

BACCALAUREATE NURSING EDUCATION IN IRAN: CHALLENGES AND STRATEGIES FOR CHANGE

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ABSTRACT

Following globalization, development of information and communication technology, higher education has changed dramatically and will. Parallel these changes, universities as higher education administrators, are required to development of accountable education, Conducting applied and community-based problem solving research, integrating and applying information and communication technologies in the field of education. Nursing education is one of the following branches of higher education that is protected and exempted from regional and global changes, and has experienced many changes in quality and quantity. In the recent years, although nursing education in Iran has been a positive trend of growth, but like many other countries have been faced with the undeniable challenges. This paper reviewed the history and the current situation of nursing education and practice in Iran and discussed the issues concerning baccalaureate graduates and the challenges in Iranian nursing education.

KEYWORDS: Nursing education, Baccalaureate, Iran

INTRODUCTION

Iran, with a population of approximately 70 million, consists of 32 provinces neighbored by Turkey, Iraq, Armenia, Azerbaijan, Turkmenistan, Pakistan, and Afghanistan. More than 98% of the population is Muslim and more than two-thirds is less than 30 years old, with a literacy rate of 82% (Iranian Statistics Centre, 2007). The life expectancy at birth has risen to 69 years for men and 73 years for women in 2006 (WHO/EMRO, 2008). The health indicators of Iran show consistent improvement and now are near those of developed countries. The pattern of the burden of disease shows a definite shift toward non-communicable diseases, which is evidence that Iran has completed the epidemiological transition (WHO/EMRO, 2004). However, with an increase in the prevalence of chronic illnesses, the importance of screening and identifying such diseases at early stages has grown. Provision of early treatment can prevent long-term complications and would help reduce costs to the health-care system. The prevalence of chronic diseases and the high road traffic injuries rate indicated the necessity for an advanced health-care system with competent nurses as front-line staff and an effective protocol addressing priority health-care issues and needs in Iran. Nursing, a field independent branch of medical science is that its graduates as members of health teams in various areas related to health services, training, research, counseling, prevention, management and supportive care and rehabilitation therapy pay. It is the first graduate level nursing courses nursing program based on scientific principles and Islamic values has been developed. Bachelor-level nursing education in Iran is providing professional nurse education as a general nurse can assess and identify health services and care coordination in various areas of the individual, family and community is responsible (The Supreme Council of Medical Sciences, 2005). Nursing education in Iran in recent years, although growth has been a positive trend, but like many other countries have been faced with the undeniable challenges. This paper review the history and the current situation of nursing education and practice in China and discuss issues concerning baccalaureate graduates and the challenges in Iranian nursing education.

Nursing Practice in Iran

Nursing in Iran is perceived as a holy and honorable job and has been commemorated by renowned clergymen. The definition of nursing that is taught to students in all Iranian nursing schools states that nurses are concerned with human responses to health and illness. Iranian nurses are professionals who have scientific knowledge and practical skills. This knowledge and these skills are strongly influenced by the context in which nursing is practiced and taught and include socioeconomic and political forces, cultural images, values and prejudices, and historical influences in Iranian society (Nikbakht *et al.*, 2004). There are four levels of nurses who are qualified to practice: MS nurses, Nurses with a bachelor's degree, Nurses with an Associate Degree. Bachelor's degree nurses must pass a national licensing exam and

complete a 4-year bachelor's degree at a university. Selection for university study depends on a placement examination. The score on the examination determines to a great extent what major or profession one is assigned to study (Ministry of Sciences, Research and Technology, 2011). Currently, the ideals of professional nursing in Iran are consistent with professional nursing values in other countries that have instituted the baccalaureate degree as the desired preparation. However, limited financial and structural resources, the shortage of urban jobs, cultural values, and the public image of nursing are interfering with the actualization of these values in practice (Nikbakht *et al.*, 2004). The role of Iranian nurses is unclear, for although most of them are employed in hospitals, yet few or none are in the role of Public Health Nursing. Additionally, because the people of Iran have a poor image of nursing, those who choose nursing as a profession do experience low self-esteem. The combination of poor image and questions regarding quality of patient care, one would find it hard to believe that these nurses are graduates with a Baccalaureate Science in Nursing (BSN) from either a nursing school or medical science university (Adib and Salsali, 2005).

