ageing research has focused on negative outcomes such as morbidity and disability in the late stage of life, this book adopts a positive outlook along the lines of the World Health Organization's Active Ageing Policy Framework for promoting active and healthy ageing. Accordingly, this book will highlight aspects that contribute to successful and productive ageing, such as a healthy lifestyle and active social engagement.

The book begins with an overview on the ageing situation in terms of the demographic profile (Chapter 1). Then aspects which may affect health outcomes are discussed. These include nutrition and health-related lifestyle (Chapter 2), social engagement (Chapter 3) and financial security (Chapter 4). Comparisons of functional status (Chapter 5) and health status (Chapter 6) are then presented. Finally, the health-seeking behaviour of seniors when health problems are encountered (Chapter 7) is discussed.

The main data sources are large-scale surveys or the population censuses conducted by the Census and Statistics Department of the Hong Kong Government. Other major data sources include surveys conducted by the Department of Health of the Hong Kong Government, The University of Hong Kong and The Chinese University of Hong Kong. For some statistics that are not widely available, data from smaller scale studies are used. It is recommended that readers consult the cited references for the meta-data of the surveys.

To facilitate international comparison, statistics of five economically developed countries that are usually used for comparison with Hong Kong are also presented. These countries are Japan, Singapore, Australia, the United States and the United Kingdom. The data presented in this book are mostly obtained from official government statistics (for example, Statistics Singapore and the Australian Bureau of Statistics). In addition, large-scale studies conducted by non-government agencies are also quoted (for example, the American Association of Retired Persons). Data from studies conducted by individual

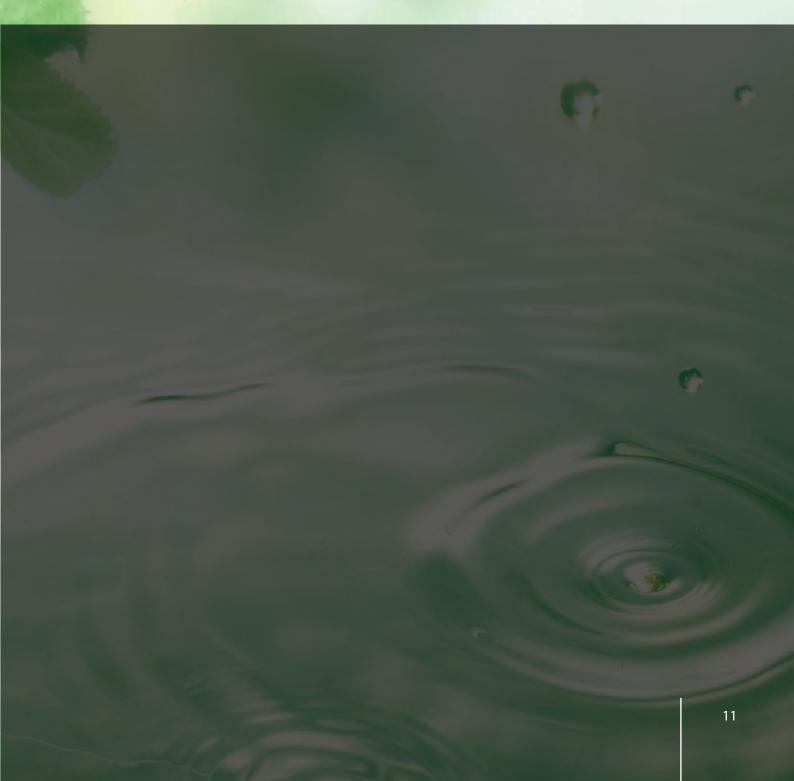
researchers are also used. As the statistics were complied from different sources, the conceptualization and compilation methods could vary a lot across countries. Hence, the international comparisons presented in this book can only be interpreted in a broad sense. For more in-depth analysis, researchers should take into account the differences in the compilation of the statistics. Again, readers are strongly recommended to consult the references for the meta-data of the surveys. As web-searches were carried out to collect the required statistics, failure to obtain such statistics might not necessarily imply that these had not been compiled by that country, but rather because they were not made available for download through the internet.

This book serves as a quick reference for those who would like to have a general indication of the current position of the well-being of Hong Kong's senior population compared to other countries. The information provided in this book could be a starting point for conducting more in-depth ageing research in the future.

References

- 1. World Health Organization (2002). Active Ageing: A Policy Framework. Geneva: World Health Organization.
- 2. Federal Interagency Forum on Aging-Related Statistics (2006). *Older Americans Update 2006: Key Indicators of Well-being.* Washington, DC: U.S. Government Printing Office.
- 3. Australian Institute of Health and Welfare. (AIHW). (2007). *Older Australia at a Glance: 4th Edition.* Cat. no. AGE 52. Canberra: AIHW.
- 4. International Longevity Centre—United Kingdom and The Merck Company Foundation. (2006). *The State of Ageing and Health in Europe.* Available at: http://www.ilcuk.org.uk/files/pdf_pdf_4.pdf Accessed on 31 Mar 2008.
- 5. Disease Prevention and Control Division, Department of Health of Hong Kong Special Administrative Region. (2004). *Tropical Health Report No. 3—Elderly Health*. Hong Kong: Government Logistics Department.

Chapter 1 Demographic Profile



Demographic Profile

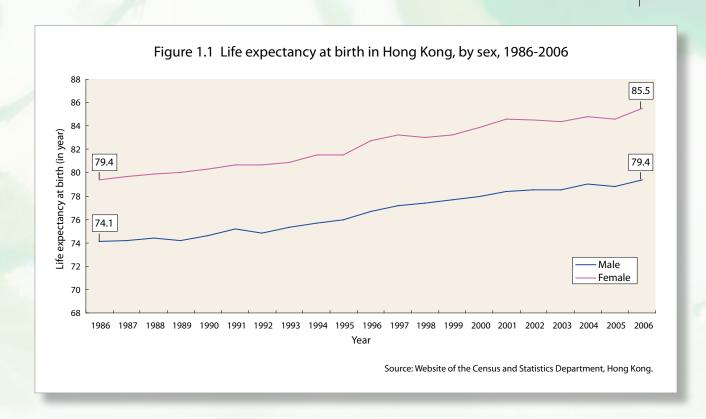
Owing to decreasing fertility rates and increasing longevity, the older population accounts for an increasing proportion of the world's population.¹ There is a growing concern over the economic, physical and psychosocial needs of this ageing population. These needs may be very different even among the senior population. This is because people age in unique ways, depending on a large variety of factors, including demographic factors.² To address these needs, policy-makers and service providers should understand the profile of the senior population. In this chapter, the demographic profile of seniors will be presented.

1.1. Life Expectancy

Life expectancy is commonly used to quantify the longevity of a population. Life expectancy at birth is defined as the average number of years that a newborn is expected to live if current mortality rates continue to apply.³ Increasing life expectancy is always viewed as one of the achievements of a population or society. However, it should be noted that life expectancy only measures the quantity of longevity, but not the quality of the gained years, which will be discussed in Chapter 6.

In the last two decades, the life expectancy of the Hong Kong population has been ever increasing. As of 1986, life expectancy was 74.1 years for males and 79.4 years for females; whereas two decades later, in 2006, life expectancy for males and females increased to 79.4 years and 85.5 years respectively.⁴ Hong Kong has one of the longest life expectancies in the world.^{3,5} (Figure 1.1)

Japan is a country well-known for its longevity. In 2006, life expectancy at birth for the male and female population in Japan was 79.0 years and 85.8 years respectively. The life expectancy of residents of Singapore is also comparable to those of Hong Kong and Japan. In 2006, the life expectancy at birth of males was 78.0 years and that of females was 82.8 years. The life expectancy of the population in Western countries was relatively shorter. In the United States, the life expectancy at birth of males and females was 75.0 years and 80.8

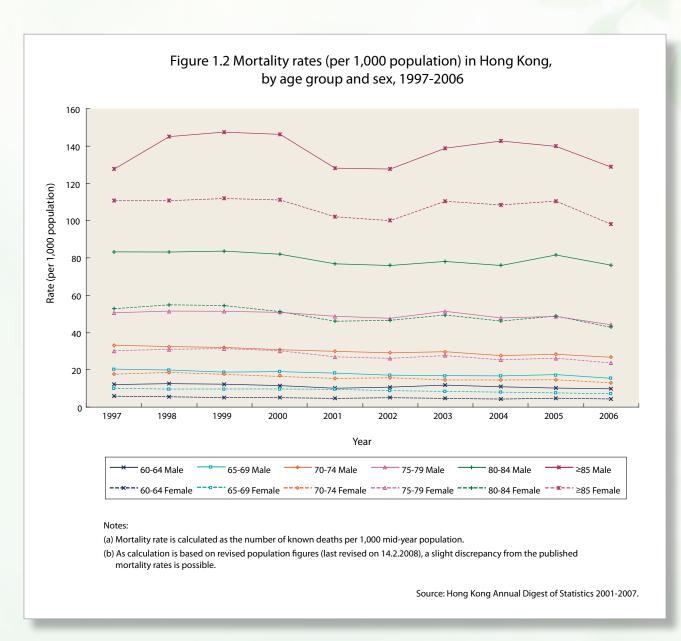


years respectively in 2006.⁸ Based on average figures in 2003-2005, the life expectancy at birth of males and females in Australia was 78.5 years and 83.3 years respectively;⁹ whereas in the years 2004-2006, for males and females in the United Kingdom it was 76.9 years and 81.3 years respectively.¹⁰ The above figures also highlight the fact that females generally live longer than males. Such a gender gap has implications for the age-sex composition of a population, which in turn affects other demographic profiles (for example, marital status).

1.2. Mortality Rate

One of the contributing factors to longer life expectancy is the decline in the mortality rates at all ages. On the contrary, an increasing mortality rate of the whole population does not imply a decline in longevity. In fact, in an ageing population, the proportion of seniors, who are at higher risk of dying than the younger population, is increasing, thus resulting in an elevated mortality rate. Therefore, an age-specific mortality rate is more suitable for comparison across places.

In Hong Kong, the age-specific mortality rates of the population have been quite stable over the years. In general, age-specific mortality rates increase sharply with age. Analyzed by sex, the mortality rate of males is always higher than that of females in the same age group, but the difference narrows at older ages. In 2006, the mortality rate (per 1,000 population) for those aged 60-64 was 9.9 for males and 4.4 for females, whereas that for those aged 85 and above was as high as 128.9 for males and 98.3 for females.¹¹ (Figure 1.2)



In Japan, the mortality rates (per 1,000 population) of males and females aged 60-64 were 10.5 and 4.3 respectively in 2005; whereas those of males and females aged 85 and above were 156.9 and 106.7 respectively. ¹² In Singapore, the mortality rates of residents aged 60-64 were 11.3 per 1,000 male residents and 6.3 per 1,000 female residents in 2006; whereas those of males and females aged 70 and above were 52.9 per 1,000 residents and 41.9 per 1,000 residents respectively. ¹³ In Australia, the mortality rates (per 1,000 population) for those aged 60-64 were 8.7 for males and 5.3 for females in 2005, while those for males and females aged 85 and above were 145.8 and 125.4 respectively. ¹⁴ In the United Kingdom, the mortality rates of males and females aged 65-74 were 25.5 per 1,000 population and 16.2 per 1,000 population respectively in 2004; whereas those for males and females aged 85 and above were 176.3 per 1,000 population and 155.2 per 1,000 population respectively. ¹⁵ In the United States, the mortality rates of males and females aged 60-64 were 14.1 per 1,000 population and 8.9 per 1,000 population respectively in 2005; whereas those for males and females aged 85 and above were 148.9 per 1,000 population and 133.0 per 1,000 population respectively. ¹⁶

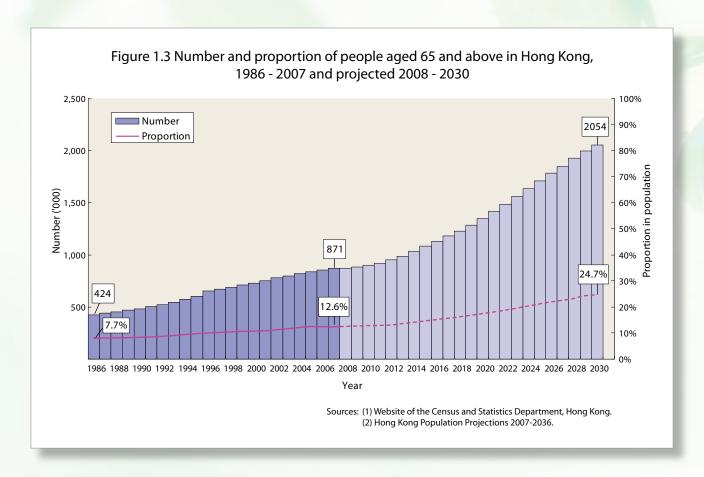
Despite the differences in the reference years and reference age groups in the above mortality statistics, comparison in a broad sense shows that the age-specific mortality rate in Hong Kong was comparable to those in Japan and Singapore. On the other hand, the Western countries had much higher age-specific mortality rates.

1.3. Number and Proportion of Seniors

The number and proportion of seniors is increasing at a faster rate than any other age group in the population.¹⁷ Understanding the size of the senior population is essential in the planning and provision of adequate services for seniors. In 2007, about 11% (about 705 million) of the world's population is aged 60 and above. It is projected that about 22% (2 billion) of the world's population will be aged 60 and above by 2050.¹⁸

In Hong Kong, there are about 0.9 million people aged 65 and above in 2007, making up about 13% of the population. Compared with the past two decades, the number of the seniors has nearly doubled.¹⁹ It is projected that the population aged 65 and above

will continue to grow. By 2030, there will be about 2.1 million people aged 65 and above, making up about 25% of the population.⁵ In other words, about one in four people will be aged 65 and above by 2030. (Figure 1.3)



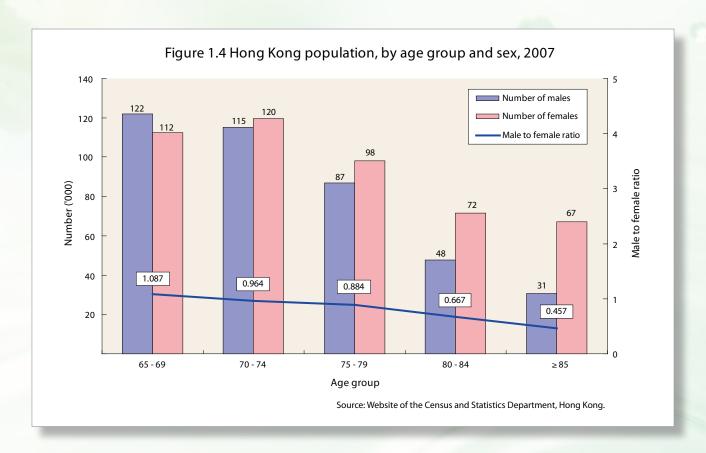
In 2006, the proportions of populations aged 65 and above were 21% in Japan, 8% in Singapore, 13% in Australia, 12% in the United States and 16% in the United Kingdom. ^{20,13,21,22,23} In terms of the proportion of seniors in the population, Singapore has the youngest population and Japan has the oldest. In 2006, the situation in Hong Kong was similar to that in Australia and the United States.

It is projected that by 2030, the proportions of populations aged 65 and above will be 28% in Japan, 15% in Singapore, 21% in Australia, 20% in the United States and 23% in the United Kingdom.²⁴ By 2030, the proportion of seniors in Hong Kong will be just slightly less than that in Japan, while Singapore will remain the youngest population.

1.4. Male to Female Ratio

Owing to the differences in life expectancy of the male and female population, there are progressively more females in the older population. For planning and provision of services to seniors, the age-sex composition of the senior population should be taken into consideration.

In Hong Kong, among the population aged 65 and above in 2007, there are about 0.4 million males and 0.5 million females. The male to female ratio decreases from 1.1 for those aged 65-69 to 0.5 for those aged 85 and above in 2007.¹⁹ (Figure 1.4)



The male to female ratios of the population aged 65-69 in 2006 were about 0.9 in Japan, Singapore, the United States and the United Kingdom, and about 1.0 in Australia. ^{20,13,22,23,21} For the population aged 85 and above, the male to female ratios in 2006 were 0.4 in Japan and the United Kingdom, and 0.5 in Singapore, Australia and the United States. ^{20,23,13,21,22} The male to female ratio was more or less the same in the places studied, including Hong Kong.

1.5. Marital Status

Marital status is closely related to one's social support. Spouses play an important role as informal caregivers to their partners. Globally, about 78% of males aged 60 and above were married in 2002, while only 44% of females of the same age group were currently married.²⁵ Such a discrepancy is due to the longevity of women, as well as the norm that men marry younger women. Therefore, while older men can be cared for by their wives, older women usually become widowed as they age.²⁵

In Hong Kong, about 80% of the male population aged 65 and above were currently married, as compared to 46% of the older female population in 2006.²⁶ Such a proportion for males has been stable since 1991, while that for females has slightly increased over the years.²⁷ (Figures 1.5a and 1.5b)

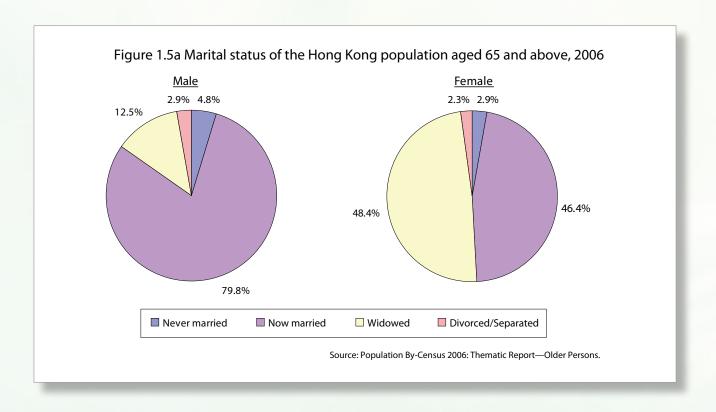
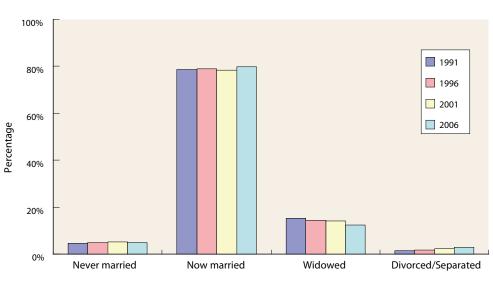


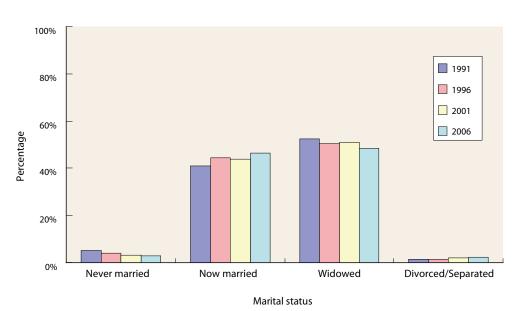
Figure 1.5b Marital status of the Hong Kong population aged 65 and above, 1991, 1996, 2001 and 2006

<u>Male</u>



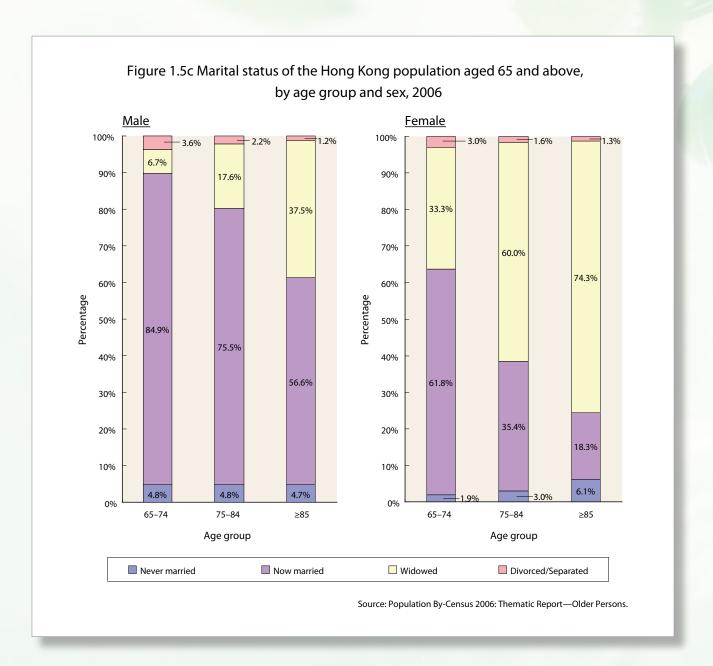
Marital status

<u>Female</u>



Sources: (1) Population Census 2001: Thematic Report—Older Persons. (2) Population By-Census 2006: Thematic Report—Older Persons.

Analyzed by age groups, in 2006, the proportion of the male population who were currently married dropped gradually from 85% for those aged 65-74, to 76% for those aged 75-84, and then to 57% for those aged 85 and above. As for the female population, the proportion dropped sharply from 62% for those aged 65-74, to 35% for those aged 75-84, and then to 18% for those aged 85 and above.²⁶ (Figure 1.5c)



In Japan, the proportions of married males and females aged 65-74 were 85% and 65% respectively in 2005, whereas the corresponding proportions for the population aged 85 and above dropped to 62% and 9% respectively. In Australia, the proportions of married males and females aged 65-74 were 75% and 60% respectively in 2006, whereas the corresponding proportions for the population aged 85 and above were 53% and 14% respectively. In the United States, the proportions of married males and females aged 65-74 were 79% and 57% respectively in 2004, whereas the corresponding proportions for the population aged 85 and above were 58% and 15% respectively. The marital status distributions in these places were quite similar, and the proportion of married seniors in Hong Kong was relatively high.

Using different age groups, the proportion of married seniors in other places are provided for reference. In the United Kingdom, the proportions of married males and females aged 60-74 were 76% and 59% respectively in 2001, whereas the corresponding proportions for the population aged 85 and above were 45% and 9% respectively.³⁰ In Singapore, the proportions of married males and females aged 65-74 were 84% and 50% respectively in 2000, whereas the corresponding proportions for the population aged 80 and above were 66% and 18% respectively.³¹

1.6. Educational Attainment

In developed countries, education is a strong predictor of ones' health status and mortality.³² While the education level of the population is improving over time, seniors generally have a lower education level than the population as a whole. This would imply that seniors might have special needs in terms of services provision and public education.

In Hong Kong, about half (52%) of the population aged 65 and above had no schooling or had only attended kindergarten in 1991; whereas in 2006, this proportion dropped to 36%. Similarly, the proportion of seniors who had attended at least secondary education increased from 15% in 1991 to 25% in 2006. Nevertheless, there existed a gap between the education level of seniors and the younger population. Such discrepancy was mainly due to the compulsory education policy imposed in the 1970s. (Figures 1.6a and 1.6b)

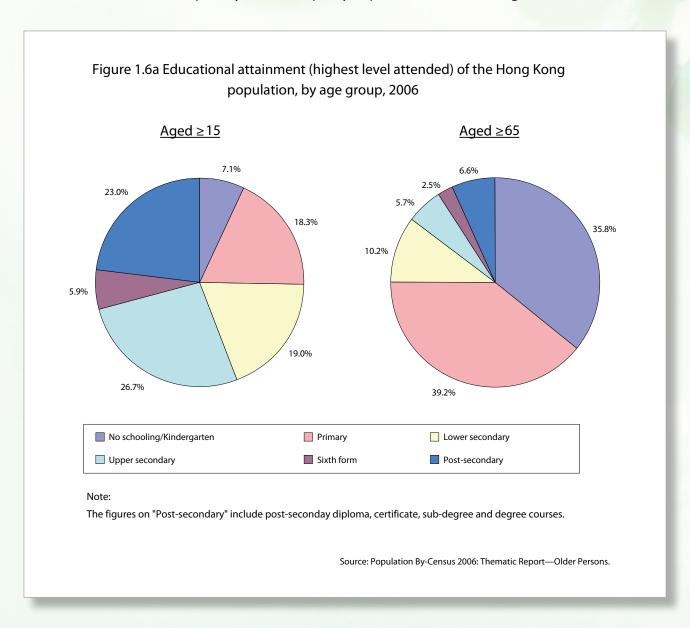
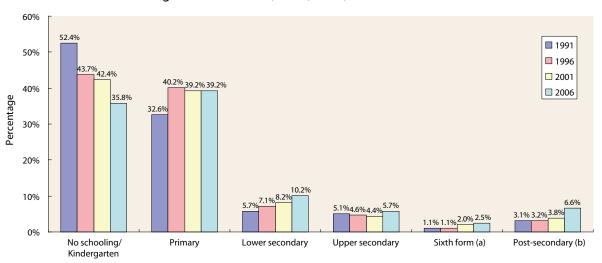


Figure 1.6b Educational attainment (highest level attended) of the Hong Kong population aged 65 and above, 1991, 1996, 2001 and 2006



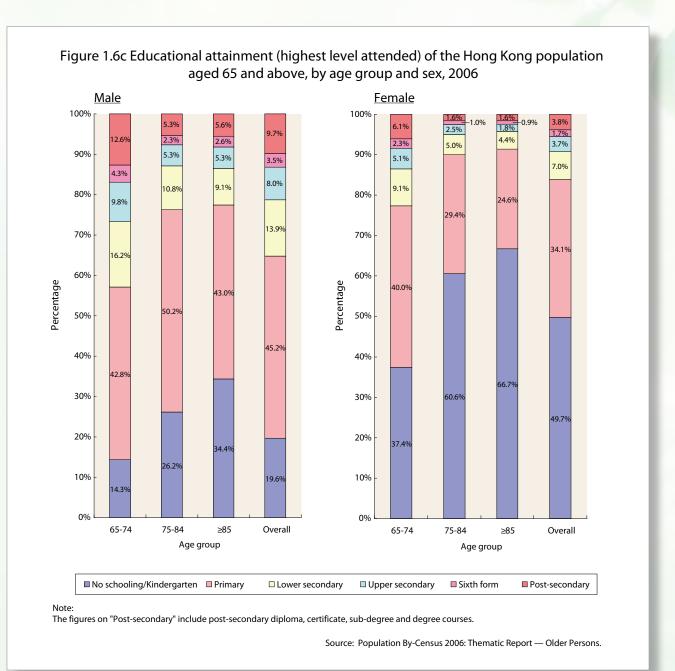
Educational attainment (highest level attended)

Notes:

- (a) For 1996, the figures include "Technician level (other further non-advanced education)"; For 2001, the figures include "Diploma/certificate courses in Institute of Vocational Education / former polytechnics".
- (b) For 1991, the figures include "Diploma/certificate courses in technical institutes / polytechnics"; For 1996 and 2001, the figures include different types of diploma / certificate courses, associateship courses or equivalent courses (except those courses specified in Note a); For 2006, the figures include post-secondary diploma, certificate, sub-degree and degree courses.

Sources: (1) Population Census 2001: Thematic Report — Older Persons. (2) Population By-Census 2006: Thematic Report — Older Persons.

Analyzed by sex, about 20% of the male population aged 65 and above had no schooling or had only attended kindergarten in 2006, as compared to 50% of the female senior population. Similarly, in 2006, the proportion of male seniors who had attended at least secondary education was double that of female seniors (35% versus 16%). When analyzed by age groups, such discrepancy by sex was even larger for those aged 85 and above.²⁶ Such discrepancy was mainly due to the Chinese traditional belief that women need not be educated. (Figure 1.6c)



Owing to slightly different education systems, there is no standard terminology for educational attainment. Furthermore, educational attainment is sometimes measured in terms of highest level attended, while sometimes highest level completed. Comparison of the statistics may not be straightforward. Nevertheless, international figures are presented for reference.

In Japan, about 44% of the population aged 65 and above had at least completed junior college/higher professional school in 2000.¹² In Singapore, the proportion of seniors aged 65-74 with at least a secondary education was about 14% in 2005.³³ In Australia, about 45% of the population aged 65 and above had non-school qualifications in 2006.²⁸ In the United States, about 73% of the population aged 65 and above were high school graduates or more in 2004.²⁹ In England and Wales, about 37% of population aged 65-74 had academic, vocational or professional qualifications in 2001.³⁴

1.7. Summary

In terms of longevity, the life expectancy at birth of the Hong Kong population is among the highest in the world. This may be due partly to the lower age-specific mortality rate in Hong Kong. While Japan has been facing ageing issues for many years, Hong Kong will soon catch up. By 2030, the proportion of seniors in Hong Kong will be just slightly less than that in Japan. The marital status distribution in Hong Kong is quite similar to that in the other places and the proportion of married seniors in Hong Kong is relatively high. As for education, the proportion of seniors in Hong Kong with at least a secondary education has been increasing, but there is still room for further improvement.

