

# BUILD BACK FAIRER: REDUCING SOCIOECONOMIC INEQUALITIES IN HEALTH IN HONG KONG



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# FOREWORD

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This report is being published as much of the world's attention is on the COP26 conference in Glasgow, and efforts to halt the climate crisis. Sustainability, rightly, is a priority issue for all of us. Health equity should be of comparable concern. In all countries, people who are more favoured in the conditions in which they are born, grow, live, work and age live longer, healthier lives than people living in less favourable conditions. The resulting health inequities should be not just a footnote to concerns with improving health, but the main issue. We want a world that is sustainable and where people's prospects for a long and healthy life are not made worse by social conditions – health inequities caused by the social determinants of health.

Studying the causes of health inequities, and using the best evidence to make recommendations as to how health equity can be improved, is the mission of the CUHK (The Chinese University of Hong Kong) Institute of Health Equity; as it is of the sister Institute of Health Equity at UCL (University College London). Indeed, there is active collaboration between the two institutes, CUHK and UCL. This report is a product of that collaboration. It is the first of a planned series of reports on social determinants of health and health equity. COVID-19 is a particular focus of this first report. The unequal impacts of the pandemic give added impetus to 'Build Back Fairer' – hence the title of the report. In building back, government, the voluntary sector, health and social services all have vital roles to play.

A Foreword may seem an odd place to have a word about language, but it is fundamental to our mission. There is a long tradition of studying health inequalities – those systematic differences in health between social groups. Where those health inequalities are judged to be avoidable by reasonable means, they are unfair, hence inequitable. Thus, in calling our Institutes 'Health Equity', both in Hong Kong and the UK, we are reflecting our commitment to improving the conditions in society that damage people's health unfairly.

For years, Japan had the longest life expectancy in the world. In Hong Kong it is now longer. It is a fair presumption that, on average, the conditions for a healthy life are favourable in Hong Kong, compared to other countries. But such good conditions are not equally distributed. One concern of the CUHK IHE, then, is the unequal distribution of these conditions for a healthy life – the social determinants of health. A second focus is to ask the question of why Hong Kong has done so well. To that end, the ambition of the CUHK IHE is to be centre of excellence for the study of health equity in Asia. It is only by making comparisons that the reasons for the success of Hong Kong and other East Asian countries can be well understood. We have established an Asian network of leading researchers whose work will be the subject of later reports.

The study of health and health equity is a unifying endeavour. We see the work we do together as not just bringing together researchers from Hong Kong and the UK, but our ambition is nothing less than establishing the CUHK IHE as a leading part of a global community now concerned with health equity.



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# ACKNOWLEDGEMENTS

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**Suggested citation:** Michael Marmot, Michael Alexander, Jessica Allen, Peter Goldblatt, Jean Woo, Eng-Kiong Yeoh, Hung Wong, Roger Chung, Eric Lai, Gary Chung, Richard Lee, Yat-Hang Chan, Siu-Ming Chan (2021) Build Back Fairer: Reducing socioeconomic inequalities in health in Hong Kong. London: Institute of Health Equity.

## ABOUT THE UCL INSTITUTE OF HEALTH EQUITY

The UCL Institute of Health Equity (UCL IHE) ([www.instituteofhealthequity.org](http://www.instituteofhealthequity.org)) was established in 2011 to develop and support approaches to health equity and build on work that has assessed, measured and implemented approaches to tackle inequalities in health and is led by Professor Sir Michael Marmot. The Institute works to build the evidence base and advise and support implementation of approaches to health inequalities in the UK and globally.

## ABOUT THE CUHK INSTITUTE OF HEALTH EQUITY

The Chinese University of Hong Kong Institute of Health Equity (CUHK IHE) ([www.ihe.cuhk.edu.hk](http://www.ihe.cuhk.edu.hk)) was established in 2020 with the vision as a leading institution in promoting health equity studies in the Asian region. The Institute endeavours to examine and understand issues of health equity in Hong Kong, inform government policies and intervention programmes to improve health equity of Hong Kong, and establish a network for the Asian region.

## THE UCL IHE AND CUHK IHE COLLABORATION

The UCL Institute of Health Equity is a collaborative partner to the CUHK Institute of Health Equity. The two institutes have a continuing collaboration to develop research and produce a series of reports to review health equity and the social determinants in Hong Kong and to build a network on related issues across Asia.

**ISBN:** 978-988-75579-0-6

# CHAPTER 1

# INTRODUCTION

Hong Kong is an advanced Asian economy with the highest life expectancy in the world and amongst the highest levels of gross domestic product (GDP) per capita. Despite this, there are health inequalities between social groups in Hong Kong that this report will examine. These inequalities are a result of inequalities in the social determinants of health, the factors in a society that influence health outcomes, as well as inequalities in access to healthcare.

The social determinants of health include the conditions of daily life: the conditions in which people are born, grow, live, work, and age. Education, housing, work, socioeconomic position, and more are the ‘causes of the causes’ of ill-health. Social determinants also include the structural determinants of these conditions: the wider forces and systems governing the unequal distribution of money, power, and resources - the social, political and cultural mechanisms by which society is ordered and hierarchies formed. These include economic policies and systems, social norms including gender norms, social policies and political systems. Inequalities in these lead to inequalities in health and wellbeing outcomes. Research shows that the social determinants are more important than healthcare or lifestyle choices in influencing the health of individuals in a society (1). Economic growth has often been used as a measure of the success of a society, but a more holistic view of social wellbeing must take social inequality, and attendant health inequality, into account.

This report is the first of a series which the University College London (UCL) Institute of Health Equity and the Chinese University of Hong Kong Institute of Health Equity plan to produce over a five-year period, and will take an overview of inequalities in health and the social determinants in Hong Kong.

# 1A LIFE EXPECTANCY IN HONG KONG

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Life expectancy at birth is a key indicator of the health of a given population. Life expectancy is an estimate of how long a baby born today would live if they experienced current age-specific mortality rates through their life. Trends in life expectancy therefore provide an indication of changes in mortality experienced by the population. In all countries life expectancy is related to the social determinants of health described in Section 1.B (2) (3) (4).

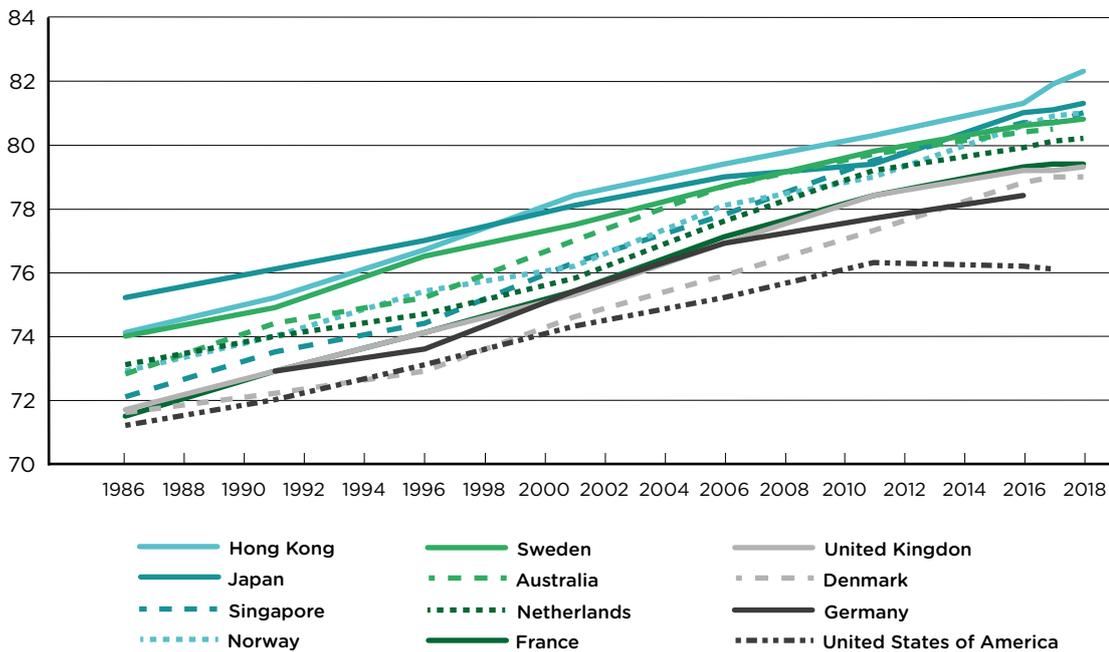
Life expectancy in Hong Kong is high compared to countries with similar economic and social development, surpassing Japan for men in 2001, and for women in 2011. While for most comparison countries included in Figure 1.1(a), life expectancy at birth has stalled since around 2016, life expectancy at birth in Hong Kong has continued to increase, especially for men.



Figure 1.1 Life expectancy at birth in Hong Kong and countries with developed economies, 1986-2018

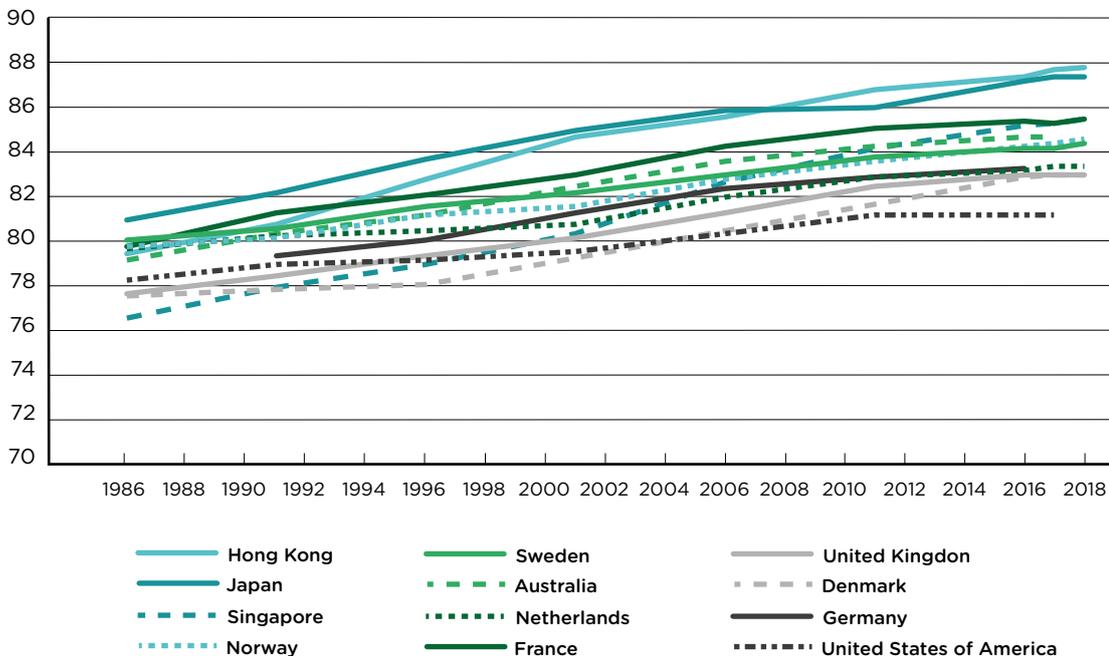
A. MEN

Life expectancy (years)



B. WOMEN

Life expectancy (years)



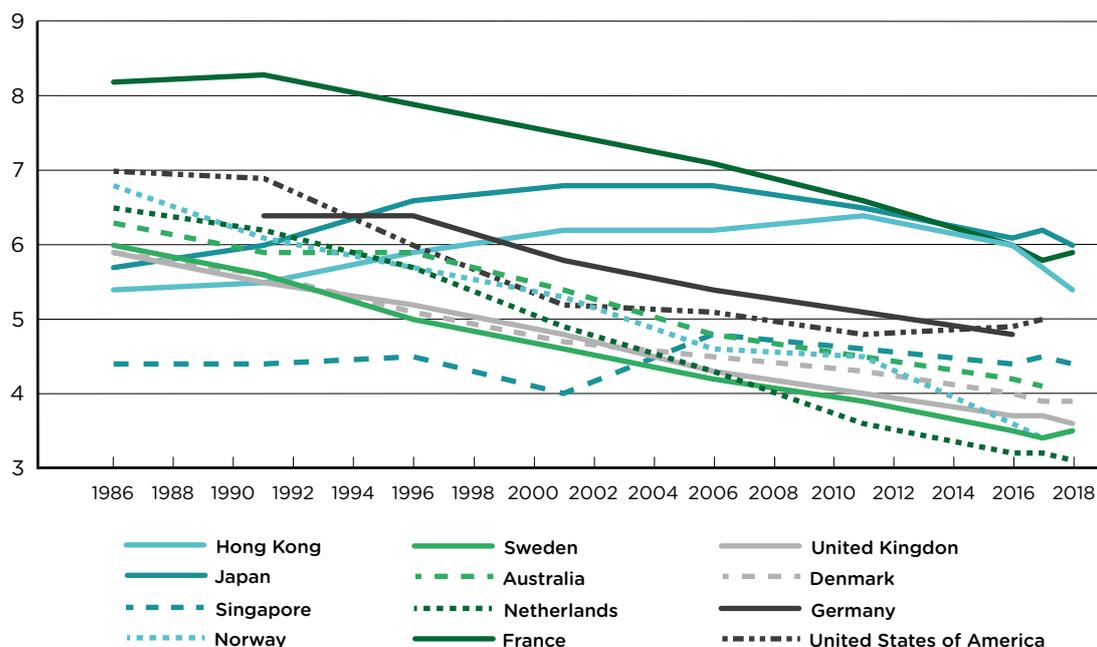
Source: Census and Statistics Department, Hong Kong Special Administrative Region Hong Kong (2019). Hong Kong Monthly Digest of Statistics - November 2019 : The Mortality Trend in Hong Kong, 1986 to 2018 (5)

As shown in Figure 1.2, Hong Kong has the third greatest difference between the life expectancy of women and that of men when compared with countries with similar economic and social development in 2018. Differences between male and female life expectancy have declined

since 1986 in all countries shown except Hong Kong, where the difference between male and female life expectancy was nearly the same in 2018 as it was in 1986, despite some variation within the period. Later reports in this series will look at gender differences in greater detail.

**Figure 1.2 Difference in life expectancy at birth (years) between women and men in for Hong Kong and countries with developed economies, 1986-2018**

Difference in life expectancy (years)



Source: Census and Statistics Department, Hong Kong Special Administrative Region Hong Kong (2019). Hong Kong Monthly Digest of Statistics - November 2019: The Mortality Trend in Hong Kong, 1986 to 2018 (5)

There are no routine data available to examine social inequalities in life expectancy in Hong Kong. Subsequent sections will look at inequalities in health using data other than life expectancy.

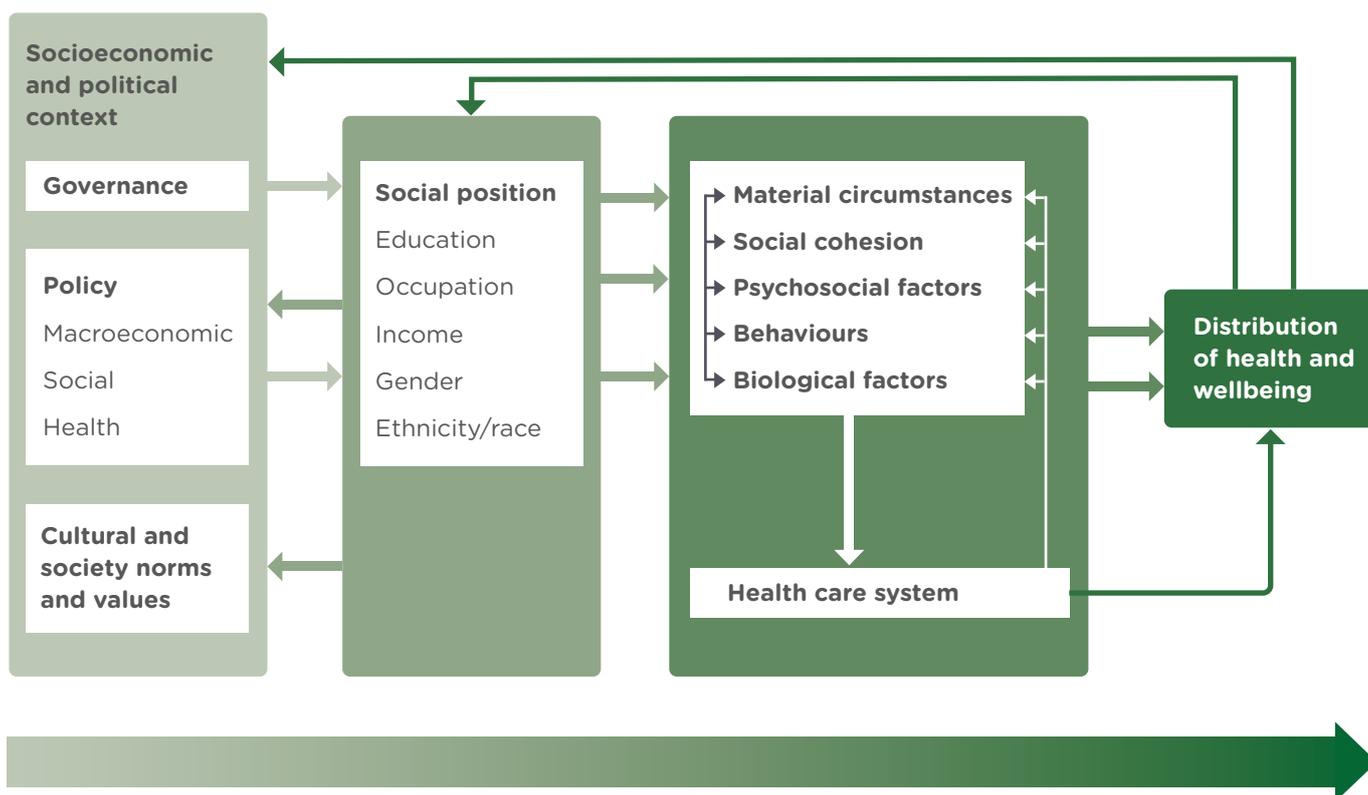
# 1B THE SOCIAL DETERMINANTS OF HEALTH

Health inequities are those inequalities in health across populations, and between different groups within society, that are avoidable by reasonable means and are therefore unfair. These health inequalities arise because of inequalities in the social determinants of health. The conditions of daily life and their deeper structural drivers influence both the resources and the capability to make use of those resources in order to lead a life that we have reason to value (6). These conditions determine the capability to be healthy and shape mental health, physical health and wellbeing (7) (8).

The Commission on Social Determinants of Health (CSDH) framework, Figure 1.3 below, shows how structural drivers in society both influence social stratification and affect people according to their socioeconomic position in society, defined according to education, occupation, income, gender and race/ethnicity. In turn, based on their

socioeconomic position, groups of individuals experience differences in exposure and vulnerability to health-compromising conditions (9). These vulnerabilities, together with the role that the health system plays in addressing the health consequences, lead to inequities in health and wellbeing (10).

Figure 1.3 Commission on Social Determinants of Health conceptual framework

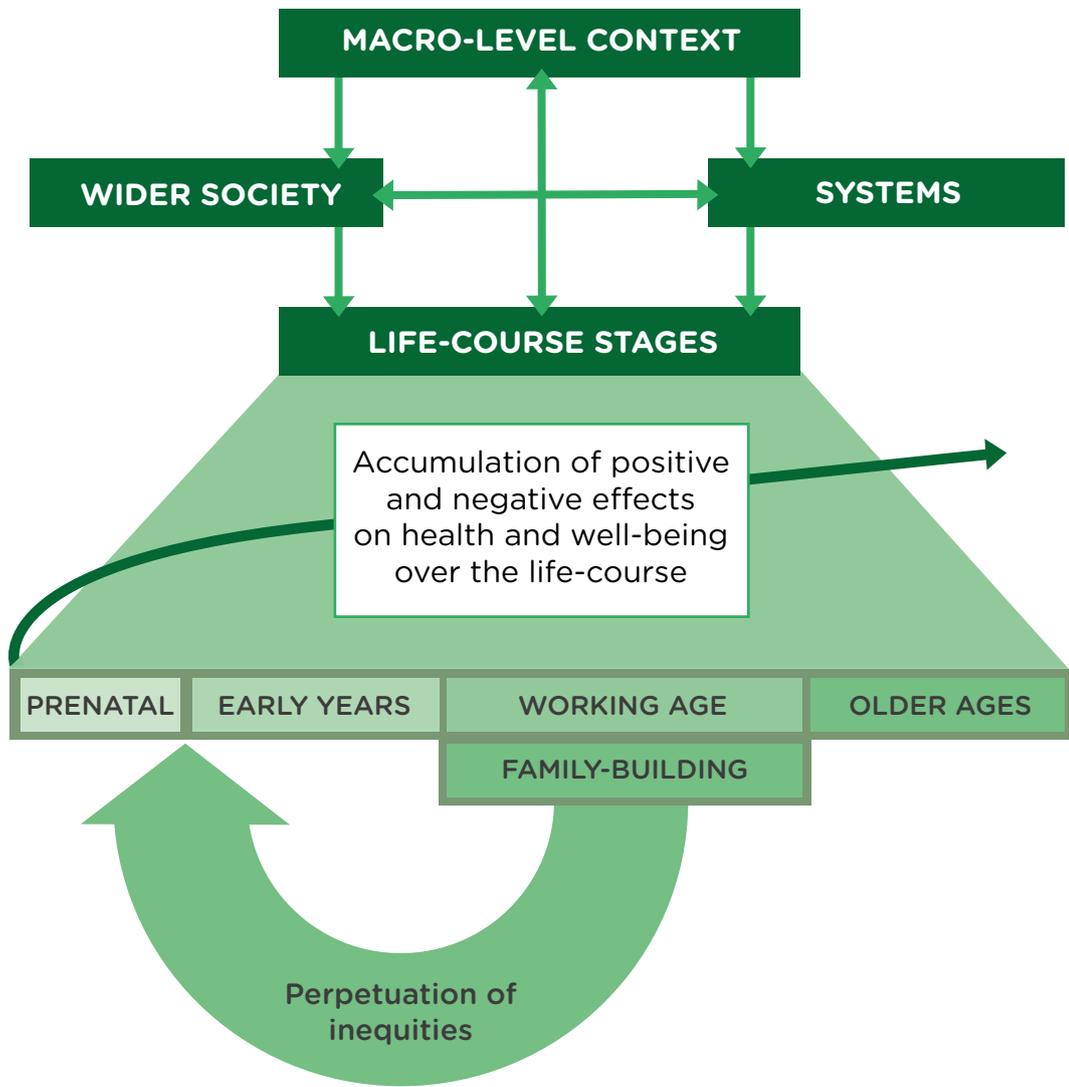


Source: CSDH adapted from Solar O, Irwin A (2010). A conceptual framework for action on the social determinants of health (9).

The framework produced for the *Review of social determinants and the health divide in the WHO European Region* incorporated a life course perspective into this framework. Early life experiences are associated with what happens in subsequent stages, and the length and quality of life. Thriving during early

years will likely influence children’s readiness for school; educational experience and attainment; income; type of employment; living conditions; and health outcomes throughout life. Figure 1.4 below shows how advantage and disadvantage accumulate through life, starting in the prenatal period (11).

**Figure 1.4 Broad themes for action on the social determinants of health**



Source: WHO (2013). *Review of social determinants and the health divide in the WHO European Region* (12).

By understanding how these frameworks relate to the conditions in Hong Kong, we can identify areas where intervention to ameliorate health inequalities can be effective, and suggest areas for policy action ‘upstream’ on the social determinants of health that can have beneficial and equitable health effects ‘downstream’.

# 1C SOCIAL INEQUALITIES AND WHY THEY MATTER - FOR HEALTH AND OTHER OUTCOMES

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Within countries at all levels of income, health follows a social gradient: the lower the socioeconomic position, the worse the health, and the shorter the lives (8) (13). This holds true even in wealthy societies like Hong Kong. In countries with profound poverty, where the poor do not have access to sufficient food, to shelter, to sanitation, and to clean drinking water, it is easy to see how wealth affects health. The poor in these societies are at risk of death from starvation and infectious diseases, particularly diarrhoeal disease, from which the better-off are protected. What is more remarkable is that social gradients in health can be seen even in wealthier societies, where nearly everyone has access to the most basic necessities. Furthermore, these gradients do not simply divide the poor from the non-poor but show fine gradation up and down the social scale.

Social gradients in health are related to relative socioeconomic position in society and are steeper in societies with more pronounced inequality. They may be better explained by reference to relative deprivation rather than simple income poverty. Individuals are deprived when they are prevented from accessing whatever resources – material, intellectual, social or otherwise – that they require to participate fully in society. Deprivation translates to worse health through a number of pathways, including increased exposure to environmental, occupational and housing health risks; increased risk-taking behaviours; and reduced access to components of a healthy lifestyle.

Those lower on the social gradient also experience greater psychosocial stress, in life situations which combine high demands and low control. This is particularly pronounced for those in poverty, living in areas with high crime rates, poor quality housing and low employment. There is evidence to suggest that such long-term stress has direct health consequences, mediated by the body's stress responses, which may contribute towards the metabolic syndrome and associated conditions, including type 2 diabetes and coronary heart disease (14). This may help explain why so-called 'diseases of affluence' like these can be more common in wealthy societies, but also be more common amongst the more deprived within those societies.

These concepts of relative deprivation and the social gradient of health are key for explaining why tackling inequality is crucial to improving the health of any society, and not just for the very worst off, but for everyone up the social scale short of the very top.

Unaddressed inequality is unfair and unnecessary and creates the conditions for poor health, societal dysfunction and instability. Highly unequal societies do worse in many health and social measures including life expectancy, mental health and crime. The case for reducing avoidable health inequalities is a moral one. If health inequalities could be reduced by reasonable means, they are unjust, a manifestation of social injustice. Improving health for all in society is an indicator of an improved society.

Mackenbach et al. estimated that over 700,000 deaths per year and 33 million cases of ill-health in the European Union (EU) could be avoided if the socioeconomically worse-off had the same health as the better-off, and that the expectancy of life in good health in the EU was reduced by 6.98 years due to the impact of inequalities (15). The Equality Trust estimated that if inequality was reduced in the United Kingdom, healthy life expectancy could increase by around 8.5 months; the population in prisons could fall by around 37%; and mental health could improve by 5% (16).

Inequality also incurs significant financial costs to a country. Inequality-related health losses in the EU were estimated to account for around 20% of total healthcare costs and 15% of total social security benefit costs. It was also estimated that welfare losses related to health inequality amount to around €980 billion (HK\$9 trillion) per year, equivalent to around 9.4% of GDP. Health inequality related losses also reduce labour productivity and reduced GDP by 1.4% per year (15). The overall cost of inequality to the United Kingdom was estimated at around £39 billion (HK\$420 billion) a year, due to effects on health, wellbeing and crime, insofar as these costs could be calculated, although the researchers noted that the true cost may be significantly higher (16).

# 1D TAKING ACTION ON SOCIAL DETERMINANTS AND HEALTH INEQUALITIES

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Scaled up and systematic action is required to address inequities in health and promote healthier populations. The World Health Organization (WHO) CSDH recommended the reduction of the inequitable distribution of power, money and resources; the improvement of daily living conditions; and the measurement and assessment of health inequities and the actions to reduce them (10).

The UCL Institute of Health Equity coined the term 'proportionate universalism' to describe policies and resources that are universal across society, but with effort proportionate to need along the social gradient. The National Health Service in the United Kingdom is a good example of proportionate universalism: a service for all, but with effort and resources focussed on where the needs are greatest. Here, need is defined clinically. To reduce inequalities in health we define need socially.

The 2010 *Marmot Review: Fair Society, Healthy Lives* laid out six broad policy objectives: give every child the best start in life; enable all children, young people and adults to maximise their capabilities and have control over their lives; create fair employment and good work for all; ensure a healthy standard of living for all; create and develop healthy and sustainable places and communities; and, strengthen the role and impact of ill-health prevention. Policies that are aimed at meeting these ambitions can have multiple and cumulative beneficial societal outcomes, reducing deprivation and inequities, and improving health for all (17).

Health equity is a shared responsibility for all arms of government, all sectors of society and every country in the world (17). Action on these social determinants must go beyond the health sector and include collaborative partnerships with the public, private and voluntary sectors, who all influence these broader determinants in domains such as housing, education and transport (19).

# 1E COVID-19 AND INEQUALITIES

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As described in the report *Build Back Fairer: The COVID-19 Marmot Review* for England, the COVID-19 pandemic further revealed and amplified inequalities in health in England, with clear socioeconomic and ethnic inequalities in risk of mortality from the disease (20). These differing risks are related to factors such as area deprivation, occupational exposures, living conditions, ethnicity, religion and previous health.

The effects of the pandemic were not limited to those of COVID-19 itself, but also to the necessary measures taken to contain it. The *Build Back Fairer* report also found that social, economic and health inequalities were increased across the board by lockdown and other containment measures. Section 5 of this report will look at the evidence relating to COVID-19 and inequalities in Hong Kong.

