

# Trends in Nursing Education in China

Frances Kam Yuet Wong, Sally Chan, Sue Yeung

**Purpose:** To explore the current trends and development of nursing education in China. Nursing education in China has developed rapidly in alignment with economic growth of this vast country.

**Design:** Descriptive, using 345 manuscript abstracts from various regions of China, submitted for the 1996 Sino-Hong Kong Educational Conference.

**Methods:** Content analysis of manuscript abstracts was done to describe the trends. Codes were determined after several rounds of independent analysis.

**Findings:** Development of nursing education in China appears in line with global trends. The preparation of a pragmatic nurse was emphasized by nurse educators who also advocate total patient care and the integration of traditional Chinese medicine in nursing education. Areas seldom mentioned, however, were student-centered approaches to learning, advanced practice, and the evaluation of educational processes and outcomes.

**Conclusions:** Nurse educators in mainland China appear aware of the dynamics and challenges in health care, and the need for preparing a new generation of nurses to face these challenges. Educators in China need to adopt new approaches in teaching and learning to prepare nurses to function in a wide range of health care settings, and to monitor and evaluate educational outcomes.

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[Key words: nursing education, China, content analysis]

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Nursing education in China has developed rapidly in alignment with the economic enhancement of the country in the last decade. Little information, however, can be obtained from the literature about the current situation.

To gain some understanding of nursing education in China, we analyzed the 345 abstracts submitted for the first Sino-Hong Kong Educational Conference in September 1996. The conference, the first of its type in the region, was hosted by a group of nurse educators and supported by the Hong Kong Nurses Training and Education Foundation—a voluntary organization established in 1986 by nurses to offer financial support to nurses from mainland China.

Nursing education has developed rapidly in the past 2 decades. In 1949, about 180 schools of nursing and 30,000 nurses existed in China (Li, 1998). Nursing educational activities were halted during the Cultural Revolution, from 1966 to 1975. Since the end of the Cultural Revolution, changes in nursing have been continual (Lin, 1998).

From 1984, nursing programs were introduced at the higher education level. In 1996, 503 programs were at the certificate (first) level in nursing and health schools; 31 programs were at the diploma (second) level in colleges and universities; and 18 programs were at the baccalaureate (third) level in universities (Li, 1998).

The total number of nurses in China, in 1998 was 1,163,000 (Lin, 1998), that is, 92 nurses per 100,000 population. In 1994, a standardized national registration

examination was introduced to govern the practice of nursing. Graduates at the first certificate level are required to pass the examination before they are granted a license to practice. Graduates at the second diploma and degree levels are exempted from the examination and granted automatic certification (Li, 1998). The period of valid certification is 2 years. In 1996, the Ministry of Public Health introduced a mandate for continuing education, requiring all nurses to provide evidence of continuing education credits for renewal of registration. Provincial and municipal public health bureaus and local nursing associations sponsor continuing education programs. Nurses are also sent for courses in Australia, Canada, Germany, Japan, the United Kingdom, and the United States.

Recently, postgraduate nursing education has also began in China. Five postgraduate programs now exist at the

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master's level, and a joint master's program is offered under the aegis of the China Medical Board of New York with Chiang Mai University in Thailand. The first 16 master's students graduated in 1996 (Li, 1998).

## Methods

A total of 345 abstract entries submitted to the Sino-Hong Kong Educational Conference were analyzed to determine the trends and development of nursing education. The coding began with a provisional "start list," as advised by Miles and Huberman (1994), containing 21 initial codes for all 345 entries. Seven members of the research team independently coded items, then agreement was calculated to determine inter-coder reliability. A list of 12 codes was identified. Level of agreement among the coders in the final round of independent coding was 95%; disagreements were resolved through negotiation.

## Findings

The abstracts were submitted from authors in 14 Chinese provinces. Most of the authors were prepared in nursing and health schools. Nurse educators in China usually have higher qualifications than do general nurses. The **Table** shows the distribution of topics; 59 of the 78 papers on methods of teaching addressed general teaching approaches. A common theme was the use of learning and teaching objectives. The preparation of "pragmatic" nurses was emphasized by many authors. Two abstracts were about the use of multimedia in teaching. Almost all abstracts referred to teaching in basic nursing education.

Many abstracts (28 out of 45) were about general trends and development of basic nursing education in China. Five were about the "educational revolution." Other themes included development of baccalaureate education, research

competencies, integration of traditional Chinese medicine in nursing, and preparation of pragmatic nurses.

Clinical teaching was the topic of about 13% of the abstracts. Most authors presented models of clinical teaching and proposed strategies to improve the effects of clinical teaching. Main topics for trends and development of continuing education included promoting mandatory continued education, continuing education for emergency care, Chinese medicine, and health promotion. Other abstracts referred to distance learning. Thirty-five (10%) abstracts were focused on curriculum design. Several authors suggested curriculum innovation in specific areas such as communication. Some suggested modifying teaching content in diabetic and emergency care. Several proposed including subjects such as infection control and health education. The role of nurse teachers was addressed in 31 abstracts (9%); the role of clinical teachers in 10. Twenty-two (6%) were focused on the roles and attributes of students. One abstract was about the direction and development of postgraduate nursing students. Student evaluation was the topic in 14 abstracts (4%). Five were focused on evaluation of clinical practice. Another five were about evaluation strategies for psychology, basic nursing care, and dissertations. Others were about general student evaluations, such as the effectiveness of examinations. Concerning educational philosophy, authors of 13 abstracts (4%) urged strengthening a nurse-oriented art and science approach. Other topics were student-centered learning, the value of moral education, aesthetics, and the humanities.