History of Nursing Education in Iran

The development of nursing in Iran has been influenced by historical, religious, cultural and economic variables (Salsali, 1999). As with many other developing countries, 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, an American missionary established Iran's first nursing school in Tabriz. It remained the only nursing program in Iran until 1935 when the government established four new nursing schools in Mashhad, Shiraz, Rasht, and Tehran (Tabari Khomeirani and Deans, 2007). A majority of the first nursing students were girls. After the Islamic revolution in 1979 and during the Iran–Iraq war, more male students enrolled in the nursing program. This increase occurred because male nurses were required to care for male soldiers in the armed services; also, politicians and the public demanded male-dominant voluntary emergency services in the war areas. In 1986, approximately 50 percent of the baccalaureate students admitted to the nursing program was men; however, at the present time, it has decreased to approximately 20 percent (Nikbakht *et al.*, 2004). In general, major changes in nursing education system is this: Transfer of nursing programs from hospitals to higher Education in 1979, Development of the BS degree in nursing in 1986, Development of the MS degree in nursing In 1988, establishment of First PhD in nursing program in 1992, increasing Universities that offer the PhD from one to five in 1999, Beginning of fellowship programs in Nursing (e.g. elderly, oncology) in 2000.

Current Nursing Education

At present, the baccalaureate program is the basic nursing program at the academic level and is the only way leading to registration as a professional nurse. High school graduates are admitted to these programs on the basis of their ranking in the competitive National Higher Education Entrance Examination (NHEEE) (Tabari Khomeirani and Deans, 2007). The Iranian nursing education program lasts for 4 years and leads to a bachelor's degree. Nursing students begin clinical training from the second semester and this is run concurrently with theoretical courses until the end of the third year. The fourth year is allocated exclusively to clinical placement training. Nursing students are trained in teaching hospitals. In the clinical field, they are assigned to care for patients based on nursing processes. Case method is the applied teaching strategy, especially in intensive care units. Students have the opportunity to experience working with patients in different units, including intensive care and special wards. Their progress through these units has a "simple to hard" trend. They learn in the clinical environment under the direct guidance and supervision of a nurse instructor for the first 3 years. In the final year, they work under the direct guidance of staff nurses and supervision of nurse instructors. The student: instructor ratio ranges from 1:6 to 1:12 (Peyrovi *et al.*, 2005). At present, the nursing curriculum throughout Iran is accredited by the MOH and ME. This program includes professional foundation courses (28 credits with a biological content), and nursing courses (53 credits on theory with a biomedical nursing content and 33 credits on clinical preparation) (Cheraghi *et al.*, 2008). Enrolment in a Master of Science degree in the nursing program requires the applicant to hold a bachelor's degree in nursing and to successfully pass the annual competitive examination. The Master of Science degree in nursing is a 2–3 year classroom and clinical program containing about 32 compulsory and optional credits in total. In the 19th year since the first PhD program officially began, the number of schools that offer PhD programs in nursing has grown to 12. The duration of the program is 4.5 years and consists of 45 credits including 20 credits for dissertation. The students accepted into the doctoral programs are Master of Nursing graduates who have been successful in both the annual competitive nationwide examination and the interview with the Iranian Board of Nursing. Iranian Board of Nursing controls and supervises the bachelors, masters, and doctoral degrees in nursing. It is also responsible for school accreditation and determining school curriculums. All schools are

obliged to follow a basic curriculum established by the Ministry of Health, although some flexibility is allowed within the predetermined curriculum (Emami and Nikbakht Nasrabadi, 2007).

