

## Original Article

## Comparative study of nursing education in three Middle East countries Rahim

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## Abstract

**Background & Objective:** In the university system, the purpose of education is to make appropriate changes in the graduates. Almost in all societies, educational goals are similar to each other, but planning relate to the traditions and cultures of each society. The aim of this study was to compare and matching the nursing curriculum in three countries: Iran, Jordan and Turkey.

**Materials and Methods:** This review -comparative study was conducted in 2019. Iran Health Ministry website and the site of several nursing schools in three countries and some related studies were used to reach the full details of the curriculum. Obtained information were analyzed by using Brady's four-stage model including description, interpretation, proximity and comparison levels. Comparison was made in the areas of the time of the beginning, the mission, and the purpose of educating, admission criteria, and number of units, courses' orientations and structure.

**Results:** The nursing education program in all three countries has many similarities. Differences were observed in the content of curriculum in the undergraduate course. At the master's level, there were differences in the admission criteria, and at the doctoral level, there were in the branches of this course.

**Conclusion:** According to the results of the present study, it is suggested to improve the quality of nursing education as much as possible, and to eliminate its shortages and defects, as well as considering the complex and changing needs of society, issues such as student selection, the undergraduate content of curriculum and postgraduate orientations should be reviewed and seriously amended.



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## Introduction

As the most important institutions for effective student education (1) and centers that produce science and culture and train required specialists of the country (2), universities have three main missions of education, research, and service provision (3). In the academic education system, training means creating increasing and proper changes in students (4). A part of the postgraduate education system, medical science education is related to the lives of human beings, and nursing is one of the complicated professions of medical sciences (5, 6). The field of nursing is extremely important in the health system of the country since its main goal is to improve people's health in all life processes (7, 8). The past few decades have witnessed extreme advancements in nursing education worldwide. However, challenges

have emerged in the qualification of graduates and the quality of nursing curriculum and training along with advances in nursing education (9). In addition, continued changes in health systems, technologies, demographic profile, expectations, and demands have led to the understanding that the training of nurses and nursing curriculum requires evaluation, revision, and even major corrections (10).

The mission of comparative education is to detect differences and similarities of various education systems, determine the causes of systems' success or failure, and use their experiences in the advancement and development of the education system (2). While educational objectives are almost similar in all communities, training methods and plans depend on the cultures and traditions of each society (2, 11). Therefore, comparative studies should be identified

and interpreted in the social, cultural, political, and economic context of training events, which leads to the formation of an approach used to solve educational problems and demonstration of effective areas in educational progress or recession (12).

Numerous studies have been conducted to compare curricula of BSc, MSc, and PhD in nursing in Iran with other countries of the world. In a research by Sajadi et al. (2016), findings showed that nursing education was more advanced in Japan, compared to Iran, in terms of modern and well-established training of all nursing levels, from BSc to PhD. However, there were some differences between the two countries in the areas of admission criteria, type and number of courses, and teaching and evaluation methods (2). In 2017, Sadooghiasl et al. marked that the main focus of the MSc course of geriatric nursing was on clinical, teaching, and research areas in Iran. Employment opportunities are described in line with the goals of the program and are extremely general. Meanwhile, the curriculum in the USA was presented separately by focusing on prevention and clinical areas. In addition, job opportunities had more objective definitions and were proportional to the curriculum's goals. Moreover, there were differences between the two countries in terms of admission (12). A comparison of nursing PhD curriculum in Widener University in the United States and the School of Nursing at Johns Hopkins University in the United States and Canada revealed incompatibility between the mission and objectives of the course with the lesson plan, unclear role and responsibilities of graduates, a failure to provide courses virtually, overlooking the community's needs and problems, and lack of student-centered and competency-based education in the Iranian Nursing PhD curriculum (13-15).

In general, since comparative research leads to the identification of strengths and weaknesses of education systems and improvement of content and quality of curricula, it could be used to eliminate issues of and improve a curriculum. The majority of

comparative studies are carried out to use the experiences of leading nations in the field of education, which, in this case, are the most advanced western countries. In recent years, we have witnessed successful nursing education programs in developing countries as well, including Turkey and Jordan (16, 17), but no research has been conducted in this regard. On the other hand, these countries are among the Middle-eastern countries, including Iran, and are culturally and religiously similar (18). Therefore, their successful experiences could be used to improve the nursing curricula in our country. With this background in mind, this study aimed to identify and match the nursing curricula of Iran, Jordan, and Turkey.

