Communicable and Non-Communicable Diseases and Health Communication in Mainland China and Hong Kong

Patchanee Malikhao

Introduction

The People's Republic of China—or mainland China—has emerged as the second largest economic power in the world with an average 10 percent growth of Gross Domestic Product (GDP) a year (World Bank 2015). The country was formerly administered by a huge, bureaucratic, communist politburo. It has undergone a post-Mao era's reform in 1978 to incorporate economic growth within its own fragmented, authoritarian polity (McGregor 2011; Zhao 2008). As a consequence, at the start of Deng Xiaoping's economic reform and openness policy, the industrialized China lifted around 500 million of its 1.3 billion citizens out of poverty (World Bank 2015; French and Crabbe 2010, p. XXIV). However, China maintains its system of authoritarianism, notwithstanding regular cries for "Western style democracy" by Chinese students and citizens such as those of the Tiananmen Square protest in April 1989 (Leslie 2014) or demands for direct

P. Malikhao (⊠)

Fecund Communication, Kowloon, Hong Kong e-mail: pmalikhao@gmail.com

election of the Hong Kong governor by the citizens of Hong Kong during the so-called umbrella movement in the Fall of 2014 (So and Ngo 2014).

China is one of the few countries that has globalized without being "Westernized"; the others being Iran and Taiwan (Nisbett 2003, p. 224). As the socialist ideology still prevails, at least in theory, it is no surprise that the Chinese understanding of democracy and polity is different from that of the West. So, too, it is different in terms of other socio-politico-cultural concepts: legal reform, health and disability rights, human rights, freedom of expression, freedom of religion, women's rights, migrant and labor rights, sexual orientation and gender identity (Human Rights Watch 2013).

Modern China has been applauded for its great leap of economic success and hyper growth (The Boston Consulting Group 2013). That can be attested by such mega cities as Beijing, Tianjin and Shanghai, and the urbanized provinces of Hebei, Shandong, Jiangsu, Zhejiang, Fujian, and Guangdong as well as the growth of the middle class from 7.4 percent in 2005 to 11.3 percent in 2010 (French and Crabbe 2010, pp. 18–20).

Hong Kong has gone through a different path of economic success. A former British colony returned to China in 1997, Hong Kong has been known as a modern Western city with underlying Chineseness (Wei and Li 2008, p. 4). It was founded by British merchants in 1841 and became an important port connecting South China and the rest of the world. It comprises Hong Kong Island, New Kowloon, the New Territories, and 235 islands in the South China Sea. It has a land area of 1,104 sq km, or 424.7 sq miles (Wei and Li 2008, p. 6). Hong Kong will officially enjoy its capitalistic system and Western lifestyle under the "one-country, two systems concept" until 2047 (MacPherson 2008, p. 10). Hong Kong, according to Economic and Trade Information, is the world's eighth largest trading economy and the tenth largest exporter of commercial services. It has the most services-oriented economy, with service sectors accounting for more than 90 percent of its GDP. It is the second largest recipient of foreign direct investment (FDI) in Asia, after mainland China, and the third largest source of FDI in Asia, after Japan and mainland China (Hong Kong Trade Development Council 2015).

In contrast to its great leap in socio-economic development, China (and to a certain extent Hong Kong) is facing a number of serious issues regarding its environmental hazards and livelihood threats, such as contaminants and toxicity in foods, as well as non-consumable products sold as consumables: pollutants in the air; non-potable water supplies; smoking and tobacco control; noise pollution etc. (MacPherson, pp. 36–49).

Moreover, it is also well documented that Western diseases or chronic non-communicable diseases are prevalent due to rapid changes in lifestyle, such as, cardiovascular diseases, diabetes, obesity, lung cancer etc. (French and Crabbe 2010, pp. 6-8). The emergence of communicable diseases has been well documented in good case studies, such as those of bubonic plague in the nineteenth century (Pryor 1975, pp. 61–70) and the epidemics or pandemics in the contemporary globalization period of severe acute respiratory syndrome (SARS), bird flu or H5N1, HIV/ AIDS, or even persistent tuberculosis and malaria. In addition, mental health-related issues such as high suicide rates, depression, and mental disorders are on the rise (Huang 2013, p. 4; MacPherson 2008, pp. 39–49).

All of these health hazards and ecological mishaps have had not only the microbes and some individuals to blame; socio-politico-cultural determinants are in fact the culprits. The low chance of the poor getting good education, the absence of strong civic organizations, morally corrupt interest groups and bureaucracies in food production and environmental regulation and control, public health policies, sanitary standards, healthcare funding, gender-related factors, the one-child policy, and the top-down health communication strategies could be mentioned as partly responsible as well (French and Crabbe 2010, pp. XIII–XIV; Huang 2013, p. 21; Wermuth 2003, p. 63). Not only domestic factors but also external factors such as globalization, policies of the World Trade Organization (WTO), the World Bank and the International Monetary Fund (IMF) affect China's inequalities (Harris and Seid 2004, p. 25).

