DEVELOPMENT OF OPTOMETRY IN HONG KONG

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ABSTRACT

Optometry in Hong Kong faces the worst projected workforce shortfall among all regulated health care professions. Local professional optometric education has been available since the 1970s and continues to evolve to keep pace with technological advancements and optometry programs in the region and beyond. However, optometric legislation and practice, particularly in relation to public health care, often lag behind. This leads to the slow progress of the development of optometry in Hong Kong. This article provides an overview of the current status of optometry in Hong Kong, particularly regarding the education, legislation and practice of the profession, and adds some thoughts toward future development.

KEYWORDS

Hong Kong, optometry

INTRODUCTION

It is well known that optometry in Hong Kong severely lacks the necessary workforce to meet present and future demands. According to a 2017 Health Bureau report[1], out of the 13 regulated health care professions subject to statutory registration, optometrists face the worst projected workforce shortfall. Focusing on the trend rather than absolute numbers as recommended in the report, the projected workforce gap of optometrists is steepest, with "best guestimate" statistics increasing from a projected shortfall of 3% in 2016 to 24.1% in 2030. For comparison, physicians also face a significant shortfall, with "best guestimate" statistics increasing from a projected shortfall of 2.4% in 2016 to 6.8% in 2030.

With an aging population and increasing workforce gap for health care services, especially for optometry, Hong Kong's health care system has been undergoing reform. Most notably, the Health Bureau released the Primary Healthcare Blueprint (the Blueprint)[2] in December 2022 to formulate the direction of development and strategies for strengthening Hong Kong's primary health care system.

Accounts of optometry in Hong Kong have previously been provided by Woo in contributions including but not limited to "Ophthalmics in Hong Kong" (1978)[3], "Optometry in Hong Kong" (2000)[4], "Diversity in optometric education within and across China: challenges for harmonisation" (2005)[5], and "History of the School of Optometry at the Hong Kong Polytechnic University" (2018).[6] The purpose of this paper is to provide an update on the development of optometry in Hong Kong, particularly regarding the education, legislation and practice of the profession in recent years.

OPTOMETRIC EDUCATION

The Hong Kong Polytechnic University (PolyU) remains the sole academic institution in Hong Kong to offer optometry programs through its School of Optometry. The School of Optometry has recently been ranked the first in Asia.[7] The origin of the School of Optometry can be traced back to the 1970s and the founding of the Institute of Medical and Health Care, which provided a certificate course in ophthalmic optics.[6] Over the past 45 years, the School of Optometry has trained more than 1,200 optometrists, accounting for about 60% of existing practitioners in Hong Kong. Currently, graduates from the School of Optometry's Bachelor of Science (Hons) in Optometry can register as Part I optometrists in Hong Kong, can also register to practice optometry in Malaysia[8] and Singapore[9], as well as directly sit the exam for registration in Australia and New Zealand.[10]

PolyU founded its optometry clinic in 1985 to support relevant education, clinical practice and research.[6] Now, the Optometry Clinic continues to provide eye care services for the public and includes a children's clinic, an advanced contact lens clinic, a myopia prevention and control center, and a vision rehabilitation clinic for people with low vision.[11] Additionally, the Optometry Clinic offers opportunities for clinical training for senior undergraduates and facilitates vision and eye research by faculty members. The School of Optometry's current research focuses on myopia prevention and the aging eye.[11]

Today, PolyU offers a range of undergraduate and postgraduate optometry and vision science programs. The following paragraphs seek to document the current programs offered[11], and especially to highlight new developments since Woo's paper in 2018.[6]

For undergraduate programs, PolyU adopted a department-based scheme admission from 2022 onward, wherein students admitted to the BSc (Hons) Scheme in Optometry will be awarded one of the following titles upon successful completion of the graduation requirements:

BSc (Hons) in Optometry

BSc (Hons) in Vision Science + AI and Data Analytics

BSc (Hons) in Vision Science + Innovation and Entrepreneurship

The first optometry program consists of five years of full-time study, including clinical practice. The latter two Vision Science and Secondary Major programs consist of four years full-time study.

