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The following publication Wong, F.K.Y., Wong, A.K.C. (2020). Advanced Practice Nursing in Hong Kong and Mainland China. In: Hassmiller, S.B., Pulcini, J. (eds) Advanced Practice Nursing Leadership: A Global Perspective. Advanced Practice in Nursing. Springer, Cham. is available at https://dx.doi.org/https://link.springer.com/chapter/10.1007/978-3-030-20550-8_9.

A road less traveled - ANP development in mainland China and Hong Kong

Two roads diverged in a wood, and I took the one less traveled by,

And that has made all the difference. (Robert Frost)

Frances Kam Yuet Wong & Arkers Kwan Ching Wong

Prologue

This chapter is a documentary of how nurses in mainland China and Hong Kong strive for excellence in the development of nursing. The incremental success in reaching the higher goals takes work of multiple key players and opportunities available at the time, with sustained efforts bringing the work forward to the next stage. In the process, the ingredients of the *right time*, *right person* and *right moments* are all important. The leaders emerged in these opportune moments are catalysts to bring about the success. The first author, FW, is privileged to be involved deeply in the development of advanced nursing practice in Hong Kong and mainland China particularly in the Greater Bay Area. Together with her, there are many leaders in the field that contribute greatly, including leaders in the hospital services, public health, universities and government policy. FW was involved in a number of strategic works related to advanced nursing practice such as the pioneering of nurse clinics, the establishment of the Hong Kong Academy of Nursing and the alliance of key partners in the Greater Bay Area. All these development cannot be accomplished without the right timing with policy support and a mission shared by visionary individuals. Here below begins the story of development of advanced nursing practice in mainland China and Hong Kong.

Background

Nurses are called to respond to societal needs in promoting the health and well-being of the people they serve. Nurses at the entry level of the profession possess the competence to function as Registered Nurses, essentially as generalists. The novice nurse will soon realize that the basic pre-registration education is not adequate to deal with day-to-day clinical practice. The advancement of medical and healthcare sciences demands that nurses today expand and extend the role to assume more responsibilities in healthcare. Progressing through the levels of practice from novice to expert, the nurse will develop more advanced competencies in solving complex clinical situations. The common term for describing this level of nursing competence is advanced nursing practice, denoting practice beyond the basic level.

[x -The International Council for Nurses defines the advanced practice nurse (APN) as a registered nurse who possesses an expert knowledge base, complex decision-making skills

and clinical competencies (1). In fact, these APNs play a key role in the nursing and healthcare professional team, contributing to client care, healthcare delivery services and professional development (2). They act as clinical leaders in the specific specialty area they represent, bringing about positive client outcomes and innovative approaches to care delivery that enhance accessibility, efficiency and effectiveness (3,4).]

Advanced nursing practice is developing around the world, but the stage of development varies from country to country. Approximately 70% of hospitals around the world have some form of advanced practice nursing (5). Hong Kong and mainland China, like the other parts of the world, face a similar need for service that is driven by medical and healthcare advancement supported by technology and new evidence in managing complex client cases. These require nurses to be better equipped with the necessary competence to deal with complicated situations. The experience of the authors is that the successful introduction of APNs requires at least three interrelated factors: need for service, APN education and competence, and system and policy support.

[x-Nurses with more education not only are ready to take on more responsibilities but also see the opportunities to change practice to produce optimal health outcomes. The interacting effects of service and education can enhance quality of service, but the existence of only two of these factors alone is not sufficient to make ANP bloom and flourish. Support at the system and policy levels is equally important to ensure that the advanced level of nursing practice is safe and meets the professional standards specified for advanced level practice in the related specialty area.]

This chapter will use Hong Kong and mainland China (Guangzhou) as a case study to illustrate how advanced nursing practice has developed with the interplay of the above three factors over the last two decades. China is a vast country, and the development of ANP can vary greatly across provinces and cities, depending on local contextual situations such as resources, education level, management support and the like. This chapter will focus on the city of Guangzhou, which is near Hong Kong and has similar demographic and economic conditions. Guangdong province has used its geographical advantage to engage in close networking with Hong Kong in the development of specialty nursing and APNs.

The key events related to the three areas of 'need for service', 'education and competence', and 'system and policy support' in Hong Kong and Guangzhou will be depicted. Table 1 provides a synopsis of the key events in these two cities.

