

# Nursing education in Iran: Past, present, and future

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## Summary

Nursing education in Iran has undergone significant change since its genesis with foreign missionaries over one hundred years ago. More recently, following the 1979 Islamic revolution, nurse education has followed the direction taken by most other countries in moving from an apprenticeship model of training to an academic model. A series of transformative changes to nursing education specifically—and across the higher education system generally—has resulted in nurses now being able to undertake study across all university-based programs up to and including doctoral level. Contemporary nursing students have access to full-text professional journals through the internet, and they may pursue their doctoral studies in other countries. Although these improvements in nursing education in Iran are to be applauded, much more needs to be accomplished to ensure that highly competent nurse practitioners continue to be produced in this country. This article presents an historical overview of the development of nursing education in Iran, within its economic and sociopolitical contexts. Recommendations based upon lessons learned from historical and contemporary realities are presented in order to advance nursing education in this part of world.

## Introduction

The current trend towards world globalization has increased the potential for exchanges of communication between people from different parts of the world and with diverse backgrounds. Today, it is common for members of the global workforce—including nursing labor with its range of specializations—to leave their country of origin to work in other parts of the globe. In the higher education sector, universities cater to international students as part of their strategic planning, introducing different models of partnership including collaborative and exchange programs with universities of other countries. Students, including students of nursing, are now able to pursue academic studies in different countries with different educational systems. In this new era, there is a need for academic and vocational groups, who are linked with nursing profession, to be fully informed about the variations in nursing educational systems in the international higher education market. Although there exists a considerable amount of literature relating to nurse education systems in different countries, there is a little published in the English language relating to nursing education in Iran. In the absence of such literature, this article intends to provide an account of the Iranian nursing education system within its historical, economic, and sociopolitical contexts.

## **The history of modern nursing education in Iran**

Iran is located in the south-west of Asia, covering over 1.64 million km<sup>2</sup>, with a population of approximately 65.5 million. The country consists of thirty provinces that vary widely in terms of their socioeconomic development. In each province there is at least one Medical Science University (MSU) although a few provinces, which are geographically large or contain overcrowded areas, have more than one. These MSUs, as the main approved authorities, hold the dual responsibilities of delivery of health care and provision of higher education to health care professionals. Each MSU runs at least one full-time basic nursing program. The development of nursing in Iran has been influenced by historical, religious, cultural and economic variables. As with many other developing countries, such as China, Taiwan and Lebanon, modern nursing was introduced to Iran by Western missionaries. Along with their religious duties, the missionaries initiated medical services for local residents and trained a small number of Iranian women in the care of sick people in hospitals. In 1916, eleven years after the introduction of the first nursing school in the Middle East in Lebanon, an American missionary established Iran's first nursing school, in Tabriz, which offered a program that largely met the local hospital's needs and focused on the practical aspects of nursing. The graduates from the Tabriz school contributed significantly to the distribution of ideas emanating from the American model of nursing. It remained the only nursing program in Iran until 1935 when the government established four new nursing schools: in Mashad, Shiraz, Rasht and Tehran. The graduates of these schools were called 'doctor assistants', in recognition of the then-accepted view of nurses as handmaidens, and doctors as holding a superior place in the community. Over the years, under the influence of British-trained nurses, Iran's nursing education system underwent a gradual shift from the American nursing model to the British nursing model. During this time, the influence of British nursing practice on the Iranian nursing profession was profound and far-reaching. As with their colleagues in western countries, the nurses who trained under this system were influenced by Florence Nightingale who had had a major impact upon nursing practice. The Islamic revolution and its subsequent "Cultural Revolution" brought about many changes in the higher education system. The nursing education scheme, largely based upon the British system, was replaced by a reconstructed academic system, and nursing curricula were revised. At the time, some nursing schools were affiliated to the Ministry of Culture & Higher Education [MCHE] (now the Ministry of Science, Research & Technology [MSRT]), while some were affiliated to the Ministry of Health (MoH). During this period, there was an increased demand for practical nurses due to the Iran-Iraq war and an acute shortage in skilled nurses across the country. In order to meet this demand and generate a rapid increase in the nursing workforce over a short period, the three-year nursing programs were replaced with a two-year basic nursing program. The graduates of the two-year basic program were then able to take a competitive nationwide examination to determine their eligibility to enroll in an additional two-year program leading to a baccalaureate degree in nursing. Those nurses who had been educated under the earlier three-year programs were offered an additional one-year program that would qualify them for a baccalaureate degree. In 1987, the temporary subsidence of high demand for nurses meant the two-year programs were abrogated, and the basic nursing program was consolidated to create a four-year nursing program. As mentioned earlier, the Islamic revolution had a major impact on Iran's higher education sector, including nursing education. One significant change was the integration of religious beliefs within the nursing education program to fulfill the spiritual needs of the community the applicants planned to serve. Another major change came from the recommendation that nursing care may be improved when it is delivered by nurses of the same sex as the patient, and, despite the fact that