For research postgraduate programs, there are the Doctor of Philosophy (Ph.D.) and Master of Philosophy (MPhil) programs. The Ph.D. is a three-year full-time program of 15 credits, while the MPhil requires nine credits.

There are two taught postgraduate programs that are recent additions. The new Doctor of Optometry (DOptom) program commenced in January 2025. It is a 2.5-year full-time or five-year part-time professional doctorate program, which aims to advance the knowledge and training of optometrists in selected optometry specialty areas.

Another new program is to be launched in September 2025—the Master of Science in Vision Science and Innovation. It is a one-year full-time or two-year part-time pioneering program that offers various professionals in health care, computer science and other related disciplines the opportunity to further advance their education in interdisciplinary and innovative vision science, with an emphasis on the importance of developing cutting-edge technologies.

Moreover, there is the Doctor of Health Science (Optometry), a two-year full-time or four-year part-time program, which focuses on the practice of health sciences and care provision in addition to research. It is meant to prepare experienced health care professionals, in this case optometrists, for leadership positions.

For other post-qualification education, the School of Optometry offers residency programs and Continuing Professional Development activities.

It is evident that Hong Kong's optometric education has been evolving to stay at the forefront of both optometric and socio-cultural advancements and technologies, in order to meet the professional needs of optometrists. Accordingly, they are able to acquire the specialized knowledge and skills needed to address the diverse eye care needs of the public.

OPTOMETRIC LEGISLATION

Hong Kong's Supplementary Medical Professions Ordinance defines an optometrist as "A person trained in the practice of—(a) testing vision; (b) prescribing optical appliances; (c) fitting optical appliances; or (d) supplying optical appliances on prescription."[12] This definition was adopted in 1985 and promulgated in 1996 through the Supplementary Medical Professions (Amendment) Bill, accompanying the first licensure of optometry in Hong Kong.[5] In 1985, the Secretary for Health and Welfare remarked that:

"The purpose of the definition is to describe the work of the optometry profession in sufficiently broad terms to ensure that it embraces all those engaged in optical work who ought to be registered. This definition does not purport to describe all the work an optometrist may do, but at the same time it does not prevent him from performing additional functions, such as the detection of ocular diseases. By the same token, restrictions may be imposed, through regulations, on the type of work which can be undertaken by different categories of optometrists."[13]

It should be noted that Hong Kong's optometrists have the jurisdiction to detect and diagnose ocular diseases and other conditions of the eye.

The practice of optometry in Hong Kong continues to be governed by the Optometrists Board (a statutory body established in 1986 under the Supplementary Medical Professions Ordinance). The Optometrists Board maintains a register of optometrists and ensures the quality of optometric services, such as through its Code of Practice and its Mandatory Continuing Professional Development Scheme.

Registration of optometrists was officially implemented in 1996.[5] Currently, the register of optometrists consists of four parts based on qualifications, with Part IV being the lowest. Part I has no restrictions on practice, while the other Parts do. As of December 2024, there are 1,258 Part I registrants, 132 Part II, 16 Part III, and 877 Part IV, totaling 2,283 registered optometrists in Hong Kong.[14]

Moreover, though optometry is categorized as an allied health profession under the Supplementary Medical Professions Ordinance, optometry is in fact a primary care profession from which patients may seek primary care services directly without physician referrals. Optometrists are indeed recognized as primary care providers, both in the Blueprint and in other Government documents. These include the "Your Health, Your Life: Healthcare Reform Consultation Document" published in 2008[15], which in addition to recognizing optometrists as primary care providers, also defines optometrists as being able to diagnose eye conditions and other related systemic conditions. Despite acknowledging optometry as primary care providers, the Blueprint also inconsistently relegates optometrists to the category of allied health professionals.