1. Need for service

In Hong Kong, the public health system funded by the government has shouldered the major healthcare demands of citizens, especially in hospital care (6). At the end of 1980s, healthcare reform measures resulted in the establishment of an independent Hospital Authority. The provisional Hospital Authority was tasked with devising mechanisms to optimize the use of available resources, improve efficiency, and attract, retain and motivate

qualified staff (7). One of the key changes in the reform related to nursing was the development of both managerial and clinical career pathways. The managerial pathway was clear, with the post of ward manager and department operations manager established in every ward and department. The clinical pathway was less structured and well defined. There is a rank above the staff nurse, which is the clinical nurse specialist (CNS). However at first only 22 CNSs had appointments in 14 clinical areas in 1993 (8). The establishment of CNS positions is dependent on the available resources. CNSs, equipped with expertise in the related area of practice, have built collaborative relationships with other members of the healthcare team and provided quality care that meets service needs (7). They have proven to be valuable members of the healthcare team, contributing to total patient care.

An example of the work of these APNs is the introduction of nurse clinics. Nurse clinics were introduced in Hong Kong in 2000 with the aim of enhancing continuity of care and access to care, and to contain costs (3). The clinics provide opportunities for patients to receive early intervention using non-pharmaceutical nursing therapeutics and timely review of their clinical condition in-between medical consultations. The optimal maintenance of clients' health by providing education, counselling and case management helps to maintain clients in the community as long as possible without the need for inpatient service. A research study conducted at the time when the nurse clinics were launched has shown that they were able to improve client symptoms, prevent complications and enhance patient satisfaction (3). Based on this evidence, a set of guidelines on the accreditation of Hospital Authority Nurse Clinics was established to guide the corporate quality assurance.

In order to make further use of advanced nurses on the clinical front and thereby improve quality of client care and health outcomes, the position of Nurse Consultant was introduced in Hong Kong in 2009. Nurse Consultants have been proven to be able to address complex population health needs and assume a clinical leadership role in shaping guidelines and policy in collaboration with an inter-professional team at the system level (9). [JOYCE: explain how they differ from the CNS and also what their education is especially in leadership]

In mainland China, the need to develop specialty nursing was first mentioned in the Chinese Nursing Career Development Plan (2005-2010) (10). In the subsequent five-year plans, the need to develop specialty nurses was reiterated and more directive details were provided. The 2011-2015 strategic plan specified that a total of 25,000 specialty nurses should be developed in the areas of critical care, emergency, blood purification, oncology, and operation room nursing (11). The current 13th Five-Year Plan emphasizes the need to educate a critical mass of clinical specialists to enhance the standards of the overall nursing team in meeting the multiple levels of people's healthcare needs, extending from the hospital to the community (12). Patients with high needs, particularly in the community, are those with chronic illness, rehabilitation needs and long-term conditions, the elderly, and those requiring palliative care.

2. Education and competence

In Hong Kong, the education of specialty nurses was started in the Hospital Authority with the establishment of the School of Post-basic Nursing Studies in 1995. Before this time, nurses requiring specialty preparation were sent overseas for training. The School has now

been renamed as The Institute of Advanced Nursing Studies and integrated into the Hospital Authority Institute of Health Care. It continues to provide Specialty Nursing Certificate Courses to nurses who work in the Hospital Authority. While the Institute offers quite structured in-service type courses to equip nurses with knowledge and skills in a variety of specialty areas, the nursing profession in general feels the need to deepen and broaden education programs, going beyond training to meet immediate service needs. With this mission, the Hong Kong Academy of Nursing (HKAN) was set up to position advanced nursing practice in Hong Kong to be on par with the international standards.

The exploration of the establishment of the HKAN was commenced in 2002 with the setting up of a working group in the Nursing Council of Hong Kong. The government agreed in principle and delegated the work to an HKAN Preparatory Committee. Between 2009 and 2011, with the support of a Fulbright Scholar Consultant and other overseas experts, as well as tremendous efforts among the local specialists, a set of generic competencies for advanced nursing practice was formulated. During the discourse, there was much discussion on the categories of specialization. The committee adopted the principle that the categories would remain broad so as to gather a critical mass of nurses in a defined specialty area but allow sub-specialization within the larger category. Another consideration was that the categories needed to be in alignment with the classification of healthcare services in order to facilitate readiness of application of expertise in service. In 2012, 14 specialty colleges were established under the umbrella of the HKAN: the Colleges of Cardiac Nursing, Community and Public Health Nursing, Gerontology Nursing, Critical Care Nursing, Education and Research in Nursing, Emergency Nursing, Medical Nursing, Mental Health Nursing, Midwives, Nursing and Health Care Management, Orthopaedic Nursing, Perioperative Nursing, and Surgical Nursing. Today, there is a system in place within the HKAN to accredit the specialty colleges to endorse their specialty competencies, theoretical curricula, clinical logbooks and examinations. The HKAN works closely with the universities and clinical settings to facilitate the education of younger nurses and enable them to fulfill the education requirements. Nurses who have met the curriculum requirements and passed the examination are granted membership and fellowship of the HKAN with a designated specialty. Details are available at www.hkan.hk.