## Materials and Methods

This was an applied research with a review-comparative approach. In general, the comparative survey is when two or several phenomena are analyzed in terms of similarities and differences (11). The present study was performed in Urmia University of Medical Sciences in 2019 following receiving approvals from the ethics committee of the university (IR.UMSU.REC.1396.405) and assessing valid websites and journals using George Brady's method (1964). The mentioned technique encompasses four stages of description, interpretation, proximity, and comparison (19). According to the research methodology, the history and status of nursing education at three levels of BSc, MSc, and PhD were assessed in Iran based on the latest revised regulations in this area. Afterwards, the history and status of nursing education at the mentioned three levels were evaluated in Turkey and Jordan, followed by finding and comparing similarities and differences among the programs. Data related to the details of curricula and the complete list of nursing credits were obtained from the website of the ministry of health of Iran, websites of nursing schools of Tehran, Tabriz, Shiraz, and Urmia, the website of the nursing school at the

University of Jordan, the website of Florence Nightingale Faculty of Nursing at the Istanbul University, and the website of council of postgraduate education in Turkey (20-23). It is worth noting that slight differences were observed in the performance of various schools of Turkey and Jordan in terms of the nursing curriculum, especially at the postgraduate education level. However, they were selected for comparison due to the experience and progress of these schools in the field of nursing education. In addition, Farsi and English articles published in the databases of Science Direct, Pub Med, Google Scholar, BMJ, DOAJ, MagIran and SID, and Barakat Knowledge Network System during 2007-2019 were searched using the keywords of "nursing education", "curriculum", "Iran", "Jordan", and "Turkey". After the search, we identified and evaluated 35 articles, 22 of which were selected since they were in line with our objectives. Moreover, the unrelated articles and those published in invalid journals were eliminated from the research. In the next stage, the collected articles were classified and compared and their strengths and weaknesses were evaluated based on the terms and context of the three countries.

## Results

The results of the present study were obtained by comparing nursing BSc, MSc, and PhD curricula in Iran, Turkey, and Jordan and assessing areas of history and time of the beginning of academic nursing education, the mission of nursing schools, and the purpose of training students in three levels of

nursing, terms, and admission criteria in all three levels, roles, and capabilities expected of graduates, the curriculum at this level and duration of the study, as well as courses' orientations and structure. The following items were considered important after assessing all elements and analyzing similarities and differences: academic nursing education initiated sooner in Iran, compared to Turkey and Jordan (Table 1). The nursing curricula of all three countries have specific missions and objectives based on strategic planning principles, and according to the results, their emphasis was on training competent nurses in the area of the mission of education in all three countries and clear expression of goals and having international approaches in the area of goals in Turkey and Jordan (Table 2). While there were significant similarities among the three countries regarding admission at the BSc level, there were some differences in the postgraduate education level (Table 3). In the field of expected capabilities and roles, graduates' unclear roles, responsibilities, and status, especially at the postgraduate education level of nursing, were observed in Iran (Table 4). Moreover, there were similarities and differences among the three countries regarding the content of curricula and duration of education. In general, there were weaknesses in evidence-based education in almost all three countries, especially Iran at the BSc level (Table 5). There were different PhD orientations in Turkey, which was not observed in Iran and Jordan (Table 6).

**Table 1: History and time of the beginning of academic education in three stages**

	<b>Iran</b>	<b>Turkey</b>	<b>Jordan</b>
<b>Bachelor of Science</b>	1915 Urmia University of Medical Sciences 1976	1955 Ege University of Izmir 1968	1972 Jordan University 1986
<b>Master of Science</b>	Nursing Higher Education Center of National University (Shahid Beheshti University of Medical Sciences)	Ege University in Izmir city	Jordan University
<b>Doctorate</b>	1995 Tabriz University of Medical Sciences	1972 Hacettepe University of Ankara	2005 Jordan University

