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GROWING OLDER

IN HONG KONG, NEW YORK AND LONDON

Funded by:



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The Hong Kong Jockey Club Charities Trust

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CADENZA:

A Jockey Club Initiative for Seniors

CADENZA: A Jockey Club Initiative for Seniors is launched and funded by The Hong Kong Jockey Club Charities Trust in light of the rapidly ageing population. It is a HK\$380 million project in partnership with the Faculty of Social Sciences of The University of Hong Kong and the Faculty of Medicine of The Chinese University of Hong Kong. The project aims at creating an elder-friendly environment in Hong Kong to foster positive community attitude towards ageing and continuously improve the quality of care and quality of life of older people.

CADENZA is an acronym for “**C**elebrate their **A**ccomplishments; **D**iscover their **E**ffervescence and **N**ever-ending **Z**est as they **A**ge.” 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 components:

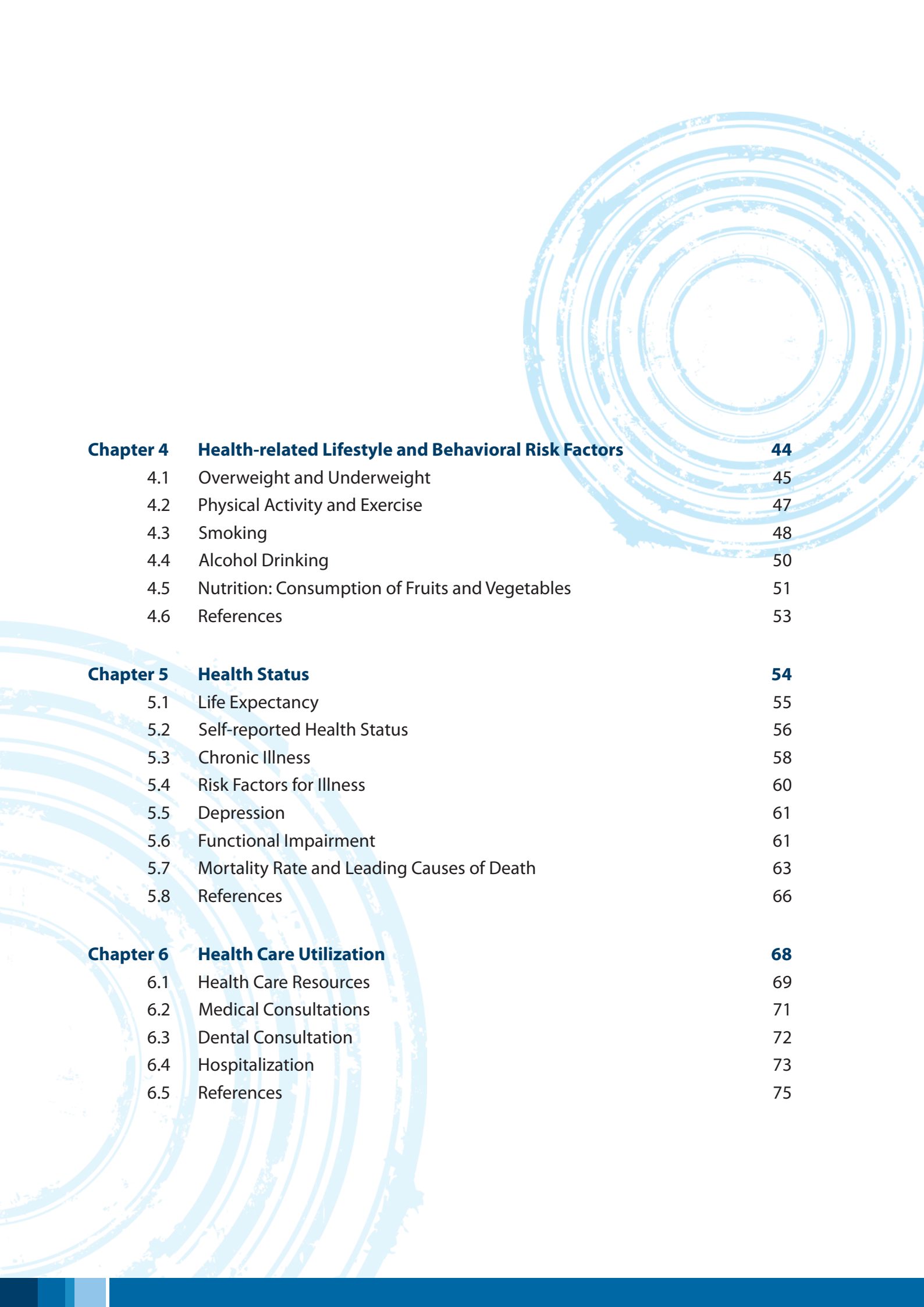
1. **Public Education** is to promote positive ageing and highlight important issues pertaining to the elderly population, covering 6 themes: (i) health promotion and maintenance, (ii) health and social services in Hong Kong, (iii) living environment, (iv) financial and legal issues, (v) quality of life and quality of dying, and (vi) age disparities.
2. **Community Projects** are innovative and sustainable service models designed to cope with the 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.
3. **Training** programme offers on-line courses, workshops and public seminars to train different levels of health and social care professionals, front line workers, carers and the general public.
4. **Leadership Training Programme and Research** is to nurture academic leadership in gerontology, conduct research to advance gerontological knowledge and evaluate the outcomes of CADENZA programmes.

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Contents

Preface	07
Executive Summary	08
Chapter 1 Population Characteristics	10
1.1 Number and Proportion of Seniors	11
1.2 Male to Female Ratio	13
1.3 Ethnicity	14
1.4 Marital Status	15
1.5 Educational Attainment	17
1.6 References	18
Chapter 2 Living Arrangements	20
2.1 Domestic Households	21
2.1.1 Household size and composition	21
2.1.2 Tenure of housing	24
2.2 Continuum of Long-term Care	25
2.2.1 Care provided in the home/services delivered in the community	25
2.2.2 Housing with various forms of assistance	27
2.2.3 Institutional care	30
2.3 References	32
Chapter 3 Financial Security	34
3.1 Formal Job Attachment	35
3.2 Household Income	36
3.3 Poverty	40
3.4 Health Insurance Systems	40
3.5 References	42



Chapter 4	Health-related Lifestyle and Behavioral Risk Factors	44
4.1	Overweight and Underweight	45
4.2	Physical Activity and Exercise	47
4.3	Smoking	48
4.4	Alcohol Drinking	50
4.5	Nutrition: Consumption of Fruits and Vegetables	51
4.6	References	53
Chapter 5	Health Status	54
5.1	Life Expectancy	55
5.2	Self-reported Health Status	56
5.3	Chronic Illness	58
5.4	Risk Factors for Illness	60
5.5	Depression	61
5.6	Functional Impairment	61
5.7	Mortality Rate and Leading Causes of Death	63
5.8	References	66
Chapter 6	Health Care Utilization	68
6.1	Health Care Resources	69
6.2	Medical Consultations	71
6.3	Dental Consultation	72
6.4	Hospitalization	73
6.5	References	75

Preface

Declining birth rates, increasing longevity and urbanization have created a new challenge for cities: how to respond to an ageing population. Although population ageing and urbanization are not new concerns for national governments around the world, the consequences of these trends for quality of life in cities has only recently started to receive attention from policy makers and researchers. Few comparative studies of world cities examine their health or long-term care systems; nor have comparisons of national systems for the provision of long-term care focused on cities, let alone world cities.

By extending the work of the *CADENZA*¹ and *World Cities Projects*², this report investigates how three world cities – Hong Kong, New York and London – are coping with this challenge. These world cities are centers of finance, information, media, arts, education, specialized legal services and advanced business services, and contribute disproportionate shares of GDP to their national economies.³ But are these influential centers prepared to meet the challenge posed by the “revolution of longevity”?⁴ How will these world cities accommodate this revolutionary demographic change? Are they prepared to implement the health and social policy innovations that may be required to serve their residents, both old and young? Will they be able to identify the new opportunities that increased longevity may offer? Can they learn from one another as they seek to develop creative solutions to the myriad issues that arise? Finally, can other cities learn from the experience of these three cities as they confront this challenge?

To address these questions, we examine comparable data⁵ on the economic and health status of older persons, as well as the availability and use of health, social and long-term care across and within these cities. In the report “*How Well Are Seniors in Hong Kong Doing? An International Comparison*”, a first attempt was made to compare the situation in Hong Kong with five economically developed countries. This report extends this study by comparing the situation in Hong Kong with two other world cities – New York City and London, which are more comparable in terms of population size and economic characteristics.

This report begins with an overview on the population characteristics of the three world cities (Chapter 1). Next, we examine living arrangements (Chapter 2), financial security (Chapter 3) and health-related lifestyle and behaviors (Chapter 4). Finally, we examine health outcomes, including health status (Chapter 5) and health care utilization (Chapter 6).

¹ For more details: <http://www.cadenza.hk/>

² For more details: http://www.thehastingscenter.org/Detail.aspx?id=5146&terms=gusmano+and+%23filename+*.html; <http://www.youtube.com/watch?v=dBXUqcqOa7s>; <http://wagner.nyu.edu/rodwin>.

³ Scott A (2001). *Global City Regions: Trends, Theory and Policy*. New York: Oxford University Press.

⁴ Butler RN (1987). The Longevity Revolution. *The Mount Sinai Journal of Medicine*; 54(1): 5-8.

⁵ The latest available information is reported here. Some of the studies from which this latest information is taken may have been conducted several years ago.

Executive Summary

Although population ageing and urbanization are not new concerns for national governments around the world, the consequences of these trends for quality of life in cities has only recently started to receive attention from policy makers and researchers. To address the challenges posed by population ageing in cities, comparable data on the economic and health status of older persons, as well as the availability and use of health, social and long-term care across and within these cities must be examined. By extending the work of the *CADENZA* and *World Cities Projects*, this report compares three world cities – Hong Kong, New York and London along different dimensions.

These world cities are similar in the size and proportion of their older populations. In other respects, the characteristics of their older populations differ in significant ways. The older population in Hong Kong is more homogeneous in terms of ethnicity. Also, marriage rates among the older population in Hong Kong are higher, which may lead to greater potential for receiving care from spouses. In contrast, lower levels of educational attainment for Hong Kong's older people, particularly women, in comparison to their counterparts in London and New York City, suggests that they may have lower levels of health status or more difficulty fending for themselves. Unlike Hong Kong, the gender disparity with respect to educational attainment is far lower in New York City.

As for living arrangements, more than 40% of older people own their own homes in all three cities. In Hong Kong, there are more people living together in the same household than in New York City and London. The older population in Hong Kong has the lowest rate of living alone after adjusting for age and gender. To support older people with different levels of dependency, all three cities provide a variety of services (e.g. elderly centers, home help) and residential care services (e.g. nursing homes).

Living in world cities is expensive, thus posing a challenge for older people, many of whom no longer participate in the labor force and therefore depend mostly on fixed incomes. In Hong Kong, the older population has less financial security than in New York City or London. Also, older people in Hong Kong have lower labor force participation rates. Income data for Hong Kong and New York City reveal large income disparities. Although our measure of poverty is limited, Hong Kong appears to have the highest proportion of older people living in poverty.

Maintaining good health and independence are important to active and healthy ageing. None of the three world cities systematically ranks top among the key indicators of health-related lifestyle and behaviors. Hong Kong has the lowest prevalence of overweight and obesity among the older population, but being underweight is a problem for some. Older men in Hong Kong have the highest prevalence of smoking, yet older women have the lowest rate. Older people in London have the highest rate of binge drinking, which is not a problem in Hong Kong. Older people in New York City are more active in doing exercise and other physical activities, while Hong Kong seniors report consuming more fruits and vegetables than those in New York City. Although older people in London report consuming the most fruits and vegetables, these findings are inconsistent with the rate of people who are overweight and obese.

In comparison to New York City and London, people in Hong Kong have longer life expectancy. Although older people in Hong Kong are harsher when it comes to their self-perceived health status, they have lower prevalence rates of diabetes, asthma, heart diseases and stroke than their counterparts in New York City. Moreover, their risk factors, as measured by hypertension, cholesterol levels and obesity are lower. Also, their measures of functional health status are higher. In contrast, seniors in Hong Kong appear to have poorer psychological health than the other cities, perhaps explaining their lower levels of self-perceived health. Finally, older people in Hong Kong and London have higher mortality rates from cancer than their counterparts in New York City, while seniors in New York City are at higher risk of dying from heart diseases.

Regarding health care resources, Hong Kong has an ample level of hospital beds but a relatively low density of physicians. This is consistent with the criticism that Hong Kong has weak primary care. Nevertheless, in comparison to New York City, older people in Hong Kong and London have higher medical consultation rates. In contrast, dental consultation rates are low for older people in Hong Kong in comparison to New York City.

These comparisons reveal how Hong Kong, New York City and London differ from one another in their response to a rapidly ageing population. The experience of these world cities will be of reference value to other cities in meeting the challenges of population ageing.



Chapter 1 »
Population Characteristics

To assess the challenges and opportunities associated with population ageing, it is important to understand the characteristics of an older population. The age distribution, marital status, living arrangements and educational status of an older population may explain differences in health outcomes and improve our capacity to predict future demand for health and social services. This chapter presents the characteristics of the older populations in Hong Kong, London and New York.

These world cities are similar in the size and proportion of their older populations. In other respects, the characteristics of older people in the three cities differ in significant ways. The older population in Hong Kong is more homogeneous in terms of ethnicity. Also, marriage rates among the older population in Hong Kong are higher, which suggests greater potential for receiving care from spouses. In contrast, lower levels of educational attainment for Hong Kong's older people, particularly among women, in comparison to those among their counterparts in London and New York, suggests that they may have lower levels of health or more difficulty fending for themselves. Unlike Hong Kong, gender disparity in terms of educational attainment is far lower in New York City.

1.1 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.¹ It is important to study the size of the older population for the sake of service provision for seniors.

In Hong Kong, there are 7.0 million people (2009), 0.9 million (12.8%) of whom are aged 65 years and over.² The number of older people in Hong Kong was only 0.3 million (6.6% of the population) in 1981 – an increase of 160% when comparing 2009 with 1981.

In New York City, there are 8.0 million people (2009), over one million (12.1%) of whom are aged 65 and over.³ The number of people age 65 and over in New York City increased by 9%, from 0.9 million in 1980 to 1.0 million in 2009, but as a percentage of the population the older population fell from 13.4% to 12.1%.

In London, there are 7.7 million people (2009), 0.9 million (11.5%) of whom are aged 65 years and over.⁴ Unlike Hong Kong and New York City, the absolute number of older people in London has decreased during the past thirty years. In 1981, the number of people aged 65 and over in London was over 1.0 million (15.2% of the population).

All three cities have about one million older people, but London has the smallest proportion, while Hong Kong has the largest. (Figure 1.1a) As noted earlier, Hong Kong stands out as the city with the fastest rate of population ageing, although the age composition of the older population is similar in the three cities. About 12.5%-14.3% of older people fall into the so-called “oldest old” category (those aged 85 years and over). (Figure 1.1b)

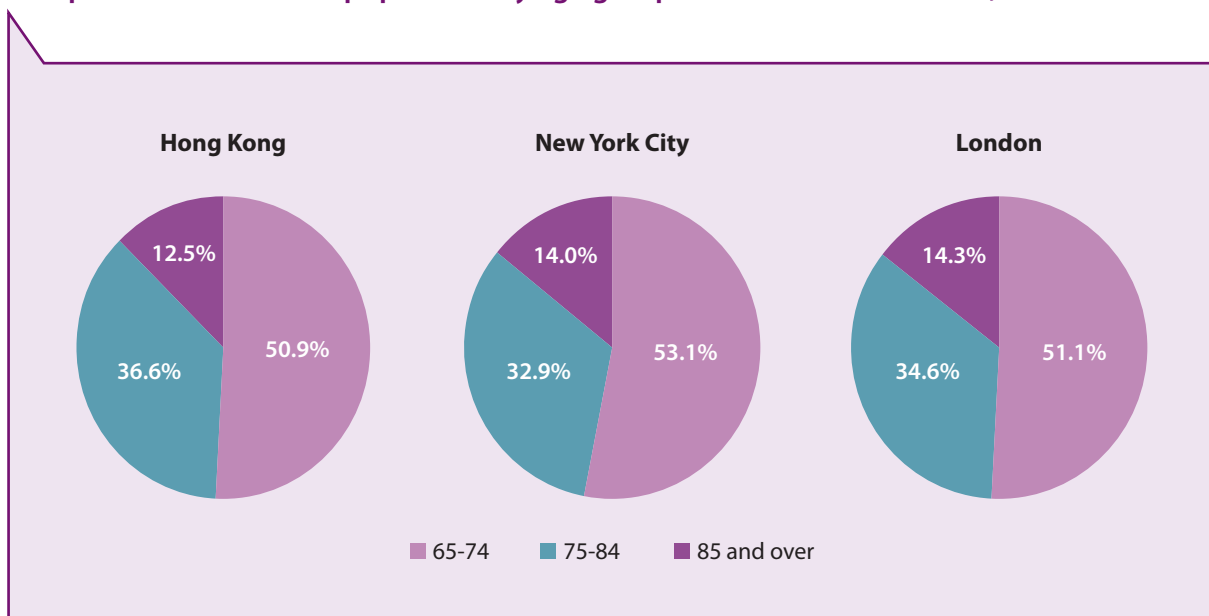
Figure 1.1a »

Proportion of people aged 65 years and over in the three world cities, 1980/1981 and 2009



Figure 1.1b »

Composition of the older population by age group in the three world cities, 2009



The “oldest-old” population (85+) is a relatively small segment of the entire population (1.6% in Hong Kong and London; 1.7% in New York City). Nevertheless, this cohort represents the fastest growing share of the older population in all three cities.⁵ Given the similar size and proportion of the older populations in Hong Kong, New York City and London, it is evident that they face similar challenges. Nevertheless, there are some interesting differences among these cities, which we explore in later sections and chapters.

1.2 Male to Female Ratio

Men and women have different needs, and women tend to provide a disproportionate share of the formal and informal caregiving. Thus, the composition of the population by gender is important in planning for the provision of services. Because women have a longer life expectancy, they make up a larger portion of the older population, but the gap is less pronounced in Hong Kong, where life expectancy among men is higher than in London and New York City.