The first master's degree program in nursing was commenced in 1995 at the Hong Kong Polytechnic University. The other two publicly funded universities, The Chinese University of Hong Kong and The University of Hong Kong, also now offer master's programs in nursing with a clinical focus. These universities work closely with the HKAN to align their curricula to partially meet the requirements of the HKAN and the specialty colleges. There are also interdisciplinary programs in collaboration with the Faculty of Medicine in the local universities, which provide focused clinical programs to equip nurses with advanced competencies.

In mainland China, one of the earliest specialty nursing training programs was introduced in 2001, when the Chinese Nurses Association invited Hong Kong to deliver an ICU course in Beijing. Guangzhou took advantage of its geographical proximity to Hong Kong and

commenced the first specialty training course at postgraduate level in 2004. The Hong Kong Polytechnic University provided a consultancy course for Nanfang Medical University, concentrating on four specialty areas: intensive care, infection control, geriatrics and diabetes care (13). Upon completion of the consultancy course, students can proceed to complete the master's program at Nanfang Medical University. In 2007, the Guangdong Ministry of Health made a contractual agreement with the Hong Kong Hospital Authority to prepare 614 APNs from 150 hospitals in 14 different specialties over four years (14).

Nursing in mainland China has conventionally been positioned as a discipline under medicine. In 2011, nursing was upgraded to a first-level discipline, which means that the discipline of nursing has the autonomy to define its own curriculum and education. Since then, education at the postgraduate level has developed very rapidly. Clinical master's programs with the aim of preparing nurses to practice at an advanced level are mushrooming. There are now at least 85 clinical master's programs across the country, with the universities working closely with their clinical partners to design curricula to meet service needs. A program in Beijing has begun to educate a small number of nurse practitioners (2).

3. System and policy support

[JOYCE: What was the role of nursing leaders here?] The development of advanced nursing practice in Hong Kong was mainly driven by service needs. System and policy support are needed to set standards that are applicable across various settings, with well-defined education requirements and clinical competencies to protect both the public and the profession. The HKAN mentioned above is the main professional association striving for statutory status for APNs and for title protection in Hong Kong. The Hong Kong government in principle agreed with the direction and assigned the work to an HKAN Preparatory Committee, as described above. The committee then evolved into the HKAN, which was officially set up in 2012. In 2017, the Food & Health Bureau of the Hong Kong government issued a 'Strategic Review on Healthcare Manpower Planning and Professional Development', which acknowledged that specialisation in nursing is instrumental in helping to revitalise healthcare systems. In 2018, the Hong Kong government instructed the Nursing Council of Hong Kong to set up a work group to formulate the scope of practice and core competencies, devise a mechanism to recognize training institutes, and set up an advanced/specialised practice register under the Nursing Council. In light of the outcome of the pilot scheme, the government is considering devising a statutory registration scheme in the long run. Over the years, the HKAN has lobbied different stakeholders and the government to work towards regulating APNs, and that work is ongoing.

In mainland China, there are neither well-defined core and specialty competencies for APNs in the related areas of practice nor a certification system to confirm their standards. The Guangdong Nurse Association has adopted the curriculum and specialty competencies from The HKAN to educate APNs. In 2017, China issued a key strategic development blueprint to link Hong Kong and Macau with nine mainland cities in the region to form the Greater Bay Area. This initiative involves a number of collaborative projects to leverage the composite

advantages of the places to drive business and the economy. The APN collaborative project between Guangzhou and Hong Kong represented an opportunity to deepen the partnership relationship. The HKAN shares the APN curriculum and expertise in providing consultation to its Guangzhou counterparts. In December 2018, a certification assessment exercise was conducted to confirm the standards of 32 Guangzhou nurses working in six specialties (management, medical, mental health, midwifery, pediatric, surgical) and grant them a status equivalent to that of APNs of a similar standard in Hong Kong in terms of education, clinical experience and competence. This is a successful initiative to link education and certification together. The APNs from Guangzhou who participated in the certification exercise have provided evidence demonstrating their impact on clinical services and the profession (ref). To date, Hong Kong still has no national system to standardize the competencies, educational requirements and certification system of APNs, in spite of the fact that many provinces are delivering courses based on their own interpretations of what advanced nursing practice should be.