# CHAPTER 2

# HEALTH INEQUALITIES IN HONG KONG

This report assesses the state of health inequalities in Hong Kong. Unfortunately, there are significant limitations in the data available. One of our recommendations is to improve the capacity to monitor health inequalities on a regular basis. While we know that Hong Kong residents enjoy long life expectancy, there has only been limited investigation into how this relates to income, education or area deprivation. Nevertheless, there is evidence of inequalities in self-rated health, in the burden of disease, both physical and mental, and in the prevalence of being overweight or obese.

## 2A INEQUALITIES IN MORTALITY

It is a consistent finding across countries that life expectancy closely relates to socioeconomic position. In England, for example, prior to the COVID-19 pandemic, the difference in life expectancy at birth between the least and most deprived deciles was 9.5 years for males and 7.7 years for females (21). Even in a relatively healthy and wealthy society, the difference in life expectancy for a man at one end of the social gradient can be nearly a decade longer than his counterpart at the other end.

A study by Chung et al. looked into inequalities in mortality risks between lower and higher socioeconomic strata in Hong Kong by birth cohort using data from 1976-2010 (22). They found that, while there was a substantial decline of mortality rates across both strata, there was a widening of inequality between the two. In other words, although the health of all of Hong Kong improved in the context of post-war rapid economic growth, the benefits were spread unequally. This was true of all-cause mortality, and of all but one of the specific causes studied, including ischaemic heart disease, other cardiovascular disease, lung cancer, other cancers, respiratory disease, other medical causes and external causes. The exception

was lung cancer in women. The study also found that, prior to the 1990s, the mortality risk from ischaemic heart disease was higher for men in a higher socioeconomic position than for men lower on the social gradient, but that pattern has since reversed. This is in keeping with the idea that 'diseases of affluence', where risk factors include obesity and a sedentary lifestyle, may be rarer amongst groups of lower socioeconomic position in poorer countries but follow the social gradient in richer countries. In other words, while mortality from such conditions may be more common in richer countries, they afflict the relatively deprived within those countries more than the relatively well-off.



## 2B INEQUALITIES IN SELF-RATED HEALTH

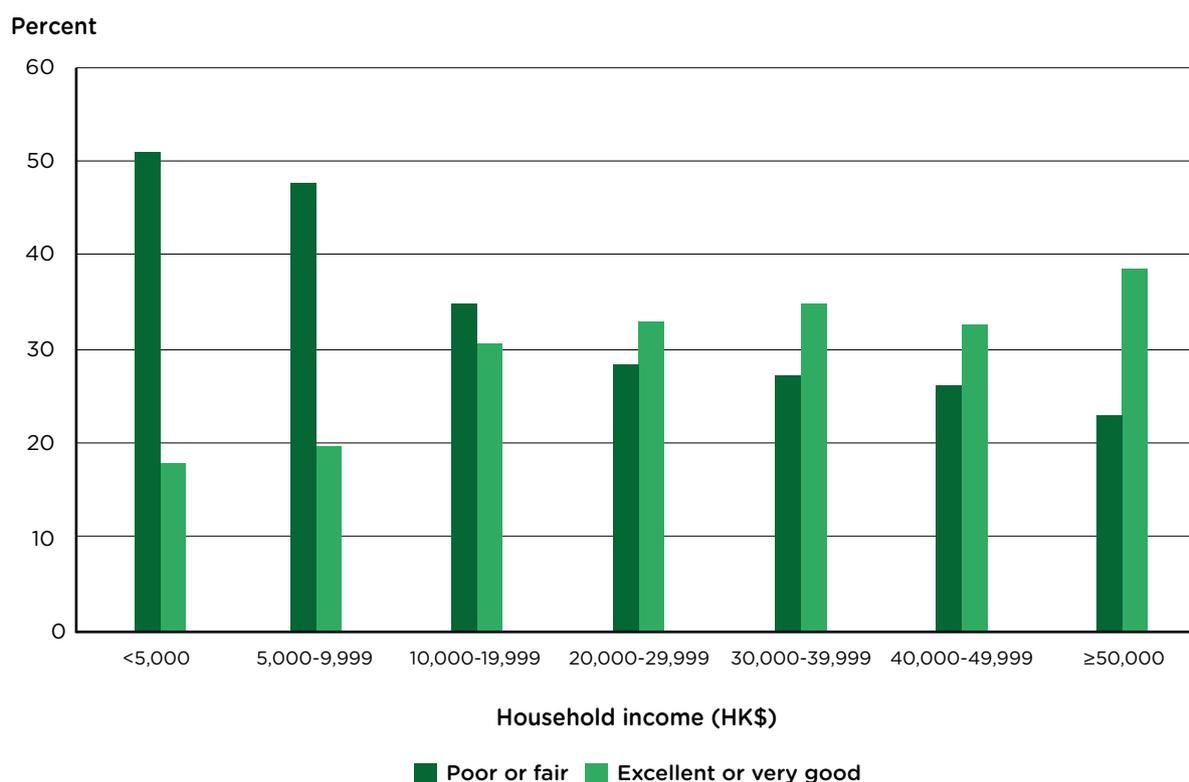
Self-rated health is widely accepted measure used as a predictor of morbidity and mortality and a measure of population health status (23) (24). It is a subjective measure of overall health status and is typically measured through survey questionnaires, where respondents rate their present health according to a categorical scale ranging from poor to excellent (or in similar terms) (25).

In Hong Kong in 2014/15, a higher proportion of men had a self-rated health status of very good or excellent (35%) when compared to women (30%) and the proportion decreased with age - from 50% at ages 15 to 24 to around 10% over the age of 75 (24). This is in keeping with findings in other wealthy countries that women live longer, but have worse health (26).

Figure 2.1 shows that self-rated health is directly related to household income - the greater the income of the

household, the more likely it is that those in the household will regard their health as excellent or very good, and the less likely that it will be regarded as poor or fair. Less than 20% of those with an income below HK\$10,000 reported very good or excellent health, while the figure was 39% among those with an income of HK\$50,000 or more. Self-reported health was strongly correlated with reporting of doctor diagnosed chronic diseases - those with fewer diagnoses described having better self-perceived health than those with a higher number.

**Figure 2.1 Distribution of self-rated health status responses in Hong Kong by monthly household income (HK\$), 2014/2015**



Source: Surveillance and Epidemiology Branch Centre for Health Protection Department of Health - Report of Population Health Survey 2014/15 (24).

## 2C INEQUALITIES IN CHRONIC DISEASES

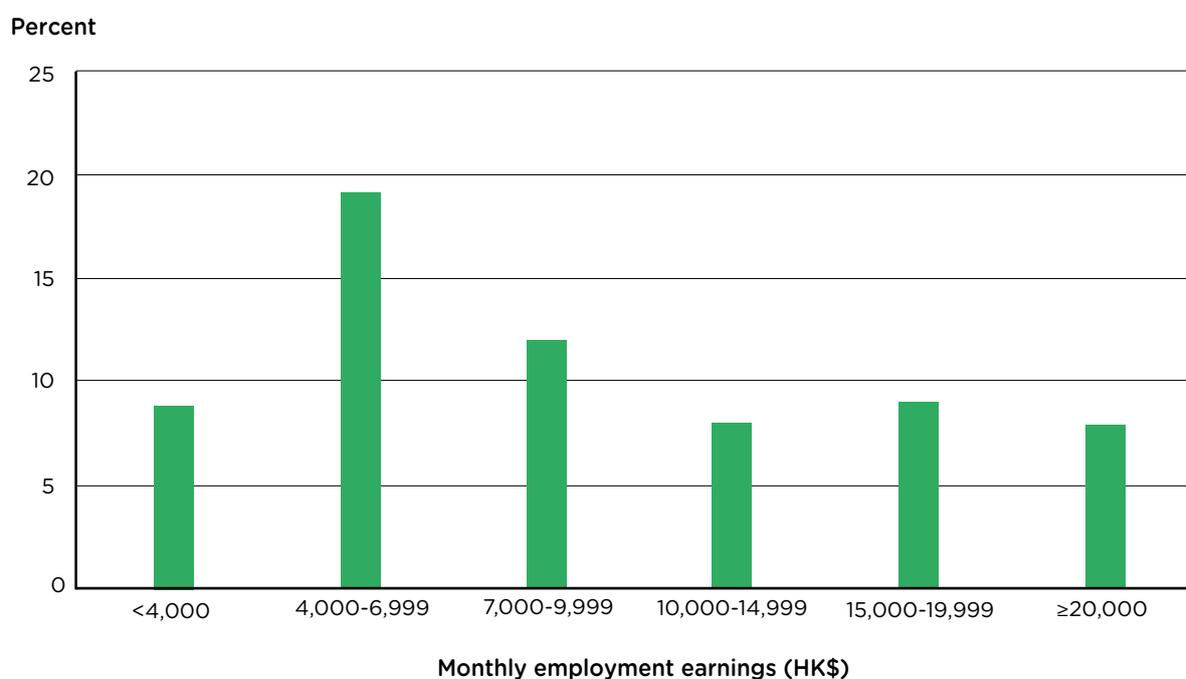
Non-communicable diseases (NCDs), also referred to as chronic diseases, which include cardiovascular diseases, chronic respiratory diseases, diabetes and cancers, are the leading cause of mortality worldwide (27). NCDs are closely associated with poverty, and are a major contributor to the inequalities in health experienced by the poor and other vulnerable and socially disadvantaged groups, in countries at all levels of development. NCDs can also have serious economic consequences for households and individuals, exacerbating existing inequalities and helping perpetuate a cycle of poverty (28).

Globally, the prevalence of individuals with two or more chronic conditions, i.e. multimorbidity, is increasing (29). Multimorbidity has been associated with an increased risk of adverse health outcomes including poorer quality of life, self-rated health and physical function; increased primary care use and hospital admissions and increased mortality. Multimorbidity can increase the complexity of care, leading to higher medical costs and posing significant challenges to healthcare services (30) (31). There is evidence to suggest that lower socioeconomic position is associated with multimorbidity, with those in more deprived groups being disproportionately affected (32) (33).

In 2016, over half of the registered deaths (55.2%) in Hong Kong were attributed to five specific NCDs alone: heart disease; cancer; chronic respiratory diseases; stroke; and diabetes (34). Hong Kong is facing increased challenges from NCDs, exacerbated by its ageing population (35).

Among employed persons, the prevalence of chronic diseases was highest for those earning HK\$4,000-6,999 per month, the second lowest income group (Figure 2.2). It should be noted that these numbers are not age-standardised. The lowest-earning group will be composed of part-time workers, who are disproportionately likely to be in the 15 to 24-year-old age group and therefore low in rates of chronic disease (36).

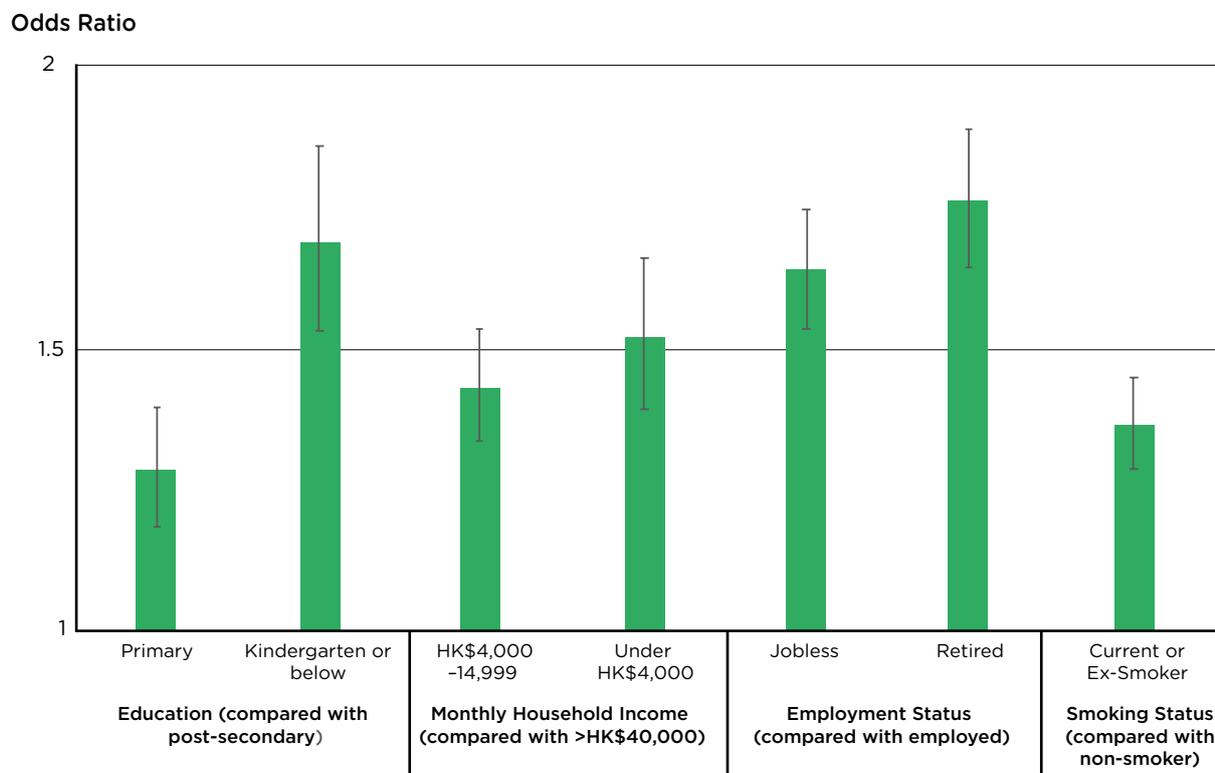
Figure 2.2 Prevalence of chronic disease by monthly household income (HK\$) among employed persons, 2014



Source: Census and Statistics Department Hong Kong Special Administrative Region (2014). Special Topics Report No. 62 (37)

A local study in 2015 found that having lower education levels (no education beyond primary school or below); having a lower income (a monthly household income of <HK\$15,000); being unemployed or retired; and being a previous daily smoker were all significant independent risk factors for multimorbidity in Hong Kong, as can be seen in Figure 2.3 (38).

**Figure 2.3 Odds ratios for significant risk factors of multimorbidity, after adjustment for confounding factors**



Source: Chung et al. (2015) (38).

Note: Odds ratios adjusted for all confounding factors (Gender; Age; Type of housing; Highest level of education attained; Monthly household income; Employment status; Smoking status). Odds ratio indicates the odds of multimorbidity in the presence of a given risk factor as compared with its absence: an OR of 1 indicates no association, i.e. as likely with the risk factor as without. Error bars represent 95% confidence interval.

These results suggest that, in Hong Kong, more disadvantaged people tend to have a higher risk of multimorbidity: such groups also tend to access healthcare through the public sector and have poor primary healthcare experience. This is supported by one of the findings in a recent local study which indicated a close relationship between the number of chronic

diseases and a lower likelihood of having regular primary healthcare in the private sector (39). The 2015 study also found that middle-class individuals ineligible for subsidized public housing may have a higher risk of multimorbidity (38). This may be related to the stress associated with covering the costs of private housing, which is unaffordable for many in Hong Kong.

## 2D MENTAL HEALTH

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**Mental health disorders, which include depression, anxiety disorders, schizophrenia and dementia are a major disease burden globally. Mental health disorders can significantly impact general health and wellbeing, being linked with physical health conditions and other adverse health outcomes. Mental health disorders have been linked with premature mortality (40). It should, however, be noted that ‘the absence of mental disorder does not necessarily mean the presence of good mental health’ and mental health issues which do not meet the diagnostic threshold for a mental health disorder often affect a large proportion of populations (41) (42).**

In Hong Kong, the Report of the Population Health Survey 2014/2015 provides data on the magnitude of selected mental health disorders including depression, anxiety disorders, schizophrenia and bipolar affective disorder. These disorders are more prevalent in women than men, with the exception of schizophrenia which has an equal prevalence between genders. In terms of age, the highest prevalence of anxiety disorders and depression was in the 65-74 years age group. The prevalence of schizophrenia tended to decrease with age, in keeping with its nature as a life-long condition that usually manifests in youth or young adulthood: mortality outweighs incidence in later life (43).

Results of research commissioned by Mind HK in 2019 indicated that 61% of persons in Hong Kong had ‘poor mental wellbeing and unsatisfactory mental health’. Other key findings of this research were that women had significantly lower mental wellbeing than men and that there had been an 11% drop in mental wellbeing since 2018, in a sharp and concerning decline (24).

Hong Kong had an average WHO-5 mental wellbeing score of 44.6 in 2019, falling in recent years from a high of 59.75 in 2017 (24). This is quite a widely used measure, and so can be compared to data from the European Quality of Life Survey of EU and EU candidate nations, which found scores ranging from 52 in Serbia to 70 in Ireland and Denmark (the United Kingdom scored 63) (44). This appears to place Hong Kong very low for wellbeing compared to European nations, although wellbeing is a subjective measure and this should be borne in mind when making international comparisons.

Mental health is shaped by the physical, social and economic environments in which people live. The risk factors for mental health disorders are largely linked with social inequality, with those in lower socioeconomic groups being disproportionately impacted (41). As outlined by Elliot (2016), poverty can be both a cause and a consequence of poor mental health (45).

A study by Chung et al. in 2020 found that deprivation was associated with a higher risk of stress and anxiety in Hong Kong, even adjusting for the effect of income poverty, and that income poverty was not independently associated with such risks. Increased deprivation over time was also associated with higher anxiety and stress scores at follow-up (46). Chan et al. (2017) also found that relative deprivation was consistently associated with lower perceived happiness, even after adjusting for absolute income and other sociodemographic variables (47).

## 2E ETHNICITY AND HEALTH

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Global evidence suggests that ethnic minority groups tend to experience poorer health in comparison to non-ethnic minority groups (48) (49) (50). Gathering and analysing health data on ethnicity is important for improving patient care and for identifying health needs and inequalities at a population level. As outlined by Health in Action, a Hong Kong non-governmental organization, such relevant data is often lacking in Hong Kong. However, they have identified some health inequalities by ethnicity where there is data available: for example, the obesity rate for South Asian females is 50% compared to 14% for Chinese females, and there is a much lower influenza vaccination rate amongst older Nepalese people compared to older Chinese people. Health in Action have warned that, when compared to local Chinese people, ethnic minority groups are generally less aware of public health promotion programmes, and face a language barrier in accessing healthcare (53).

Local research has also established that there are ethnic inequalities related to type 2 diabetes for ethnic minorities in Hong Kong, finding that ethnic minority patients with diabetes were younger and more obese, and had worse glycaemic control (51). Qualitative research among healthcare providers has also suggested that there are significant cultural and linguistic barriers to accessing care for ethnic minorities in Hong Kong which the healthcare system is not well-equipped to overcome and are therefore likely to exacerbate health inequalities (52). A checklist of measures to facilitate access to public health services for ethnic minorities has been developed by the Food and Health Bureau, the Department of Health and the Hospital Authority. However, there is a lack of patient data for ethnic minorities in the public sector to allow for an evaluation of the effectiveness of these measures (53).

# CHAPTER 3

## INEQUALITIES IN THE SOCIAL DETERMINANTS OF HEALTH IN HONG KONG

In this section we will assess the social determinants of health in Hong Kong: what we earlier described as the ‘causes of the causes’ of ill health. Communicable disease is transmitted by some form of pathogen like a virus, a bacterium, or a parasite. Non-communicable disease often develops as a result of risk factors like nutrition, alcohol or tobacco use, or exposure to occupational hazards. However, for both communicable and non-communicable diseases, there are upstream determinants that affect how likely you are to be exposed to risk factors, how likely you are to develop the disease, how that disease will affect you, how easily you will be able to access healthcare, and how you will recover. As the physician Sir William Osler noted over 100 years ago, ‘It is much more important to know what sort of a patient has a disease than what sort of a disease a patient has.’ We would go beyond that to observe that the sort of patient they are is largely determined by the conditions in which they were born, grew, live, work, and age. We will examine inequalities in income, in welfare support, in education, in employment, in housing and environment: all of which inequalities help to shape inequalities in health.

It has also been argued that more unequal societies have worse health overall, not just worse for those at the sharp end of inequalities (54). Hong Kong bucks that trend, by having high levels of inequality and low welfare spending, but nevertheless enjoying the longest life expectancy in the world. It may be that Hong Kong is simply an outlier, but the factors that make it so are unclear, and it may be that inequalities in the present will have damaging effects on health in the future (55). More research is needed into this seeming ‘paradox’ and further reports in this series will look closely at this question.

## 3A INEQUALITIES IN INCOME IN HONG KONG

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It is crucial to health and wellbeing that individuals have control over their own lives, and are able to participate in society. Having money is necessary, but not sufficient: while having a reasonable income cannot guarantee good health, having an income insufficient for one's needs will assuredly contribute to worse health. As the Health Foundation have outlined, inadequate incomes lead to poor health by making it harder to avoid stress and feel in control of one's life; harder to access resources; harder to adopt and maintain healthy behaviours; and by removing the sense of a supportive financial safety net (21) (56). The relationship also works in the other direction: lower income can lead to poorer health, and poor health can reduce earning capacity (16).



Over the past 30 years, the Hong Kong economy grew by an average of 3.8% per annum in real terms (57). However, income distribution in Hong Kong is highly unequal. The Gini coefficient is a commonly used measure of income inequality. It is based on a 'comparison of cumulative proportions of the population against cumulative proportions of income they receive' (58). The Gini coefficient ranges from a score of 0 to 1 where 0 indicates complete equality and 1 indicates complete inequality.

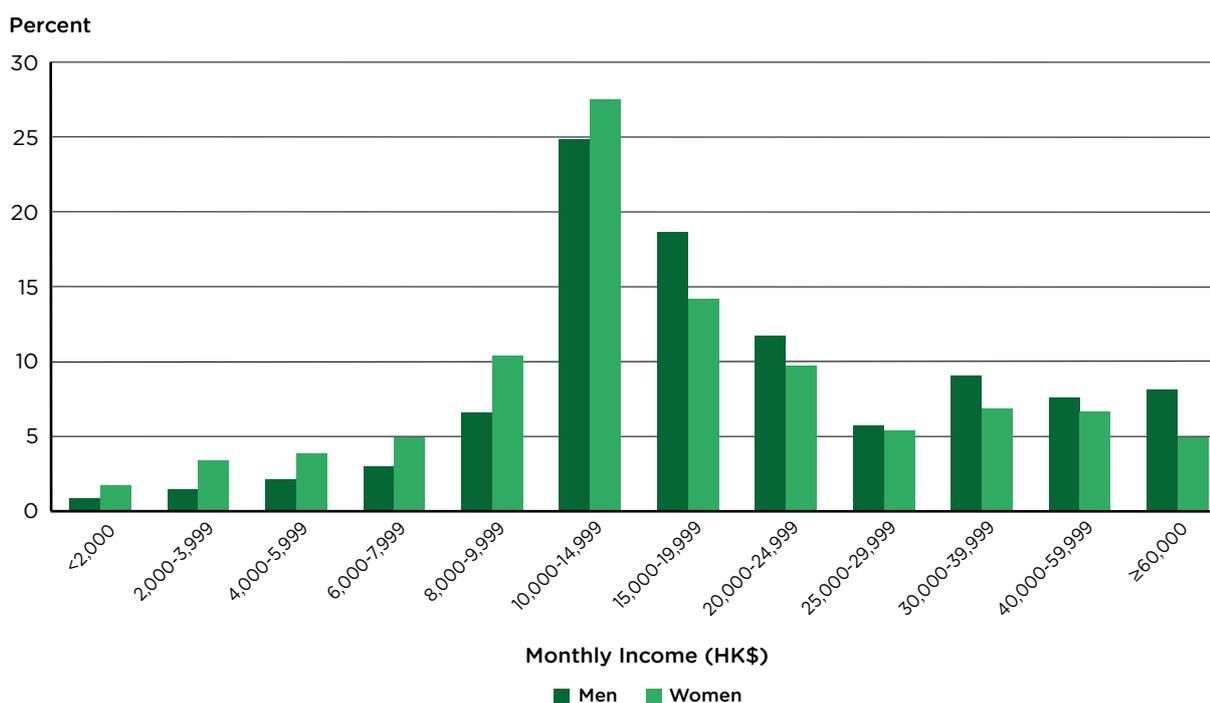
Hong Kong has a relatively high Gini coefficient compared to other developed nations, although international comparisons have to be made with care due to significant variation in the way it is calculated (59) (58). Hong Kong's status as a metropolitan state means its economy may be better compared to other metropolitan areas: based on original (pre-tax and pre-social transfers) household income, Hong Kong's Gini (0.539 in 2016) is broadly comparable with US cities like New York (0.551 in 2015), Los Angeles and Chicago (both 0.531), and lower than that of Greater London in the United Kingdom (0.582 in 2011) (60)

(61). The Gini coefficients of these cities are all significantly higher than those of their countries as a whole.

Perhaps the most useful comparison is with Singapore, another Asian, mostly metropolitan, state. Singapore's Gini coefficient is calculated post-tax and post-social transfers, and based on the per capita income of economically active households. Compared with the equivalent calculation for Hong Kong, in 2016 they were almost exactly the same (0.402 to 0.401) (60).

Between 2006 and 2016, while Hong Kong's Gini coefficient based on original household income has increased slightly, from 0.533 to 0.539, after taxation and welfare it has stayed very similar, from 0.475 to 0.473 (60). Such an income inequality could be reflected by Figure 3.1 which shows the income distribution of the working population of Hong Kong by main employment in 2016. While around one-fifth of working individuals earned HK\$30,000 or above, another one-fifth earned less than HK\$10,000. In addition, the income level was greater for men than women in general.

**Figure 3.1 Distribution of individual income (HK\$) of the working population in Hong Kong (excluding foreign domestic workers) from their main employment by gender, 2016**

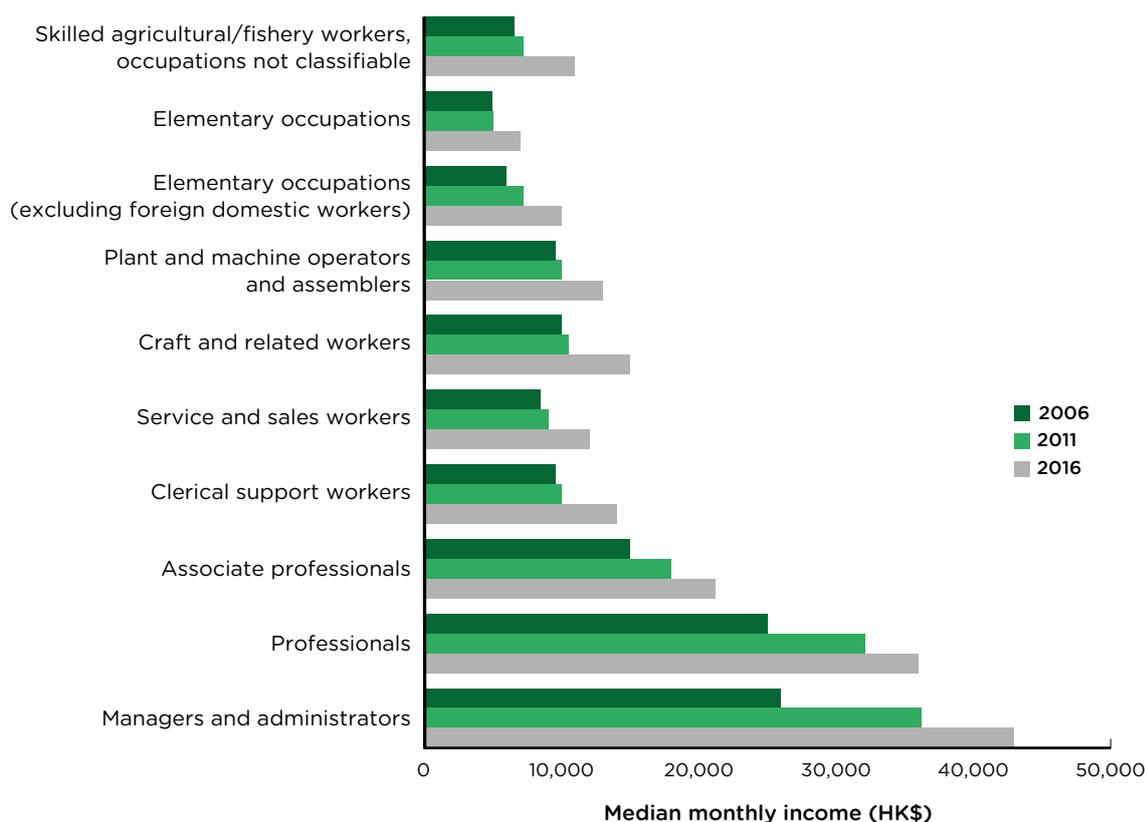


*Source: Census and Statistics Department Hong Kong Special Administrative Region (2017). 2016 Population By-census Thematic Report: Household Income Distribution in Hong Kong (60).*

As shown in Figure 3.2, median monthly income between 2006 and 2016 was greater among managers and professionals than among other occupation groups, whose median income increased by 65% over this period, driving widening income inequalities. Other groups saw much lower increases, both in absolute and relative terms. Plant and machine operators and assemblers, for example, only saw median wages increase by 37%, and elementary occupations (such as labourers and domestic workers) by 43%. When foreign domestic workers are excluded,

elementary occupations saw median wages increase by 67%: although wages for all in this group remain low, it is notably the foreign domestic workers who are seeing minimal increases. In absolute terms, although skilled agricultural and fishery workers, and other unclassifiable occupations, saw a 69% increase in their income from main employment, this only translates to an extra HK\$4,500, compared with the additional HK\$17,000 gained by managers and administrators.