In Hong Kong, among the population aged 65 years and over, there are about 0.4 million men (46.3%) and 0.5 million women (53.7%) (2009).² The male to female ratio is about 0.863, i.e. 863 older men per 1,000 older women. The male to female ratio decreases from 1.037 for those aged 65-74 to 0.458 for those aged 85 and over.

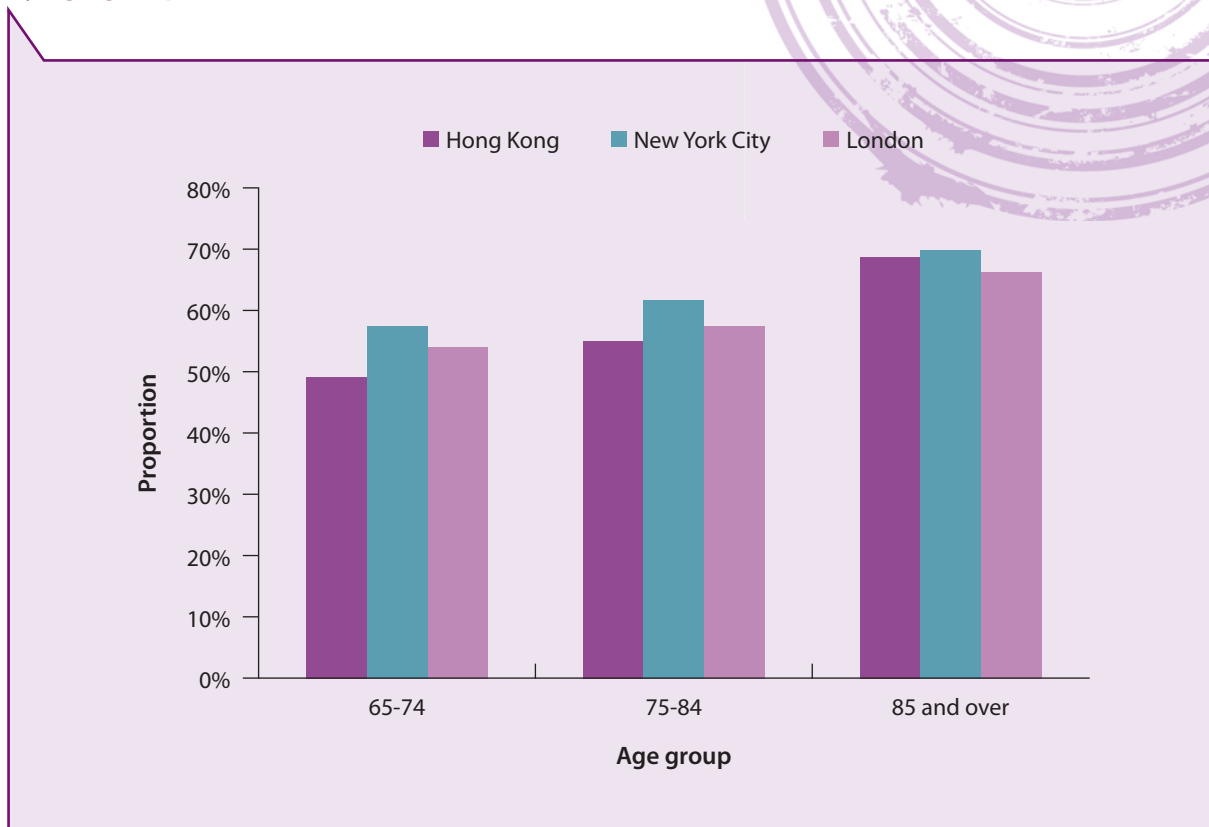
In New York City, there are about 0.4 million men (39.5%) and 0.6 million women (60.5%) aged 65 years and over (2009).³ The male to female ratio is 0.652. The ratio decreases from 0.743 for those aged 65-74 to 0.432 for those aged 85 and over.

In London, there are about 0.4 million men (43.1%) and 0.5 million women (56.9%) aged 65 years and over (2009).⁴ The male to female ratio is 0.758. This ratio decreases from 0.855 for those aged 65-74 to 0.512 for the cohort aged 85 and over.

Hong Kong has the smallest proportion of women among the population aged 65 years and over, followed by London. However, the proportion of women among the population aged 85 years and over was about the same as New York City, and slightly larger than that in London. (Figure 1.2)

Figure 1.2 »

Proportion of females among the older population in the three world cities, by age group, 2009



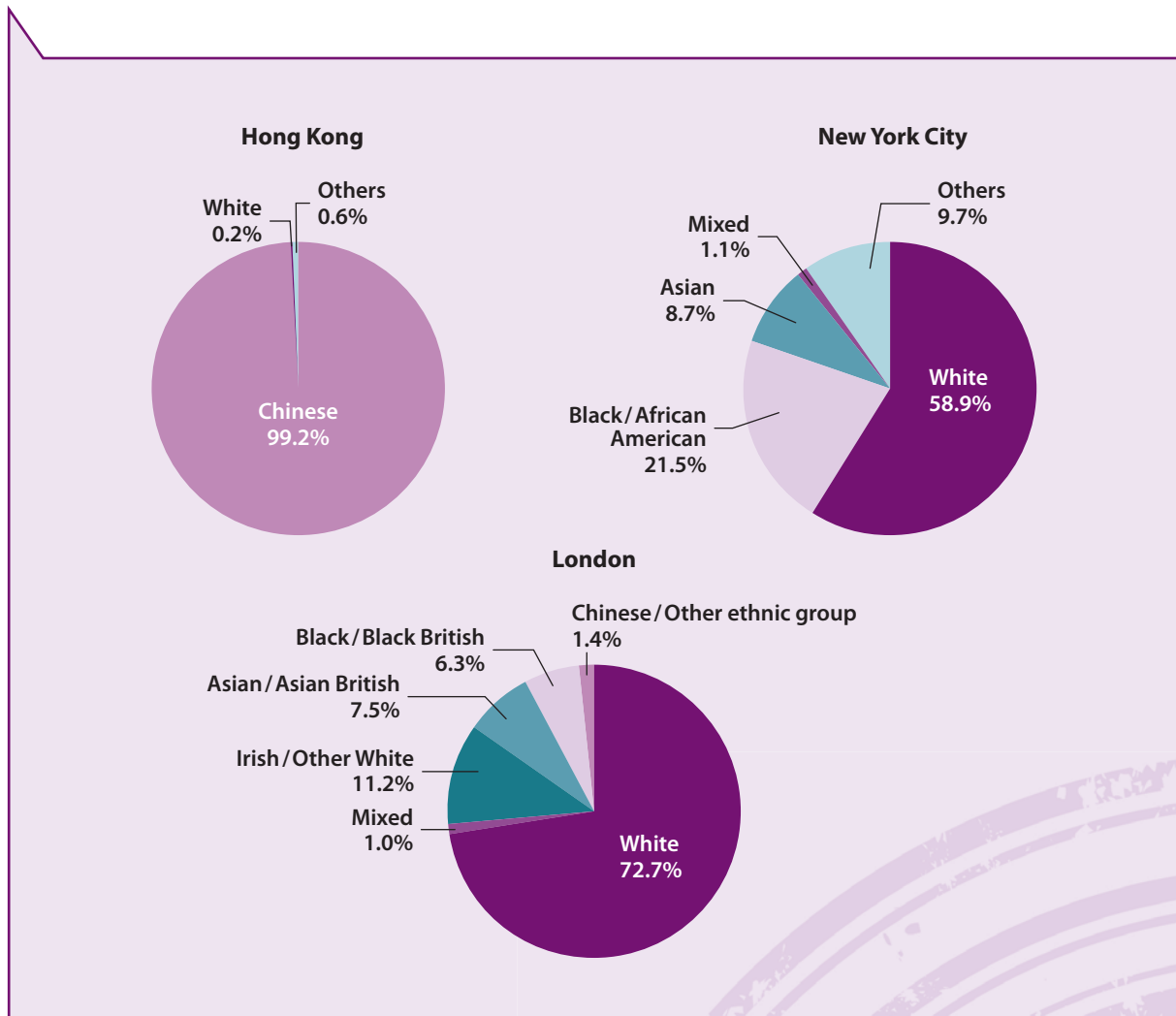
1.3 Ethnicity

In ethnically and culturally heterogeneous populations, service providers have to ensure that a wide range of services and activities are provided to address the diverse needs and expectations of people with different backgrounds. Currently, this is a far greater concern for policy makers and service providers in London and New York City than it is in Hong Kong.

Hong Kong has a more homogeneous population than many other world cities, including Tokyo.⁵ Nearly all residents (99.2%) of Hong Kong aged 65 years and over are Chinese.⁶ The second largest ethnic group is White, which makes up only 0.2% of the older population. In London, about 72.7% of the older population (men aged 65 years and over and women aged 60 years and over) are British Whites.⁷ Another 11.2% of London's older population are Irish or other Whites. The older population in New York City is more ethnically diverse. About 58.9% are Whites, 21.5% are Black or African American, and 8.7% are Asian.³ (Figure 1.3)

Figure 1.3 »

Composition of the older population in the three world cities, by ethnicity, 2006



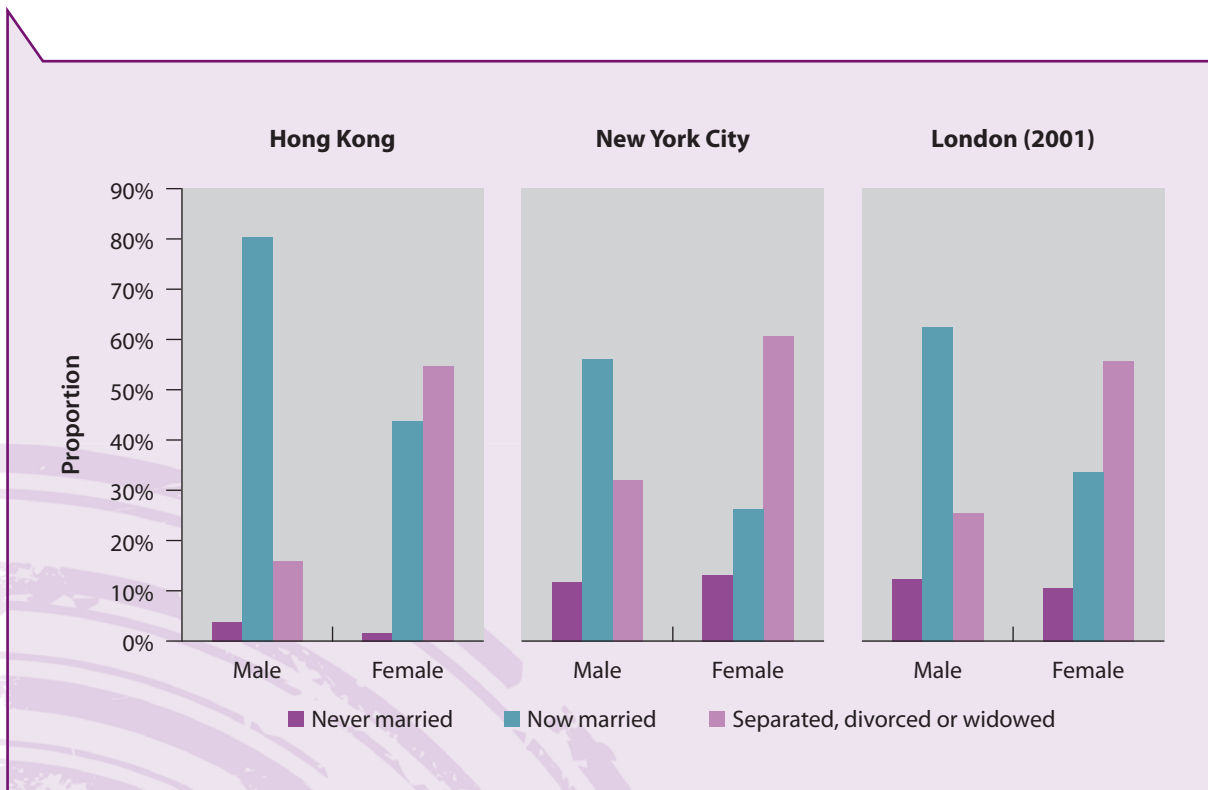
1.4 Marital Status

There is evidence that married people are healthier and have a lower mortality risk than non-married people.^{8,9} It is also common for spouses to be the informal caregivers, so many caregivers are themselves older people.¹⁰ However, while older men often receive care from their wives, older women usually become widowed as they age.¹¹

In Hong Kong, marriage rates among older men (80.3%) are much higher than among their counterparts in New York City (56.1%) and London (62.4%).^{3,12,13} Likewise, even though less than half of women aged 65 years and over in Hong Kong are married (43.7%), they nevertheless have the highest rate of marriage. Most older women in all the three cities are either separated, divorced or widowed (54.6%, 60.6% and 55.7% respectively in Hong Kong, New York City and London. (Figure 1.4)

Figure 1.4 »

Marital status of the population aged 65 years and over in the three world cities, by gender, 2009



The proportion of separated, divorced or widowed women increases substantially with age. About 75.6% of women aged 85 years and over in Hong Kong (2006) are separated, divorced or widowed.¹⁴ This is slightly less than that in New York City (80.5% in 2009) and London (78.4% in 2001).^{3,13} In contrast, less than half of older men in New York City (2009) and London (2001) are separated, divorced or widowed. The proportion of men aged 85 and over in Hong Kong who are separated, divorced or widowed is under 40%. This helps to explain the remarkable number of women aged 85 and over who live alone in world cities.⁵

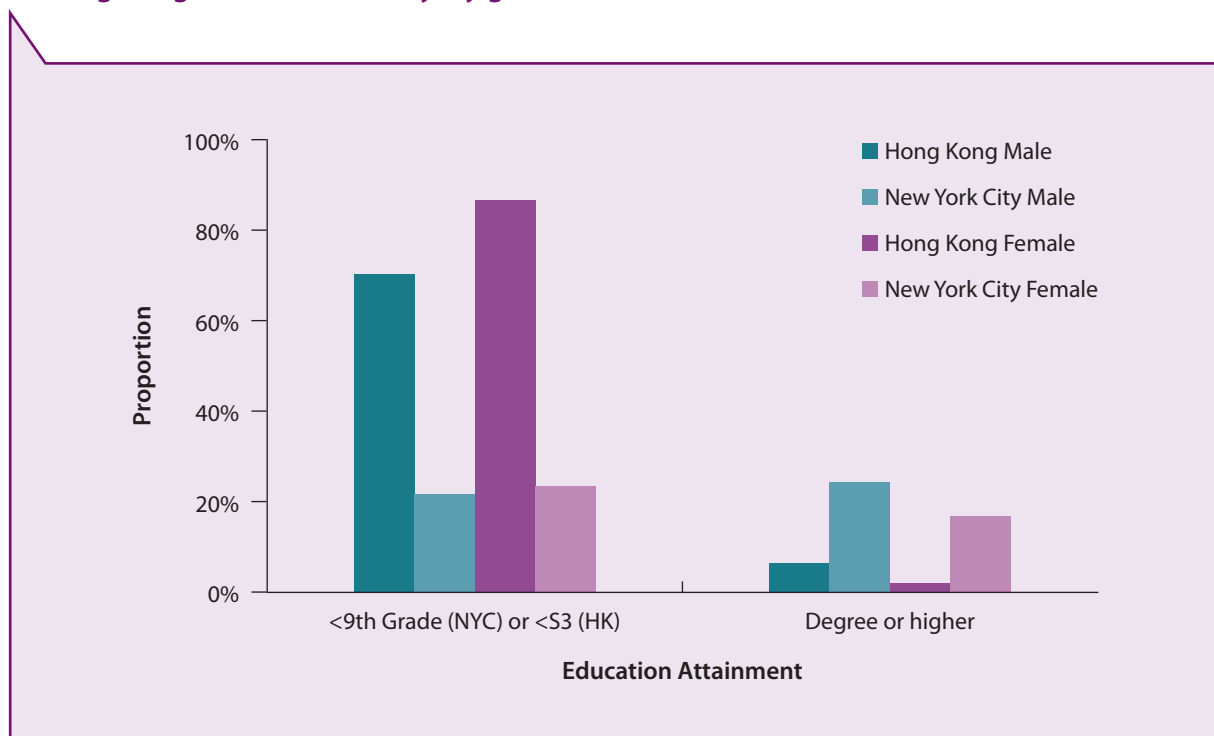
Among the older populations of the three cities, Hong Kong has the highest proportion of those who are married, but the smallest proportion of those who are separated, divorced or widowed. It appears that older people in Hong Kong have more informal care provided by family members, especially spouses. However, while informal caregivers are valuable resources in caring for older people, their physical and psychological needs have to be addressed. Currently, informal caregivers face a huge caregiver burden.

1.5 Educational Attainment

Education is a strong predictor of health status and mortality.¹⁵ In the past, women, in particular in Chinese societies, were usually deprived of education. Hence, there are striking gender differences in educational attainment among the older populations of Hong Kong, New York and London.

In Hong Kong, the third year of secondary education marks the completion of lower secondary education, which is roughly equivalent to the ninth grade in the United States (U.S.). In Hong Kong, about 70.3% of men and 86.6% of women aged 65 years and above did not complete lower secondary school (2006).¹⁶ In contrast, among their counterparts in New York City, only 21.7% of men and 23.4% of women did not complete the ninth grade (2006).³ In London, for the age cohort of older people 65-74 years, 57.1% of men and 64.8% of women have no academic, vocational or professional qualifications, including open examination grades, or higher school certificates (2001).¹³ In comparison to Hong Kong, older people in New York City have higher educational attainment. In New York City, 24.3% of men and 16.8% of women aged 65 years and over have completed a Bachelor's degree or higher qualifications (2006), far more than their counterparts in Hong Kong (6.6% and 2.1%). (Figure 1.5)

Figure 1.5 »
Education attainments of the population aged 65 years and over
in Hong Kong and New York City, by gender, 2006



Note: S3 refers to the third year of secondary education

1.6 References

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Chapter 2 »
Living Arrangements

In all three cities, more than 40% of older people own their own homes. In Hong Kong more people live together in the same household than in New York City and London. The older population in Hong Kong has the lowest rate of living alone after adjusting for age and gender differences. A variety of community support services and residential care services are provided in all three cities. The relationship among these services and rates of institutionalization among older people requires further investigation.

