

## Nursing in China: Historical development, current issues and future challenges

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### Abstract

Chinese health treatment was traditionally provided by medical personnel and the profession of nursing did not really exist. Modern nursing evolved following the arrival of Western missionaries in the late 19th century. Throughout the 20th century, nursing development was significantly influenced by the political climate, particularly during the Cultural Revolution of 1966 - 1976, when most nursing schools were closed. There are now over 1.2 million Chinese nurses, with around 98.6 nurses per 100,000 population. Education and training is heavily influenced by the medical model, with the majority of Chinese nurses educated in secondary programs of 2 to 4 years duration. An important aspect of nursing practice is reflected in the Chinese cultural understanding of health. For Chinese people, illness occurs when there is disharmony between the patient and their environment. As such, a large component of traditional Chinese medicine focuses on restoring this overall balance, rather than simply treating the symptoms. Future issues for Chinese nursing include upgrading all nurse education programs to a bachelor degree level, expanding the scientific research base and increasing the international focus.

### Key words

China, nurse, development, education, history

### Introduction

With 1.3 billion people living in a land area of around 10 million square kilometres, China is the world's most populated country. Since the late 1970s, political and social reforms have drastically changed the country's economic structure from agricultural to manufacturing. Industrialisation brought relative prosperity, with economic growth now exceeding 10%, making China the world's sixth-largest economy (Gill, 2003). Overall health status and standard of living has also increased for many Chinese. Average life expectancy at birth is around 70 years for males and 73 years for females, with child mortality currently at 157 per 1000 births for males and 106 per 1000 births for females (World Health Organization, 2004). Although government health expenditure has increased in recent years to reach 5.3% of gross domestic product, this figure still remains somewhat less than other Asian countries such as Japan (7.8%). The purpose of our paper is to present and discuss the historical development, current status and future challenges for Chinese nursing. Given that the Chinese cultural understand-

ing of health heavily influences contemporary nursing practice, this important issue will also be explored.

### Historical overview of nursing in China

Chinese health treatment was traditionally provided by various paramedical and medical personnel, with family members dispensing everyday care for their sick relatives. In these early times, the profession of nursing did not really exist (Watt, 2004). Modern Chinese nursing evolved due to the influence of Western missionaries who began arriving after China lost the Opium War in 1842 (Xu et al., 2000). Shortly before this time however, in 1835, the first Western influenced hospital was established in Canton. The first American nurse, Elizabeth McKechnie, arrived in 1884 and began to introduce the Florence Nightingale system of nursing. In 1888 the first school for Chinese nurses was opened in Fuchou by another American, Ella Johnson (Chan & Wong, 1999). She was later supplemented by Nina Gage, who arrived in 1908 and then established a nurse training program in 1910 as part of the Yale mission (Xu et al., 2000).

Nina Gage later served as president of the Chinese Nursing Association between 1912 and 1914. By 1915, China established an examination system for the professional certification of nurses, followed by Asia's first 5-year bachelor of nursing degree at the Peking Union Medical College in 1920 (Hong & Yatsushiro, 2003). This facility became the first of many nursing schools to flourish between the 1920s and 1930s, with 183 registered facilities by 1937 (Chan & Wong, 1999). In 1930 the first government-funded nursing school was established, and this number gradually increased. By 1936, there were at least 6000 nurses officially registered with the Nursing Association of China (Watt, 2004). By 1949, a total of 216 three or four year nurse-training programs were underway. Overall, during the first half of last century it can be said that tertiary education was a reasonably successful undertaking for Chinese nursing. Between 1924 and 1952 for example, the Peking Union Medical College graduated a total of 264 bachelor-degree level nurses (Xu et al., 2000).

In 1949, a major upheaval of Chinese nursing began following the government's takeover by the Communist party. By 1952 a Soviet-modelled education reform program had come into effect, during which time all post-secondary nursing education was abolished (Xu et al., 2000). The remaining programs consisted of 3-year training following 9 years of primary and secondary school (Hong & Yatsushiro, 2003). There was some resistance to these policies however, with the establishment of the Beijing Second Medical College in 1961, although it quickly failed due to significant political pressure. Nonetheless, the State Planning Commission and Ministry of Education listed nursing as one of 10 important health-related specialities in 1963. Unfortunately, this list proved futile as the Cultural Revolution of 1967 to 1977 effectively brought nursing education to a halt in China. Education itself was considered non-essential by the ruling government and as such, most nursing schools were closed (Chan & Wong, 1999). After the fall of government in 1977, things slowly improved for Chinese nursing, although it would eventually leave a 30-year gap in the training and development of nursing as a respected profession. Bachelor degree education was revived in 1983 with the establishment of the Tainjin Medical College nursing course, which graduated its first class in 1988 (Chan & Wong, 1999).