nursing was traditionally perceived in Iran as a female profession, this recommendation resulted in changes to the distribution gender of applicants, with increasing numbers of males motivated to select nursing as their career. In the past two decades, the growth and development of nursing schools has been determined and influenced by various pieces of government legislation. In response to the need created by rapid post-war development to supply an adequate workforce for the health care sector, the medical section of the MCHE was incorporated into the MoH in 1985. As a result of the nationwide restructuring of higher education, the medical education section, alongside treatment affairs, undergone supervision of a new established authority called Ministry of Health & Medical Education (MoHME). In that year, all nursing schools affiliated to the former MoH (non-university-affiliated schools) and schools affiliated to the former MCHE were integrated into the MoHME. These changes led to a significant increase in medical education placements and subsequently the number of student admissions. These changes, which enhanced the establishment of higher education institutes all over the country, were largely accomplished by ongoing appeals from political parties and resulted in a considerable increase in the number of nursing schools in Iran. From the late 1980s, budget considerations together with an over-supply of nursing graduates forced the MoHME and government to revise policies regarding the admission of nursing students. A comprehensive evaluation of the viability of nursing programs resulted in the closure of a number of smaller nursing schools. Simultaneously, a number of other nursing schools were urged to close their part-time programs and decrease the number of students admitted to full-time programs. These measures resulted in a considerable decrease in the total number of nursing student admissions over last decade.

### **The Iranian nursing education system**

Due to the large number of general applicants for the limited number of university places in Iran, applicants to all courses—including medical and medical-related courses such as nurse education programs – are required to have passed the competitive National Higher Education Entrance Examination (NHEEE). Although there is no passing score for the NHEEE, applicants who attain high rankings have a higher probability in gaining entry to university and their desired course of study. Generally, the highest ranked students select the more socially prestigious courses, such as medicine, dentistry or pharmacology. Lower ranking students have limited choice and often select courses, including nursing, most often without any particular motivation or interest. The rationale for selecting a university course, even one that is not a first preference, is that it attracts a grant to study in university which is perceived by the general public as prestigious and a significant social advantage; however, in some disciplines with a clinical component, there may be some negative consequences. In Iran, the government regulates nursing and other health discipline education through a series of education plans. The nursing education plan, approved by MoHME's Nursing Council, sets a national standard for nursing education for the whole country. The plan includes the aims, scope and contents of nursing education in all education programs, and all nursing schools must consider the plan when implementing nurse education activities. Each nursing school, however, has a right to develop its own curriculum guidelines based upon the national nursing education plan. These guidelines include a description of learning and teaching methods, types of assessment, evaluation and examination requirements. Nurse education programs are offered through two different cost systems. The first is through the state sector MSUs, which are affiliated to and supervised by MoHME. The state sector system provides an equal opportunity to everyone, irrespective of wealth and income level, to study at an Iranian university. In the state sector MSUs, nursing education (and all other higher education) is free of charge for students,