Most people prefer to live in their homes and communities as they age. Living at home enables older people to continue their existing lifestyles and is associated with greater social participation. At the same time, older people who live alone in the community are at risk of social isolation. To provide adequate support, when older people reach a certain level of dependency, it becomes necessary to provide options for a variety of different living arrangements, including residential facilities and nursing homes, when necessary. In this chapter, we compare living arrangements and access to long-term care services among the three cities.

2.1 Domestic Households

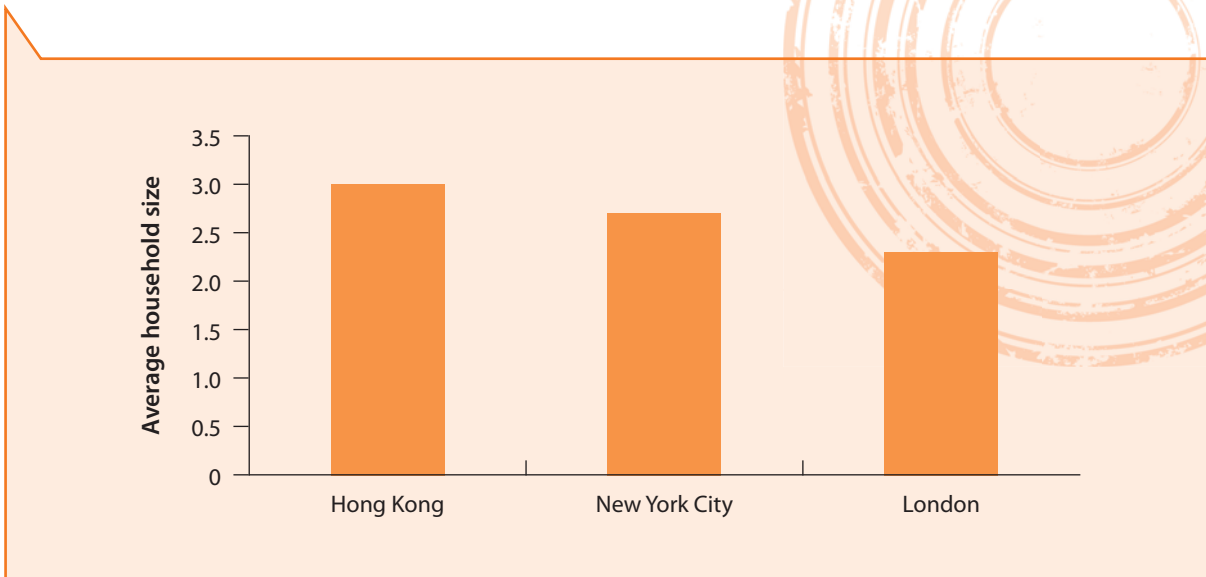
In all three cities, the vast majority of seniors continue to live in their homes as they grow older. In Hong Kong (2006), 90.0% of people aged 65 years and older live in their domestic households. Among persons age 85 and over, 66.1% live at home.¹ In New York City (2006) and London (2001), rates of living at home are significantly higher – 95.1% and 96.6% respectively.^{2,3} But even when older people live at home, community support services are important to help them age-in-place when they need assistance with activities of daily living.

2.1.1 Household size and composition

Traditionally, Hong Kong has had large extended nuclear families that facilitate mutual support among their members. In contrast, Western families tend to be smaller in size. During the past two decades, however, these differences appear to be shrinking as family size has declined in Hong Kong to a level that is comparable to New York City and London.

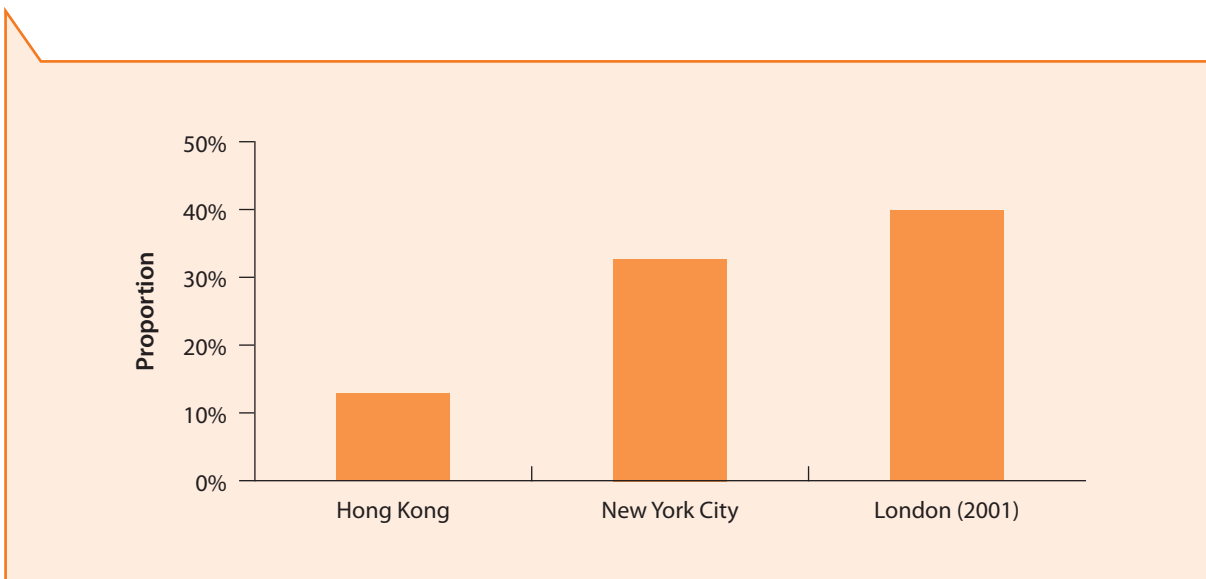
Hong Kong has the largest average household size (3.0 members) of the three cities, followed by New York City (2.7) and London (2.3).^{2,4,5} (Figure 2.1a) However, whereas the average household size has declined steadily over the past decades in Hong Kong, it has remained stable in London and New York City.

Figure 2.1a »
Average household size of the three world cities, 2006



In Hong Kong, among the population aged 65 years and over who live at home, 12.9% live alone, a percentage much lower than that of New York City (32.7%) and London (39.8% in 2001).¹⁻³ (Figure 2.1b)

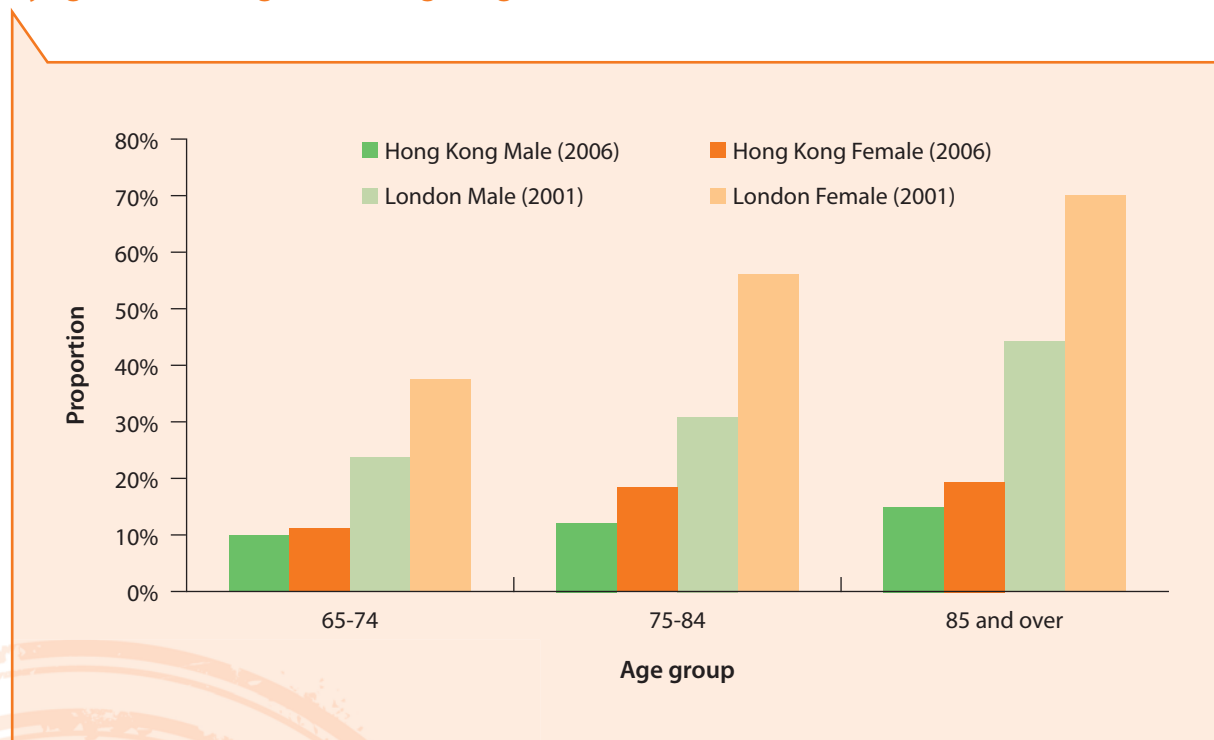
Figure 2.1b »
Proportion of community-dwelling population aged 65 years and over living alone in the three world cities, 2006



The proportion of those living alone varies substantially across age and gender. In Hong Kong, the proportion of community-dwelling older people living alone is similar for men (10.0%) and women (11.2%) aged 65-74.¹ Among those aged 85 years and over, the proportion for men (15.0%) is less than that for women (19.4%). In London, the gender difference among those living alone was large even among those aged 65-74 (23.8% for men and 37.5% for women) and was even larger among persons age 85 and over (44.2% for males; 69.9% for females).³ The proportion of those living alone is substantially lower in Hong Kong for both men and women across all age cohorts. (Figure 2.1c)

Figure 2.1c »

Proportion of those living alone among the older population living at home, by age cohort and gender, Hong Kong (2006) and London (2001)



Among the three cities, Hong Kong has the largest average household size, and the lowest proportion of older people living alone. Although living alone is not the same as being lonely, many older Chinese have close-knit families, so this may reflect an important cultural preference. On the other hand, the larger number of older people living alone in New York City and London may reflect a greater degree of independence facilitated by affordable housing and better community support services. The cause and meaning of living alone among older people in these cities should be studied further.

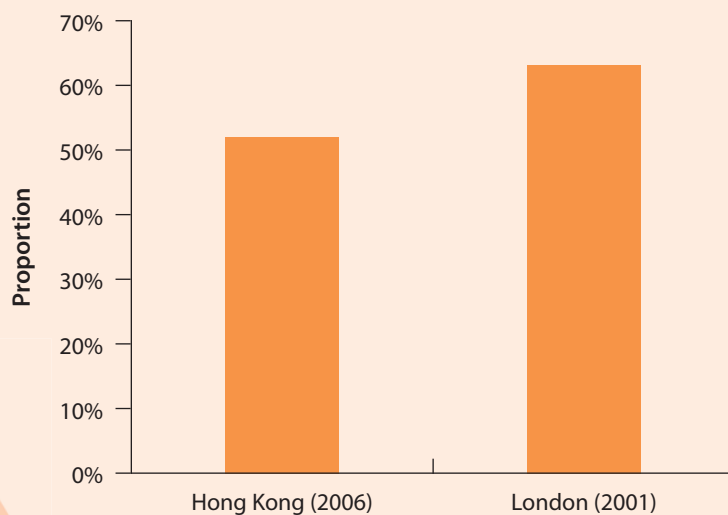
2.1.2 Tenure of housing

In all three world cities a large share of the housing stock is rented.⁶ In New York City, about half of the older population (49%) own their own home, but there is great variation within the city. For example, rates of home ownership range from less than 15% in some of the poorest neighborhoods of New York City to more than 80% in some of the wealthiest neighborhoods. Among older New Yorkers who rent, about 20% live in public housing and nearly 60% live in some form of rent controlled or subsidized housing. In Hong Kong and London, there are no rent control programs for older persons in private rental housing. In contrast, rents for public housing are usually quite affordable. In Hong Kong, the monthly rent of public housing ranges from HK\$259-3,525 (~US\$33-454).⁷

In Hong Kong, slightly more than half (51.9%) of the community-dwelling population aged 65 years and over are home owners (2006),¹ the majority of whom (73.9%) have paid off the mortgages on their homes. In London, the proportion of older home owners is higher (63%) and once again the majority (83.5%) have paid off their mortgages (2001).³ (Figure 2.1d)

Figure 2.1d »

Proportion of community-dwelling population aged 65 years and over living in owner-occupied housing, Hong Kong (2006) and London (2001)



Although home ownership among the older population is common in London and Hong Kong, the quality and condition of the housing stock is highly variable and ought to be investigated further. In 2011, Hong Kong will introduce some reverse mortgage programs, a financial tool that has been available in London and New York City since the late 1980s.⁸ Many believe that “house rich, cash poor” older home owners could make better use of their housing assets as collateral to generate income that would support many of the services they require.⁹ In this respect, Hong Kong could learn from the experience of other world cities.

2.2 Continuum of Long-term Care

There are a variety of services designed to meet different levels of needs along what is often termed a continuum of long-term care. These include care provided in the home, services delivered in the community, housing with various forms of assistance and institutional care. While the terminology of the care services in the three cities is similar, the staffing and provision may differ substantially.

2.2.1 Care provided in the home/services delivered in the community

Hong Kong, New York City and London offer a variety of community-based support services for older people who manage to live in their own home but need assistance with daily living. There are two modes of delivery. First, “care provided in the home” refers to health care or social care delivered to the homes of older people. Second, “services delivered in the community” refer to facilities such as senior centers where older people go within their neighborhoods to receive such services. The evidence regarding the effects of community-based services on the institutionalization of older people is mixed.¹⁰ Some researchers suggest that these services may offer a transitional stage between community-living and institutionalization.^{11,12}

In Hong Kong, services delivered in the community are more abundant than care provided in homes. Many independent older people visit “elderly centres”, where they and their caregivers can receive community support services provided at district and neighborhood levels. The services provided in elderly centres are essentially social in nature, and congregate meals are available. Frail older people and those with dementia receive services in “day care centres”, which focus more on care and rehabilitation. For

those who need short-term residential care services, respite care services are available. For in-home services, older people can apply for home help personal care services, which we define as “non-medical services”, such as meal delivery, homemaker services and escort services to outpatient clinics. Integrated Home Care Services (IHCS) and Enhanced Home and Community Care Services (EHCCS) cover a wider range of services, including medical services such as in-home nursing care and rehabilitation exercises. These community services are mainly provided by non-governmental organizations (NGOs) and the majority of places are subsidized by the government. Although government-subsidized services are not means-tested, clients must satisfy strict criteria of care needs (Standardized Care Need Assessment) before they become eligible for these services. If the services are enrolled to capacity, which is always the case, those in need will be placed on the waiting list.

In New York City, there are also a wide range of community-based services available to older people. Many of these are funded by the New York City Department for the Aging (DFTA). DFTA is an “Area Agency on Aging” (AAA) created by the Older Americans Act and funded, in part, by the federal government. It is also a local New York City Government agency that relies on state and local funding. One of the most important functions of DFTA is to fund 254 Senior Centers. These centers are distributed throughout the city and provide a variety of services, including congregate meals. In addition to funding senior centers, DFTA funds care management services designed to assess the needs of older people and refer them to additional services, e.g. housekeeper services and home-delivered meals.

Along with the community-based services funded by DFTA, a large percentage of older New Yorkers receive “home help” non-medical personal care services, such as cleaning, cooking and personal assistance such as bathing.⁶ Medicaid, a program funded by the federal and state governments, is the single most important payer for these services. Medicaid home care services are means-tested and available only to lower-income older persons. The services available under the Medicaid program depend on the older person’s medical condition, social service needs, and housing situation. In rare cases, the Medicaid program will fund in-home nursing care with 24-hour supervision. Older people who make too much money to be eligible for Medicaid can receive publicly-funded home care services through the DFTA’s home care program. Services in the DFTA program are restricted to housekeeping and do not provide personal care. The older population in New York City use far more home care than their counterparts in the rest of the state and country.⁶ This reflects not only the larger share of older persons in New York City who are poor, but also the aggressive efforts of New York State and City governments to make these services available.

In London, the Home Care Services Unit of each local authority (the 33 boroughs of London) funds home-attendant services (such as bathing and dressing) and in some cases housekeeping services (such as cooking and cleaning) for some older residents. Some local authorities provide these services directly and others contract provision to independent organizations.⁶ Local authorities also vary in terms of out-of-pocket charges for these services. As is the case in New York City, home help services, in contrast to home nursing services, are means-tested.

The rate of home help users per 1,000 population aged 65 years and over is 5.8 in London (2001) and 7.1 in New York City (2000).⁶ (Figure 2.2a) In Hong Kong, comparable statistics are not available.

Figure 2.2a »

Rates of home help users per 1,000 population aged 65 years and over, London (2001) and New York City (2000)



2.2.2 Housing with various forms of assistance

When older people become more dependent in daily living, but institutional care is not required, they may consider living in facilities with a variety of arrangements for assisted living. These facilities are housing units specially designed for people who cannot live on their own independently, but can still manage to live in the community with on-site care and support services.