### **Current nursing and health care issues**

At the present time, around 95% of all Chinese nurses are trained for 3 years at a health school following 9 years of primary and secondary schooling. Most of these schools are attached to hospitals and the majority of entrants come directly from junior high school. Senior high school graduates are usually offered an equivalent 2 or 3 year course in nursing at the same facility (Chan & Wong, 1999). These schools graduate about 40, 000 nurses per year. By 2000, there were 530 such institutes, comprising the vast majority in China. A higher level university diploma in nursing was re-introduced in the 1980s, of which there are now 99 programs (Hong & Yatsushiro, 2003). Graduates from both programs are required to sit the state registered nurses examination in order gain their RN licence. Alternatively, the RN title is automatically bestowed following graduation from one of China's 42 bachelor-degree schools of nursing. The highest level qualification, the university bachelor degree in nursing, is often viewed as elite because it takes 5 years of full-time study and only graduates about 300 nurses per year (Chan & Wong, 1999). Although some bachelor-degree qualified nurses choose to work in clinical areas, many of them quickly move into management or education positions. By composition, the curriculum in most nursing schools comprises: Nursing Theory (32%), Practical Experience (27%), General Education (24%), Professional Foundations (15%) and Electives (2%) (Xu et al., 2002).

China also has two novel strands to the national nursing program, namely the Chinese medicine program and the foreign language program. In the first course, students are specifically trained to become nurses familiar with the principles of Chinese medicine, with many of them eventually working in this field (Xu et al., 2000). The other strand involves most lessons and lectures given in a foreign language, usually English or Japanese, which increases fluency and prepares them for an international career. Chinese postgraduate nursing programs are still in their infancy, with the first established at Beijing Medical University in 1992. By 1998 however, this number had grown to 5 and then to 7 by 2000 (Hong & Yatsushiro, 2003). Admission criterion is fairly strict and includes written examinations, clinical experience and the demonstration of various nursing skills. The Master of Science in Nursing (MSN) course takes 3 years full-time and undoubtedly produces high quality graduate nurses for management, research or education po-

sitions (Li, 2001). China's first Doctoral program in nursing was originally planned to start in 2000, but it failed to gain approval from the central government (Xu et al, 2002).

### The Chinese Nursing Association

At the present time, the Chinese Nursing Association (CNA) serves as the peak professional body for uniting, developing and promoting nursing. The association was originally founded in 1909 as the Chinese Nurses' Society, before changing its name to the current title in 1964. Headquarters were originally located in Jiangxi province before settling in Beijing in 1952. One initial priority was to change the symbolic title for nurses from kanhu to hushi, while another sought to introduce a national RN qualifying examination (Watt, 2004). The first annual meeting took place in 1914, and the council has consisted of an elected body since that time. There are now over 330, 000 members incorporating 31 branches, 7 working committees and 13 academic committees (Chinese Nursing Association, 2004). The CAN's main focus includes protecting the rights of nurses, disseminating advanced nursing knowledge, fostering academic exchange and publishing academic journals. In this regard, the Chinese Nursing Association publishes its premier academic work in *The Chinese Journal of Nursing*. The association also organises and sponsors national and international academic conferences to develop the scientific and professional potential of its members and Chinese nursing in general (CNA, 2004).

### Traditional Chinese medicine and the Chinese nursing ethos

Chinese nursing ethos reflects the underlying beliefs of Chinese people and their cultural understanding of health (Wong et al., 2003). As such, their way of thinking is heavily rooted in Confucian thought and the theoretical foundations of traditional Chinese medicine. In this paradigm, which continues to play a significant role in contemporary Chinese health care, the central tenants are yin-yang and the 5 phases. Traditional Chinese medicine emphasises the human organism, its place within the universe and the interaction of 5 evolutive phases: wood, fire, earth, metal and water. Illness results from disharmony, and disease primarily occurs when the human body gets out of balance with its environment (Wong & Pang, 2000). Traditional medicine therefore, does not simply focus on treating symptoms, rather

it attempts to restore the patient's balance with their total environment. Therapeutic surroundings also serve a central role in these beliefs, with a traditional Chinese saying that thirty percent of healing depends on treatment and seventy percent on nursing care (Wong & Pang, 2000).