Given this background, this chapter aims to discuss how globalization has been affecting public health in China; why economic progress brought about inequalities; how these inequalities have been impacting public health in China; and what the current status of public health is in China and Hong Kong.

Cases of epidemics that broke out in the past, such as bubonic plague, bird flu and SARS, will be analyzed for both the public health and health communication policies. Health communication strategies regarding these infectious/communicable diseases have been explored. The same approach has been used with current epidemics such as HIV/AIDS and ongoing historical diseases such as malaria and tuberculosis (TB). At the same time, policies to mitigate pollutants in the air and water will be also discussed.

Moreover, the chapter will assess communication strategies and policies on non-communicable disease (NCD) and public health policies. This includes food safety and regulations concerning alcohol and tobacco control to prevent the onset of diabetes, obesity, cardiovascular disease, and cancers.

GLOBALIZATION AND ITS IMPACT ON HEALTH

The concept of globalization must not be referred to as a phenomenon exclusively belonging to the twentieth and twenty-first centuries. According to Hopkins (2002), globalization is a new term that denotes ongoing historical processes from before the 1500s up to the present day. According to Lie (2003, pp. 101–116), globalization can be understood as a flow of cultural products from one location to another. The location can be nations, communities, institutions, or individuals. Unfortunately, the global flows cannot be smooth because of nation states' boundaries, geocultural boundaries, such as East and West, and geo-economic boundaries, such as the North-South divide (Powell and Steel 2011). Globalization makes some regions become centers of economic growth while others are outliers or closer to the periphery. This affects the life of the people in those regions a great deal. Harris and Seid (2004) explain that the transition from agrarian to industrial societies in most developing countries has been slower and more problematic than that in the developed nations as there are many people who did not benefit from the developments.

NCDs (i.e. cardiovascular disease, especially coronary heart disease and stroke, cancer, chronic respiratory disease, and diabetes) kill about 36 million of the world population each year (WHO 2015). Social determinants that can be considered as negative consequences of globalization contributing to NCDs among populations include migration of the population from traditional means of subsistence, urbanization without provision of standard housing and employment, and large unregulated marketing of tobacco products and alcoholic beverages (Harris and Seid 2004, p. 16; Yacht and Beaglehole 2004, pp. 214-215). The globalized world—equipped with high-speed transportation—has resulted in mobility and migration being deemed responsible for the emergence of new patterns of infectious diseases and speeding up the transmission rate of those diseases. Major infectious diseases have killed large populations: small pox (500 million people), measles (200 million), Spanish flu (80 million), Bubonic plague (75 million), AIDS (40 million), and typhus (4 million) (WHO 2015). Although the incidence of infectious diseases dropped from 40 percent to 17.5 percent between 1990 and 2010, new diseases have emerged at the rate of one or more per year since the 1970s. According to the World Health Organization (2015), several new infectious diseases are, for instance, the Severe acute respiratory associated coronavirus (SARS-CoV), henipaviruses (hendra and nipah), avian influenza virus, and the H1N1 virus (swine influenza). There are also historic, infectious diseases that are re-emerging, such as West Nile fever, human monkey pox, dengue, TB, and malaria.

Uneven growth or socio-economic disparities/differentials/gaps between the haves and the have-nots posed by globalization as a threat to healthy individuals or communities can be studied in nine different approaches, according to Wermuth's research (2003, pp. 9-43), described below.

First, the 'health gradient' descriptive model, which linearizes the socioeconomic status (or SES) and health outcomes, can be used to (partially) explain that high level of income, education, and occupation have some association with a lower death rate (Anderson and Armstead 1995, pp. 213–215). To elaborate, low-income people and paupers face a short life expectancy at birth as they have less access to appropriate healthcare, nutrition, living conditions including sanitation, and later in life they are more prone to chronic stress because of unstable jobs or unemployment prospects.

Second, being healthy or not is a consequence of bio-psychosocial effects (Anderson and Armstead 1995, pp. 213-225): the sociodemographic (i.e. age, ethnicity, gender, and location) together with the socio-economic status (i.e. education, income, occupation, family wealth, perceived SES, economic mobility, childhood socio-economic status, material possessions, trading/bartering practices, and national income distribution); the socio-environmental and medical (i.e. residential characteristics, occupational environment, social support, social/professional hierarchy, and access to healthcare); the psychological and behavioral (i.e. psychological distress, personality factors, health promoting behaviors, and health-damaging behaviors); and physiological (cardiovascular, immune, muscular, endocrine, height, and weight).

Third, a paradigm for research on SES and health by Williams (1990, pp. 81-99) is based on the second approach but emphasizes the psycho-social factors that have an impact on health: health practices (smoking, alcohol, nutrition); social ties or social support; perceptions of control; stress (family, occupational, and residential).