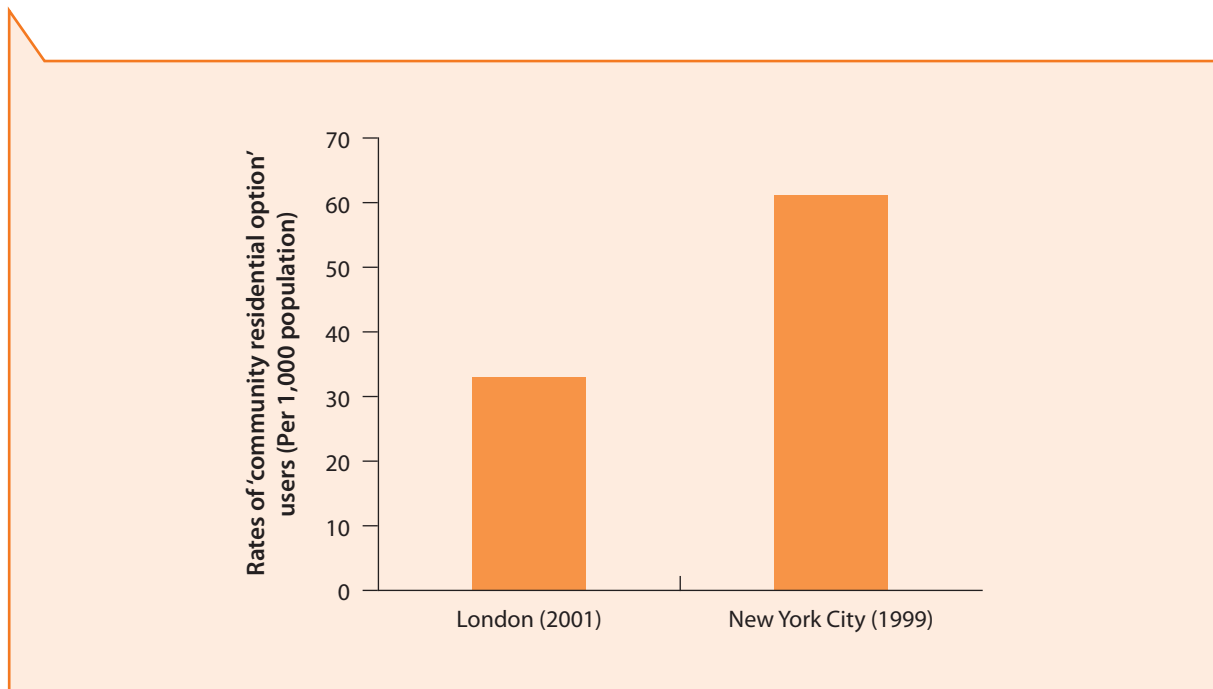
In addition to the extensive availability of home help and home health care, London and New York City have developed a range of “community residential options”, which fall into two major categories: congregate housing with common services, or individual apartments with attached and collective services. The former are usually new facilities constructed for this purpose. The latter involves adding services to existing housing units.

In the case of congregate housing, placement is means-tested in both cities and availability is quite limited. New York City has the greatest number of such assisted living alternatives, including 28 housing complexes that have become officially recognized NORCs (naturally occurring retirement communities): apartment complexes in which over half of the population is over 50 years old and which receive public funding to support their services for older people. The two most common community-based residential options in New York City are enriched housing and assisted living programs. Enriched housing is a means-tested program and is usually attached to a particular apartment complex with subsidized apartments. In addition, older people who are poor enough to qualify for services under the Medicaid program can receive personal assistance in an assisted living program (ALP) including medical services.

There are about 33 “community residential option” users per 1,000 persons age 65 and over in London (2001) and about 61 in New York (1999).⁶ (Figure 2.2b) For New York City, we count as congregate housing all registered adult homes, which include Medicaid assisted living programs in adult homes. For individual units, we include enriched housing (including assisted living in enriched housing) and section 202 housing (under the federal Supportive Housing for the Elderly Act), but exclude public housing for the elderly. In London, we have only considered congregate care, in the form of residential care homes. Unlike New York, where funding exists from national sources, residential care homes in London, like home-help services there, are financed by each local authority. For these units in London, we have excluded dual-registered beds that include “medicalized” services. Medicalized beds, which are the equivalent of nursing home beds in New York City, are discussed in the next section of the chapter.

Figure 2.2b »

Rates of “community residential option” users per 1,000 population aged 65 years and over, London (2001) and New York (1999)



In Hong Kong, housing equipped with various forms of assistance is not as common as in New York City and London. In the past, “Hostels for the Elderly” provided communal living accommodation, activities and round-the-clock staff support for older people capable of self-care; while “Homes for the Aged” provided residential care, hot meal service and limited assistance in daily activities to seniors dependent in terms of self-care but independent in terms of personal or nursing care. However, these two services have been phased out since 2003 and effectively now provide institutional care to their residents, who become frailer and more dependent as they age.

Under the housing policy, there are public rental housing units for older people (Housing for Senior Citizens/Sheltered Housing for the Elderly) based on hostel-type accommodation with shared facilities. Means-tested individual home units for groups of six older people are provided with a warden for handling emergency situations. However, these units are not popular among older people and quarrels among the residents are not uncommon. There are self-contained small flats for the older people in public rental housing estates. These flats are equipped with facilities to cater for the needs of older people. However, these are not supported by warden services.

In 2003, a new initiative, Senior Citizen Residences Scheme, started to provide integrated housing tailored for the middle-income elderly. There are 576 self-contained units under this scheme and facilities both inside and outside the units are designed for the needs of older people. Round-the-clock professional medical and care services, as well as communal and recreational activities, are available. However, the residents have to pay an “entry contribution” in order to enjoy life-long residence without having to pay any monthly rental. Those who are less well-off cannot apply for these units.

Despite this new initiative since 2003, there is a lack of housing with various forms of assistance in Hong Kong. The “community residential option” in New York City and London represents an innovative use of existing urban resources.

2.2.3 Institutional care

Older people who need assistance in daily living but who are too frail to live in housing with various forms of assistance, or at home with support from community services and/or informal caregivers, will eventually require nursing homes/institutionalized long-term care.

Nursing home care in the United Kingdom (U.K.) is means-tested and availability is limited. Public financing for long-term care in the U.S. is more limited than in the U.K. Medicare only pays for the first 100 days of nursing home care. Medicaid includes a skilled nursing benefit and is the primary source of funds for nursing homes. Medicaid, however, is means-tested and limited to older people with very limited incomes. Most seniors in the U.S. “spend down” their assets until they are eligible for Medicaid. In London and New York City, there are about 15.8 nursing home places per 1,000 people aged 65 and over (in 2001) and 45.3 per 1,000 (in 2006) respectively.^{13, 14}

In Hong Kong, almost all seniors have to move to institutional care once they cannot manage to live in their own home. Institutional care services in Hong Kong are called “Residential Care Homes for the Elderly” (RCHE), which are provided both by NGOs and by the private sector, and where staffing levels and quality vary considerably. There are 73,178 institutional care places (2008) or 83.2 places per 1,000 people aged 65 years and over, with about one-third being subsidized places.¹⁵ The older population can choose to use services subsidized by the government if they satisfy the Standardized Care Need Assessment. However, there is always a long waiting list for these services because most older people prefer them in comparison to homes operated by the private sector, since the quality of care is generally better for subsidized homes. In spite of the abundant supply of

institutional care places operated by the private sector (over two-thirds of all places), the occupancy rate in these homes is low. If these could be fully utilized, the waiting time for institutional care would be shortened substantially.

The institutionalization rate for people aged 65 years and over in Hong Kong is near 7% (6.8% in 2004 and 6.5% in 2008).^{16,17} In London by contrast, only 2.3% of people aged 65 and over are in institutionalized long-term care (in 2001), while the rate in New York City is 3.9% (in 2000).^{3,18} (Figure 2.2c)

Figure 2.2c »

Institutionalization rate among the population aged 65 years and over in the three world cities



While New York City offers a higher rate of home help services and “community residential options” than London, these figures only reflect the supply of services, not the demand for them. In addition, there is waiting list for these services. Hong Kong’s older population has the lowest rate of living alone, yet the share of Hong Kong’s older population living in long-term care institutions is higher than that in London and New York City. It is uncertain as to whether the high institutionalization rate in Hong Kong is a result of inadequate community support, inadequate housing with various forms of assistance, inadequate space to allow for home modification for those with increasing dependency, or some combination of these factors. This is an area of inquiry that deserves greater attention.

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The background features a series of concentric, overlapping circles in shades of teal, blue, and green, creating a tunnel-like effect. A dark teal banner with a white vertical stripe on the right side is positioned horizontally across the middle of the image. The text is located on the left side of this banner.

Chapter 3 »
Financial Security

Hong Kong, London and New York are three of the most expensive cities in the world and thus pose a challenge to older people, many of whom are no longer in the work force and have relatively fixed incomes. In Hong Kong, the older population has less financial security than in New York City or London. Also, older people in Hong Kong have lower labor force participation rates. We do not have data on income distribution in London, but there are reliable income data for Hong Kong and New York City, which reveal large income disparities. Although definitions of poverty vary, Hong Kong appears to have the highest proportion of older people living in poverty. It should be noted, however, that this claim does not take into account significant differences in health and welfare benefits.

3.1 Formal Job Attachment

There is no mandatory retirement age in any of the three cities, but it is common for people in Hong Kong to retire at the age of 55 to 60. In London, and the rest of the U.K., the traditional age of retirement (and qualification for public pensions) is 60 for women and 65 for men. In New York City and the rest of the U.S., the traditional age of retirement is 65, but the average age of retirement is actually 62.¹ Under the Social Security program in the U.S., people born in 1960 or later cannot collect full pension benefits until the age of 67, but the age of eligibility for Medicare health insurance benefits is still 65.

In all three cities, there is an ongoing debate about the merits of extending work life. Opponents fear that allowing older people to remain in the work force will take jobs away from younger people.² Others claim that for people who do manual labor there are health risks associated with delaying retirement. Proponents of extending work life, however, argue that labor force participation, at least on a part-time basis, not only provides older people with greater income security, but also enhances social life and community involvement, and reduces the probability of social isolation.³

Labor force participation rates among older people (aged 65 years and over) range from 5.4% in Hong Kong to 14.8% and 10.0% respectively in New York City and London.⁴⁻⁶ (Figure 3.1)

Figure 3.1 »
Labor force participation rate among the population aged 65 years and over
in the three world cities, 2009



A number of factors could account for the differences in labor force participation rates. Pension and social security policies can play an important role. The high rate in New York City may reflect migration of economically inactive older people who move out of the city, but there is no evidence to support this hypothesis. As shown in Chapter 1, older people in Hong Kong have a lower level of education, which may become an obstacle to employment. Of course, some seniors choose to retire because of personal preference, such as to enjoy family life or other commitments – in contrast, some who would like to work may be excluded from the labor force.

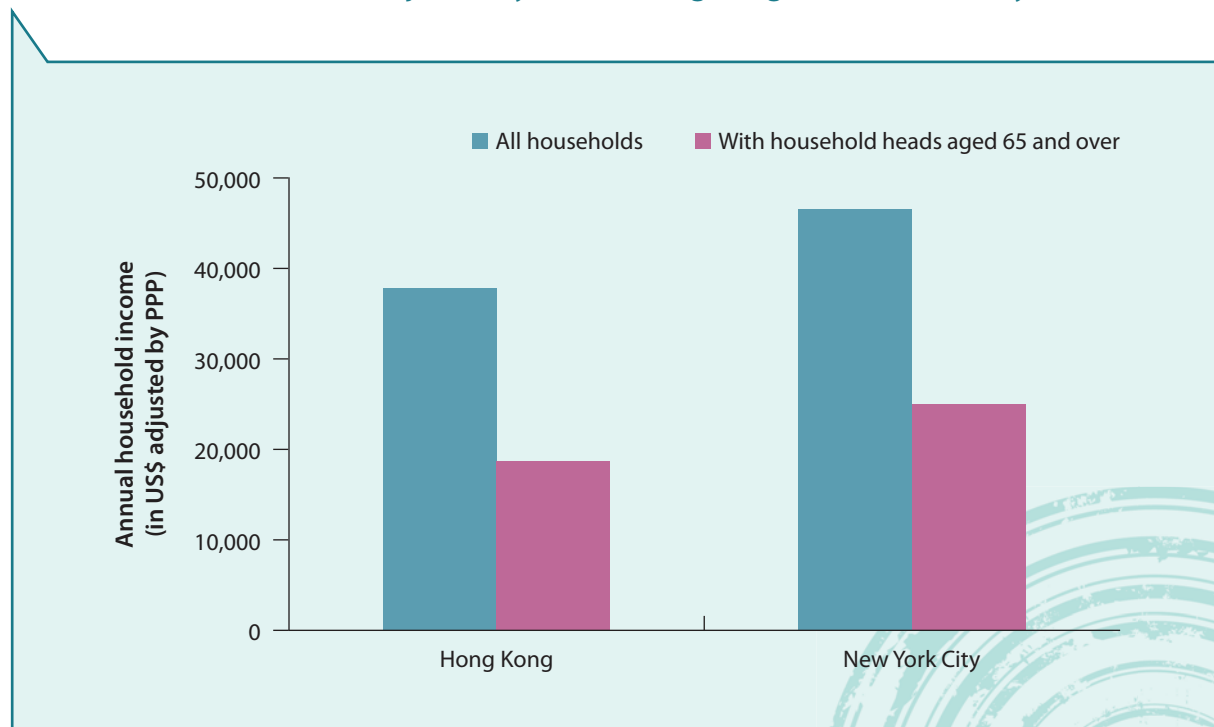
3.2 Household Income

The financial security of older people, particularly those retired, is sometimes supported by other household members. Thus, household income is generally considered to be a better indicator of the financial resources available to older people than personal income. In comparing income data across cities, although one could rely on currency exchange rates to convert the currency into U.S. dollars, since price levels are different in each city, it is more accurate to convert these data using purchasing power parities (PPP) as estimated by the International Monetary Fund.⁷ Figures in brackets refer to the currency adjusted to U.S. dollar using PPP conversion factors.

The median monthly household income in Hong Kong is HK\$17,250 (2006), while that among households with a household head aged 65 years and over is much lower at HK\$8,525.⁸ A rough calculation will give an annual income of HK\$207,000 (US\$37,691) and HK\$102,300 (US\$18,627), respectively. In New York City, the median annual household income is US\$46,480 (2006), while that among those with a household head aged 65 and over is US\$24,941.⁵ In London, comparable data are unavailable. (Figure 3.2a)

Figure 3.2a »

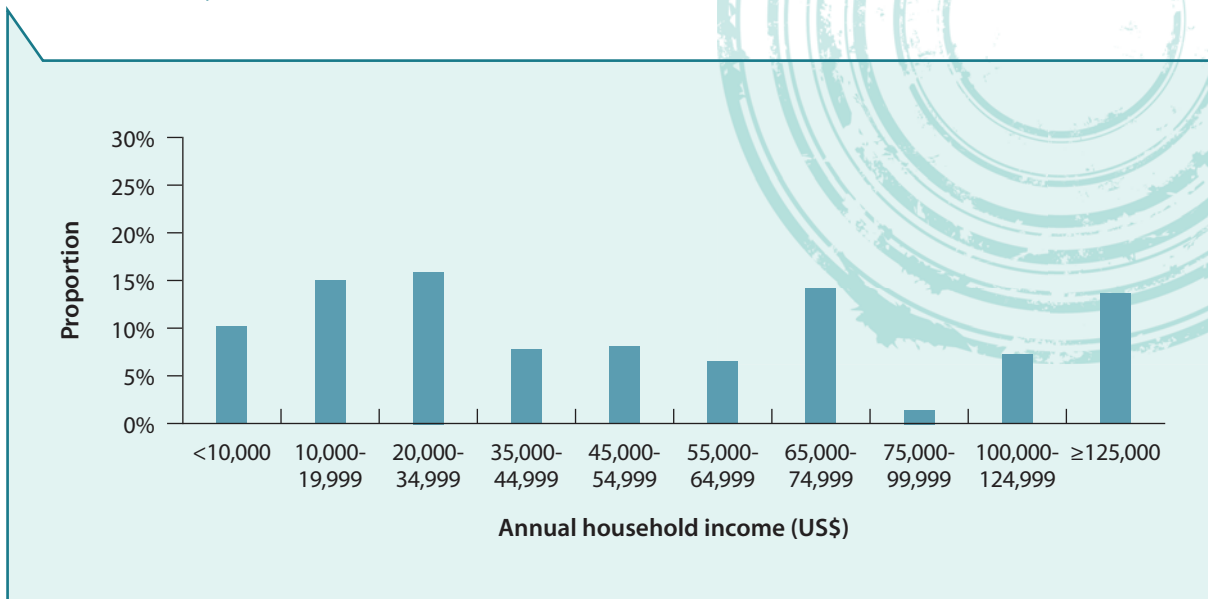
Annual household income (adjusted by PPP) in Hong Kong and New York City, 2006



In New York City, the distribution of household income of people aged 65 years and over clusters around both the lower and higher income groups. While 41% of community-dwelling older people have an annual household income of less than US\$35,000, 13.6% have an annual household income of more than US\$125,000 (in 2006).⁵ (Figure 3.2b)

Figure 3.2b »

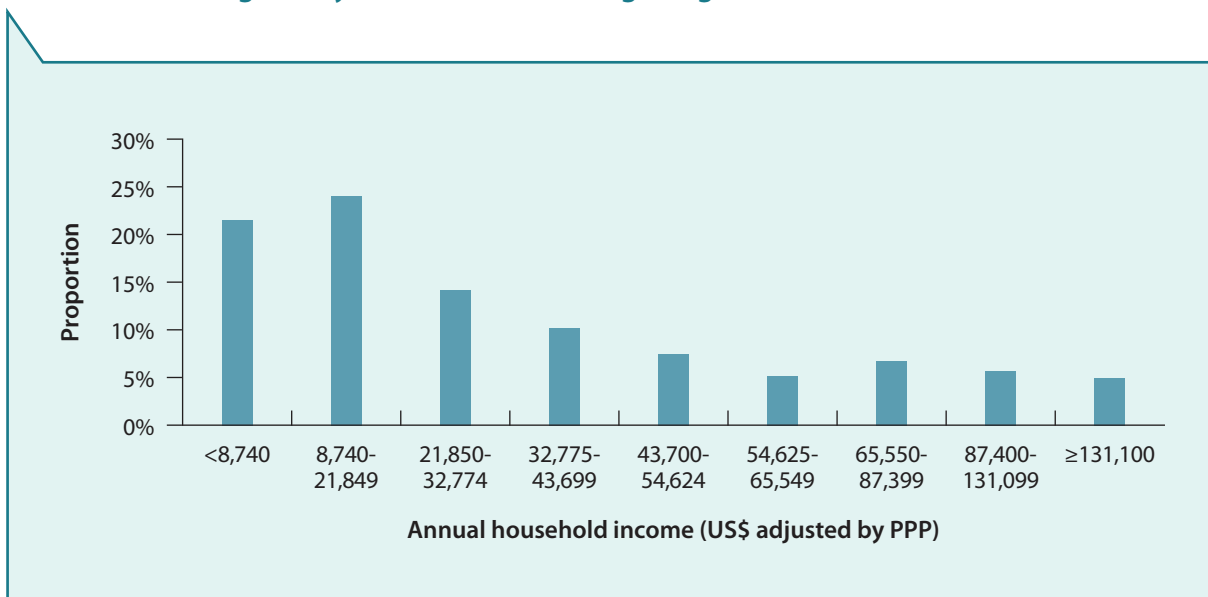
Distribution of annual household income among population aged 65 years and over in New York City, 2006