The moral characteristics required of nurses is deeply engrained in Chinese culture and is therefore, very familiar for most Chinese people. As such, Chinese nurses have a moral obligation to treat patients with sincerity (Pang, 1998). Another important cultural belief relates to a common theme defined by ones` hierarchical relationship with others. In the teachings of Confucius, this refers to relationships between parents and children, ruler and subjects, husband and wife, older and younger people, and the relationship among friends (Wong & Pang, 2000). Social order is maintained when all members of society respect these relationships. The family unit is another central tenant of traditional Chinese beliefs and plays a key role in the structure of Chinese society. It has traditionally been the domain of family members to make health care decisions and care for their sick relatives. Being cared for by nurses, who are essentially strangers, therefore places Chinese people in somewhat of a paradoxical situation. In this regard, Pang et al. (2000) has described how nurses may conceptually enter the patients' family sphere and even act as a surrogate family member. This in turn, increases confidence in the patient's therapeutic regimen and also helps overcome the stigma attached with being cared-for by a stranger. On the other hand, it places great responsibility on Chinese nurses, which reinforces their moral obligation to treat patients with the utmost sincerity (Pang, 1998). Chinese medical and nursing ethics are also interwoven with Confucian doctrine, with the moral standard for caregivers is similar to that expected of an ideal Confucian person (Tsai, 1999). Interestingly however, nursing ethics do not always mean telling the truth to the patient. Pang (1999) has suggested how Chinese nurses only wish to tell the truth when it will be directly beneficial to the patient. Conversely, nurses would feel insincere if patients were to lose confidence in their treatment by hearing the truth about serious illnesses. All of these deep-seated cultural issues clearly have a profound influence on the thought, practice and daily life of Chinese nurses.

### Occupational health issues for Chinese nurses

Various occupational health issues have begun to emerge among Chinese nurses in recent years. Among them, nurse burnout appears to be increasingly important and is known to relate to age, gender, place of work, total work years, job setting and speciality (Sun et al., 1996). Skin diseases, especially hand dermatitis, have recently been documented as a common workplace issue for hospital nurses in China (Smith et al., 2004a). Musculoskeletal disorders, particularly low back pain, are also known to occur at reasonably high rates (Smith et al., 2004b). There are a few reasons for this. Chinese nurses suffer a high turnover rate, most likely due to their heavy work-load and a high hospital bed-to-population ratio. Physical factors are also important, such as a lack of rest areas, general overcrowding, poor ventilation and excessive noise (Sun et al., 1996). Nurses are often required to clean wards as part of their job, which further adds to their burden. For largely traditional reasons, Chinese women are still expected to do the majority of child rearing and domestic duties, adding additional strain for nurses with families. All of these factors may contribute to work-related disease and injury. Other health and safety issues also represent important hazards for Chinese nurses, particularly needlestick and sharps injuries. Nonetheless, various educational programs have now been trialled and are beginning to show results in this regard (Huang et al., 2002).

### Future challenges for Chinese nursing

Although there are at least 1.2 million nurses in China today (Xu et al., 2000), the overall proportion of nurses remains rather low at 98.6 per 100, 000 population. This latter result compares unfavourably with other countries such as Japan (744.9 per 100, 000) and Australia 830.0 per 100, 000 (WHO, 2004). Nonetheless, it is still a marked improvement from seventy years ago when the ratio was only 0.5 nurses per 100, 000 population (Watt, 2004). As the vast majority only have an associate degree or diploma in nursing, there is also a pressing need to narrow the gap in education levels between China and other developed countries such as Australia and Japan (Chan & Wong, 1999). For example, during an international study of registered nurses in 11 countries, Arthur et al. (1999) found that only 3% of Chinese nurses held a post-registration bachelor degree; the lowest of all countries studied. Nonetheless, significant

reforms are beginning to occur throughout the Chinese nursing education system in order to correct this shortfall. In a similar way, there have been regular attempts to strengthen the professional identity of nurses in contemporary China. In 1982 for example, the outstanding contributions of 301 nurses to Chinese society were published and distributed nationwide. Nevertheless, research in 1987 showed that many Chinese nurses still suffered from low self-esteem, predominately because they did not get the public respect they deserved (Pang et al., 2000).

Although the outbreak of SARS in 2003 was a crucial period for Chinese nursing, it also highlighted some deficiencies in the Chinese health care system for patients and nurses. New problems such as a rapid influx of in-patients and the (as then) unknown nature of SARS provided significant challenges for Chinese nursing (Zhang et al., 2003). Prior to its arrival, the national capacity to diagnose, treat and later, prevent the spread of novel infections was limited. Many of these shortcomings directly effected nurses, hundreds of thousands of whom were eventually mobilised in the fight against SARS. Although some ultimately lost their lives in the course of nursing work, their proud achievements were not overlooked by the international community. In August 2003, 10 Chinese nurses received the coveted Florence Nightingale Medal from the International Red Cross as a reward for their great contribution to health care work (Gu, 2003). Their achievements are all the more impressive considering that only 38 Chinese nurses have ever received such an award.

### Summary

In summary, it can be seen that modern Chinese nursing evolved rapidly since the late 19th century. Although significant modernization has now occurred, an important aspect of nursing practice is still reflected in the Chinese person's cultural understanding of health. Future issues for Chinese nursing include upgrading all nurse education programs to a bachelor degree level, expanding the scientific research base, increasing the international focus and forging new cooperative programs throughout the world.

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