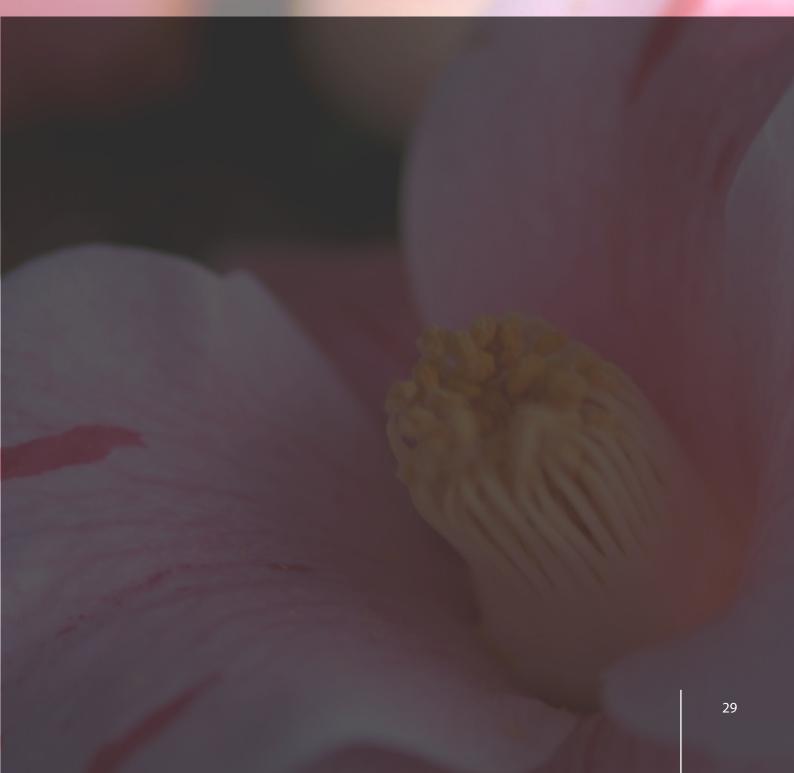
1.8. References

- 1. World Health Organization (2002). Active Ageing: A Policy Framework. Geneva: World Health Organization.
- 2. Ageing and Health Programme, World Health Organization (1999). *Ageing—Exploding the Myths*. Geneva: World Health Organization.
- 3. World Health Organization (2007). WHO Statistical Information System—Life Expectancy at Birth (Years). Available at: http://www.who.int/whosis/indicators/2007LEX0/en/ Accessed on 31 Mar 2008.
- 4. Census and Statistics Department of Hong Kong Special Administrative Region (2008). *Hong Kong Statistics—Vital Events*. Available at: http://www.censtatd.gov.hk/showtableexcel2.jsp?tableID=004 Accessed on 31 Mar 2008.
- 5. Census and Statistics Department of Hong Kong Special Administrative Region (2007). *Hong Kong Population Projections 2007-2036*. Hong Kong: Government Logistics Department.
- 6. Statistics Bureau, Ministry of Internal Affairs and Communications, Japan. (2007). *Statistical Handbook of Japan 2007*. Japan: Statistics Bureau.
- 7. Statistics Singapore. (2007). *Key Annual Indicators*. Available at: http://www.singstat.gov.sg/stats/keyind. html#keyind Accessed on 31 Mar 2008.
- 8. United States Census Bureau. (2007). *International Data Base*. Available at: http://www.census.gov/ipc/www/idb/ Accessed on 31 Mar 2008.
- 9. Australian Institute of Health and Welfare (AIHW). (2007). *Life Expectancy*. Available at: http://www.aihw.gov.au/mortality/data/life_expectancy.cfm Accessed on 31 Mar 2008.
- 10. Office for National Statistics of the United Kingdom. (2007). *Population Trends No.130—Winter 2007*. Available at: http://www.statistics.gov.uk/downloads/theme_population/Population_Trends_130_web. pdf Accessed on 31 Mar 2008.
- 11. Census and Statistics Department of Hong Kong Special Administrative Region (2007). *Hong Kong Annual Digest of Statistics 2007*. Hong Kong: Government Logistics Department. [and back issues]
- 12. Statistics Bureau and Statistical Research and Training Institute, Ministry of Internal Affairs and Communications (MIC). (2007). *Japan Statistical Yearbook 2008*. Japan: MIC.
- 13. Department of Statistics, Ministry of Trade and Industry, Republic of Singapore (2007). *Yearbook of Statistics Singapore*, 2007. Singapore: Department of Statistics.
- 14. Australian Institute of Health and Welfare (AIHW). (2007). *GRIM (General Record of Incidence of Mortality) Books.* Canberra: AIHW.
- 15. Office for National Statistics of the United Kingdom. (2006). *United Kingdom Health Statistics No.2*. London: Office for National Statistics.
- 16. National Center for Health Statistics, United States. (2008). Deaths: Final Data for 2005. *National Vital Statistics Report*, 56(10). Version submitted for publication in January 2008. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_10.pdf Accessed on Mar 31 2008.
- 17. United Nations Population Fund (UNFPA). (2002). Population Ageing and Development. New York: UNFPA.
- 18. United Nations Department of Economic and Social Affairs, Population Division. (2007). *World Population Ageing 2007*. New York: United Nations.

- 19. Census and Statistics Department of Hong Kong Special Administrative Region (2008). *Hong Kong Statistics—Population*. Available at: http://www.censtatd.gov.hk/showtableexcel2.jsp?tableID=002 Accessed on 31 Mar 2008.
- 20. Statistics Bureau, Ministry of Internal Affairs and Communications, Japan. (2007). *Current Population Estimates as of October 1, 2006*. Available at: http://www.stat.go.jp/english/data/jinsui/2006np/index.htm Accessed on 31 Mar 2008.
- 21. Australian Bureau of Statistics. (2007). *Australian Demographic Statistics, September Quarter 2006*. Canberra: Australian Bureau of Statistics.
- 22. United States Census Bureau. (2007). *National Population Estimates—Characteristics*. Available at: http://www.census.gov/popest/national/asrh/NC-EST2006-sa.html Accessed on 31 Mar 2008.
- 23. Office for National Statistics of the United Kingdom. (2007). StatBase—Table 1: Mid-2006 Population Estimates: United Kingdom; Estimated Resident Population by Single Year of Age and Sex. Available at: http://www.statistics.gov.uk/StatBase/Expodata/Spreadsheets/D9657.xls Accessed on 31 Mar 2008.
- 24. Kinsella K. and Velkoff V.A. (2001). An Aging World: 2001. *U.S. Census Bureau, Series*, P95/01-1. Washington, DC: U.S. Government Printing Office.
- 25. Western Pacific Region, World Health Organization. (2006). *Integrating Poverty and Gender into Health Programmes: A Sourcebook for Health Professionals: Module on Ageing.* Geneva: World Health Organization.
- 26. Census and Statistics Department of Hong Kong Special Administrative Region (2008). 2006 Population By-census: Thematic Report—Older Persons. Hong Kong Special Administrative Region: Government Logistics Department.
- 27. Census and Statistics Department of Hong Kong Special Administrative Region (2002). 2001 Population Census: Thematic Report—Older Persons. Hong Kong: Government Logistics Department.
- 28. Australian Bureau of Statistics. (2007). 2006 Census Community Profile Series: Basic Community Profile. Available at: http://www.censusdata.abs.gov.au/ Accessed on 31 Mar 2008.
- 29. Federal Interagency Forum on Aging-Related Statistics (2006). *Older Americans Update 2006: Key Indicators of Well-being*. Washington, DC: U.S. Government Printing Office.
- 30. Office for National Statistics of the United Kingdom. (2005). *Focus on Older People: 2005*. London: Office for National Statistics.
- 31. Department of Statistics, Ministry of Trade and Industry, Republic of Singapore. (2007). *Census of Population 2000 Statistical Release 1: Demographic Characteristics*. Singapore: Singapore Department of Statistics.
- 32. Economic and Social Affairs, Population Division, United Nations. (2003). *Population, Education and Development*. New York: United Nations.
- 33. Committee on Ageing Issues, Singapore. (2006). *Report on the Ageing Population*. Available at: http://www.mcys.gov.sg/successful_ageing/Report.html Accessed on 31 Mar 2008.
- 34. Office for National Statistics of the United Kingdom. (2003). *All people aged 16 74 Part 2: Census 2001, National Report for England and Wales Part 2.* Available at: http://www.statistics.gov.uk/StatBase/ssdataset.asp?vlnk=7532&Pos=6&ColRank=2&Rank=704 Accessed on 31 Mar 2008.

Chapter 2

Nutrition and Health-related Lifestyle



Nutrition and Health-related Lifestyle

Healthy diets and regular, adequate physical activity are major factors in the promotion and maintenance of good health, especially in the prevention of chronic diseases.¹ More importantly, diet and physical activity are modifiable factors in the well-being of seniors. Understanding the dietary habits and level of physical activity would help to promote healthy ageing in Hong Kong.

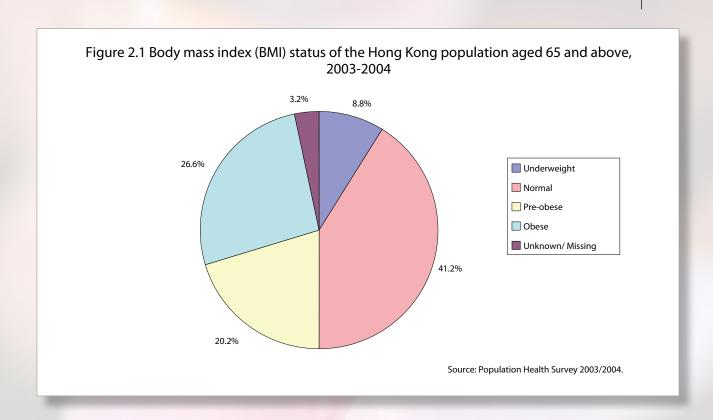
2.1. Underweight and Overweight

Body mass index (BMI) reflects the balance between nutrition intake and physical activities. The World Health Organization has recommended that an individual should maintain a BMI in the range 18.5-24.9 kg/m². A BMI less than 18.5 kg/m² is regarded as underweight, where a BMI equal to or more than 25 kg/m² is regarded as overweight. If an adult has a BMI between 25 and 30 kg/m², the adult is considered as pre-obese; if the BMI is equal to or more than 30 kg/m², that adult is considered as obese.¹

Being overweight is well-known for its association with a higher risk of disease, especially cardiovascular diseases. Meanwhile, being underweight is a reflection of insufficient nutrition and also makes people more vulnerable to diseases because of their weakened immune systems. For seniors, the risks of being underweight or overweight are equally important.

According to a survey conducted by the Department of Health of Hong Kong and Department of Community Medicine of The University of Hong Kong in 2003-2004, about 9% of people aged 65 and above were underweight.² On the other hand, about 47% of people aged 65 and above were overweight, including 27% of them being obese. For seniors in Hong Kong, the problem of being overweight was more serious than the problem of being underweight. Nevertheless, the problem of obesity is not serious. (Figure 2.1)

As compared with other countries, the prevalence of being underweight for those aged 65 and above was only about 1% in the United States in the years 2003-2004, about 1% in England in 2003 and about 3% in Australia in 2004-2005.^{3,4,5} The prevalence



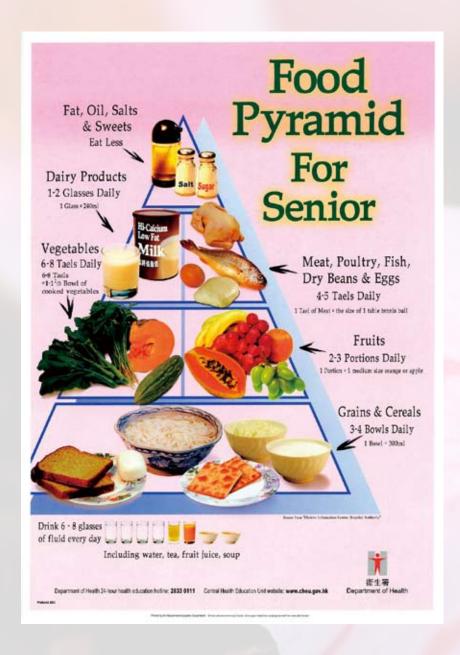
of being underweight amongst seniors in Hong Kong was higher than those in the Western countries. While the figures are not directly comparable, the prevalence of being underweight based on different age groups in some Asian countries is presented for reference. In 2004, the prevalence of being underweight for populations aged 60-69 was about 5% in Japan and about 6% in Singapore.^{6,7}

On the other hand, the prevalence of being overweight for those aged 65 and above was as high, at about 71% in the United States in 2003-2004 and about 72% in England in 2003,^{3,4} which was substantially higher than that in Hong Kong. For Australia, the prevalence of being overweight for people aged 65 and above was about 48% in 2004-2005,⁵ which was about the same as that in Hong Kong. While the figures are not directly comparable, the prevalence of being overweight based on different age groups in Japan and Singapore is presented for reference. In 2004, the prevalence of being overweight for population aged 60-69 was about 30% in Japan and about 36% in Singapore.^{6,7}

2.2. Dietary Habits

It is commonly believed that seniors have to avoid consumption of certain high risk food in order to maintain good health. However, it seems there is a lack of emphasis on encouraging seniors to consume adequate amounts of nutritious food. To promote public awareness, the Department of Health of Hong Kong has compiled a Food Pyramid for Seniors [in poster form] (Box 2.1) to recommend a balanced diet, with quantities of each food type stated explicitly, for seniors to follow.⁸

Box 2.1 Food Pyramid for Seniors prepared by Department of Health of Hong Kong⁸

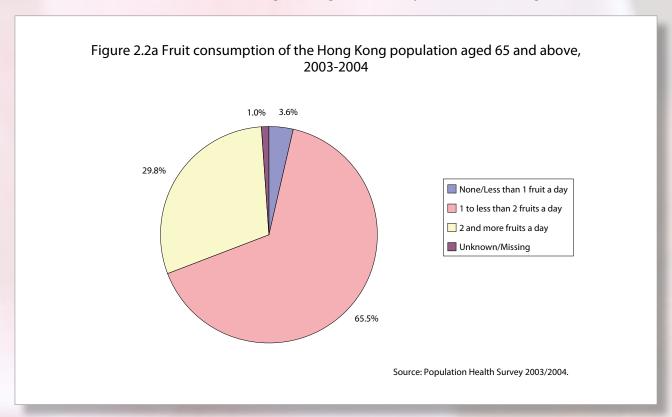


In the following sections, the consumption patterns of the Hong Kong senior population of fruits, vegetables, milk, meat, fish and high fat food are summarized from the population survey jointly conducted by the Department of Health of Hong Kong and Department of Community Medicine of The University of Hong Kong in 2003-2004.² International comparisons are made where appropriate.

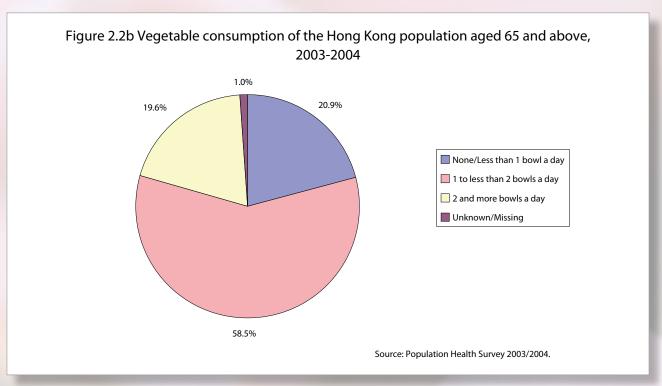
2.2.1. Consumption of Fruits and Vegetables

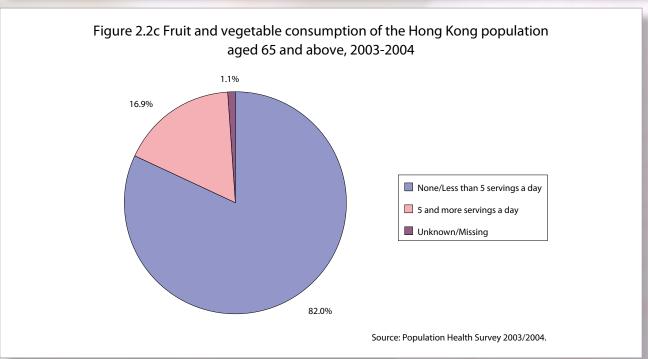
In 2003-2004, about 30% of people aged 65 and above in Hong Kong ate two or more servings of fruits a day,² and met the recommendations of the Department of Health of Hong Kong. In 2004-2005, about 65% of people aged 65 and above in Australia ate two or more servings of fruit per day.⁵ In Singapore, about 34% of people aged 60-69 ate two or more servings of fruit per day in 2004.⁹ A rough comparison suggests that fruit intake among seniors in Hong Kong was similar to Singapore, whilst it was much lower than in Australia. (Figure 2.2a)

For vegetable consumption, about 78% of people aged 65 and above in Hong Kong ate at least one bowl (1 bowl \approx 2 servings) of vegetables a day,² and met the vegetable



consumption recommendations of the Department of Health of Hong Kong. In Australia, about 87% of people aged 65 and above ate two or more servings of vegetables per day in 2004-2005.⁵ In Singapore, only about 28% of people aged 60-69 had a daily consumption of two or more servings of vegetables in 2004.⁹ A rough comparison suggests that vegetable intake among seniors in Hong Kong was higher than in Singapore, yet there was still room for improvement when compared to Australia. (Figure 2.2b)

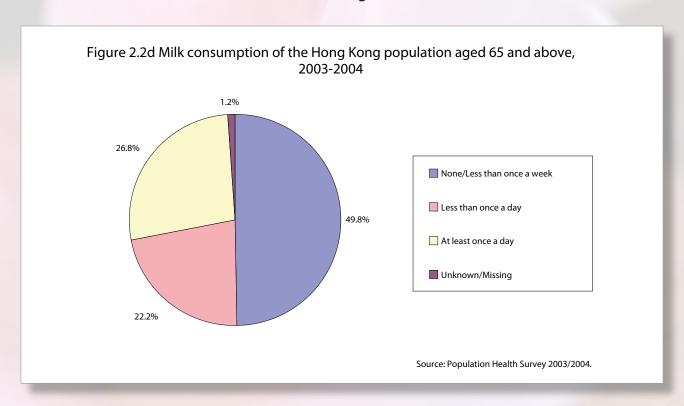




Taking fruit and vegetables combined, it is recommended to eat at least 400g or five servings per day.^{1,10} About 17% of people aged 65 and above in Hong Kong had a daily consumption of five or more servings of fruits and vegetables,² thus meeting the World Health Organization recommendations. The proportions of people aged 65 and above who ate five or more servings of fruit and vegetables per day were about 27% in England in 2004 and about 31% in the United States in 2003.^{11,12} The relatively low percentage in Hong Kong might be due to the low fruit intake. In this regard, seniors in Hong Kong are recommended to increase their fruit and vegetable consumption. (Figure 2.2c)

2.2.2. Consumption of Milk

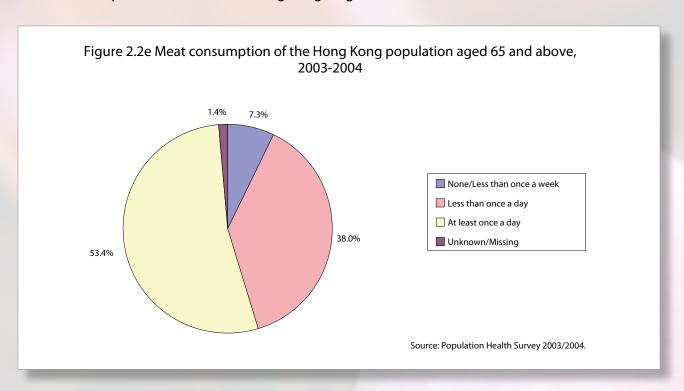
In 2003-2004, about 27% of people aged 65 and above in Hong Kong drank milk at least once a day.² Assuming one glass of milk was consumed each time, this implies that about 27% of seniors met the recommendations of the Department of Health of Hong Kong. On the other hand, about half of the people aged 65 and above in Hong Kong did not drink milk or drank milk less than once a week.² (Figure 2.2d)



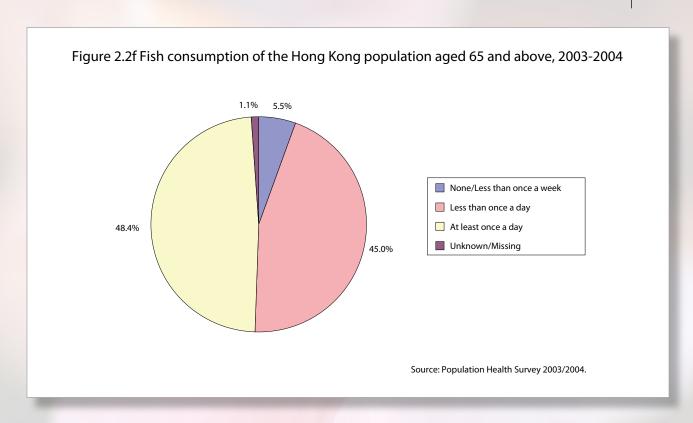
In Singapore, the percentage of seniors who did not drink milk was also high. In 2004, about 64% of people aged 60-69 in Singapore did not drink milk at all.⁹ But for Australia, only 6% of people aged 65 and above did not drink milk in 2004-2005.⁵ There appears to be some cultural difference in the consumption pattern of milk.

2.2.3. Consumption of Meat and Fish

In 2003-2004, about 53% of people aged 65 and above in Hong Kong ate meat at least once a day.² This proportion was the lowest among all age groups. For those who did not have a daily consumption of meat, they should consume other high protein foods such as fish, dry beans or eggs as a substitute, so as to meet the recommendations of the Department of Health of Hong Kong. (Figure 2.2e)



At the same time, almost half (48%) of people aged 65 and above ate fish at least once a day.² This proportion was much higher than those of the other age groups (except for people aged 55-64).² This might suggest that seniors had a higher intake of fish as a substitute for meat. According to the World Health Organization, fish consumption can improve health because fish contains unsaturated fats and a number of other nutritional benefits.¹³ (Figure 2.2f)



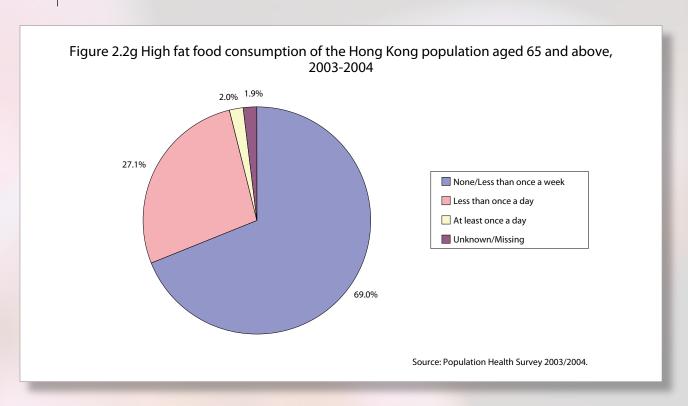
While meat and fish consumption is not measured in similar units in other places, the situation in Singapore is presented for reference. In 2004, about 30% of people aged 60-69 in Singapore consumed 2.5 or more servings of meat or alternatives daily.⁹

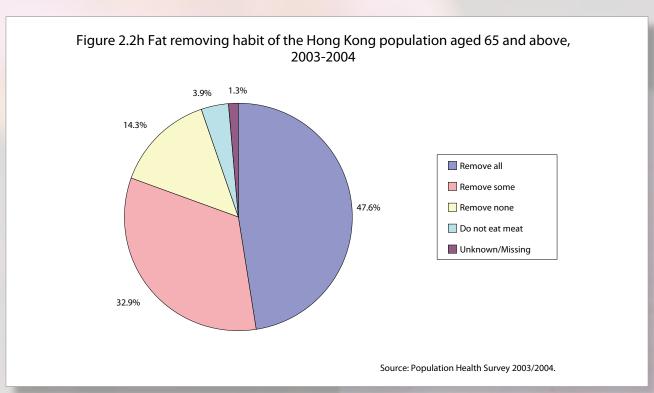
2.2.4. Consumption of High Fat Food

To prevent coronary heart disease, the World Health Organization recommends reducing consumption of high fat foods, as well as removing fat from meat and skin from poultry.¹³

In 2003-2004, about 69% of people aged 65 and above in Hong Kong either did not eat high fat food or ate high fat food less than once a week.² This proportion was much higher than those of the other age groups.² At the same time, about 48% of people aged 65 and above in Hong Kong removed all the fat from their food when eating.² All these healthy dietary habits met World Health Organization recommendations. (Figures 2.2g and 2.2h)

Singapore was one of the few places which collected similar statistics. In 2004, about 48% of people aged 60-69 in Singapore trimmed off all the skin from poultry when eating and about 61% trimmed off all the visible fat from meat when eating.⁹



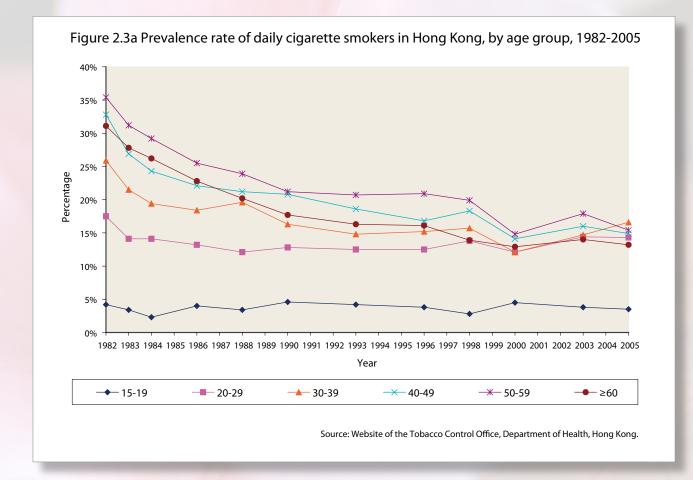


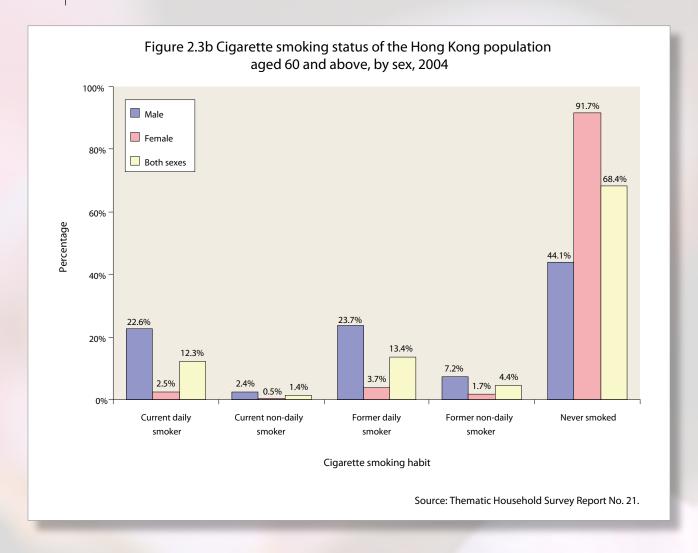
2.3. Smoking

It is widely known that smoking is hazardous to health. It is equally important to prevent non-smokers to become smokers as well as to encourage current smokers to stop smoking.

According to a series of surveys conducted by the Census and Statistics Department of Hong Kong in the years 1982 to 2005, the prevalence of daily smokers among those aged 60 and above in Hong Kong dropped from about 31% in 1982 to about 13% in 2005.¹⁴ (Figure 2.3a)

As shown by another survey conducted by the Census and Statistics Department of Hong Kong, about 14% of people aged 60 and above were current smokers in 2004.¹⁵ Nearly 90% of the current smokers (or 12% of people aged 60 and above) were daily smokers.¹⁵ The daily smoking prevalence for males aged 60 and above was about nine





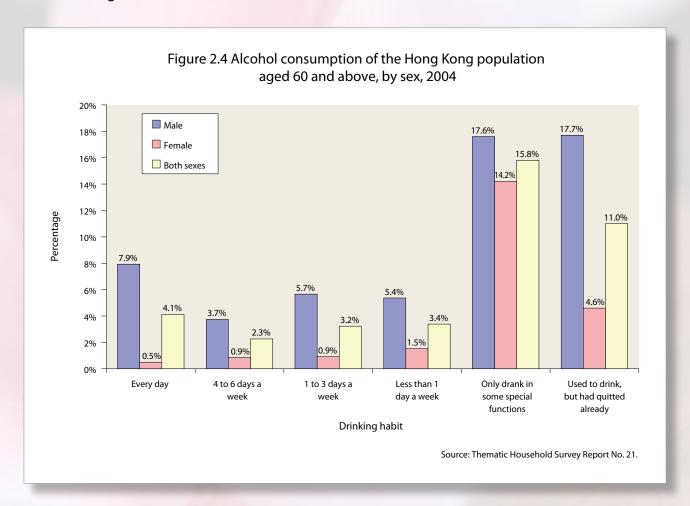
times that of females (22.6% versus 2.5%).¹⁵ While only less than half (44%) of males never smoked, about 92% of the females never smoked.¹⁵ (Figure 2.3b)

Similar sex differences in smoking prevalence were shown in Asian countries. In Singapore, the prevalence of daily smokers aged 60-69 was about 18% for males and about 2% for females in 2004.⁷ In Japan, the prevalence of daily smokers was about 28% for males and about 6% for females aged 60 and above in 2004.⁶ On the other hand, great sex differences in smoking prevalence were not common in Western countries. In 2002-2004, about 9% of males and 7% of females aged 65 and above in the United States were current daily smokers.¹⁶ In 2004, the smoking prevalence was about 15% for males and about 14% for females aged 60 and above in the United Kingdom.¹⁷ As for Australia, the prevalence of daily smokers was about 11% for males and about 7% for females aged 60 and above in 2004.¹⁸ The daily smoking prevalence of male seniors in Hong Kong was higher than those of the other places (except Japan), but the other way round for females (except Singapore).

2.4. Alcohol Drinking

Alcohol drinking is commonly perceived as a means of relaxation or of atmosphere building in social gatherings. Nevertheless, alcohol drinking could be harmful. It is recommended by the World Health Organization that men should not drink more than two drinks a day and women should not drink more than one drink a day.¹³

According to the survey conducted by the Census and Statistics Department of Hong Kong, about 13% of people aged 60 and above currently had a habit of consuming alcoholic drinks in 2004.¹⁵ Nearly half (49%) of these current drinkers (or 6% of people aged 60 and above) drank more than three days a week. The prevalence of current drinkers of males aged 60 and above was about six times that of females (22.7% versus 3.8%).¹⁵ Nevertheless, as the amount of daily consumption was not revealed in the survey, it was hard to comment whether such alcohol drinking habits posed threats to the health of seniors. (Figure 2.4)



Noting the possible difference in the amount of daily alcohol consumption, the frequency of alcohol drinking habit in other countries is presented for broad comparison. In Japan, about 47% of males and 8% of females aged 60 and above drank more than four days a week in 2004.⁶ In Singapore, about 7% of males and 1% of females aged 60-69 drank more than four times a week in 2004.⁷ In the United States, about 21% of males and 9% of females aged 65 and above drank more than three drinks per week in the year 2002-2004.¹⁶ In Australia, about 62% of males and 40% of females aged 60 and above were weekly alcohol drinkers in 2004.¹⁸ As for the United Kingdom, about 68% of male and 45% of female aged 65 and above drank alcohol in the week preceding the survey in 2004.¹⁷

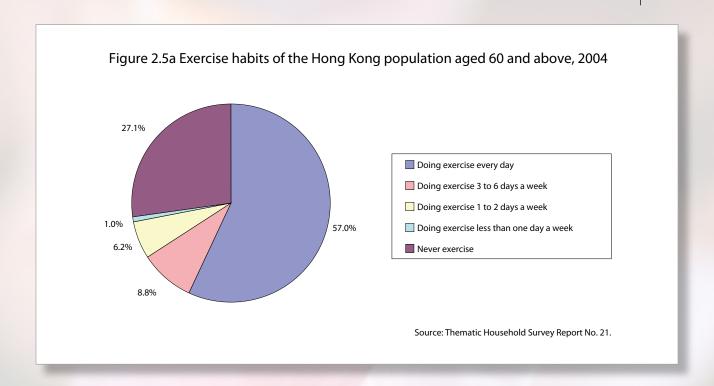
Similar to Hong Kong, sex differences in the prevalence of alcohol drinkers also appeared in Japan and Singapore. But for the Western countries, such sex differences were only observed to a lesser extent. Despite the difference in measurement units, Hong Kong generally had lower prevalence of drinkers than other places (except Singapore, to which the comparison was not conclusive).

