

## Perspective

# Rich people have better health than the poor: Health equity in an unequal world

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Abstract: Many accept as inevitable that the rich have better health than the poor; at the same time, many would view this as contravening social justice. This topic was discussed between experts from diverse disciplines at a colloquium on 15th November 2024 in Hong Kong, jointly organized by the Institutes of Health Equity of the Chinese University of Hong Kong and University College London. To address health equity, there need to be indicator(s) that consist of health data, disaggregated by age groups, gender, and measures of deprivation, that are regularly collected. Social determinants of health that give rise to health inequalities need to be documented, to enable measures to be developed to counter such inequalities in the presence of wealth disparities. Such measures include government policies covering health, social, and other areas such as housing, transport, urban planning etc. Civil society also has an important role in mitigating health inequalities, particularly in societies with a steep gradient in wealth, such as Hong Kong.

**Keywords:** health inequality; life expectancy; social determinants; philanthropy; ageism; intrinsic capacity

### 1. Introduction

In most Western societies, health equity permeates all health and social care discourse, featuring in government policies. For example, in the presence of wealth inequalities giving rise to gradients in health outcomes according to socioeconomic position, the principle of proportionate universalism has been proposed to mitigate health inequalities by resourcing and delivering universal services at a scale and intensity proportionate to the degree of need. Thus, while services are universally available, it is proposed that services are weighted towards the most disadvantaged [1]. How proportionate universalism reduces health inequalities has been recently reviewed [2]. In contrast, health equity is less discussed among many Asian countries, and seldom features in government policies with the exception of Japan, and perhaps also China. Yet there is a gap between health equity taking a prominent position in public and policy discourse, effective implementation, and actual health outcomes. Social justice is embedded in the concept of health equity, and this may be an integral part of certain cultures underpinning health and social policies in the absence of an explicit goal in targeting health inequalities. Capitalizing on the work of the joint University College London Institute of Health Equity and the Institute of Health

Equity of the Chinese University of Hong Kong in the past five years, a colloquium was held on 15 November 2024 to explore various facets of health equity in relation to health outcomes in Hong Kong, with reference to the work of Sir Michael Marmot in the UK. Discussants had expertise in epidemiology, medicine, public health, health policy, and social care disciplines. We were privileged to have the input of Sir Michael Marmot from the UCL Institute of Health Equity in London, a pioneer advocate for health equity worldwide. In England, various local governments as well as businesses have sought direction from the UCL Institute for recommendations on actions to promote health equity. From 2019, Sir Michael has worked with the Chinese University of Hong Kong to document the current state of health equity, with recommendations for action. This article explores how government and civil society tackle health equity by addressing social determinants of health with the pervasive background of gradients in socioeconomic positions. It is partly based on the discussions held at the Colloquium.

Three main topics were covered: indicators of health equity that need to be collected on a regular basis; the current status of the social determinants of health in Hong Kong; and finally, Hong Kong's aspirations and efforts in striving towards equitable health.

#### 2. Indicators

Historically, total life expectancy [TLE] at birth has been used as an outcome indicator to highlight health inequality, especially in intercountry comparisons, being an overall reflection of social determinants of health. For example, in England from 1999–2001 to 2011–2013, TLE showed a steady rise, until 2011–2013 to 2017–2019, when TLE remained static, and from 2020-2022, started to decline. Such changes have been attributed to austerity measures and government cuts on spending on social determinants of health [3]. TLE was lower in deprived neighborhoods, and a doseresponse relationship exists between excess deaths and the index of multiple deprivation. The principle of proportionate universalism may be used in leveling of the social gradient in health, whereby more resources are directed towards those in lower socioeconomic positions. TLE only represents a summative indicator, which is affected by eight factors termed 'The Marmot Principles'. (1) Give every child the best start in life; (2) enable all children, young people, and adults to maximize their capabilities and have control over their lives; (3) create fair employment and good work for all; (4) ensure a healthy standard of living for all; (5) create and develop healthy and sustainable places and communities; (6) strengthen the role and impact of ill health prevention; (7) tackle racism, discrimination, and their outcomes; (8) pursue environmental sustainability and health equity together. A systematic review showed that 691 indicators have been widely used, the most common being TLE, infant mortality, obesity/overweight, smoking, self-perceived health, unemployment, mental well-being, cardiovascular disease, and material deprivation [4]. Neighborhood disadvantage metrics have also been constructed in the form of an atlas in the USA [5].