Fourth, the general theoretical model of relationships between occupational quality and poor physical health of Wickrama et al. (1997, pp. 363–375) emphasizes the underlying occupational quality, social integration, and marital integration to sense of control of an individual which leads to health-risk behaviors and poor physical health.

Fifth, it was found by Kennedy et al. (1996) that the degree of income inequality was correlated with states' mortality rates and infant mortality.

Sixth, the social capital—comprising the community cohesion and trust a person possesses—was suggested to be a good indicator of health by Kawachi and Kennedy (1997).

Seventh, the model Social, Psychological, and Physical Pathways to Health Outcomes, developed by Brunner and Marmot (1999), p. 20), reveals that social structure, social environment, and work affect the psychological aspects of an individual and are related to the health behaviors of that person. The brain of that individual subsequently creates neuroendocrine and immune responses that cause patho-physiological changes which consequently affect organ impairment and health in general.

Eighth, Wilkinson (1997) stated that improvements of the standard of living and quality of life via globalization lower the rate of communicable or infectious diseases, but increase the rate of non-communicable diseases such as cardiovascular diseases among both the upper and lower social classes.

Ninth, the political economy not only consists of global political and economic forces, the state, government, social classes, public administration, policy making, and the distribution of sources between and among populations, but also concerns a world transnational trading system and the mobilization of labor and resources to maximize profits. In turn, it affects the living conditions of workers and their health.

Wealthier but not Healthier: China and Hong Kong's Health in the Globalized World

Mainland China's GDP per capita is US\$6,807, while that of Hong Kong is US\$38,124 (The World Bank group 2015). The annual growth rate of China has been 9.1 percent from 1989–2014, while the annual growth rate of Hong Kong has increased to 5.4 percent from 1974 to 2014 (Trading Economics 2014a, b). Mainland China and Hong Kong have evolved in many phases of globalization, and that seems to be a mixed blessing as the positive aspects of globalization, in terms of the social and political reach of the economic reform, have enhanced the life expectancy at birth of an average mainlander from 69 years in 1990 to 75.2 years in 2012, and stagnated the mortality at birth of mainland Chinese infants (World Health Organization 2014, p. 60). Life expectancy at birth of a Hong Kongers is 80.7 years for males and 86.4 years for females. Also, the infant mortality rates of Hong Kong ranked sixth lowest in the world (Pearson Education 2013) thanks to the advances in public health and medical technology. However, inequalities in income, global

environmental changes, and changes in lifestyle as well as communications that come with globalization take tolls on public health. Specifically in China, health can be examined through five pathways, as suggested by Harris and Seid (2004, p. 11): (a) economic growth, income distribution, and poverty; (b) democracy and governance; (c) health services; (d) nutrition and food security; and (e) other risk or mitigating factors.

The latest data indicates that more than a quarter of the adult population in China, or around 350 million people, are overweight and obese (The Economist 2014), and according to WHO (2014), 6.5 percent of female and 4.6 percent of male Mainland Chinese adults aged more than 20 are obese. The more affluent Hong Kongers witness excess weight and obesity among 48.3 percent of males and 31.4 percent of females. Obesity among children in both mainland China and in Hong Kong is on the rise. It is also worth noticing that 6.9 percent of male Chinese children are obese, which is twice the percentage of the male adults (The Economist 2014), and one out of every five children in Hong Kong is obese (South China Morning Post 2015). It is also worth noting that obesity is expanding more in the rural areas than in the cities, as many farmers have sold their landholdings for development and moved to more sedentary lifestyles (The Economist 2014). The cause of obesity in cities in China is due to the lack of public spaces for exercise, and the changes in eating patterns as people consume more meat, potatoes, cow's milk, beers, fast food/deep-fried foods than in the past; hence, oils and fats (especially transfat or hydrogenated fat used for producing margarine), monosodium glutamate, sugar, and salt are on the increase while not enough grains are being consumed (French and Crabbe 2010, pp. 49-73, 107). Obesity may lead to a lack of concentration, sleep apnoea, constipation, osteoarthritis, slipped discs, bad backs, pulled muscles and infertility (French and Crabbe 2010, pp. 7, 9–10).

The top ten causes of death in China are malignant neoplasms (28 percent), heart disease (21 percent), cerebrovascular disease (11 percent), diseases of the respiratory system (5 percent), injury and poisoning (3 percent), endocrine, nutritional and metabolic diseases (3 percent), diseases of the digestive systems (3 percent), diseases of the nervous systems (1 percent), diseases of the genitourinary system (1 percent), and infectious diseases (0.9 percent) (CDC 2014). NCDs accounted for 87 percent of total deaths in China in 2014 (WHO 2014). French and Crabbe (2010, p. 7) reported that it was known in 2007 that bad diet, obesity and a lack of physical exercise are the factors that are associated with cancers among the women in Shanghai. The cancer diagnosis rates in Shanghai were more or less the same as those in the European Union (EU). It is alarming that 11.6 percent of the population in the mainland is diabetic, according to the latest survey (The Economist 2014). With reference to infectious diseases in mainland China, Zhang and Wilson (2012) observed that the most frequently reported diseases were viral hepatitis (38.3 percent), bacterial infections (33.3 percent) and sexually transmitted infections (STIs) and HIV (9.8 percent), which accounted for 5.4, 4.8 and 1.4 million diagnosed cases respectively during the period 2005–08. In Hong Kong. the top three infectious diseases are chickenpox, TB and food poisoning (Hong Kong Government 2014).