OPTOMETRIC PRACTICE

In the 1970s when optometry was beginning to emerge as a profession in Hong Kong, there were eye examiners but very few trained optometrists.[3] The then Hong Kong Medical and Health Department supplied eye care to the public through its outpatient clinics, in which refractions were usually performed by "optical technicians" and any necessary further examinations and care were provided by an ophthalmologist or a contact lens practitioner. "Opticians" were also employed by various optical companies, but the majority did not have high school education and significant proportions of these service providers had only one year or less of experience in dispensing, refraction or contact lenses.

Hong Kong's optometric practice has come a long way. At present, optometrists in Hong Kong are generally employed as professional optometrists in the private sector, or in the public sector by the Hospital Authority or Department of Health. There are also those employed by companies involved in eye care, as well as those who are engaged in research or further studies.

Optometrists employed by the Hospital Authority are compensated at a lower level compared to both allied health professionals and other primary care professionals, despite having equivalent qualifications and expertise. Allied health professionals including but not limited to physiotherapists, occupational therapists, and radiographers have the same higher pay grades than optometrists; primary care professionals such as physicians and dentists have much higher pay grades than allied health professionals. The human resources department was asked to review optometrists' pay grades in 2010 and concluded that it should be increased to be equivalent with the pay grades of allied health professionals. Despite this conclusion, optometrists' pay grades still remain one grade lower than that of all allied health professionals throughout the past years of minor adjustments.

Furthermore, optometrists are currently unable to make direct referrals to the Hospital Authority. In contrast, private hospitals, including university-affiliated hospitals, accept referrals made by optometrists with no difficulty. There are also some stand-alone cases of optometrist referrals being directly endorsed by family physicians who recognize the optometrists' expertise and judgement, and these referrals are accepted by the Hospital Authority.

Optometric associations in Hong Kong currently include The Hong Kong Society of Professional Optometrists, The Hong Kong Optometric Association, The Hong Kong Association of Private Practice Optometrists, and Hong Kong Cornea & Contact Lens Society. The Hong Kong Optometric Association was formed early on in 1965 and was also one of the driving forces behind the formation of Hong Kong's optometric education and legislation.[3]

The ongoing primary health care reforms, outlined by the Blueprint, provide an opportunity for the practice of optometry to become better adapted to the needs of the public. In general, the Blueprint aims to develop an accessible and community-based primary health care system by restructuring primary health care governance, subsidizing and reallocating resources, enhancing the workforce and improving telehealth and digital connectivity.

The Blueprint stresses further development of publicly funded primary health care services such as District Health Centers. As proposed hubs for health care services and resources for each district, District Health Centers regrettably still do not include all primary care providers in their directly accessible core team. Optometrists are not included, nor are dentists and Chinese medicine practitioners, even though some allied health professionals such as physiotherapists are included.[16]

The Blueprint also proposes further developments for the Primary Care Directory, which was first launched in 2011 with Doctor and Dentist Sub-directories, followed by the Sub-directory for Chinese medicine practitioners in 2012.[17] Particularly, the Blueprint suggests that further sub-directories for physiotherapists, occupational therapists, and pharmacists should be developed first; sub-directories of other health care professionals, including optometrists, are recommended to be developed in a later phase. The Subgroup on Optometrists Sub-directory was established in 2013 under the Working Group on Primary Care, which was subsequently dissolved in December 2015. The Optometrists Sub-directory was in fact ready for implementation in 2015.

CONCLUDING REMARKS

In 2005, Woo remarked that education and legislation always go hand in hand.[5] This still holds true. Although optometric education in Hong Kong has continued to evolve, there is still work to be done to ensure the sufficient provision and continued advancement of eye care. For the benefit of the public, Hong Kong must seize the opportunity provided by ongoing health care reforms to align its legislative and institutional support with the expanding capabilities of its optometry professionals.

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