MATERIALS AND METHODS

Baccalaureate Programs

In Iran, the baccalaureate program is the basic nursing program at the academic level and the only avenue leading to registration as a professionally registered nurse. The goal of this program is to produce competent nurses with the necessary theoretical knowledge and technical skill to provide high quality general nursing care. The centralized four-year baccalaureate program produces graduates who are generalist nurses and constitutes the backbone of the nurse education system in Iran. As with all other university-based programs, high school graduates are admitted to these programs on the basis of their ranking in the competitive NHEEE. Currently, there are approximately 100 baccalaureate nursing programs (each with at least 130 credits) offered in MSUs and AU courses across the country. The learning environment for students engaged in baccalaureate programs is shared between classroom, hospital, community and other educational settings. The percentage of classroom time in the total program is about 40%; hospital time (including working in community based health-care delivery settings) is about 54%; and miscellaneous educational activities (including laboratory settings activities) occupy less than 6% of the program.

The subject content of the programs fall into three main categories: foundation science, general science, and special science. Foundation units—for example, anatomy, physiology, pharmacology—and general units including literature and religion are designed to improve students' general competence in the study of nursing. Each of these units is delivered by a specialist lecturer. The specialist subjects are drawn from the medical education model and are divided into the five areas of medical– surgical, obstetric, pediatric, psychiatric, and community nursing. Efforts are underway via a collaborative process to revise the current curriculum and conduct nursing programs between schools of nursing and the Iranian National Nursing Board [INNB] (Nikbakht *et al.*, 2004). However, the dominance of the discipline of medicine on the discipline of nursing can be observed directly through the selected content, and indirectly through the distinctive medical emphasis characteristic of lecture presentations. Nurse educators, who are generally prepared at Master of Nursing level in specific areas, teach professional courses such as pediatric and surgical nursing. The clinical experience at baccalaureate level is spread across the first three years of the program: basic nursing care is taught during the first year; medical/surgical care is taught during the second and third years; and community and mental health care is taught during the third year. The program concludes with a full-time practicum in the final year of the curriculum. The practicum is designed to boost the students' self-esteem and introduce them to real life work conditions and the development of time management skills. Upon successful completion of the program, graduates are awarded the Bachelor of Nursing degree and granted RN status, which is the minimum legal and educational requirement for professional nursing practice in Iran (Tabari Khomeirani and Deans, 2007).

RESULTS

Issues and Challenges

Unfortunately, despite the importance of nursing education, research conducted in Iran indicates inefficiency is theoretical and clinical nursing. Theoretical material presented in classroom is less transferred to clinical situations and students can not apply what has learned at practice. However, the aim of providing training is increasing clinical experience has increased; its implementation in clinical practice presents problems (Ahmadinejad *et al.*, 2002). In a study 42% teacher and 17.5% students announced Education is Weaker than the year before students (72.5%) and teachers (85%) reported Student motivation, particularly their interest was less than previous years. This is because the teachers were non appropriate patterns (Asadollahi and Afshari, 2002). Theoretical and clinical courses in terms of adequacy and appropriateness of graduates with the necessary professional requirements and job duties were not. Nursing graduates' performance was evaluated by head nurses weaker than themselves (Toulabi *et al.*, 2009). Quality of Clinical education is not desirable and there are deficiencies (Zamanzadeh *et al.*, 2008); So that the quality of clinical education is expressed under 40% (Jourabchi, 2002). Most students believe that Have failed in their training courses to learn skills necessary for employment in nursing and of course do not have enough self-satisfaction and the clinical skills of nursing students is at an appropriate level (Rahmani *et al.*, 2007). Nursing students, as is expected of them, they are not able to communicate effectively with their patients (Namdar *et al.*, 2008). Since, the score on competitive National Higher Education Entrance Examination (NHEEE) determines to a great extent what major or profession one is assigned to study, this practice has created problems. Many students, especially male students assigned to schools of