2.5. Physical Activity and Exercise

Appropriate amount of physical activity and exercise is important for all ages, including seniors, to maintain good physical and mental health. The World Health Organization recommends that seniors take up four different types of exercise, namely endurance exercises, strength exercises, balance exercises and flexibility exercises.¹³ For endurance exercises, it is recommended to have 30 minutes of exercise a day, whereas for strength exercises, each main muscle group should be exercised twice a week.¹³

According to the survey conducted by the Census and Statistics Department of Hong Kong, about 73% of people aged 60 and above reported having the habit of doing exercises regularly in 2004, of which about 78% (or 57% of people aged 60 and above) did exercises daily.¹⁵ (Figure 2.5a)

In Japan, about 38% of people aged 65 and above reported having the habit of doing exercises regularly in 2004.⁶ Among them, 44% (or 16% of people aged 65 and above) did exercises daily.⁶ In the United States, about 22% of people aged 65 and above reported engaging in regular leisure time physical activity in 2003-2004.¹⁹ In Australia, about 25%



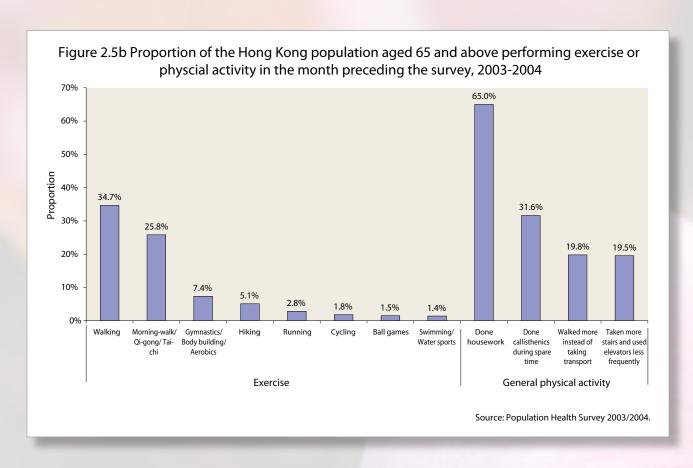
of people aged 65 and above reported moderate or high exercise levels in the two weeks preceding the survey in 2004-2005. In Singapore, about 28% of people aged 60-69 exercised regularly (at least 20 minutes per occasion for three or more days a week) in 2004. It appears that the proportion of seniors in Hong Kong who reported doing regular exercises was quite high when compared with other places.

Another survey conducted by the Department of Health of Hong Kong and Department of Community Medicine of The University of Hong Kong in 2003-2004 showed that only about 2% and 14% of people aged 65 and above performed vigorous physical activities and moderate physical activities respectively in the week preceding the survey interview.² While these percentages were not high, about half of them did the physical activities seven days a week.² In addition, the mean duration of vigorous physical activities performed by those aged 65-74 was about 89 minutes and that by those aged 75 and above was about 53 minutes.² As for moderate physical activities, the mean duration was about 75 minutes and 49 minutes for those aged 65-74 and 75 and above respectively.² These were far more than the 30 minutes exercises recommended by the World Health Organization.

Though international comparison was not feasible in a strict sense, the situations in other places are presented here for reference. In Japan, respectively about 1% and 8% of

people aged 65 and above performed vigorous exercise and moderate exercise in 2004.⁶ In Australia, respectively about 4% and 24% of people aged 65 and above engaged in vigorous exercise and moderate exercise in the two weeks preceding the interview in 2004-2005.⁵ As for the United States, respectively about 17% and 42% of people aged 65 and above engaged in vigorous physical activities and light-to-moderate physical activities at least once a week in 2002-2004.¹⁶

It was also revealed by survey findings that walking was the most popular type of exercise among Hong Kong people aged 65 and above who exercised in the month preceding the survey.² About 35% of all those aged 65 and above took walking as exercise in the month preceding the survey in 2003-2004.² (Figure 2.5b)



This percentage was more or less comparable to that in Australia. In 2004-2005, about 46% of people aged 65 and above in Australia walked for exercise in the two weeks preceding the survey.⁵ In Japan, about 45% of people aged 65-74 walked, on average, at least 6,000 steps a day in 2004.⁶

While most seniors in Hong Kong did not take up a formal type of exercise, about 65% of people aged 65 and above did housework in the month preceding the survey interview in 2003-2004.² (Figure 2.5b)

By the same token, gardening is an alternative form of exercise in other places. Historical data revealed that in 1997, about 36% of people aged 55 and above in the United Kingdom did gardening as physical activity.²⁰ In Japan, about 43% of people aged 65 and above did gardening in their leisure time in 2001.²¹

2.6. Summary

The prevalence of being overweight among seniors in Hong Kong was lower than that of the other countries, whilst the prevalence of being underweight was higher. The consumption of vegetables and avoidance of high fat food followed the recommended pattern fairly well. However, fruit consumption should be encouraged. Hong Kong generally had a lower prevalence of drinkers and female smokers than the other countries. However, the prevalence of male smokers in Hong Kong was higher than that of other places (except Japan). Most seniors in Hong Kong had a habit of doing exercise regularly.

2.7. References

- World Health Organization (2003). Diet, Nutrition and the Prevention of Chronic Diseases. Report of a Joint WHO/ FAO Expert Consultation. WHO Technical Report Series, No. 916, 2003. Geneva: World Health Organization.
- 2. Department of Health of Hong Kong Special Administrative Region and Department of Community Medicine of The University of Hong Kong (2005). *Population Health Survey 2003/2004*. Hong Kong: Department of Health.
- 3. Federal Interagency Forum on Aging-Related Statistics (2006). Older Americans Update 2006: Key Indicators of Well-being. Washington, DC: U.S. Government Printing Office.
- 4. The Information Centre (2006). *Statistics on Obesity, Physical Activity and Diet, England 2006*. Available at: http://www.ic.nhs.uk/ Accessed on 31 Mar 2008.
- 5. Australian Bureau of Statistics (2006). 2004-05 National Health Survey: Summary of Results. Canberra: Australian Bureau of Statistics.
- 6. Ministry of Health, Labour and Welfare of Japan. (2006). Heisei 16-nen kokumin kenkou eiyou tyosa kekka no gaiyou [Summary of results of the National Health and Nutrition Survey, 2004]. Available at: http://www.mhlw.go.jp/shingi/2006/06/dl/s0613-8b.pdf Accessed on 31 Mar 2008. Japanese.

- 7. Epidemiology & Disease Control Division, Ministry of Health, Singapore. (2005). *National Health Survey 2004 Results*. Singapore: Ministry of Health.
- 8. Central Health Education Unit, Department of Heath of Hong Kong Special Administrative Region. *Food Pyramid for Senior*. Available at: http://www.cheu.gov.hk/eng/resources/exhibition_details. asp?id=2411&HTMLorText=0 Accessed on 31 Mar 2008.
- 9. Health Promotion Board of Singapore (2005). *Report of the National Nutrition Survey 2004.* Singapore: Health Promotion Board.
- 10. Central Health Education Unit, Department of Health of Hong Kong Special Administrative Region. Dietary Recommendations for Fruit and Vegetable Intake. Available at: http://2plus3.cheu.gov.hk/html/eng/sec3_content.asp?fname=sec3_q5.aspx Accessed on 31 Mar 2008.
- 11. The Information Centre (2006). *Health Survey for England 2005 Latest Trends*. Available at: http://www.ic.nhs.uk/ Accessed on 31 Mar 2008.
- 12. World Health Organization. *The WHO Global InfoBase*. Available at: http://www.who.int/infobase/report. aspx Accessed on 31 Mar 2008.
- 13. Regional Office for the Western Pacific of World Health Organization (2005). *Healthy Ageing—Practical Pointers on Keeping Well.* Manila: World Health Organization.
- 14. Tobacco Control Office of Department of Health of Hong Kong Special Administrative Region. *Hong Kong Smoking Prevalence*. Available at: http://www.tobaccocontrol.gov.hk/ Accessed on 31 Mar 2008.
- 15. Census and Statistics Department of Hong Kong Special Administrative Region (2005). *Thematic Household Survey Report No. 21: Social-demographic Profile, Health Status and Long-term Care Needs of Older Persons.* Hong Kong: Government Logistics Department.
- 16. Adams P.F. and Schoenborn C.A. (2006). Health behaviors of adults: United States, 2002-04. *National Center for Health Statistics. Vital Health Stat 10(230)*.
- 17. Office for National Statistics, United Kingdom (2005). Smoking and Drinking among Adults, 2005 in 2004 General Household Survey. Available at: http://www.statistics.gov.uk/downloads/theme_compendia/GHS05/GHS2005_SmokingandDrinking_Report.pdf Accessed on 31 Mar 2008.
- 18. Australian Institute of Health and Welfare (2005). *Statistics on Drug Use in Australia 2004*. (Drug Statistics Series No. 15). Canberra: Australian Institute of Health and Welfare.
- 19. Federal Interagency Forum on Aging-Related Statistics (2006). *Older Americans Update 2006: Key Indicators of Well-being.* Washington, DC: U.S. Government Printing Office.
- 20. European Commission (2003). *Health statistics: Key Data on Health 2002.* Luxembourg: Office for Official Publications of the European Communities.
- 21. Statistics Bureau, Ministry of Internal Affairs and Communications. (2002). Summary of Results of the 2001 Survey on Time Use and Leisure Activities. Available at: http://www.stat.go.jp/english/data/shakai/2001/tokeihyo.htm Accessed on 31 Mar 2008.

Chapter 3

Social Networking and Engagement

Social Networking and Engagement

The World Health Organization defines health as "a state of complete physical, mental and social well being and not merely the absence of disease or infirmity". In other words, good physical and mental health does not necessarily imply good health in general. A healthy social life plays an important part in the well-being of individuals, including seniors. A healthy social life can be sought actively by social participation. Alternatively, social support can be provided by family, friends and other people through day-to-day interactions. In this chapter, the well-being of seniors in terms of social participation and support will be explored.

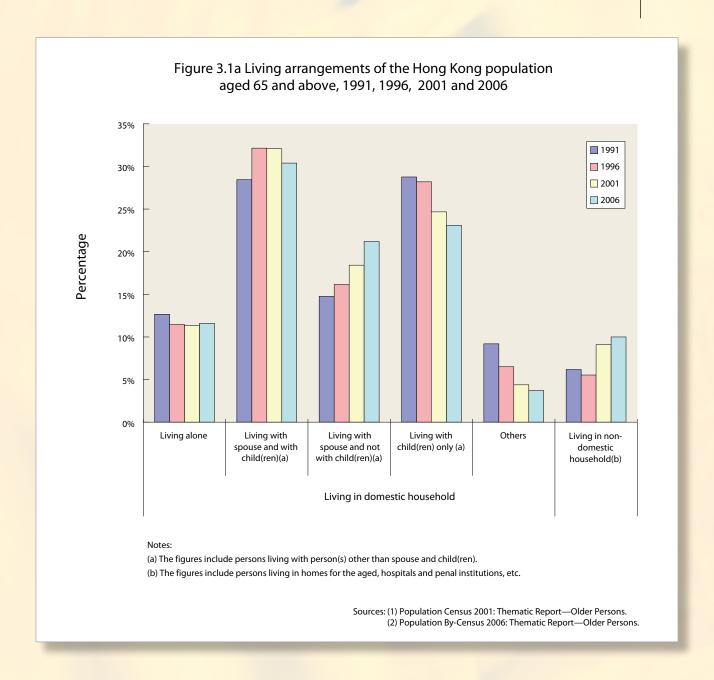
3.1. Living Arrangement

Different living arrangements result in different levels of social participation and support. Usually, seniors living in domestic households have more freedom in their choices of social participation. Besides, seniors living with family or others are more likely to gain mutual support from cohabiters. On the other hand, seniors living alone have to seek social support outside the household. For seniors living in institutions, their social network may be relatively limited.

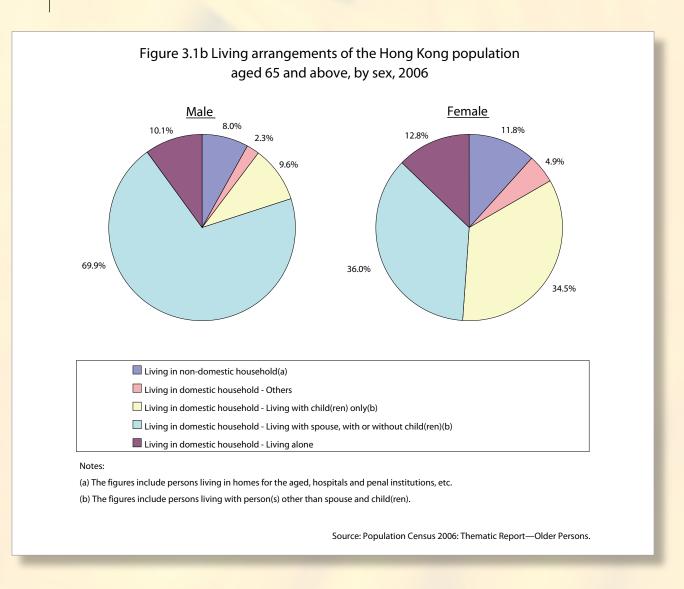
3.1.1. Domestic Households

According to census data, about 90% of the Hong Kong population aged 65 and above lived in domestic households in 2006.² This percentage slightly decreased by about 4% as compared with 1991.^{2,3} Meanwhile, the percentage of people aged 65 and above living alone was quite stable during the period from 1991 to 2006 (about 11-13%).^{2,3} (Figure 3.1a)

Analyzed by sex, the percentage of females aged 65 and above who lived alone was higher than that of males (about 13% versus 10%) in 2006.² Moreover, the percentage of those living alone increased with age (except for those aged 85 and above). The increasing proportion of those living alone across age groups could be due to widowhood and the moving away of adult children, whilst the drop in the percentage for those aged 85 and above could result from institutionalization (Figures 3.1b and 3.1c)



The United Nations reported that the percentages of people aged 60 and above living alone were the lowest in Asia, but the highest in Europe.⁴ For example, the percentages of people aged 65 and above living alone were about 15% in Japan in 2005;⁵ about 7% in Singapore in 2000;⁶ about 29% in Australia in 2006;⁷ and about 28% in the United States in 2000.⁸ In the United Kingdom, about 32% of the population over the state pension age (65 for men and 60 for women) lived alone in 2004.⁹ In this regard, the percentage in Hong Kong was comparable to those in the Asian countries and much lower than those in the Western countries.

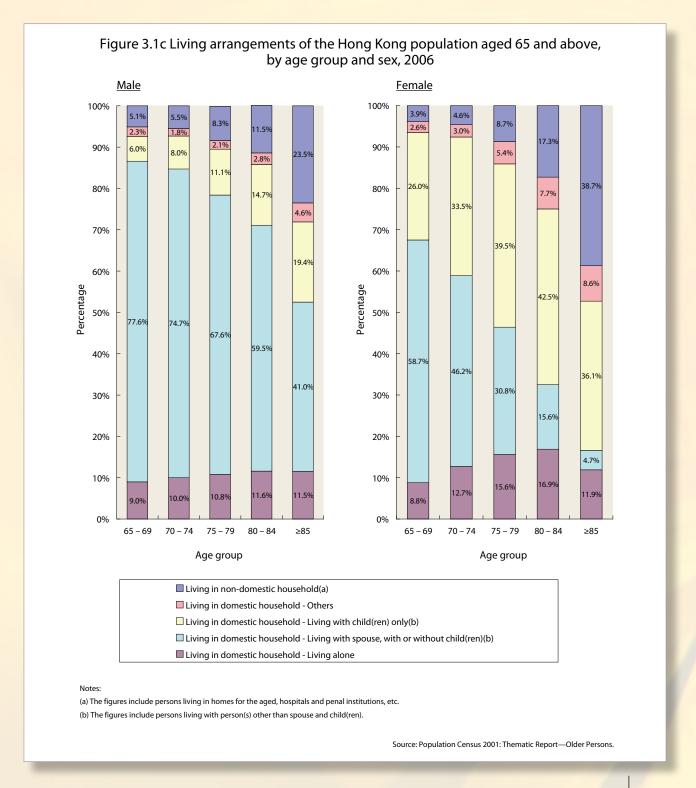


3.1.2. Institutions

Meanwhile, there was a slight increase in the percentage of the Hong Kong population living in non-domestic households, mainly homes for the aged, from about 6% in 1991 to 10% in 2006.^{2,3} Analyzed by age, the percentage of those aged 85 and above was the highest among all age groups in 2006. About 23% of males and 39% of females aged 85 and above lived in non-domestic households in 2006.² (Figures 3.1a and 3.1b)

The United Nations reported that Asia, Eastern Europe and Latin America had the lowest levels of institutional living among seniors, whereas Northern and Eastern Europe, North America and Oceania had the highest levels of institutional living.⁴ In 2005, the percentage of people aged 65 and above living in institutions was about 3% in Japan.⁵ In 2006, the percentage of people aged 65 and above living in non-private dwellings was

about 6% in Australia.⁷ In 2000, about 6% of people aged 65 and above in the United States lived in group quarters.⁸ In 2001, about 5% of people aged 65 and above were living in communal establishments in the United Kingdom.¹⁰ It should be noted that data on institutional living are still fairly poor and the coverage of institutions varies.⁴ International comparisons should be made with caution.



3.2. Social Participation

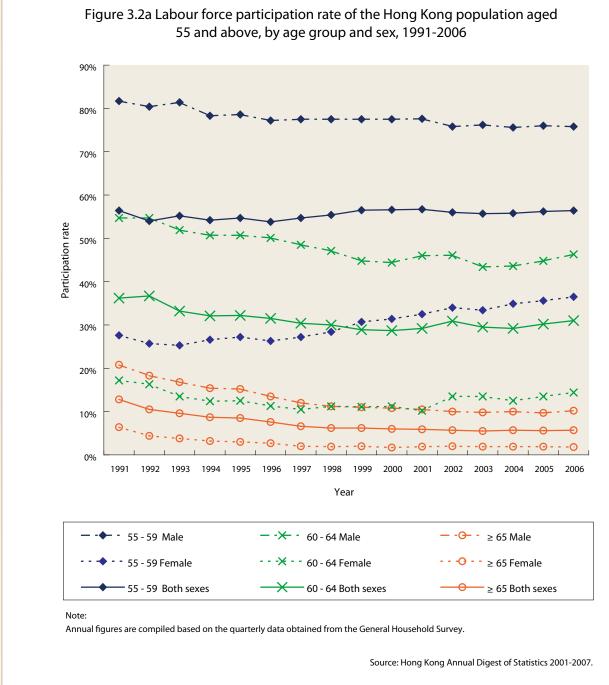
Seniors living in domestic households have a number of opportunities to actively participate in various work or activities which enable them to interact with people in the community. Here, several forms of social participation engaged in by seniors living in domestic households are presented.

3.2.1. Formal Job Attachment

The benefit of having a formal job attachment is more than securing an income. It is rather a way of maintaining a social life and community involvement. According to statistics from the Census and Statistics Department of Hong Kong, the labour force participation rate for the Hong Kong population aged 65 and above has been on a declining trend since 1991, but has become more stable in the 2000s. It dropped from about 13% in 1991 to about 6% in 2006.¹¹ A similar declining trend was also observed for the 60-64 age group, which dropped from about 36% in 1991 to about 31% in 2006.¹¹ On the other hand, for those aged 55-59, the rates were steady over the years.¹¹ Most of the drastic year-on-year decrease happened before the late 1990s. It is uncertain whether the fluctuations were due to political instability or economic instability around the time. (Figure 3.2a)

The same source data revealed that sex differences in the labour force participation rate existed in all age groups in Hong Kong. Such differences widened with age: for those aged 65 and above, the labour force participation rate for males was about 10%, while that for females was less than 2% in 2006.¹¹ Nevertheless, the labour force participation rate dropped considerably when people entered their 60s, followed by a more dramatic drop when they reached the age of 65.¹¹ This was partly due to the common retirement age at 60 or 65. (Figure 3.2a)

In Japan, the labour force participation rates of the population aged 65 and above were as high as 29% for males and 13% for females in 2006.¹² In Singapore, such rates were about 22% and 8% for males and females respectively in 2006.¹³ In Australia, such rates were about 12% for males and 4% for females in 2005-2006.¹⁴ In the United States, such rates were 20% and 12% for males and females in 2006.¹⁵ In the United Kingdom, about 10% of males and 12% of females remained economically active after state pension age (65 for male and 60 for female) in the fourth quarter of 2006.¹⁶ It was common that

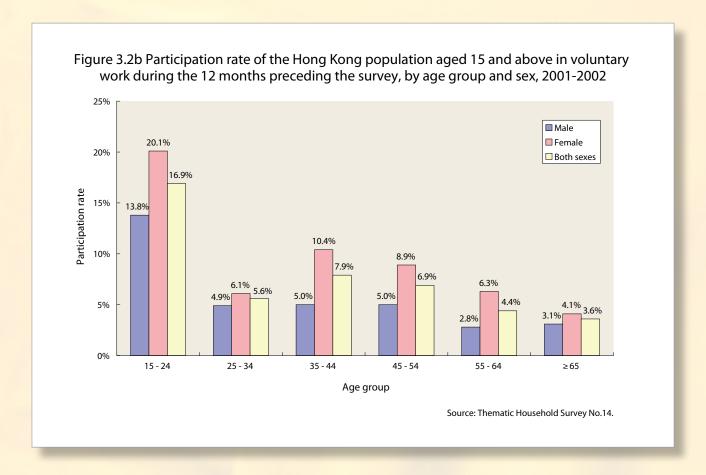


a substantial drop occurred in the labour force participation rates of some particular age groups because of the state or the usual retirement age.

The labour force participation rate of seniors in Hong Kong was lower than those of other places. A low labour force participation rate could reflect two possible scenarios—an involuntary one reflecting societal bias against employing older workers or a voluntary one reflecting a personal preference to not re-enter the workforce after retirement. Further research is needed to reveal the underlying reason.

3.2.2. Voluntary Work

Apart from having a formal job attachment, seniors may take up voluntary work. According to a survey conducted by the Census and Statistics Department of Hong Kong in 2001-2002, about 3% of males and 4% of females aged 65 and above were engaged in voluntary work in the 12 months preceding the survey.¹⁷ (Figure 3.2b)



Overall, the percentage of people in Hong Kong participating in voluntary work was relatively low, regardless of age. It is thus not surprising that the respective percentage for seniors in Hong Kong was also lower than other places. For example, the proportion of the population aged 65 and above who volunteered in the 12-month period preceding the survey were about 27% in Japan in 2001; ¹⁸ about 40% in Australia in 2004; ¹⁹ and about 24% in the United States in 2003. ²⁰ In England and Wales, about 32% of people aged 65 and above participated in formal volunteering at least once in the 12 months preceding the survey in 2001. ²¹ Unlike the other countries, the volunteer rate of the population aged 65 and above was quite low in Singapore (about 4% in 2004). ²² Despite the difference in reference years, the situation in Singapore was quite similar to that in Hong Kong.

3.2.3. Care Giving

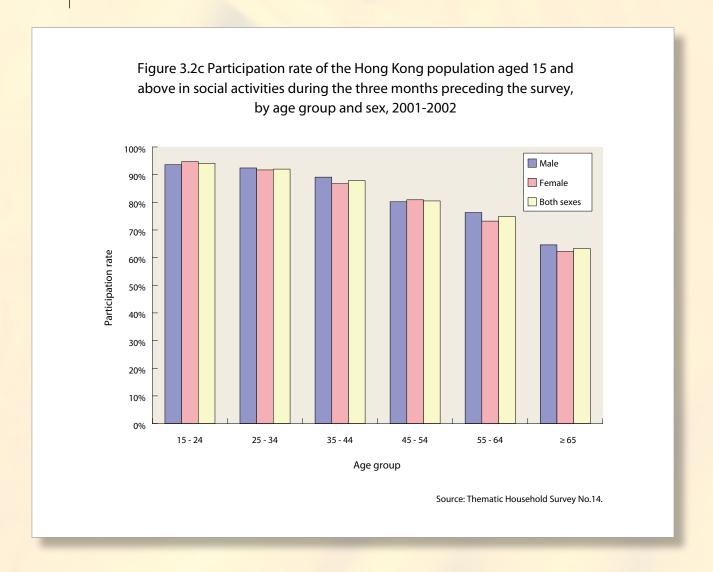
Besides performing voluntary work, which is organized and formal, seniors also offer a helping hand on various occasions. For example, seniors living in domestic households are sometimes the caregiver to their family members. A survey conducted by the Census and Statistics Department of Hong Kong showed that about 22% of people aged 60 and above took care of other family members in 2000.²³

It was common in other places that seniors served as caregivers to family members, relatives or friends. In Australia, about 19% of people aged 65 and above were carers to older people and people with disabilities in 2003.²⁴ In England and Wales, about 11% of the population aged 65 and above provided unpaid care to family members, friends, neighbours or others in 2001.²⁵ For the younger age group, the proportion of caregivers was even higher. In the United States, nearly half of the population aged 50 and above identified themselves as caregivers in 2000.²⁶

3.2.4. Social Activities

There are various forms of social activities, including cultural, recreational/sports, religious, social entertainment and leisure activities, available in the community. Participation in these activities can strengthen interpersonal communication and bonds within the community. The survey conducted by the Census and Statistics Department of Hong Kong showed that about 63% of people aged 65 and above had participated in some kind of social activity during the three months preceding the survey in 2001-2002.¹⁷ Such percentages were about the same for males and females. (Figure 3.2c)

Social activities can be measured in various ways, for example measuring each component separately. Hence, international comparisons cannot be performed and related statistics are presented for reference only. Among the population aged 65 and above in Australia, about 61% actively participated in a social or support group in the 12 months preceding the survey in 2006.⁷ In England, about 65% of people aged 65-74 and 47% of people aged 75 and above attended arts activities in the 12 months preceding the survey in 2003.¹⁰ In 2002, about half of the people aged 80 and above in England belonged to at least one organization (for example, social clubs and sports clubs).¹⁰



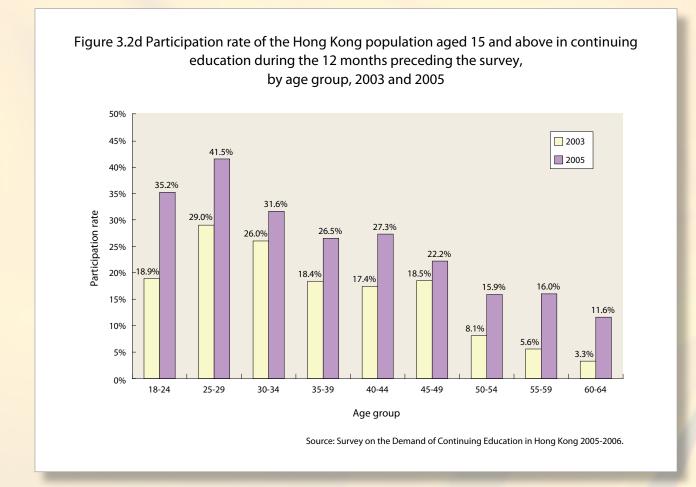
3.2.5. Lifelong Learning

In addition, some seniors continue learning as a means to expand their social contacts. A survey conducted in 2001 showed that most people aged 55 and above in Hong Kong perceived learning as a way to meet more people (82%) and to fill up time (55%).²⁷ A series of surveys conducted by The School of Professional and Continuing Education of The University of Hong Kong showed that about 12% of people aged 60-64 participated in continuing education in 2005, while the percentage in 2003 was only about 3%.²⁸ (Figure 3.2d)

As most training courses are informal, statistics on the participation rate of lifelong learning among seniors are not complete. In making an international comparison, the difference in the definition of learning should be noted. In Japan, the participation rate in

"studies or research" was about 27% for people aged 60-64 in 2001. In Australia, about 20% of people aged 60-64 participated in structured, taught learning in institutions and organizations in 2006-2007. In the United States, about 20% of people aged 66-74 took at least one adult education class in the year preceding the survey in 1999. In England and Wales, 51% of people aged 60-69 reported some learning in 2002. While the participation rate in continuing education for those aged 60-64 in Hong Kong was increasing, it seemed there was still room for an increment as suggested by the participation rates in other places.

Among people aged 55 and above in Hong Kong, practical courses were found to be the most preferred courses, followed by hobbies and interests courses in 2001.²⁷ Similarly, arts and culture, followed by commerce and business, were the most popular areas among those aged 60-64 who participated in studies and research in Japan in 2001.¹⁸ Comparing Hong Kong and Japan, the preference for study areas were similar to some extent.



3.3. Care and Support

Care and support is important to seniors, regardless of their physical condition and health status. Caregivers not only provide support in instrumental activities and personal care, but also emotional support to seniors.³¹ Nevertheless, those seniors who cannot seek social participation actively have to rely more on the supportive care provided by family members, friends and other people.