although they must pay for their books and other study expenses. In addition, many students attending MSUs are entitled to grants through a loan from the welfare bureau of MoHME, with repayments required once the graduate is employed. The second cost system is offered through the non-government nationwide Azad University (AU) in more than sixty nursing schools is available in large and small cities all over the country. Although there is no exact number available for student enrolments in the AU nursing programs, it estimated that these student enrolments exceed those in the state sector nursing schools. In Iran, students can study nursing across all higher education levels — from bachelor to doctoral. However, unlike some western countries, Iran does not differentiate by rank within licensed nursing personnel, and Registered Nurse (RN) is the only professionally recognized rank. Upon successful completion of nurse education programs, graduates are automatically granted the status of RN, which is the minimum legal and educational requirement for professional nursing practice. As RNs are trained as generalists rather than specialists, they are eligible to practice in any ward of the hospital. Although continued education programs are offered to nurses, and they are evaluated by their managers on an annual basis, currently there is no renewal system for RNs. Consequently, almost every nurse's registration status continues automatically, unless the nurse engages in actions that require disciplinary intervention. Two other categories of health workers are employed alongside and assisting RNs: Komak Behyar (associated nurse assistant) and Behyar (nurse assistant). These health workers complete their unique training programs in the non-higher education system.

#### **Komak Behyar: associated nurse assistant**

The Komak Behyar, in terms of organizational structure, is the most junior member of the health care delivery team in direct contact with patients. Following a short-time, vocational training hospital-based course, which varies in length between two months and six months and is conducted by RNs, the Komak Behyar is employed generally to satisfy the patients' needs by performing basic nursing tasks.

#### **Behyar: nurse assistant**

The Behyar, to a large extent, is equivalent to the assistant nurse in other countries. The Behyar is able to provide primary nursing care independently and is engaged in more advanced nursing care under RN supervision. There are two types of Behyar training programs. One enrolls high school graduates through an exclusive competitive examination held by MoHME and has a one-year curriculum. The other admits high school first-year students and has a three-year curriculum. Graduates of Behyari programs are awarded a tertiary diploma. In some wards, such as outpatient clinics, and in some less developed areas of the country, the Behyar are the primary nursing workforce relied upon to provide nursing care.

#### **Master programs**

The first Master of Nursing program in Iran was established in 1988. By 2004, the number of these programs, which are mainly affiliated with major MSUs in metropolitan cities, has increased to fourteen. The aim of the Master of Nursing program is to prepare competent nurses who are able to act as nurse educators, conduct clinical research and manage health care delivery settings. Enrolment in a Master of Nursing program requires the applicant to hold a Bachelor of Nursing degree and to have successfully completed the MoHME-developed annual competitive examination. The exam consists of key nursing areas, including adult medical–surgical, obstetric-gynecological, pediatrics, community health nursing, as well as measurement of the applicant's ability to read and comprehend nursing professional literature in the English language. In Iran, the Master of Nursing is a three-year classroom and clinical program

containing about 43 compulsory and optional credits in total. The focus of classroom teaching centres upon student participation in student and faculty-led seminars and roundtable discussions. Master of Nursing degrees are available in two fields: nursing education and nursing management. Each field has four different specialties, including medical/surgical nursing, mental health nursing, paediatric nursing and community health nursing. Master of Nursing curricula focus mainly on educational units rather than practical units, and include core basic, clinical and functional courses. Employment in an academic setting, in comparison to clinical setting, has more financial benefits in Iran; therefore, many Master of Nursing graduates prefer to pursue careers in the academe rather than service sector, in contrast to western countries. Master of Nursing graduates comprise the majority of nursing school faculties, and many new graduates work in clinical areas only because the academic positions have been filled by ex-graduates. Despite this trend, many nursing managers allege that the current focus on educational courses in Master of Nursing programs rarely prepares a person to be a good clinician.