In Hong Kong, the distribution of household income among the older population also clusters around income groups below US\$35,000 adjusted for PPP. About 60% of the households with older people have an annual household income of less than US\$32,775 (adjusted by PPP) (2006).⁹ (Figure 3.2c)

Figure 3.2c »

Distribution of annual household income (adjusted by PPP) among households with member(s) aged 65 years and over in Hong Kong, 2006

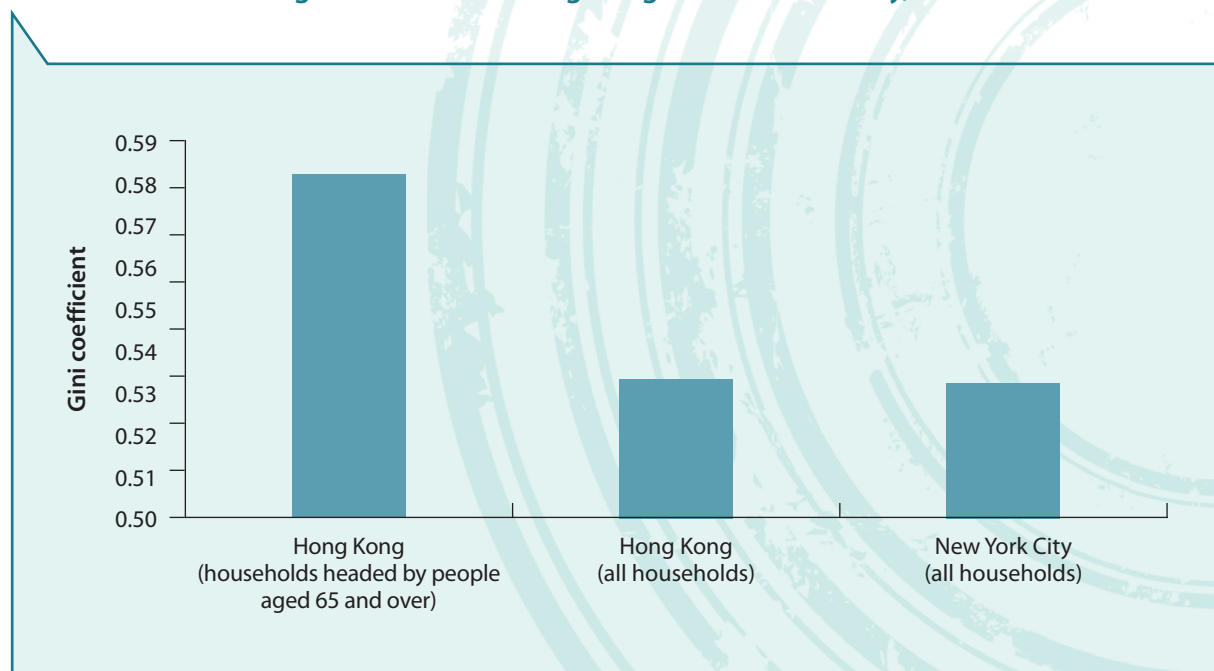


In Hong Kong and New York City, the median income for households with a head aged 65 and over is about half that for all households. This could be due to the lower income level of older household members as well as to the smaller size of households with older heads. The distribution of income among older households suggests there is significant income inequality in both Hong Kong and New York City.

We use the Gini coefficient to measure income inequality (the greater the coefficient, the greater the extent of income inequality). The Gini coefficient for all households in Hong Kong is 0.533 (2006).⁸ This figure is about the same as that of New York City (0.532).⁵ (Figure 3.2d) In Hong Kong, the Gini coefficient for households with a head aged 65 years and over is slightly higher (0.582). However, we have been unable to obtain equivalent data for New York City.

Figure 3.2d »

Gini coefficient among households in Hong Kong and New York City, 2006



Income inequality in Hong Kong is roughly the same, if not greater than in New York City. In Hong Kong, income inequality among households headed by older people is greater than that among all households. However, the Gini coefficient based on household income does not take into account household size. Nor does it reflect differences in taxes and social benefits.

3.3 Poverty

There is no universal standard for defining poverty. Even within the same country, a range of different measures are typically used for different purposes. For example, for welfare application, there is one definition; for statistical purpose, there is another definition. In this comparison, we adopt the poverty thresholds updated by the U.S. Census Bureau, which measures a person's poverty status by comparing a person's household income in the last 12 months with the poverty threshold appropriate for that person's household size and composition. If the household income of that person's household is below the corresponding threshold, the person is considered to be below the poverty level. Using this method, 18.6% of people aged 65 years and over in New York City are classified as below the poverty level (2008).⁵

In London, the government's poverty threshold is defined as an income below 60% of the median income after housing costs. About 23% of pensioners (men aged 65 and over and women aged 60 and over) in London are considered as below the poverty threshold (2006-2009).¹⁰ Pensioners living in Inner London have a higher poverty rate (29%) than those living in Outer London (20%). This may be because of the high living standard in Inner London. Using an alternative definition of poverty (income below 50% of the median income after housing costs), the poverty rate among the pensioners in London is 15% (Inner London: 18% and Outer London: 13%).

In Hong Kong, there is no official definition for poverty based on a single poverty line or income indicator. One NGO defines poverty as living on a monthly income less than or equal to 50% of the median income of all other households of equal size. Using this method, the poverty rate among people aged 65 and over is 40.1% (2006).¹¹

While definitions of poverty differ among the three cities, it appears that the poverty rate of Hong Kong's older population is the highest. This observation is consistent with other measures, including the low education level, low labor force participation and the high degree of income inequality.

3.4 Health Insurance Systems

In the U.S., Medicare is a near universal social insurance program that provides hospital, physician and prescription drug insurance. The Medicare program has several distinct parts.

Medicare Part A is a hospital insurance program based on the Social Security contributory model and funded through payroll taxes. Medicare Part B is a voluntary supplementary medical insurance program funded through beneficiary premiums and federal general revenues. In 1972, the program was expanded to include the disabled and people with end-stage renal disease, and in 2003 the Medicare Modernization Act (MMA) expanded the program further. The MMA created Medicare “Part D,” a new prescription drug benefit unlike any of the other benefits covered by Medicare. It is different because in order to receive it beneficiaries are required to enroll in either a stand-alone prescription drug plan (PDP) or a private Medicare Advantage (MA) plan that includes Part D prescription drug coverage.¹² One aspect of Part D is a low-income subsidy available to beneficiaries with incomes up to 150% of the federal poverty level and limited resources. For qualified beneficiaries, Medicare covers large portions of plan premiums and prescription cost-sharing. The PDPs and MAs have broad discretion to determine formularies and all use some form of utilization management to control costs.¹³ Along with the creation of a prescription drug benefit, the Act also provides incentives to encourage beneficiaries to select MA plans over the traditional Medicare program.^{14,15} By July 2010, about 24% (11.1 million) of Medicare beneficiaries were enrolled in Medicare advantage plans, up from 5.3% in 2003 when the Medicare Modernization Act was adopted.

Nationally, Medicare provides health insurance to about 99% of the older population. In New York City, which has a large number of immigrants, at least 15% of the older population does not qualify for Medicare Part A – and is unlikely to be able to afford Medicare Part B or D – because they did not pay Medicare payroll taxes for at least 10 years.¹⁶ Furthermore, the out-of-pocket expenses associated with the Medicare program are significant, particularly for lower income beneficiaries. In 2005, Medicare beneficiaries spent on average US\$4,394 on health care expenses and 10% of beneficiaries spent more than US\$8,000 per year. For the poorest Medicare beneficiaries health care expenses represent about 50% of their income.¹⁷ According to one analysis, older people spend a greater portion of their disposable income on health care today than they did in 1965 before the adoption of Medicare and Medicaid.¹⁸

In contrast to New York City and the rest of the U.S., older Londoners enjoy significant protection against the costs of health care although they do not have universal health insurance coverage. Historically, the U.K. National Health Service (NHS) has limited access to some high cost health care services, like kidney dialysis and revascularization, particularly for older people.^{19,20} Despite this, the NHS provides excellent primary care and with few exceptions (modest user fees for prescription drugs and dental care, while drugs are free for pensioners) health care is free at the point of service.

Similar to London, there is no universal health insurance coverage in Hong Kong, but there is low-charge health care provided by the public sector. Health insurance programs are all privately administrated and usually cover medical consultation (including medication) and hospitalization costs. Only 10% of people aged 65 and over are covered by self-purchased medical insurance and/or medical benefits supplied by employers/companies (in 2009-2010).²¹ This proportion is far lower than those for other age groups. However, as the majority of older people seek medical care at public hospitals and public outpatient clinics, which provide care at very low charge, the low insurance coverage may not necessarily cause a problem. On average, among the population aged 65 and over who pay for their medical expenses, the median of monthly medical expenses is about HK\$500 (US\$88 adjusted by PPP) (2005).²² A rough calculation (the median of medical expenses divided by the median monthly income) shows that the out-of-pocket health care expenses are approximately 14% of their monthly income. Nevertheless, waiting time could be a concern other than financial concerns.

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Chapter 4 »
**Health-related Lifestyle and
Behavioral Risk Factors**

Maintaining good health and independence are important to active and healthy ageing. Although the importance of a healthy lifestyle for younger people is well-known, it is important to emphasize that many older adults ignore the fact that it is never too late to follow healthy behaviors. Lifestyle and behavior choices are important predictors of health and function at all ages.¹

None of the three world cities systematically ranks top among the key indicators of health-related lifestyle and behaviors indicators we compare in this chapter. Hong Kong's older residents have the lowest prevalence rate of overweight and obesity in comparison to their counterparts. They also have relatively high rates of underweight, which is less of a problem in New York City and London. Older men in Hong Kong have the highest prevalence of smoking, yet older women have the lowest prevalence. Older people in London have the highest prevalence of binge drinking, which is not a problem in Hong Kong. Older people in New York City are more active in doing exercise and physical activities, while Hong Kong seniors report consuming more fruits and vegetables than those in New York City. Although older people in London report consuming the most fruits and vegetables, these findings are inconsistent with the rate of people who are overweight and obese.

In this chapter, we compare health-related lifestyle and behaviors of the older population based on surveys of the community-dwelling population. Unless otherwise stated, the data we present refer to this population.

4.1 Overweight and Underweight

The risks of being underweight or overweight are equally important for seniors. Being overweight is associated with a higher risk of disease, especially cardiovascular disease. Being underweight is a reflection of insufficient nutrition and makes people more vulnerable to diseases because of their weakened immune systems.

Body Mass Index (BMI) is one of the indicators for underweight and overweight. The World Health Organization (WHO) has recommended that an individual should maintain a BMI in the range 18.5-24.9kg/m². A BMI less than 18.5kg/m² is regarded as underweight, whereas a BMI equal to or more than 25kg/m² is regarded as overweight or obese. For Asian populations, the health risks associated with obesity occur at a lower BMI, 23kg/m².²

Based on the Western scale, 59.6% of people aged 65 years and over in New York City are overweight or obese (BMI ≥ 25kg/m²) (2006)³ in contrast to London where 64.8% of people population aged 55 years and over are overweight or obese (BMI ≥ 25kg/m²) (2006).⁴

Based on the Asian scale, in Hong Kong, about 48.4% of people aged 65 years and over are overweight or obese ($BMI \geq 23 \text{ kg/m}^2$) (2003/2004)⁵. However, based on the Western scale ($BMI \geq 25 \text{ kg/m}^2$) as in New York City and London, this figure falls to 27.5%.

New York City and London share high prevalence rates of overweight and obesity among the senior or soon-to-be old population. But obesity is a less serious problem in Hong Kong. (Figure 4.1)

Figure 4.1 »

Prevalence of the overweight community-dwelling population aged 65 years and over in the three world cities, 2006



In Hong Kong, about 9.1% of the community-dwelling population aged 65 years and over are underweight ($BMI < 18.5 \text{ kg/m}^2$) (2003/2004)⁵. Perhaps due to the low prevalence, there is not much emphasis on underweight in New York City and London. We have been unable to find any data on the prevalence of the underweight population in these cities.

Hong Kong has the largest proportion (42.5%) of older people in the normal range ($18.5 \text{ kg/m}^2 \leq BMI < 22.9 \text{ kg/m}^2$), whereas in New York City and London, even combining normal and underweight together, the proportion is less than 40%.

4.2 Physical Activity and Exercise

Engaging in adequate physical activity and exercise is good for the physical and mental health of people of all ages. There are some cultural differences in the kinds of exercises in which seniors engage. For example, Tai Chi is widely practiced by the Chinese older population, while walking and jogging are the most common forms of exercise among older Western people.

In general, the WHO recommends having at least 30 minutes of physical activity of moderate intensity every day or on most days of the week.⁶ In 2010, WHO released recommendations on physical activity for different age groups.⁷ One of the recommendations is having at least 150 minutes of moderate-intensity aerobic physical activity, or at least 75 minutes of vigorous-intensity aerobic physical activity, or an equivalent combination of these, in a week.

In New York City, about 37.8% of people aged 65 years and over have five or more moderate sessions of physical activities lasting at least 30 minutes each, or three or more vigorous sessions lasting at least 20 minutes each in a week (2006).³ A further 38.5% of the older population have less frequent or vigorous physical activities and 23.7% have none at all.

In London, about 14.5% of people aged 55 and over report taking part in 0-3 hours of sport or exercise in the week preceding the survey (2006) and 79.3% report not participating at all in any sport or exercise.⁴ Analyzed by ethnicity, the Asian or Asian British adult population (aged 18 and over) have the highest non-participation rate among all ethnic groups.

In Hong Kong, 36.7% of people aged 65 and over report not participating in exercise or physical activities in the month preceding a 2003/2004 survey.⁵ About 14.0% of the older population report performing moderate physical activities and only 1.6% vigorous exercise in the week preceding the survey. Among those who perform moderate physical activities, 83.5% perform the activities at least four days a week. Among those who perform vigorous physical activities, 56.6% perform the activities at least four days a week.

Although data on physical activities are not directly comparable in the three cities, older people in New York City appear to be more active than those in London and Hong Kong. The Asian and Asian British in London have the lowest participation in physical activities among all ethnic groups. This is consistent with the observation that over one-third of older people in Hong Kong do not participate in exercise or physical activities in the course of a month. In addition, the Asian population appears to take part in other low activity-level exercises, which is not reflected in the above data. To meet the WHO recommendations, moderate to vigorous intensity physical activities should be further promoted in Hong Kong and London.

4.3 Smoking

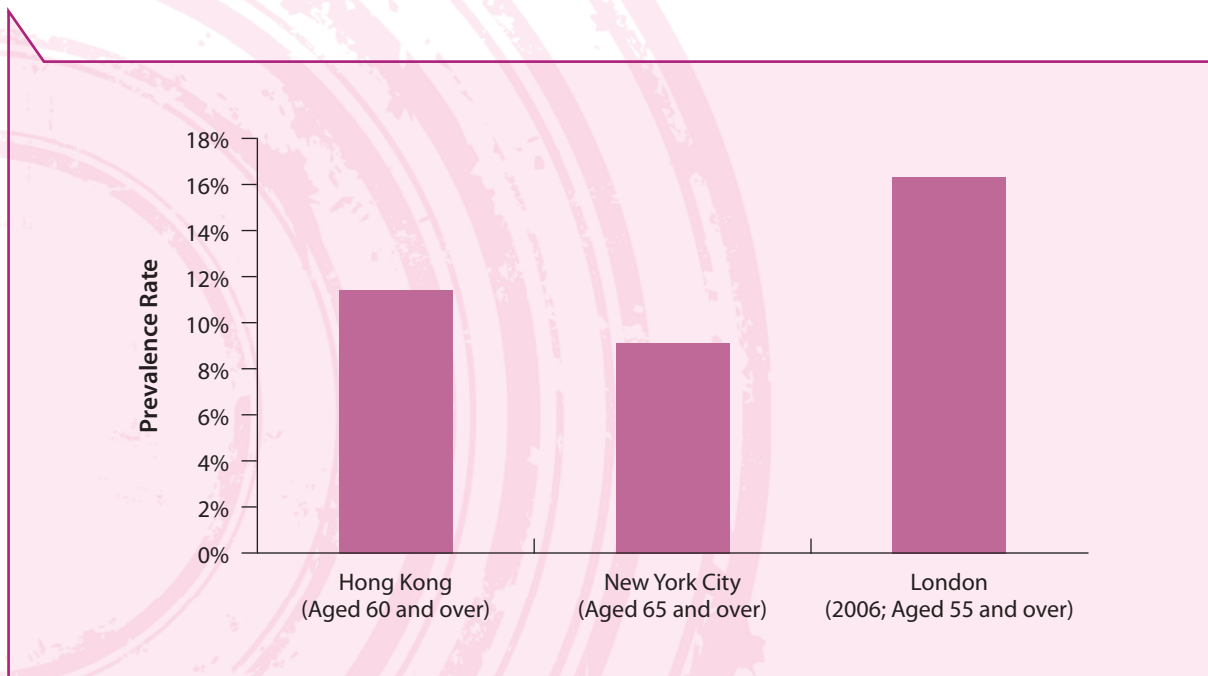
Smoking is hazardous to health. Common illnesses associated with smoking include hypertension and stroke. To promote good health of seniors, smoking prevention and cessation are important.