**Figure 3.2 Median monthly income (HK\$) from main employment of working population by broad occupation group in Hong Kong, 2006, 2011 and 2016**

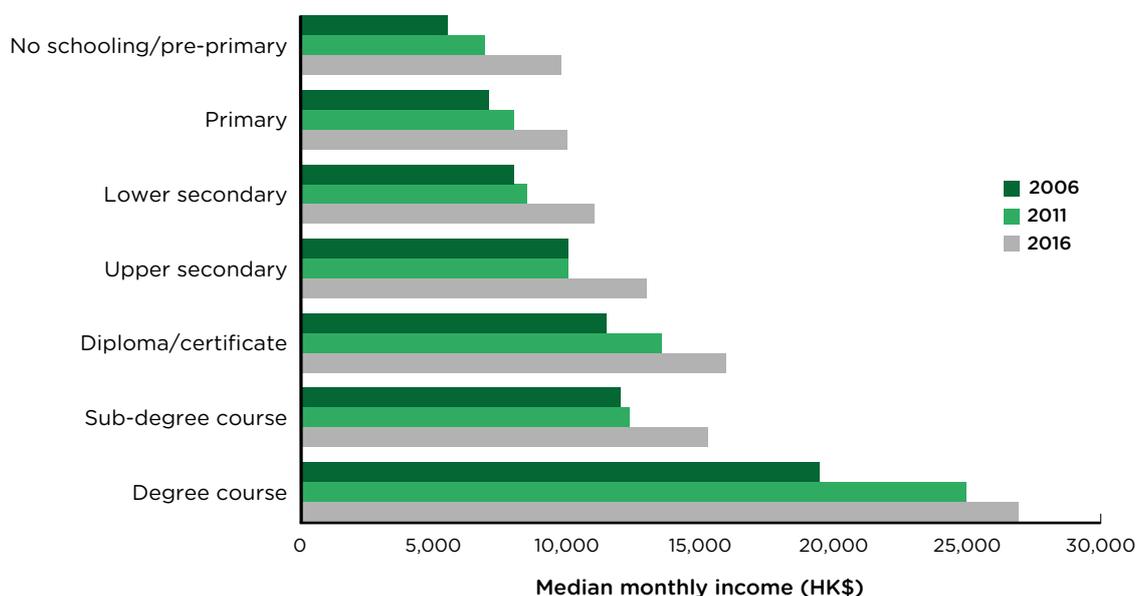


*Source: Census and Statistics Department Hong Kong Special Administrative Region (2017). 2016 Population By-census Thematic Report: Household Income Distribution in Hong Kong (60).*

*Note: Elementary occupations include "street vendors; domestic helpers and cleaners; messengers; private security guards; watchmen; freight handlers; lift operators; construction labourers; hand packers; agricultural and fishery labourers" (60).*

As shown in Figure 3.3, the median monthly income was higher among groups with more education, although it rose for all educational attainment groups during 2006-2016.

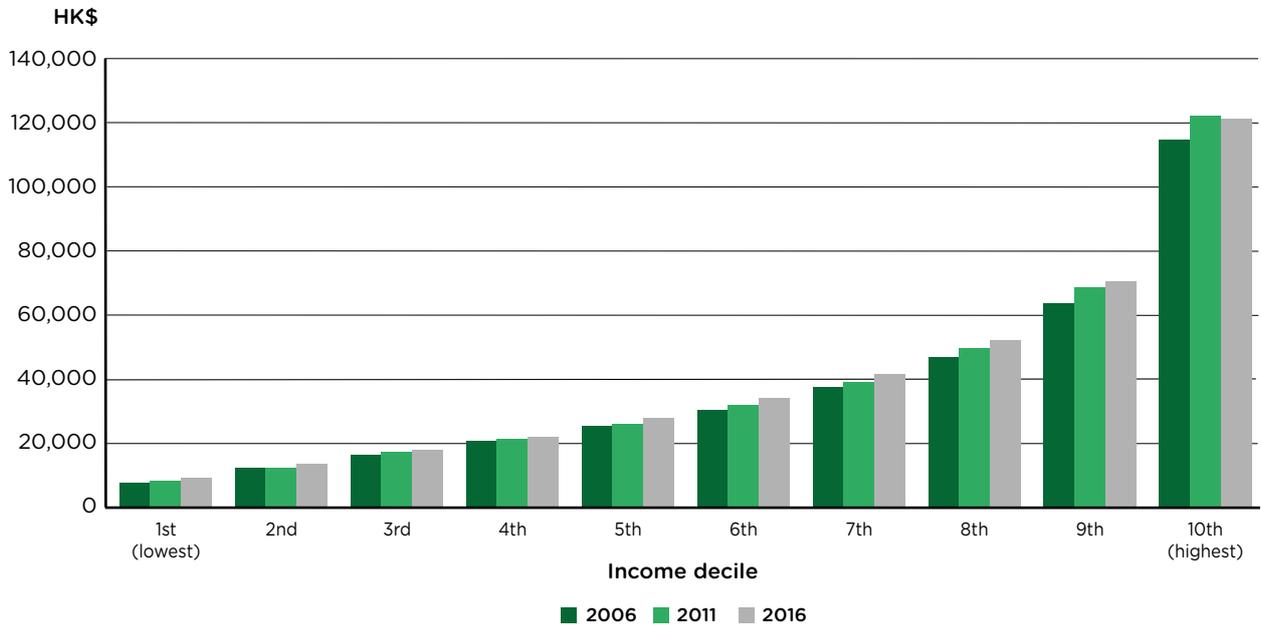
**Figure 3.3 Median monthly income (HK\$) from main employment of working population by highest level of educational attainment, Hong Kong, 2006, 2011 and 2016**



*Source: Census and Statistics Department Hong Kong Special Administrative Region (2017). 2016 Population By-census Thematic Report: Household Income Distribution in Hong Kong (60).*

In terms of inequalities in household income, median monthly household income among economically active households was markedly greater in the two highest income deciles. Figure 3.4 also shows that, between 2006 and 2016, the increase in income was greater in these two deciles (around HK\$7,000) than all others combined. However, the percentage increase was greatest in decile 1 (lowest income level) at around 23%.

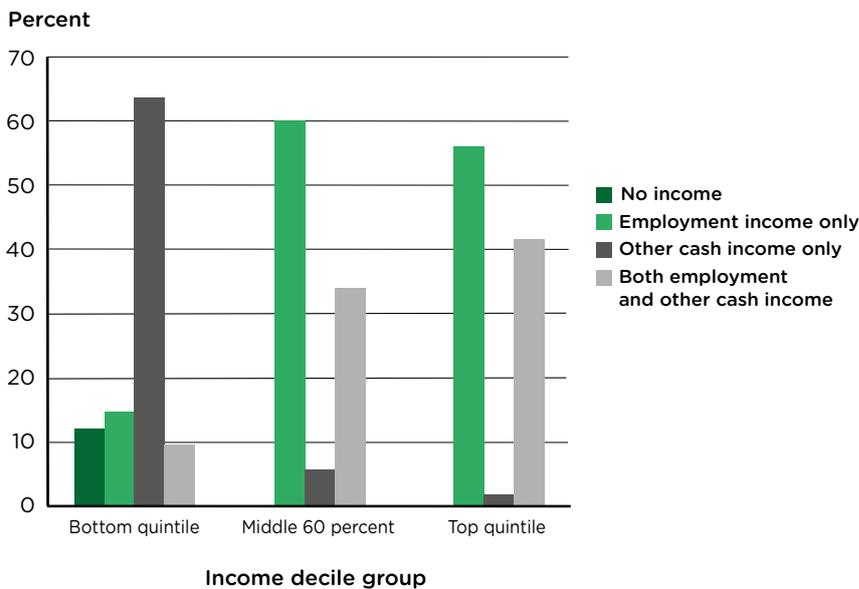
**Figure 3.4 Median original monthly household income (HK\$) of economically active households (including foreign domestic workers) at constant (June 2016) prices by income decile group, 2006, 2011 and 2016**



Source: Census and Statistics Department Hong Kong Special Administrative Region (2017). 2016 Population By-census Thematic Report: Household Income Distribution in Hong Kong (60).

Figure 3.5 shows that the variation in sources of income across income quintiles. At lower levels of income, the majority of income does not come from employment, and this is likely to represent welfare and charity support, or pensions amongst retired people. At higher levels of household income, the majority of income derives directly from employment. The proportion of households in receipt of multiple income strands increases with household income: this is likely to represent return on capital, including dividends and rent.

**Figure 3.5 Distribution of households within broad income groups by source of income in Hong Kong, 2016**



Source: Census and Statistics Department Hong Kong Special Administrative Region (2017). 2016 Population By-census Thematic Report: Household Income Distribution in Hong Kong (60).

Note: Other cash income refers to 'income generated from rent income, interest, dividends, regular/ monthly pensions and insurance annuity benefits, regular contribution from persons outside the household, regular contribution from charities, comprehensive social security assistance, old age allowance, old age living allowance, normal disability allowance, higher disability allowance, education-related Government subsidies and other Government subsidies. Income from lottery/ gambling winnings, loan obtained, compensation, inheritances, loan payment received and proceeds from sale of assets are excluded'.

# 3B FINANCIAL MECHANISMS

Hong Kong’s approach to taxation and government spending has always favoured a low-tax, low-spending system, variously described as ‘laissez-faire’ or ‘non-interventionist’, that leans away from using social programmes to redistribute wealth or reduce inequalities (62). Although social welfare programmes do exist, as we will see, they are highly targeted and limited in scope.

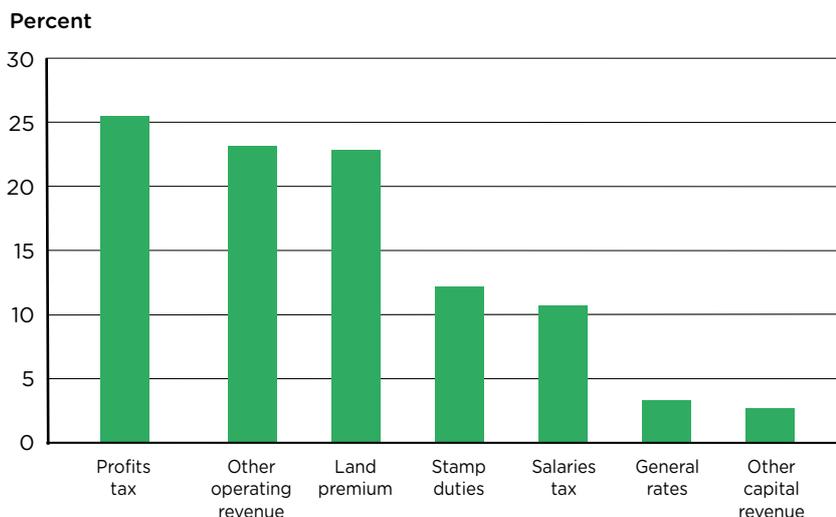
In the Nordic countries of Europe, which broadly enjoy good health, low crime, high social mobility and quality education, the Nordic Experience of the Welfare State group examined the evidence for the effects of welfare on health. They concluded that a broad scope of public service provision across the life course, including redistributive welfare policies; policies that took into account equality of opportunity and outcome; and policies that were universal rather than means-tested and highly targeted, were crucial (63). A functioning welfare state can lift families out of poverty, with its attendant health risks, and provide support to disadvantaged groups, including older people and those with disabilities.

The provision of good public services has the potential to improve health by reducing the link between low income and actual deprivation: if the public realm provides subsidised health care, transportation and education, then the relatively income-poor need not be absolutely deprived of these benefits, with their impact on health. Following the evidence that universalist policies produce the greatest benefits for health, the UCL Institute of Health Equity supports policies of ‘proportionate universalism’, that are provided to all, but resources focused where there is greatest need.

## TAX SYSTEM

Taxation can be an engine of wealth redistribution. A tax system, alongside a system of social welfare, funded from taxation, can work to reduce social inequities, and thus reduce health inequalities. As outlined in an article by Marques (2020), ‘the structure of the fiscal system [in Hong Kong] does not promote redistribution’ (62). Revenues in Hong Kong have depended on levies paid by corporations and on land sales, rather than on income taxes, which, it has been suggested, around 50% of workers do not earn enough to pay. Budget estimates for 2019-2020 show that the highest proportion of tax revenue came from profit taxes, land premiums and other operating revenues, as shown in Figure 3.6 (64). This impacts on the Hong Kong welfare system, which has been described as ‘no longer fit for purpose’, undermining opportunities for good health and the reduction of health inequalities (62).

Figure 3.6 Distribution of total government revenue estimates by item, 2019-2020



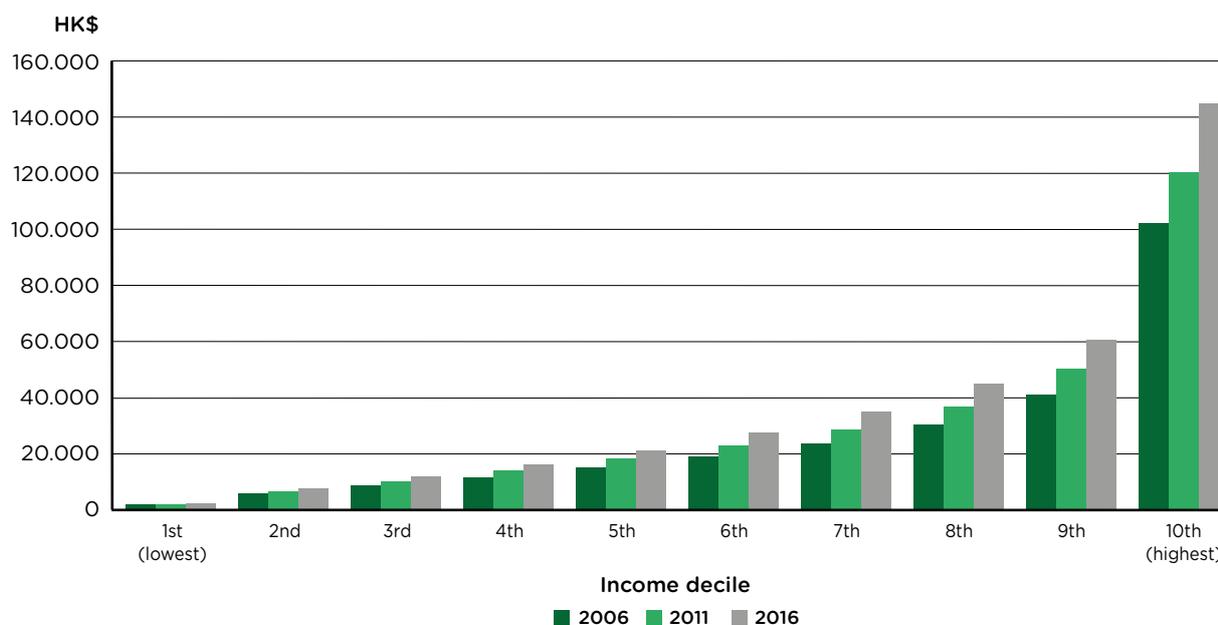
Source: Research Office Legislative Council Secretariat (2019). Major sources of government revenue (64)

Note: Other operating revenue refers to ‘investment income earned under the General Revenue Account, fees and charges, betting duty, government rents and duties’. Other capital revenue refers to ‘investment income earned under the Capital Account, loan repayments received by various funds, and recovery of the land costs for the flats sold under the Home Ownership Scheme from the Hong Kong Housing Authority’

In Section 3A above, we showed that income inequalities are widening in Hong Kong, although the figures were pre-tax. Figure 3.7 shows that post-tax household income in all types of household increased between 2006 and 2016 and that in the highest income decile (decile 10), there was a 42% increase from HK\$102,220 to HK\$144,850 Hong Kong compared with

an increase of 17% in the lowest income decile (decile 1) from HK\$1,950 to HK\$2,290. This suggests that the tax system is not working to reduce income inequalities and encourage redistribution. It should be noted that this graph includes economically inactive households, which are likely to make up a significant proportion of the lower income deciles.

**Figure 3.7 Average post-tax monthly household income (HK\$) at current prices by income decile group in 2006, 2011 and 2016**



*Source: Census and Statistics Department Hong Kong Special Administrative Region (2017). 2016 Population By-census Thematic Report: Household Income Distribution in Hong Kong (60).*

## SOCIAL WELFARE

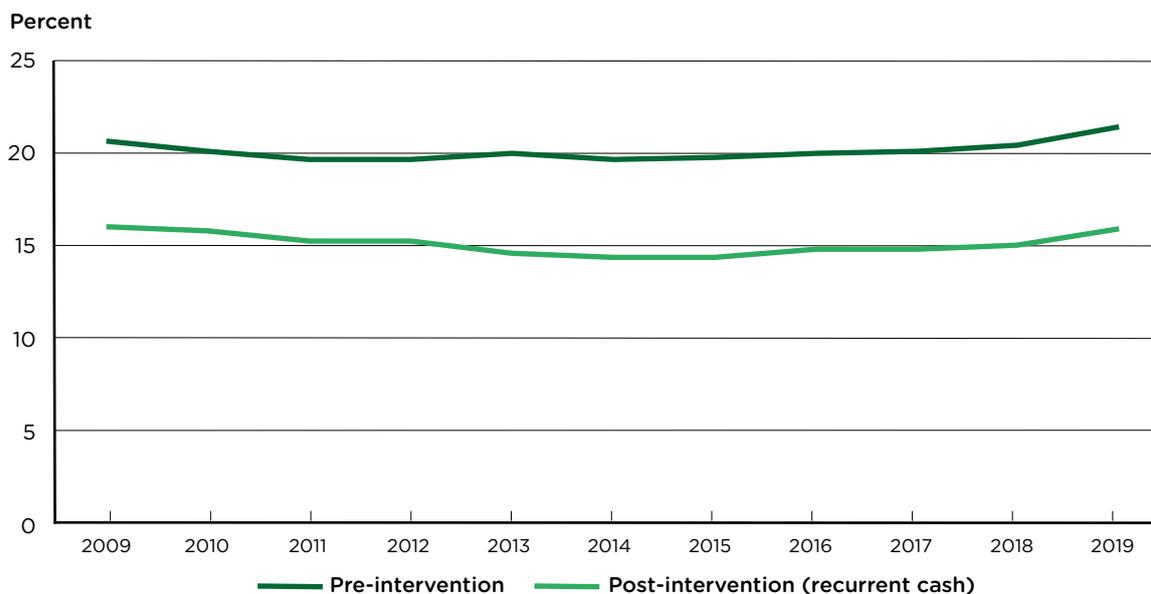
According to Oxfam’s Hong Kong Inequality Report, the Hong Kong Government had accumulated a surplus of over HK\$690 billion between 2008 and 2018, resulting in HK\$1.1 trillion in fiscal reserves. However, despite these increases, the ratio of government’s recurrent expenditures on education, healthcare and social welfare to GDP has continued to decrease (65). After recording a fiscal surplus for 15 years in a row, Hong Kong reverted to a fiscal deficit of HK\$37.8 billion (i.e. 1.3% of GDP) in 2019-2020 (66). The deficit is expected to more than triple to HK\$139.1 billion (4.8% of GDP) in 2020-2021, and the Financial Secretary forecasts four more deficit years ahead, largely due to the impacts of the COVID-19 pandemic.

Prior to the pandemic, recurrent expenditures on education, healthcare and social welfare were equivalent to 14.4% of GDP in Hong Kong’s 2018/19 budget (65). While there are no directly comparable international figures, the Organisation for Economic Co-operation and Development (OECD) does publish social spending data for its members, indicating the proportion of their GDP on social expenditure, comprising cash and in-kind benefits and tax breaks with a social purpose. In 2019, the United Kingdom spent the equivalent of 20.6% of GDP, close to the OECD average of 20.0%, and the United States of America spent 18.7%, while Norway, Sweden, Germany, Austria, Italy, Denmark, Belgium, Finland and France all spent over 25% (67). The most recent data available for Japan is 2017, when social spending comprised 22.3% of GDP.

The government's recurrent cash measures in 2019 – i.e. regular payments as part of a social welfare programme, excluding one-off relief packages and benefits in kind – served to lift 174,500 households and 392,900 individuals out of poverty and reduce the poverty rate to 15.8%,

from a theoretical pre-intervention rate of 21.4% (68). The poverty line in Hong Kong is a relative measure, set at 50% of the median monthly household income. There have been minimal changes in the poverty rate in Hong Kong both before and after policy intervention since 2009, as shown in Figure 3.8.

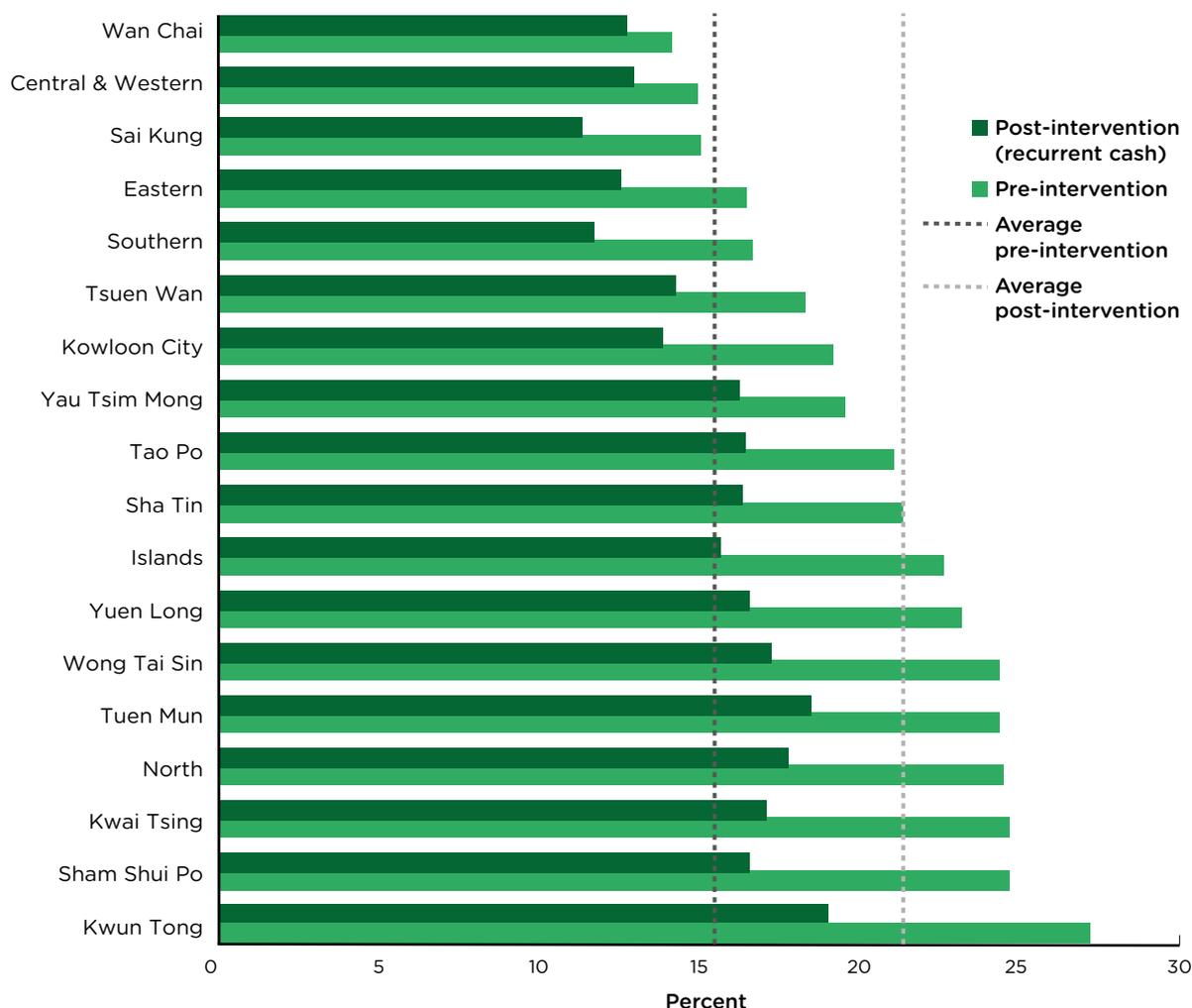
**Figure 3.8 Percentage of households in poverty before and after recurrent cash policy intervention in Hong Kong, 2009-2019**



Source: Government of the Hong Kong Special Administrative Region (2019). Hong Kong Poverty Situation Report 2019 (68)

Figure 3.9 shows variations in the poverty rate before recurrent cash policy intervention between districts in Hong Kong in 2019, ranging from 27.2% in Kwun Tong to 14.2% in Wan Chai. Reductions in the poverty rate were seen to varying degrees across all of the districts following policy intervention, and this was generally more pronounced in districts with higher pre-intervention poverty rates.

**Figure 3.9 Percentage of households in poverty before and after recurrent cash policy intervention in Hong Kong, by District Council 2019**



Source: Government of the Hong Kong Special Administrative Region (2019). *Hong Kong Poverty Situation Report 2019* (68)

The section below outlines some of the key social welfare assistance programmes available in Hong Kong. There also exist a few different programmes for the support of older people and those with disabilities, grouped together as the Social Security Allowance Scheme, including both means-tested components for those over 65 and non-means-tested components for those over 70 or with a doctor-certified disability (69). There are also forms of housing subsidy discussed in section 3F on housing affordability below. As noted previously a great deal of support is also offered by NGOs, voluntary sector organisations and philanthropists.

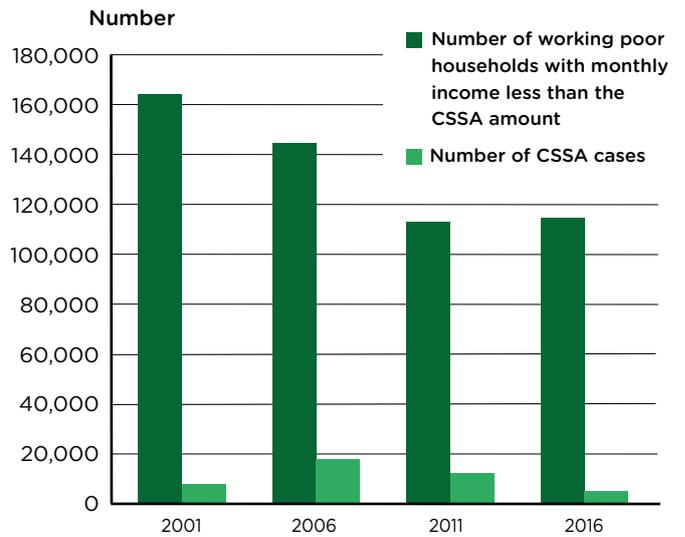
### COMPREHENSIVE SOCIAL SECURITY ASSISTANCE SCHEME

The Comprehensive Social Security Assistance (CSSA) is intended to supplement incomes for the poorest in Hong Kong. Yet even with greater public awareness of the plight of low-skilled workers, lone parents, older people and the unemployed, a means- and income-tested structure excludes many (70) (62). The average monthly payment for a household of four people eligible for CSSA in 2019 was HK\$15,675, and for a single person HK\$6,507 (71). For context, rent for even subdivided lodgings, which are on average the size of a parking space, can be well over HK\$5,000, leaving little to spend on other necessities such as utilities, food, and clothing, let alone social engagement or emergencies (62) (72).

The Legislative Council Panel on Welfare Services stated clearly in 2019 that the CSSA was intended to be ‘a safety net of last resort for recipients to meet their basic needs’ and expressed concern that a more generous offering would have ‘the undesirable effect of discouraging able-bodied adults from fully engaging in the labour market’ (73).

In 2016, there were 308,549 working poor households, approximately 40% of which were poor enough to qualify for the CSSA (65). However, the number of those who receive the CSSA is significantly lower than the total number of working poor households who have a monthly income of less than the average CSSA amount, as shown in Figure 3.10.