Conclusion

The account of APN development in Hong Kong and Guangzhou reveals some interesting insights. The evolvement of a profession is a process. It starts with the need for services that challenge the status quo of nursing. From the 1990s to the early 2000s, healthcare services became more complex and specialized. There have been attempts to enhance quality of care with the support of the appropriate professional talents, and at the same time there is much pressure to contain costs so as to sustain a cost-effective system. In the midst of these developments, nurses have to differentiate themselves into roles that can claim ownership in specific areas of practice, so that they can make contributions to the evolving healthcare teams. In Hong Kong, these service needs are manifested by the establishment of clinical nurse specialist roles in health care organizations. The launch of the Hospital Authority in Hong Kong with the commencement of a clinical career track in the 1990s was an important start for advanced nursing practice in Hong Kong. The defined need for advanced nursing practice in mainland China is revealed in national documents. It should be noted that the development of nursing in China has been catching up very quickly in the last few decades, since the end of the 10 year Cultural Revolution in 1975. Higher education in nursing in the country was resumed in 1984, with one of its challenges being to increase the acute low ratio of nurses to patients?. As of 2018, China had a total number of 4.099 million nurses, with a ratio of 2.94 nurses to 1000 population (15). This is a big difference compared to 2015, when there were a total of 3.241 million nurses in the country (2). An adequate number of nurses is important in ensuring that nursing strength does not focus only on meeting essential needs but has a capacity that can build a higher level of practice to lead the profession forward.

The cultivation of talent takes time. As soon as the need for service is identified, the demand for education to prepare these talents emerges almost at the same time. In Hong Kong, the Hospital Authority started its own in-service continued education arm to prepare specialty nurses at around the same period that specialization in nursing was deemed a direction for service. The education sectors were very responsive and began collaborating with the service partners to plan clinical master's programs in both Hong Kong and mainland China.

System and policy support are very important in driving the development of advanced nursing practice. The protection of the title APN through regulation is a means of protecting the public and ensuring the standards of the profession. As APNs work autonomously and employ more complex skills, they need to have proper education and certification of their competencies. Regulation helps to enforce structured proper education in accordance with prescribed standards; in return, the rights and practice privileges of APNs can be protected to provide optimal care to clients.

In his poem, 'The road not taken', Robert Frost wrote, 'Two roads diverged in a wood, and...I took the one less traveled by, And that has made all the difference.' Every act of professional development is an important move. The service need calls for more advanced professional nursing service, and the quality of service can only be ensured with proper education to prepare nurses with the appropriate level of competencies to deal with increasingly complex client situations. System and policy support are instrumental in legitimizing the APN role, protecting the public, and ensuring that nurses provide optimal care to their clients.

Epilogue

The way forward

Hong Kong, similar to other countries in the world, is facing the challenge of aging population and its implications for a broad range of political, economic, and social conditions. In view of this, the Hong Kong Government has felt some urgency to begin a planning process for shifting the caring focus away from a current costly, hospital-based approach to preventive, community-based approach services in order to alleviate the pressure on hospital. Hong Kong Cancer Screening Strategy, Elderly Services Programme Plan, District Health Center, to name a few, are the latest community-based programmes that being introduced to enhance district-based primary healthcare through health-social collaboration and public-private partnerships. The objectives of these programmes are to encourage the public to take preventive measures against diseases, raise health awareness, strengthen and consolidate the capabilities in self-care and home care, and promote health management by providing health promotion and education, comprehensive health assessment, community rehabilitation and chronic disease management.

While the funding, policy, and cross-sector collaboration are important, these programmes cannot be run without a group of devoted, experienced community nursing specialists. Currently in Hong Kong, the services of community nursing specialist is provided by Hospital Authority which aims at providing disease-based nursing care to mostly post-discharge patients in the community. Community nurses administer comprehensive and continuous nursing care to patients through home visits and at the same time, provide patients and their carers with knowledge of chronic disease management. Although these services have been proved effective, they are based primarily on hospital and have been inclined towards acute problems. To enhance the community care for the public and achieve the objectives of the various community-based programmes, the role of the community nursing specialist has to be reformed and expanded. They have to not only act as a leader in initiating the change in the service direction, but also adopt the role of educator to provide knowledge

and skills to the nurses who are currently working in the community on the way forward. The change of role is highly challenging and demanding; however, it can be rewarding in the long run when the health and well-being of people of all ages improved due to the effort of the APN.