### **Doctoral programs**

The framework and foundation of the first doctoral nursing program in Iran was laid out in 1995 at Tabriz University of Medical Sciences. In the eleven years since that first PhD program officially began, the number of programs has grown to seven. These programs are 4.5 years in length and consist of 52 credits, including 20 credits for dissertation. The programs present somewhat of a blend of the US and UK models, in that they require course work—fewer than American programs—and have a focus on the students' research throughout the program. The students accepted into the doctoral programs are Master of Nursing graduates who have been successful in both an annual competitive nationwide examination (developed by MoHME) and an interview with a panel of nursing experts. The purpose of the doctoral program is to prepare graduates for a lifetime of intellectual inquiry and creative scholarship and research, and to further the extension of nursing knowledge in Iran. Graduates from the programs are expected to be knowledgeable professionals who are able to provide invaluable insights into nursing issues, thereby improving the nursing care status in the health care system. Currently, around twentyfive nurses have completed the PhD program—the majority of whom have eventually assumed faculty roles in baccalaureate and masters' programs across the country. Because the field of nursing suffers from an acute shortage of doctorally prepared faculty, there has been a growth in the number of doctoral programs in Iran, and metropolitan MSUs are now seeking approval from the High Council of Higher Education Planning (HCHPEP) and MoHME to establish PhD programs.

### **The future**

The development of modern nursing education in Iran, in parallel with many other countries, has been complex since its beginnings early in the twentieth century. Although the main direction of nurse education over the whole of that century was positive, the early years of this century has seen nursing education in Iran—as in many other countries – confronted with some undeniable challenges. Firstly, the current student recruiting system, in which authorities rely solely on NHEEE scores, has caused some problems. For some applicants, the selection of a career according to their ranking in the competitive NHEEE means nursing is often the only realistic and reasonable career choice. However, these students often have little or no information regarding nursing as a career, and some even enter nursing programs with reluctance. While some of these students are dissuaded from studying nursing, there is a risk that many others have insufficient motivation to strive to be a competent nurse. Secondly, whilst the trend to extend nursing education via an expansion in the number of university departments of nursing and an

increase in the number of masters and doctorate nursing programs is exciting, the downside is that it may actually devalue nursing degrees. Currently, the nursing profession is facing a sudden growth in nurse graduates who, because of limited positions, do not have the opportunity to gain employment in state sector hospitals and instead have to take positions in private institutions where—due to current market conditions of oversupply—they often receive lower remuneration and conditions. This has resulted in nurses working in an unfair situation with minimum benefits, which has the potential to lead to a further devaluation of nurses and the nursing profession in Iranian society. Thirdly, the changing patterns of service delivery resulting from different factors—such as modernisation of Iran's health delivery system and overproduction of nursing graduates—has necessitated major revisions to nursing education at both pre- and post-qualification levels. It is important that these changes are directed towards tailoring nursing programs to the real needs of the systems they are designed to serve. For example, currently all Master of Nursing programs are designed to prepare nurse educators and nurse administrators; however, in reality, many graduates from these programs are not engaged in their speciality and thus do not have the opportunity to use their knowledge and skills to the best advantage of the health care system. At a time of economic rationalization, this may be considered wasteful. It is apparent that there should be a shift in the focus of masters programs from education and administration areas to clinical practice areas—such as nurse practitioner—thus preparing clinicians for direct patient care. In the general community, it seems that an increase in the numbers of nursing students has had a paradoxical impact. It is believed that many Iranian families have at least one nurse in their family, which, from one perspective, is positive in that it could help them learn more about nursing as an academic and scientific-based discipline. However, many of these families are confronted with unmotivated students and graduates and know that a considerable number of these individuals had no other choice of study as a result of their ranking in the competitive NHEEE. There is a danger that this perception, together with the historically poor image of nursing in Iranian society, could significantly undervalue the status of nursing and nursing education in general across the community. In summary, although nursing education in Iran has enjoyed prodigious improvement in recent years and faces many opportunities in the future, it also faces many threats. In this regard, a set of deliberate actions in areas such as applicant recruitment, employment and nursing curricula is needed if further improvement of nursing education is desired.

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