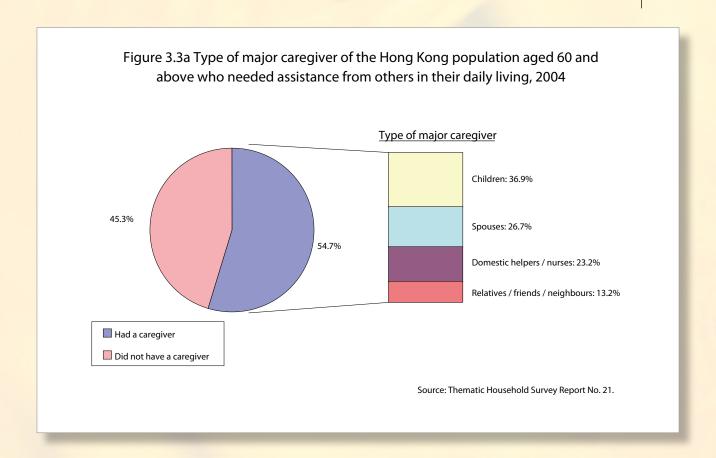
There are two types of caregivers, namely informal caregivers and formal caregivers. The former are usually family members, friends and neighbours who provide care without pay, while the latter are trained health care professionals who provide care with or without pay.

3.3.1. Informal Care Giving to Seniors

Seniors living in institutions mainly rely on formal care, whereas seniors living in domestic household rely more on informal care. According to a survey conducted by the Census and Statistics Department of Hong Kong in 2004, about 55% of the non-institutional population aged 60 and above who needed assistance had caregivers.³² Among them, about 37% and 27% of them had their children and spouse as the major caregivers respectively. Another 23% received care mainly from domestic helpers or nurses.³² (Figure 3.3a)

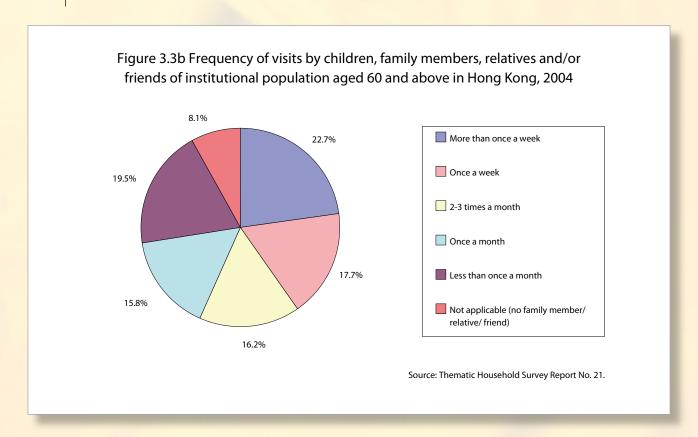
In Australia, among people aged 65 and above and receiving assistance in 2003, about 18% received assistance from partners and about 26% to 29% from children.⁷ In other countries, statistics on caregivers are measured in different units. Related statistics with the closest concept are presented here for reference. In the United States, caregivers to those aged 50 and above were likely to be taking care of their mother (about 34%), grandmother (11%) or father (10%) in 2003.³³ In the United Kingdom, the spouse was the major source of help with mobility tasks for people aged 65 and above in 2001-2002.¹⁰ It appears that it was common for spouses and children to take care of seniors.

Another form of informal care is provided through visits to seniors, including those living in domestic households and institutions. These visits are usually paid for by relatives and friends of seniors, and sometimes by volunteers.



According to the survey conducted by the Census and Statistics Department of Hong Kong in 2004, about 40% of the people aged 60 and above living in institutions were visited by their children, family members and/or friends at least once a week and another 16% were visited two to three times a month.³² (Figure 3.3b)

While Hong Kong does not have figures on family contacts with seniors living in domestic households, figures on Australia, England and the United States are presented for reference. In Australia, about 76% of people aged 65 and above were contacted at least once a week by family and friends living outside the household in 2006.⁷ In England and the United States, intergenerational contact was high. In England, about 58% of males and 64% of females aged 50 and above met their children at least weekly (excluding those without grandchildren) in 2002.¹⁰ In the United States, about 56% of grandparents aged 60 and above met their grandchildren at least weekly in 2001.³⁴



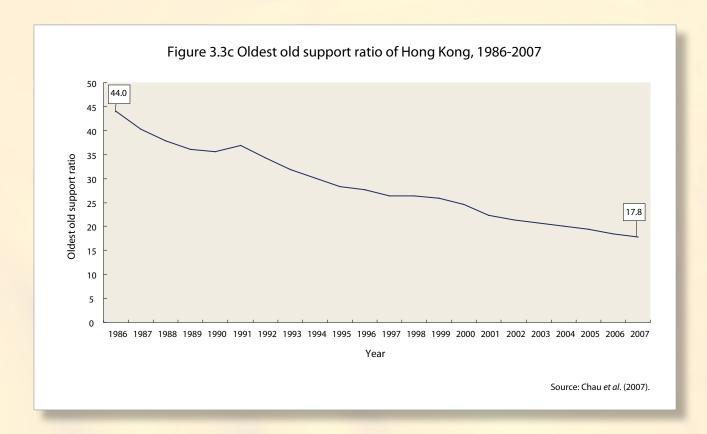
3.3.2. Support to Oldest Old

It is of particular interest to study support to the population aged 85 and above, which is defined as "oldest old". As most of the informal caregivers are aged 50-74, recent research suggested using the oldest old support ratio (the ratio of people aged 50-74 to those aged 85 and above) to provide information on the number of potential carers per person aged 85 and above.³⁵

Based on the population data, the oldest old support ratio for Hong Kong is calculated.^{36,37} Hong Kong experienced a continuous drop in oldest old support ratio in the past decades, from 44 in 1986 to 18 in 2006. This could be explained by the faster growth rate of the population aged 85 and above than that of the population aged 50-74. (Figure 3.3c).

Based on official population statistics, in 2006, the oldest old support ratio for Japan was 14; Singapore, 33; Australia, 15; the United States, 13; the United Kingdom, 13.^{38,39,40,41,42} In this regard, Hong Kong has the largest potential in developing informal caregivers when compared to other countries, except Singapore which had an extraordinary high ratio.

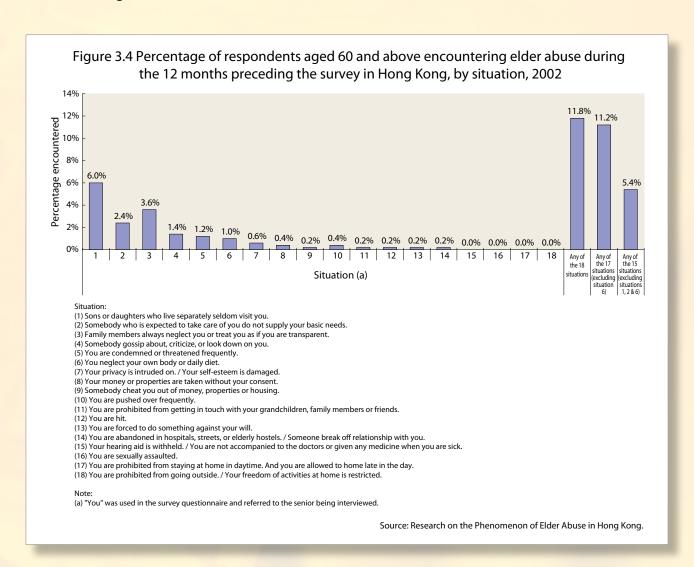
Nevertheless, the institutionalization rate of seniors in Hong Kong increased from about 6% in 1991 to 10% in 2006.^{2,3} So even though the oldest old ratio is currently still slightly higher than the other countries in the comparison (except Singapore), a continuing falling trend could have profound implications regarding institutionalization.



3.4. Abuse and Neglect

In contrast to social support, abuse and neglect pose a threat to the well-being of seniors. The World Health Organization defines abuse of the elderly (elder abuse) as "a single, or repeated act, or lack of appropriate action, occurring within any relationship where there is an expectation of trust which causes harm or distress to an older person". Elder abuse does not necessarily imply physical abuse; instead, neglect and emotional abuse are the usual causes.

Based on information collected by the Central Information System on Elder Abuse Cases, the number of newly reported elder abuse cases in Hong Kong in 2006 was 522.⁴⁴ A survey conducted by the Hong Kong Christian Service in 2002 showed that about 5% to 12% (according to different definitions) of the respondents aged 60 and above had experienced some kind of elder abuse during the 12 months preceding the survey.⁴⁵ (Figure 3.4)



International comparison is not recommended as there are many possible definitions and measurements for the surveillance of elder abuse. Also, case reporting of elder abuse is typically under-reported.⁴³ The victims may either not be willing to reveal the problem or they may not be aware of the problem. Here, international figures are presented for reference only. In Japan, while only 53 elder abuse cases were reported in 2006, survey results showed that there were at least 498 seniors who suffered mistreatment inflicted by staff at nursing care facilities nationwide in the same year.⁴⁶ In Singapore, there were 186

reported elder abuse cases in 2006.⁴⁷ In 2003, there were about 8.3 reports of abuse in 1,000 Americans aged 60 and above.⁴⁸ In the United Kingdom, about 3% of people aged 66 and above living in private households reported that they had experienced mistreatment (abuse and neglect) involving a family member, close friend or care worker during the year preceding the survey in 2006.⁴⁹

3.5. Summary

In terms of social networking, the percentage of seniors living alone in Hong Kong was in line with the global pattern, showing such percentages to be lower in Asia, but higher in Europe and North America. On the other hand, the institutionalization rate of seniors in Hong Kong has increased over the years. While the participation of seniors in formal job attachment, voluntary work and lifelong learning was relatively low in Hong Kong, the participation of seniors in care giving and social activities was comparable to other countries.

It was common that the informal caregivers to seniors were their spouse and children. According to the oldest old support ratio, Hong Kong has the largest potential in developing informal caregivers when compared with other countries, except Singapore. While the statistics on elder abuse might not be complete, the issue of elder abuse needs to be investigated further.

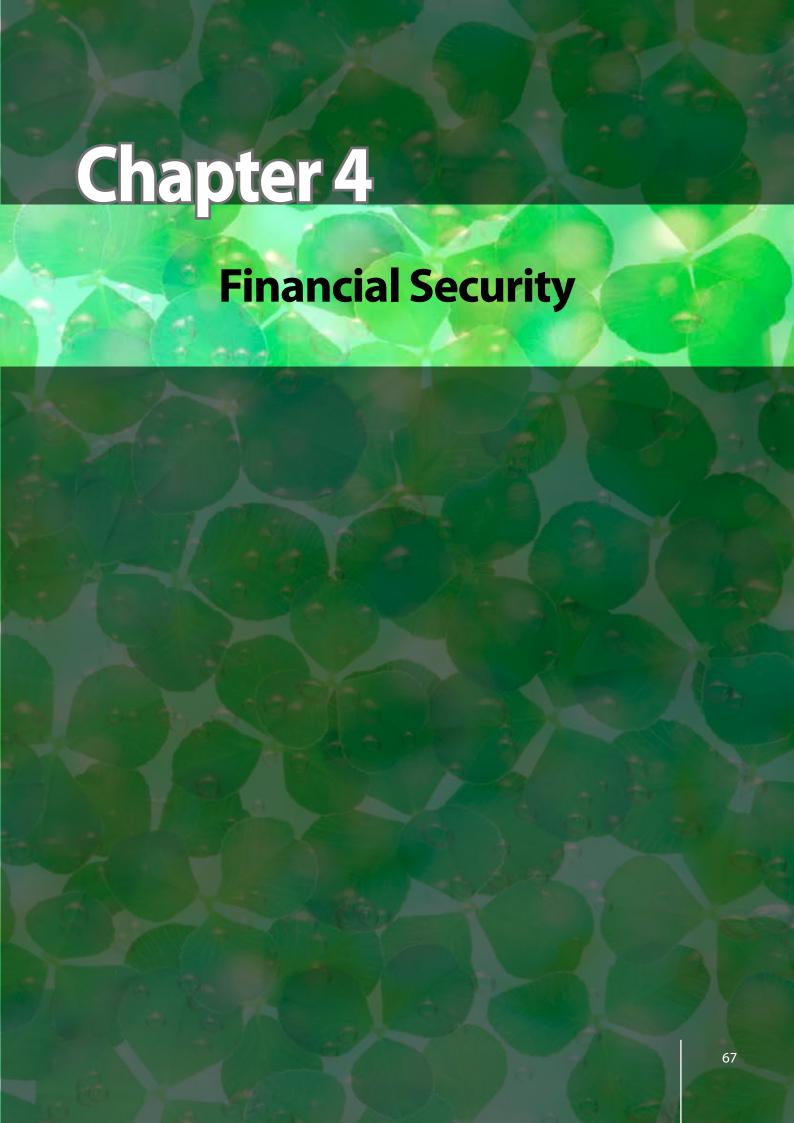
3.6. References

- 1. World Health Organization (1946). *Preamble to the Constitution of the World Health Organization* as adopted by the International Health Conference, New York, 19 June 22 July 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.
- 2. Census and Statistics Department of Hong Kong Special Administrative Region (2008). 2006 Population By-census: Thematic Report—Older Persons. Hong Kong Special Administrative Region: Government Logistics Department.
- 3. Census and Statistics Department of Hong Kong Special Administrative Region (2002). 2001 Population Census: Thematic Report—Older Persons. Hong Kong Special Administrative Region: Government Logistics Department.
- 4. Population Division, Department of Economic and Social Affairs of United Nations (2005). *Living Arrangements of Older Persons around the World*. New York: United Nations.

- 5. Statistics Bureau of Japan (2006). 2005 Population Census of Japan—Summary of First Basic Complete Tabulation Results. Available at: http://www.stat.go.jp/english/data/kokusei/2005/kihon1/00/04.htm Accessed on 31 Mar 2008.
- 6. Department of Statistics, Ministry of Trade and Industry, Republic of Singapore (2001). *Census of Population 2000 Statistical Release 5: Households and Housing*. Singapore: Department of Statistics.
- 7. Australian Institute of Health and Welfare. (AIHW). (2007). *Older Australia at a Glance: 4th Edition.* Cat. no. AGE 52. Canberra: AIHW.
- 8. United States Census Bureau. (2004). *We the People: Aging in the United States. Census 2000 Special Reports.*Washington, DC: Census Bureau.
- 9. Office for National Statistics, United Kingdom. (2005). *Social Trends No.35*. London: Office for National Statistics.
- 10. Office for National Statistics, United Kingdom. (2005). *Focus on Older People: 2005*. London: Office for National Statistics.
- 11. Census and Statistics Department of Hong Kong Special Administrative Region (2007). *Hong Kong Annual Digest of Statistics 2007*. Hong Kong: Government Logistics Department. [and back issues]
- 12. Statistics Bureau of Japan (2007). *Labour Force Survey 2006 Yearly Average Results*. Available at: http://www.stat.go.jp/english/data/roudou/154b.htm Accessed on 31 Mar 2008.
- 13. Department of Statistics, Ministry of Trade and Industry, Republic of Singapore (2007). *Yearbook of Statistics Singapore*, 2007. Singapore: Department of Statistics.
- 14. Australian Bureau of Statistics. (2007). 2007 Year Book Australia. Canberra: Australian Bureau of Statistics.
- 15. Department of Labor, Bureau of Labor Statistics, United States. (2007). *Employment Status of the Civilian Noninstitutional Population by Age, Sex, and Race.* Available at: ftp://ftp.bls.gov/pub/special.requests/lf/aa2006/aat3.txt Accessed on 31 Mar 2008.
- 16. Office for National Statistics, United Kingdom (2008). *Labour Force Survey Historical Quarterly Supplement Data (Calendar Quarters)* Available at: http://www.statistics.gov.uk/statbase/product.asp?vlnk=14365 Accessed on 31 Mar 2008.
- 17. Census and Statistics Department of Hong Kong Special Administrative Region (2003). *Thematic Household Survey Report No. 14: Time Use Pattern; Pattern of Participation in Unpaid Activities; Pattern of Participation in Social Activities; Sharing of Housework; Views on Home-makers.* Hong Kong: Government Logistics Department.
- 18. Statistics Bureau, Ministry of Internal Affairs and Communications. (2002). Summary of Results of the 2001 Survey on Time Use and Leisure Activities. Available at: http://www.stat.go.jp/english/data/shakai/2001/tokeihyo.htm Accessed on 31 Mar 2008.
- 19. Australian Government Department of Families, Community Services and Indigenous Affairs. (2005). Giving Australia: Research on Philanthropy in Australia—Australians Giving and Volunteering 2004. Canberra: Australian Government Department of Families, Community Services and Indigenous Affairs.
- 20. United States Department of Labor. (2008). *Volunteering in the United States, 2007.* Available at: http://www.bls.gov/news.release/pdf/volun.pdf Accessed on 31 Mar 2008.
- 21. Attwood C., Singh G., Prime D., Creasey R., et al. (2003). 2001 Home Office Citizenship Survey: people, families and communities. *Home Office Research Studies*, 270. Available at: http://www.communities.gov.uk/documents/communities/pdf/452422 Accessed on 31 Mar 2008.
- 22. National Volunteer & Philanthropy Centre. (2006). *NVPC Releases 2006 Individual Giving Survey Results*. Available at: http://www.nvpc.org.sg/ Accessed on 31 Mar 2008.

- 23. Census and Statistics Department of Hong Kong Special Administrative Region (2001). Special Topics Report No. 27: Casual Employment; Part-time Employment; Social-demographic, Health and Economic Profiles of Elderly People and Soon-to-be Old People. Hong Kong: Government Logistics Department.
- 24. Australian Bureau of Statistics. (2004). *Disability, Ageing and Carers: Summary of Findings*. Canberra: Australian Bureau of Statistics.
- 25. Office for National Statistics, United Kingdom (2004). *Census 2001—National Report for England and Wales. Part 2.* Available at: http://www.statistics.gov.uk/downloads/census2001/National_report_EW_Part2.pdf Accessed on 31 Mar 2008.
- 26. American Association of Retired Persons (AARP). (2001). *AARP Caregiver Identification Study*. Available at: http://www.nfcacares.org/pdfs/AARPSurveyFinal.pdf Accessed on 31 Mar 2008.
- 27. Leung A., Lui Y.H. and Chi I. (2005). Later life learning experience among Chinese elderly in Hong Kong. *Gerontology and Geriatrics Education*, 26(2): 1-15.
- 28. The School of Professional and Continuing Education of The University of Hong Kong (HKU SPACE). (2006). *Survey on the Demand of Continuing Education in Hong Kong 2005/2006.* Hong Kong: HKU SPACE.
- 29. Australian Bureau of Statistics. (2007). Adult Learning 2006-2007. Canberra: Australian Bureau of Statistics.
- 30. Manheimer R.J. (2002). Older adult education in the United States: trends and predictions. *North Carolina Centre for Creative Retirement (NCCCR) Report.* Available at: http://www.unca.edu/ncccr/Reports/older_adult_education_in_the_US.htm Accessed on 31 Mar 2008.
- 31. Cranswick K. (1997). *Canada's Caregivers* in *Canadian Social Trends—Winter 1997*. Canada: Statistics Canada.
- 32. Census and Statistics Department of Hong Kong Special Administrative Region (2005). *Thematic Household Survey Report No. 21: Social-demographic Profile, Health Status and Long-term Care Needs of Older Persons.* Hong Kong: Government Logistics Department.
- 33. National Alliance for Caregiving and American Association of Retired Persons (AARP). (2004). *Caregiving in the U.S.* Available at: www.caregiving.org/data/04finalreport.pdf Accessed on 31 Mar 2008.
- 34. American Association of Retired Persons (AARP). (2002). *The Grandparent Study 2002 Report.* Available at: http://assets.aarp.org/rgcenter/general/gp_2002.pdf Accessed on 31 Mar 2008.
- 35. Robine J.M., Michel J.P. and Herrmann F.R. (2007). Who will care for the oldest people? *British Medical Journal*, 334: 570-571.
- 36. Census and Statistics Department of Hong Kong Special Administrative Region (2008). *Hong Kong Statistics—Population*. Available at http://www.censtatd.gov.hk/showtableexcel2.jsp?tableID=002 Accessed on 31 Mar 2008.
- 37. Chau P.H., Yen E. and Woo J. (2007). Caring for the Oldest Old: "Mixing and Matching" Informal and Formal Caregiving. *British Medical Journal*. Available at: http://www.bmj.com/cgi/eletters/334/7593/570#164600 Accessed on 31 Mar 2008.
- 38. Statistics Bureau, Ministry of Internal Affairs and Communications, Japan. (2007). *Current Population Estimates as of October 1, 2006*. Available at: http://www.stat.go.jp/english/data/jinsui/2006np/index.htm Accessed on 31 Mar 2008.
- 39. Department of Statistics, Ministry of Trade and Industry, Republic of Singapore (2007). *Yearbook of Statistics Singapore*, 2007. Singapore: Department of Statistics.
- 40. Australian Bureau of Statistics. (2007). *Australian Demographic Statistics, September Quarter 2006*. Canberra: Australian Bureau of Statistics.

- 41. United States Census Bureau. (2007). *National Population Estimates—Characteristics*. Available at: http://www.census.gov/popest/national/asrh/NC-EST2006-sa.html Accessed on 31 Mar 2008.
- 42. Office for National Statistics of the United Kingdom. (2007). StatBase—Table 1: Mid-2006 Population Estimates: United Kingdom; Estimated Resident Population by Single Year of Age and Sex. Available at: http://www.statistics.gov.uk/StatBase/Expodata/Spreadsheets/D9657.xls Accessed on 31 Mar 2008.
- 43. World Health Organization. (2007). *Prevention of Elder Abuse*. Available at: http://www.who.int/ageing/projects/elder_abuse/en/ Accessed on 31 Mar 2008.
- 44. Social Welfare Department of Hong Kong Special Administrative Region (2007). *Statistics on Elder Abuse Cases, 2006.* Available at: http://www.swd.gov.hk/doc/family/en/elder%20abuse%20statistics_Jan%20to %20Dec%2006.pdf Accessed on 31 Mar 2008. Chinese.
- 45. Hong Kong Christian Service. (2004). *Research on the Phenomenon of Elder Abuse in Hong Kong*. Hong Kong: Hong Kong Christian Service.
- 46. The Yomiuri Shimbun. (2007). *Elder Abuse Underreported—Survey Finds Vast Majority of Mistreatment Cases Ignored*. Available at: http://www.globalaging.org/elderrights/world/2007/under.htm Accessed on 31 Mar 2008.
- 47. Singapore Parliamentary Debates. (2007). Elder Abuse. *Singapore Parliamentary Debates Official Reports,* Parliament No.11, vol. 83, col.215. Available at: http://www.parliament.gov.sg Accessed on 31 Mar 2008.
- 48. National Center on Elder Abuse. (2006). *Abuse of Adults Aged 60+: 2004 Survey of Adult Protective Services.*Washington, DC: National Center on Elder Abuse.
- 49. O'Keeffe M., Hills A., Doyle M., McCreadie C., Scholes S., Constantine R., Tinker A., Manthorpe J., Biggs S. and Erens B. (2007). *UK Study of Abuse and Neglect of Older People Prevalence Survey Report. Prepared for Comic Relief and the Department of Health.* Available at: http://www.elderabuse.org.uk/documents/ComicRelief-ElderAbuse-Full.pdf Accessed on 31 Mar 2008.



Financial Security

In 2002, the World Health Organization laid down a policy framework of active ageing, identifying financial security as one of the key factors to active ageing.¹ Having adequate financial resources to support daily living and social engagement is inevitably important to the physical and social well-being of seniors. More importantly, the feeling of being financially secure helps to promote the psychological well-being of seniors. In this chapter, the financial security of seniors will be explored in terms of income and expenditure analysis.

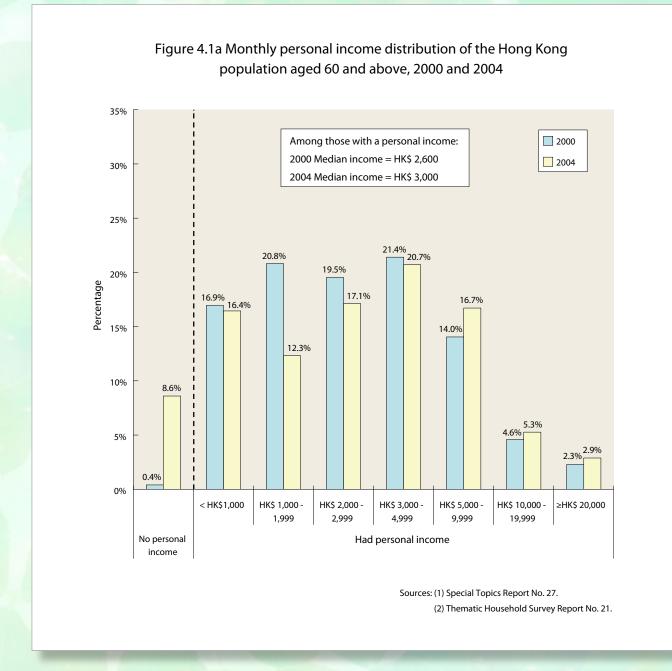
4.1. Personal Income

In a similar way to social engagement, financial resources can be sought actively or passively. Some seniors may prefer to work or invest in return for income, while some may rely on financial support from family members or social security programmes.

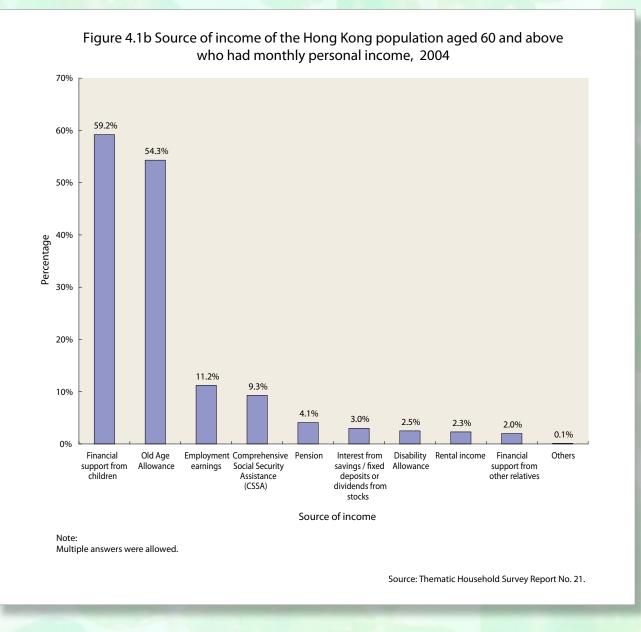
4.1.1. Personal Income

According to the survey conducted by the Census and Statistics Department of Hong Kong, almost all (99.6%) people aged 60 and above had a monthly personal income in 2000.² However, a similar survey conducted in 2004 showed that only about 91% of seniors had a monthly personal income.³ On the other hand, among those with a personal income, the median of personal income increased slightly from HK\$2,600 in 2000 to HK\$3,000 in 2004.^{2,3} (Figure 4.1a)

According to the 2004 survey, seniors received their income from multiple sources. Most (about 59%) people aged 60 and above received financial support from children. The second and third most common sources of income were Old Age Allowance (about 54%) and employment earnings (about 11%).³ (Figure 4.1b)



International comparisons of statistics on the personal income distribution of seniors are not straightforward, mainly due to differences in the definition of personal income and the purchasing power of the currency. In addition, the inclusion of financial support from family members in the personal income of seniors is not common. The situations in the United States, Australia and Singapore are presented for reference only. For easy reference, the foreign currencies mentioned in the subsequent sections are also converted to Hong Kong dollars by the average exchange rate in the corresponding years.



In the United States, about 97% of people aged 65 and above had a personal income in 2004 and the median income among those receiving an income was US\$15,193 for the whole year (or a monthly income of US\$1,266≈HK\$9,860).⁴ In Australia, about 88% of people aged 65 and above had at least a weekly individual income of AU\$160 (≈HK\$646) in 2001 and the mean gross income among those having a positive income was AU\$311 per week (or a monthly income of AU\$1,244≈HK\$5,025).⁵

As for the source of income, financial assistance from children was the main source of income for seniors in Singapore. It was found that in 2000, about 75% of people aged 65 and above in Singapore relied on financial assistance from children as their main source of

income; whilst the other two most common major sources of income were income from employment/business (10%) and rental property, savings, interest and dividends (9%).⁶ In this regard, the sources of income were quite similar in Hong Kong and in Singapore.

On the other hand, in Western countries such as the United States and Australia, seniors were more likely to rely on government support as a source of income. In the United States, the most common sources of income for people aged 65 and above who had an income in 2004 were social security (91%), property income (57%) and retirement income (36%).⁴ Only less than 0.5% of seniors received financial assistance from friends or relatives outside the household and less than 0.1% of seniors reported income from child support.⁴ In Australia, about 78% of people aged 65 and above who were not in the labour force relied on government income support payment as the main source of income in 1999-2000.⁵

It should be noted that the apparently low percentage of seniors receiving Old Age Allowance in Hong Kong was likely due to the difference in target population of the survey (aged 60 and above) and the eligible population for Old Age Allowance (aged 65 and above). In the next section, the social security system for seniors in Hong Kong will be discussed in more detail.

4.1.2. Social Security

Among the various sources of income of seniors in Hong Kong, Comprehensive Social Security Assistance (CSSA), Old Age Allowance and Disability Allowance fall under the non-contributory social security system provided by the Government. The CSSA serves as a safety net to provide financial support to populations in need, based on satisfaction of the residence criteria and the income and assets tests. The CSSA provides higher standard rates for seniors. As of March 2008, the monthly CSSA rates for those aged 60 and above range from HK\$2,235 to HK\$4,040 depending on their level of disability and living arrangement (single person or family member). In addition, the recipients are entitled to special grants to meet their special needs, including fares to hospital/clinic and medically recommended diets and appliances.