In addition to TLE, health span (that is, the duration of life spent without disease and/or injury) may be more important, especially since the increasing TLE worldwide

has not been accompanied by the same magnitude of increase in disability-free life expectancy [6]. For example, in spite of a still-increasing TLE in Hong Kong, there is actually a declining proportion of life free of disability, resulting in an expansion of morbidity [7]. At the same time, there is an increasing trend in frailty [8] and dependency [9]. Consequently, the healthcare and long-term care burdens and their associated economic costs are expected to rise in the coming years. Sensible policies to tackle the problems brought forth by the aging population would be to enable individuals to live independent lives for as long as possible such that the age of relying on the medical/long-term care could be delayed. Reliable population measures are therefore warranted in order to monitor the progress in this regard. A more relevant indicator for populations that are aging would be changes in intrinsic capacity, which the United Nations is using to monitor healthy aging. The score is composed of five domains: sensory (hearing and vision), locomotion, cognition, psychological health, and vitality [10]. These are the domains of individual capabilities that were deemed to enable an individual to live independent lives and perform activities that he or she has reasons to value. Intrinsic capacity was shown to be affected by social determinants throughout the life course and demonstrates a social gradient [11] indicators, suggesting that appropriate social policies, such as adequate social protection and provision of an age-friendly environment, are important in improving the trajectories of population aging.

The extent of health inequalities was not regularly monitored by the government in Hong Kong, unlike the Office of National Statistics [ONS] of the United Kingdom. The population census represents the only regular data-collecting exercise that could reflect trends. Although opinions from various stakeholders in the community are regularly sought regarding what items should be included in the census, health data have consistently been excluded. While health surveys and epidemiological studies in Hong Kong routinely include socioeconomic positions such as education, occupation, and income, these are treated as confounders and adjusted for in studies of health outcomes. Social gradients in health outcomes are documented [12–14]. However, there is no regularly collected data equivalent to that of the ONS in the United Kingdom: there is lack of data on equity stratifiers comparable to neighborhood deprivation. This is because as a result of high-density living, people with differing socioeconomic positions may live close to each other with common public facilities. A close approximation may be the household density [area of household divided by the number of people living in that area], which is collected by the census [15]. Although the existing government-led population health surveys and thematic household surveys collect health variables and a few socioeconomic indicators for a limited comparison of health outcomes across the social ladder, the sample size and availability of equity stratifiers are much less than that in the population census, leading to a weak surveillance of health inequalities in Hong Kong.

Poverty is an obvious indicator. In Hong Kong, a clear gradient exists between monthly household income, self-rated health, and prevalence of chronic disease as well as multimorbidity [12]. Multimorbidity is also higher among those with low education, the unemployed or retired, and current/ex-smokers. There is some debate regarding what is an appropriate measure of poverty: 50% below the median household income, or some multi-dimensional index of poverty as recommended by

the UN [16,17]. The former may not be an accurate indicator in Hong Kong, as data is only available for income from salaries, without taking into account other sources of income or various government allowances in the form of cash or housing, for those with low income/assets. Recently, the Hong Kong government has announced that it targets to adopt new definitions of poverty, which is to be measured with a new multidimensional metric that measures economic activities, social welfare, housing conditions, and/or healthcare utilization, etc.; details are yet to be announced nonetheless [18].

The importance of standardized age-disaggregated health data that is regularly collected by governments to meet sustainable development goals (SDG) has been emphasized by the World Health Organization in 2021 [19]. Such data is needed to formulate policies targeting health inequality, as well as for monitoring their effectiveness. An example of using measurement and evaluation to guide action is provided by Japan, where reduction in the health disparities gap among prefectures in the average amount of time spent without limitation in daily activities was achieved. Evaluation was also disaggregated by gender, education, wealth, and place of residence [20].