Table: Key events related to APN development in Hong Kong and Guangzhou

	Hong Kong	Guangzhou
Need for Service	1990 – Hospital Authority established to improve efficiency and retain qualified staff 1993 – Clinical nurse specialists introduced to provide specialty care	2005 – The Chinese Nursing Career Development Plan (2005-2010) first mentioned the need to develop specialty nursing in China
	2000 – Nurse clinics set up to enhance continuity and accessibility of care	2012 – The 2011-2015 Strategic Plan mentioned specific service areas needed for specialty nurses
	2009 – Nurse consultants introduced to address complex population health needs	2016 – The 13th Five-Year Plan reiterated the need to educate a critical mass of clinical specialists for quality services
Education & Competence	1995 – Hospital Authority School of Post-basic Nursing Studies established (subsequently named as The Institute of Advanced Nursing Studies)	2001 – One of the earlier specialty nursing training programs offered in Beijing
		2004 – Hong Kong and Guangzhou introduced the first postgraduate specialty
	1995 – First master's degree program in nursing launched	training course 2007 – Guangdong Ministry of Health sent
	2002 – The Hong Kong Academy of Nursing (HKAN) Preparatory Committee launched	614 nurses to be trained in 14 different specialties by the Hong Kong Hospital Authority
	2012 – 14 Specialty Colleges established under the umbrella of The HKAN with a defined competency framework, accreditation and certification system, admitting Members and Fellows demonstrating practice at an advanced level	2011 – Nursing upgraded to a first-level discipline and clinical master's programs launched
System and Policy	2017 – The Food & Health Bureau of the Hong Kong Government issued a 'Strategic Review	2017 – Formation of the Greater Bay Area by the Chinese government to drive
Support	on Healthcare Manpower Planning and Professional Development', acknowledging the importance of specialized advanced nursing practice	business and the economy in the area 2018 – First APN Certification Assessment exercise under the Greater Bay Area Scheme
	2018 – A work group on Advanced/Specialized Practice set up under The Nursing Council of Hong Kong by instruction of the Hong Kong government, to define APN competencies and training standards and a mechanism for registry	

REFERENCES

- 1. International Council of Nurses. [Internet]. Nurse Practitioner/Advanced Practice Nurse Definition and Characteristics; 2009. Available from: http://www.icn.ch/images/stories/documents/publications/fact_sheets/1b_FS-NP_APN.pdf.
- 2. Wong FKY. Development of advanced nursing practice in China: act local and think global, Int J Nurs Sci. 2018;5(2):101-104. doi: 10.1016/j.ijnss.2018.03.003.
- 3. Wong FKY, Chung LC. Establishing a definition for a nurse-led clinic: structure, process and outcome. J Adv Nurs. 2006;53(3):358-369. doi:10.1111/j.1365-2648.2006.03730.x
- 4. Wong FKY. Advanced Nursing Practice. 3rd ed. Beijing: People's Medical Publishing House; c2018.
- 5. Parker JM, Hill MN. A review of advanced practice nursing in the United States, Canada, Australia and Hong Kong Special Administrative Region (SAR), China. Int J Nurs Sci. 2017;(4)2:196-204.
- 6. Lai AHY, Kuang Z, Yam CHK, Ayub S, Yeoh EK. Vouchers for primary healthcare services in an ageing world? The perspectives of elderly voucher recipients in Hong Kong. Health Soc Care Community. 2018;26(3):374-382.
- 7. Wong FKY. Health care reform and the transformation of nursing in Hong Kong. J Adv Nurs. 1998;28(3):473-482.
- 8. Wong FKY. Senior clinical nurse specialist pilot scheme in Hong Kong. Clin Nurse Spec. 2001;25(4):169-176.
- 9. Wong FKY, Lau ATY, Ng R, Wong EWY, Wong SM, Kan ECY, et al. An Exploratory Study on Exemplary Practice of Nurse Consultants. J Nurs Scholarship. 2017; 49(5):548-556.
- 10. Ministry of Health of the People's Republic of China. The Chinese Nursing Career Development Plan (2005-2010). Chin J Nurs. 2005;40(10):721-3.
- 11. Ministry of Health of the People's Republic of China. The Chinese Nursing Career Development Plan (2011-2015). Chin Nurs Manag. 2012;12(2):5-8.
- 12. National Nursing Career Development Plan (2016-2020). Gazette of the National Health and Family Planning Commission of People's Republic of China. 2016;11:24-30.
- 13. Wong FK, Peng G, Kan EC, Li Y, Lau AT, Zhang L, et al. Description and evaluation of an initiative to develop advanced practice nurses in mainland China. Nurse Educ Today. 2010;30(4):344-9.
- 14. Liao XB. Joint training program for specialized nurses in Guangdong Province in collaboration with Hong Kong. Chin J Nurs. 2011;46(12):1189-90.

15. Wu XJ, Reflection on the Development of Nursing Professionals? in the Era of Great Health. China Nurs Manag Conference. Guizhou, Guiyang. 2019.6.13-14.