In Hong Kong, 11.4% of people aged 60 years and over are smokers (2008) and 71.7% have never smoked.⁸ In New York City, 9.1% of people aged 65 and over are smokers (2008) while 53.2% have never smoked.³ In London, 16.3% of people aged 55 and over are smokers (2006), and 47.8% have never smoked.⁴

Given the difference in age groups, it appears that the prevalence of smokers is the highest in London, whereas prevalence rates in Hong Kong and New York City are similar. (Figure 4.3a) On the other hand, Hong Kong has the largest proportion of older people who have never smoked.

Figure 4.3a »

Prevalence of smokers among the community-dwelling older population in the three world cities, 2008

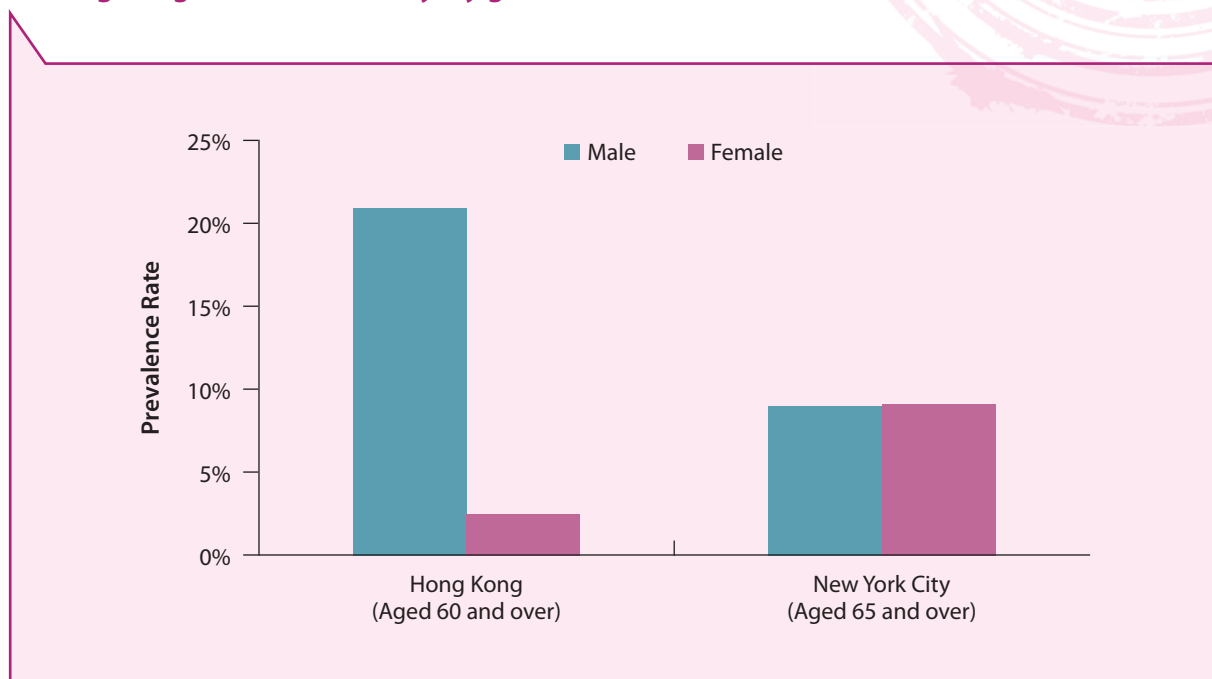


About 20.9% of men aged 60 years and over in Hong Kong are smokers (2008), in contrast to only 2.5% of women.⁸ In New York City, there is no apparent gender difference: the prevalence rates of smoking for men and women aged 65 and over are respectively 9.0% and 9.1% (2008).³ In London, prevalence rates of current smokers among the older population by gender are unavailable.

Analyzed by gender, older men in Hong Kong have a higher prevalence of smoking than their counterparts in New York City, but the reverse is true for older women. (Figure 4.3b)

Figure 4.3b »

Prevalence of current smokers among community-dwelling older population in Hong Kong and New York City, by gender, 2008



The high smoking prevalence among the older male population in Hong Kong is a striking contrast to their counterparts in New York City. In contrast, the proportion of men who have never smoked in Hong Kong (49.2% for those aged 60 and over) and New York City (44.8% for those aged 65 and over) are similar. This implies the lower prevalence of older male smokers in New York City results from more smokers having given up smoking. More public health efforts at smoking cessation targeted to the male population should be organized in Hong Kong.

4.4 Alcohol Drinking

Moderate drinking is sometimes beneficial to social and physical health. However, excessive drinking can bring adverse health and behavioral consequences. Here, we examine the prevalence of binge drinking, the consumption of a large quantity of alcohol on one occasion.

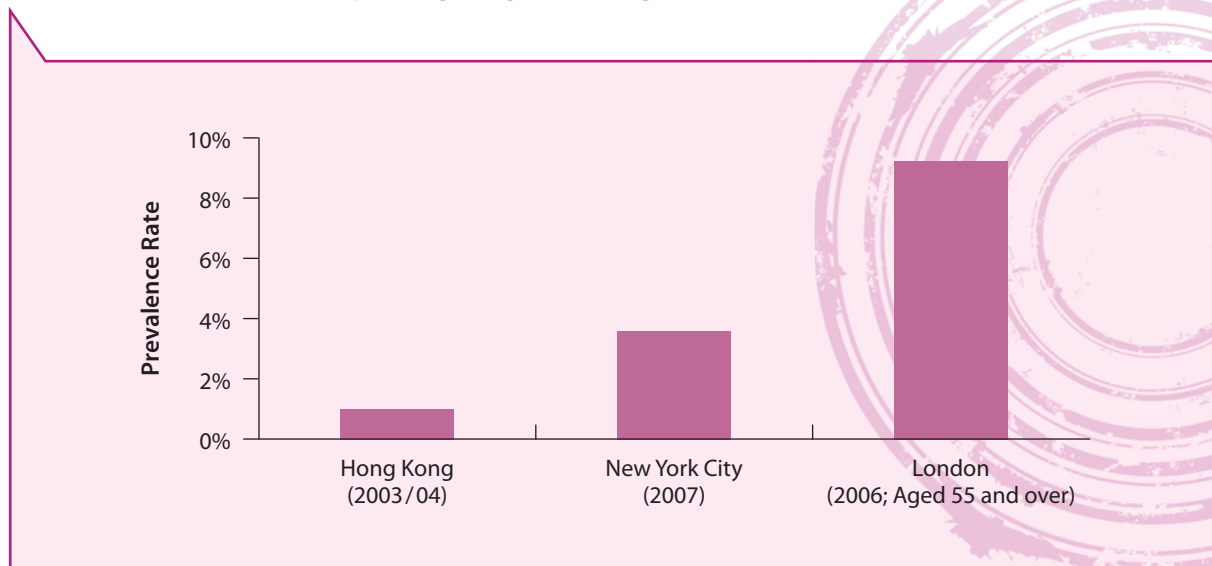
In Hong Kong and New York City, binge drinking is defined as consuming five or more alcoholic drinks on one occasion during the month prior to the survey. In London, different definitions of binge drinking are defined for men and women separately: more than eight units for men and more than six units for women on the heaviest day of drinking in the week prior to survey.

In Hong Kong, only 1.0% of people aged 65 years and over engaged in binge drinking in the month preceding the 2003/2004 survey.⁵ In New York City, the proportion of people aged 65 and over who engaged in binge drinking in the month preceding the survey was 3.6% in 2007.³ In London, 9.2% of people aged 55 and over had engaged in binge drinking in the week preceding the survey in 2006.⁴

The older population in Hong Kong has a lower prevalence of binge drinking than their counterparts in New York City. London appears to have a much higher level of binge drinking, but it is possible that this difference may reflect differences in the definition of binge drinking and the age group covered by the London survey. (Figure 4.4) This is consistent with robust comparative data on England and the U.S.⁹

Figure 4.4 »

Prevalence of community-dwelling population aged 65 years and over in the three world cities reporting binge drinking, 2003-2007



Although the problem of binge drinking among older people in the three cities is less serious than the problem of smoking, it has significant health consequences and may reflect unaddressed social and psychological problems.

4.5 Nutrition: Consumption of Fruits and Vegetables

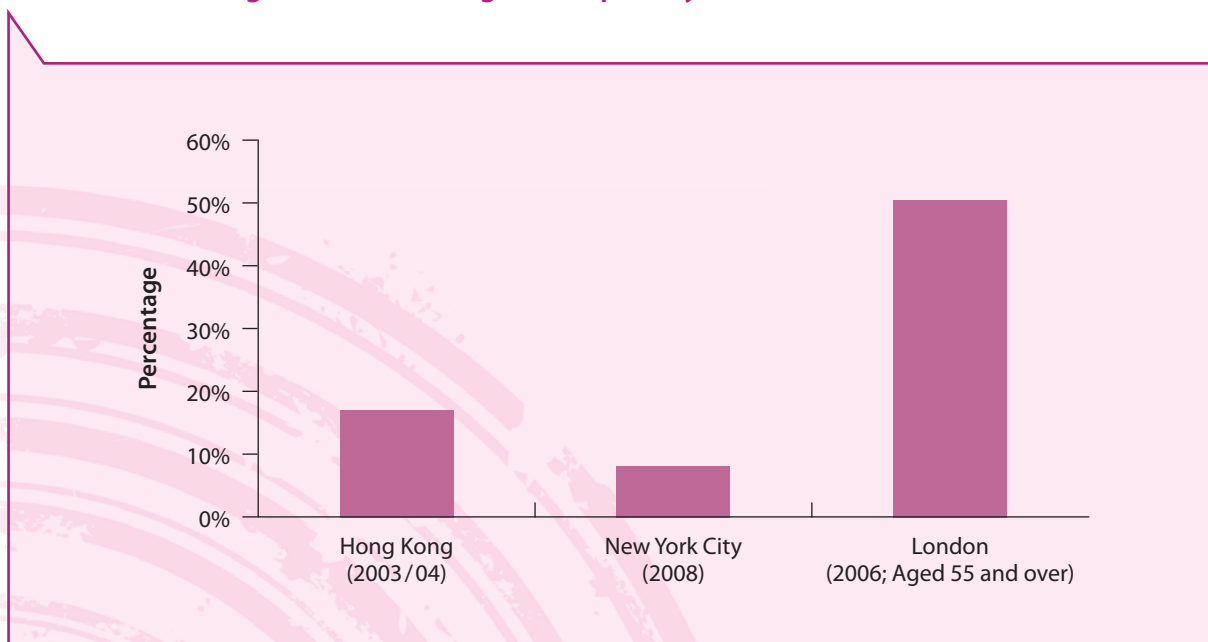
Nutrition plays an important role in the health of the older population yet older people do not necessarily have adequate nutrition intake. Indeed, their dietary habits deviate widely from the healthy diet recommendations. For example, although the WHO recommends that people consume at least 400g (or five servings) of fruits and vegetables a day,⁶ in wealthy cities, people may consume more meat than fruits and vegetables. In this section, we will examine the consumption of fruits and vegetables in the three world cities.

In Hong Kong, 17.1% of people aged 65 years and over consume five or more servings of fruits and vegetables a day (2003/2004).⁵ In New York City, only 8.2% of people aged 65 and over report consuming five or more servings of fruits and vegetables on the day before they were asked (2008).³ In London, 50.4% of people aged 55 and over report consuming five or more portions of fruits and vegetables on the day before they were asked (2006).⁴

London has the largest proportion of older people meeting WHO recommendations on fruit and vegetable consumption, while New York City has the worst situation. Even though Hong Kong is between the two, the proportion of seniors meeting WHO recommendations remains quite small. (Figure 4.5)

Figure 4.5 »

Percentage of community-dwelling population aged 65 years and over consuming at least five servings of fruits and vegetables per day in the three world cities, 2003-2008



It is well-known that in comparison to Asian diets, Western diets are composed of fewer fruits and vegetables. However, the data noted above suggest that even in Hong Kong, consumption of fruits and vegetables among the older population is not high. It is surprising that over half the older population in London report daily consumption of at least five servings of fruits and vegetables. However, this finding must be interpreted with caution as it is based on self-reported data. People in London may perceive tubers (e.g. potatoes) as fruits and vegetables, which according to WHO guidelines⁶ should not be included in counting the five servings. Given the rates of overweight and obesity among older persons in London, this is a plausible explanation, but we cannot confirm this.

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Chapter 5 »
Health Status

Maintaining good health and independence is important for the older population as they can enjoy their old age and reduce suffering from illnesses. Moreover, it is also important for society, since the disease and disability burden arising from the rapidly ageing population can be minimized.

In comparison to New York City and London, people in Hong Kong have a longer life expectancy. Although older people in Hong Kong are harsher when it comes to their self-perceived health status, they have lower prevalence rates of diabetes, asthma, heart diseases and stroke than their counterparts in New York City. Moreover, their risk factors, as measured by hypertension, cholesterol levels and obesity are lower. Also, their measures of functional health status are higher. In contrast, seniors in Hong Kong appear to have poorer psychological health, perhaps explaining their lower levels of self-perceived health. Finally, older people in Hong Kong and London have higher mortality rates from cancer than their counterparts in New York City, while seniors in New York City are at higher risk of dying from heart diseases.

5.1 Life Expectancy

In most nations around the world, life expectancy has increased over the past century. Part of this increase is due to extensions of human longevity – approximately three months a year over the past decades. But while people can live longer, it is crucial to maintain good health; otherwise, a prolonged lifespan will imply a longer period living with diseases and disabilities.

In Hong Kong, New York City and London, life expectancy at birth is respectively 79.3, 76.3 and 78.6 years for men and 85.5, 82.0 and 83.1 years for women (2008); at 65 years, life expectancy is respectively 18.1, 18.0 and 18.4 years for men and 22.9, 21.3 and 21.2 years for women.¹⁻³

Hong Kong has the longest life expectancy at birth among the three cities. For men, life expectancy at birth in Hong Kong is just 0.7 years longer than in London and 3.0 years longer than New York City. For women, life expectancy at birth in Hong Kong is 2.4 years longer than in London and 3.5 years longer than in New York City. Hong Kong also has the longest life expectancy at age 65 for women (1.6-1.7 years longer than in the other two cities). For men, in contrast, Hong Kong has a similar life expectancy at age 65 as New York City and London. (Figure 5.1)

Figure 5.1 »
Life expectancy at age 65 in the three world cities, by gender, 2008



In summary, among the three world cities, Hong Kong has the longest life expectancy at birth for both genders. But for the older population, life expectancy at 65 years is a more relevant indicator than life expectancy at birth in reflecting their health and the effectiveness of health promotion and health care system. However, at 65 years of age there is hardly any difference among men in the three cities. While Hong Kong still has the longest life expectancy at 65 for women, the gap among these cities is narrowing. Given that older men in these cities have similar life expectancy, the longer life expectancy of older women suggests that women will require additional care and support as they are more vulnerable to the risk of being widowed and losing their spouses.

5.2 Self-reported Health Status

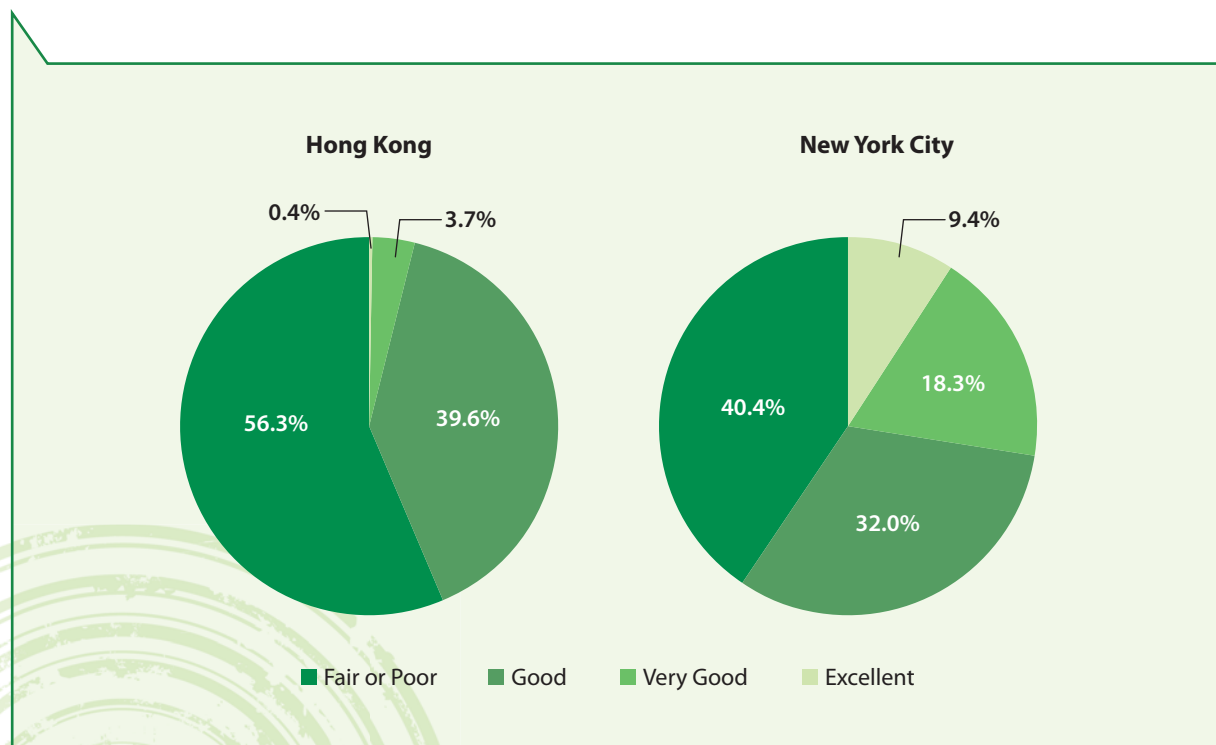
Self-reported health status is a subjective measure of general health and well-being. It reflects a combination of many factors, including perceived morbidity, health expectations and socio-cultural context.⁴

In Hong Kong, only 0.4% of the community-dwelling population aged 65 years and over consider their health status as “excellent” (2009-2010).⁵ The proportion of older people reporting their health status as “very good”, “good”, “fair” and “poor” is respectively 3.7%, 39.6%, 44.5% and 11.8%. In New York City, by contrast, the proportion of the older population reporting their health status in these categories is respectively 9.4% (excellent), 18.3% (very good), 32.0% (good), and 40.4% (fair or poor) (2009).⁶ In London, more than half (57.1%) of the community-dwelling population aged 55 and over reported their health status as “very good or good”, 32.8% as “fair” and 10.1% as “poor or very poor” in 2006.⁷

As the response categories used in the London survey are different, the self-reported health status is not comparable to the other two cities. In comparison to Hong Kong, a larger proportion of older people in New York City consider themselves as having good to excellent health status. This is striking given that older New Yorkers do less well on most other measures of health status (Figure 5.2), but it is consistent with previous research that compares self-reported health status in the U.S. with other countries.⁸

Figure 5.2 »

Self-reported health status of community-dwelling population aged 65 years and over in Hong Kong and New York City, 2009



The larger proportion of older people in Hong Kong reporting poor to fair health suggests that they have poorer health status than their counterparts in New York City. However, as almost all older people in Hong Kong are Chinese, they tend to be more conservative in reporting their health status. For Westerners, “fair” may have an implicit meaning of below average, but among Chinese, the category “fair” may not connote a negative meaning. As the category of “fair” and “poor” are combined in the New York City statistics, it is not certain that there are more seniors in Hong Kong who claim that their health status is fair in comparison to their New York City counterparts. Meanwhile, a study showed that Hong Kong had poorer self-reported health compared to the urban and rural Chinese populations in Beijing.⁹ Hence, the lower levels of self-reported health among Hong Kong seniors may also be explained by their poorer psychological health apart from cultural difference. It is therefore important to consider a range of other health status measures as well.