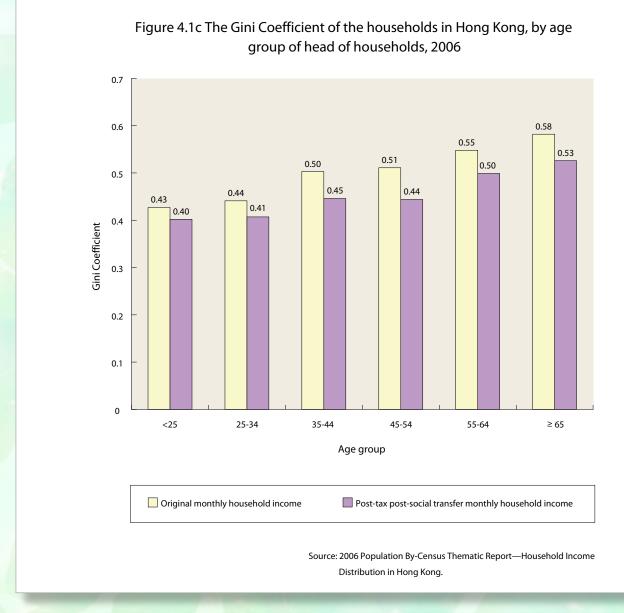
The Old Age Allowance, which includes the Normal Old Age Allowance (NOAA) and the Higher Old Age Allowance (HOAA), provides a monthly allowance to Hong Kong residents aged 65 and above. NOAA is a means tested monthly allowance at a fixed rate of HK\$625 (as of March 2008) for those aged 65 to 69. HOAA is a non-means tested monthly allowance at a fixed-rate of HK\$705 (as of March 2008) for those aged 70 and above. The Disability Allowance provides a monthly allowance to Hong Kong residents who are severely disabled at a fixed-rate of HK\$1,170 or HK\$2,340 (as of March 2008) depending on the level of disability.

As of the end of 2007, 78% of people aged 65 and above (or 89% of those aged 70 and above) receive public financial assistance in the form of CSSA, Old Age Allowance or Disability Allowance.⁸

4.1.3. Gini Coefficient

The Gini coefficient is often used to indicate disparity in income, with a value of zero indicating perfect equality and a value of one indicating complete inequality. That is, the greater the Gini coefficient, the more likely it is that inequality exists. To study income inequality among seniors, the Gini coefficient is calculated based on household income. In 2006, the Gini coefficient for households headed by a person aged 65 and above in Hong Kong was 0.582, which was higher than those for the younger age groups (ranging from 0.427 to 0.548). Even taking into account the effect of taxation and social benefits, the Gini coefficient for those households headed by a person aged 65 and above in Hong Kong was 0.526, which was still higher than those for the younger age groups (ranging from 0.402 to 0.499). (Figure 4.1c)

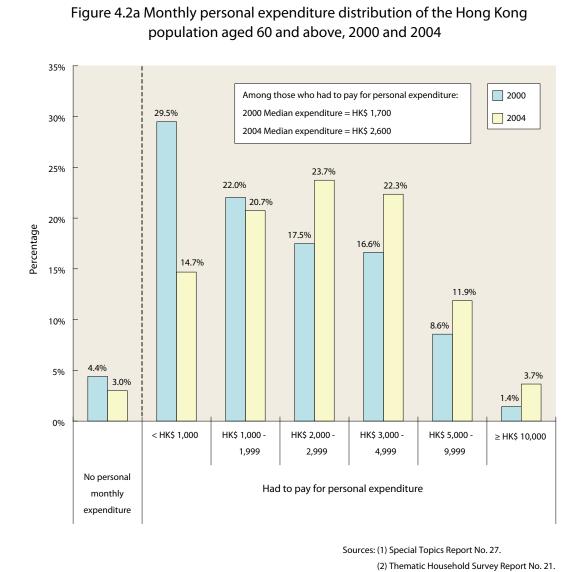
In Japan and the United States, Gini coefficients on individual income are available. In Japan, it was estimated that the Gini coefficients of the aged population (individuals aged 65 and above) was about 0.338 in 2002, which was more or less the same as that for the population aged 25 to 59 (0.316).¹⁰ In the United States, the Gini coefficient for the population aged 65 and above was 0.474 in 2006, which was more or less the same as that for the population aged under 65 (0.498).¹¹



When compared with the younger population, there seems to be a slightly larger income disparity among the senior population in Hong Kong. Nevertheless, the Census and Statistics Department of Hong Kong emphasized that Gini coefficients might not fully take into account the effects of taxation and social benefits on the reduction of income inequality, even after adjustment. Hence, Gini coefficients have to be interpreted with care. In addition, as the comparison of income inequality may be subject to considerable limitations owing to differences in data sources, income definitions and compilation methods, international comparisons should be made with caution.⁹

4.2. Expenditure

Personal expenditure can be broadly classified into two types, namely expenditure on basic necessities of life and expenditure on lifestyle choices. The availability of financial resources affects the pattern of personal expenditure, yet it is not the only factor. Personal lifestyle preference and more importantly the self-perceived adequacy of financial resources also play a role in affecting the expenditure pattern. Nevertheless, statistics on these subjective factors are sparse or unavailable.

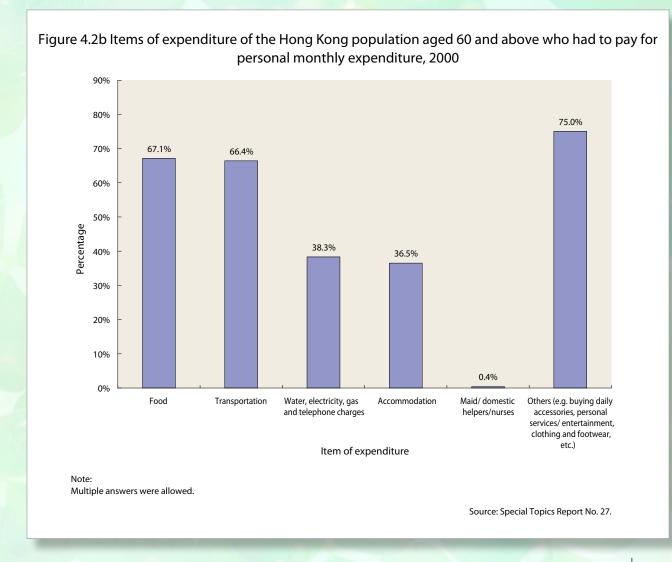


74

4.2.1. Personal Expenditure

According to the surveys conducted by the Census and Statistics Department of Hong Kong in 2000 and 2004, almost all (over 95%) people aged 60 and above had to pay for their own personal expenses. As with the increase in personal income, the median monthly expenditure of seniors also increased from HK\$1,700 in 2000 to HK\$2,600 in 2004.^{2,3} Nevertheless, the gap between median monthly personal income and median monthly expenditure narrowed from a surplus of HK\$900 in 2000 to a surplus of HK\$400 in 2004. (Figure 4.2a)

In 2000, among seniors who had to pay for their own monthly expenses, most had to pay regular expenses for food (67%) and transportation (66%). About 37% of seniors who had to pay for their own monthly expenses paid for their accommodation.² (Figure 4.2b)



While the 2000 survey did not reveal information on health care expenses, another household survey conducted by the Census and Statistics Department of Hong Kong in 2005 showed that among people aged 65 and above who had to pay their own monthly expenses, about 94% had to pay for food, 90% for transportation, 80% for medical expenses and 46% for accommodation. Nevertheless, it should be noted that statistics collected through the 2000 and the 2005 surveys might not be comparable as the two surveys were from different series of statistical surveys.

Hong Kong is one of the few places which collected data on the expenditure of seniors. For other countries, most surveys concerning expenditure used the household as the unit, making analysis on individual seniors difficult.¹³ In addition, international comparisons are not straightforward due to differences in purchasing power of currencies.

Household expenditure figures of households headed by a person aged 65 and above in the United States are presented for reference only. In 2004, the average annual expenditure of such households was US\$31,104 (or a monthly average of US\$2,592≈ HK\$20,186). The largest share of expenditure was on housing (roughly about 33% of expenditure), followed by transportation (16%), food (14%) and health care (13%).¹⁴ Among health care expenditures, over half (55%) was on health insurance.¹⁴

Based on the mean annual income before tax and the mean annual expenditure of these households in the United States, the income-to-expenditure ratio was about 1.12 (=US\$34,988/US\$31,104) in 2004.¹⁴ Compared with Hong Kong, the income-to-expenditure ratio, based on median monthly personal income and median monthly expenditure, was about 1.00 (=HK\$3,500/HK\$3,500) in 2005.¹² While these ratios were not directly comparable, they give a rough idea of the situations of the two places.

4.2.2. Medical Expenses

As many people are concerned with the ability of seniors to pay for medical expenses, the affordability of this expenditure component will be discussed in more detail. The amount of out-of-pocket health care expenses depends on several factors, including the charges for the services received, the utilization rates of health care services and the amount of health insurance coverage.

In Hong Kong, public health care services for Hong Kong residents are largely subsidized by the Government. As of March 2008, the fees for outpatient services (including general out-patient services, specialist out-patient services, and accident and emergency services) range from HK\$45 to HK\$100 per attendance, while an additional amount of HK\$10 may be charged for each drug item. As for public in-patient services, the fees are HK\$100 per day (plus an admission fee of HK\$50 for the first day of admission) for general acute beds and HK\$68 for other non-acute beds. For those with financial difficulties, a fee waiver can be granted. Nevertheless, others have to pay for these services, though at a low charge.

Those preferring more health care choices have to pay even more, ranging from hundreds to thousands of dollars. For example, the charge for a first class bed in a private hospital can be as high as HK\$3,900 per day; in addition, doctor consultations and all other services/supplies, including medicine and therapeutic treatments, are charged separately. While seniors have a choice over the services, they have to become financially secure first. This could be achieved either by allocating a budget for out-of-pocket expenses or by having adequate health insurance coverage.

According to the survey conducted by the Census and Statistics Department of Hong Kong in 2005, among the population aged 65 and above who paid for their medical expenses, the median of monthly medical expenses was about HK\$500.¹² A rough calculation (the median of medical expenses divided by the median monthly income, HK\$3,500) showed that the out-of-pocket health care expenses would be approximately 14% of their monthly income.

Detailed statistics on health care expenditure (excluding health insurance premiums) of seniors in the United States are available. However, it should be noted that these figures include expenses paid by the seniors themselves and/or by their families. Hence, they should be used as reference only. In 2003, about 96% of people aged 65 and above in the United States made some expenditure on health care. Among those with some health care expenses, the median out-of-pocket expenses for health care in the year was U\$\$861 (or a monthly average of U\$\$72≈HK\$559), which was much smaller than the mean (U\$\$1,547 a year, or a monthly average of U\$\$129≈HK\$1,004). This was because a small proportion of people, in particular those Medicare beneficiaries without supplemental insurance coverage, had extremely large expenses. It appeared that for the United States, health care expenses could also vary a lot, especially with different types of health insurance coverage.

In Singapore, health care expenses vary depending on the type of services provided and health insurance coverage. Here, the fees and charges of the medical services of Singapore are presented for reference. As of March 2008, the consultation fees for Singapore citizens aged 65 and above range from \$\$4 (\$\approx\$HK\$\$22) at polyclinics (public clinics) to as high as \$\$55 (\$\approx\$HK\$\$303) at private clinics; and medication is charged at \$\$0.6 to \$\$3 (\$\approx\$HK\$\$3 to HK\$\$17) at polyclinics per week.\(^{17}\) As for in-patient services, the fees range from as low as \$\$\$20 (\$\approx\$HK\$\$110) per day for a bed in an open ward in restructured hospitals (public hospitals) to as high as at least \$\$\$280 (\$\approx\$HK\$\$1,542) per day for a single bed ward in private hospitals.\(^{17}\) Nevertheless, the large variation can be narrowed by insurance coverage.

4.3. Health Insurance

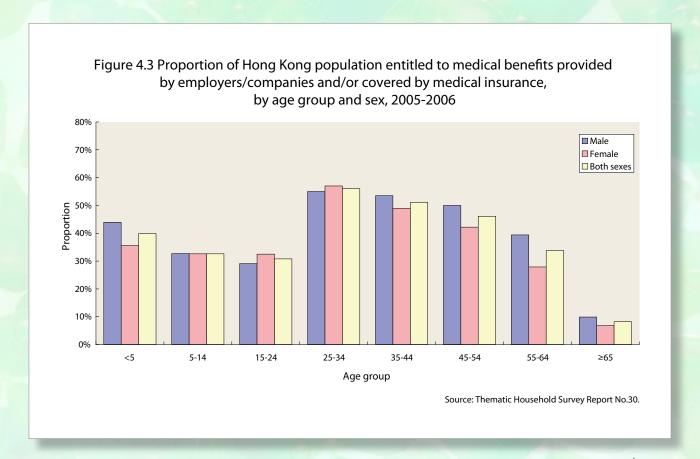
Insurance is meant to secure the unexpected or unaffordable financial needs of the insured. For seniors, sudden but huge acute medical care financial needs, as well as long-lasting but moderate long-term care financial needs would probably be the most unexpected and unaffordable financial burden to them. Traditionally, retirement income security was based on the three-pillar model—social security, pensions and personal savings—recommended by the World Bank. While these three pillars can support regular daily expenses, they might not be adequate to address financial needs in health care expenses. In view of this, health insurance can take a role in financing seniors, and is sometimes referred to as the fourth pillar of income security.

Health insurance programs can be provided publicly or privately. Some governments provide health insurance coverage, including contributory and non-contributory programs, for their senior residents. For private health insurance coverage, contributors include the insured themselves, their employers and/or employers of their family members. For places with public health insurance, private health insurance serves as complementary, supplementary, or even duplicate protection to the insured; whereas for places without public health insurance, private health insurance becomes the primary protection to the insured.

For example, in Singapore, there are a large variety of health insurance schemes. MediShield serves as a contributory national medical insurance scheme, helping the residents up to the age of 85 in meeting the costs of treatment for serious illnesses or

prolonged hospitalisation. On top of MediShield, private insurers offer private medical insurance schemes to serve as catastrophic medical insurance plans, offering additional benefits. In addition, ElderShield, a government-launched scheme, serves as an affordable insurance scheme to assist people who become severely disabled.²⁰ As of the end of 2004, 82% and 60% of seniors in their 60s and 70s respectively were covered under MediShield and similar protection plans.²¹

In Hong Kong, there is no public health insurance program for the population, including seniors. Health insurance programs are all privately administrated and usually cover medical consultation (including medication) and hospitalization costs. According to the survey conducted by the Census and Statistics Department of Hong Kong in 2005-2006, only about 8% of people aged 65 and above were covered by self-purchased medical insurance and/or medical benefits supplied by employers/companies.²² This rate was far less than those for the other age groups. However, the lower percentage of seniors under health insurance coverage compared to other age groups only implies that fewer seniors are under protection; the figure cannot reflect the level of protection to each insured person. Therefore, care must be taken in interpreting figures on health insurance coverage. (Figure 4.3)



In the United States, there is a nearly universal health insurance program for seniors—Medicare. There are various plans under Medicare. People aged 65 and above are covered by Part A (hospital insurance) without paying a premium if they or their spouse paid Medicare taxes while working.²³ People receiving Social Security or Railroad Retirement Board will automatically be covered by Part B (medical insurance) when they reach the age of 65.²³ In 2001, Medicare had already covered 96% of people aged 65 and above.²⁴ Nevertheless, as the out-of-pocket expenses of Medicare could be high and prescription drugs are not covered, about 69% of seniors had more than one source of health insurance in 2001.²⁴ In addition to Medicare, 32% of seniors had employment-based health insurance coverage and 27% had individually-purchased or top-up health insurance coverage.²⁴ Taking all types of health insurance together, only less than 1% of seniors in the United States were not covered by health insurance in 2001.²⁴

In Australia, there is a universal health care system—also named Medicare, which aims to ensure all Australians have access to free or low-cost medical, optometrical and hospital care while being free to choose private health services and, in special circumstances, allied health services.²⁵ Meanwhile, private health insurance gives a voluntary option to all Australians for private funding of their hospital and ancillary health treatment. In 2004-2005, while most (91%) people aged 65 and above were entitled to various government health concession schemes, about 47% of seniors were covered by private health insurance.²⁶ It can be deduced that some seniors were covered by both government health concessions as well as private health insurance.

While there are universal health insurance plans (plus other health financing schemes) in the United States and Australia, seniors still utilize private health insurance in their mode of financing. It appears that the situation in Hong Kong is quite different from the United States and Australia. One possible explanation might be that the costs of health care services in Hong Kong are so heavily subsidized by the Government that people do not see the need for insurance coverage.

It should be noted that there are other modes of financing health care expenditure, such as the health care saving account, the details of which are outside the scope of this book.

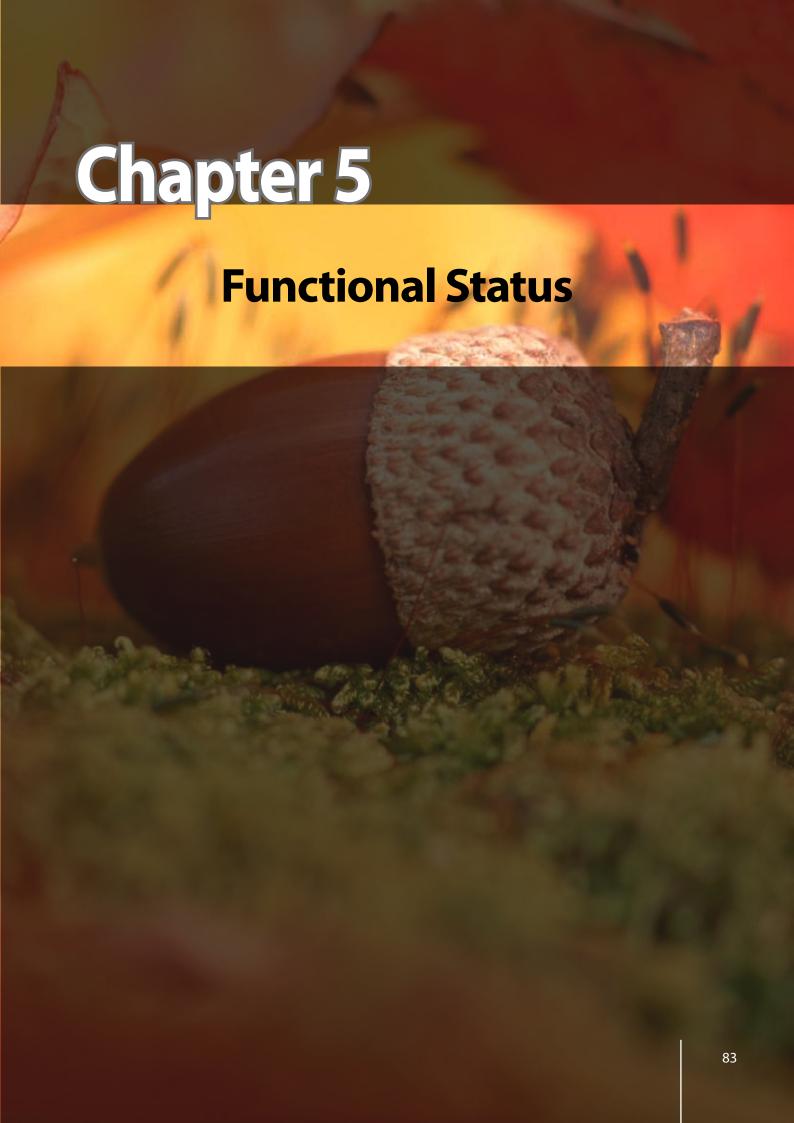
4.4. Summary

In Asian economies such as Hong Kong and Singapore, financial assistance from children was the most common source of income for seniors. On the other hand, seniors in the United States and Australia relied more on social security as the main source of income. The most common monthly expenditure items of seniors in Hong Kong were food and transportation. Nevertheless, statistical comparisons of the personal income and expenditure of seniors are not straightforward, mainly due to differences in definitions and the purchasing power of currencies. Public health insurance programs for seniors are available in other countries but not in Hong Kong.

4.5. References

- 1. World Health Organization (2002). Active Ageing: A Policy Framework. Geneva: World Health Organization.
- 2. Census and Statistics Department of Hong Kong Special Administrative Region. (2001). Special Topics Report No. 27: Casual Employment; Part-time Employment; Social-demographic, Health and Economic Profiles of Elderly People and Soon-to-be Old People. Hong Kong: Government Logistics Department.
- 3. Census and Statistics Department of Hong Kong Special Administrative Region (2005). *Thematic Household Survey Report No. 21: Social-demographic Profile, Health Status and Long-term Care Needs of Older Persons.* Hong Kong: Government Logistics Department.
- 4. United States Census Bureau. (2005). *Annual Demographic Survey March Supplement, 2005 Data*. Available at: http://www.bls.census.gov/cps/asec/2005/sdata.htm Accessed on 31 Mar 2008.
- 5. Australian Bureau of Statistics. (2003). *Census of Population and Housing, Ageing in Australia 2001*. Canberra: Australian Bureau of Statistics.
- Statistics Singapore. (2001). Singapore Census of Population 2000: Statistical Release 1: Demographic Characteristics. Available at: http://www.singstat.gov.sg/pubn/census.html#c2000adr Accessed on 31 Mar 2008.
- Social Welfare Department of Hong Kong Special Administrative Region. (2008). Social Security. Available at: http://www.swd.gov.hk/en/index/site_pubsvc/page_socsecu/sub_socialsecurity/#CSSAsr Accessed on 31 Mar 2008.
- 8. Social Welfare Department of Hong Kong Special Administrative Region. (2008). Special tabulation on the number of public financial assistance as of end of December 2007.
- 9. Census and Statistics Department of Hong Kong Special Administrative Region (2007). 2006 Population By-Census Thematic Report—Household Income Distribution in Hong Kong. Hong Kong: Government Logistics Department.
- 10. Fukawa T. (2006). Income distribution in Japan based on IRS 1987-2002. *The Japanese Journal of Social Security Policy*, 5(1): 27-34.
- 11. United States Census Bureau. (2007). *Annual Social and Economic (ASEC) Supplement (2006 Income)*. Available at: http://pubdb3.census.gov/macro/032007/perinc/toc.htm Accessed on 31 Mar 2008.

- 12. Special tabulation extracted from *Thematic Household Survey 2005* by Research Office, Food and Health Bureau of Hong Kong Special Administrative Region.
- 13. HelpAge International. (2002). State of the World's Older People 2002. London: HelpAge International.
- 14. United States Department of Labor. (2007). *Standard Tables: Consumer Expenditure Survey 2004.* Available at: http://www.bls.gov/cex/2004/Standard/age.pdf Accessed on 31 Mar 2008.
- 15. Hospital Authority of Hong Kong Special Administrative Region. (2007). *Fees and Charges for Public Health Care Services*. Available at: http://www.ha.org.hk/ Accessed on 31 Mar 2008.
- Machlin S.R. and Zodet W.M. (2006). Out-of-Pocket Health Care Expenses by Age and Insurance Coverage, United States, 2003. Statistics Brief #126. Agency for Healthcare Research and Quality, Rockville, Md. Available at: http://www.meps.ahrq.gov/mepsweb/data_files/publications/st126/stat126.pdf Accessed on 31 Mar 2008.
- 17. Contact Singapore. (2007). *Moving to Singapore-Healthcare*. Available at: http://www.contactsingapore. org.sg/home/index.php/eng/moving_to_singapore/healthcare Accessed on 31 Mar 2008.
- 18. World Bank. (1994). Averting the Old-Age Crisis: Policies to Protect the Old and Promote Growth. New York: Oxford University Press.
- 19. American Association of Retired Persons (AARP). (2001). *Beyond 50: A Report to the Nation on Economic Security.* Available at: http://www.aarp.org/research/economy/trends/aresearch-import-296-D17389. html Accessed on 31 Mar 2008.
- 20. Central Provident Fund Board of the Singapore Government. (2001). *MediShield Scheme*. Available at: http://mycpf.cpf.gov.sg/ Accessed on 31 Mar 2008.
- 21. Committee on Ageing Issues. (2006). *Report on the Ageing Population*. Available at: http://www.mcys.gov.sg/successful_ageing/report/CAl_report.pdf Accessed on Mar 31 2008.
- 22. Census and Statistics Department of Hong Kong Special Administrative Region (2007). *Thematic Household Survey Report No.30: Health Status of Hong Kong Residents; Doctor Consultation; Hospitalization; Dental Consultation; Provision of Medical Benefits by Employers / Companies and Coverage of Medical Insurance Purchased by Individuals; Health Status of Institutional Residents and their Utilization of Medical Services.* Hong Kong: Government Logistics Department.
- 23. Centers for Medicare and Medicaid Services. (2008). *Medicare and You 2008*. Available at: http://www.medicare.gov Accessed on 31 Mar 2008.
- 24. Employee Benefit Research Institute. (2003). *Health Insurance and the Elderly.* Available at: http://www.ebri.org/pdf/publications/facts/0803fact.pdf Accessed on 31 Mar 2008.
- 25. Medicare Australia. (2007). *About Medicare*. Available at: http://www.medicareaustralia.gov.au/public/register/index.shtml Accessed on 31 Mar 2008.
- 26. Australian Bureau of Statistics. (2006). *National Health Survey: Summary of Results*. Canberra: Australian Bureau of Statistics.



Functional Status

While functional decline is commonly misbelieved to be an unavoidable part of ageing, it actually can be prevented or slowed down at any age.¹ Given mild levels of disabilities or impairment, seniors are still able to live independently. However, if physical or mental disabilities are severe, seniors' independence will be threatened.¹ This will in turn affect the physical, social and psychological well-being of seniors. In this chapter, the level of functional status of seniors and its influence on the daily living of seniors will be explored.

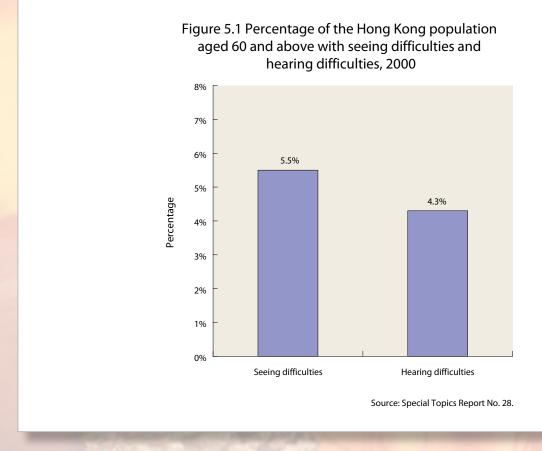
5.1. Sensory Functions

During the ageing process, some people might experience deterioration in seeing and/ or hearing abilities. These sensory deteriorations do not necessarily imply total sensory loss because they can be tackled with specialized visual and hearing aids. Nevertheless, if such deterioration results in total sensory loss, independency in performing activities of daily living as well as the social relationships of seniors will be very much affected.

5.1.1. Seeing

According to the survey conducted by the Census and Statistics Department of Hong Kong, about 6% of people aged 60 and above had seeing difficulties in 2000.² For the purpose of that survey, people with seeing difficulties referred to those who (i) had been diagnosed as being blind or having low vision under medical assessment tests or (ii) perceived themselves as having long-term difficulty in seeing with one eye or both whether with or without correcting glasses/contact lenses.² The proportion of people aged 60 and above with seeing difficulties was much higher than those for younger age groups (ranging from 0.1% to 1.0%). (Figure 5.1)

Also based on self-reported status, 28% of people aged 65 and above in the United Kingdom reported difficulties with their eyesight in 2001, and 17% of people aged 65 and above in the United States reported trouble seeing (with or without glasses/contact lenses) in 2004.^{3,4} In Australia, about 3% of people aged 65 and above reported complete



or partial blindness in 2004-2005.⁵ Based on visual acuity data, about 23% of Singaporean Chinese aged 61 to 79 had visual impairment (blindness or low vision in one eye or both eyes) in 1997-1998.⁶

These figures seem to suggest the problem of visual impairment among seniors in Hong Kong might be less prominent than the other studied places (except Australia). However, it should be noted that comparisons across studies may not be appropriate due to the variation in the selection of the study population, mode of data collection (self-reported versus measurement) and definitions of various visual impairments.

5.1.2. Hearing

The survey conducted by the Census and Statistics Department of Hong Kong also revealed that about 4% of people aged 60 and above had hearing difficulties in 2000.²

For the purpose of that survey, people with hearing difficulties referred to those who (i) had been diagnosed with a hearing impairment under medical assessment tests or (ii) perceived themselves as having long-term difficulty in hearing.² Again, the proportion of people aged 60 and above with hearing difficulties was the highest when compared with other age groups (ranging from 0.2% to 1.4%).² (Figure 5.1)

As for self-reported hearing impairment, 32% of people aged 65 and above in the United Kingdom reported difficulties with their hearing (with or without a hearing aid) in 2001, and 40% of people aged 65 and above in the United States reported trouble hearing (without a hearing aid) in 2004.^{3,4} In Australia, about 33% of people aged 65 and above reported complete or partial deafness in 2004-2005.⁵ In general, it was estimated that by the age of 80 approximately 50% of the population would be affected by age-related hearing loss, which might be partly due to genetic factors.⁷

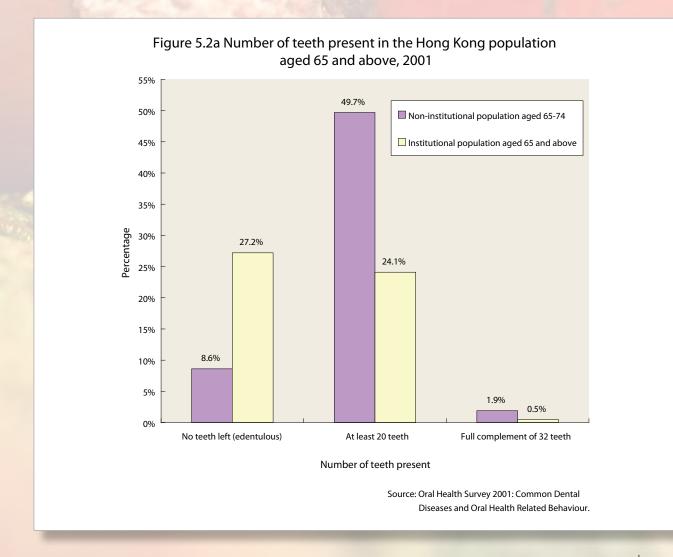
The exceptionally low prevalence of hearing difficulties among seniors in Hong Kong, as compared to those in the other studied places, calls for attention in interpreting the results. As with the case of visual impairment, the prevalence of hearing impairment could be affected by the selection of the study population, mode of data collection (self-reported versus measurement) and definitions of various hearing impairments. Results from the study based on self-reported data and those based on measurement could differ significantly. Based on self-reported data, only 4% of people aged 60 and above in Hong Kong reported having hearing difficulties in 2000.² On the other hand, based on measurement, it was found that in 2004, about 43% of people aged 60 and above in Hong Kong had mild hearing loss and about 37% had moderate to severe hearing loss.⁸ Hence, different studies might not be comparable.

