



Editorial

Oncology Healthcare Provision in Hong Kong: Viewpoint of a Clinical Oncologist

V.H.-F. Lee ^{*}†^{*} Department of Clinical Oncology, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong SAR, China[†] Clinical Oncology Center, The University of Hong Kong-Shenzhen Hospital, Shenzhen, China

Received 29 April 2019; accepted 22 May 2019

Hong Kong is undoubtedly one of the most successful cities where East meets West. It became a British colony after the signing of the Treaty of Nanking (Nanjing) following the defeat of the Qing Dynasty of China in the Opium War in 1842. Subsequently, the Kowloon peninsula, the New Territories and other outlying islands were ceded and leased to Britain in 1860 and 1898, respectively. It has never been imagined before that these historical events have drastically changed Hong Kong from a fishing port to a metropolitan city over the past 177 years. Tributes are paid to its strategic geographical location (excellent ‘feng shui’ backed up by the mainland and facing the big ocean) with a deep harbour and high hills providing shelter against undesirable weather conditions, influence of the West after the Industrial Revolution, the credible law system and the diligence and wisdom of the people from Hong Kong, mainland China and the West to create such a favourable environment for industry in the past and now business, finance, technology and tourism. In 2018, its population was about 7.4 million people, who contributed to the estimated gross domestic product of US\$64 794 per capita (purchasing power parity based). Hong Kong is also empowered with a robust and easy-to-access healthcare system to safeguard the people’s health.

Indeed, Hong Kong is one of the healthiest and richest regions in the world. Residents of Hong Kong enjoy a very long life expectancy. In 2017, the life expectancy at birth was 82 years for men and 88 years for women, which represents an increase of about 8 years when compared with 30 years ago. According to the recent Hong Kong census and the Hong Kong Cancer Registry [1,2], cancer is the most common cause of death in Hong Kong, accounting for about 30% of all registered mortalities in 2016. The public healthcare system

is run by the Hospital Authority and the Department of Health [3,4]. The Hospital Authority, established in 1990, is a statutory body that governs and manages all 43 public hospitals and health institutions, as well as the vast majority of specialist and general outpatient clinics in Hong Kong. The Department of Health, a governmental department under the Food and Health Bureau, takes care of health education, protection, such as vaccination, surveillance, epidemiology and provides medical services for sexually transmitted diseases, child health assessments, dental services, etc. The public health sector, supported by the government’s annual spending of HK\$80.6 billion (US\$10.3 billion or £7.8 billion), roughly equivalent to 4% of its gross domestic product, covers more than 90% of medical services.

Approval for drug use is governed by the Department of Health. As the vast majority of cancer patients receive cancer treatment in public hospitals, the drug must also be approved and listed in the Hospital Authority Drug Formulary before it can be prescribed and dispensed to patients. Unfortunately, patients still have to pay in full themselves for these drugs, even if they are approved and listed in the Drug Formulary, except for some old chemotherapeutic agents, like platinum compounds, which are provided free of charge. One of the most distinctive features of the healthcare system in Hong Kong is the lack of a territory-wide mandatory patient medical insurance programme. Despite the reasonably low taxation rate (maximum 15% of salaries for income tax), the cost of living is among the highest in the world and there is strong opposition to setting up a mandatory medical insurance programme by contributing a few more per cent of income, even after consultations and open discussions for more than two decades. Although almost all targeted drugs and immunotherapeutics are self-financed, subsidies through the government’s Community Care Fund and Samaritan Fund are available to the very poor and sick. Some non-governmental organisations work with drug companies to

Author for correspondence: V.H.-F. Lee, Department of Clinical Oncology, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong SAR, China. Tel: +852-2255-4352; Fax: +852-2872-6426.

E-mail address: vhflee@hku.hk.

provide a ceiling programme so that patients do not need to pay further after a specified duration of drug treatment. Other forms of drug subsidy programme include an intercalated free drug programme offered by the pharmaceutical companies and private donations for certain drugs.

The provision of radiation therapy is more straightforward in the public sector. The Hospital Authority Central Coordinating Committee is responsible for decision making on replacing obsolete radiation machines with new ones fully funded by the Hospital Authority. Contrary to drug treatment, radiation therapy is considered to be 'very cheap', as the charges are based on the number of fractions not the manpower/machine/technique used. For instance, the whole radiotherapy planning and treatment cost of intensity-modulated radiation therapy in 35 fractions for a nasopharyngeal carcinoma is about HK\$3000 (i.e. US\$385 or £290). Similarly, stereotactic body radiation therapy of five fractions costs only HK\$500 (US\$65 or £48). Therefore, running a clinical trial using novel radiation techniques is more easily achievable in Hong Kong from the patient's point of view, if the radiation workers are willing to work a bit longer for patient set-up, which is largely offset by the shorter delivery time.