**Table 2: Comparing the mission and purpose of education**

		Iran	Turkey	Jordan
<b>Mission of nursing education</b>	<b>Bachelor of Science</b>	Training informed, skilled, and committed nurses to take care of patients and promote their health (24,25)	Training professional nurses with assessment of health care needs in accordance with contemporary viewpoints and necessary cares(26)	Promoting society's health via training of professional nurses, conducting research and providing social services, and preparing an appropriate learning environment(22).
	<b>Master of Science</b>	Training committed and skilled people based on the principles of nursing sciences and scientific texts to work in fields of nursing, education, research and management(25)	Training professional nurses who examine the national health care needs and provide necessary cares and preparing students for doctoral degree(26)	Promoting people's health and well-being via preparing professional nurses to provide high quality nursing cares, research, and community-based services (29)
	<b>Doctorate</b>	Promoting professional science and national health standards, permanent enrichment of faculty members, knowledge production, technology transfer, scientific interaction at national and international level (30)	Providing services to preserve and promote the health of people by nurses with bachelor's degree or above having knowledge, ethics and leadership characteristic (21)	Providing advanced knowledge and traditional and non-traditional creative activities, nursing graduates empowerment in the areas of knowledge and research-based theories as researchers, teachers or managers (22)
	<b>Bachelor of Science</b>	Designing a program based on Islamic teachings and the needs of society, using standards, creative thinking and research methods in education, nursing process, developing motivation for continuous learning (24,25)	Training the nurses based on standards, lifelong learning, commitment to ethical values and human rights, effective communications, problem solving ability, and research skills (26,31)	Training qualified nurses, promoting research culture, developing body of nursing knowledge at local, national and international level, publishing nurses' knowledge, lifelong learning techniques (22)
	<b>Master of Science</b>	Providing comprehensive and community-oriented education with emphasis on services in the fields of education, management and counseling clinics (27)	Providing necessary training to meet the needs of people, conduct research, prepare for doctoral degree and supply specialized services at national and international levels (32)	Advanced education, participation in coordination of training programs, involvement in professional accountability, nursing empowerment (29)
	<b>Doctorate</b>	Training teachers with educational and research qualifications, reaching professional self-sufficiency (33)	Teaching students along with increased skills, creatively and critically thinking (20)	Promoting research culture, developing body of nursing knowledge, professional promotion (22)

**Table 3: Comparing terms and criteria of student admission**

	<b>Iran</b>	<b>Turkey</b>	<b>Jordan</b>
<b>Bachelor of Science</b>	High school graduates in the field of natural science who are admitted via national entrance exam (24,25)	Secondary and high school graduates who are admitted via national entrance exam (34,35)	Passing 2-year pre-school course, 10 years of basic education, and 2 years of secondary education and achieving an acceptable score in the national entrance exam (36)
<b>Master of Science</b>	Admission in entrance exam and having a bachelor's degree in nursing to be allowed in some fields, including intensive care, neonatal intensive care, and emergency nursing and having at least two years of clinical experience in corresponding departments (27)	Requirements for admission to this grade in Turkey include passing the entrance exam, valid language certificate, bachelor's degree in nursing, as well as acquiring admission score in the interview (28)	Administration of department website to manage the possibility of attending programs and completing the admission process, payment of fees, review of admission capacity of specialized discipline, 1 year of clinical nursing experience or teaching in relevant fields (29)
<b>Doctorate</b>	Having the general higher education entry requirements, approved master's degree, passing the special entrance exam for doctoral degree, getting an admission score in one of the English language exams(33)	Necessary requirements could vary depending on the different universities and colleges, but in general, successful passing of science and foreign language exams is essential (20)	Having general requirements, accepted specialties, TOEFL or its equivalents, article published or approved in a reliable scientific journal, list of undergraduate and graduate grades (22)