HEALTH COMMUNICATION IN HONG KONG AND CHINA: PAST, PRESENT AND FUTURE

Explicit public health policies in Hong Kong started in 1843 during the colonial period, when a committee of public health was set up to tackle the fever that caused the death of 24 percent of the military and 10 percent of the civilian populations (MacPherson 2008, p.12). The Good Order and Cleanliness Ordinance No. 14 of 1845 was passed as the first law relating to public health by the colonial government (MacPherson 2008, p. 12).

Hong Kong Public Health and Health Communication Policies, 1842–1941

During the period before the Second World War (1842–1941), the health policy and communication on the bubonic plague that broke out in Tai Ping Shan in Hong Kong in 1896 was examined by Pryor (1975, p. 61). The plague bacillus was carried by rats to humans and through the air (Pryor 1975, p. 62, 68). Plague (or the Black Death) that killed 80,000 people was thought to have spread either from Yunnan, in the South of China, or via a transportation route from India (Pryor 1975, pp. 62, 68). One of the social determinants that helped spread the disease was the overcrowded tenements in which residents were divided in cubicles, some of which did not even have windows (Pryor 1975, p. 68).

The first public health strategy was a bio-medical approach focused on quarantine, the rapid disposal of corpses, fumigation or disinfection of residences, and evacuation. Hong Kong, then a colony under the British, demolished every house in Tai Ping Shan and rebuilt the area as a public park called Blake Garden (Ng 2014, p.149). This is a top-down approach.

Although the government executed the plan to battle the plague efficiently, this approach earned distrust and resistance from the local residents. Ng (2014, p. 149) describes how Chinese families were known to hide the sick and even dead bodies in their homes to evade forced removal and mass burial, and many of them migrated to China. This incident emphasized that the policymakers have to ensure a good two-way communication and understand the local culture to gain acceptance and cooperation by the locals for the health policy to be successful.

This biomedical approach to health communication worked when the British government set up a bacteriological facility in 1906, which is now the Hong Kong Museum of Medical Sciences, and brought in experts from England, France, and Japan to treat the infected and develop a vaccine. The bubonic plague was controlled in 1925 after 20,000 deaths, which is 70 times the number lost to SARS in 2003 (Ng 2014, p. 149).

HONG KONG PUBLIC HEALTH AND HEALTH COMMUNICATION POLICIES, 1942–49

During the Second World War, public health in Hong Kong was expanded together with advances in vaccination. Health communication strategies in those days, as analyzed from the narrative by MacPherson (2008, p. 20), entailed a top-down, unilateral approach, as anti-TB campaigns were used to "educate" the public in terms of behavioral change communication. Good governance and medical service were executed under a structural intervention plan. MacPherson (2008, p. 20) reported that the Hong Kongers at the Health Department did such a good job in health services and rehabilitation of the colony during the war that almost 2 million people immigrated to Hong Kong.

HONG KONG PUBLIC HEALTH AND HEALTH Communication Policies, 1949–97

MacPherson (2008, pp. 22-25) writes that, in this period, Hong Kong focused more on the biomedical intervention of maternal and child healthcare services to reduce infant and neonatal mortality and eliminate vaccine-preventable diseases in children. In 1948, health communication in Hong Kong could therefore be called a participatory-based advocacy (Servaes and Malikhao 2010). Communication as a non-anti-tuberculosis association was formed. At the same time, a structural intervention

approach to public health was implemented when the housing authority resettled the slum dwellers to standard residential areas. Hong Kong also collaborated with international organizations like WHO to create outreach services. It also limited the number of migrants from mainland China. The health communication strategy—combining social marketing of vaccinations with behavioral change interventions—came up with promotional activities such as giving away gifts to the children who had been vaccinated. This strategy was used to battle cholera and hepatitis infections (MacPherson 2008, pp. 23-24). The public health of Hong Kong after 1997 will be analyzed in conjunction with that of mainland China as Hong Kong was returned to China under the one country, two systems arrangement after that particular year.