**Figure 3.10 Number of working poor households with incomes lower than the average CSSA amount and number of CSSA cases, 2001-2016**



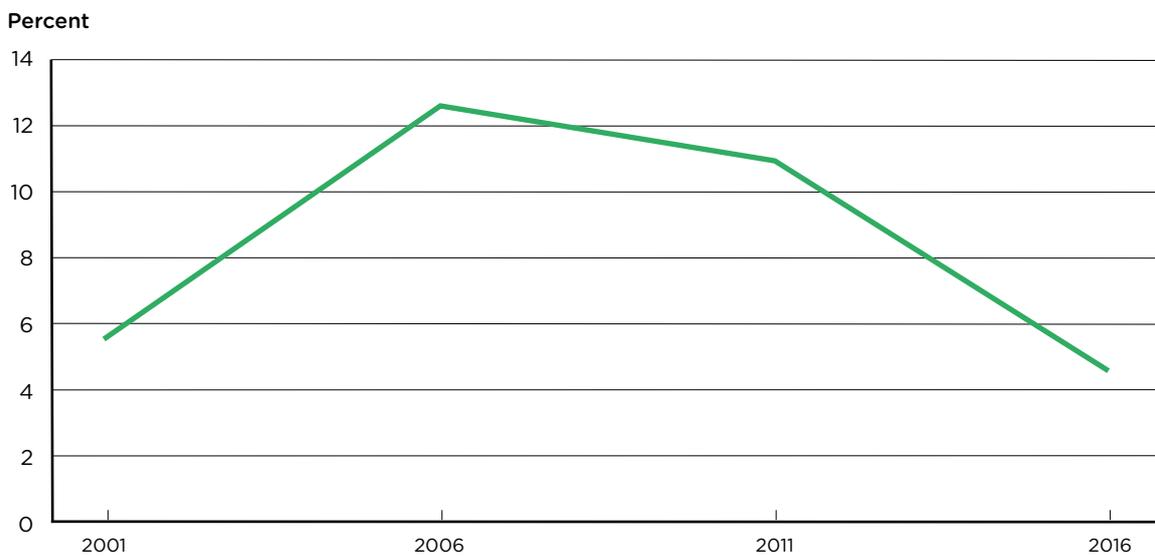
Source: Oxfam (2018). Hong Kong Inequality Report (65)

In 2016, only 4.5% of working poor households eligible to apply for the CSSA did so, as shown in Figure 3.11. It also shows that the ratio of working poor households applying for the CSSA in Hong Kong has been decreasing since 2006 (74).

It has been suggested that many do not access the CSSA because of stigma associated with accessing help (62). It can also be difficult to navigate the demands of a complex welfare system, and not all of those eligible may even be aware of the existence of such programmes. A simplified, and well-publicised, ‘one stop shop’ model built on the

principle of proportionate universalism could improve this situation, and reduce inequality across the gradient. A ‘one stop shop’ model can cover a number of different organisational structures, but the key point is that users can experience a relatively seamless interaction with the welfare system, accessed at the same geographical location or via the same digital platform, rather than having to ‘shop around’ for different forms of benefit and support (74). Hong Kong currently has a unique system by which 90% of its welfare services are provided by non-governmental organisations (NGOs), administering government funds (75).

**Figure 3.11 Percentage of working poor households applying for the CSSA in Hong Kong, 2001-2016**



Source: Oxfam (2018). Hong Kong Inequality Report (73)

## WORKING FAMILY ALLOWANCE SCHEME

The Working Family Allowance (WFA) Scheme supports low-income working households who have longer working hours and are not receiving the CSSA, with the aim of encouraging self-reliance and easing intergenerational poverty. A household needs to meet certain working-hour requirements and income and asset limits to be eligible for the scheme. This scheme was first introduced in 2016 as the Low-income Working Family Allowance, but was renamed the Working Family Allowance Scheme in 2018. The government has implemented a number of improvements to the scheme over the past three years, including extending the scheme to cover one-person households and increasing the rates of allowance. As of December 2020, the scheme was covering 56,000 households, including over 180,000 individuals (76) (77). Additional support was provided to recipients of the WFA as part of the Anti-epidemic fund, a one-off special allowance equivalent to two-months of the WFA payments (78). This is discussed in greater detail in Section 5C of this report, alongside other governmental responses to the pandemic.

## PENSION SYSTEM IN HONG KONG

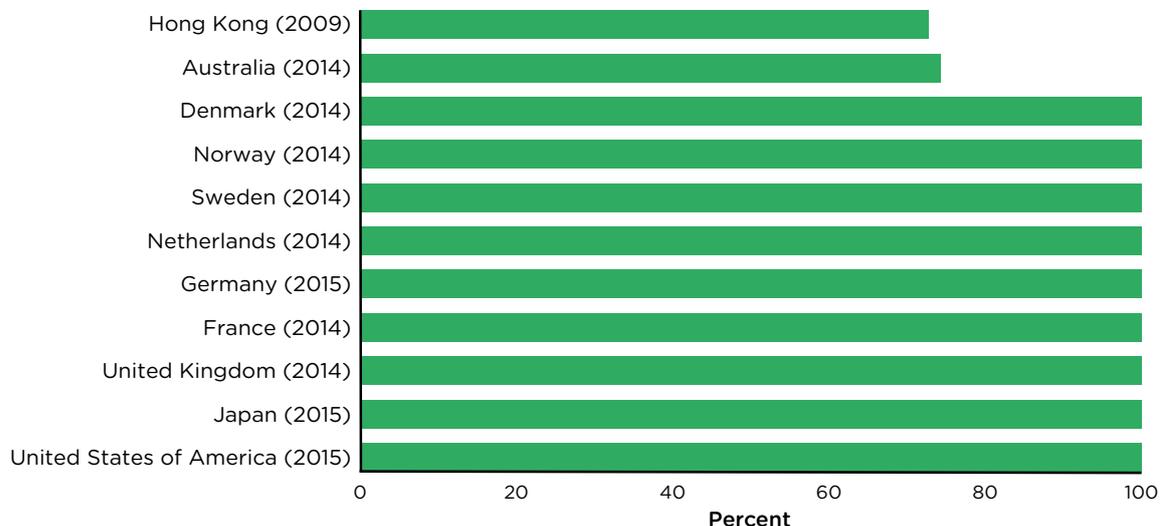
The Hong Kong pension system is based on a four-pillar model and incorporates four of the five pillars that make up an ideal pension system according to the World Bank. The 'zero pillar' encompasses the Old Age Allowance where people over 70 years who meet specified residency requirements are funded directly by the government; the 'second pillar' consists of a mandatory, privately-managed, occupational scheme known as the Mandatory Provident Fund (MPF); the 'third pillar' refers to voluntary savings; and the 'fourth pillar' encompasses social help and is based on public services, personal assets and family support. Hong Kong does not have an equivalent of the

'first pillar', a contributory public pension 'social security' scheme (79). As outlined by Oxfam, there are 'loopholes' in the Hong Kong model which can consequently leave some older people vulnerable to poverty (73).

The MPF, first introduced in 2000, is the only compulsory saving scheme for retirement in Hong Kong. It involves a specified contribution to a saving scheme which covers both part-time and full-time employees between 18 and 64 years who have been employed for 60 or more days. Prior to the implementation of this scheme, only around a third of workers in Hong Kong had any form of retirement protection, according to the Mandatory Provident Fund Schemes Authority. However, as outlined in a paper by Wong (2012), the effectiveness of the MPF in alleviating poverty is limited. The MPF has particular problems addressing poverty amongst women, for a number of reasons. The MPF does not cover those who remain at home to do domestic work, a form of unpaid labour carried out more frequently by women. Women also make up a greater proportion of the working poor, for whom MPF contributions are not enough to provide sufficient protection in older age (80). Additionally, workers in casual employment, who are more likely to be women, are less likely to be engaged with the scheme. A study conducted by Oxfam in 2017 on low-income casual work found that 75% of interviewees did not have MPF in place, and that 60% of casual workers in Hong Kong were women (73).

Based on the latest available data from the International Labour Organization (ILO), Hong Kong has a lower pension coverage for those above the statutory pensionable age when compared to other countries with similar levels of development, as shown in Figure 3.12. In most of the countries in Figure 3.12, 100% of the population aged above the statutory pensionable age receive a pension, whilst in Hong Kong 73% of the population above the statutory pensionable age receive a pension.

**Figure 3.12 Percentage of the population aged over the statutory pensionable age receiving a pension in Hong Kong and countries with a similar level of development, 2015 or latest available year**



Source: International Labour Organization (2017). *World Social Protection Report (2017-2019)* (81)

This lack of government support for older people is a likely contributor to the high levels of poverty in older age: Oxfam has reported that one in every three older people in Hong Kong lives in poverty (73). This is especially likely to include the lifetime poor who will not have significant pension or other savings. Poverty puts older people at significant risk of poor health, during a period of life when medical costs are likely to be significant. Older people may be forced back into work that is unsuitable due to financial pressures, putting their health at risk. As will be discussed in the employment section below, workforce participation among older people has increased significantly in recent years. As Hong Kong has a rapidly aging population, this is likely to be a growing problem.

## MINIMUM WAGE

A minimum wage, as defined by the ILO, is the ‘minimum amount of remuneration that an employer is required to pay wage earners for the work performed during a given period, which cannot be reduced by collective agreement or an individual contract’ (82). The minimum wage aims to protect workers from unduly low pay and has the potential of promoting ‘equality by increasing workers’ remuneration and improving the living conditions of those at the lower end of the wage distribution’ (83).

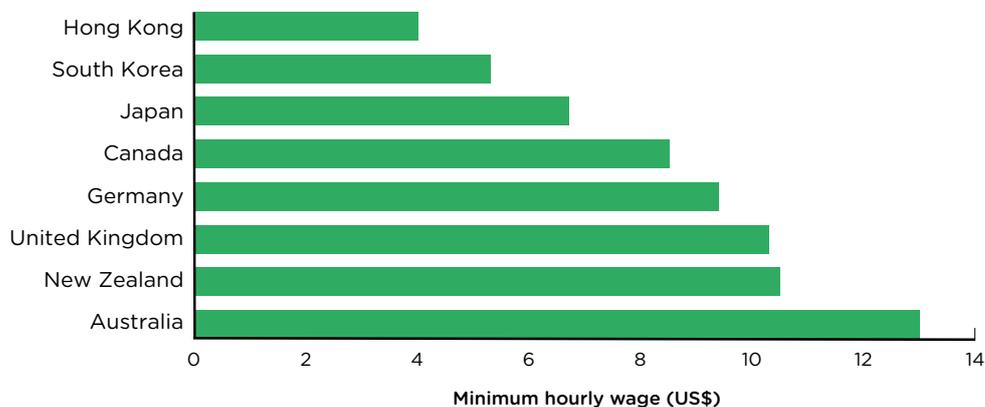
In terms of health, a minimum wage has to be understood in the context of a minimum income for healthy living. This

income needs to be sufficient to afford everything that is needed not just for survival, but for full engagement with society and for the maintenance of a healthy lifestyle. To put it another way, the minimum income is that which prevents individuals experiencing deprivation and its impacts on health.

In Hong Kong, a voluntary minimum wage scheme was introduced in 2006, but a statutory minimum wage did not follow until 2011, at which time it was set at HK\$28 (US\$3.60; GB£2.18 per hour). The minimum wage in Hong Kong is reviewed every two years. In May 2019, the statutory minimum wage in Hong Kong was raised to HK\$37.50 per hour, and it was announced in February 2021 that it would remain at that level until April 2023 (84) (85). The incremental rises in the minimum wage have merely kept up with inflation, and it is not sufficient alone to meet the basic needs of workers and their families, despite the launch of social welfare schemes such as the Working Family Allowance (WFA) (73). The Oxfam Hong Kong Inequality Report highlighted that the minimum wage rate is well below the level that would qualify for social support via the CSSA Scheme (73).

The minimum wage in Hong Kong is low in comparison to other developed countries, as can be seen in Figure 3.13. This is based on data from 2016, when the minimum wage in Hong Kong was HK\$32.50 (86).

**Figure 3.13 Minimum hourly wage in Hong Kong and selected developed countries (US\$), 2016**



Source: Oxfam (2018). *Hong Kong Inequality Report* (73)

Note: In 2016 the hourly wage in Hong Kong was HK\$32.50 (86) which is equivalent to just over US\$4

The low minimum wage has contributed to the development of a ‘poor working class’ in Hong Kong who rely on social schemes such as the WFA, which is targeted at those in lower-income working households who work particularly long hours (72) (87). In addition, the statutory minimum wage does not apply to the territory’s almost 300,000 foreign domestic workers, who mainly come from the Philippines and Indonesia and are predominantly women (88) (60). These workers are subject to a separate Minimum Allowable Wage, currently

set at HK\$4,630 per month, with a food allowance of not less than HK\$1,121 per month if free food is not provided as part of the employment contract (89). It should be noted that multiple NGOs have previously alleged that the underpayment of foreign domestic workers, also called ‘foreign domestic helpers’ in Hong Kong, is widespread, alongside excessive working hours and other abuses (90) (91). As they are not permanent Hong Kong residents, they are also not eligible for many forms of social support including the CSSA (92) (70).

## 3C POVERTY

Poverty is an important driver of health inequities at every stage of life, with widespread negative impacts on health which accumulate throughout life. Living in poverty means having insufficient income to access a range of services and resources essential to health – including decent housing, sufficient nutritious food, resources for education, access to employment, health care and participation in social and community life.

Poverty is also stressful, and that stress has a direct effect on mental and physical health, and has measurable effects on brain development in children (93). Long-term stress responses are associated with increased risk of disease like diabetes and ischaemic heart disease (94). The cognitive load of this stress may also reduce the ‘mental bandwidth’ available for other decision-making, resulting in behaviour that worsens health in the long run (95) (96). Those in relative poverty may therefore be more vulnerable to ill health, and if they do become ill, often face greater barriers to accessing healthcare (97). In Hong Kong in 2019, 21.4% of the population were living in poverty. Poverty here is as defined by the Hong Kong Commission on Poverty, ‘based on the concept of “relative poverty” and set at 50% of the median monthly household income before policy intervention (i.e. before taxation and social welfare transfer)’ (68).

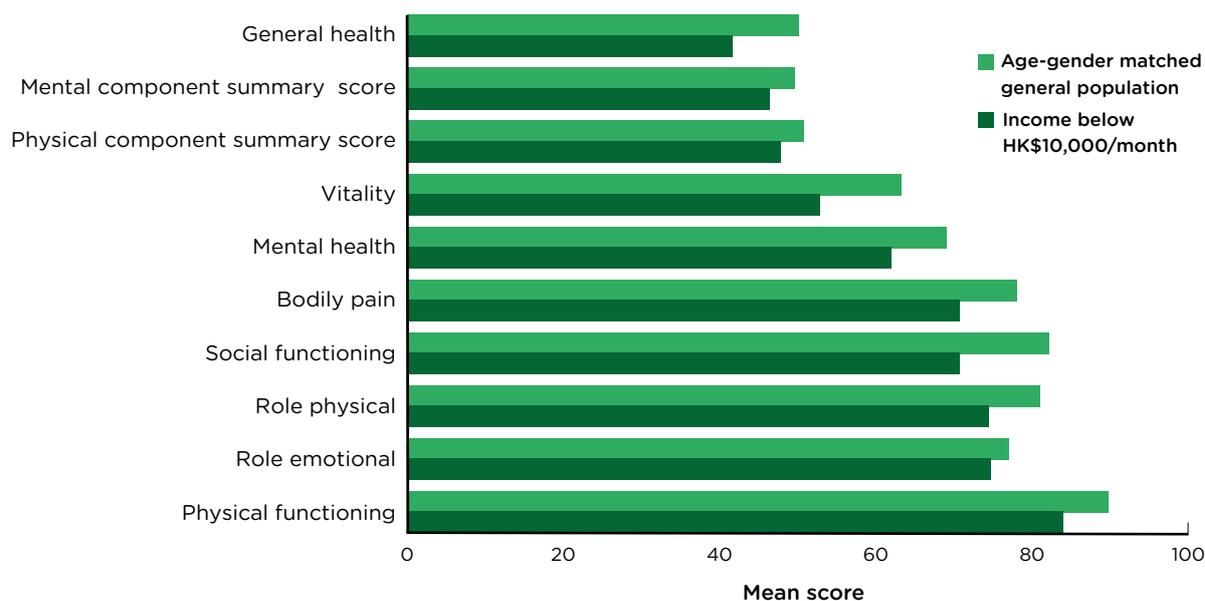
As outlined by Lau et al. (2014), poverty is a significant cause of poor health in Hong Kong. 18% of all adults reported that lack of money had affected their health in the the Poverty and Social Exclusion in Hong Kong (PSEHK) 2013 Living Standards Survey. The same proportion felt

that their poor health had impacted their financial situation. The high cost of health care and out-of-pocket health expenditures have been cited as causes of poverty and financial hardship in Hong Kong. Drawing on these findings, the authors suggested that, in Hong Kong, there appears to be a multifaceted relation between health and poverty - i.e. poverty is a cause of poor health and being in poor health can also cause poverty (98).

A study in 2016 found that Chinese adults in Hong Kong living in lower-income households had poorer health-related quality of life than the general population (99). Specifically, having a household income of less than 50% of the median was independently associated with worse mental and physical health, even after adjusting for sociodemographic characteristics and co-morbidities (99). Figure 3.14 shows that that the population living below the Hong Kong poverty line had lower scores in all of the Short Form Health Survey version 2 subscale scores (SF-12v2), used to measure health-related quality of life and covering a range of physical and mental health outcomes, when compared to the age-gender matched general population. Lower scores indicate poorer health-related quality of life.



**Figure 3.14 Comparison of health-related quality of life (HRQOL) measures between households living below HK\$10,000/month (i.e. the poverty line) compared to the age-gender matched general population in Hong Kong**



*Source: Lam et al. (2016). Poverty and health-related quality of life of people living in Hong Kong: Comparison of individuals from low-income families and the general population (99)*

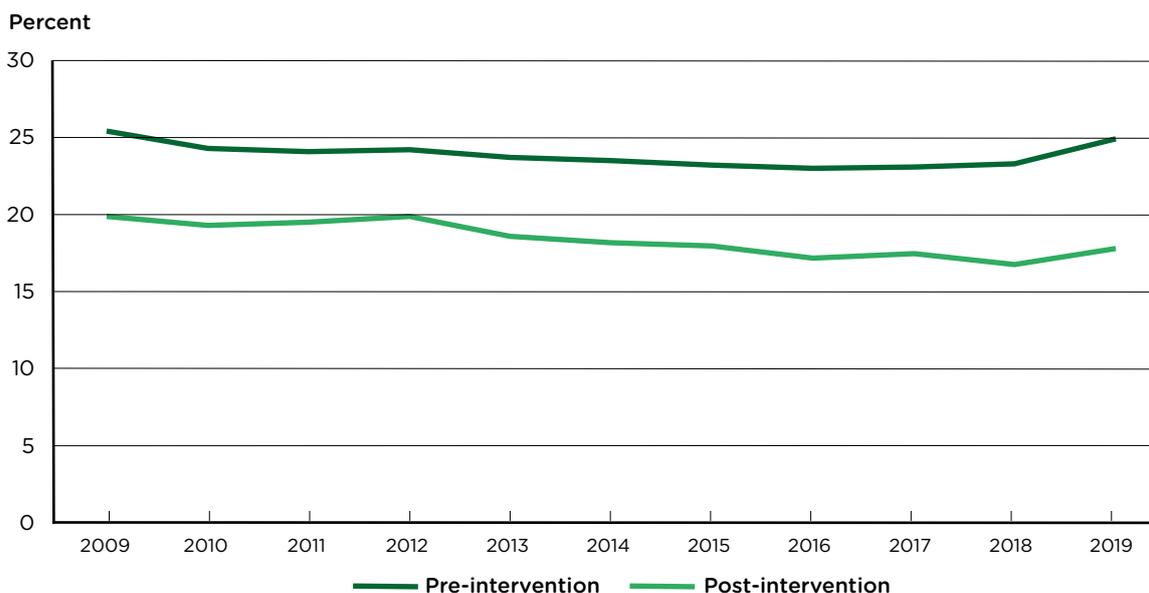
*Note: The health-rated quality of life (HRQOL) measures are selected indicators from the 12-item Short-Form Health Survey version 2 (SF-12v2) subscale. The scoring range of the SF-12v2 subscale ranges from 0 to 100 where higher scores indicate better HRQOL. Scores were significantly lower in the <HK\$10,000/month group in all of the measures with the exception of the 'role emotional' measure.*

## CHILD POVERTY

Positive experiences during early life affect cognitive development, educational attainment, employment and income, wellbeing and mental and physical health throughout the life course. Positive experiences in the early years relate to how nurturing the environments in which the child grows are and access to quality services to support young children and their families. Both these relate in part to the availability of social, economic and other resources (100). Across the world, evidence shows that there are clear inequalities in cognitive development during the earliest years, and without intervention, these inequalities tend to widen through childhood (17). Eliminating child poverty is therefore crucial for reducing inequalities and improving the health of society.

Figures from 2019, the latest available, show a worsening of child poverty in Hong Kong since 2018, reversing some of the improvement seen since 2009. This refers to children living in poor households, with an income below 50% of the median. Between 2018 and 2019 child poverty rates increased, both the rate before policy intervention, and that after. This can be seen in Figure 3.15. As reported in the Hong Kong Poverty Situation Report 2019, the worsening of the child poverty situation is associated with the significant increase in the number of working poor families (68).

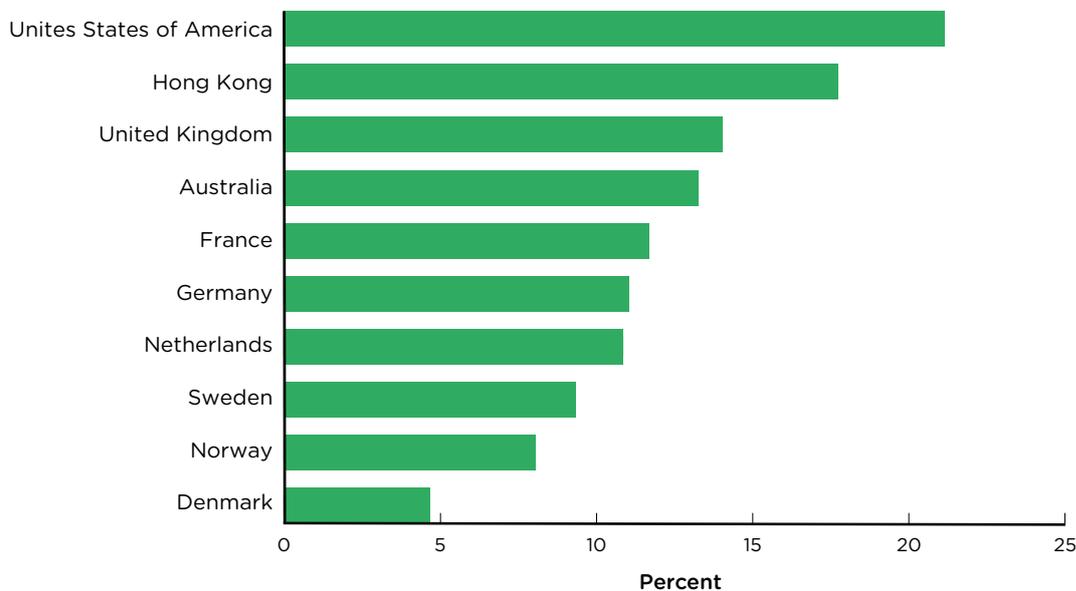
**Figure 3.15 Percentage of children in poverty in Hong Kong pre-intervention and post recurrent cash policy intervention, 2009-2019**



Source: Government of the Hong Kong Special Administrative Region (2019). Hong Kong Poverty Situation Report 2019 (66)

When compared to other countries of similar development levels, Hong Kong had the second highest poverty rate amongst children under 18 years old, after taxation and welfare intervention, just behind the United States of America.

**Figure 3.16 Poverty rate in children (<18 years) in Hong Kong and selected developed countries, 2019 or latest available**



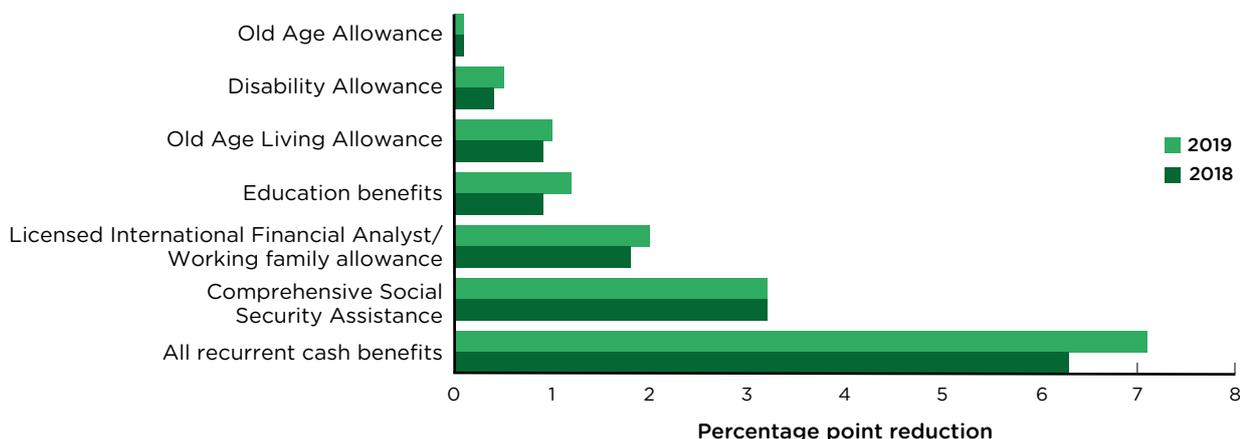
Source: Hong Kong data from Government of the Hong Kong Special Administrative Region. Hong Kong Poverty Situation Report 2019 (66). Data for other countries from OECD Poverty rate (indicator) (101).

Note: OECD definition of poverty rate is 'the ratio of the number of people (in a given age group) whose income falls below the poverty line; taken as half the median household income of the total population' (68). This has been converted to percentage for the above graph. The Hong Kong poverty rate is based on the rate post policy intervention. Data for the Netherlands is provisional, from 2016; for Denmark and the USA 2017; Norway, Germany, France, Australia 2018; all others 2019.

Despite the increase in the child poverty rate in Hong Kong, the Hong Kong Poverty Situation Report 2019 did also note that there was an increase in the poverty alleviation on children from policy measures in 2019, when compared to 2018, i.e. there was a 0.6 percentage point increase in the poverty alleviation due to recurrent cash programmes between these years (68). This was

on account of the WFA, which lowered the child poverty rate by 2.0 percentage points; and education benefits, which lowered the poverty rate by 1.2 percentage points in 2019, as shown in Figure 3.17. It should be noted that poverty alleviation cannot be directly measured, so these figures are based on a theoretical model of pre-intervention poverty.

**Figure 3.17 Percentage point reduction in the child poverty rate due to selected recurrent cash programmes in Hong Kong, 2018-2019**



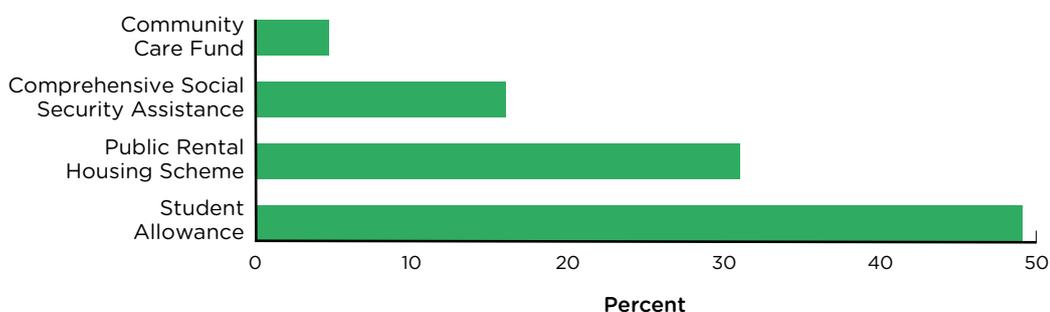
Source: Government of Hong Kong Special Administrative Region (2019). Hong Kong Poverty Situation Report 2019 (68)

A study in 2018 evaluating the effectiveness of welfare schemes relevant either directly or indirectly to the reduction of child poverty found that all four of the schemes included - the CSSA, the Public Rental Housing (PRH) Scheme, the Community Care Fund (CCF) and the Student Allowance (SA) Scheme - were relatively ineffective in reducing child poverty. These programmes provided insufficient coverage, and, where they were available, resulted in little benefit. As well as proving ineffective at tackling child poverty, all but the CSSA were found to be inefficient: in other words, as well as failing to lift children out of poverty, these programmes,

with the exception of the CSSA, did not represent good value for money in making the attempt (102).

Figure 3.18 below illustrates how these benefits were distributed among poor households with children. We can see that 80% of benefits delivered to these families were in the form of SA or PRH. Although the CSSA represents better value for money in reducing child poverty, only around 16% of benefits were delivered via this programme.