5.2. Oral Functions

Oral functions, including chewing and speaking, could affect the physical, social and psychological well-being of seniors. For example, malnutrition and communication problems might result from chewing and speaking difficulties respectively. The presence of teeth is one of the essential factors for proper oral functions. While tooth loss by itself is non-life-threatening, tooth loss to a certain extent may cause various degrees of impaired functions. Although tooth loss is often misperceived as being part of ageing, it is actually largely preventable. Hence, oral hygiene should be promoted.

According to a survey conducted by the Department of Health of Hong Kong, seniors in Hong Kong experienced different levels of tooth loss. In 2001, about 9% of the non-institutional population aged 65-74 had no teeth at all (edentulous) and about 50% had at least 20 teeth.⁹ For the institutional population aged 65 and above, about 27% had no teeth at all and about 24% had at least 20 teeth.⁹ The prevalence of tooth loss appears to be more prominent in the institutional population. This might be because the institutional population studied is generally older than the non-institutional population studied. (Figure 5.2a)

As figures based on the institutional population were rare, only figures based on the non-institutional population are used for international comparison. In Japan, about 10% of the non-institutional population aged 65-74 were edentulous and about 50% had at least 20 permanent teeth in 2005. In the United Kingdom, about 36% of the non-institutional population aged 65-74 were edentulous and about 29% had at least 21 permanent teeth in 1998. In the United States, the proportion of edentulous people aged 65-74 was about

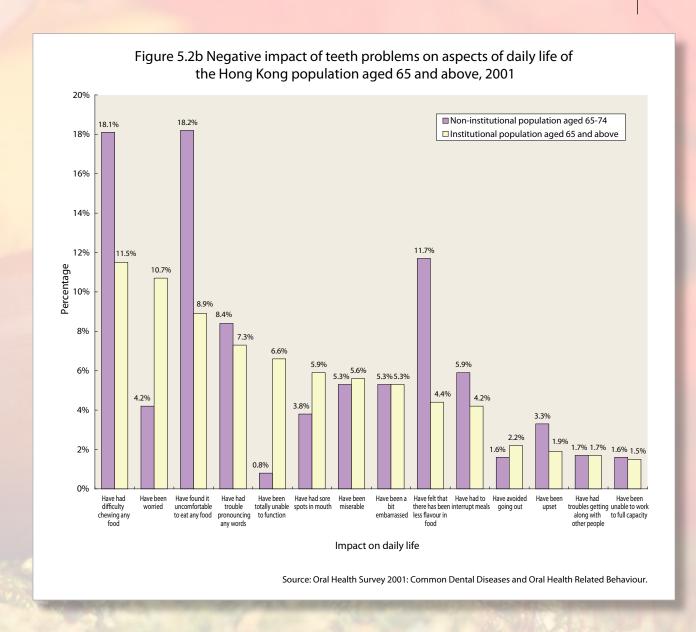


21% in 2004.⁴ In Australia, based on adult patients at the beginning of a course of public dental care, the proportion of people aged 65 and above with no teeth at all was 18% in 2001-2002.¹² In Singapore, about 30% of Chinese residents aged 65-74 were edentulous in 1995.¹³

The edentulous prevalence among the non-institutional population aged 65-74 in Hong Kong was about the same as that in Japan, but much lower than those in the United States and the United Kingdom. In addition, a high proportion of the population in Hong Kong and Japan had at least 20 teeth. This might suggest the oral health status of seniors in Hong Kong and Japan was better than that in the United States and the United Kingdom. For Australia, as the studied population was patients attending dental care, they might represent a population with different characteristics (for example, those who were more concerned about their health status; or those who had existing dental problems). Hence, such figures should not be used for comparison with other presented figures. Comparison with the situation in Singapore will not be conducted as the gap in reference time points is too large.

The number of teeth present is just an illustration of the problem of tooth loss. Its consequences, such as the negative impact on daily life, are more important. Negative impacts included chewing difficulties, trouble in pronouncing, as well as other physical and psychological aspects of daily life. According to the 2001 survey conducted by the Department of Health of Hong Kong, about 18% of the non-institutional population aged 65-74, and 12% of the institutional population aged 65 and above reported chewing difficulty as a result of their oral health condition. Also, about 8% of the non-institutional population aged 65-74 and 7% of the institutional population aged 65 and above reported trouble in pronouncing any words. (Figure 5.2b)

Statistics on functional limitations as a result of poor oral health are sparse. Among the chosen places for study, only the United Kingdom published similar data for the non-institutional population aged 55 and above. It was shown that in 1998, about 11% of people aged 55 and above had functional limitations, including trouble in pronouncing words and feeling that their sense of taste had worsened.¹¹ While the target population was a younger group, the results generally agreed with those of Hong Kong.



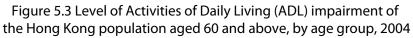
5.3. Activities of Daily Living (ADL)

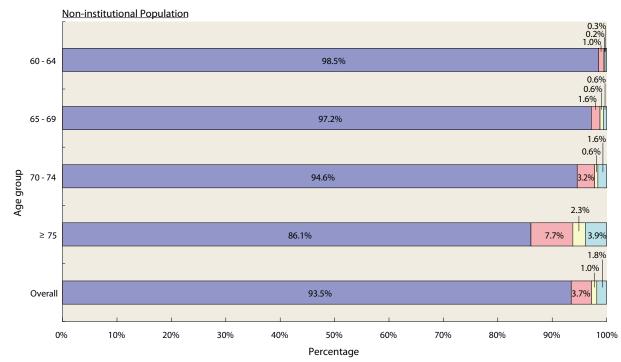
The ability of seniors to perform daily activities independently is largely affected by the level of functional status. As suggested by the World Health Organization, disability and functioning are outcomes of interaction between health conditions and contextual factors (including external environmental factors and internal personal factors). ¹⁴ In other words, how disability is experienced by the individual depends on the interaction of various factors including one's physical, mental and psychological status. For example, an individual not being able to walk independently may be caused by physical impairment, the fear of falling and/or inertia. Here, only the outcomes of such interactions will be discussed.

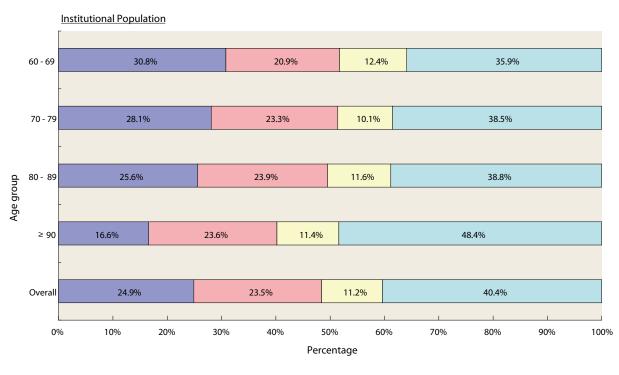
The basic Activities of Daily Living (ADL) are widely used to measure the ability of seniors to independently perform basic daily tasks in selected areas, namely dressing, eating, ambulating, toileting and hygiene. For different studies, different specific items from these areas will be adapted for the assessment.

For the survey conducted by the Census and Statistics Department of Hong Kong in 2004, six specific items were chosen to describe the level of ADL of seniors. These items were (i) transferring between a bed and a chair, (ii) mobility, (iii) dressing, (iv) eating, (v) toileting and (vi) bathing. Among the non-institutional population aged 60 and above, most (about 94%) reported that they could perform all six tasks independently. On the other hand, only 25% of the institutional population aged 60 and above reported the ability to perform all six tasks independently. The percentages of the population, both non-institutional and institutional, that could perform all six tasks independently decreased with age. Comparing the non-institutional and institutional population, even for the same age group. This might suggest that seniors who were more dependent sought institutional care. (Figure 5.3)

Similar items were selected to describe the level of ADL among seniors in Japan. It was found that in 2002 about 84% of the non-institutional population aged 66 and above reported the ability to perform all six selected tasks (bathing, dressing, eating, getting out of bed or up from or sitting down in a chair, going outside and toileting) independently. In the United States, ADL limitations were described in terms of bathing, dressing, getting in and out of bed or a chair, using the toilet and eating. In 2003, about 68% of the Medicare beneficiaries aged 65 and above (both institutional and non-institutional) did not have any ADL limitations. In Singapore, using the Barthel Index, a study conducted in 1992-1993 showed that about 83% of the non-institutional population aged 60 and above were independent in performing all ten selected tasks (bowel, bladder, grooming, toilet use, feeding, transfer, mobility, dressing, steps and bathing). Focusing on mobility limitations, about 17% of the population aged 65 and above in the Untied Kingdom reported limitations in at least one of the selected activities (going out of doors and walking down the road, getting up and down stairs and steps, getting around the house, getting to the toilet and getting in and out of bed) in 2001.







■0 ADL impairment ■1-2 ADL impairments ■3-4 ADL impairments ■5-6 ADL impairments

Note:

The 6 ADLs included are transferring between a bed and a chair, mobility, dressing, eating, toileting and bathing.

Source: Thematic Household Survey Report No. 21.

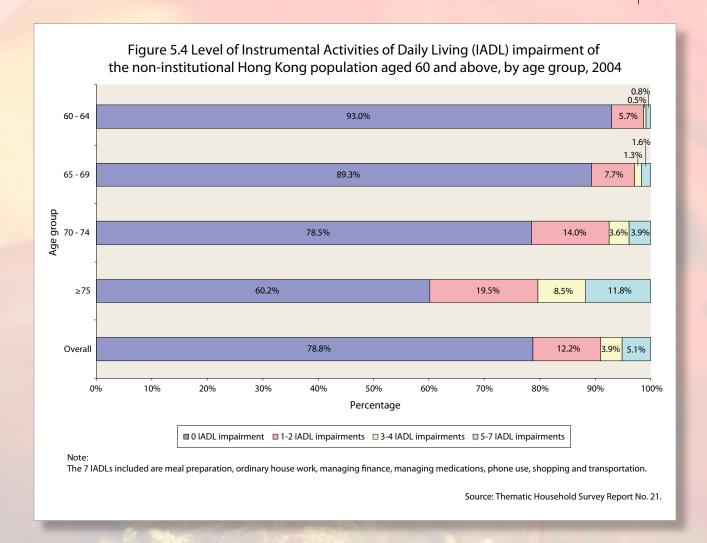
These figures suggest that the proportion of the aged non-institutional population without any ADL limitations in Hong Kong is higher than that in Japan. Nevertheless, international comparison was not conducted for other places due to the great difference in definition of ADL limitations, coverage and/or reference time point.

5.4. Instrumental Activities of Daily Living (IADL)

Apart from the basic ADL, the Instrumental Activities of Daily Living (IADL) is another commonly used measure to describe the functional status of seniors. While basic ADL focuses on fundamental functioning, IADL focuses on more complicated tasks, such as cooking and communicating, which integrate proper physical and mental functioning.

For the survey conducted by the Census and Statistics Department of Hong Kong in 2004, IADL was described with respect to seven items, namely (i) meal preparation, (ii) ordinary house work, (iii) managing finance, (iv) managing medications, (v) phone use, (vi) shopping and (vii) transportation. Among the non-institutional population aged 60 and above, about 79% could perform all seven tasks independently. As IADL tasks were more complicated in nature, it was not surprising that this percentage was moderately lower than the percentage of the population that could perform all the ADL tasks. IADL was less commonly assessed for the institutional population. Hence, such information was not available for the institutional population in Hong Kong. (Figure 5.4)

A similar 8-item IADL scale was used in Singapore in 2004. It was found that about 62% of the non-institutional population aged 60 and above did not have any limitations in performing the IADL tasks (doing laundry, doing housework, grocery shopping, preparing meals, getting to places outside the house, managing money, taking medications and using a telephone). For Japan, in 2002, about 80% of the non-institutional population aged 66 and above could perform all four selected IADL tasks (shopping, using a telephone, travelling and doing light housework) independently. For the United States, a 5-item IADL scale (preparing meals, managing money, shopping for groceries or personal items, performing light or heavy housework and using a telephone) was used in a study conducted in 2003. About 55% of the Medicare beneficiaries aged 65 and above (both institutional and non-institutional) were free of any IADL limitations. ¹⁷



Hong Kong thus appeared to have a higher proportion of aged non-institutional population with no IADL limitations compared with Singapore. On the other hand, as there were many discrepancies in the selected IADL items and coverage in the studies of Japan and the United States, such figures may not be directly comparable to those of Hong Kong.

Besides basic ADL and IADL, there are different types of ADL that assess higher-level functional status in different areas. For example, intellectual ADL assesses the abilities to deal with reading and writing, such as filling in forms and reading newspapers or books; while social ADL assesses the abilities to maintain relationships with people and the community, such as visiting friends and initiating conversation with younger people.²⁰ As intellectual and social ADL are still developing tools, it is expected that their usage will be more popular in future.

5.5. Summary

These figures seem to suggest that vision and hearing problems among seniors in Hong Kong might be less prominent than the other countries studied. The prevalence of being edentulous among seniors in Hong Kong appeared to be also much lower than in the Western countries. In addition, both the proportion of the senior population without any ADL limitations and the proportion without any IADL limitations appeared to be higher than in some of the countries studied.

5.6. References

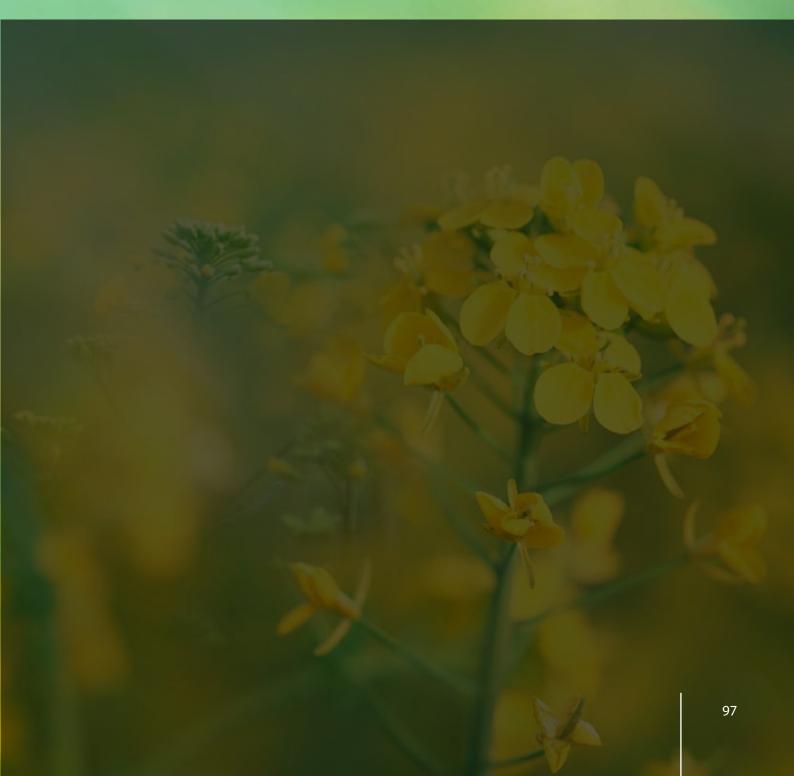
- 1. World Health Organization (2002). Active Ageing: A Policy Framework. Geneva: World Health Organization.
- Census and Statistics Department of Hong Kong Special Administrative Region. (2001). Special Topics Report No. 28: Persons with Disabilities and Chronic Diseases. Hong Kong: Government Logistics Department.
- 3. Office for National Statistics of the United Kingdom. (2003). *Living in Britain 2001—Supplementary Report: People Aged 65 and Over.* Available at: http://www.statistics.gov.uk/lib2001/section3760.html Accessed on 31 Mar 2008.
- 4. Federal Interagency Forum on Aging-Related Statistics (2006). *Older Americans Update 2006: Key Indicators of Well-being*. Washington, DC: U.S. Government Printing Office.
- 5. Australian Bureau of Statistics. (2006). *National Health Survey: Summary of Results*. Canberra: Australian Bureau of Statistics.
- Saw S.M., Foster P.J., Gazzard G. and Seah S. (2004). Causes of blindness, low vision, and questionnaireassessed poor visual function in Singaporean Chinese adults: The Tanjong Pagar Survey. *Ophthalmology*, 111: 1161-1168.
- 7. Van Laer L. and Van Camp G. (2001). Genes in the ear: what have we learned over the last years? *Scandinavian Audiology*, 30(2 Suppl. 53): 44-53.
- 8. Institute of Human Communicative Research, The Chinese University of Hong Kong. (2005). *Synopsis: Hearing Problems of Older Adults in Hong Kong.* Available at: http://www.ihcr.cuhk.edu.hk/eng/research/pdf/synopsis_Eng.pdf Accessed on 31 Mar 2008.
- 9. Department of Health of Hong Kong Special Administrative Region. (2002). *Oral Health Survey 2001: Common Dental Diseases and Oral Health Related Behaviour.* Hong Kong: Department of Health.
- Ministry of Health, Labour and Welfare of Japan. (2007). Statistical Tables of the Survey of Dental Diseases (2005) Part 1. Available at: http://www.mhlw.go.jp/topics/2007/01/dl/tp0129-1d.pdf Accessed on 31 Mar 2008.
- 11. Office for National Statistics (2000). *Adult Dental Health Survey: Oral Health in the United Kingdom 1998*. London: The Stationery Office.
- Brennan D.S. and Spencer A.J. (2004). Oral Health Trends among Adult Public Dental Patients. AIHW Cat. No. DEN127. Canberra: Australian Institute of Health and Welfare (Dental Statistics and Research Series No. 30).

- 13. Loh T., Ow R.K., Neo J., Khoo J. and Lim L.P. (1996). Tooth loss and coronal caries of elderly residents in Singapore. *Community Dentistry and Oral Epidemiology*, 24(4): 300-301.
- 14. World Health Organization (2002). *Towards a Common Language for Functioning, Disability and Health: The International Classification of Functioning, Disability and Health.* Geneva: World Health Organization.
- 15. Census and Statistics Department of Hong Kong Special Administrative Region (2005). *Thematic Household Survey Report No. 21: Social-demographic Profile, Health Status and Long-term Care Needs of Older Persons.* Hong Kong: Government Logistics Department.
- 16. Schoeni R.F., Liang J., Bennett J., Sugisawa H., Fukaya T. and Kobayashi E. (2005). Trends in old-age functioning and disability in Japan: 1993-2002. *TRENDS Working Paper Series 05-03*. Available at: http://www.psc.isr.umich.edu/pubs/pdf/tr05-3.pdf Accessed on 31 Mar 2008
- 17. Centers for Medicare and Medicaid Services of the United States. (2003). *The Characteristics and Perceptions of the Medicare Population*. Available at: http://www.cms.hhs.gov/mcbs/ Accessed on 31 Mar 2008
- 18. Chan K.M., Pang W.S., Ee C.H., Ding Y.Y. and Choo P. (1999). Functional Status of the elderly in Singapore. Singapore Medical Journal, 40(10): online. Available at: http://www.sma.org.sg/smj/4010/articles/4010a4. htm Accessed on 31 Mar 2008
- 19. Ng T.P., Niti M., Chiam P.C. and Kua E.H. (2006). Physical and cognitive domains of the Instrumental Activities of Daily Living: validation in a multiethnic population of Asian older adults. *Journal of Gerontology: Medical Sciences*, 61A(7): 726-735.
- 20. Matsubayashi K., Ho H.K., Okumiya K., Wada T., Ishine M., Wada C., *et al.* (2005). Comprehensive geriatric assessment for community-dwelling elderly in Asia compared with those in Japan: I. Singapore. *Geriatrics and Gerontology International*, 5: 99-106.



Chapter 6

Health Status



Health Status

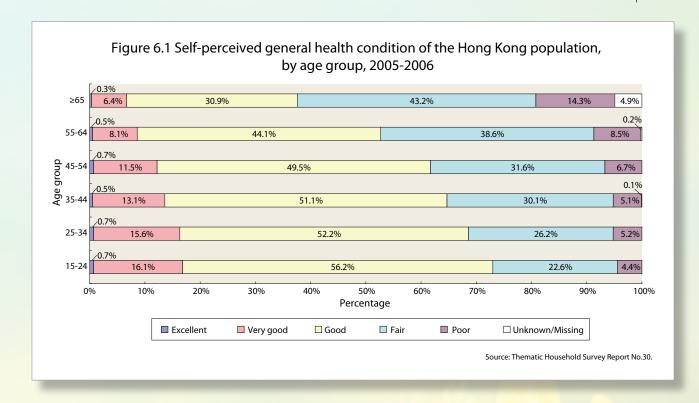
Health refers to physical, mental and social well-being as defined by the World Health Organization.¹ Maintaining a good physical and mental health status is an important component in an active ageing framework.² While some physical and mental conditions (for example, dementia) are associated with the ageing process, many illnesses and conditions (for example, cardiovascular diseases and lung cancer) can be largely prevented by living a healthy lifestyle throughout the course of life. In Chapter 2, the lifestyle of seniors in Hong Kong was discussed. In this chapter, the physical and mental health status of seniors will be explored.

6.1. Self-rated Health Status

While health status can be reflected by objective measurements on specific conditions, it can also be self-assessed by the individuals themselves. Self-reported health status is a commonly used subjective measure to describe the general health and well-being of an individual. It is a complex combination of many factors, including observed morbidity, health expectations and social and cultural context.³ Also, it has been shown to be a powerful, independent predictor of their future health care use and survival.⁴

According to the survey conducted by the Census and Statistics Department of Hong Kong in 2005-2006, about 0.3% of people aged 65 and above reported excellent health, 6% very good health, 31% good health, 43% fair health and 14% poor health.⁵ The proportion of people who reported good-to-excellent health status decreased with age. This proportion dropped from 73% for those aged 15-24 to 38% for those aged 65 and above. (Figure 6.1)

Self-rated health status is not only determined by real differences in health, but also the differences in the reporting behaviour of the individuals according to different norms and expectations.³ Therefore, in international comparisons, the absolute figure of the measure should not be emphasized. Instead, a comparison across different groups in the same place would be more meaningful.



The United States and Australia also used the same 5-point self-rated health status scale as Hong Kong. In the United States, about 75% of people aged 65 and above reported good-to-excellent health in 2006, while the proportion for those aged 18-64 was as high as 90%.⁶ In Australia, the proportion of people who reported good-to-excellent health in 2004-2005 decreased from 93% for those aged 15-24 to 67% for those aged 65 and above.⁷

In Japan and Singapore, other 5-point self-rated health status scales were used. In 2004, about 12% of people aged 65 and above in Japan reported good health, 13% fair, 40% average, 19% not so good and 4% poor; while the distribution for the general population was respectively 25%, 17%, 40%, 10% and 2%. In Singapore, the proportion of people who reported very good or good health in 2001 decreased gradually from 88% for those aged 18-24 to 45% for those aged 75 and above (another 48% moderate and 7% bad or very bad). Using a 3-point scale, it was found that in the United Kingdom, the proportion of people who reported good health in 2001 decreased from 92% for those aged 5-9 to 23% for those aged 85 and above. 10

It was consistent that in all the places studied, including Hong Kong, many older people did have a positive view of their health status. Nevertheless, the proportion of people with a positive view decreased with age, suggesting higher possibility of illness and disability when one aged.

6.2. Chronic Illnesses

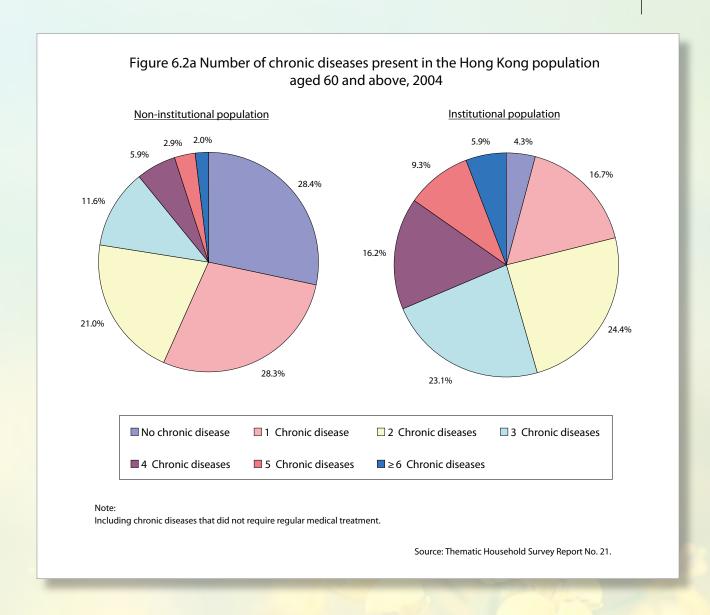
An important effect of chronic diseases is limitation in functional abilities,² which in turn affects one's independence and autonomy. Hence, prevention and postponement of chronic illnesses is an essential part of active ageing.² Nevertheless, in cases where some chronic illnesses are already present, the aim of active ageing is to reduce or minimize the disabilities caused by these illnesses.

6.2.1. Multi-morbidity

Although many people misperceive that chronic illnesses must come together with the ageing process, there are people who are free of any chronic illness when they age. According to the survey conducted by the Census and Statistics Department of Hong Kong in 2004, about 28% and 4% of the non-institutional and institutional populations aged 60 and above respectively reported not having any chronic illness.¹¹ (Figure 6.2a)

For the non-institutional population aged 60 and above, 28% reported one chronic illness, 21% two and 22% three or more. On the other hand, 17% of the institutional population aged 60 and above reported one chronic illness, 24% two and 55% three or more. These figures indicate that multi-morbidity (having more than one chronic illness) was common (79%) in the institutional population, whereas less than half (43%) of the non-institutional population had a multi-morbidity condition. It appears that multi-morbidity was more common in the institutional population, yet it should be noted that such an observation might be affected by the difference in the age composition of the two populations. (Figure 6.2a)

In the United Kingdom, about 46% of the population aged 60 and above in private households reported having limiting long-term illness in 2001, whereas the proportion was about 93% for the population aged 60 and above in communal establishments. It appears that the proportion of seniors in Hong Kong who had long-term illnesses was larger. However, it should be noted that the definition adopted by the Hong Kong survey included milder chronic diseases that did not require regular medical treatment, which might or might not be limiting activities of seniors. In Australia, almost all people aged 65



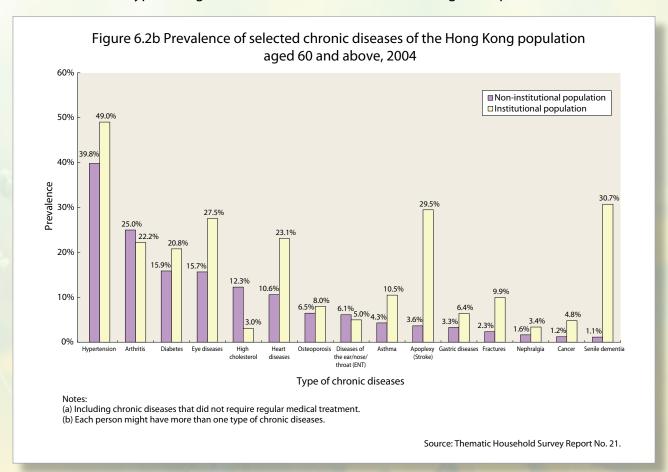
and above (99.7%) had at least one long term condition in 2004-2005.⁷ However, as the definition of "long term condition" included not only chronic illnesses but also functional limitations, international comparison might not be appropriate.

Based on actual measurement, it was found that about 86% of the non-institutional population aged 65-74 in Singapore had diabetes, hypertension and/or high total blood cholesterol in 2004. In other words, no more than 14% were free of any chronic illness. Despite the differences in the age of the studied population, the situation in Hong Kong seemed to be better.

6.2.2. Prevalence of Common Chronic Illness

Hypertension was the most common chronic illness among seniors in Hong Kong. According to the survey conducted by the Census and Statistics Department of Hong Kong in 2004, about 40% and 49% respectively of the non-institutional and institutional populations aged 60 and above had hypertension.¹¹ In the non-institutional population aged 60 and above, the prevalence of arthritis (25%) and diabetes (16%) was also relatively high. In the institutional population aged 60 and above, arthritis (22%) and diabetes (21%) were also common.¹¹ In addition, there were chronic illnesses, including dementia (31%), stroke (29%) and eye diseases (28%), with an even higher prevalence rate among the institutional population.¹¹ The high prevalence of these illnesses in the institutional population might be because people with these chronic conditions were more likely to need assistance in daily living. (Figure 6.2b)

As the above figures were based on subjective views of the respondents, they might not necessarily respond to medical diagnoses. Hence, care should be taken in interpreting these types of figures. With this caveat in mind, a rough comparison across different



studies was attempted. As most of the surveys were conducted on the non-institutional population, the following prevalence rates refer to those of the non-institutional population unless otherwise stated.

Similar to the situation in Hong Kong, hypertension was the most prevalent chronic disease among seniors in the United States. In 2006, about 53% of the population aged 65 and above had been told on two or more visits to doctors or other health professionals that they had hypertension.⁶ In Australia, while hypertension was the second most prevalent chronic disease in 2004-2005, its prevalence rate among the population aged 65 and above was as high as 39%.⁷ On the other hand, the prevalence rate of hypertension was surprisingly low (11%) among the population aged 65 and above in the United Kingdom in 2003.¹⁰ Even for an Asian population, Japan, about 39% of the population aged 60 and above had been told by a doctor that they had hypertension in 2000.¹³ These figures suggest that the prevalence of hypertension in Hong Kong was lower than that in the United States, and was comparable to those in Australia and Japan, yet it was higher than that in the United Kingdom. Using blood pressure measurements, the prevalence rate of hypertension among the population aged 60-69 in Singapore was about 56% in 2004.¹⁴ Nevertheless, it should be noted that this figure might not be comparable to the self-reported data.