CHINESE PUBLIC HEALTH AND HEALTH COMMUNICATION UNDER MAO, 1946-76

The Ministry of Public Health (MOPH) was set up in 1949. Prevention was the work that the MOPH did, with mobile health teams all over the country. The mode of health communication was a mixture of social marketing and propaganda as health was prized close to national security. The government launched a series of "patriotic hygiene campaigns" to emphasize the importance of environmental sanitation. As analyzed by Huang (2013, pp. 31–33), during the great "leap forward campaign" of 1958–59, the principle of public health was based on egalitarianism, and health services were free of charge and accessible as the state took care of society. The health communication policy in this period was top-down, authoritarian, and relied on one-way communication. Mao dictated the public health policy in the 'anti-schistosomiasis campaign' in 1958, and came up with his own form of pest control which included sparrows as pests. This wrong policy led to a plague of locusts as there were not enough sparrows. In other words, a less thought-out policy led to an ecological imbalance.

During the great Cultural Revolution period under Mao, the barefoot doctor program was promoted as a national policy (Huang 2013, p. 43). This was a structural change intervention during which China trained peasants to become medical 'doctors' in the rural areas. Moreover, during this period, health services and medical services were managed in a three-tier system (Huang 2013). Public health and education policies were mixed up with political ideology and resulted in a step backward for China as shown by the epidemiological data in state statistics (MacPherson 2008, pp. 34–35).

CHINESE PUBLIC HEALTH AND HEALTH COMMUNICATION IN POST-MAO CHINA

Changes took place during the economic reforms after Mao passed away in 1976. In 1985, public health policies allowed the private health care establishments to reduce the role of the state (Huang 2013, pp. 57-58). It was a structural change of the public health system. Huang (2013, p. 80) reported that this economic reform model in the health sector "jettisoned the Maoist health model which emphasized quality and universalism". The profit-oriented approach had a profound effect on preventive measures as the public needed to bear the cost of medical fees (MacPherson 2008, p. 36). In 2006, it was found that historical diseases had re-emerged and new diseases such as HIV and AIDS, H5N1 or SARS spread rapidly. Hong Kong has had a "socialist" health care system providing good service at minimal cost to the people (MacPherson 2008, p. 45). In 2006, the Hong Kong SAR Government introduced private health insurance schemes for those who could afford them (MacPherson 2008, p. 45).

HIV/AIDS POLICIES AND COMMUNICATION IN HONG KONG SAR AND CHINA

The HIV/AIDS epidemic is a manifestation of a complex relationship between inequality, particularly gender inequality with regard to education and income, and poverty (Sutherland and Hsu 2012, pp. 27, 43). According to MacPherson (2008, p. 40), the number of people living with HIV/AIDS (PLWHA) in Hong Kong remains low but the increase of HIV infection rates in Guangdong and Shenzhen, which borders Hong Kong, has triggered alarms.

The HIV epidemic in China concerns three different socio-cultural and economic factors. The first is a complex consequence of the poorly controlled blood, drug, and sex trades. The second is three socially marginalized populations: impoverished rural residents in central China, ethnic minorities in border regions, and female migrant workers in many cities. The third factor is homosexuality among Chinese males (Jun and Worth 2010, pp. 13-41).

MacPherson (2008, p. 40) reports an estimated 650,000 PLWHA and an estimated 60,000-80,000 new cases. Ren et al. (2014, pp. 267-284) studied the Chinese newspapers' coverage of HIV transmissions over a decade (2000-10) and came up with the finding that HIV stigmatization in Chinese newspaper was high. The media labeled and stereotyped PLWHA and their relatives. Zhang (2010, pp. 177–194) studied the source of HIV-related stigma and discrimination in China. These, according to him, can be traced to ideas and metaphors associated with the attitudes of government agencies, news media, and health professionals; stigma is exacerbating the HIV/AIDS epidemic as the infected people will not disclose their status, not even to their intimate partners, for fear of being outcast and losing income. Thus, health communication regarding HIV/AIDS in China is pretty negative and impedes the progress of public health. Shi and Chen (2014, p. 295) conducted a quantitative content analysis about PLWHA on Weibo, the Chinese social networking application equivalent to Twitter, and found that more than half of the messages in the HIV/AIDS Weibo Group were about social support, either informational or emotional.

Regarding the HIV/AIDS communication strategy of the government, MacPherson (2008, p. 40) reports that China denied having an HIV problem till 2002, one month after the Global AIDS Fund was announced. Huang (2010, pp. 47, 60) conducted ethnographic studies among female sex workers in China from 1996-2008 and contended that health knowledge alone will not be sufficient to change HIV risktaking behavior. Promoting condom use among sex workers often failed to consider the complex power relations between new sex workers from poor areas, their handlers, and the customers who wanted unprotected sex (Huang 2010, pp. 59-60), and the government policy which used condoms as legal evidence to arrest and fine a sex worker before 2001. The nationwide condom use in local hotels was launched in 2004 and in entertainment areas in 2006 (Huang 2010, p. 62). This is a structural change intervention in the fight against HIV/AIDS. In 2003, the Chinese government launched the "four frees, one care" program consisting of free voluntary HIV testing and counseling; free anti-retroviral drugs for the poor, free medication for all pregnant PLWH, and free schooling for the orphans of people who have died of AIDS (Huang 2010, p. 94). The government also provides screening to prevent bloodborne infections, and a needle exchange program (Huang 2010, p. 94). This has been a biomedical intervention. The government launched a nationwide awareness and safe sex campaign, which was a social marketing communication strategy. From the above mentioned stigmatization studies, there is a need

for more in-depth content analyses of the messages the government sent out to assess their relevance and impact.