**Figure 3.18 Distribution of welfare programme benefits received by poor households with children, 2018**

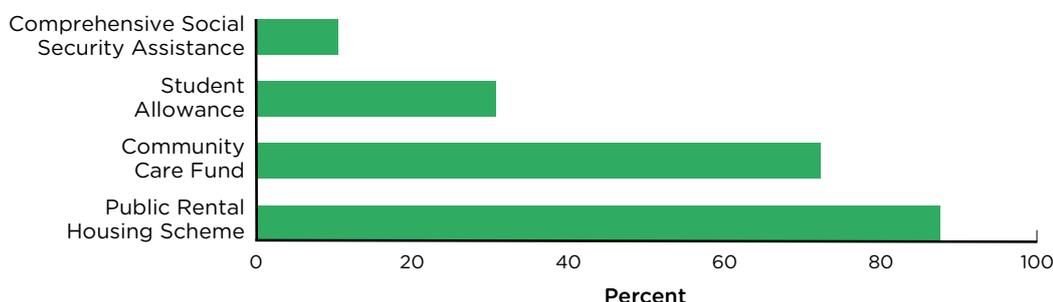


Source: Cheung et al. (2018). Evaluating the Effectiveness and Efficiency of Hong Kong Welfare Programmes in Reducing Child Poverty (102)

The PRH Scheme appeared to be the most effective of the schemes at reducing child poverty, as shown in Figure 3.19, with 87.2% of poor households receiving this benefit being brought above the poverty line, compared to 10.5% of those households receiving the CSSA scheme. However, the CSSA is a highly means-tested benefit, only available to the very poorest, and is therefore ineffective by virtue of its exclusionary nature: it cannot lift many families out of poverty, both because it is only offered to a few, and because they are sunk the deepest in poverty to begin with. The CSSA actually had the greatest effectiveness in closing the poverty gap for the families who received it, but they were still poor afterwards simply because they had been so poor before. As we have noted above, a further

problem is that few who are eligible actually apply, due to stigma and administrative hurdles. The PRH in contrast, which is a form of housing benefit in kind, is very widely offered and is therefore inefficient for poverty alleviation due to its inclusive nature. This is understandable as it used for other purposes than housing the poorest, for example rehousing displaced residents during rebuilding projects. Although the PRH brings more families above the poverty line than the CSSA, it is much less effective at closing the poverty gap. If coming above the poverty line is the finish line, then it is crucial to understand that the two populations served by these programmes do not start at the same starting point, as recipients of the CSSA are much poorer on average.

**Figure 3.19 Percentage of poor households with children receiving benefits who were brought above the poverty line by welfare programme type, 2018**



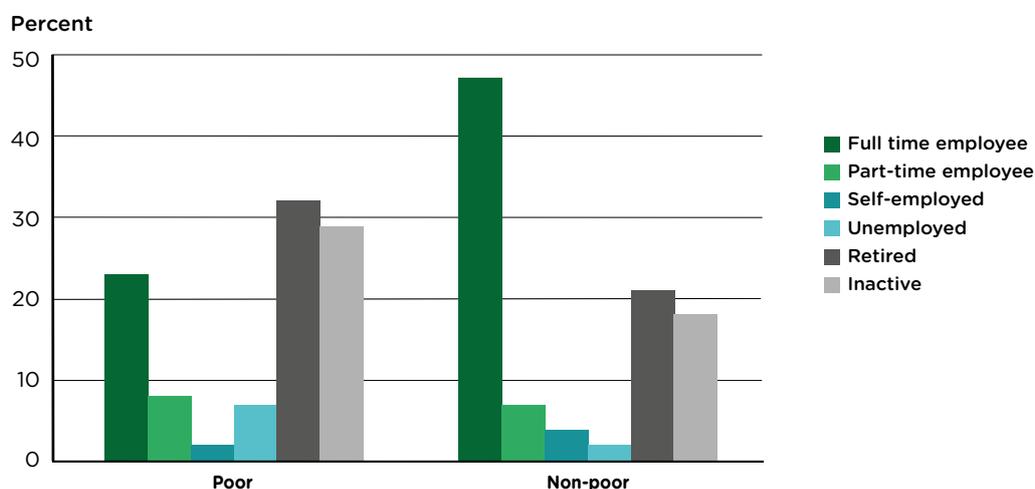
Source: Cheung et al. (2018). *Evaluating the Effectiveness and Efficiency of Hong Kong Welfare Programmes in Reducing Child Poverty* (102)

## IN-WORK POVERTY

Paid employment can represent a way out of poverty, but only if the wages and working conditions are sufficient to support an adequate standard of living (98) (103). Productive employment i.e. 'employment yielding sufficient returns to labour to permit the worker and her/his dependents a level of consumption above the poverty line' is essential to reduce poverty and ensure sustainable social and economic

development (104) (105). The absence of such employment can give rise to 'working poverty'. Working poverty is an issue in Hong Kong. Close to one in four of those living in poverty in Hong Kong are poor despite being in full-time employment, as shown in Figure 3.20, according to a report by Lau et al. (98). This report, which was based on the results of the PSEHK Living Standards Survey 2013, described a 'considerable problem' with low-paying jobs in Hong Kong (98).

**Figure 3.20 Distribution of economic activity status by poverty group in Hong Kong, 2013**

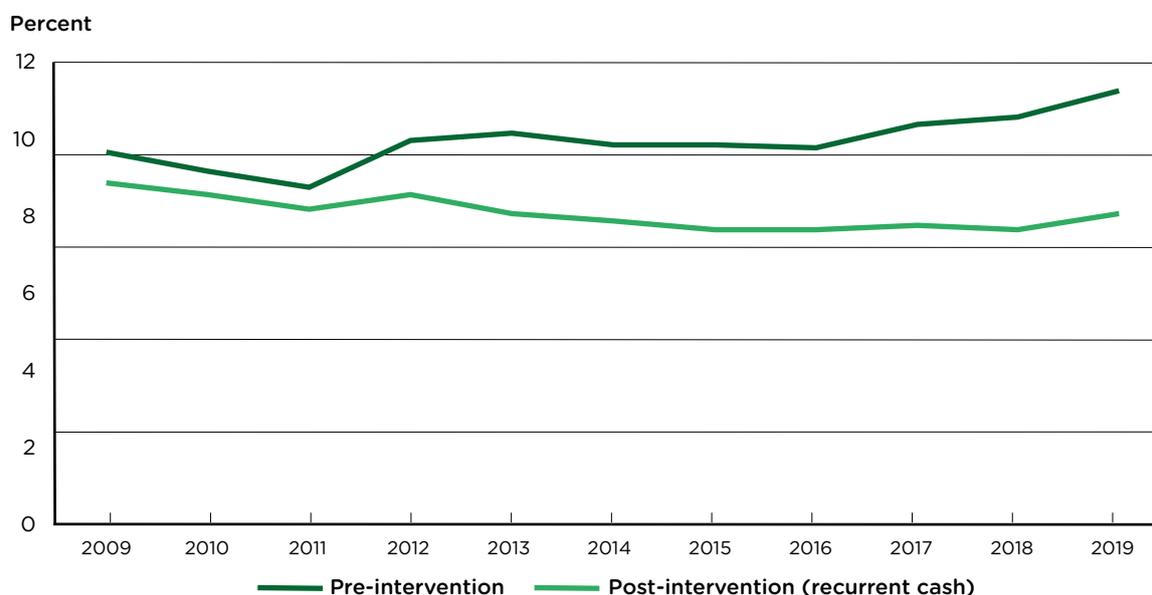


Source: Lau et al. (2014). *Social Exclusion in Hong Kong: Findings from the 2013 Living Standard Survey* (98)

According to the Poverty Situation Report in Hong Kong (2019), working households make up around 35% of the poor households in Hong Kong who are not receiving the CSSA. Figure 3.21 shows that the poverty rate for working households not receiving the CSSA (both pre-

and post-intervention) had increased in 2019 when compared to the previous year. The interventions in this case comprised all other recurrent cash interventions apart from the CSSA, for example the Old Age Living Allowance, Disability Allowance or WFA.

**Figure 3.21 Poverty rate amongst working households not receiving the CSSA in Hong Kong pre-intervention and post recurrent cash policy intervention, 2009-2019**

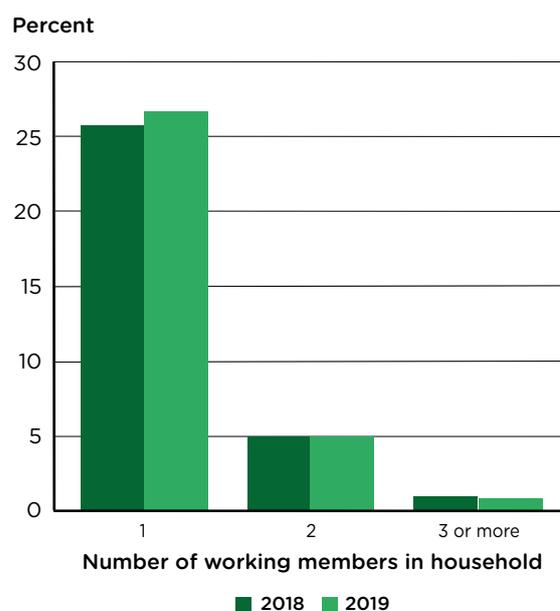


Source: Government of the Hong Kong Special Administrative Region, Hong Kong Poverty Situation Report 2019 (68)

The poverty rate was highest amongst households with only one working member, for whom it increased by one percentage point from 2018 to 2019, whilst the poverty rate for households with 2 or 3 or more working members stayed the same or decreased, as shown in Figure 3.22.

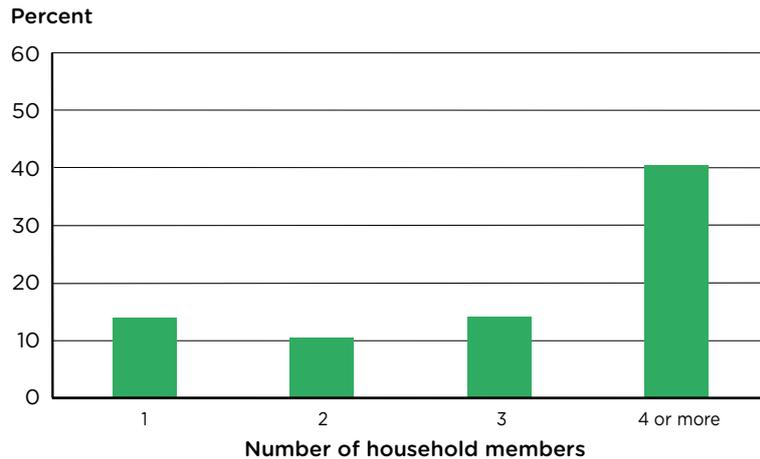
Figure 3.23 shows that over half of the increase in working poor households in Hong Kong in 2019 were amongst households with 4 or more people. Most of these household were households with children (68).

**Figure 3.22 Poverty rate by number of working members in households in Hong Kong, 2018-2019**



Source: Government of the Hong Kong Special Administrative Region, Hong Kong Poverty Situation Report 2019 (68)

**Figure 3.23 Distribution of the increase in working poor households in Hong Kong by household size, 2019**



*Source: Government of the Hong Kong Special Administrative Region. Hong Kong Poverty Situation Report 2019 (68)*

*Note: Poverty statistics refer to statistics before policy intervention (purely theoretical assumption).*

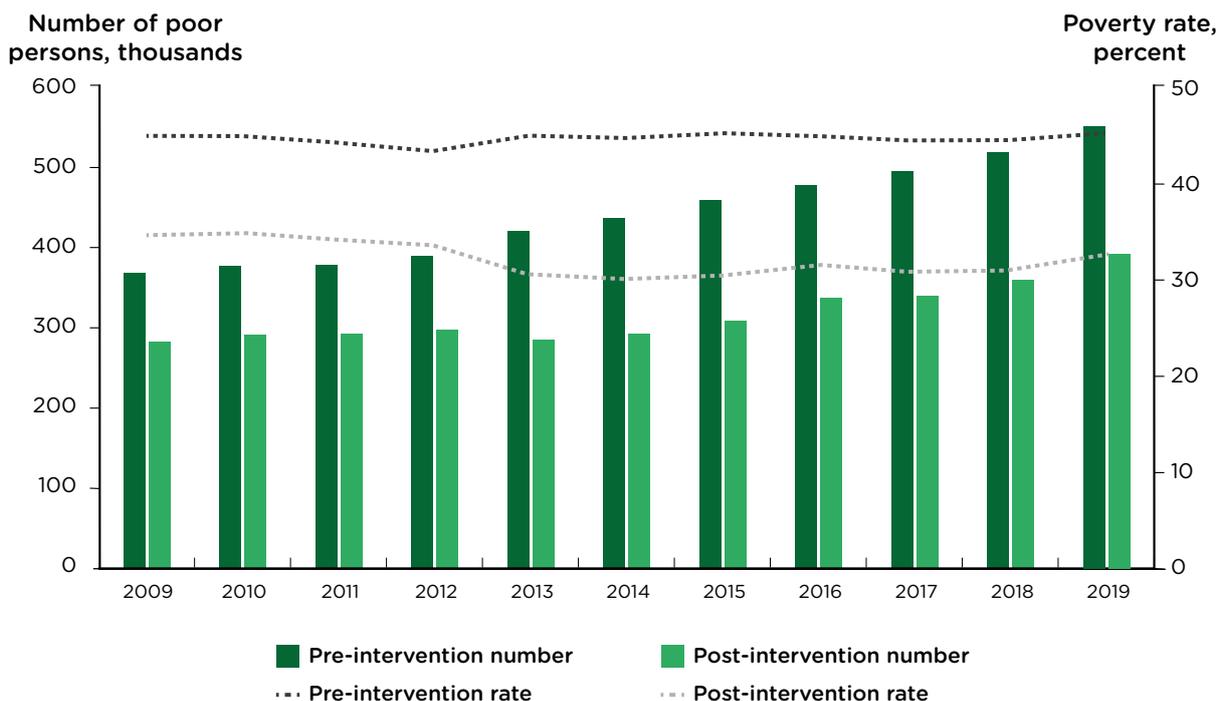
### POVERTY AMONG POPULATION AGED 65 AND OLDER

Due to its high life expectancy and low fertility rate, Hong Kong has a rapidly ageing population. In 2016, the Census and Statistics Department projected that between 2018 and 2038 the population of older people would almost double: from 1.27 million to 2.44 million, and from 18% of the total population to 32%. Approximately one third of people will be 65 or older by 2038 (57).

Those aged 65 and over make up the bulk of those with the

lowest income in Hong Kong. The Office of the Government Economist has reported that older households in Hong Kong tend to save less compared with working households (57). Figure 3.24 shows that the absolute number of people aged over 65 years in poverty before policy intervention has been increasing since 2009 (68). The number of persons in poverty post-intervention has also risen. The poverty rate post-intervention amongst persons over 65 years had slightly declined between 2010 and 2015, but has increased since then, and in 2019 the poverty rate post-intervention was 32%, compared to 31% in the previous year. This may be related to the inadequacy of the pension system as described above in the section on welfare.

**Figure 3.24 Number and percentage of those aged 65 and over in poverty in Hong Kong, 2009-2019**

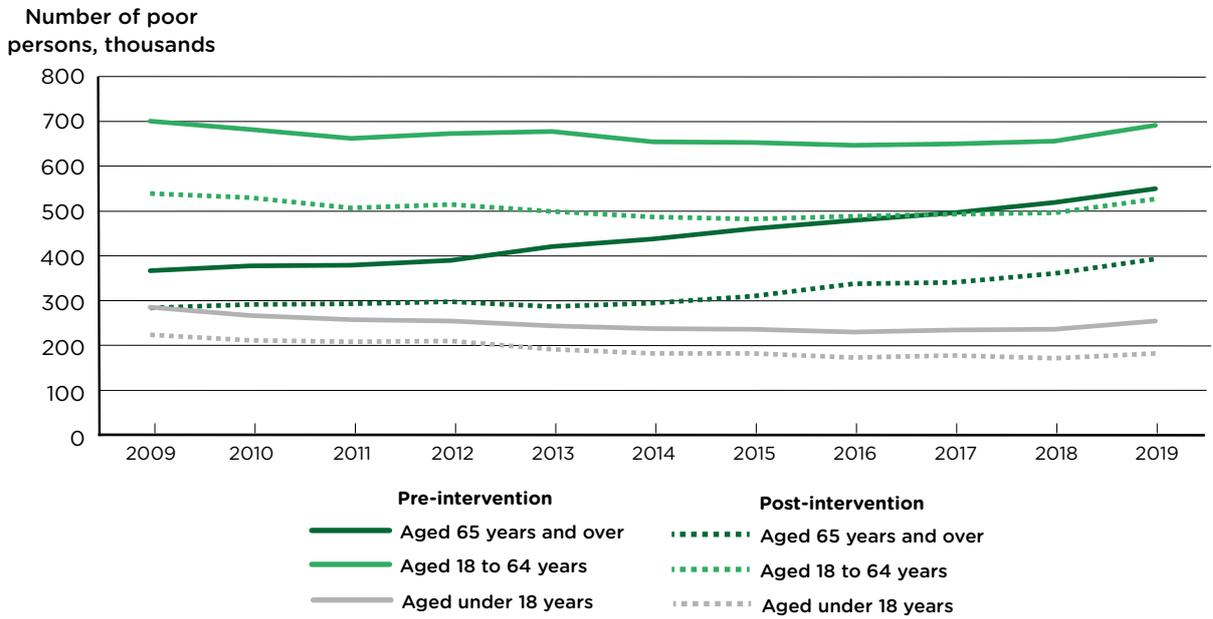


*Source: Government of the Hong Kong Special Administrative Region. Hong Kong Poverty Situation Report 2019 (68)*

The number of poor people aged 65 years and over has been consistently increasing, both before and after recurrent cash intervention, as shown in Figure 3.25. There have been some variations in the number of poor

in the other age groups, i.e. those aged 18 years and under and those 18 – 64 years between 2009 and 2019, however, both of these groups have seen increases in the poor population over the most recent years.

**Figure 3.25 Poor population by broad age group pre-intervention and post recurrent cash policy intervention in Hong Kong, 2009-2019**

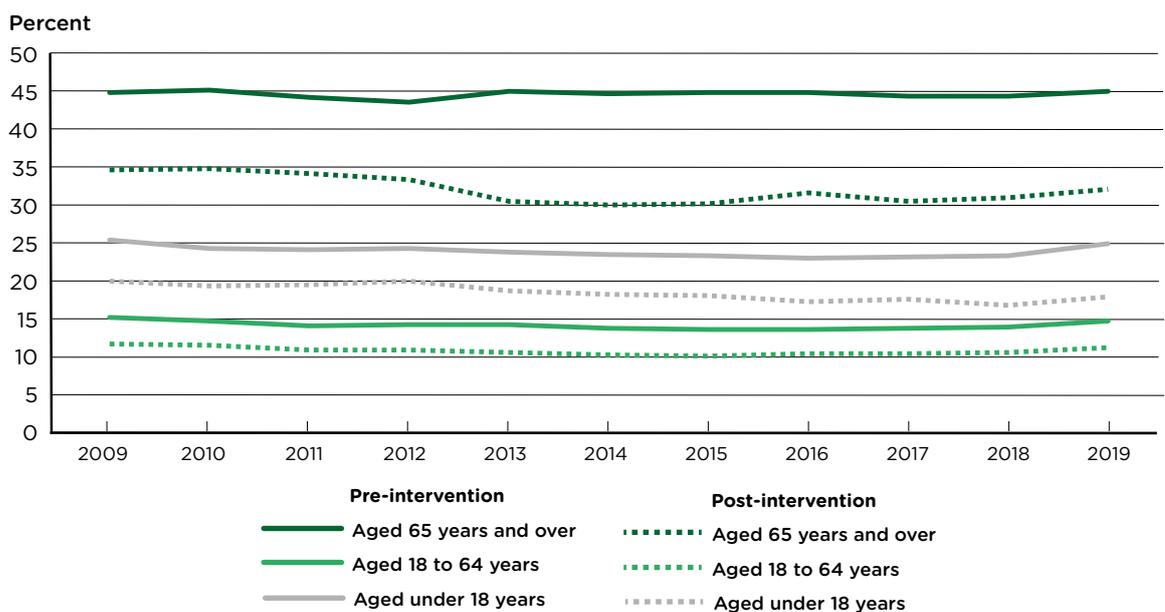


Source: Government of the Hong Kong Special Administrative Region. Hong Kong Poverty Situation Report 2019 (68)

Between 2009 and 2019, the poverty rate both before and after recurrent cash policy intervention was consistently higher amongst over-65s than either working-age or young people, as shown in Figure 3.26.

Whilst the reduction in poverty rates following recurrent cash intervention were most appreciable in this population aged 65 years and over, the rate of poverty was still highest amongst this age group.

**Figure 3.26 Percentage in poverty by broad age group pre-intervention and post recurrent cash policy intervention in Hong Kong, 2009-2019**



Source: Government of the Hong Kong Special Administrative Region. Hong Kong Poverty Situation Report 2019 (68)

# 3D INEQUALITIES IN EDUCATION IN HONG KONG

Educational attainment has a close relationship with health, and inequalities in attainment translate into inequalities in health. Higher educational attainment can also lead to lower rates of unemployment, greater income and improved socioeconomic position, with attendant effects on health. Conversely, pre-existing inequalities can impact the ability of individuals to continue in education (17).

Educational attainment is highly differentiated by age cohort in Hong Kong – with the majority of those who did not attend primary school born before the 1940s. Conversely, among those who had progressed beyond secondary education the majority were born in the 1970s or later. This process has been aided by the launch of nine years of free, compulsory education in 1978.

As a result of these trends in education, there are strong generational differences in the extent to which educational

inequalities have influenced subsequent inequalities in life chances and health outcomes. While this has meant that the numbers in relative disadvantage in old age is currently considerable, the proportion of people entering old age with secondary education or higher has increased year on year. This can be seen in Figure 3.27, which also shows generational differences in education by gender: women have lower educational attainment than men in all age groups, although this is less marked in younger age cohorts.

**Figure 3.27 Educational attainment distribution in each age group at ages 65 and over by gender in Hong Kong, 2016**



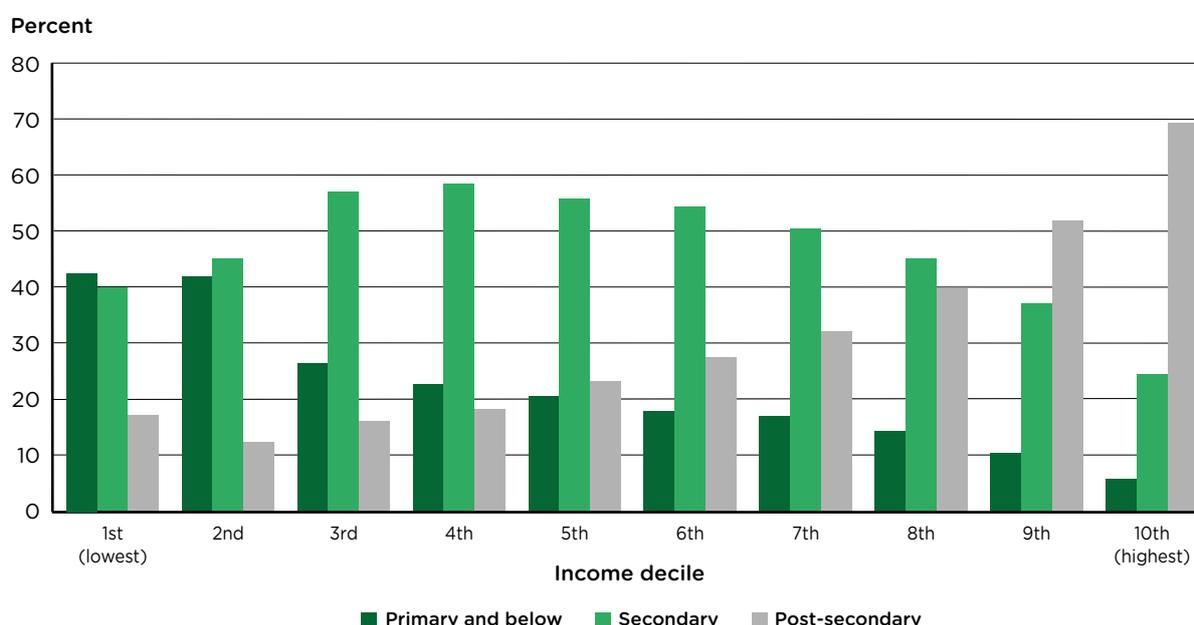
Source: Census and Statistics Department Hong Kong Special Administrative Region. 2016 By-census thematic Report: Older Persons (106).

Despite education being free for children in Hong Kong, there are significant inequalities in access to the resources and activities integral to the education and social development of children. A significantly higher proportion of poor children are deprived of access to educational resources and activities than non-poor children. 34% of poor children are deprived of educational resources (which include educational games, outdoor leisure equipment, books, or a computer with internet connection) compared to 1% of non-poor. 41% of poor children are deprived of educational activities (including school trips, tutoring and extra-curricular activities), while 0% of non-poor children are (98). This is indicative of a marked divide in access to education. This divide

in early years can have significant knock-on effects on educational attainment, social mobility and propagates lifelong social, economic and health inequalities.

Figure 3.28 shows that, in the population aged 15 years and over, the level of educational attainment tends to increase with increasing income decile group. For example, the most deprived income decile groups are more likely to have primary education as their highest level of educational attainment when compared to the higher income decile groups, and the proportion of people with a post-secondary education tends to increase with each increasing income decile.

**Figure 3.28 Educational attainment distribution in each income decile at ages 15 and over in Hong Kong (excluding foreign domestic workers), 2016**



Source: Census and Statistics Department Hong Kong Special Administrative Region. 2016 By-census thematic Report: Household Income Distribution in Hong Kong (60).

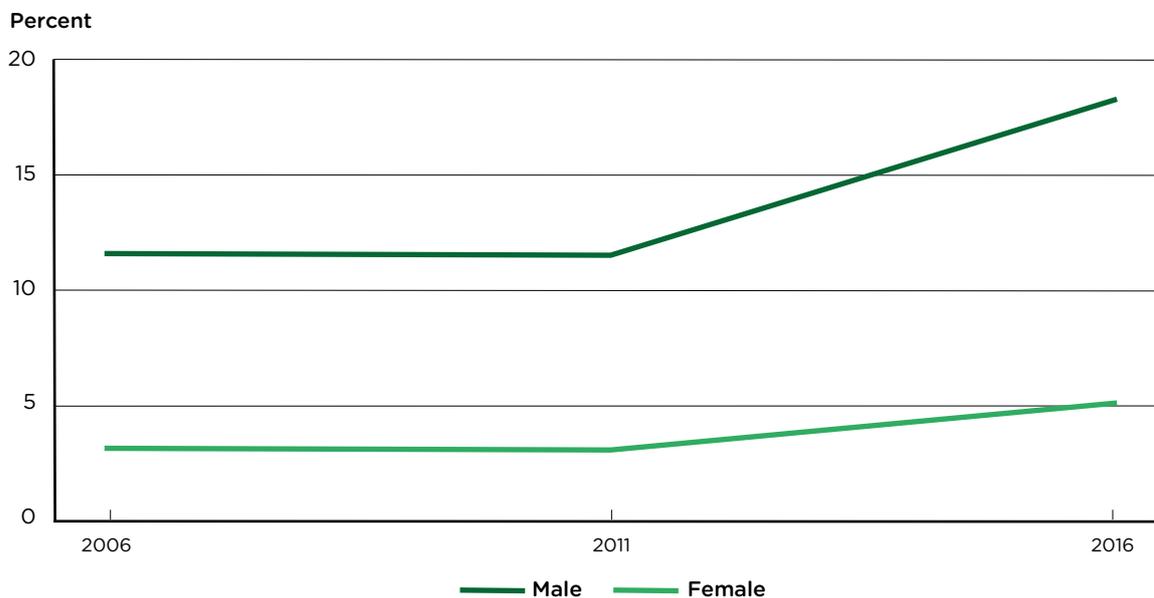
### 3E INEQUALITIES IN EMPLOYMENT IN HONG KONG

Patterns of employment both reflect and reinforce the social gradient in health. Those lower in social level find it harder to get into work, and when they do, the work is more likely to be low-paying, insecure, dangerous, stressful, and offer lower satisfaction – all of which damage physical and mental health. Unemployment is also bad for health: associated with increased morbidity and mortality (17). These result from financial problems leading to material deprivation; from increased psycho-social stress and its attendant effects on health; and from poorer health behaviours as a result of unemployment. Having a paid job is a crucial determinant of household income, and is most important for those for whom it offers the possibility of moving out of poverty, and escaping its attendant health inequalities. Good quality work can also thereby break the transmission of intergenerational inequalities

Figure 3.29 shows that the labour force participation rate among men and women aged 65 years and over has increased between 2011 and 2016. This may be partly inevitable in the context of an ageing population, and can have both beneficial and negative effects on health inequalities. Employment is broadly good for health, but this needs to be good, secure work. If, conversely,

older people are being forced back into insecure, low-paid work by financial need and inadequate retirement protection, then this is likely to have negative effects on their health. In 2019/20 unemployment has increased amongst all age groups as a result of the COVID-19 pandemic, set out in Section 5.

**Figure 3.29 Labour force participation rate of people aged 65 and over by gender in 2006, 2011 and 2016**



*Source: Census and Statistics Department Hong Kong Special Administrative Region. 2016 Population By-census Thematic Report: Older Persons (106)*

Table 3.1 shows a breakdown by age group and gender in labour force participation among those aged 65 and over who are still in employment. The greatest increases have come from 65 to 74-year-olds. This may reflect an increase in demand for workers, due to an ageing population, or in

supply, due to healthier, more highly-skilled older workers being able to continue or return to work. On the other hand, it may also reflect increased risks of poverty forcing people back into work at older ages, given the high levels of older people in poverty noted above.