5.3 Chronic Illness

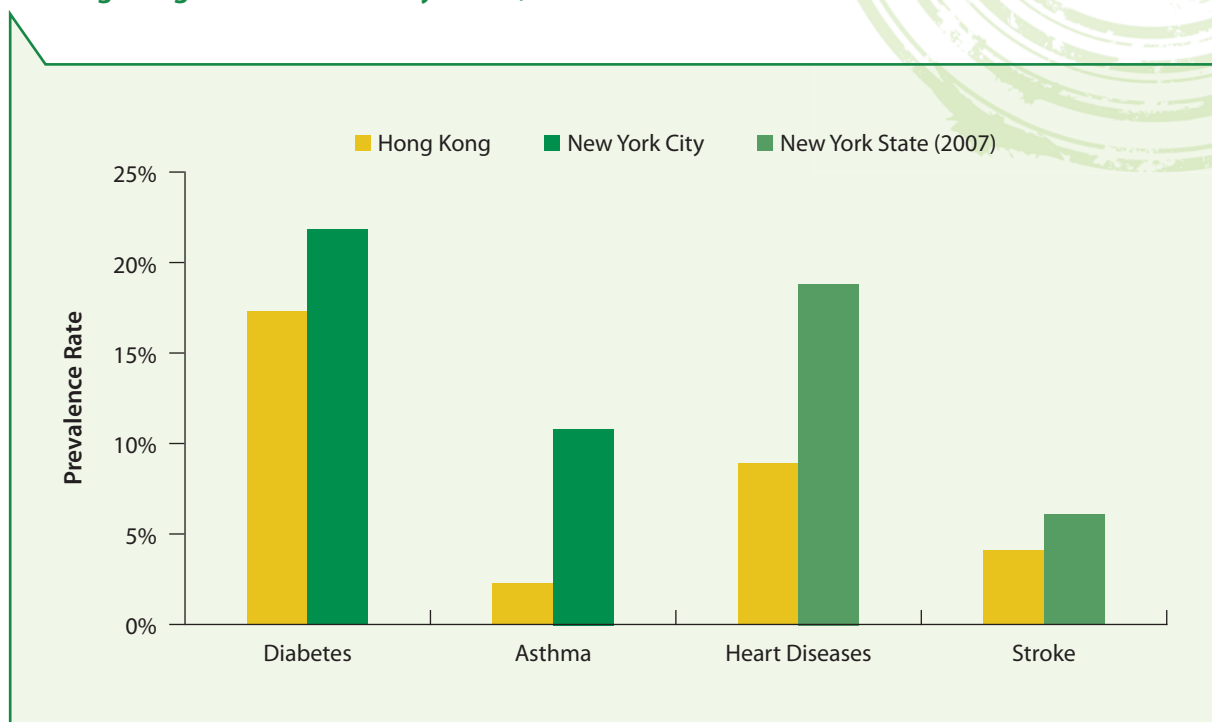
Another measure of health status is the prevalence of chronic illnesses. Although prevalence rates based on self-reported data may be subject to reporting error and under-diagnosis, this measure at least provides an estimate of disease prevalence to assess the health status of a population. Also, this measure can inform public health policy for targeting programs to prevent chronic illnesses and design disease management programs. We present prevalence rates of selected chronic illnesses in Hong Kong and New York City as such data are not available for London.

In Hong Kong, based on self-reported chronic health conditions diagnosed by practitioners of Western medicine, 17.3% of the community-dwelling population aged 65 years and over have diabetes, 8.9% have heart diseases, 4.1% have stroke and 2.3% have asthma (2008).¹⁰

In New York City, based on self-reported chronic illnesses diagnosed by physicians, nurses or other health professionals, 21.8% of the community-dwelling population aged 65 years and over have diabetes and 10.8% have asthma (2008).⁶ However, prevalence rates of heart disease and stroke are unavailable. Here, the prevalence rates in New York State are presented as reference. In New York State, the self-reported prevalence of diseases of heart (namely heart attack, angina and coronary heart disease) is 18.8% among the community-dwelling population aged 65 years and over and that for stroke is 6.1% (2007).¹¹

Assuming data in Hong Kong and New York City are subject to similar under-reporting and under-diagnosis, the older population in Hong Kong has lower prevalence rates of diabetes and asthma than their counterparts in New York City. (Figure 5.3) Rates of heart diseases and stroke in New York State also suggest that the older population in New York City may have a higher prevalence than in Hong Kong. These differences in prevalence rates may be related to ethnic differences in the two populations as well as to the Westernization of dietary habits in Hong Kong.

Figure 5.3 »
Self-reported chronic illnesses of community-dwelling population aged 65 years and over in Hong Kong and New York City/State, 2008

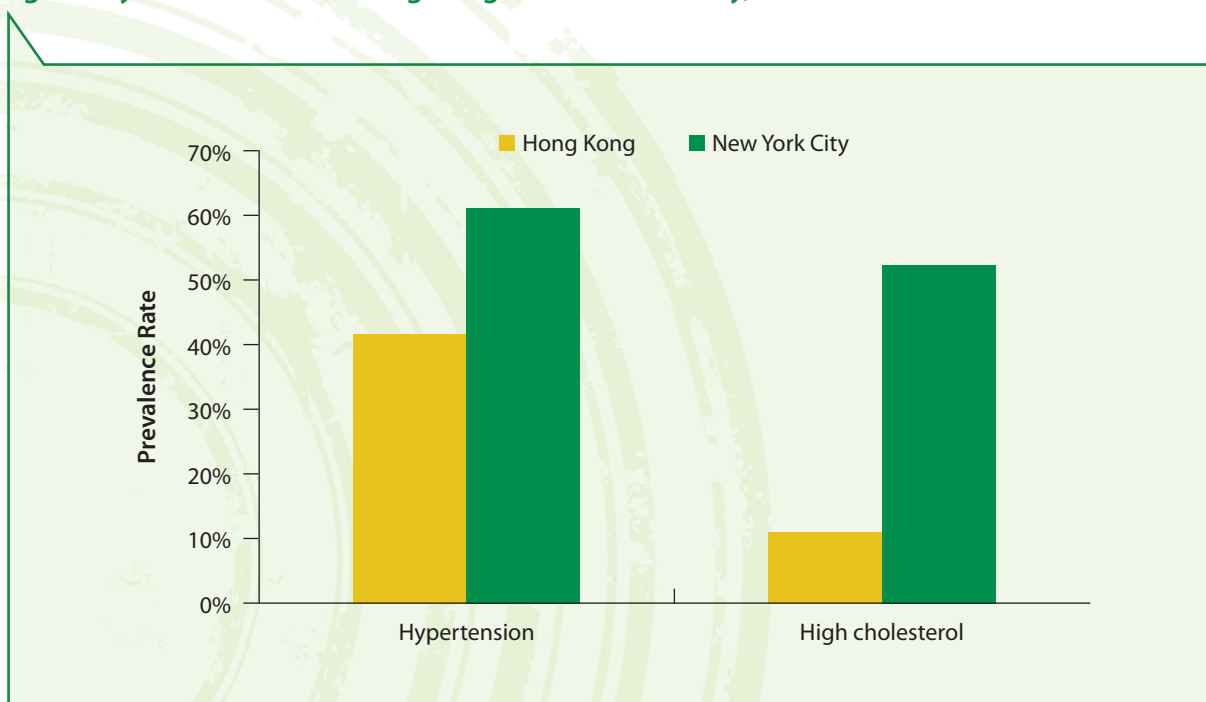


5.4 Risk Factors for Illness

Apart from the health-related lifestyle we showed in Chapter 4, there are other health conditions that are risk factors for illness. Hypertension and high cholesterol are risk factors for cardiovascular diseases. Their prevalence can partly explain the differences in the prevalence rates of heart diseases and stroke.

In Hong Kong, the self-reported prevalence rates of hypertension and high cholesterol among the community-dwelling population aged 65 years and over are respectively 41.6% and 11.1% (2008).¹⁰ In New York City, also based on self-reported data, 61.0% of the community-dwelling population aged 65 years and over have hypertension and 52.2% have high cholesterol (2008).⁶ (Figure 5.4)

Figure 5.4 »
Self-reported hypertension and high cholesterol of community-dwelling population aged 65 years and over in Hong Kong and New York City, 2008



In both Hong Kong and New York City, there is a high prevalence of hypertension, which is more common than any of the chronic illnesses. The strikingly high rates of hypertension and high cholesterol in New York City, together with a high prevalence of overweight, partly explain the high prevalence of cardiovascular diseases.

5.5 Depression

Apart from physical health, psychological health also contributes greatly to the well-being of older people. Poor psychological health can be as life-threatening as physical illnesses. In this respect, depression is an important indicator of psychological health.

In Hong Kong, based on the Center for Epidemiologic Studies' Depression Scale (CES-D), 11.4% of the community-dwelling population aged 65 and over suffer from severe depression, 22.7% moderate depression and 19.3% mild depression (2003-2004).¹² In New York City, only 12.0% of their counterparts report depression diagnosed by a physician, nurse, or other health professional (2005).⁶ It appears that psychological health is poorer among seniors in Hong Kong than among their counterparts in New York City. In London, data on depression are unavailable.

5.6 Functional Impairment

Chronic illnesses often result in functional limitations and can affect the daily activities of an individual. Also, degeneration due to ageing can result in disabilities even if older people do not have chronic health conditions. Nevertheless, given mild impairment in functional status, seniors are still able to live independently. We present prevalence rates of common functional limitations in Hong Kong and New York City since such data are not available for London.

In Hong Kong, based on self-reported data, 9.2% of the community-dwelling population aged 60 years and over have difficulty seeing and 6.1% have difficulty hearing (2007).¹² In New York City, also based on self-reported data, 10.6% of the community-dwelling population aged 65 years and over have difficulty seeing and 12.3% have difficulty hearing (2008).¹⁴ Although the New York City community survey includes a slightly older population, this alone cannot explain why the prevalence of hearing problems is twice as high in New York City.

Of course it is more important to know whether older people can carry on their daily living in spite of functional impairments than to measure precisely the degree of impairment. In Hong Kong, the ability of older people to perform activities of daily living (ADL) is assessed by their ability to perform six pre-defined activities (transferring between a bed and a chair, mobility, dressing, eating, toileting and bathing). Current estimates (2008) indicate that 8.9% of the community-dwelling population aged 65 years and over have difficulty performing at least one of these pre-defined tasks.¹⁵ In New York City, only two activities - dressing and bathing - were selected as self-care tasks. Current estimates (2008) indicate that 13.2% of the community-dwelling population aged 65 and over have self-care difficulty.¹⁴ Although a more restricted definition of functional impairments in terms of ADL is used in Hong Kong, the prevalence of older people with difficulties is still lower than that in New York City.

For more complicated tasks of independent living, seven activities, namely preparing meals, doing ordinary housework, managing finance, managing medications, using the phone, shopping and using transport were selected to assess the ability of older people to live independently in Hong Kong. Current estimates (2008) indicate that 28.5% of the community-dwelling population aged 65 years and over have difficulty performing at least one of the pre-defined instrumental activities of daily living (IADL).¹⁵ In New York City, the capacity for independent living was assessed by whether people could do errands alone such as visiting a doctor's office or shopping. By this definition, current estimates (2008) indicate that 22.1% of the community-dwelling population aged 65 and over have difficulties with independent living.¹⁴ As a more restricted definition of functional impairments in terms of IADL is used in Hong Kong, the higher prevalence of older people having difficulties with independent living in Hong Kong makes it impossible to draw a meaningful conclusion.

5.7 Mortality Rate and Leading Causes of Death

Increasing life expectancy reflects decreasing mortality rates. In 2008, mortality rates for the older population in Hong Kong (37.4 per 1,000) were similar to those in New York City (36.5 per 1,000), while London had the highest rate (45.1 per 1,000).^{2,16-17} This observation still holds when the rates are age-adjusted to the WHO population. (Figure 5.7)

Figure 5.7 »

Age-adjusted* mortality rate of population aged 65 years and over in the three world cities, 2008



* Adjusted to 2000 WHO Population

Analysis of mortality rates by cause is as important as analysis of the causes of hospitalization because this can help enable the design of public health programs and the planning of health care services, particularly those that can prolong life.

In Hong Kong, the five leading causes of death among the older population are the same as those among the general population (2008).¹⁶ Malignant neoplasms (cancers) are the leading cause of death (9.4 per 1,000 population aged 65 and over), followed by diseases of heart (6.7 per 1,000), pneumonia (5.9 per 1,000), cerebrovascular diseases (3.7 per 1,000) and chronic lower respiratory diseases (2.3 per 1,000).

In New York City, the three leading causes of death among the older population are also the same as for the general population (2008), whereas the fourth and fifth leading causes swap for the older and general populations.² Among the older population, diseases of heart are the leading cause of death, with a mortality rate of 17.1 per 1,000 population, followed by cancer (8.2 per 1,000), influenza and pneumonia (1.9 per 1,000), chronic lower respiratory diseases (1.3 per 1,000) and diabetes mellitus (1.1 per 1,000).

For London, the same breakdowns such as diseases of heart and diabetes are not available. Assuming those categories with breakdowns are the leading causes of death, the five leading causes of death among the older population are the same as the general population (2008).¹⁷ Cancer is the leading cause of death, with a mortality rate of 11.3 per 1,000 population aged 65 and over, followed by ischemic heart diseases (7.2 per 1,000), cerebrovascular disease (4.1 per 1,000), pneumonia (3.4 per 1,000) and chronic lower respiratory diseases (2.7 per 1,000).

Cancer and diseases of the heart rank as the top two causes of death in the three cities. (Table 5.7) While the mortality rate from cancer is the highest in London, it is only moderately higher than in Hong Kong and New York City. On the other hand, the mortality rate from diseases of the heart is strikingly high (nearly three-fold that of Hong Kong) in New York City. In London, including only ischemic heart disease, the mortality rate is already higher than that from diseases of heart in Hong Kong. With diseases of the heart and cancer accounting for a quarter of all deaths, the mortality rates from other causes are relatively low (<2 per 1,000) in New York City.

Table 5.7 »

Leading causes of death among the population aged 65 years and over in the three world cities, 2008

Rank	Hong Kong		New York City		London	
	Cause of death	Mortality rate (per 1,000 population)	Cause of death	Mortality rate (per 1,000 population)	Cause of death	Mortality rate (per 1,000 population)
1	Malignant neoplasms (cancer) (C00-C97)	9.4	Diseases of heart (I00-I09, I11, I13, I20-I51)	17.1	Malignant neoplasms (cancer) (C00-C97)	11.3
2	Diseases of heart (I00-I09, I11, I13, I20-I51)	6.7	Malignant neoplasms (cancer) (C00-C97)	8.2	Ischemic heart disease (I20-I25)	7.2
3	Pneumonia (J12-J18)	5.9	Influenza and pneumonia (J10-J18)	1.9	Cerebrovascular diseases (stroke) (I60-I69)	4.1
4	Cerebrovascular diseases (stroke) (I60-I69)	3.7	Chronic lower respiratory diseases (J40-J47)	1.3	Pneumonia (J12-J18)	3.4
5	Chronic lower respiratory diseases (J40-J47)	2.3	Diabetes mellitus (E10-E14)	1.1	Chronic lower respiratory diseases (J40-J47)	2.7

Note: Codes in brackets are International Classification of Diseases (ICD) version 10.

The observation of high mortality from diseases of the heart in New York City is consistent with the high prevalence rates of hypertension and high cholesterol. It appears that public health efforts on prevention of risk factors for cardiovascular diseases have not been adequate. For cancers, while some can be prevented by having a healthy lifestyle (e.g. not smoking), some can be detected early and managed properly. The high mortality rate from cancer in Hong Kong is consistent with the weak primary care system,¹⁸ which has to be strengthened. The explanation for the high mortality rate from cancer in London is uncertain, but may be related to poor access to drugs and specialty care.

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The background features a series of concentric, slightly blurred circles in shades of yellow and green, creating a ripple effect. In the lower right, a portion of a globe is visible, showing blue and white colors. A dark brown diagonal band cuts across the middle of the image, containing the chapter title.

Chapter 6 »
Health Care Utilization

Hong Kong has an ample level of hospital beds but a relatively low density of physicians. This is consistent with the criticism that Hong Kong has weak primary care.¹ Nevertheless, in comparison to New York City, older people in Hong Kong and London have higher medical consultation rates. In contrast, dental consultation rates are low for older people in Hong Kong in comparison to New York City. Since access to health care at Hong Kong's public hospitals is heavily subsidized and patients can directly seek hospital care without going through a primary care system, and physicians in private practice require direct patient payments, it is not surprising to find higher hospitalization rates in Hong Kong than in New York City. In this chapter, we compare the level of health care resources and their use by older people in the three cities.