SARS, OTHER COMMUNICABLE DISEASES, AND COMMUNICATION

SARS broke out in Guangdong province in the South of China in mid-November 2002 (Huang 2013, p. 89). The mode of communication of the government of Guangdong was denial and silence on grounds of secrecy (Huang 2013, p. 90). Furthermore, fragmented and poorly coordinated provincial policy could not reach the higher authority's decision-making bodies in time when the epidemic broke out. The disease reached Hong Kong in March 2003 (Hung 2003). It was a success of Hong Kong's biomedical invention capacity that the scientists could identify the virus and a team of international experts could develop a vaccine against SARS in May 2003 (Hung 2003). The Hong Kong public health specialists uncovered the flaws in the infrastructure that had helped spread the disease, such as the bad sanitary drainage systems of apartment buildings that allowed mists of contaminated water to spread further.

Hung (2003, p. 94) reports the public health strategies as follows:

The prevention and control measures undertaken in Hong Kong include: (1) preventive education and publicity; (2) tracing the source of infection; (3) introducing five major control measures (compulsory isolation and surveillance of contacts, stopping school and university education sessions, exchange of epidemiological information between Hong Kong and Mainland China, temperature checking of travelers at points of entry and exit, district-wide cleansing campaigns); (4) strengthening collaboration and communication with Mainland China and the WHO; and (5) developing a quick diagnostic test for SARS.

The SARS crisis made the Chinese government acknowledge that animalborne epidemics such as foot and mouth disease, swine vesicular disease, and avian influenza should no longer be kept as state secrets (Huang 2013, p. 94). Communicable or infectious diseases such as plague and cholera, as well as SARS, highly pathogenic avian influenza, polio, and pulmonary anthrax, etc., should be reported within a given period of time. Also, capacity building among bureaucratic organizations has been established in the years since (Huang 2013, pp. 93–94).

NCDs, Public Health and Health Communication Policy in Hong Kong and China

As NCDs are determined partly by the quality of food, water, and air intake, the policies and measures to control and regulate food safety, and water and air pollution, should be analyzed. MacPherson (2008, pp. 42–43) reports:

... there is no comprehensive environment protection law to give force to a maze of regulatory regimes and policies, and no systematic attempt to promote public discussion and awareness of environmental problems.

Regarding food safety, MacPherson (2008, p. 43) reports the serious lack of enforcement and unified supervision to a set standard, even though China has over 200 laws and regulations on standard food safety. She also reports about fake drugs in China. Mou (2014, p. 330) studied the microblogging exchanges about food safety crises in China and found that the Chinese government has not used micro-blogs to inform the public about food safety, even though half of the online users are micro-blog users, and that the authorities' intervention on social media was not sufficient during the period of a food safety crisis.

It is important that the time spent watching television and exposure to advertising and marketing strategies are analyzed. French and Crabbe (2010, p.134) report three explanations of a survey by Ofcom (the independent regulator and competition authority for UK communications industries) into how hours of exposure to television programs and advertising correlate with poor diet, poor health, and obesity among children and adults. The reasons given were: (a) television viewing is a sedentary activity; (b) television viewing is associated with unhealthy snacking and eating high fat, high sugar, and high salt (HFSS) pre-prepared and fast meals; (c) the exposure to advertisements of HFSS food products is high. Moreover, peers and children can influence HFSS food choice by peer pressure (pester power) or nagging the parents for it. Most importantly, marketing power via product promotions and special offers affects children's HFSS food choice.

CONCLUSION AND RECOMMENDATIONS

Health communication, if planned and executed wisely, can amount to more than informing people about diseases and disease prevention and cures; it can alter attitudes in favor of living healthily. It may, to a certain extent, induce positive health behavior but it will not be effective if the communicators pay less attention to the enabling polity and environment that can assist health behavior change.

Health communication research in China that borrows the Western quantitative analyses pays less attention to the enabling environment in which the health communication takes place. The political and economic environments influence the public health policy. Public health during outbreaks should be transparent and timely. Thanks to advances in epidemiological and microbiological research, which form a pivotal part of biomedical intervention, disease control and prevention are possible. However, the examples of disease outbreaks in China show that exclusively top-down command and lack of coherent communication between and among the responsible authorities can aggravate the situation. From the analyses of the public health policies of China, one can see that the civic organizations were not encouraged in China to check and balance the information from the authorities and help monitor the outbreaks. Participation is thus lacking in the health communication process in China. Advocacy-communication can be seen from the social networking sites such as Weibo and in microblogging. Mostly, behavior change interventions and school-based interventions took place for introduction of vaccination and promoting a hygienic environment. Capacity building, domestically in China and with Hong Kong Special Administrative Region or with other nations in times of a health crisis, have always proven to be effective. Law enforcement should be strengthened. Moral ethics should be on the agenda of media advocacy to make the citizens and government officials realize that one cannot make profits at the cost of other people's lives, and that one should not discriminate or victimize others (Malikhao 2016). Public ethics and vigilance on any issue that affects people's wellness and well-being should be on the top agenda of communication and public health to ensure a good environment and food safety as well as a public space for recreation and well-being.