Arthritis was the most prevalent chronic disease among seniors in Australia. Nearly half (49%) of the population aged 65 and above in Australia reported having this condition in 2004-2005.⁷ In 2006, about 49% of the population aged 65 and above in the United States had been told by a doctor or other health professionals that they had some form of arthritis.⁶ On the other hand, only about 18% of the population aged 65 and above in the United Kingdom reported having arthritis in 2003.¹⁰ While Hong Kong had a lower prevalence than the United States and Australia, its prevalence (25%) was still much higher than that in the United Kingdom.

As for diabetes, the prevalence rate among the population aged 65 and above was about 14% in Australia in 2004-2005 and about 8% in the United Kingdom in 2003.^{7,10} In 2006, about 18% of the population aged 65 and above in the United States had been told by a doctor or other health professionals that they had diabetes.⁶ These figures suggest that the prevalence of diabetes among seniors in Hong Kong was higher than that in the United Kingdom, while it was more or less the same as those in Australia and the United States. Based on blood tests, the prevalence rate of diabetes mellitus among the population aged 60-69 in Singapore was about 29% in 2004.¹⁴ Combining medical

treatment history and measurements of blood glucose level, the prevalence rate of (probable) diabetes among the population aged 60 and above in Japan was about 31% in 2002.¹⁵ While the prevalence rate of diabetes in Hong Kong was lower than those in these Asian populations, caution must be taken that the difference might be caused by the different estimation methods.

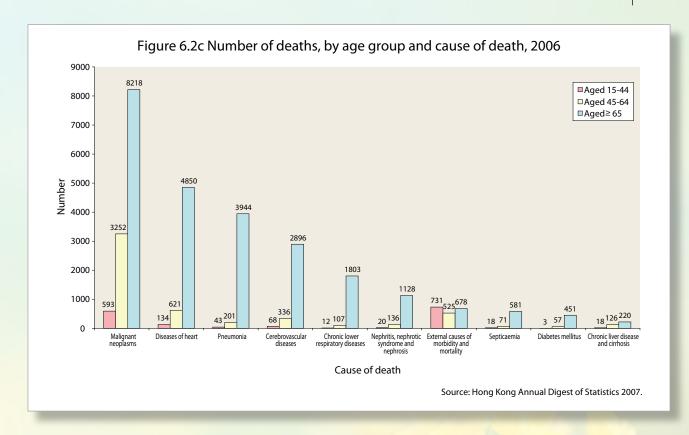
In Hong Kong, the prevalence of heart diseases was not high. In 2004, the prevalence of heart diseases among the non-institutional population aged 60 and above in Hong Kong was about 11%,¹¹ which was much lower than those in the other places. In the United Kingdom, the prevalence of coronary heart disease, one type of heart diseases, among the population aged 65 and above was about 15% in 2003.¹⁰ In 2006, about 31% of the population aged 65 and above in the United States had been told by a doctor or other health professionals that they had heart disease.⁶ For coronary heart disease only, the prevalence rate was as high as about 22%.⁶ From historical data, the prevalence rate of heart diseases among the population aged 65 and above in Japan was 12% in 1999.¹⁶ This seemingly lower prevalence rate than Hong Kong might be caused by the difference in reference at the time of the study. Nevertheless, while Hong Kong enjoyed a moderately low prevalence rate of heart diseases, more effort could still be made to keep this rate as low as possible.

6.2.3. Mortality Rate of Common Chronic Illness

Some chronic illnesses and conditions only lead to functional disability, but some might lead to more serious adverse effects or even death.

In 2006, the three leading causes of death for the population aged 65 and above in Hong Kong were malignant neoplasms (cancer), diseases of the heart, and pneumonia respectively.¹⁷ While these causes were also common in other age groups, the ranking of these leading causes of death of the senior population was quite different from that of the younger population. (Figure 6.2c)

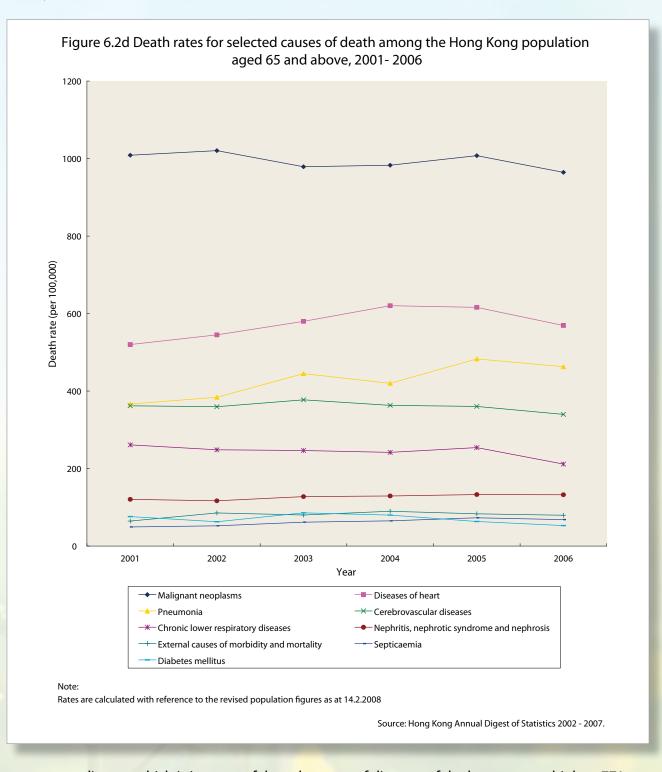
In 2006, the mortality rate from cancer was 964 per 100,000 people aged 65 and above. In 2006, the mortality rates from diseases of the heart, pneumonia and cerebrovascular diseases (stroke) were respectively 569, 463 and 340 per 100,000 people aged 65 and above. While the mortality rates from cancer and stroke were quite stable over the



years 2001 to 2006, there was an increasing trend in the mortality rates from diseases of the heart and pneumonia. This increase seems to suggest that people were not aware of their role in the prevention of these life-threatening diseases. By adopting a healthy lifestyle, such as doing exercises and not smoking, many chronic illnesses could actually be prevented. (Figure 6.2d)

Similar to the situation in Hong Kong, cancer was the leading cause of death among seniors in Japan, Australia and the United Kingdom. The mortality rates from cancer among those aged 65 and above were about 976 per 100,000 in Japan in 2005, 1,056 per 100,000 in Australia in 2005 and 1,223 per 100,000 in the United Kingdom in 2004. In the United States, although cancer was only the second leading cause of death among seniors in 2005, its mortality rate was as high as 1,056 per 100,000. The mortality rate from cancer in Hong Kong was substantially lower than those in Australia, the United Kingdom and the United States, while it was slightly lower than that in Japan.

Diseases of the heart ranked as the leading cause of death among seniors in the United States in 2005, with a mortality rate of about 1,443 per 100,000 people aged 65 and above.²¹ In Japan, Australia and the United Kingdom, diseases of the heart ranked second in the causes of death among seniors. The mortality rate from diseases of the heart was 585 per 100,000 in Japan in 2005.¹⁸ In Australia, the mortality rate from ischaemic heart



disease, which is just one of the subgroups of diseases of the heart, was as high as 771 per 100,000 people aged 65 above in 2005.¹⁹ Similarly, in the United Kingdom, the mortality rate from ischaemic heart disease was as high as 958 per 100,000 people aged 65 and above in 2004.²⁰ The mortality rate from diseases of the heart in Hong Kong was much lower than those in the United States, Australia and the United Kingdom, while it was slightly lower than that in Japan.

While pneumonia was the third leading cause of death among seniors in Hong Kong, it was less common in other places. In 2005, the mortality rates from pneumonia among people aged 65 and above were 400 per 100,000 in Japan and 146 per 100,000 in the United States. In the United Kingdom, the mortality rate from pneumonia was 336 per 100,000 people aged 65 and above in 2004. In Australia, the mortality rate from influenza and pneumonia among the population aged 65 and above was as low as 65 per 100,000 in 2005. The mortality rate from pneumonia in Hong Kong was the highest among the places studied.

While stroke ranked as the fourth leading cause of death among seniors in Hong Kong, it ranked at third place in the other places studied. The mortality rates from stroke among those aged 65 and above were 456 per 100,000 in Japan in 2005, 403 per 100,000 in Australia in 2005, 337 per 100,000 in the United States in 2005 and 586 per 100,000 in the United Kingdom in 2004. 18,19,21,20 The mortality rate from stroke among seniors in Hong Kong was much lower than those in Japan, Australia and the United Kingdom, while it was similar to that in the United States. Despite this, the reasons for the lower mortality rate in Hong Kong have to be explored. Also, the caring and service needs of stroke survivors in Hong Kong should be addressed.

As cause-specific mortality rates among seniors in Singapore were not readily published, the ranking based on the number of deaths in the whole population is presented here for reference. In 2006, the four leading causes of death were cancer, heart and hypertensive diseases, pneumonia, and stroke.²² Such a ranking pattern was similar to that in Hong Kong.

Cause-specific mortality rates vary with age and sex, even within the senior population. In the above paragraphs, only an overview is presented. Interested parties should refer to the cited references for a more detailed breakdown of the statistics.

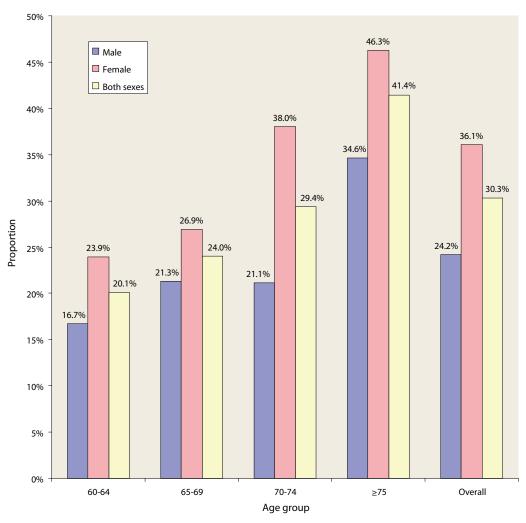
6.3. Cognitive Status

Apart from physical status, cognitive status also contributes largely to the independency and well-being of seniors. Stroke and dementia are common conditions that lead to cognitive impairment. Although cognitive impairment is not life-threatening, there are implications for the caring and service needs of seniors with these conditions.

6.3.1. Cognitive Impairment

According to the survey conducted by the Census and Statistics Department of Hong Kong in 2005, about 30% of the population aged 60 and above were subject to a certain level of cognitive impairment (based on Abbreviated version for Memory Inventory for Chinese (AMIC) and Mini-Mental State Examination (MMSE), with adjustments for education levels). The proportion of seniors with cognitive impairment was higher in females than males, regardless of age groups.²³ (Figure 6.3a)

Figure 6.3a Proportion of the Hong Kong population aged 60 and above with positive results in the cognitive screening tests, by age group and sex, 2005



Note:

The screening test was based on combination of Abbreviated version for Memory Inventory for Chinese (AMIC) and Mini-Mental State Examination (MMSE), with adjustment for education level. For details, please refer to data source.

Source: Thematic Household Survey Report No.28.

Using a MMSE score of 23 or below as a cut-off value for cognitive impairment, the prevalence of cognitive impairment (unadjusted for education level) was estimated for the United Kingdom, Singapore and Japan. In the United Kingdom, the prevalence of cognitive impairment among the population aged 75 and above was about 18% during the period 1995-1999.²⁴ In Singapore, about 30% of the population aged 60 and above (excluding those physically or mentally incapacitated to participate) had cognitive impairment as of 2003-2004.²⁵ Historical data show that in 1991, about 22% of the population aged 65 and above in Japan (excluding those with a medical history of stroke and/or severe vision/hearing impairment) had cognitive impairment.²⁶ Based on combined immediate and delayed recall tests, it was found that about 13% of the population aged 65 and above in the United States had moderate or severe memory impairment in 2002.²⁷ As the definition of cognitive impairment and the age group of the studied population were different, international comparison was not attempted.

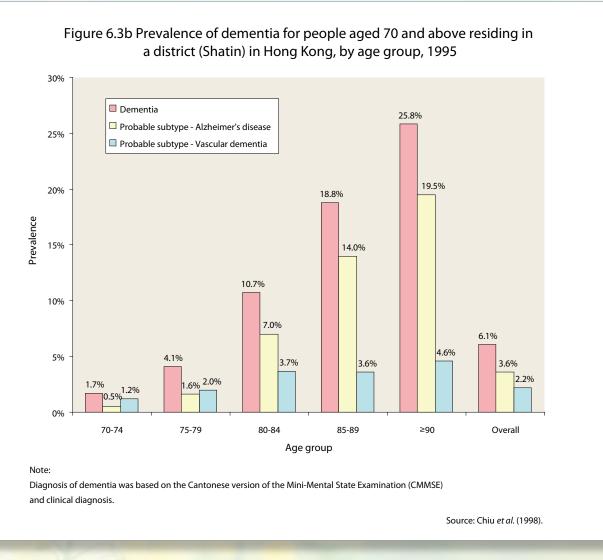
6.3.2. Dementia

Dementia is a group of symptoms that are caused by structural and chemical changes in the brain. Two of the most common sub-types of dementia are Alzheimer's disease, which accounts for over half of all dementia cases, and vascular dementia.²⁸

As discussed in an earlier section, the prevalence of dementia in Hong Kong based on reported data was respectively about 1% and 31% for the non-institutional population and institutional population aged 60 and above in 2004.¹¹ (Figure 6.2b)

Based on clinical diagnoses, some researchers found that the prevalence of dementia was about 6% among the population aged 70 and above (in one district of Hong Kong) in 1995. ²⁹ This prevalence was 5% among the non-institutional population and 17% among the institutional population.²⁹ For both the non-institutional and institutional populations, the prevalence of dementia increased with age. Analyzed by sub-types of dementia, it was found that about 4% of the studied population probably had Alzheimer's disease and 2% had vascular dementia.²⁹ (Figure 6.3b)

In other countries, the prevalence of dementia was determined with different tools. In the United Kingdom, based on the Expert Delphi Consensus, the latest estimates of prevalence of dementia (as of 2007) increased from 1% for those aged 65-69, to 33% for

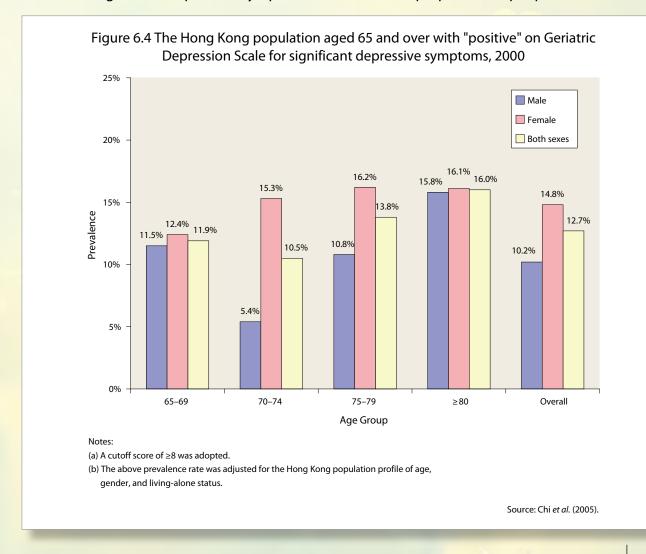


those aged 95 and above.³⁰ In Australia, based on meta-analysis of international and Australian studies, it was estimated that the dementia prevalence was about 7% for those aged 65 and above in 2004.³¹ According to a community-based survey conducted in Japan in 1998, it was found that about 9% of people aged 65 and above had dementia (based on clinical rating and diagnoses).³² A household survey conducted in Singapore estimated that based on Geriatric Mental State Examination, the dementia prevalence among those aged 65 and above was 6% in 2003.³³ Based on clinical evaluation conducted in 2000, the prevalence of Alzheimer's disease (a sub-type of dementia) in the United States was estimated to be as high as 13% for those aged 65 and above.³⁴ Although different assessment or diagnoses methods were used, the dementia prevalence was more or less the same in all places studied, except the United States which had much higher prevalence of Alzheimer's disease.

6.4. Depression

There is growing concern over the psychological health status of seniors. Good psychological health is one of the key components in positive ageing. On the other hand, poor psychological health may be a life-threatening condition. For example, depression is a risk factor for suicide attempts.³⁵ The World Health Organization has even projected that by the year 2020, depression will be the second most common contributor to the global burden of diseases for all ages.³⁶ While psychological health has many domains, depression will be discussed in detail in this section.

One of the common tools to measure depressive symptoms of the older population is the Geriatric Depression Scale (GDS). Based on the GDS (cut-off score of ≥ 8), a household survey conducted in Hong Kong found that about 13% of the population aged 65 and above had significant depressive symptoms in 2000.³⁷ The proportion of people with



significant depressive symptoms slightly increased with age. Meanwhile, there was a large discrepancy in the prevalence among males and females aged 70-79. (Figure 6.4)

Also based on the GDS (cut-off score of ≥8), the prevalence of depression in the United Kingdom was about 3% among the population aged 75 and above in 1995-1999.³⁸ Using GDS (cut-off score ≥6), the prevalence of depression in Japan was about 30% among the population aged 65 and above in 2002.³⁹ Based on the Geriatric Mental State (GMS) Schedule, the prevalence of depression among the population aged 60 and above in Singapore was about 5% in 2003-2004.⁴⁰ Using another scale, the Center for Epidemiologic Studies Depression Scale (CES-D), the percentage of people aged 65 and above with clinically relevant depressive symptoms in the United States was about 15% in 2002.²⁷ Also based on CES-D, the prevalence of depression among the population aged 65 and above in Australia was about 14% for the non-institutional population and about 32% for the institutional population in 1992-1993.⁴¹ It should be noted that the difference in the prevalence of depression might be partly due to the difference in assessment tools and the definition. Hence, international comparison was not attempted.

6.5. Healthy Life Expectancy

Traditionally, life expectancy describes the expected length of survival of individuals, the longer the better. Nowadays, people are concerned about quality of life as well. One of the many factors that can give people a sense of well-being is being healthy and independent. Taking into account all states of health and survival experience, the World Health Organization introduced the use of Health-Adjusted Life Expectancy (HALE), which was named Disability-Adjusted Life Expectancy (DALE) when first introduced, to describe life expectancy at birth with an adjustment for time spent in poor health.⁴²

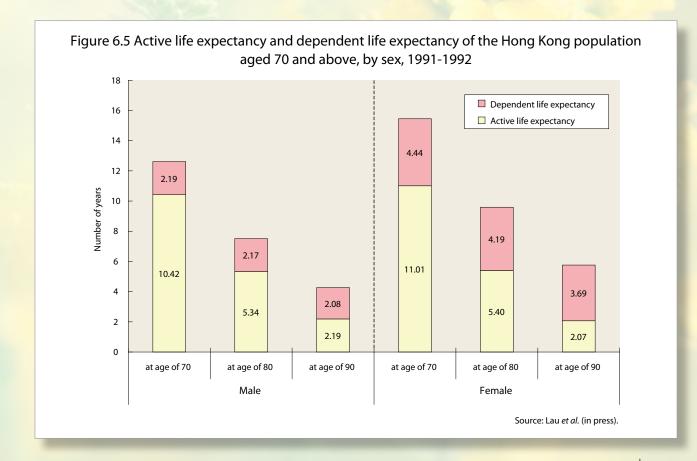
In Hong Kong, it was estimated that the HALE at birth in Hong Kong was about 70.3 for males and 75.7 for females in 2000.⁴³ In 2000, the life expectancy at birth of males and females in Hong Kong was 78.0 and 83.9 respectively.¹⁷ A rough comparison shows that both males and females in Hong Kong can expect to spend approximately 8 years of their life in poor health.

According to the World Health Report, the HALE of males at birth for 2000 was 71.2 in Japan, 69.6 in Australia, 68.3 in the United Kingdom, 66.8 in Singapore and 65.7 in the

United States.⁴² For females, the HALE at birth for 2000 was 76.3 in Japan, 73.3 in Australia, 71.4 in the United Kingdom, 68.9 in Singapore and 68.8 in the United States.⁴² In 2000, while both males and females in Japan had the longest HALE, the HALE of males and females in Hong Kong respectively ranked third and second when compared with the World Health Organization member states.⁴³

Active life expectancy is one form of disability-free life expectancy, which measures the average number of years that an individual is expected to live free of disability. Based on actual data collected from a study conducted in 1991-1992, active life expectancy at age 70 in Hong Kong was 10.42 years for males and 11.01 years for females.⁴⁴ On the other hand, dependent life expectancy (life span with some functional limitations) at age 70 was 2.19 years for males and 4.44 years for females.⁴⁴ These figures suggest that females at age 70 enjoyed a slightly longer active life span than males, but at the same time females would have to live double the life span with functional limitations. (Figure 6.5)

Both HALE and disability-free life expectancy suggest that some years with ill health and disability will be experienced. Hence, there is an implication for the long term care and service needs of seniors.



6.6. Summary

It was consistent that in all the economies studied, including Hong Kong, many older people had a positive view of their health status. Regarding multi-morbidity, the situation in Hong Kong seemed to be better than some countries. Similar to other countries, hypertension was one of the most prevalent chronic illnesses in Hong Kong. While Hong Kong had a lower prevalence of arthritis than the United States and Australia, the prevalence was still much higher than the United Kingdom. As for diabetes, Hong Kong had a higher prevalence when compared with the United Kingdom, while it was more or less the same as those in Australia and the United States.

Cancer was the leading cause of death among seniors in Hong Kong, the United Kingdom, Australia and Japan. The mortality rates from cancer and diseases of the heart in Hong Kong were much lower than those in the United Kingdom, Australia and the United States, while they were slightly lower than those in Japan. The mortality rate from pneumonia in Hong Kong was the highest among the places studied. The mortality rate from stroke among seniors in Hong Kong was much lower than those in Japan, Australia and the United Kingdom, while it was similar to that in the United States.

The prevalence of dementia was similar in most countries studied. Differences in the prevalence of depression were observed in different countries, which might be due partly to differences in assessment tools and definitions.

6.7. References

- 1. World Health Organization (1946). *Preamble to the Constitution of the World Health Organization* as adopted by the International Health Conference, New York, 19 June 22 July 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.
- 2. World Health Organization (2002). Active Ageing: A Policy Framework. Geneva: World Health Organization.
- Iburg K.M., Salomon J.A., Tandon A. and Murray C.J.L. (2001). Cross-population comparability of physician-assessed and self-reported measures of health. The Global Burden of Disease 2000 in Ageing Populations, Research Paper No. 01.20.
- 4. Idler E. and Benjamini Y. (1997). Self-rated health and mortality: a review of twenty-seven community studies. *Journal of Health and Social Behaviour*, 38:21-37.

- 5. Census and Statistics Department of Hong Kong Special Administrative Region (2007). Thematic Household Survey Report No.30: Health Status of Hong Kong Residents; Doctor Consultation; Hospitalization; Dental Consultation; Provision of Medical Benefits by Employers/Companies and Coverage of Medical Insurance Purchased by Individuals; Health Status of Institutional Residents and their Utilization of Medical Services. Hong Kong: Government Logistics Department.
- 6. Pleis J.R. and Lethbridge-Çejku M. (2007). Summary health statistics for the U.S. population: National Health Interview Survey, 2006. *National Center for Health Statistics. Vital Health Stat*, 10(235).
- 7. Australian Bureau of Statistics. (2006). 2004-2005 National Health Survey: Summary of Results. Canberra: Australian Bureau of Statistics.
- 8. International Longevity Center-Japan. (2006). *Japan Retains World's Longest Life Expectancy Says WHO World Health Report 2006.* Available at: http://longevity.ilcjapan.org/f_issues/0601.html Accessed on 31 Mar 2008.
- 9. Epidemiology & Disease Control Division, Ministry of Health of Singapore. (2003). *National Health Surveillance Survey 2001*. Singapore: Ministry of Health.
- 10. Office for National Statistics, United Kingdom. (2006). *Focus on Health 2006 Edition*. London: Office for National Statistics.
- 11. Census and Statistics Department of Hong Kong Special Administrative Region (2005). *Thematic Household Survey Report No. 21: Social-demographic Profile, Health Status and Long-term Care Needs of Older Persons.* Hong Kong: Government Logistics Department.
- 12. Committee on Ageing Issues, Singapore. (2006). *Committee on Ageing Issues: Report on the Ageing Population*. Available at: http://www.mcys.gov.sg/successful_ageing/Report.html Accessed on 31 Mar 2008.
- 13. Ministry of Health, Labour and Welfare of Japan. (2001). Heisei 12-nen junkanki-shikkan kiso cyousa houkoku [The Fifth National Survey of Cardiovascular Diseases, 2000]. Available at: http://wwwdbtk.mhlw.go.jp/toukei/kouhyo/indexkk_18_1.html Accessed on 31 Mar 2008. Japanese.
- 14. Epidemiology & Disease Control Division, Ministry of Health, Singapore. (2005). *National Health Survey* 2004 Results. Singapore: Ministry of Health.
- 15. Ministry of Health, Labour and Welfare of Japan. (2004). Heisei 14-nendo tounyoubyou jittaityosa houkoku [Survey of Diabetes, 2002]. Available at: http://wwwdbtk.mhlw.go.jp/toukei/kouhyo/indexkk_4_2.html Accessed on 31 Mar 2008. Japanese.
- 16. Saito Y. and Crimmins E.M. (2005). Changes in the health of elderly Japanese between 1987 and 1999. Presented at International Union for the Scientific Study of Population, XXV International Population Conference, Tours, France, July 18-23, 2005.
- 17. Census and Statistics Department of Hong Kong Special Administrative Region (2007). *Hong Kong Annual Digest of Statistics 2007*. Hong Kong: Government Logistics Department. [and back issues]
- 18. Statistics Bureau and Statistical Research and Training Institute, Ministry of Internal Affairs and Communications (MIC). (2007). *Japan Statistical Yearbook 2008*. Japan: MIC.
- 19. Australian Bureau of Statistics. (2007). 2005 Causes of Death. Canberra: Australian Bureau of Statistics.
- 20. Office for National Statistics of the United Kingdom. (2006). *United Kingdom Health Statistics No.2*. London: Office for National Statistics.
- 21. National Center for Health Statistics, United States. (2008). Deaths: Final Data for 2005. *National Vital Statistics Report*, 56(10). Version submitted for publication in January 2008. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_10.pdf Accessed on 31 Mar 2008.

- 22. Department of Statistics, Ministry of Trade and Industry, Republic of Singapore (2006). *Yearbook of Statistics Singapore*, 2006. Singapore: Department of Statistics.
- 23. Census and Statistics Department of Hong Kong Special Administrative Region (2006). *Thematic Household Survey Report No. 28: Pattern of Using Non-franchised Bus Services; Needs of Persons from the Mainland having Resided in Hong Kong for Less than 7 Years; Cognitive Function of Older Persons.* Hong Kong: Government Logistics Department.
- 24. Rait G., Fletcher A., Smeeth L., Brayne C., Stirling S., Nunes M., et al. (2005). Prevalence of cognitive impairment: results from the MRC trial of assessment and management of older people in the community. *Age and Ageing*, 34: 242-248.
- 25. Ng T.P., Niti M., Chiam P.C. and Kua E.K. (2007). Ethnic and educational differences in cognitive test performance on Mini-Mental State Examination in Asians. *American Journal of Geriatric Psychiatry*, 15(2): 130-139.
- 26. Ishizaki J., Meguro K., Ambo H., Shimada M., Yamaguchi S., Hayasaka C., *et al.* (1998). A normative, community-based study of Mini-Mental State in elderly adults: the effect of age and educational level. *Journal of Gerontology: Psychological Sciences*, 53B(6): P359-P363.
- 27. Federal Interagency Forum on Aging-Related Statistics (2006). *Older Americans Update 2006: Key Indicators of Well-being.* Washington, DC: U.S. Government Printing Office.
- 28. International Longevity Centre—United Kingdom and The Merck Company Foundation. (2006). *The State of Ageing and Health in Europe.* Available at: http://www.ilcuk.org.uk/files/pdf_pdf_4.pdf Accessed on 31 Mar 2008.
- 29. Chiu H.F.K., Lam L.C.W., Chi I., Leung T., Li S.W., Law W.T., et al. (1998). Prevalence of dementia in Chinese elderly in Hong Kong. *Neurology*, 50: 1002-1009.
- 30. Alzheimer's Society. (2007). Dementia UK. London: Abba Litho.
- 31. Australian Institute of Health and Welfare (AIHW). (2006). *Australia's Health 2006*. AIHW Cat. No. AUS 73. Canberra: AIHW.
- 32. Meguro K., Ishii H., Yamaguchi S., Ishizaki J., Shimada M., Sato M., et al. (2002). Prevalence of dementia and dementing diseases in Japan: the Tajiri Project. *Archives of Neurology*, 59: 1109-1114.
- 33. Chiam P.C., Ng T.P., Tan L.L., Ong P.S., Ang A. and Kua E.H. (2004). Prevalence of dementia in Singapore—Results of the National Mental Health Survey of the Elderly 2003. *Annals Academy of Medicine*, 33 Suppl (5): S14-S15.
- 34. Hebert L.E., Scherr P.A., Bienias J.L., Bennett D.A. and Evans D.A. (2003). Alzheimer Disease in the US population—prevalence estimates using the 2000 Census. *Archives of Neurology*, 60: 1119-1122.
- 35. Cheung Y.B., Law C.K., Chan B., Liu K.Y. and Yip P.S.F. (2006). Suicidal ideation and suicidal attempts in a population-based study of Chinese people: Risk attributable to hopelessness, depression, and social factors. *Journal of Affective Disorders*, 90: 193-199.
- 36. World Health Organization. (2007). *Mental Health—Depression*. Available at: http://www.who.int/mental_health/management/depression/definition/en/ Accessed on 31 Mar 2008.
- 37. Chi I., Yip P.S.F., Chiu H.F.K., Chou K.L., Chan K.S., Kwan C.W., et al. (2005). Prevalence of depression and its correlates in Hong Kong's Chinese older adults. *American Journal of Geriatric Psychiatry*, 13(5): 409-416.
- 38. Osborn D.P., Fletcher A.E., Smeeth L., Stirling S., Nunes M., Breeze E., *et al.* (2002). Geriatric Depression Scale Scores in a representative sample of 14 545 people aged 75 and over in the United Kingdom: results from the MRC Trial of Assessment and Management of Older People in the Community. *International Journal of Geriatric Psychiatry*, 17(4): 375-382.