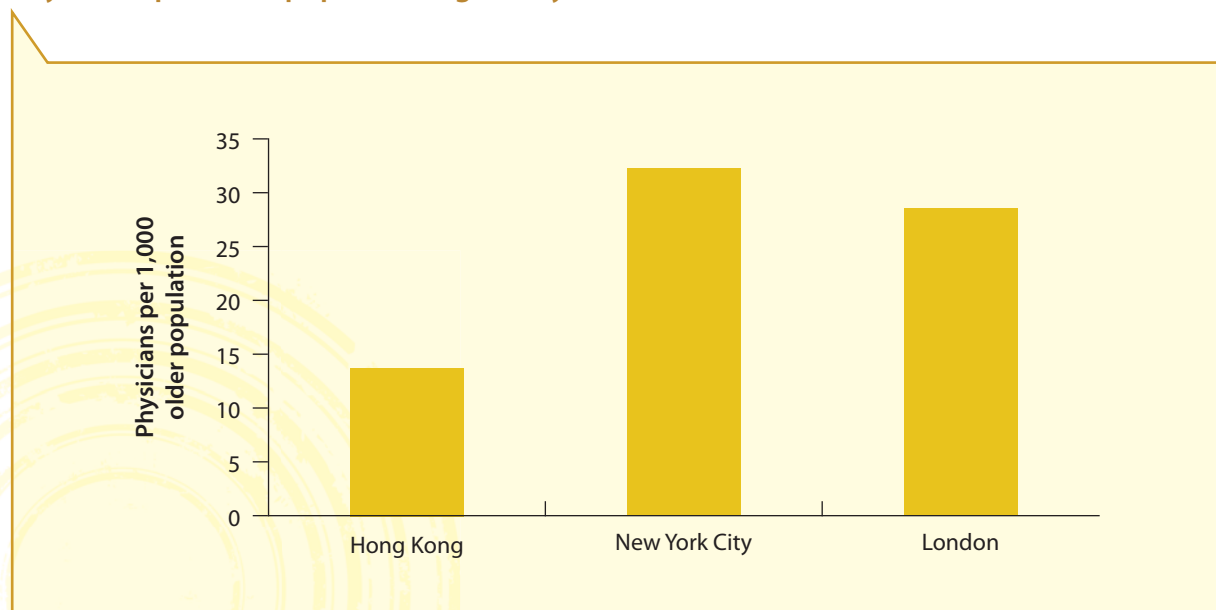
6.1 Health Care Resources

The level of health care resources – both out-patient and inpatient care – is important although this alone does not ensure access, quality and affordability. We compare the density of physicians and hospital beds here, while recognizing that there are other health resources that could also be added to complete our study.

In Hong Kong, there are 12,239 registered doctors (2009) or 13.7 per 1,000 population aged 65 and above.² In New York City, there are 32,702 physicians, or 32.2 physicians per 1,000 population aged 65 and over.³ In London, the equivalent figures are respectively 25,433 doctors and 28.5.⁴ (Figure 6.1a)

Figure 6.1a »

Physicians per 1,000 population aged 65 years and over in the three world cities, 2009

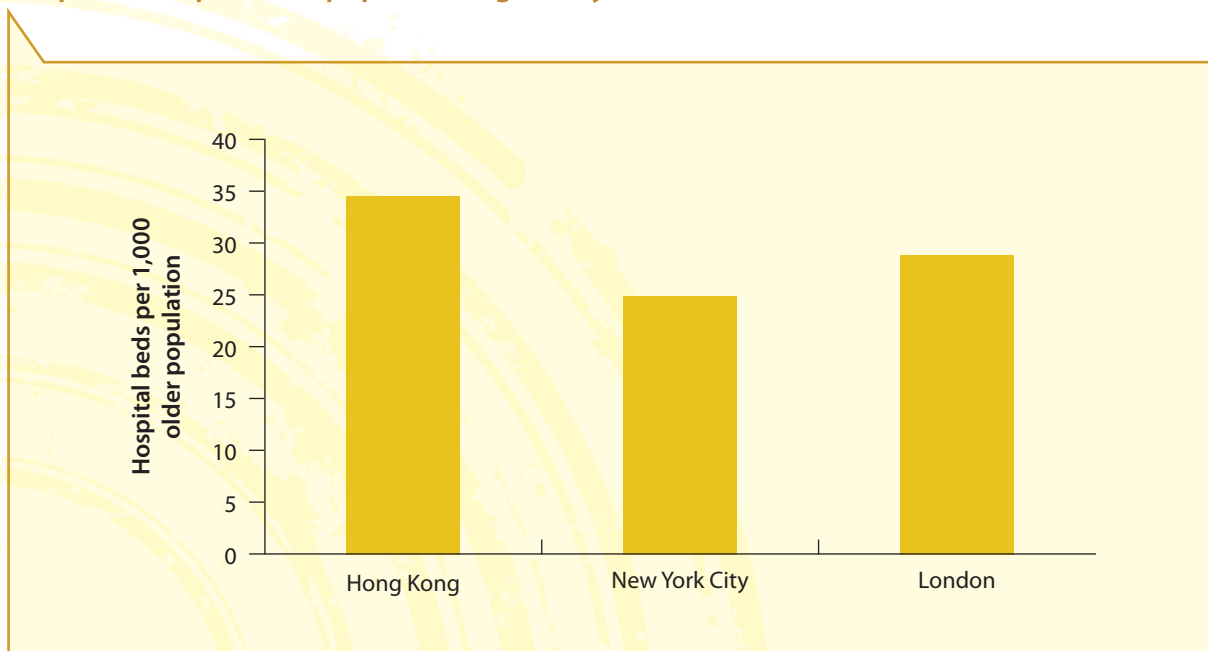


As for hospital beds, in Hong Kong there are 30,829 acute and non-acute beds in public and private hospitals (2008-2009), or 34.5 per 1,000 population aged 65 and over.² In New York City, there are 25,282 beds, or 24.9 per 1,000 population aged 65 and above.⁵ In London, the equivalent figures for public hospitals are respectively 25,681 and 28.8.⁶ (Figure 6.1b)

Hong Kong has the highest ratio of hospital beds to the older population among the three cities, and nearly 90% of the beds are run by the Hospital Authority. In New York City these figures account for all beds in private nonprofit hospitals as well as those in the public sector which are operated by the New York Health and Hospitals Corporation. However, it still has the lowest ratio. In London, our figures account only for beds in the National Health Service.

Figure 6.1b »

Hospital beds per 1,000 population aged 65 years and over in the three world cities, 2008



The availability of physicians and hospital beds in Hong Kong reveal striking contrasts – the most abundant supply of hospital beds and the lowest density of physicians. This level of resources reflects a weak system of primary care and a notoriously hospital-centered health care system. As a result, patients do not have easy access to community-based primary care – which is not only a less expensive way to deliver such care, but is more likely to provide patients with an opportunity to receive care from the same physician or set of physicians (a so-called “medical home” in the U.S.).

6.2 Medical Consultations

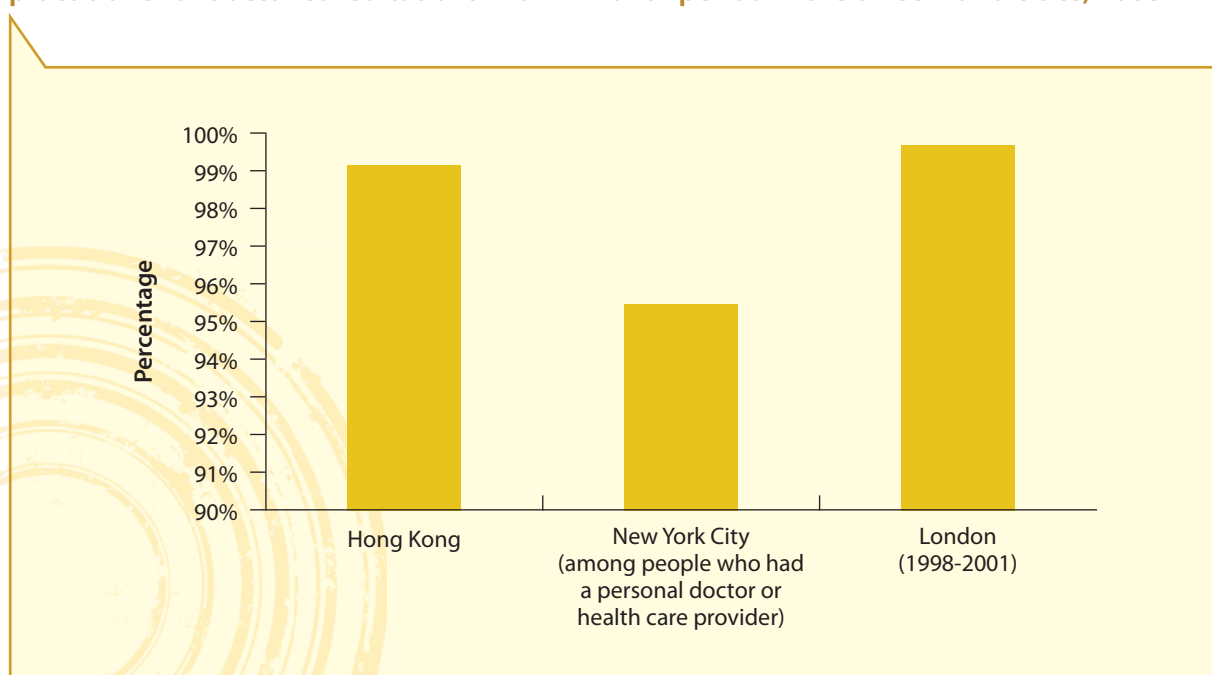
Two common out-patient treatments are medical consultation by Western practitioners and dentists. In Hong Kong, medical consultation by traditional Chinese practitioners is also becoming more popular. However, this is not explored here as there are no comparable statistics in New York City and London.

In Hong Kong, 33.1% of the community-dwelling population aged 65 and over consulted a doctor during the month preceding the survey (2008).⁷ In New York City, 95.5% of the community-dwelling population aged 65 and over who have a personal doctor or health care provider made a consultation in the 12 months preceding the survey (2008).⁸ Based on our analysis using the pooled General Household Survey of 1998, 2000 and 2001, we estimate that 21.3% of the community-dwelling population aged 65 and over in London consulted a general practitioner or doctor in the two weeks preceding the survey.

Since the medical consultation rates in the three cities are based on different reference periods (two weeks, one month and 12 months), we have roughly adjusted for the time period in order to compare them. Using 12 months as the time period, the general practitioner or doctor consultation rates among the older population are 99.2% in Hong Kong, 95.5% (for those who have a personal doctor or health care provider) in New York City and 99.8% in London. (Figure 6.2)

Figure 6.2 »

Percentage of community-dwelling population aged 65 years and over having general practitioner or doctor consultations in a 12-month period in the three world cities, 2008



Based on this rough estimation, the medical consultation rates (one or more consultations in 12 months) of the older population in Hong Kong and London are both very high, at over 99%. This may be explained by the fact that these consultations are covered by the NHS in London and the low-charge public out-patient clinics in Hong Kong. In New York City, as the rate among those without a personal doctor or health care provider is expected to be lower, the medical consultation rate among the older population in general will be less than 95.5%. There could be various explanations. First, there are many older people in New York City who do not qualify for Medicare (e.g. immigrants who have not paid into the Social Security System for at least 10 years). Second, even among older people with Medicare coverage, out-of-pocket costs may discourage them seeking medical consultations. Third, Medicare reimbursement rates have been reduced and it is possible that fewer physicians are accepting new Medicare patients. As medical consultations can be affected by various factors, including health status, psychological and social reasons, more sophisticated studies are needed to address the issue.

6.3 Dental Consultation

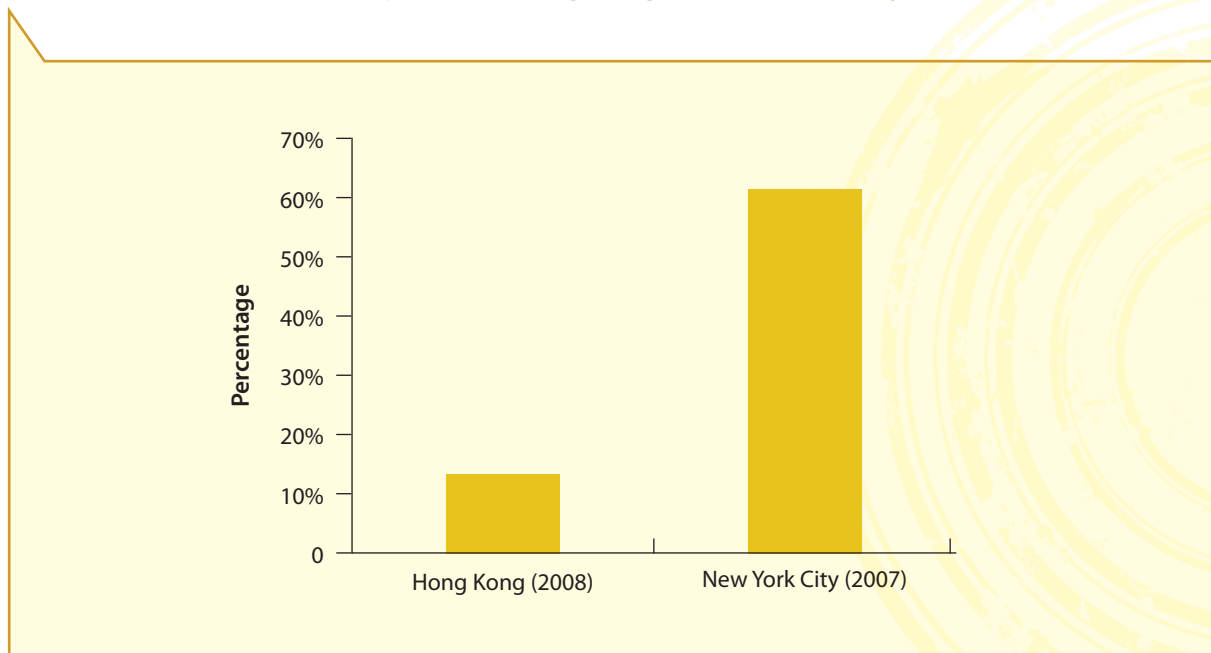
Oral hygiene and health are important to the older population. Problems with teeth may affect older people's ability to chew and speak. Some older people suffer from functional limitation related to poor oral health.⁹

In Hong Kong, 13.3% of the community-dwelling population aged 65 and over had a dental consultation in the 12 months preceding the survey (2008).⁷ In New York City, 61.4% of the community-dwelling population aged 65 and over visited a dental care provider in the 12 months preceding the survey (2007).⁸ In London, comparable data are not available.

The dental consultation rate in Hong Kong is far lower than in New York City. (Figure 6.3) Analyzed by age group, the dental consultation rate among the older population in Hong Kong is substantially lower than that for the younger age groups (aged 35-44: 27.9%; aged 45-54: 27.9%; aged 55-64: 23.1%).⁷ On the other hand, we do not find such age disparities in New York City (aged 25-44: 64.2%; aged 45-64: 65.7%).⁸

Figure 6.3 »

Percentage of community-dwelling population aged 65 years and over having dental consultations in a 12-month period in Hong Kong and New York City, 2007-2008



The low dental consultation rate among the older population in Hong Kong, compared to New York City as well as the younger population in Hong Kong, suggests that seniors in Hong Kong may not be receiving adequate dental care. This may reflect low public awareness towards oral health, as well as possible obstacles, particularly high charges, in accessing dental care. For London, statistics on dental care visits were unavailable until recently, implying the possible lack of awareness in this area. Historically, access to dental care has been poor in the English NHS.¹⁰ Hence dental care for the older population has to be strengthened in Hong Kong and London.

6.4 Hospitalization

The older population usually takes up a large proportion of bed-days in hospitals since more rehabilitation and treatment time is needed for their chronic conditions. Also, they have higher admission rates than the younger population. Affordable and accessible hospitalization services are essential for the older population.

In Hong Kong, 22.8% of people aged 65 years and over have been admitted to public hospitals in the 12 months preceding the survey (2006) (the rate for the whole population is 8.4%).¹¹ Based on our analysis of public hospital discharge statistics (2006), there are 382.9 public inpatient episodes (counting inter-hospital transfers as one episode) per 1,000 people aged 65 and over (109.3 per 1,000 population aged 15 and over). As most of the older population are admitted to public hospitals, the hospitalization rate that includes admission to private hospitals will only be slightly higher than these values.

In New York City, based on hospital discharge statistics, there are 350.8 hospital discharges per 1,000 people aged 65 years and over (144.4 per 1,000 people of all ages) (2006).¹²

In London, based on our analysis of the pooled General Household Survey of 1998, 2000 and 2001, we estimate that 14.2% of the community-dwelling population aged 65 and over were admitted to hospital in the year preceding the survey. However, the institutional population generally has a much higher hospitalization rate. It is expected that the hospitalization rate including the institutional older population is much higher than 14.2%. Based on our analysis of hospital discharge data, there were 533.8 inpatient episodes per 1,000 people aged 65 and over.

The comparisons of the hospitalization data in the three cities are subject to some limitations. First, the Hong Kong data only include public hospitals, but those from New York City include both public and private hospitals. In London, the database includes all hospitalizations paid for by the NHS, whether they take place in public or private hospitals, but they do not include inpatient stays in private hospitals paid for with private financing. Second, inter-hospital transfers are counted as multiple discharges in Hong Kong data. Hence these discharges are grouped as episodes for comparison with the other cities. Nevertheless, there may be possible misidentifications under such grouping.

In general, these figures suggest that older people in Hong Kong have higher hospital utilization than New York City (in terms of episodes per 1,000 of the older population) and London (in terms of the proportion of older people who have been hospitalized). This is consistent with the health care resources statistics that the density of hospital beds is higher in Hong Kong. Another possibility is that older people in Hong Kong have poorer health such that they need more hospitalization. As hospital administrative data are not capable of reflecting the relationship between need and use, more sophisticated studies are needed to address the issue.

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