REFERENCES

Anderson, N. B., & Armstead, C. A. (1995). Toward understanding the association of socio-economic status and health: A new challenge for the biopsychosocial approach. Psychosomatic Medicine, 57(3), 213-225.

Brunner, E., & Marmot, M. (1999). Social organization stress, and health. In M. Marmot & R. G. Wilkinson (Eds.), Social determinants of health (pp. 17-43). Oxford: Oxford University Press.

- CDC. (2014). CDC in China. http://www.cdc.gov/globalhealth/countries/ china/pdf/china.pdf. Accessed 11 Jan 2015.
- French, P., & Crabbe, M. (2010). Fat China. How expanding waistlines are changing a nation. London and New York: Anthem Press.
- Harris, R. L., & Seid, M. J. (2004). Globalization and health in the new millennium. In R. L. Harris & M. Seid (Eds.), Globalization and health (pp. 1-46). Leiden & Boston: Brill.
- Hong Kong Government. (2014). Notifiable infectious diseases. http://www. healthyhk.gov.hk/phisweb/en/healthy_facts/disease_burden/comm_diseases/comm_diseases/. Accessed 11 Jan 2015.
- Hong Kong Trade Development Council. (2015). Economic and trade information on Hong Kong. http://hong-kong-economy-research.hktdc.com/businessnews/article/Market-Environment/Economic-and-Trade-Information-on-Hong-Kong/etihk/en/1/1X000000/1X09OVUL.htm. Accessed 9 Jan 2015.
- Hopkins, A. G. (2002). Introduction: Globalization—An agenda for historians. In A. G. Hopkins (Ed.), Globalization in world history (pp. 1-10). London: Pimlico.
- Huang, Y. Y. (2010). Female sex workers in China: Their occupational concerns. In J. Jun & H. Worth (Eds.), HIV in China: Understanding the social aspects of the epidemic (pp. 45-65). Sydney: UNSW Press.
- Huang, Y. (2013). Governing health in contemporary China. New York: Routledge. Human Rights Watch. (2013). World report 2013. http://www.hrw.org/worldreport/2013/country-chapters/china?page=2. Accessed 9 Jan 2015.
- Hung, L. S. (2003, August). The SARS epidemic in Hong Kong: What lessons have we learned? Journal of the Royal Society of Medicine, 96(8). http://www. ncbi.nlm.nih.gov/pmc/articles/PMC539564/. Accessed 12 Jan 2015.
- Jun, J., & Worth, H. (2010). An overview of China's HIV epidemic. In J. Jun & H. Worth (Eds.), HIV in China: Understanding the social aspects of the epidemic (pp. 13-41). Sydney: UNSW Press.
- Kawachi, I., & Kennedy, B. P. (1997). Health and social cohesion: Why care about income inequality? British Medical Journal, 314, 1037-1040.
- Kennedy, B., Kawachi, I., & Prothrow-Stith, D. (1996). Income distribution and mortality: Test of the Robin Hood Index in the United States. British Medical Journal, 312, 1004-1007.
- Leslie, T. (2014). Tiananmen Square Massacre: Look back on how the crackdown unfolded. http://www.abc.net.au/news/2014-06-04/how-the-tiananmensquare-massacre-unfolded/5496454. Accessed 8 Jan 2015.
- Lie, R. (2003). Spaces of intercultural communication: An interdisciplinary introduction to communication, culture, and globalizing/localizing identities. New Jersey: Hampton Press, Inc.
- MacPherson, K. L. (2008). Invisible borders. Hong Kong, China and the imperatives of public health. In M. J. Lewis & K. L. MacPherson (Eds.), Public health