Several authors emphasized the importance of effective management in providing quality nursing education. Three explored the curriculum change for specialty training in continuing education. Others addressed the training and development of nurses for traditional Chinese medicine, oral nursing, neurosurgical nursing, and community nursing. Clinical assessment methods, evaluation of qualifying professional assessment, and evaluation of teaching quality were also included as topics.

## Discussion

The findings indicate that nursing education in China is undergoing change, and its directions and questions of concern correspond with global trends. When compared with problems identified by the World Health Organization (WHO) Global Advisory Group on Nursing and Midwifery (Salvage, 1995), commonalities were found. The WHO Advisory Group found the following addressed in many countries: (a) curriculum review and reorientation to primary health care; (b) new program development, especially in higher education; (c) training of nurse teachers; (d) provision of quality learning materials; (e) continuing education; (f) closer links between education and service; and (g) evaluation of outcomes (Salvage, 1995).

Preparation of pragmatic nurses was a concern to many. This theme appeared in methods of teaching, trends and

**Table: Topics of Manuscripts on Nursing Education**

Topics	Number
Methods of teaching	78(23%)
Trends in basic nursing education	45(13%)
Clinical teaching	43(13%)
Trends of continuing nursing education	40(12%)
Curriculum design	35(10%)
Role of nurse teachers	31( 9%)
Role and attributes of nursing students	22( 6%)
Student evaluation	14( 4%)
Philosophy of nursing education	13( 4%)
Nursing educational management	10( 3%)
Trends and development of specialty training	10( 3%)
Evaluation of education	4( 1%)
Total	345(100%)

development of basic education, clinical teaching, and curriculum. This desire for pragmatism is closely related to the social and political environment in China. Mao Zedong, ruler in the 1950s and 1960s, promulgated that health care, encompassing primary health care (PHC) and hospital care, should be pragmatic in serving the needs of the people (Liu, 1993). The ideology of pragmatism in Chinese society is further reinforced and well illustrated by Deng Xiaoping's "Maxim of white and black cat." Deng asserted that as long as the cat catches mice, it does not matter whether the cat is white or black. Throughout the ruling days of Mao and Deng, health care remained one of the key pragmatic social services for promoting the health of Chinese people (Fung, 1998; Lin, 1998).

Our findings indicate that China's educators are aware of demographic changes. Several used the term "educational revolution." Educators seem to be diligently preparing a new generation of nurses in China, especially in providing total patient care and integrating traditional Chinese medicine in nursing practice. Several areas not mentioned, however, are the use of a more student-centered approach to learning, advanced nursing practice, and continuous improvement of educational processes and outcomes based on evidence of competence.

Total patient care is being actively promoted in China in 1998 (Li, 1998; Lin, 1998). Our findings show that curriculums are being revised to educate nurses for total patient care, including the enhancement of communication skills by enriching programs with behavioral sciences.

Engaging students as active learners appears to be somewhat weak in China. Approaches to teaching and learning centered mostly on teachers. The more innovative methods of learning, such as problem-based learning, reflective learning, and experiential learning, were seldom addressed. Perhaps the gap between conceptual and concrete learning can be bridged by case-method simulations of clinical management and computer-assisted instruction (Joel, 1988). The focus of contemporary learning is the process of problem solving, instead of the didactic provision of a huge amount of material to the students by the teachers (Wong et al., 1997).

Nursing education in China is developing rapidly. China as a country is also undergoing dramatic changes socially and economically. These changes have several implications for health care services. With the escalated standard of living, expectations for higher quality of service will inevitably increase. As recommended by WHO, countries should ensure that basic and continuing education are focused on knowledge, skills, and attitudes relevant to the needs and values of local communities (Salvage, 1995).

Graduates of any nursing program should meet the health and nursing care needs of the population they serve, including the elderly. In China, the one-child policy endorsed for years changed the demographic profile so that a relatively high proportion of the future population will be elderly. Nurses educated today need to anticipate these changes and demands (National League for Nursing, 1999). The ideology of pragmatism in education should not be confined to fulfilling

the immediate short-term needs of society but should also pertain to future needs.

The findings in our study do not show plans to prepare nurses in China to focus on care of elders or other specialized populations. In response to changing health patterns, the development of advanced nursing practice concentrating on specific client populations should be a priority.

## Conclusions

According to Lin (1998), and reinforced by the findings of this study, four main issues need to be addressed concerning the development of nursing in China. First, nurses need to be prepared to care for an increasing elderly population in China. Second, the disease-centered model of care should be replaced with a model designed for health maintenance, promotion, and education. Third, the scope of nursing services should be expanded to settings such as communities, families, homes for the elderly, and health clinics. Fourth, nursing education and continuing education should be strengthened.

Lin (1998) reminded nurses of the importance of China maintaining its unique cultural features while adopting practices from the Western world. Traditional Chinese medicine has been popular among Chinese for more than 4,000 years. Chinese nurses should recognize this valuable tradition and develop models of nursing that accommodate both Western and traditional Chinese health and care. [JNS]

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