**Table 3.1 Labour force participation rates of older persons by gender and age in 2006, 2011 and 2016**

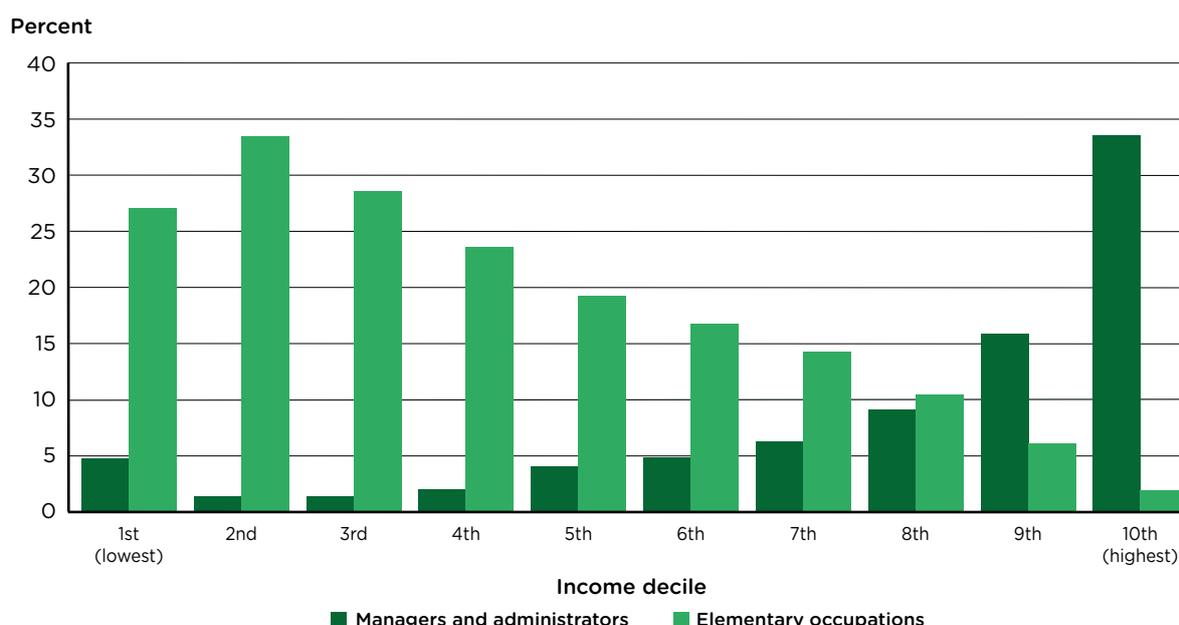
		Labour Force Participation Rates of Older Persons		
Year		2006 (percent)	2011 (percent)	2016 (percent)
Gender	Age			
Male	65 - 74	15.8	18.3	28.5
	75 - 84	5.7	3.9	6.3
	85+	3.2	2	0.6
	<b>Sub-total</b>	11.6	11.5	8.3
Female	65 - 74	4.5	5.7	9.51
	75 - 84	1.8	1.1	1
	85+	1.3	0.3	0
	<b>Sub-total</b>	3.1	3	5.1
Persons	65 - 74	10.2	12.2	19
	75 - 84	3.5	2.4	3.5
	85+	1.9	0.9	0.2
	<b>Total</b>	7	7	11.2

Source: Census and Statistics Department, Hong Kong Special Administrative Region (106)

Figure 3.30 shows that those working in elementary occupations are concentrated in the lower income deciles, while those working in managerial or administrative positions are more likely to be in higher income groups. This has relevance for health as elementary employment is less beneficial for health than managerial and administrative employment (58). It can

be difficult to distinguish the health effects of certain kinds of employment from those otherwise related to income via, for example, housing and neighbourhoods. Nonetheless, the differential risk of exposure to COVID-19 infection is one example of how ill health is associated with different employment, resulting in a higher risk for those in elementary occupations (19).

**Figure 3.30 Percentage of the working population (excluding foreign domestic workers) in elementary and managerial and administrative occupations in each income decile in Hong Kong, 2016**



Source: Census and Statistics Department Hong Kong Special Administrative Region. 2016 Population By-census Thematic Report: Household Income Distribution in Hong Kong (60).

Note: Elementary occupations include 'street vendors; domestic helpers and cleaners; messengers; security guards; watchmen; freight handlers; lift operators; construction labourers; hand packers; agricultural and fishery labourers'.

## 3F INEQUALITIES IN LIVING CONDITIONS IN HONG KONG

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The environment in which people live is a major determinant of their health. Environmental factors such as clean air, adequate water, a stable climate and access to green spaces and health-supportive housing and built environments are all pre-requisites for good health (107). In 2016, 24% of deaths globally were associated with living or working in an unhealthy environment (108). Health is also affected by the neighbourhoods in which we live: their green spaces, traffic levels, public transport and cycling infrastructure, and sources of community support.

Exposure to environmental health risk factors, such as air pollution and hazardous waste, are often unequally distributed amongst populations, with more socially deprived groups being more likely to be exposed to such risk factors (109). As well as physical harm caused by poor living conditions and environments, poor quality environments are damaging to mental health and wellbeing. Being constantly exposed to inadequate, dilapidated housing and a poorly built environment can cause stress that can adversely affect the mental health of residents and contribute to symptoms of anxiety and depression (110). Remedying inequalities in living environments has to take into account planning for equitable and healthy communities.

Research shows that less affluent populations are more exposed to environmental health risks, whether in their homes - including biological and chemical contamination; tobacco smoke; noise; and extremes of temperature - or in their neighbourhoods - including traffic pollution and hazardous waste sites. More deprived individuals are also less likely to live in good-quality housing and in communities with high social capital. They live in areas with higher rates of crime, and reduced access to amenities like good public transport and green spaces that allow for and encourage healthier lifestyles. They may also lack the resources and capabilities to mitigate these risks to good health.

Stable, affordable housing is a foundation for healthy living and community engagement, all of which are made more difficult for disadvantaged communities (111). Research shows the strong connections between housing—including the physical quality of the living environment and the tenure arrangement—and physical and mental health (112). Insecure tenures can be a risk to health: as well as the increased stress associated with insecurity, residents are also at risk of eviction and homelessness, or of sudden increases in rent, both of which can have significant knock-on health effects. Housing construction can provide employment and contribute to economic and social growth, with associated health benefits.

As noted above, Hong Kong has some of the most unaffordable housing in the world. Not only does this increase the risk of homelessness and overcrowding, it also reduces the amount of money left from income after housing costs, thus increasing the risk of deprivation of other essentials and causes stress, depression and anxiety. It must also be noted that access to housing alone without being assured access to decent work or a stable income does not diminish household poverty (113).

### HOUSING

Low quality housing has a negative impact on health and can increase the risk of a wide range of communicable and non-communicable diseases, including cardiovascular disease, respiratory illnesses and mental health problems (114) (115). Cold and damp homes that lack good insulation, ventilation and heating contribute to circulatory and respiratory diseases and poorer mental health (116).

Poorly ventilated homes can also lead to excess heat, which has its own health issues. Heatwaves, which are projected to increase due to climate change, can cause death by heat-related illnesses, and increase hospitalisations and deaths for those who already have chronic illnesses (117). Social inequality exacerbates this risk - as we have seen, those with chronic disease, who are at greater risk, are more likely to be of lower socioeconomic position; outdoor and manual workers are at greater risk; the displaced and homeless are also at greater risk; and the more deprived are more likely to live in overcrowded homes without adequate cooling (117).

Poor housing conditions have a long-term impact on the health of children, increasing the risk of severe ill-health or disability during childhood and early adulthood by up to 25% (118). Children in poor housing conditions are also more likely to develop mental health problems like anxiety and depression; respiratory problems; slowed physical growth; and delayed cognitive development (119). These adverse outcomes relate both to the direct effects of poor-quality housing, and its associated deprivation.

There is evidence that variation in housing quality can affect the educational development of children and young people, and that children living in precarious housing conditions have lower rates of enrolment, attendance and performance at school (120). In addition to education, housing also impacts on other social determinants of health, such as economic opportunities and social cohesion; inequalities in these determinants contribute to inequalities in health in later life (121).

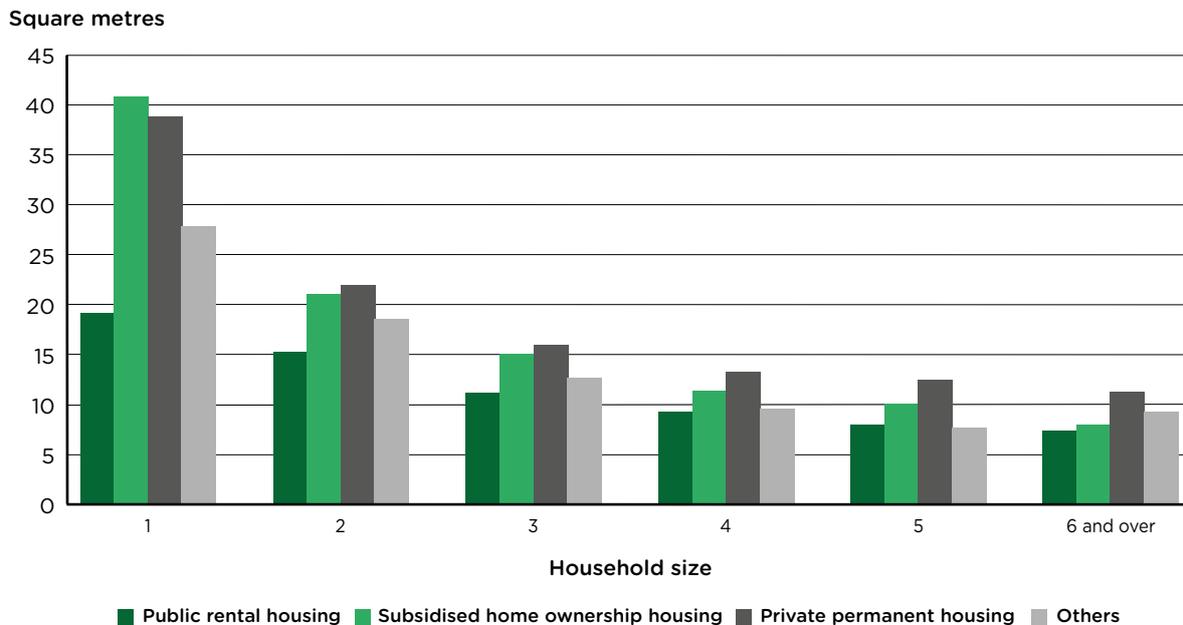
According to an article by Leung et al. (2020), almost half of the population in Hong Kong live in either public rental housing or subsidized ownership housing. Yip (2020) highlighted that subdivided units, small units within a converted flat, are in high demand amongst low-income households (122). In 2020, over 110,000 households and over 225,000 individuals, 16% of whom were under 15 years old, were living in subdivided units, which are often overcrowded and in poor condition (122) (123).

## OVERCROWDING

People who live in overcrowded housing are more likely than those with more space to experience respiratory problems and infections. Children living in overcrowded housing are up to 10 times more likely to contract bacterial meningitis, for example, than those in uncrowded homes (119) (124). Living in overcrowded conditions also increases the risk of COVID-19 infection during the pandemic, as distancing and isolation becomes difficult or impossible (20).

Figure 3.31 shows that those in public rental housing generally have less space available to them, while those in private housing, particularly in larger households, have more space.

**Figure 3.31 Median per capita floor area of accommodation by household size and type of housing in Hong Kong, 2016**



*Source: Census and Statistics Department Hong Kong Special Administrative Region. 2016 By-census (125)*

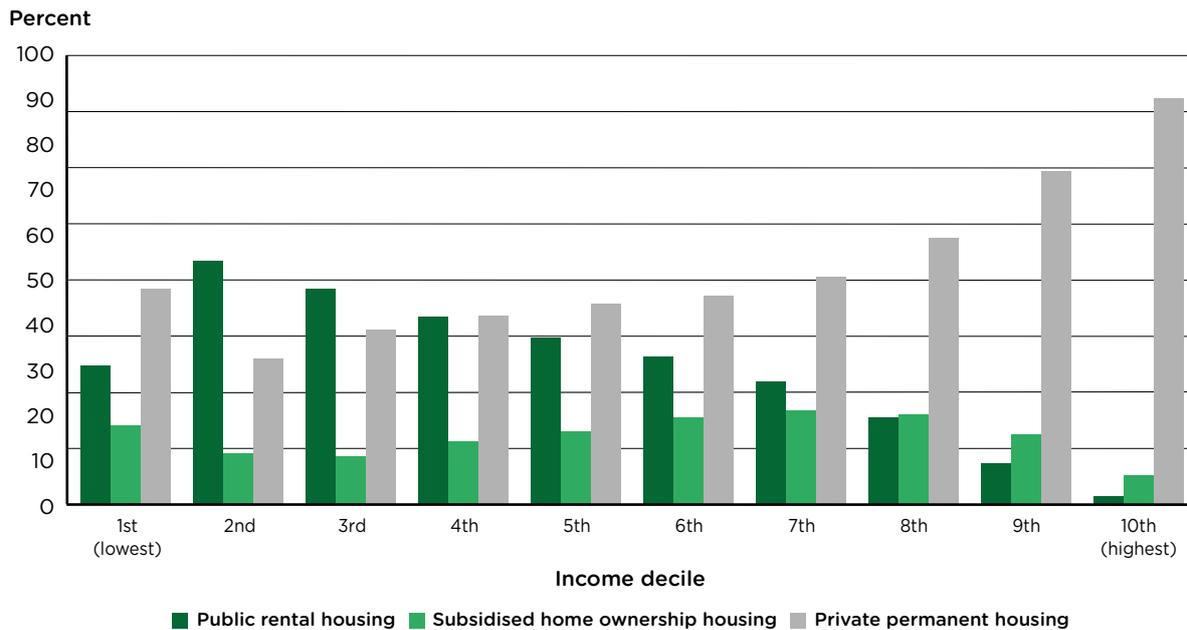
*Note: Figures exclude domestic households living in unsheltered accommodation or on board vessels. Floor area of common area shared among households is excluded.*

## TYPE OF HOUSING

Satisfaction arising from having access to home ownership opportunities has been shown to be linked to better emotional outcomes. In the United Kingdom, there is evidence that homeowners weathered COVID-19 lockdown measures without reduction in wellbeing, while private and social renters, who already reported lower wellbeing than homeowners, saw their wellbeing drop further, exacerbating inequalities (126). Availability of quality social housing stock with secure tenures is key in reducing income inequalities and addressing poor health outcomes associated with poor and unfit housing and overcrowding.

Those in income deciles 2–4 in Hong Kong are more likely to live in public rental housing than in private permanent housing, or subsidised home ownership. Those in deciles 5-10 are more likely to live in private permanent housing than other types of housing. Approximately 20% of the population in the lowest income decile and those in deciles 6-8 live in subsidised home ownership housing, as shown in Figure 3.32.

**Figure 3.32 Distribution of domestic households within each income decile by type of housing, 2016**



*Source: Census and Statistics Department Hong Kong Special Administrative Region. 2016 By-census thematic Report: Household Income Distribution in Hong Kong (60).*

## HOUSING AFFORDABILITY

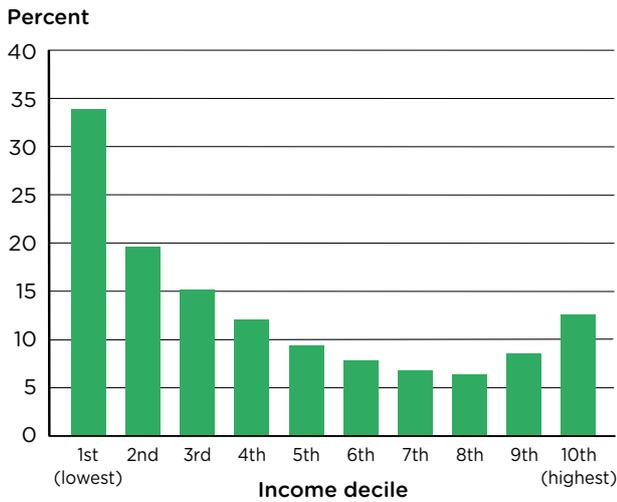
As one of the most densely populated places in the world, Hong Kong suffers from severe housing affordability problems (127). In 2020, the affordability ratio of Hong Kong was the highest in the world at 20.7, meaning that the median cost of a dwelling in Hong Kong is 20.7 times the annual median pre-tax household income. In comparison, the ratios were 8.6 in London, 5.9 in New York and 4.7 in Singapore (128).

There is evidence for an association between housing affordability and poorer self-rated health, physical conditions and mental health in Hong Kong. A study in 2019 found that the less affordable housing was in Hong Kong, the poorer physical and mental health was. Relative deprivation in terms of necessities (the ability of respondents to afford items considered to be essential to most adults in Hong Kong) had a mediating role between the affordability of housing and health, i.e. deprivation mediated 34% of the impact of housing affordability on physical health and 16% of the impact on mental health. This study concluded that tackling the problem of unaffordable housing would be a means to improving the health of Hong Kong’s population (129). A further effect of high housing costs is to reduce the money available for other things that can contribute to good mental and physical health, including nutritious food; socialising; travel costs for work and education, and other essential household items (130).

The high price of housing in Hong Kong makes home ownership unobtainable for many, although the government is heavily involved in the housing market with close to 50% of the population living in public housing (131). Rent for public housing is subsidized and there is the Rent Assistance Scheme which provides rent relief to those in public rental housing who are facing financial difficulties (132). Specifically, this scheme offers 25% or 50% rent reductions to eligible households. However, the average waiting time for public housing in Hong Kong is around 5.8 years as of June 2021, indicating a severe shortage of such housing (133). At the same time, the share of public expenditure on housing has halved over the past 22 years to 5% in 2019-2020, suggesting that shortages will continue to be an issue and likely worsen (66).

Figure 3.33 shows that the median ratio of housing costs to household income decreased with increasing income decile, with the exception of deciles 9 and 10 where the ratio was higher than deciles 6-8. This is possibly because housing costs for those in deciles 9 and 10 are very high compared with those in deciles 3-8. The lowest income decile group had the highest median ratio of housing costs compared to all other decile groups and this ratio was over double that of the ratio for the highest income decile group. Households with smaller incomes are more likely to contain a greater proportion of people who have no employment income and are likely to spend more of their limited income on fixed costs such as housing.

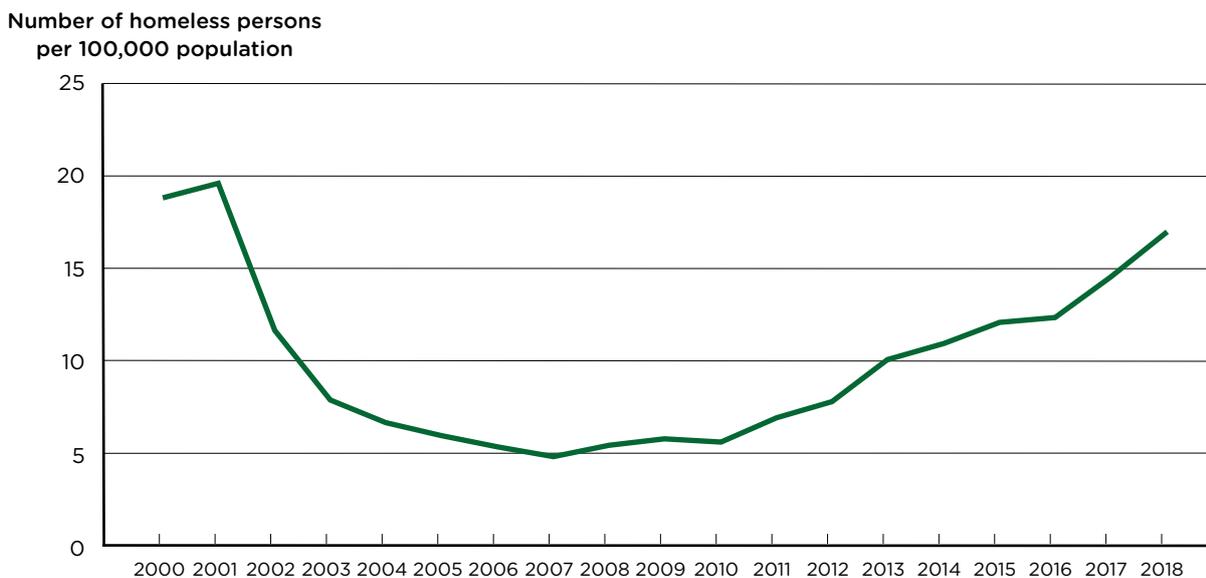
**Figure 3.33 Median housing cost as a percentage of household income (excluding foreign domestic workers) in Hong Kong, by income decile group, 2016**



Source: Census and Statistics Department Hong Kong Special Administrative Region. 2016 By-census thematic Report: Household Income Distribution in Hong Kong (60).

Lack of affordable housing also leads to homelessness. Homeless families, and especially homeless children, are three to four times more likely to suffer from poor mental health, even one year after being rehoused, than those living in good quality tenured housing (134). As Figure 3.34 shows, after a steep decline in the first few years of the twenty-first century, the number of homeless persons (referring to street sleepers counted in the Street Sleepers Registry) per 100,000 population in Hong Kong has grown since 2007 and stood at 17 per 100,000 in 2018 (135).

**Figure 3.34 Number of homeless persons per 100,000 population in Hong Kong, 2000-2018**



Source: Social Indicators of Hong Kong (2020). Homeless persons per 100,000 population (135).

## ENVIRONMENT

Worldwide, the WHO attributes an estimated 4.2 million deaths a year to ambient air pollution, and a further 3.8 million premature deaths to indoor household pollution (136). One study estimated that 8,500 deaths in Hong Kong in 2017 were attributable to some form of pollution: 4,200 due to ambient air pollution from solid fuels; 3,300 due to ambient particulate matter; 800 due to household solid fuel pollution; and another 200 due to ambient ozone (137).

A 2018 study into air pollution found that those living in more socially deprived areas of Hong Kong were more likely to be exposed to higher concentrations of PM2.5, fine atmospheric particulates, than those living in the least socially deprived areas (138). Exposure to PM2.5 particulates has been linked to respiratory and cardiovascular morbidity and mortality: children, older people and those with pre-existing disease are at particular risk (139).

Green spaces are important to public health, with evidence suggesting that they can have beneficial health outcomes including improving mental health, reducing stress and promoting physical activity. A study was conducted by Xu et al. (2017) to investigate the association between green spaces and adult mortality in Hong Kong (140). The study found that there was an association between greater area-level green space and lower mortality from diabetes, chronic respiratory disease and cardiovascular disease. It was also found that this association was generally stronger for those living in low socioeconomic areas when compared to those in higher socioeconomic areas. From this it was concluded that the provision of green spaces could potentially help to reduce mortality and could also contribute to reducing disparities in mortality related to socioeconomic position.

# CHAPTER 4

# HEALTHCARE AND HEALTH BEHAVIOURS

## 4A INEQUALITIES IN ACCESS TO HEALTHCARE

Inequality in access to healthcare is an issue in Hong Kong. A survey in 2014/15 found that, during the previous year, 8% of the 2,233 survey respondents had not sought medical care for financial reasons (141). These respondents were more likely to: be income-poor; have higher levels of stress and anxiety; have poorer physical and mental health; and experience more severe disability and pain affecting their daily activities, than the general population of Hong Kong.

Hong Kong has a dual public-private healthcare system: the vast majority of inpatient services are provided by the public sector which is tax-funded with low additional fees at the point of care, but primary care is largely provided by the private sector (over 70% market share) with substantial fees at the point of care (142). These fees may make primary care less accessible, which is critical as primary care has both preventative and treatment roles, and acts as a point of entry for the rest of the healthcare system.

A 2019 study concluded that those in Hong Kong who are income-poor and in deprived groups are less likely to have access to regular primary healthcare, irrespective of their burden of chronic disease or other sociodemographic factors (39). Primary healthcare in this study included both 'western allopathic medicine' and 'traditional Chinese medicine'. People who were older, less educated, income-poor, more deprived and had higher multimorbidity were more likely to seek primary care in the public sector. The quality of primary

care varies between the public and private sectors. The same study found that private services often had better availability of appointments, were in more convenient locations, and, unlike the public sector, allowed patients to choose their service providers and concluded that 'despite Hong Kong's healthcare policy that no one shall be denied adequate healthcare due to lack of means in the public healthcare sector, primary care is found to be pro-rich' (141).

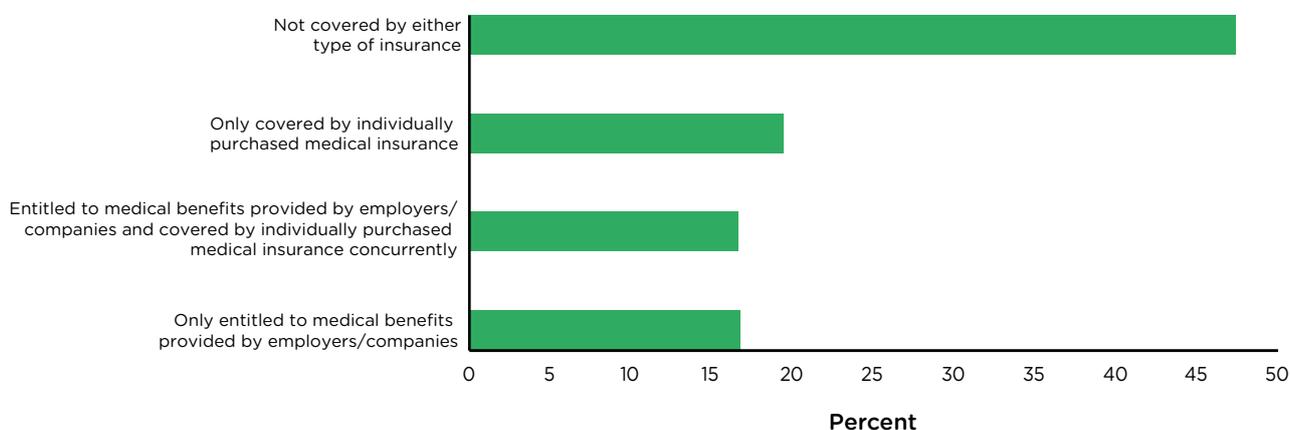
A 2009 study found that, amongst older people not living in a care home, those with lower incomes had a lower total use of healthcare services than their higher-income counterparts. This is despite higher healthcare needs being associated with lower socioeconomic position. From this, it was concluded that there is a mismatch in the need and supply of healthcare and that an 'inverse care law' (i.e. 'where the availability of good medical care varies inversely with the need of the population served') exists for older people in Hong Kong (143) (144).



As shown in Figure 4.1, close to half of the population (47%) were neither entitled to medical benefits provided by employers/companies nor covered by individually purchased medical insurance. As a result, individuals

must choose whether to pay from savings or income, which the poor will struggle to do; to fall into debt by borrowing to pay medical bills; or to go without medical care at all.

**Figure 4.1 Distribution of population by type of entitlement to medical benefits (whether provided by employers/companies or by individually purchased medical insurance) in Hong Kong, 2019**



Source: Census and Statistics Department Hong Kong Special Administrative Region. Thematic Household Survey Report No. 68 (145)

Those who are not covered by medical benefits who require specialist outpatient treatment must rely on publicly funded services that are overstretched, with resulting very long waiting lists. The longest waiting time for stable new patients at specialist outpatient clinics in 2020/2021 were up to 148 weeks for Ear, Nose, Throat; 134 weeks for Eye; 149 weeks for Medicine; 139 weeks for Orthopaedics & Traumatology; and 122 weeks for Surgery (146). The government of Hong Kong has recently launched a Voluntary Health Insurance Scheme

to encourage more people to take out health insurance and relieve some of the pressure on public healthcare provision. This scheme sets minimum standards for insurance policies, which are then tax-deductible (147). However, private insurance is likely to remain out of the grasp of the less well-off who do not pay enough tax to benefit from the deduction. Even if this programme does free up capacity in public healthcare and reduce some waiting times, it may further exacerbate the divisions of a two-tier system.

## 4B INEQUALITIES IN HEALTHY BEHAVIOURS

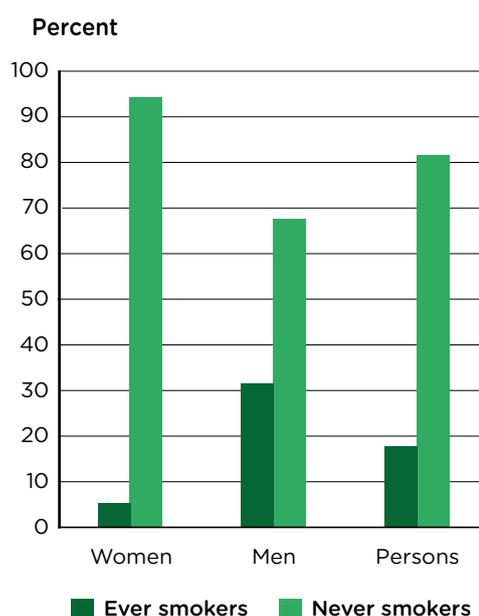
It is well-known that a poor diet and lack of exercise can contribute to obesity and the metabolic syndrome, and so increase the risk of diabetes, coronary heart disease, stroke, and many forms of cancer. The majority of cases of lung cancer and chronic obstructive pulmonary disease occur in smokers. However, this only tells part of the story. Again, we have to look at the causes of the causes.