The other interesting issue with cancer care in Hong Kong is which health care professionals deliver cancer management. As a former British colony, Hong Kong oncologists still follow the British style of training and attend the conjoint first and final examinations for the Fellowship of the Royal College of Radiologists (FRCR) co-organised by the Royal College of Radiologists and the Hong Kong College of Radiologists for clinical oncologists and another set of examinations by the Hong Kong College of Physicians and the Royal College of Physicians for medical oncologists, as stipulated clearly in the training syllabus and regulations of the respective colleges. Although it is commonplace to divide oncology into radiation oncology and medical oncology worldwide, Hong Kong is one of the very few regions in the world where cancer care is dominated by clinical oncologists, representing 80% of all Hong Kong oncologists, who are capable and competent of providing both medical therapies and radiation treatment. Clinical oncologists in Hong Kong also provide comprehensive palliative care services in public oncology centres. In fact, a further 4-year subspecialty training in palliative medicine is provided by the Hong Kong College of Radiologists after passing the FRCR Part IIB examination, with a quotable qualification in the Specialist Registrar of the Medical Council of Hong Kong (more or less equivalent to the General Medical Council of the UK) after completion of the required training and a pass in the subsequent oral examination [5,6]. On the contrary, it is more commonly observed nowadays that clinical oncologists in the UK are more specialised in radiation oncology than clinical oncology after passing the Final Examination for the FRCR.

Oncology services in Hong Kong have been even more intriguing since the return of sovereignty to China in 1997. The unprecedented and brilliant principle 'One Country Two Systems' promulgated by the late Xiao-Ping Deng shows the vivacity of how Hong Kong's healthcare system prevails in the mainland. The University of Hong Kong-Shenzhen Hospital (HKU-SZH), built by the Shenzhen municipal

government and endorsed by the China central government, and just separated from Hong Kong by the Shenzhen River, is the first hospital in China that is essentially under the Hong Kong management model [7]. Established in July 2012, HKU-SZH is currently providing public comprehensive care to all patients with all types of disease, with clinical oncology services as one of the five centres of excellence. With special permission of the central and municipal governments of China, the clinical academic staff of HKU and some other private doctors in Hong Kong can practise oncology in this hospital as honorary consultants without the need to pass additional licensing examinations in China. The 1.5 h drive from the south to the north for about 35 miles, leaving at 7am from the Queen Mary Hospital (a HKU teaching hospital) was definitely not easy to begin with. Truly it was an experiential learning for us, as we had to tune our biological clock 2 hours earlier in order to catch up the shuttles. However, this has been gradually overcome by the enthusiasm of the doctors in Hong Kong, who would like to refine the deep-rooted healthcare system on the mainland, especially the practice of accepting red packets as a special honorarium or bribery from patients who would like to receive expedited and better care. Now we can also carry out cross-border preclinical and clinical research and our expertise can be passed on to the mainland. In return, the large patient sample size with similar patient characteristics and the huge financial and technology resources in Shenzhen can make trials more easily accomplishable.

The legend of Hong Kong is not just because of the progress it has achieved by the contribution of the UK, China and the Hong Kong people, but also the endless verve and exemplariness it has inspired and the influence it has had on neighbouring cities after accumulating the experience of failures and successes over the past 170 years. It shall continue to glow and flourish as before, of that we are confident and certain.

Conflict of interest

The authors declare no conflict of interest.

References

- [1] Census and Statistics Department. Hong Kong special administrative region. Available at: <https://www.censtatd.gov.hk/hkstat/sub/so380.jsp>. [Accessed 1 March 2019].
- [2] Hong Kong Cancer Registry. Available at: <http://www3.ha.org.hk/cancereg/>. [Accessed 1 March 2019].
- [3] Hospital Authority of Hong Kong. Available at: https://www.ha.org.hk/visitor/ha_index.asp?Content_ID=0&Lang=ENG&Dimension=100&Ver=HTML. [Accessed 1 March 2019].
- [4] Department of Health of Hong Kong. Available at: <https://www.dh.gov.hk/eindex.html>. [Accessed 1 March 2019].
- [5] Hong Kong College of Radiologists. Available at: <https://hkccr.org/>. [Accessed 1 March 2019].
- [6] The Medical Council of Hong Kong. Available at: https://www.mchk.org.hk/e_index.html. [Accessed 1 March 2019].
- [7] The University of Hong Kong-Shenzhen Hospital. Available at: <https://www.hku-szh.org/>. [Accessed 1 March 2019].