nursing, do not wish to become nurses. Although they desire university degrees, they tend not to want degrees in nursing. Thus, there is considerable job dissatisfaction among male nurses and a high level of turnover. Men also experience conflict and burnout while studying nursing, according to a recent informal survey, but women students also experience burnout at a high rate (Nikbakht *et al.*, 2004). One of the challenges ahead in nursing education, entry to this course without careful evaluation of those accepted (Ghodsbin and Shafakhah, 2008) That may not have sufficient motive for success in school and their negative impact on educational processes and outcomes (Leonello and Oliveria, 2008) .Adib Haj Bagheri and Dianati (2004) emphasis on interests, abilities, general health, education and motivation Admitted to fit with the desired professional and believe that every professional needs a certain level of knowledge, skills and personality characteristics (Leonello and Oliveria, 2008). If there is no proportional relationship between characteristics of individuals seeking to enter a professional career with the desired profession, can disrupt a person's compatibility with the profession (Wells and Cagle, 2009).

Dissatisfaction faculty members of the evaluation procedures, evaluation form and their content is another challenge in the educational system (Tootoonchi *et al.*, 2006). On the other hand, because nursing education is closely related with people's health is of utmost importance (Naseri and Salehi, 2007), therefore it is necessary to evaluate the quality of nursing education, to move. Some researchers are expressed Internal evaluation in nursing education across educational groups is done Irregularly and although, the evaluation results are reported to the school ,university and educational Department of ministry of Health, but the feedback is not given to groups. External evaluation is performed merely in terms of ranking universities and colleges in the country every five years as incomplete and sometimes unrealistic approaches. Accreditation activities in nursing education system, as established by the board of nursing courses with a preliminary evaluation and approval of the council shall be made and basically, there is no independent body for accreditation. With regard to the major failure in educational assessment, an effective evaluation system in education Nursing is essential (Khodaveisi *et al.*, 2011). According to what was obtained from various studies challenging aspects of clinical education can be divided into several categories: related to the instructor, related to the educational environment, associated with the system, and other related cases factors related to the instructor include: the loss of clinical skills, little experience in clinical education, fear of Clinical training, lack of control, difficulties in involvement all persons involved in the process of learning and shortage of motivated faculty members. Factors associated with educational conditions include pressures of time constraints, lack of clinical education for faculty members, lack of encouragement, lack of education on clinical practice patterns in the training Tutor. System factors include: the occurrence of frequent interruptions (meeting, the cell phone, pager), short stay patients in Hospital, overcoming technology. Patient-related factors: the likelihood of patient discomfort, ill patients, patients absence in the Visit time , patients' misunderstanding of the contents of the visit, issues related to privacy of individuals, patients Angry /non fellow, changes in the composition of patients. Other factors such as too many people in small rooms, noisy wards, no blackboard in the room of patients, no References to books and texts, refusal of faculty members and students discuss the differential diagnosis in Bedside, fear of questioning and fatigue of learners strategies that improve the quality of education can be used in clinical practice include: improved capabilities Clinical teaching of faculty, Reduce the fear of Clinical Training, Increasing training status , create the training ethics. But, considering to clinical evaluation as a vital component of complement in Bedside teaching should not missed. It is necessary in this regard, efforts to improve the quality and quantity of training is done at bedside and supervisors should seek to develop appropriate and diverse strategies in order to improve students clinical assessment (Mokhtari Nouri *et al.*, 2011).