Why is it that risky and unhealthy behaviours also follow a social gradient? We might consider whether it is harder to get exercise when you live in a run-down part of town without green spaces, and do not have the money to spare for an expensive gym; whether the affordable alcohol and cigarettes might be more attractive to someone in a high-demand, low-control job that they constantly fear losing; whether a single parent, tired from their shift at a second job may not be so easily able to construct a healthy home-cooked meal for their family; whether a young person with no prospects might sufficiently discount future benefit so as to take risks now. The list could continue at great length. The conclusion is that providing information about healthy choices is insufficient to tackle the risks of unhealthy behaviour if you do not also work to reduce the inequalities that predispose people lower on the socioeconomic gradient to make risky decisions.

### SMOKING

Of the population aged over 15 years, 17.9% reported having ever smoked. The proportion of persons who had ever smoked was higher for men (31.7%) than women (5.4%), as shown in Figure 4.2.

**Figure 4.2 Distribution of persons aged over 15 years who have ever smoked by gender, 2018-2019**

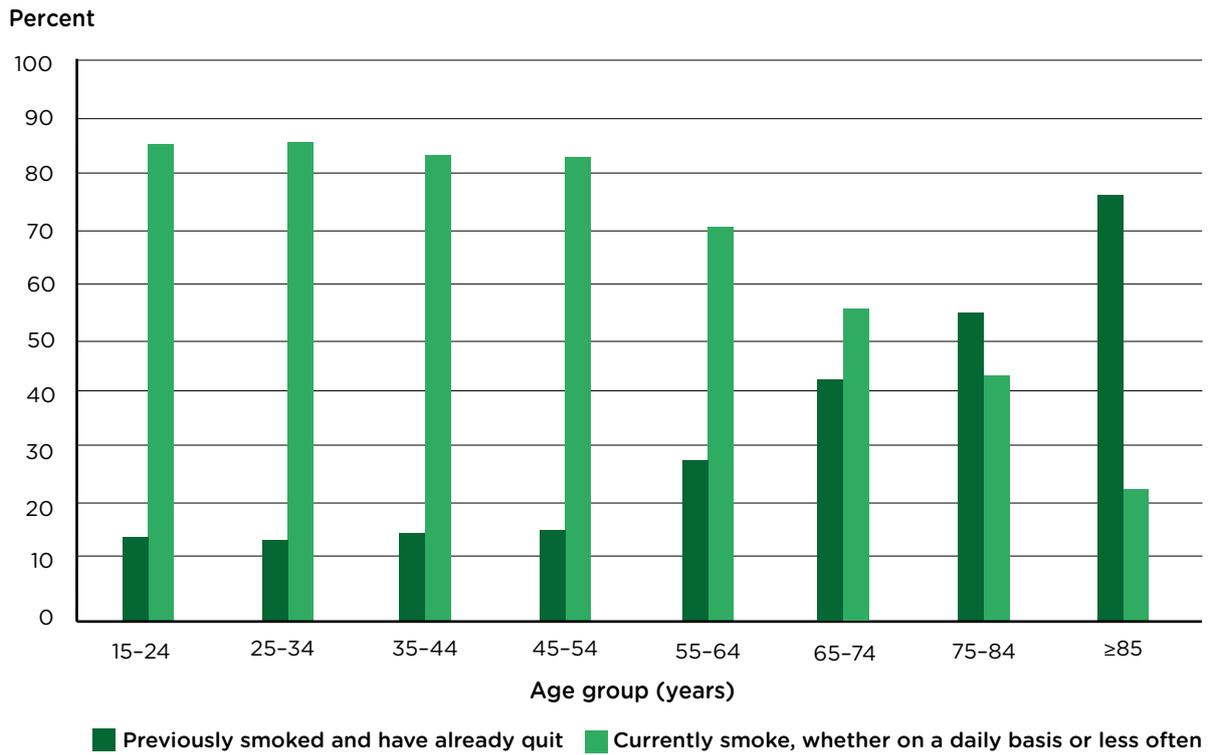


*Source: Non-communicable Diseases Branch Centre for Health Protection, Department of Health. Report of Health Behaviour Survey 2018/2019 (149)*

Slightly more than 70% of those who had ever smoked were current smokers, making up 11.1% of the total over-15 population of Hong Kong. The majority of those were daily cigarette smokers, making up 92% of current smokers and 10.2% of the total over-15 population (148).

Figure 4.3 shows that among population who had ever smoked, the majority of those aged under 75 in 2018/19 were current while those aged 75 and over were more likely to be past smokers than current smokers.

**Figure 4.3 Distribution of persons who had ever smoked in each age group, by whether or not currently smoking, 2018/2019**

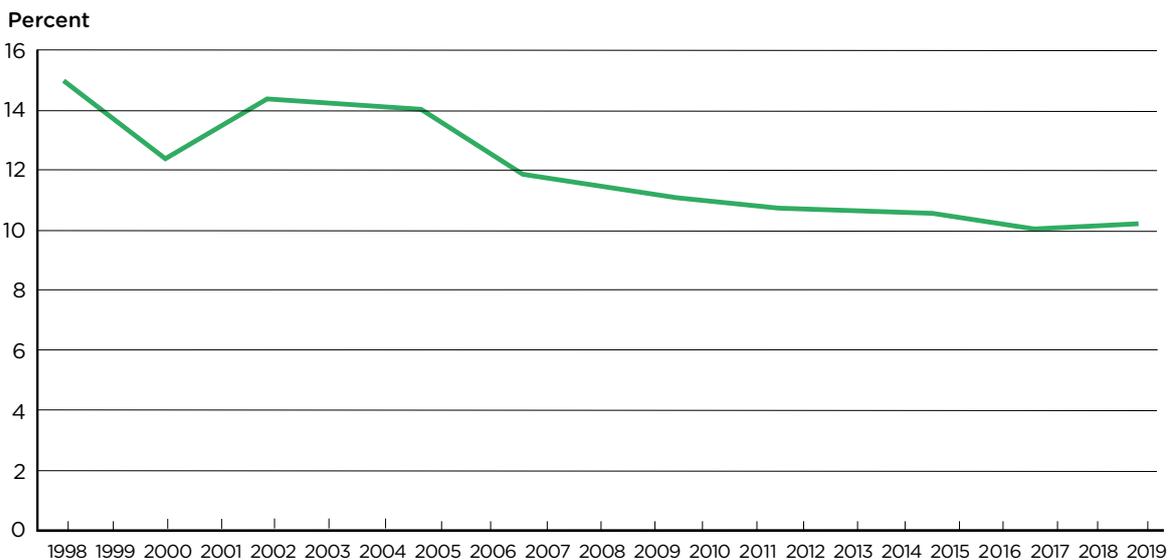


Source: Non-communicable Disease Branch Centre for Health Protection, Department of Health. Report of Health Behaviour Survey 2018/2019 (149)

Figure 4.4 shows that the proportion of the population who are daily cigarette smokers has been decreasing from 15% in 1998 to 10% in 2019, one of the lowest rates in the world. Researchers at the University of Hong

Kong have claimed that the low smoking prevalence is the single most important factor in Hong Kong's long life expectancy (150). As this research has not yet been published, it will be addressed in a future report.

**Figure 4.4 Percentage of the population aged over 15 years in Hong Kong who are daily cigarette smokers, 1998-2019**



Source: Census and Statistics Department Hong Kong Special Administrative Region. Thematic Household Survey Report No. 70: Pattern of smoking (148)

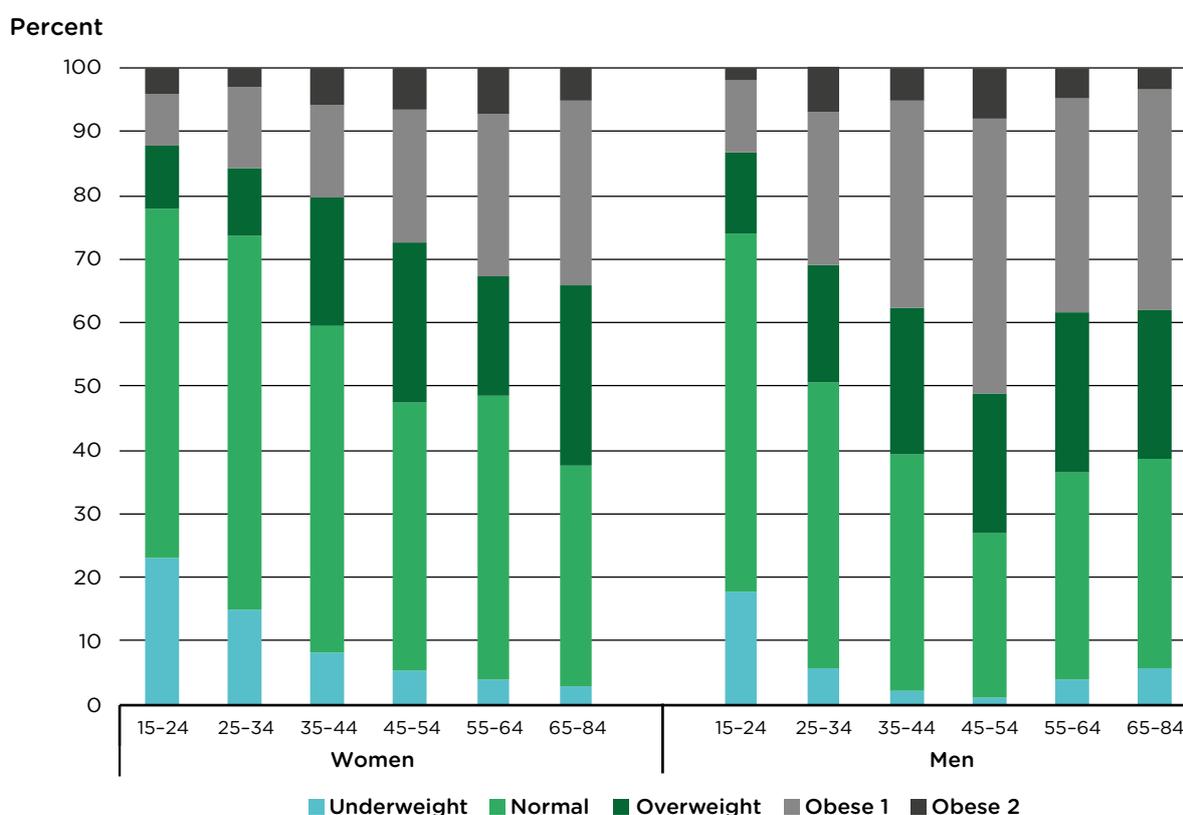
Evidence of socioeconomic inequalities in smoking in Hong Kong is mixed. In 2019, an evidence review by Ho et al. found that living in public housing, being economically disadvantaged, and being a new immigrant were all associated with an increased likelihood of ever having smoked amongst adolescents (151). However, a paper in 2021 found that, amongst secondary school students in Hong Kong, more affluent students were more likely to have ever used nicotine products and to be current users, and were also more likely to remain users, as measured by the current-ever use ratio. This was true for cigarettes, and even more so for more novel nicotine products like e-cigarettes. Poor students were more likely to smoke than the averagely well-off, although less than the affluent, and students with lower parental education were also more

likely to smoke, resulting in a slightly complex picture (152). It is likely that affordability and cultural cachet, especially with vaping products, is affecting the relationship between socioeconomic position and smoking in Hong Kong.

## BEING OVERWEIGHT AND OBESE

Based on data from the Population Health Survey 2014/2015, 50% of the population aged 15-84 years are considered to be overweight or obese as defined by a Body Mass Index (BMI) of  $\geq 23\text{kg/m}^2$  (the threshold used for being overweight or obese for Hong Kong and other countries in Asia) (24). As indicated in Figure 4.5, a higher proportion of men than women are overweight or obese, in every age group in this age range except ages 65-84.

**Figure 4.5 Distribution of BMI categories in adults 15-84 years by gender and age group, 2014/2015**



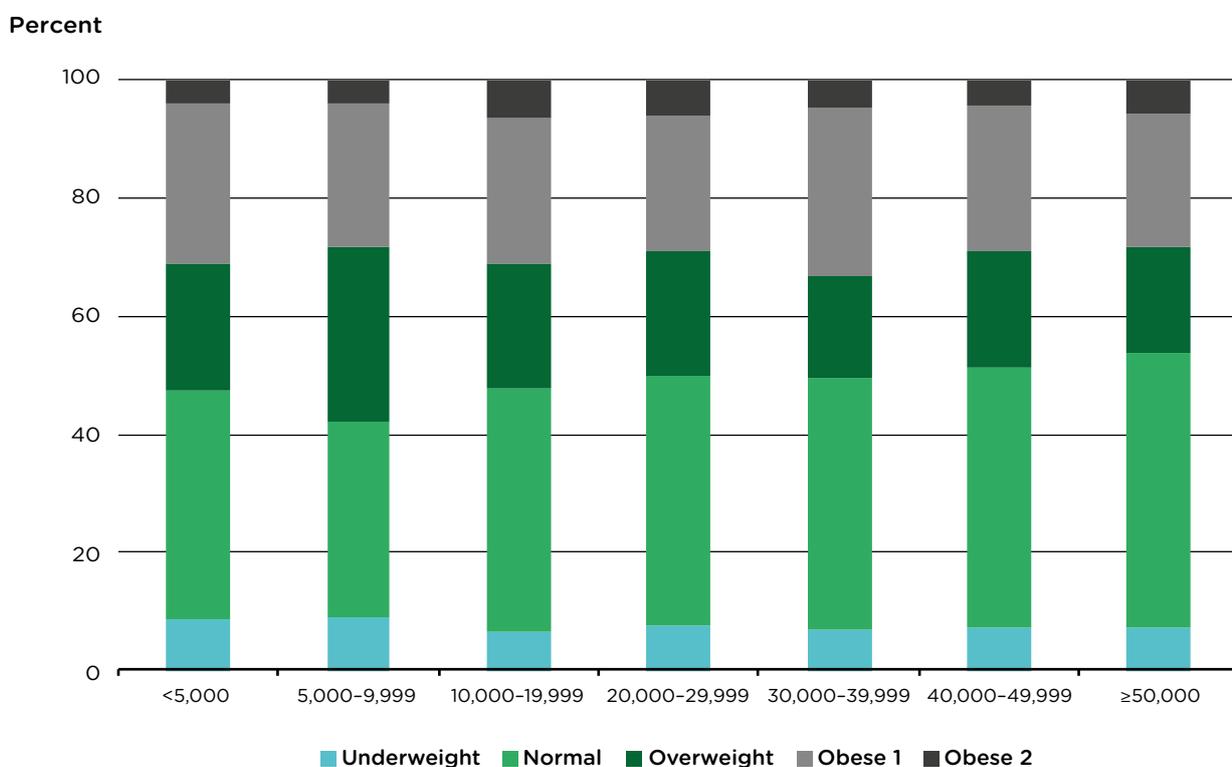
Source: Surveillance and Epidemiology Branch Centre for Health Protection Department of Health. Report of Population Health Survey 2014/2015 (24).

Notes:	HK definition	Lower limit	Upper limit	International definition
	Underweight	-	18.5kg/m <sup>2</sup>	Underweight (shown in blue)
	Normal	18.5kg/m <sup>2</sup>	23.0kg/m <sup>2</sup>	Normal (shown in shades of green)
	Overweight	23.0kg/m <sup>2</sup>	25.0kg/m <sup>2</sup>	
	Obese 1	25.0kg/m <sup>2</sup>	30.0kg/m <sup>2</sup>	Overweight (shown in grey)
	Obese 2	30.0kg/m <sup>2</sup>	-	Obese (shown in black)

A study by Wang et al. (2017) which investigated the prevalence of being overweight in Hong Kong Chinese children found that the overall prevalence of being overweight amongst children in Hong Kong was 19.9%. Specifically, the proportion of boys who were considered overweight was higher than girls - 24% compared to 16% respectively. The study also found that lower maternal education and lower monthly incomes were significantly associated with being overweight amongst Hong Kong children (153).

As shown in Figure 4.6, the proportions of the population considered to be overweight (BMI = 23-24.9 kg/m<sup>2</sup>) and obese (BMI ≥ 25kg/m<sup>2</sup>) do not conform to a clear, simple socioeconomic pattern, with lower rates at the extremes of income. Considerations of socioeconomic gradients in weight must also take into account the risks of being underweight, which is more common in the lower-income groups. It should be noted that this data is not available broken down by gender, and it has been found elsewhere that the social gradient in weight is more pronounced among women. In Hong Kong, Chung et al. (2021) found that women with lower educational attainment had higher levels of hypertension (high blood pressure) and diabetes, and that this was mediated significantly by obesity, but did not find the same pattern amongst men (154).

**Figure 4.6 Distribution of BMI categories in adults (15-84 years) by monthly household income (HK\$), 2014/2015**



Source: Surveillance and Epidemiology Branch Centre for Health Protection Department of Health. Report of Population Health Survey 2014/2015 (24).

Notes:	HK definition	Lower limit	Upper limit	International definition
	Underweight	-	18.5kg/m <sup>2</sup>	Underweight (shown in blue)
	Normal	18.5kg/m <sup>2</sup>	23.0kg/m <sup>2</sup>	Normal (shown in shades of green)
	Overweight	23.0kg/m <sup>2</sup>	25.0kg/m <sup>2</sup>	
	Obese 1	25.0kg/m <sup>2</sup>	30.0kg/m <sup>2</sup>	Overweight (shown in grey)
	Obese 2	30.0kg/m <sup>2</sup>	-	Obese (shown in black)

Obesity is a risk factor for many diseases, particularly diabetes. In 2015, diabetes was the tenth leading cause of death in Hong Kong. Data from the Population Health Survey 2014/2015 indicates that 8% of persons aged 15-84 years had diabetes. This includes those who had either been previously diagnosed or who had diabetes without any known history of the disease. A higher proportion of men had diabetes compared to women, i.e. 11% compared to 6%, and the prevalence increased with age, with over a quarter of persons aged 65-84 years having diabetes, compared to less than 1% in the 15-34 age group (24).

## HEALTH LITERACY AND ACCESS TO INFORMATION

Good health literacy and being able to access, appraise and apply health information are important to health. These abilities support individuals in making 'judgements and decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course'. Poor health literacy has been found to be associated with making less healthy choices; engaging in riskier behaviour; having poorer health; and experiencing higher levels of hospitalization (155). Inequality in health communication, 'the difference in accessing, seeking, processing and acting on information between different groups in society,' has been proposed as one contributing mechanism to health inequalities (156).

There is evidence to suggest that health information-seeking behaviours are socially patterned and can be influenced by factors such as financial resources, education, socioeconomic position and ethnicity. A study by Wang et al. (2013) investigated the health information-seeking behaviours and the social determinants of these amongst Chinese adults in Hong Kong. Whilst 1% of respondents sought health information at least monthly, there were also socioeconomic inequalities and behavioural clustering of health information-seeking behaviours amongst respondents. Lower household income and having a lower level of educational attainment were associated with less frequent health information seeking behaviours. Being female, a non-smoker and of older age were associated with frequent health information seeking, whilst being a smoker and physically inactive were associated with infrequent health information-seeking behaviour (156).

# CHAPTER 5

# COVID-19

# 5A COVID-19 AND INEQUALITIES

The effects of the coronavirus pandemic were not shared out equally across all sections of society. Those who were already disadvantaged in various ways were more at risk from the virus, and more likely to suffer stress and economic hardship as a result of efforts to contain its spread. The pandemic therefore exposed pre-existing inequalities in health, and widened them, by falling hardest where health and its social determinants were already in a worse state.

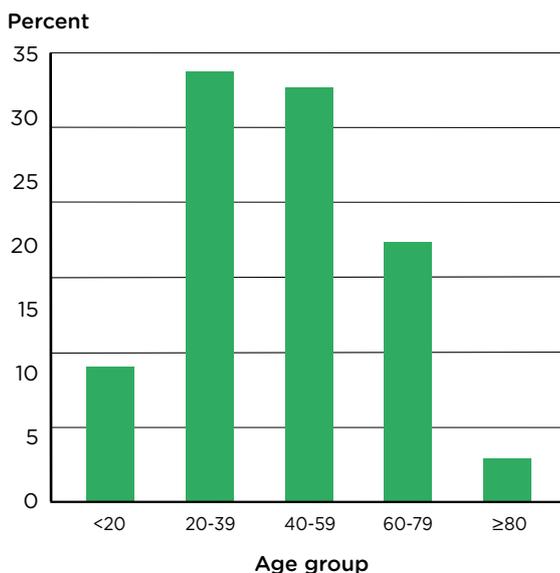
COVID-19 mortality rates rise steeply with age, and are higher for people with disabilities, for men, and for people with longstanding health conditions (22) (157). Those living in more disadvantaged areas, with lower education and lower incomes may be more likely to catch COVID-19 due to living in crowded conditions and having increased occupational exposures, and are more likely to be in poor health beforehand, increasing the risk of a worse outcome (22).

## RATES OF INFECTION AND MORTALITY

There were over 12,000 confirmed cases of COVID-19 infection in Hong Kong in the period up to 22 October 2021, representing an infection rate of 1.6 per thousand population, and 213 deaths (157). The breakdown of cases by age group is shown in Figure 5.1

Several physical co-morbidities increase the risk of severe infection including cardiovascular disease; hypertension; malignancy; chronic respiratory disease; immunosuppressive conditions including organ transplantation; chronic kidney disease; diabetes and obesity. Early reports from China indicated that between 7-20% of inpatients with COVID-19 had diabetes. Within hospital, diabetes is associated with more severe infection, respiratory distress requiring intensive ventilatory support, cardiac injury and death (158). Fasting hyperglycaemia per se is also associated with a higher risk of death (159). Most of these conditions increase in prevalence with older age, contributing to the increased risk of severe infection and death in older age groups. As we have seen in Section 2C of this report, chronic disease is also linked to socioeconomic position: if prior poor health increases vulnerability to severe COVID-19 infection, then the pandemic may exacerbate pre-existing health inequalities.

**Figure 5.1 Distribution of confirmed or probable cases by age group in Hong Kong, 22 October 2021**



Source: Coronavirus Disease (COVID-19) in HK Dashboard (158)

According to a telephone survey conducted in September/October 2020 by the CUHK Institute of Health Equity, more deprived individuals in Hong Kong found it harder to source or afford sufficient supplies of Personal Protective Equipment (PPE), including masks, potentially putting themselves and their communities at greater risk of spreading infection.

One particular cluster of cases can serve as an illustration. Since the first batch of reported cases in the ‘Dancing/Singing’ cluster came mainly from the wealthier members of society who attended dance clubs across the city, it was once believed that COVID-19 was the ultimate equalizer that did not only affect the socioeconomically disadvantaged. Early local research suggested that COVID-19 spread from less deprived to more deprived areas across the first three waves of community outbreaks (160). Nonetheless, in regions with profound wealth and health inequalities like Hong Kong, COVID-19 transmission down the socioeconomic gradient may be inevitable (161). In the box below, we trace one such chain of transmission.

## INEFFECTIVE COVID-19 CONTAINMENT IN THE ENTERTAINMENT SETTINGS AND ITS COST ON THE SOCIOECONOMICALLY DISADVANTAGED: LESSONS LEARNED FROM THE LARGEST TRACEABLE ‘DANCING/SINGING’ CLUSTER IN HONG KONG

The ‘Dancing/Singing’ cluster stands out as the largest COVID-19 infection cluster in Hong Kong. From 19 November to 22 December 2020, 732 epidemiologically linked cases were identified, which is seven-fold the size of the second largest cluster: the ‘Bar and Band’ cluster, which also emerged from an entertainment setting (162).

Based on 486 symptomatic COVID-19 cases with local residential addresses (93.5% of the 520 symptomatic cases) in the ‘Dancing/Singing’ cluster reported by the Centre for Health Protection of Hong Kong until 31 December 2020, we studied the temporal trend of socioeconomic profile by matching their addresses with the area-level Social Deprivation Index (SDI) of corresponding large Tertiary Planning Units (162) (163).

Despite initially clustering in the relatively wealthier groups who could afford entertainment activities, the disease spread to people living in disadvantaged communities in about one month. Adjusted for age and gender, results of multiple linear regression showed a statistically significant increase in SDI by 0.012 (95% CI=0.004-0.020; p=0.004) per day.

Entertainment settings were not only often the primary source of exposure, they also characteristically result in rapid propagation and especially long transmission cascades involving multiple secondary settings, when compared with infection clusters emerging from other social venues (164). The socioeconomically disadvantaged are particularly susceptible, as evidenced by the sizeable outbreaks in public estates and residential care homes in deprived areas in the later phase of the ‘Dancing/Singing’ cluster outbreak (162). Even though the outbreaks begin amongst the more advantaged, the effect of social determinants quickly becomes evident in the increased vulnerability of the poor and the deprived. Without prompt and effective regulatory measures, the cost of massive outbreaks from entertainment settings could end up being passed onto socioeconomically disadvantaged communities.

Later studies have lent support to the idea that the socioeconomically disadvantaged are at greater risk from COVID-19 clusters. A recent local study examined the data on sizable infection clusters in Hong Kong, i.e. outbreaks involving ten or more epidemiologically linked patients from different households. This found that socioeconomic disadvantage was associated with greater transmission, particularly in clusters associated with essential activities of living and working. This is in keeping with the observation that the less well-off find it harder to social distance at home and in the community, and are less likely to be able to work from home (165).

Local research found no direct association between socioeconomic position and risk of severe illness, but did find that the increased risk of severe COVID-19 amongst those with multiple chronic health problems could be effectively mitigated by higher socioeconomic position. In other words, although multimorbidity increased the risk of severe disease among those from medium- and low-income areas, that risk was all but eliminated for those living in high-income areas. The authors of the report hypothesised that greater difficulty managing long-term health conditions, perhaps related to health literacy and access to primary care, may explain why co-morbidities left the disadvantaged at greater risk than they did the relatively well-off (166). Although those who were poor but healthy may not have been at any greater risk of severe illness than those who were healthy and wealthy, those who were both poor and chronically ill – and the poor are more likely to have multiple chronic illnesses – were particularly vulnerable.

## MENTAL HEALTH

There is a mental health crisis occurring globally as a result of the pandemic. Pandemic-related fears, financial and employment concerns and the social isolation associated with lockdown measures have all been cited as contributory factors to these indirect health impacts (167). Zhao et al. (2020) investigated the impact of the COVID-19 pandemic on mental health and attempted to identify vulnerable sociodemographic groups in Hong Kong (168). This study involved analysis of cross-sectional data from the 2016 and 2017 Hong Kong Family and Health Information Trend Surveys and the 2020 COVID-19 Health Information Survey, based on random samples of the general adult population. The results indicated that stress levels in 2020 had increased by 28.3% when compared to 2016 and 2017 and that anxiety prevalence had increased by 42.3%. Additionally, the prevalence of depression symptoms and unhappiness had doubled. There was evidence that this burden had not fallen equally across society, as increased stress levels were significantly higher amongst adults who had received less education, as well as amongst older people. The study concluded that Hong Kong is facing a mental health emergency emerging from the COVID-19 pandemic and that public health interventions were urgently needed in Hong Kong, particularly for older people and for those with lower educational attainment.

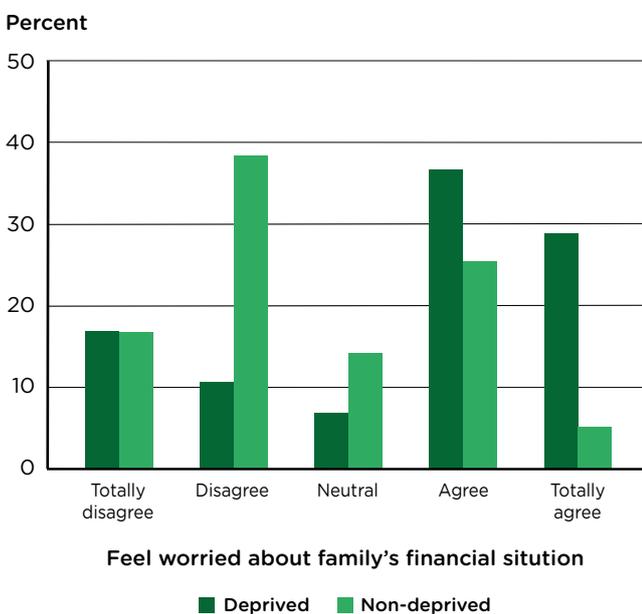
# 5B INEQUALITIES IN IMPACTS FROM CONTAINMENT MEASURES

Socioeconomic inequalities did not just put individuals at greater risk from COVID-19, they also affected vulnerability to the negative effects of measures to contain the pandemic. As usual when the economy suffers, the burden falls heaviest on those who are already disadvantaged: the poor become poorer. Those in better paid jobs may be more able to work from home, while those in lower-paid, precarious, or casual work may risk losing what income they have. School closures fall more heavily on children who lack learning resources at home, or whose parents lack the free time and flexibility to help with learning from home. Necessary as they may have been, the effect of these control measures may be to widen inequalities in health in the longer term.