# 3. Social determinants of health world wide and in Hong Kong

As a background to social determinants of health that contribute to health inequalities, Sir Michael showed that GDP per capita measured in 2011 international dollars is proportional to life expectancy [21]. Countries with higher rates of income inequality have higher rates of death from COVID-19, AIDS deaths, and HIV infections. Within a city such as New York, COVID has a greater impact on life expectancy among ethnic minorities. In Brazil, rates of HIV are falling among the white population, compared with rising rates in the non-white population. There are also social inequalities in cardiovascular deaths at ages 45–64. Populations without access to improved water sources, with poor coverage of social safety net programs, have high under-5 mortality rates, while the prevalence of stunting is higher among those with low family income. Cash transfer programs reduce Gini coefficients and all-cause mortality over time.

Personal or household income has long been used as an indicator of poverty; however, there is an increasing trend to use multidimensional measures in addition to incomes, such as material deprivation and social exclusion [22]. Furthermore, the negative association between income inequality and happiness may not be explained by lower household income but by the perceived unfairness and lack of trust [23].

A commonly neglected social determinant is ageism [24]. Ageism manifests when age is employed as a criterion to classify and segregate individuals, resulting in harm, disadvantage, and injustice while undermining intergenerational solidarity. This phenomenon adversely affects our health and well-being and poses a significant obstacle to the implementation of effective policies and initiatives aimed at promoting healthy aging. This has been acknowledged by the World Health Organization (WHO) Member States in the Global Strategy and Action Plan on Ageing and Health, as well as through the Decade of Healthy Ageing: 2021–2030 [25]. The global reach of ageism on older persons' health is described in a recent systematic review [26].

In Hong Kong, the impact of social determinants is most obviously demonstrated among ethnic minorities through the ongoing Jockey Club S.A.T.H. Project for Healthy Families [27]. The 2021 population census of Hong Kong found that ethnic minorities (mainly South Asian) constitute 8.4% of the population [28]. They have lower education and lower rank occupations, higher poverty rates, higher prevalence of obesity, metabolic syndrome, and anemia, and poorer access to healthcare [27,29]. There is considerable heterogeneity by ethnic subgroups and gender, which intervention programs would need to take into account. Health inequalities were further exposed under the COVID-19 pandemic. For instance, health information dissemination to the ethnic minorities in Hong Kong during the pandemic was considerably hindered by language barriers; social distancing policies also imposed an additional burden on them with limited social and religious support.

For the general population, poverty impacts health in many ways. Poor children have less access to educational resources and activities. The legal minimum wage (HK\$40) in Hong Kong is generally considered not enough to support the basic needs of the working poor and their families [30]. Income inequality has remained high over the past decade, with a Gini coefficient of 0.437 (after taxation and social transfer) in 2016, and approximately 1.1 million lived below the official poverty line (post-intervention) in 2019, of whom 32% are over age 65 years. In the first quarter of 2024, the median income of the poorest decile was 81.9 times lower than that of the richest decile. This represents a significant increase from 34.3 times in 2019 [30]. This poverty situation is aggravated by high housing costs (the least affordable in the world) and long waiting lists for public housing (average waiting time 5.8 years).

A consequence is the rapid increase in people living in substandard housing with small living space and substandard facilities, as well as the number of homeless people. High demand for affordable housing has led to the emergence of the so-called subdivided units in Hong Kong, which are formed by splitting an ordinary flat into smaller units (a median size of 10 m² for an average household size of 2.3) for rental purposes [31]. This has resulted in overcrowded housing and high building density in some parts of urban areas of Hong Kong. The way in which a flat is divided also means that some of the subdivided units might not have the necessary windows for ventilation.

At the same time, the number of poor older adults is increasing rapidly due to increasing life expectancy, and public health services are not able to keep up with the demand, even though it may be essentially free for all, resulting in problems of access, and long waiting times.