Implementation and establishment of “the Improvement of efficiency low”, clinical governance system and Criteria of Accreditation standards calls for nurses to be trained properly. Despite the problems that arose in nursing education, what strategies can be for promotion of education? Many methods and teaching strategies in nursing education is expressed. But these strategies are not clear and practical. For years, questions about teaching methods and flexibility in their use have been investigated superficial and there is a need to examine in depth (Karimi Moonaghi *et al.*, 2010). The increasing complexity of health care, rapid changes in the composition and the aging population and increasing chronic disease and Emerging, reform the health system, along with the possibility of developing new therapeutic Biomedical diverse, the need for nurses with more knowledge, training and higher skill demands (Blais *et al.*, 2006). Education is simple or complex process that simple visibility can lead to waste the forces and capabilities and efforts will fail. Therefore, educational development and revolution requires identifying the process of education and awareness of new methods of its implementation. This is important in nursing education, because the main mission of nursing education is training of nurses capable and competent Who has the knowledge, attitudes and skills necessary

to maintain and improve their and society health. Since, learning in the development of nursing skills and caring properly has major role, then, the student must learn how act as a professional in the educational environment. Nursing education is fundamental for providing effective human resources for community needs (Bahrami Babahydri *et al.*, 2003) and includes theoretical and practical training processes (Parchebafieh and Lakdizeji, 2009) part of health care staff competency is based on training and knowledge that they have learned. Educational program is a key factor determining the values, goals and educational issues (Valizadeh *et al.*, 2008). The goal of nursing education is to train people to care (Sawatzky *et al.*, 2009.) Develop critical thinking and creative, self- learning, improving mental, motor skills, time management skills, increase self-confidence, good communication and prevention of being passive students (Ghodsbin and Shafakhah, 2008). In other words, the activities of nursing education are part of nursing practice (Leonello and Oliveria, 2008). Nursing education Mission is to training nurses qualitatively (Karimi Moonaghi *et al.*, 2010).

Strategies for change

One of the strategies for nursing education, changes in how the student is selected. With Centralized admission system, remove the interview stage, adequate control of the School of Nursing has been withdrawn. The experience shows that in the nursing field, entrance exam scores or high-ranking criterion alone is not suitable for study in this field. Interviews lead to possible interest from volunteers or volunteers who are just trying to stay back from the convoy pass those entrance examination, be prevented. Moreover, holding interviews, provides an opportunity to assess personality characteristics, morals, interests, attitudes, beliefs, values, and also reviewed the academic record, background and attract talented individuals interested in providing. Revision of educational curricula can be another strategy that currently being conducted by the Tehran University of Medical Sciences. Parallel to the rapid changes in economic, political, social, in order to Responsive training, nursing education requires a fundamental change in educational programs and curriculum. Actually, nursing profession due to their different abilities and different roles in society, requires to designing efficient and effective educational system, professional standards, codes of ethics, nursing, determine areas of nursing duties, approve professional Rules and regulations. However, the Specialized courses and basic nursing courses is like to nursing schools courses in the World, necessary be felt for revision in educational curricula, Change the curriculum of some courses, credits, assessment of its application in society, Remove or add a number of courses based on norms, values and culture. For example, courses such as research in nursing and evidence-based nursing in Bs has not achieved to its real position. Despite changes in patient-centered approach to family centered nursing care or shift Hospital centered Nursing Services to community-based, Objectives of community health nursing course true not only at school but after graduation is not functional and operational.