- in Asia and the Pacific (pp. 10-54). London and New York: Routledge Taylor & Francis Group.
- Malikhao, P. (2016). Effective health communication strategies for sustainable development. New York: Nova Science.
- McGregor, R. (2011). The party. The secret world of China's communist rulers. London: Penguin.
- Mou, Y. (2014). What can microblog exchanges tell us about food safety crises in China? Chinese. Journal of Communication, 7(3), 319-334.
- Ng, J. (2014). Hong Kong state of mind. Hong Kong: Blacksmith Books.
- Nisbett, R. E. (2003). The geography of thought: How Asians and Westerners think differently—and why? New York: Free Press.
- Pearson Education. (2013). Lowest infant mortality rate. http://www.infoplease. com/world/countries/lowest-infant-mortality-rate.html. Accessed 9 Jan 2015.
- Powell, J. L., & Steel, R. (2011, December 1). Revisiting Appadurai: Globalizing scapes in a globalized world-the pervasiveness of economic and cultural power. International Journal of Innovative Interdisciplinary Research, 1, 74-80.
- Pryor, E. G. (1975). The great plague of Hong Kong. Journal of the Hong Kong Branch of the Royal Asiatic Society, 5, 61-70.
- Ren, C., Hust, S. J. T., & Zhang, P. (2014, September). Chinese newspaper's coverage of HIV transmission over a decade (2000-2010): Where HIV stigma arises. Chinese Journal of Communication, 7(3), 267-284.
- Servaes, J., & Malikhao, P. (2010). Advocacy strategies for health communication. Public Relations Review, 36(1), 42-49.
- Shi, J., & Chen, L. (2014). Social support on Weibo for people living with HIV/AIDS in China: A quantitative content analysis. Chinese Journal of Communication, 7(3), 285-298.
- So, P. & Ngo, J. (2014, January 7). Hundreds of police to clear Hong Kong's last pro-democracy protest site. South China Morning Post 2015. http://www. scmp.com/news/hong-kong/article/1661842/police-outline-detailsclearance-causeway-bay-occupy-site?page=all. Accessed 8 Jan 2015.
- South China Morning Post. (2015). Childhood obesity still a problem in Hong Kong. http://www.scmp.com/comment/insight-opinion/article/1108529/ childhood-obesity-still-problem-hong-kong. Accessed 10 Jan 2015.
- Sutherland, D., & Hsu, J. Y. J. (2012). HIV/AIDS in China-The economic and social determinant. London and New York: Routledge.
- The Boston Consulting Group. (2013). The 2014 sustainable economic development assessment. https://www.bcgperspectives.com/content/articles/public_sector_ globalization_2014_sustainable_economic_development_assessment/?chapter=4. Accessed 9 Jan 2015.
- The Economist. (2014). Obesity. Chubby little emperors. http://www.economist. com/news/china/21604221-why-china-under-and-over-nourished-sametime-chubby-little-emperors. Accessed 10 Jan 2015.

- The World Bank Group. (2015). Data. GDP per capita. http://data.worldbank. org/indicator/NY.GDP.PCAP.CD. Accessed 10 Jan 2015.
- Trading Economics. (2014a). China GDP annual growth rate. http://www. tradingeconomics.com/china/gdp-growth-annual. Accessed 10 Jan 2015.
- Trading Economics. (2014b). Hong Kong GDP annual growth rate. http://www. tradingeconomics.com/hong-kong/gdp-growth-annual. Accessed 10 Jan 2015.
- Wei, B., & Li, E. (2008). Culture shock! Hong Kong. A survival guide to customs and etiquette. New York: Marshall Cavendish International (Asia) Private Limited.
- Wermuth, L. (2003). Global inequality and human needs. Boston: Pearson Education, Inc..
- Wickrama, K. A. S., Lorenz, F. O., Conger, R. D., & Elder, G. H. (1997). Linking occupational conditions to physical health through material, social and interpersonal processes. Journal of Health and Social Behavior, 38(4), 363-375.
- Wilkinson, R. G. (1997). Health inequalities: Relative or absolute material standards? British Medical Journal, 314(7080), 591-595.
- Williams, D. R. (1990). Socioeconomic differentials in health: A review and redirection. Social Psychology Quarterly, 53(2), 81-99.
- World Bank. (2015). China overview. http://www.worldbank.org/en/country/ china/ overview. Accessed 8 Jan 2015.
- World Health Organization. (2014). Noncommunicable diseases (NCD) country profiles, 2014. China. http://www.who.int/nmh/countries/chn_en.pdf. Accessed 10 Jan 2015.
- World Health Organization. (2015). Noncommunicable diseases. http://www. who.int/mediacentre/factsheets/fs355/en/. Accessed 11 Jan 2015.
- Yacht, D. & Beaglehole, R. (2004). Globalization of Risks for Chronic Diseases Demands Global Solutions. In R. L. Harris & M. Seid (eds.) Globalization and Health. Leiden & Boston: Brill, pp. 213-233.
- Zhang, Y. (2010). Stigma and HIV discourse in China. In J. Jun & H. Worth (Eds.), HIV in China: Understanding the social aspects of the epidemic (pp. 177-194). Sydney: UNSW Press.
- Zhang, L. & Wilson, D. P. (2012). Trends in notifiable infectious diseases in China: Implications for surveillance and population health policy. http://www.plosone. org/article/info%3adoi%2f10.1371%2fjournal.pone.0031076. Accessed 11 Jan 2015.
- Zhao, Y. (2008). Communication in china. Political economy, power and conflict. Lanham: Rowman & Littlefield.