- 39. Wada T., Ishine M., Sakagami T., Kita T., Okumiya K., Mizuno K., *et al.* (2005). Depression, activities of daily living, and quality of life of community-dwelling elderly in three Asian countries: Indonesia, Vietnam and Japan. *Archives of Gerontology and Geriatrics*, 41: 271-280.
- 40. Ng T.P., Chiam P.C. and Kua E.H. (2006). Mental disorders and asthma in the elderly: a population-based study. *International Journal of Geriatric Psychiatry*, 22(7): 668-674.
- 41. Anstey K.J., von Sanden C., Sargent-Cox K. and Luszcz M.A. (2007). Prevalence and risk factors for depression in a longitudinal, population-based study including individuals in the community and residential care. *American Journal of Geriatric Psychiatry*, 15(6): 497-505.
- 42. World Health Organization. (2001). The World Health Report 2001. Geneva: World Health Organization.
- 43. Law C.K. and Yip P.S.F. (2003). Healthy life expectancy in Hong Kong Special Administrative Region of China. *Bulletin of the World Health Organization*, 81(1): 43-47.
- 44. Lau J.T.F., Choi K.C., Ho S.C., Yang X. and J. Woo. (in press). Active life expectancy in a Chinese Elderly Population in Hong Kong. *Gerontology*.



Chapter 7

Health Seeking Behaviour

Health Seeking Behaviour

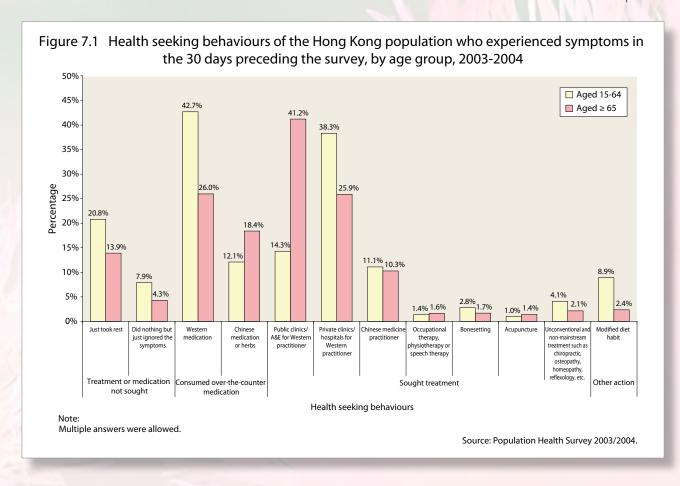
By living a healthy lifestyle, good functional and health status can be maintained into old age. Nevertheless, seniors might experience times when they suffer from illnesses or ill health. Healthy ageing is not only about how to maintain a healthy life, but also includes one's correct attitude and practice towards health-seeking. Having illnesses or ill health is not necessarily a threat to healthy ageing, but poor health-seeking behaviour could be a threat instead. In this chapter, different health-seeking behaviours of seniors will be explored with a view to reflecting their ability to cope with ill health and conditions.

7.1. Not Seeking Treatment/Medication

For mildly self-limiting illnesses, people normally recover after few days. Taking enough rest and modifying lifestyle can be helpful in the recovery process. On the other hand, failure to seek treatment for more severe illnesses can be a threat to the recovery process and health.

A survey conducted by the Department of Health of Hong Kong and Department of Community Medicine of The University of Hong Kong during 2003-2004 showed that among the population aged 65 and above who experienced symptoms in the 30 days preceding the survey, about 14% just took rest while 4% did nothing and just ignored the symptoms.¹ These percentages were much lower than that of the population aged 15-64. It appears that seniors were more likely to seek active treatment than the younger population. As it is not common to collect data on the proportion of the population not seeking health care, international comparison was not performed. (Figure 7.1)

Nevertheless, there exist many factors affecting the decision not to seek health care, for example avoiding treatment fees, not having a companion, or not perceiving the need. In the United States, it was found that about 2% of the population aged 65 and above failed to obtain needed medical care due to cost at some time during the 12 months preceding the interview in 2005.² More research needs to be conducted to investigate the underlying reasons for not seeking health care.



7.2. Taking Over-the-Counter Medication

It is common for people to take over-the-counter medication when they have a mild or moderate illness. These over-the-counter medications usually help to relieve symptoms. Adequate use of over-the-counter medication helps seniors to restore themselves to good health without adding a burden on the health care system. On the other hand, misuse of over-the-counter medication may produce harmful effects such as a delay in formal medical treatment. Hence, public education on the proper use of over-the-counter medication is important.

The survey conducted by the Department of Health of Hong Kong and Department of Community Medicine of The University of Hong Kong during 2003-2004 found that among the population aged 65 and above who experienced symptoms in the 30 days preceding the survey, about 26% consumed over-the-counter Western medication and 18% consumed Chinese medication or herbs.¹ The proportion of seniors who had symptoms and consumed Western medication was much lower than that of the population aged

15-64. On the contrary, the proportion of seniors who had symptoms and consumed Chinese medication or herbs was much higher. The difference in the proportions of seniors choosing over-the-counter Chinese medication or herbs and over-the-counter Western medication was not as large as that of the younger population. This might suggest the popularity of over-the-counter Chinese medication or herbs among seniors. (Figure 7.1)

Again, statistics on the proportion of the population in other countries taking over-the-counter medications during illness were sparse, if not absent; hence international comparison was not performed. Nevertheless, it should be noted that in the United States, the use of over-the-counter medication decreased with age.³ This observation was similar to the pattern of use of Western over-the-counter medications in Hong Kong.

7.3. Seeking Treatment

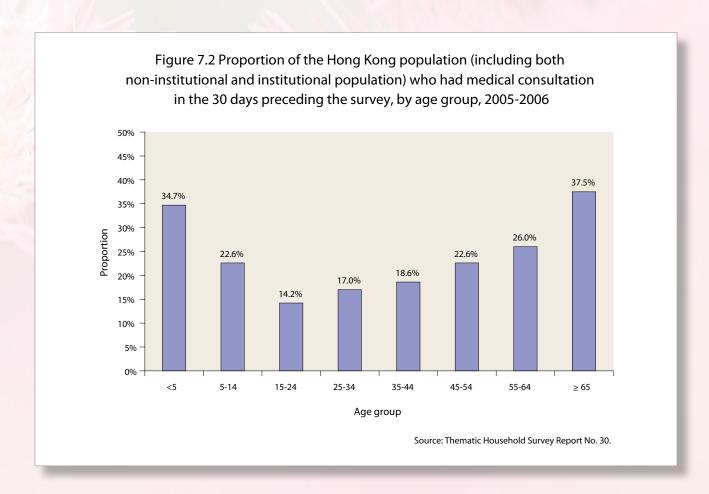
For moderate to severe illnesses, treatment has to be sought from medical professionals. Also, long-term follow-up consultation is required for some chronic diseases. Most commonly, people receive treatment through seeking medical consultation from public or private medical practitioners. Sometimes, people seek treatment directly from other health professionals such as physiotherapists or occupational therapists.

The survey conducted by the Department of Health of Hong Kong and Department of Community Medicine of The University of Hong Kong during 2003-2004 showed that about 41% of the population aged 65 and above who experienced symptoms in the 30 days preceding the survey sought treatment from public Western practitioners, 26% from private Western practitioners and 10% from Chinese medicine practitioners. The proportion of seniors seeking treatment from public Western practitioners was substantially higher than that of the population aged 15-64. On the other hand, the proportion of seniors seeking treatment from private Western practitioners was much lower. As for Chinese medicine practitioners, the proportion of seniors seeking treatment was more or less the same as that of the younger population. (Figure 7.1)

Among all forms of health-seeking behaviours (including not seeking treatment/medication, taking over-the-counter medications and seeking treatment), seeking treatment from Western practitioners in public clinics or accident and emergency

departments of public hospitals was the most popular health-seeking behaviour among seniors. On the other hand, consuming Western over-the-counter medication was the most popular health-seeking behaviour among the population aged 15-64, followed by seeking treatment from Western practitioners in private clinics or hospitals.

According to another survey conducted by the Census and Statistics Department of Hong Kong in 2005-2006, about 38% of the population (both non-institutional and institutional) aged 65 and above had a medical consultation in the 30 days preceding the survey.⁴ This proportion was the highest among all the age groups.⁴ These figures suggest that seniors have a greater need for medical consultation than the younger population. (Figure 7.2)



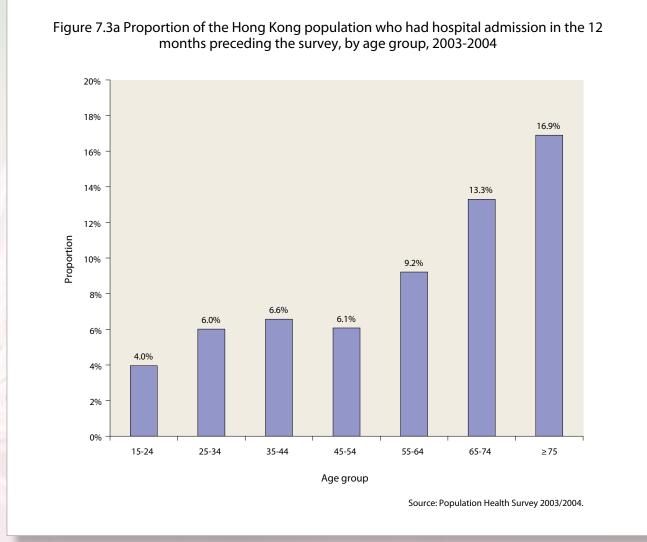
In Australia, about 42% of the population aged 65 and above consulted general practitioners or specialists in the two weeks preceding the interview in 2004-2005, and 8% visited casualty/outpatients/day clinics.⁵ In the United Kingdom, according to a survey conducted in 2002-2003, about 24% of the population aged 65 and above consulted a general practitioner in the two weeks preceding the interview, and about 24% had been outpatients in the three months preceding the interview.⁶ In the United States, about 94% of the population aged 65 and above had office visit(s) to a doctor or other health care professionals in the 12 months preceding the interview in 2005.² In Japan, about 12% of the population aged 65 and above used outpatient services on the survey date.⁷ For all these places, the proportion of seniors seeking medical consultation was higher than that of the younger age groups, which suggests that seniors were more likely to consult a medical practitioner than the younger population. This observation was similar to the situation in Hong Kong.

7.4. Hospitalization

When an illness is more severe or when operations have to be performed, hospital admission is needed. During a hospital stay, medical consultation and treatment will be provided. In most places, including Hong Kong, treatments in hospitals are based on Western medical practice. In some places, such as China, hospitals based on Chinese medical practice are also available.

7.4.1. Hospitalization Rate

According to the survey conducted by the Department of Health of Hong Kong and Department of Community Medicine of The University of Hong Kong in 2003-2004, the proportion of the population who were admitted to hospital in the 12 months preceding the survey increased from 4% for those aged 15-24 to 17% for those aged 75 and above. These figures suggest that the hospitalization need of seniors was much higher than that of the younger age groups. (Figure 7.3a)



In the United States, about 18% of the population aged 65 and above had overnight hospital stays during the 12 months preceding the interview in 2005.² In the United Kingdom, about 14% of the population aged 65 and above had been hospital inpatients in the 12 months preceding the interview in 2002-2003.⁶ The hospitalization rate of seniors in a 12-month period was similar in Hong Kong, the United States and the United Kingdom.

While using a slightly different reference period and estimation method, the hospital admission rates in Australia, Singapore and Japan are presented for reference. In Australia, about 1% of the population aged 65 and above had been hospital inpatients in the two weeks preceding the interview in 2004-2005.⁵ In Singapore, the public hospital admission rates for male and female residents aged 65 and above were about 31% and 27% respectively in 2006.⁸ In Japan, about 4% of the population aged 65 and above were hospitalized on the survey date.⁷ Again, all the places studied showed larger proportions of seniors being admitted to hospital than those of the younger population.

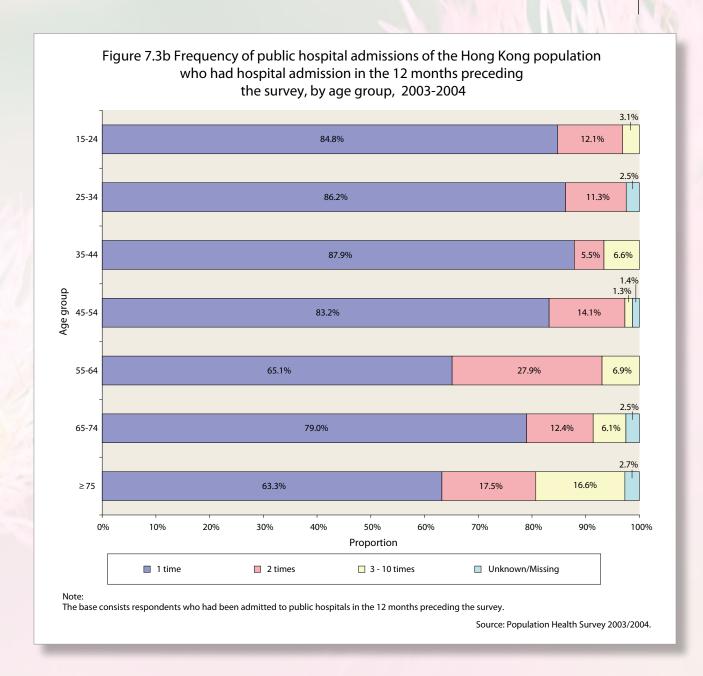
7.4.2. Type of Hospital

In Hong Kong, about 94% of the population aged 65 and above who needed hospitalization in the 12 months preceding the survey conducted in 2003-2004 had been admitted to a public hospital.¹ This suggests that seniors relied more on public hospitals than private hospitals. This phenomenon was also observed in Singapore, where the hospital admission rate for public sector hospitals was over nine times (288.6 per 1,000 versus 31.0 per 1,000) that for private sector hospitals.⁸

7.4.3. Frequency of Hospitalization

In Hong Kong, among the population aged 75 and above who had been admitted to public hospitals in the 12 months preceding the interview, about 63% were admitted to public hospitals once, 18% twice, and 17% three to ten times.¹ The proportion of the population aged 75 and above who had been admitted to hospital more than once in the 12-month period was much larger than that of the younger populations, except for the population aged 55-64, which had the largest proportion. (Figure 7.3b)

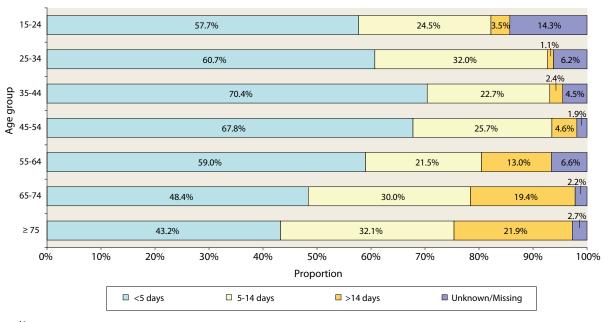
In the United States, among those aged 65 and above who had overnight hospital stays, about 69% had one admission in the 12 months preceding the interview in 2005, 18% had two and 13% had three or more.² The frequency distribution of hospital admission of the population aged 65 and above in the United States was similar to that of the population aged 75 and above in Hong Kong.



7.4.4. Length of Hospital Stay

As for the length of hospital stay, about 43% of the population aged 75 and above in Hong Kong who had been admitted to hospitals in the 12 months preceding the interview in 2003-2004 stayed in hospitals for less than 5 days, 32% for 5 to 14 days, and 22% for more than 14 days. The average length of stay in hospital for those aged 75 and above was 8.9 days. This figure was greater than that of the younger populations, except for the population aged 65-74, which had the longest average length of stay in hospital (10.8 days). (Figures 7.3c and 7.3d)

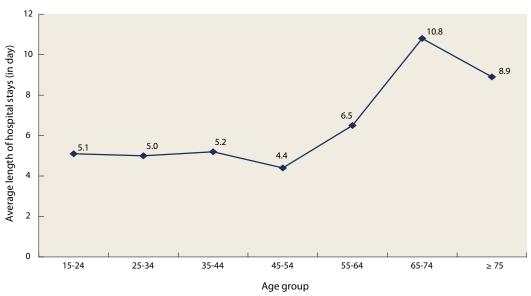
Figure 7.3c Length of hospital stays among the Hong Kong population admitted to hospital in the 12 months preceding the survey, by age group, 2003-2004



The base consists respondents who had been admitted to hospitals in the 12 months preceding the survey.

Source: Population Health Survey 2003/2004.

Figure 7.3d Average length of hospital stays among the Hong Kong population aged 15 and above admitted to hospital in the 12 months preceding the survey, by age group, 2003-2004



The base consists respondents who had been been admitted to hospitals in the 12 months preceding the survey.

Source: Population Health Survey 2003/2004.

The average length of hospital stay of the population aged 65 and above was about 5.5 days in the United States in 2005 and 4.6 days in Australia in 2004-2005.^{9,10} In Singapore, the average length of hospital stay of residents aged 65 and above was about 8.9 days in 2006.¹¹ In the United Kingdom, the average number of nights spent in hospital as an inpatient was 7 for the population aged 65-74, and as high as 12 for those aged 75 and above in 2002.¹² In Japan, the unit of the relevant parameter was defined differently so that a comparison was not performed. These figures show that the average length of hospital stay of seniors varied substantially. The situation in Hong Kong seemed to be closer to that in Singapore.

Data on average length of hospital stay may not be comparable between those from respondent surveys, which are subject to recall bias, and those from administrative records. Furthermore, duration of hospital stay may not be an accurate indicator of health, as it may be affected by availability of beds as well as quality of care. Hence, more research is required.

It should be noted that as the above statistics on hospital utilization are based on surveys targeted for the non-institutional population, they are not directly comparable to statistics compiled from administrative records, which also cover the institutional population. Statistics covering the institutional population might show higher hospital utilization.

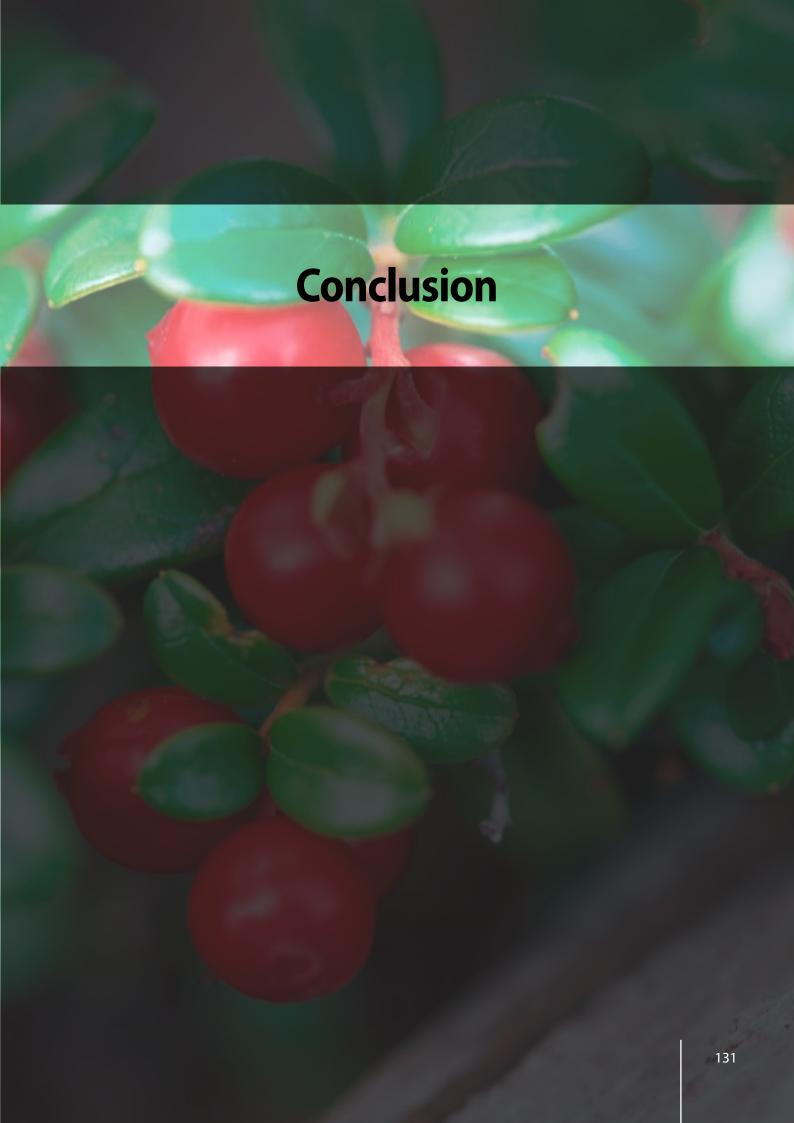
7.5. Summary

In Hong Kong, it appears that seniors were more likely to seek active treatment than the younger population. The proportion of seniors in Hong Kong who had symptoms and consumed over-the-counter Western medication was the lowest among all age groups. On the other hand, the figures suggest that using over-the-counter Chinese medication or herbs was popular among seniors in Hong Kong. Similar to other countries, seniors in Hong Kong were more likely to consult a medical practitioner, seek medical treatment or be admitted to hospital than the younger population. The frequency distribution of hospital admission of seniors in the United States was similar to that in Hong Kong. The figures show that the average length of hospital stay of seniors in Hong Kong was similar to that in Singapore.

Actually, there is much room for development in statistics on health care utilization. While it is common to collect traditional utilization rate statistics, it is also important to collect statistics on the withdrawal of health-seeking behaviour (i.e. not seeking health care). In addition, the patterns of and reasons for health-seeking behaviour should be further investigated.

7.6. References

- Department of Health of Hong Kong Special Administrative Region and Department of Community Medicine of The University of Hong Kong (2005). *Population Health Survey 2003/2004*. Hong Kong: Department of Health.
- 2. Adams P.F., Dey A.N. and Vickerie J.L. (2007). Summary health statistics for the U.S. population: National Health Interview Survey, 2005. *National Center for Health Statistics. Vital Health Stat*, 10(233).
- 3. Hanlon J.T., Fillenbaum G.G., Ruby C.M., Gray S. and Bohannon A. (2001). Epidemiology of over-the-counter drug use in community dwelling elderly. United States perspective. *Drugs & Aging*, 18(2): 123-131.
- 4. Census and Statistics Department of Hong Kong Special Administrative Region (2007). *Thematic Household Survey Report No. 30: Health Status of Hong Kong Residents; Doctor Consultation; Hospitalization; Dental Consultation; Provision of Medical Benefits by Employers/ Companies and Coverage of Medical Insurance Purchased by Individuals; Health Status of Institutional Residents and their Utilization of Medical Services.* Hong Kong: Government Logistics Department.
- 5. Australian Bureau of Statistics. (2006). 2004-2005 National Health Survey: Summary of Results. Canberra: Australian Bureau of Statistics.
- Office for National Statistics, United Kingdom. (2005). Focus on Older People: 2005. London: Office for National Statistics.
- Ministry of Health, Labour and Welfare of Japan. (2005). Heisei 17-nen Kanja Chosa [The 2005 Patients Survey]. Available at: http://www-bm.mhlw.go.jp/toukei/saikin/hw/kanja/05/02-01.html Accessed on 31 Mar 2008. Japanese.
- 8. Department of Statistics, Ministry of Trade and Industry, Republic of Singapore (2007). *Yearbook of Statistics Singapore*, 2007. Singapore: Department of Statistics.
- 9. DeFrances C.J. and Hall M.J. (2007). 2005 National Hospital Discharge Survey. Advance Data from Vital and Health Statistics; no 385. Hyattsville, MD: National Center for Health Statistics.
- 10. Australian Institute of Health and Welfare. (AIHW). (2007). *Older Australia at a Glance: 4th Edition*. Cat. no. AGE 52. Canberra: AIHW.
- 11. Department of Statistics, Ministry of Trade and Industry, Republic of Singapore (2007). *Singapore 2007 Statistical Highlights*. Singapore: Department of Statistics.
- 12. Office for National Statistics of the United Kingdom (2004). *Living in Britain General Household Survey* 2002. London: Crown.



Conclusion

Hong Kong is an international city as well as a world-class financial, trading and business centre. Apart from its economic advancements, Hong Kong also provides a solid base for active ageing. The senior population in Hong Kong generally live a healthy and active life. The figures presented in the previous chapters show that their well-being in physical, social and economic terms is of a comparable level to other well developed economies, including Japan, Singapore, Australia, the United States and the United Kingdom.

Demographic Profile

In terms of longevity, the life expectancy at birth of the Hong Kong population is among the highest in the world. This may be due partly to the lower age-specific mortality rate in Hong Kong. While Japan has been facing ageing issues for many years, Hong Kong will soon catch up. By 2030, the proportion of seniors in Hong Kong will be just slightly less than that in Japan. The marital status distribution in Hong Kong was quite similar to that in the other places and the proportion of married seniors in Hong Kong was relatively high. As for education, the proportion of seniors in Hong Kong with at least a secondary education has been increasing, but there is still room for further improvement.

Nutrition and Health-related Lifestyle

The prevalence of being overweight among seniors in Hong Kong was lower than that of the other countries, whilst the prevalence of being underweight was higher. The consumption of vegetables and avoidance of high fat food followed the recommended pattern fairly well. However, fruit consumption should be encouraged. Hong Kong generally had a lower prevalence of drinkers and female smokers than the other countries. However, the prevalence of male smokers in Hong Kong was higher than that of other places (except Japan). Most seniors in Hong Kong had a habit of doing exercise regularly.

Social Networking Engagement

In terms of social networking, the percentage of seniors living alone in Hong Kong was in line with the global pattern, showing such percentages to be lower in Asia, but higher in Europe and North America. On the other hand, the institutionalization rate of seniors in Hong Kong has increased over the years. While the participation of seniors in formal job attachment, voluntary work and lifelong learning was relatively low in Hong Kong, the participation of seniors in care giving and social activities was comparable to other countries.

It was common that the informal caregivers to seniors were their spouse and children. According to the oldest old support ratio, Hong Kong has the largest potential in developing informal caregivers when compared with other countries, except Singapore. While the statistics on elder abuse might not be complete, the issue of elder abuse needs to be investigated further.

Financial Security

In Asian economies such as Hong Kong and Singapore, financial assistance from children was the most common source of income for seniors. On the other hand, seniors in the United States and Australia relied more on social security as the main source of income. The most common monthly expenditure items of seniors in Hong Kong were food and transportation. Nevertheless, statistical comparisons of the personal income and expenditure of seniors are not straightforward, mainly due to differences in definitions and the purchasing power of currencies. Public health insurance programs for seniors are available in other countries but not in Hong Kong.

Functional Status

Figures seemed to suggest that vision and hearing problems among seniors in Hong Kong might be less prominent than the other countries studied. The prevalence of being edentulous among seniors in Hong Kong was also much lower than in the Western countries. In addition, both the proportion of the senior population without any ADL limitation and the proportion without any IADL limitations appeared to be higher than in some of the countries studied.

Health Status

It was consistent that in all the economies studied, including Hong Kong, many older people had a positive view of their health status. Regarding multi-morbidity, the situation in Hong Kong seemed to be better than some countries. Similar to other countries, hypertension was one of the most prevalent chronic illnesses in Hong Kong. While Hong Kong had a lower prevalence of arthritis than the United States and Australia, the prevalence was still much higher than the United Kingdom. As for diabetes, Hong Kong had a higher prevalence when compared with Australia and the United Kingdom, while apparently lower than those Asian populations studied.

Cancer was the leading cause of death among seniors in Hong Kong, the United Kingdom, Australia and Japan. The mortality rates from cancer and diseases of the heart in Hong Kong were much lower than those in the United Kingdom, Australia and the United States, while they were slightly lower than those in Japan. The mortality rate from pneumonia in Hong Kong was the highest among the places studied. The mortality rate from stroke among seniors in Hong Kong was much lower than those in Japan, Australia and the United Kingdom, while it was similar to that in the United States.

The prevalence of dementia was similar in most countries studied. Differences in the prevalence of depression were observed in different countries, which might be due partly to differences in assessment tools and definitions.

Health Seeking Behaviour

In Hong Kong, it appeared that seniors were more likely to seek active treatment than the younger population. The proportion of seniors in Hong Kong who had symptoms and consumed over-the-counter Western medication was the lowest among all age groups. On the other hand, figures suggested that using over-the-counter Chinese medication or herbs was popular among seniors in Hong Kong. Similar to other countries, seniors in Hong Kong were more likely to consult a medical practitioner, seek medical treatment or be admitted to hospital than the younger population. The frequency distribution of hospital admission of seniors in the United States was similar to that in Hong Kong. Figures showed that the average length of hospital stay of seniors in Hong Kong was similar to that in Singapore.

Concluding Remarks

As indicated, the statistics were compiled from different sources and the conceptualization and compilation methods could vary a lot across countries. Hence, this international comparison done from a broad perspective should be interpreted with care. Nevertheless, the comparisons should stimulate further research.

For ageing measures that are relatively less favourable in Hong Kong compared to other countries, more effort should be invested to improve the current situation, and possibly build a better future. For characteristics that compare favourably with other countries, they should be maintained and even taken to a higher standard. No matter how well the older population in Hong Kong is doing at present, our society can always find ways to help Celebrate their Accomplishments and Discover their Effervescence and Never-ending Zest as they Age.