A product of the UCL and CUHK Institutes of Health Equity is the systematic documentation of social determinants of health in Hong Kong, examining socioeconomic inequalities; inequalities throughout the life course, as well as the impact of the environment [12–14]. A list of recommendations accompanied each report. The landscape of health-related policies in Hong Kong reveals significant implications for health equity. While efforts and achievements have been made to ensure the best start for all individuals over the past decades in Hong Kong, a noticeable shift away from prioritizing health for all post-childhood has been observed. For example, initiatives like the Chronic Disease Co-Care scheme, aiming to promote universal access to a "Family Doctor for All," face challenges with the co-

payment model potentially exacerbating health inequities by unintentionally encouraging dual utilization of public and private services among wealthier groups without alleviating public service demand that the disadvantaged group tends to rely on, as seen in past schemes like the Elderly Healthcare Voucher program. Also, private health insurance in Hong Kong trends towards favoring the wealthier groups [32], whereas the ineligibility for tax deduction and the lack of a high-risk pool in the government-initiated Voluntary Health Insurance Scheme fail to cater to the needs of the disadvantaged. To tackle social determinants more effectively, the newly established District Health Centres, when well-designed and positioned, hold promise as central hubs connecting and synergizing the healthcare system with communities. Despite existing policies targeting physical health, a notable gap persists in mental and dental healthcare provisions for adults in Hong Kong, leading to inequalities in mental health prevalence and limited access to affordable dental services, particularly for marginalized groups [33,34]. Embracing the concept of proportionate universalism is essential, ensuring interventions are universally accessible while proportionately targeted to reduce the steepness of the social gradient in health. Some government health policies are formulated according to the principle of universal proportionalism, in linking co-payments for certain services such as dementia day care and residential care to household incomes. Strengthening policy and implementation research capabilities within the government is another key to a precise and evidence-based healthcare reform in Hong Kong.

## 4. Aspirations towards health equity

In creating a society that aspires to health equity by tackling social determinants of health, strategies may be divided broadly into government policies (both health systems as well as non-health systems covering early childhood education, adolescent mental health, workplace, the physical and social environment) with effective implementation, and also into civil society responses that include non-government organizations, charitable foundations, as well as business sectors (**Figure 1**).

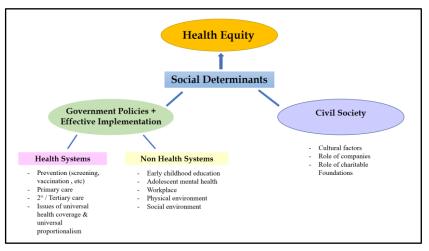


Figure 1. Social determinants of health equity.

One of the key challenges for the Hong Kong government is to have a paradigm shift that much of the population health lies beyond the healthcare system. Much emphasis has been placed on government healthcare policies in providing health for all, as discussed at the 8th Global Conference on Health Promotion, resulting in the Helsinki Statement on Health in All Policies, and how to implement this has also been discussed [35]. Examples from the United Kingdom are the participation by local government as well as businesses in adopting the 'Marmot Principles'. Over 40 local authorities have plans in place to reduce health inequalities, and the number continues to increase. However, action plans extend beyond the health sector, covering education, town planning, social services, the creation of supportive neighborhoods, reducing crime rates to provide safe communities, etc. Changes taking place may best be described as a movement in creating 'Marmot Cities' and 'Marmot Places' with key partners in healthcare. These efforts have received the explicit support of professional and healthcare organizations, as well as the government.