## FINANCIAL SECURITY

As shown in Figure 5.2, nearly two thirds of socially deprived survey respondents agreed that they had become more worried about their family’s financial situation since the outbreak, compared with under a third of the non-deprived.

**Figure 5.2 Distribution of the extent of agreement to the statement that survey respondents feel more worried about their family’s financial situation since the COVID-19 outbreak, by deprivation status in Hong Kong, September/October 2020.**

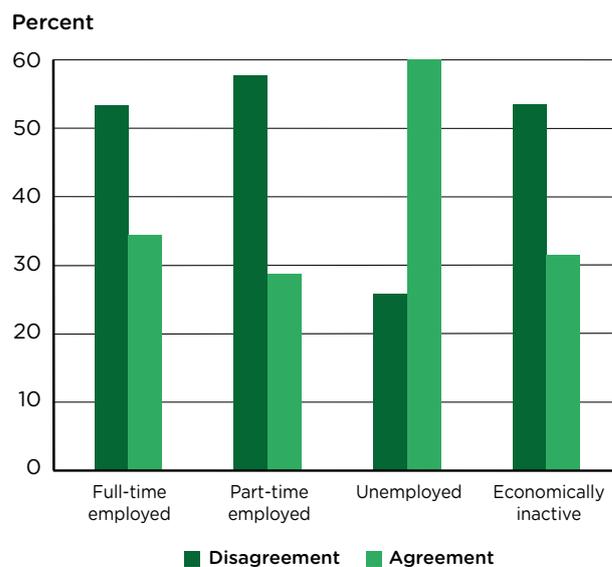


Source: Unpublished data from the telephone survey conducted by CUHK Institute of Health Equity (2020)

In terms of employment status, the highest proportion of those who reported agreement with the statement that they feel more worried about the financial situation of their family since the COVID-19 pandemic was amongst those who were unemployed (60%), as shown in Figure

5.3. The majority of those in other employment status categories indicated disagreement with this statement. It is perhaps unsurprising that the unemployed should be most concerned about their financial situation, but if welfare support is insufficient then these concerns may translate into negative health effects, and potentially impair their ability to find work and improve their situation. Even with pandemic measures introduced to extend the CSSA, many are excluded, including any able-bodied adult with total assets in excess of only HK\$66,000 (US\$8,500) (62).

**Figure 5.3 Percent in agreement or disagreement with the statement that survey respondents feel more worried about their family’s financial situation since the COVID-19 outbreak, by employment status in Hong Kong, September/October 2020.**



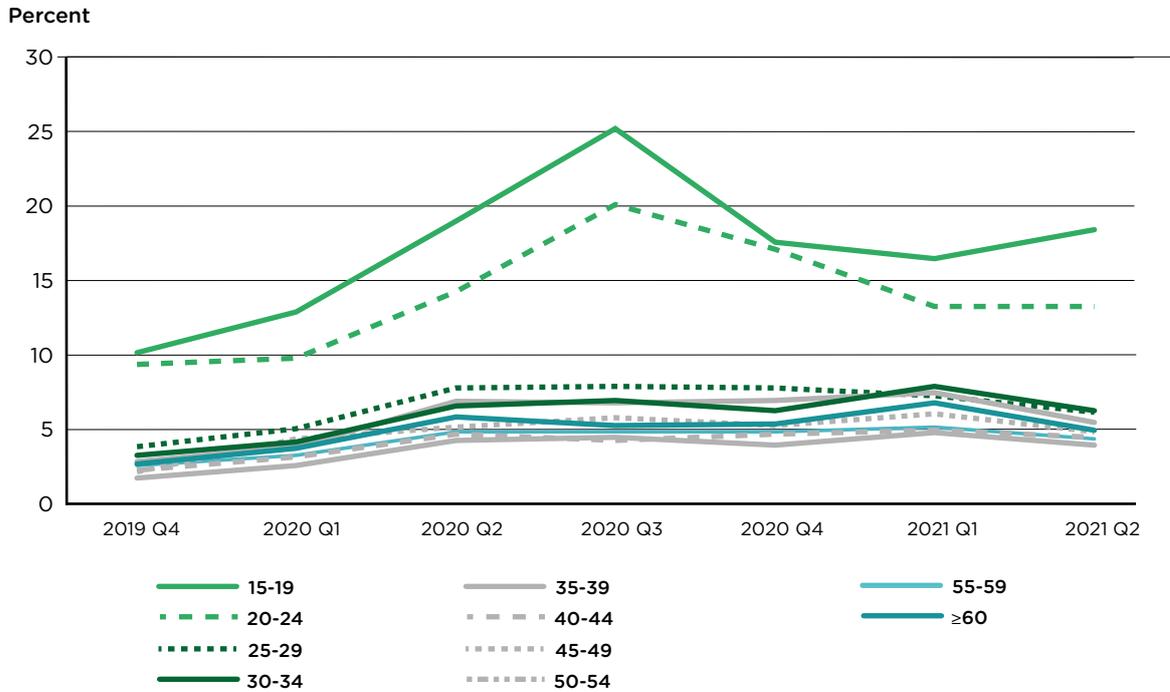
Source: Unpublished data from the telephone survey conducted by CUHK Institute of Health Equity (2020)

Note: ‘Agreement’ in this graph includes those who said they agreed or totally agreed with the statement. Conversely, “disagreement” comprises those who said they disagreed or disagreed totally.

## EMPLOYMENT

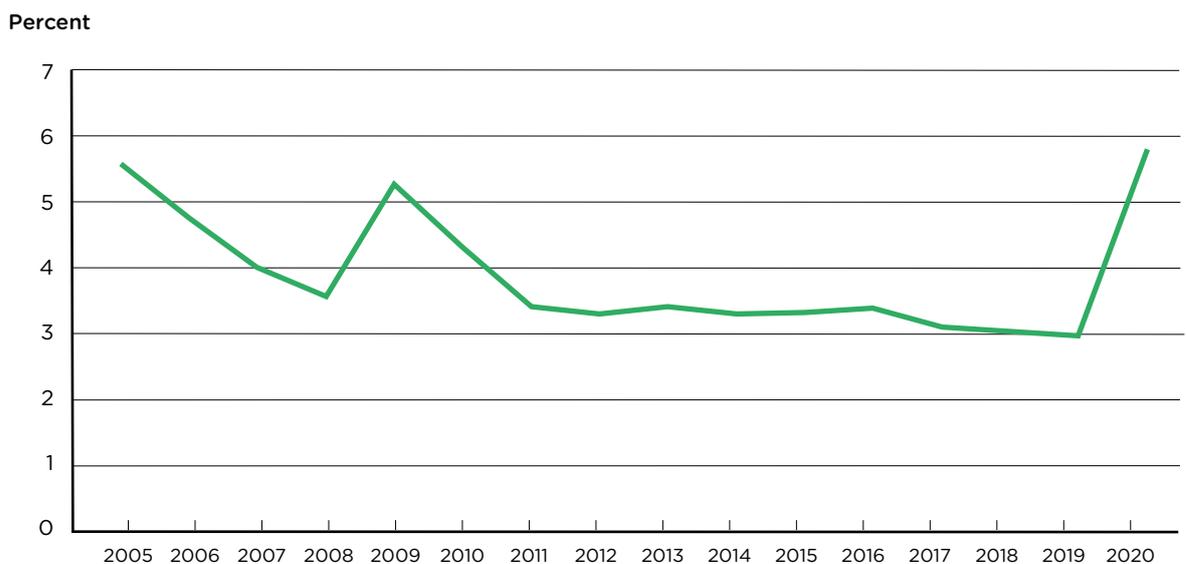
Unemployment and underemployment rates have increased sharply during the COVID-19 outbreak, and although we have begun to see improvement, levels remain higher than pre-pandemic. Figure 5.4 shows the changes in employment between 2019 and 2021. We have noted earlier the long-term trend of increased workforce participation among older people, perhaps related to inadequate welfare provision in older age. Here we can see that the increase in unemployment has fallen more heavily on younger age groups. Figure 5.5 places this trend in a longer historical context.

**Figure 5.4 Unemployment rate by five-year age group by quarters in Hong Kong, 2019 Q4-2021 Q2.**



Source: Census and Statistics Department Hong Kong Special Administrative Region. Data from the General Household Survey (169)

**Figure 5.5 Unemployment rate as a percent of total labour force, modelled ILO estimates, 2005-2020**

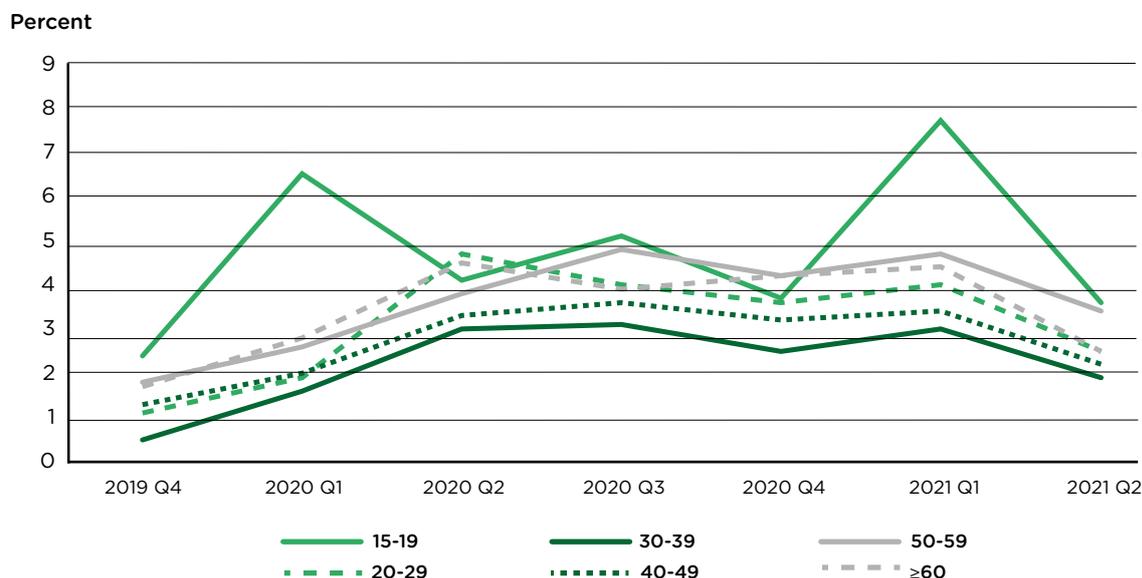


Source: The World Bank database (2021). Unemployment, total (% of total labour force) (modelled ILO estimate) (170)

Underemployment also increased during the pandemic. Figure 5.6 shows the marked increase in underemployment in 2020, especially among the youngest age group and among those aged 50-59 and

60 and over. Underemployment in the younger age group may lead to worsening chances of good employment as they get older, perpetuating disadvantage and increasing deprivation.

**Figure 5.6 Underemployment rate by age group by quarters in Hong Kong, 2019 Q4-2021 Q2.**



Source: Census and Statistics Department Hong Kong Special Administrative Region. Data from the General Household Survey (169)

These increases in unemployment and underemployment can only worsen inequalities and deprivation for segments of the population, and may well have long-term impacts on health that reveal themselves in the coming years.

## EDUCATION

Globally, the COVID-19 pandemic has had a profound impact in delivery of education. Face-to-face education was suspended in many countries as part of virus containment measures, with over 130 million students in 11 countries worldwide missing over three-quarters of their face-to-face teaching in the 18 months of the pandemic (171). Hong Kong was one of the first cities to impose school closures in response to the pandemic (172).

According to the United Nations Educational, Scientific and Cultural Organisation (UNESCO), school closures carry significant adverse economic and social costs across communities and these impacts are most significant for marginalized and vulnerable groups (173). These can serve to exacerbate already existing inequalities in educational attainment as well as other related factors, and have long term impacts on inequalities in employment and income. Prolonged school closures can also have impacts on other aspects of child development including their physical, cognitive, mental and psychosocial health, as well as on their family relationships (172).

In Hong Kong, a study was conducted by Tso et al. (2020) with a sample of Hong Kong families with children aged 2-12 years to investigate and identify groups of children who were vulnerable to the impacts of the COVID-19 pandemic and the associated containment measures including school closures. The study results provided empirical evidence of school closures exacerbating inequalities for families with children with special educational needs. This was particularly so for single parent families, low-income families and families with members with mental disorders (172).

With the physical school closures in response to the pandemic, digital platforms have become an important means of delivering remote education. However, global evidence suggests that there are inequalities in access to the resources required to facilitate such digital learning (174). In Hong Kong, a study conducted by the Society for Community Organization with 600 low-income families found that 70% of these families did not have computers and 28% did not have broadband access (175).

At present, Hong Kong performs extremely well in OECD's Programme for International Student Assessment, which assesses the educational achievement of 15-year-olds, with a smaller difference between outcomes for the socioeconomically advantaged and disadvantaged than the OECD average (176). However, worsening inequalities in access to learning resources threaten to widen educational attainment gaps between school children from 'poorer' and 'richer' economic backgrounds. As we have seen, gaps in educational attainment can translate into inequalities in later life, including inequalities in health.



## EXCLUSION AND DISCRIMINATION

An evidence brief from the WHO, currently in pre-print, has identified that some groups have been disproportionately affected by COVID-19 in multiple countries, including ethnic minorities, migrants, and workers in precarious employment. Many foreign domestic workers in Hong Kong live at the intersection of these vulnerabilities, as do those working in front-line occupations in many countries, as noted by the WHO (177)

Migrant workers are particularly vulnerable to the impacts of the COVID-19 pandemic. Migrant workers are often excluded from their host country's welfare system and can face barriers in accessing health information and healthcare. The border closures for many countries have restricted the ability of migrants to move between their home and host countries (178). The pandemic has also seen an increase in xenophobic and discriminatory behaviour towards migrants (179).

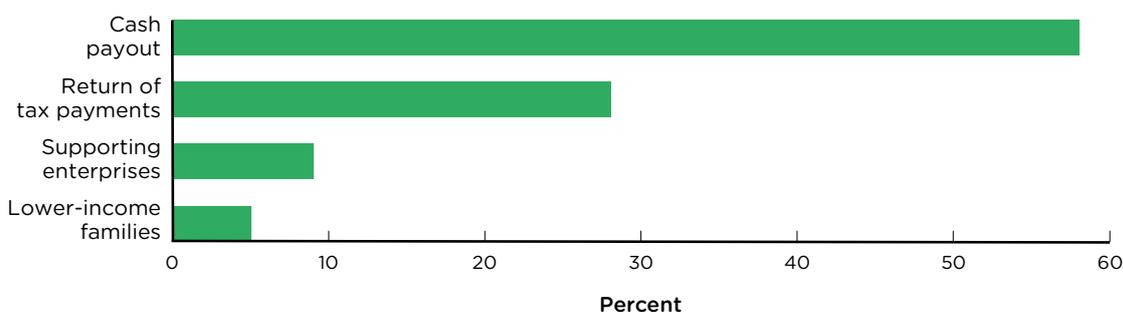
A study conducted by Lui et al. (2021) investigated the experiences of foreign domestic workers in Hong Kong during the COVID-19 pandemic and the impacts that the pandemic has had on their health and economic wellbeing. The study concluded that the inequalities and discrimination against foreign domestic workers had been exacerbated by the COVID-19 pandemic. The employment conditions and treatment of foreign domestic workers by their employers have become worse since the outbreak of the pandemic and these workers have been largely neglected in the government's policy response. Financial support, quarantine arrangements and access to food and PPE were identified by the survey participants as areas where more support is needed. Many of the study participants indicated that they have needed to turn to community support networks to access PPE and other essentials (178).

## 5C HONG KONG GOVERNMENT RESPONSES TO COVID-19

Support measures were introduced in 2020-2021 to mitigate the impacts of COVID-19. The government implemented a fiscal stimulus package amounting to 12.2% of GDP as a means of supporting individuals and business in response to the pandemic. Key measures of this stimulus included health-related spending to support anti-epidemic efforts, cash payouts to eligible residents, an employment support scheme and the introduction of an Anti-epidemic Fund which provided one-off relief measures to eligible citizens (this is further detailed below) (180).

Of the one-off relief spending in 2020-2021, just over a quarter were tax refunds (28%), 9% was for enterprises and the remaining consisted of universal cash distributions and dedicated support to lower-income families, as shown in Figure 5.7. Only 5% of this, however, was dedicated specifically to lower-income families (66).

**Figure 5.7 Distribution of the one-off relief measures in the 2020-2021 Budget in Hong Kong**



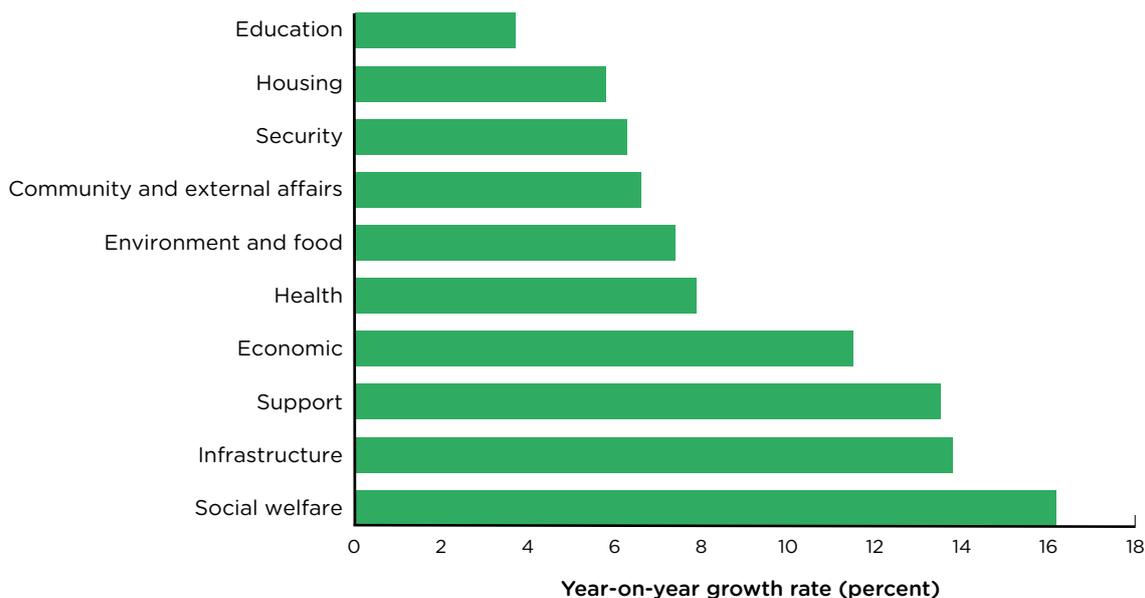
*Source: Research Office Legislative Council Secretariat. The 2020-2021 Budget (66).*

A large fiscal deficit was announced by the Financial Secretary in the 2021-2022 Budget delivered in February 2021 - HK\$257.6 billion for 2020-2021, representing 9.5% of GDP. This was over 80% higher than the forecasted fiscal deficit outlined in the 2020-2021 Budget (HK\$139.1 billion), attributable to the government's expenditure on relief measures associated with the COVID-19 pandemic, illustrating the significant impact that the pandemic has had on the economy (66) (181).

Unprecedented initiatives were announced in the 2021-2022 budget to support the economy. These include an initiative to issue time-limited consumption vouchers, rather than cash, to eligible residents, as well as the introduction of government-guaranteed personal loans to the unemployed, as a means of providing financial relief to this group, particularly those with limited financial assets. Additionally, the expansion of the issue of green bonds was also announced as a means of relieving government fiscal pressures (181).

However, the 2021-2022 budget also reduced or halted many of the one-off expenditures relating to COVID-19 relief measures. There is no longer a one-month rent waiver for low-income households in public rental units and the salaries and profits tax rebates have been halved. As a result, it is estimated that the total public expenditure for 2021-2022 will decrease by 10.3% when compared to 2020-2021. However, whilst the one-off relief measure has been scaled back, a 9.5% increase in recurrent expenditure has been budgeted for 2021-2022, with recurrent public expenditure on health, social welfare and education being increased by 9.2% year-on-year. Social welfare has the largest year-on-year growth rate for 2021-2022, as shown in Figure 5.8. It has been suggested that this is attributable to the government's spending on older people and rehabilitation services (181).

**Figure 5.8 Year-on-year growth rate of recurrent public expenditure by policy areas, 2021-2022**



Source: Research Office Legislative Secretariat. *The 2021-2022 Budget April 2021. Research Brief Issue No.3 2020-2021 (181)*

## HONG KONG GOVERNMENT'S ONE-OFF RELIEF MEASURES

### ANTI-EPIDEMIC FUND HONG KONG

A HK\$30 billion Anti-Epidemic Fund was approved on 21 February 2020 by the Legislative Council and was distributed across 24 measures directed at enhancing anti-epidemic capability (182). This included, but was not limited to: enhancing support to the Hospital Authority to combat the epidemic; supporting local mask production; and providing support for the Retail Sector Subsidy Scheme and the Food Licence Holders Subsidy Scheme (183).

A second round of Anti-epidemic Fund measures were approved 18 April 2020 totalling HK\$137.5 billion and a third HK\$24 billion Anti-epidemic Fund was announced 15 September 2020. An additional HK\$6.4 billion was then added to the Anti-epidemic Fund on 21 December 2020 (183). Measures in this fourth round included the application of anti-virus coating for residential care homes for older people and those with disabilities, the procurement of private virus testing services, a Designated Quarantine Hotel Scheme and a Greater Bay Area Youth Employment Scheme (184).

### GOVERNMENT MEASURES TO SUPPORT INDIVIDUALS AND BUSINESSES IMPACTED BY THE COVID-19 PANDEMIC.

In April 2020, the Hong Kong Government outlined a package of measures to support businesses and individuals affected by the COVID-19 pandemic. The measures outlined in the package were broadly directed at retaining jobs, supporting enterprises and protecting livelihoods. As part of retaining jobs, it was outlined that an HK\$81 billion Employment Support Scheme would be introduced to provide wage subsidies for eligible employers. This was so that employers could use the subsidy amount to pay their employee's wages, rather than making their employees redundant. A further HK\$6 billion would be invested to create 30,000 time-limited jobs in the public and private sectors, around 10,000 civil servants would be recruited by the government, and 5,000 short-term positions for young people would be created (185).

Measures to support enterprises included providing one-off grants of HK\$80,000 or HK\$200,000 to eligible food licence holders and providing eligible retail shops with one-off relief grants of HK\$80,000. Measures outlined to protect livelihoods included: reducing salary tax; extending the deadline for the payment of salary taxes; providing an extra month's payment for CSSA recipients; and covering a month's rent for lower income persons living in public rental accommodation (185).

# 5D SELECTED NGO/CIVIL SOCIETY RESPONSES TO COVID-19

Non-governmental organisations (NGOs) and the charitable sector play a crucial role in providing social assistance and support to the less advantaged in Hong Kong. This was particularly important during the pandemic, when prior inequalities were exacerbated. Below are some of the responses from the NGO sector during the pandemic.

## THE JOCKEY CLUB'S COMMUNITY SUSTAINABILITY FUND

In May 2020, a HK\$150 million Community Sustainability Fund was announced by the Hong Kong Jockey Club to help address the impacts of COVID-19 in Hong Kong. Specifically, the Fund will serve to provide grants to small and medium size community service agencies to help them to plan and implement services to support the physical and mental wellbeing of disadvantaged and vulnerable groups affected by the COVID-19 pandemic. Other initiatives launched by the club included a HK\$100 million COVID-19 Emergency Fund which was designed to provide emergency grants to non-governmental organizations who provide essential services to vulnerable groups affected by the pandemic including low-income groups and older people. As of 7 May 2020, over 200 organizations had received grants as part of this initiative for more than 220 projects. Additionally, the Jockey Club has provided funding for care packs comprising of essential food and hygiene supplies which were distributed to vulnerable groups including homebound older people, and to disabled and low-income groups (186).

## HONG KONG COUNCIL OF SOCIAL SERVICE (HKCSS) COVID-19 RESPONSE

The HKCSS is a federation of NGOs in Hong Kong working in the social care field (187). In response to the COVID-19 pandemic, the HKCSS along with over 350 social welfare organizations have been distributing preventive materials to disadvantaged groups in Hong Kong. As a result, a total of 7.53 million masks and 830,000 other supplies have been distributed to over 1.65 million people (188).

## HONG KONG RED CROSS (HKRC) COVID-19 RESPONSE

The HKRC have undertaken taken a number of actions to support citizens in Hong Kong in response to the pandemic, including providing a community health education service, prevention information and tools

and a psychological support service. As a result, and as reported on the 12 April 2021, the HKRC has distributed over 4.6 million masks, provided emergency support to over 119,000 individuals in quarantine, provided over 300,000 relief material items to quarantine centres and provided health and hygiene education as well as psychological support to over 3.5 million people (189).

Moreover, the HKRC, in January and February 2021, deployed staff members to selected areas to provide infection prevention and mental health information and to distribute PPE. Over 5,000 individuals benefitted from this. Additionally, discussions were held with over 800 citizens in order to gain an understanding of community needs. Following this, in a press release the HKRC highlighted that it is was evident that more support is required for vulnerable groups. Such groups include low-income groups, those with chronic diseases, ethnic minorities, immigrants and older people. It was also stressed that the HKRC were particularly concerned about older people from low-income groups in terms of infection prevention based on observations made of this group for example in terms of the incorrect use of masks, the repeated use of the same mask and lack of knowledge of how to use infection prevention measures correctly (190).

## ST JAMES' SETTLEMENT PEOPLE'S FOOD BANK

The People's Food Bank was established in 2003 and serves to provide food services to deprived groups in Hong Kong. The aim of the Food Bank is to "provide food to people in need on a short-term and weekly basis, relieve hunger and to promote social cohesion through encouraging people to share resources with those less fortunate than themselves" (191). The service targets disadvantaged and vulnerable populations including those on low income, older people, the unemployed, and 'Street Sleepers'. Specific services provided as part of the programme include the provision of nutrition packs to older people and a Children Milk Powder Sponsorship Scheme, where milk and milk powder is provided to deprived families with children aged 10 years or below in order to support the nutrition needs of these children (192).

# CHAPTER 6

# CONCLUSIONS AND THE WAY FORWARD



**As the first report of the series, we have provided an overview of the situation of health inequalities across the social ladder in Hong Kong, with a focus on the impact of different social conditions and the on-going COVID-19 pandemic on health. These are some of the key messages of this report:**

- Hong Kong has the longest life expectancy in the world, but also marked health inequalities in chronic diseases, mental health, subjective health status, health behaviour, and healthcare access, resulting in a social gradient of health.
- A wide array of social determinants of health are inter-related – education, work, income, housing, social spending and poverty are all closely related to health outcomes.
- The COVID-19 outbreak has exposed and exacerbated the pre-existing social inequalities in Hong Kong, not only due to disproportionate risk of COVID-19 infection but also the differential health and social impacts of COVID-19 containment measures across the social ladder.
- Without prompt and appropriate interventions, the poverty-induced health problems could increase the already heavy burden of the healthcare and social welfare system.
- Reducing inequalities in health requires holistic strategies across the whole of the society and government rather than mitigation in silos.

Based on the findings and observations in this report, we have made five recommendations to reduce health inequalities in Hong Kong as follows:

RECOMMENDATION

1

To raise public awareness of the importance of health inequalities, social gradients of health and social determinants of health.

RECOMMENDATION

2

The government should set up new databases that provide necessary linkages between socioeconomic indicators and health outcomes and improve existing collection of data to identify and monitor health inequalities in Hong Kong regularly. Where possible, the data should be disaggregated by age, gender, socioeconomic position, and geographical areas and include new indicators on vulnerable groups and the extent of healthy ageing in the society.

RECOMMENDATION

3

The government should work with other sectors, including academia, social care and healthcare, professional bodies, businesses, charities and voluntary organisations, in developing policies across the board to mitigate the social determinants of health inequalities and alleviate the burden of disease on disadvantaged groups.

RECOMMENDATION

4

To review the impact of COVID-19 and the containment measures on physical and mental health of different social groups, including school children, working adults and foreign domestic workers. To incorporate analysis of the impact of policies on health equity of society in future policies and measures to tackle the pandemic.

RECOMMENDATION

5

In the long run, it is necessary to establish a unified vision on fair and equitable society in Hong Kong through engaging and building up consensus with stakeholders in different sectors including the government and the civil society. This initiative should be placed in the larger context of the UN sustainable development goals and the WHO's decade of healthy ageing.

Subsequent reports will examine various topics including the upstream determinants of health through the life course, socio-environmental factors, existing services and public policies, and recommendations on strategies for achieving health equity. The final report will address the key question - why does Hong Kong have the longest life expectancy in the world?

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