In addition, Concurrent with the development and specialization of medical knowledge and reduce the needs of the community to a nursing workforce quantitatively, Nursing schools were able to type an expert such as a nurse, emergency nursing, trauma care, acute care nurse, cancer nurse specialist, chronic diseases and nursing have a bachelor's. The above items require to Revision of Nursing Education Curriculum and programs. Another strategy is to establish a system of assessment and evaluation. Remove the nursing exam, nursing our graduates are not competent. What monitoring system today as the scientific and practical skills graduates will be emphasized in applying the staged tests, especially, clinical skills test in order to ensure the skills and competencies required by graduates to provide services after their graduation. Nursing education is not limited solely to the academic period, such as appraisal and credit system of continuous monitoring and evaluation of faculty, staff qualifications and practical training, licensing requirements in professional nursing activities, criteria for inclusion and continued nursing, teaching beginning and during service, and Should be formulated clearly and explicitly. Lack of requirements in the evaluation of the educational system can lead to decreased efficiency of evaluation and Numerous problems. Therefore, Identification Requirements for effective evaluation According to experts 'and managers' perceptions of nursing education is helpful and used be by Those who are involved with the educational system for providing a more appropriate action plans to improve the educational system and have important decisions. Infrastructure requirements in educational assessment which should be considered include the establishment of a strategic plan and information management system, Blossoming of evaluation thinking, accountability the managers based on the index, Not limited to the evaluation board and faculties, Evaluation of policies, The need for comprehensive policy and macro-evaluation, Becoming intertwined the evaluation in strategic plans, Research to evaluate and improve the culture of evaluation. For effective evaluation should be provided infrastructure activities such as a comprehensive policy and prosperity of thinking in the evaluation team noted. One of the important learning strategies is being affecting social and cultural patterns and behaviors of

students. Hence, research should focus on behaviors and values of teachers in the educational system are doing. One of the factors affecting the effectiveness of teaching is appropriate patterns. Pattern-centered strategy of teaching is fundamental for excellent teaching process. That way the students are guided through their learning effect on the processes educational activities importantly. Knowledge of teaching approaches and the factors that effect on them will be very important for designers and teachers. Therefore, it is essential that for greater understanding of the strategy process and its operational Stepped (Mokhtari Nouri *et al.*, 2011). Effective evaluation should be continuous to the spiritual and behavioral aspects, especially the professionalization process in the interest of students. Through interviews with students and their evaluation, the cognitive challenges, and makes learning environment for students interested in education continues. Selection, use and maintenance of thriving university faculty members at all levels of education are very important. Appropriate Characteristics for faculty members teaching in various nursing courses is recommended. Comprehensive evaluation of educational programs, promotion and development of strategies and programs to increase effectiveness and efficiency programs.

DISCUSSION AND CONCLUSIONS

Studies have emphasized that the nursing curriculum should be revised and be reformed based on community health needs. (34, 35). Of the most important factors influencing conduct a proper evaluation, are considered effective tools that can accurately measure the desired objectives and the validity and reliability may be and is recommended to develop valid and reliable tools for all aspects of training and rigorous supervision of the evaluation is performed. In order to continuously improve the educational system should be regularly evaluated and appropriate feedback to be provided. Providing appropriate feedback to improve educational quality assessment is necessary. To improve the evaluation of theoretical training Methods applying teaching strategies that can enable and foster creative and critical thinking growth is recommended (Farahani and Ahmadi, 2006). Although the process of clinical learning environments in nursing education are important, but difficult to control. Adequate evaluation and supportive and motivational environment, there is no in clinical training (Vahidi *et al.*, 2006). Effective assessment in clinical education requires revising clinical assessment tools and processes (Delaram and Tootoonchi, 2009). Achievement tests should reflect the best of all educational objectives and content are all so that cover all educational purposes. Also, have the ability to evaluate rate of obtain high level learning (Saif, 2006). Graduate Competencies is far from desirable and some skills and abilities necessary to do business at the end of their training are not obtained (Ehsanpour, 2006). So, consider to graduates, Job Future, competency, continuing education, let to achievement, graduate effect on the community is important. Unfortunately, despite the importance of nursing education, research conducted in Iran, is indicated inefficiency of theoretical and clinical training. Theoretical material presented in class is less transferred to clinical situations and Students can not apply what is learn in the patient's bedside. However, purpose of clinical training is increasing of clinical experience; its implementation is along with problems in practice (Ahmadinejad *et al.*, 2002). Problems such as reduced motivation and interest of students, the inadequacy and appropriateness of educational materials with professional requirement and job duties, Failure to obtain skills for employment during course, lack of adequate satisfaction of course, the inability to communicate effectively with the patient are nursing education challenges (Mokhtari Nouri, *et al.*, 2011).

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