Examples of what non-government organizations (NGOs) in Hong Kong can achieve are exemplified by Health in Action, an NGO led by Dr. Fan Ning, in working towards achieving health equity in the neighborhood. A transdisciplinary team was formed in a district with a high number of 'working poor'. Operating on the concept of mapping existing available community resources and empowering people to manage their health by raising health literacy and mobilizing community resources, the group had carried out projects such as healthy restaurants, a cash voucher project for deprived households, run a community pharmacy that supports minor ailment service, as well as providing primary care services to disadvantaged people in the area. Working with other partners, the concept of creating a 'community living room' for people living in poor conditions in subdivided flats, where families can go during the day for cooking, laundry, and supervising children doing homework, came to fruition with support from the government and a property company that donated the space in a private building. This initiative has become a government policy and will be reproduced in other districts. This is an excellent example of how government, businesses, and civil society all worked together to tackle multiple social determinants for the disadvantaged that affect health [36].

Another example of how the local government may work with multiple partners in one of the poorest districts with many old buildings and subdivided flats is an initiative in Sham Shui Po district. It is known that indoor air quality affects health [37]; in these small flats [the median per capita floor area of accommodation was 6 square meters] with poor ventilation, the concentration of PM2.5 was approximately 50 micrograms per cubic meter, far exceeding WHO recommended levels [38]. In collaboration with a local university, a low-cost air purifier was designed, which was able to reduce PM2.5 by almost 40% in a pilot study [39]. The device was then being distributed to about 7,500 households living in subdivided flats in Sham Shui Po (i.e., about one-third of all households living in that kind of flat).

Another example of participation by businesses is the relief measures for low-income households to cope with increasingly hot summers, in the form of cash subsidies for electricity with increasing use of air conditioners and partial subsidies for replacement of old units with more energy-efficient units with up to 30% reduction in energy use [40]. Although the wealth gap is large in Hong Kong, there are many charitable foundations formed by businesses, wealthy families, and institutions such as the Jockey Club Charities Trust. Hong Kong's philanthropic heritage is marked by

a long-standing tradition of private concerns contributing to welfare and manifold other social initiatives. Based on their tax exemption status, some 10,000 charities have been set up. Approved charitable donations under profits tax for business donors totaled US\$560 million in the financial year 2020–2021. For individual donors, charitable donations approved under salaries tax reached nearly US\$1 billion. Meanwhile, a growing proportion of global family offices are creating philanthropic foundations to spur social improvement, contributing to the city's philanthropic spirit [41]. This figure represents one charity per 750 residents, and the title 'Asian capital of philanthropy' has been proposed [42].

Emphasizing the critical importance of both the "Whole of Government" and "Whole of Society" approaches is fundamental to approaching health equity [43]. The concept of a "Whole of Government" approach emphasizes public service agencies collaborating across portfolio boundaries to develop integrated policies and programs to achieve shared or complementary goals, given the significant impact of multiple social determinants of health on population health. Health equity in all policies, systems, and programs requires multisectoral and coordinated actions beyond traditional healthcare settings. In parallel, a "Whole of Society" approach extends beyond public authorities to engage a wide range of stakeholders, including families, communities, NGOs, academia, and businesses, stressing the importance of linking science, service, and policy for achieving health equity [44]. In particular, the role of the business sector deserves greater attention, and expanding the "Social" domain of ESG by incorporating the "Diversity, Equity, and Inclusion" framework could be a feasible way forward. Aligning with "Justice and Equity", explicitly outlined as one of the four key principles in the Healthy China 2030 [45], concerted efforts from the Hong Kong government and the whole society are indispensable. A thorough health equity impact assessment is recommended before public policy decision-making. After all, achieving health equity hinges on recognizing the humanity that everyone in our society should be valued equally, and leveraging the collective commitment of the diverse community in Hong Kong is essential to drive positive change.

## 5. Conclusion

It can be seen that despite the absence of the phrase 'health equity' in government policies in Hong Kong, in policy formulations this principle appears to have been taken into account implicitly in many sectors, in contrast to the phrase being explicitly included in health policies in China. Furthermore, there are ongoing reviews of policies to include health equity dimensions that extend beyond health systems.

Civil society working with government synergistically may mitigate the social gradient in health outcomes, thereby contributing to improvement in indicators of health equity. However, there is a need for the government to collect age- and gender-disaggregated data of health equity indicators to monitor the effectiveness of measures to address various social determinants of health equity.

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