**Table 4: Comparing expected roles and capabilities of the graduates**

	<b>Iran</b>	<b>Turkey</b>	<b>Jordan</b>
<b>Bachelor of Science</b>	Nursing process-based cares, communicating with patients, teaching the clients, managing and organizing in health centers (37)	Promoting people's health, environmental protection, caring for diseases, adherence to moral values, education, counseling, research (34,35)	Competence in providing professional nursing care, evidence-based care, safe and ethical care, effective communication with clients and the health team, taking benefit of critical thinking and problem solving (22)
<b>Master of Science</b>	Caring, consultative, educational, scholar, preventing, managerial roles; anticipated competencies such as finding patients' problems, developing a care plan, implementation and evaluation, active participation in developing policies related to health promotion(27)	Managerial, scholar, educational, caring and preventing roles; capabilities such as diagnosis of health problems, implementation and evaluation of cares, health education, managerial-administrative measures; participation in directing cross-sectoral programs (28,32)	Educational, managerial, scholar and clinical roles; capabilities such as providing quality nursing cares; promoting research culture, promoting body of nursing knowledge, promoting continuous learning (29)
<b>Doctorate</b>	Overcoming quantitative and qualitative deficits of human resources, managing training courses, research, management in nursing, analyzing problems related to profession, and providing solutions (23)	Managerial and executive tasks, education and assessment of results, identifying health requirements, presenting nursing care plans (20)	Occupying specialized scientific and scholar positions and providing appropriate solutions to specialty-related problems and challenges (22)

**Table 5: Comparing curriculum and duration of study**

	<b>Iran</b>	<b>Turkey</b>	<b>Jordan</b>
<b>Bachelor of Science</b>	4-year courses, undergraduate course is theoretical-practical, internship and field internship and a total of 130 credits (24)	4-year courses, equivalent of 2300 clinical hours and 2300 theoretical hours, passing English language course (26)	4-year courses consisting of 136 theoretical and practical credits (22)
<b>Master of Science</b>	Passing 21 specialized credits and 4 thesis credits, a total of 32 credits, with minimum and maximum length of 2 and 3 years, respectively 9 (27)	Students pass 30 credits and then submit their projects under the supervision of a professor (32)	Passing 36 credits (21 credits for compulsory courses, 6 credits for optional courses, and 9 credits for thesis) in a maximum of 7 semesters (38)
<b>Doctorate</b>	Two educational (25 credits) and research (20 thesis units) courses. After completing the training course, the person will be qualified to participate in the comprehensive exam (33)	2 educational and research courses for students with master's degree. Students with a bachelor's degree are also admitted (minimum 42 credits, 14 courses, comprehensive exam and thesis) (20)	Two educational courses (21 compulsory courses and 15 optional courses) and a research course that includes a thesis (22)

**Table 6: Comparing the courses' orientations and structure**

	<b>Iran</b>	<b>Turkey</b>	<b>Jordan</b>
<b>Bachelor of Science</b>	There is no specific discipline (23)	There is no specific discipline (25)	There is no specific discipline (21)
<b>Master of Science</b>	Master of Science in nursing, Ministry of Health, including 12 disciplines (internal surgery nursing, pediatric nursing, pediatric intensive care nursing, neonatal intensive care nursing, intensive care nursing, community health nursing, psychiatric nursing, military nursing, rehabilitation nursing, emergency nursing, geriatric nursing, and nursing management)(27)	Including 12 disciplines (surgical nursing, internal nursing, pediatric nursing, community health nursing, principles of nursing, oncology nursing, gynecological nursing, mental health nursing, emergency nursing, legal nursing, nursing education and management in nursing) (28)	Three disciplines: psychiatric, intensive care and palliative care nursing (29)
<b>Doctorate</b>	Doctoral program in nursing is only conferred as PhD with maximum length of 4 years(33)	Doctoral program in nursing is only conferred as PhD. Doctoral disciplines include psychiatric nursing, internal medicine nursing, surgical, gynecological nursing, pediatric nursing, principles of nursing, and community health nursing (28)	Doctoral course in nursing is conferred as PhD and the length of course is about 4 years (22)

## Discussion

The present study aimed to compare the nursing BSc, MSc, and PhD curricula of Iran, Turkey, and Jordan so that effective steps could be taken toward the improvement of the quality of curricula by determining the weaknesses and strengths of the educational systems and presenting efficient solutions. Therefore, focusing on cultural, social, historical, and economic differences and their comparison could be beneficial for solving problems and challenges in the field of nursing education (25). According to the results, academic nursing education initiated sooner in Iran but postgraduate education started sooner in Turkey, compared to Iran and Jordan. A comparison of the educational mission of the three countries revealed numerous similarities and demonstrated that the main emphasis of education is on training the necessary and qualified human resources (in terms of science and practice) to be active clinical, education, research, and managerial areas, and on providing high-quality care and improving the community's health. Unfortunately, this issue has not been considered in the curricula of Iran and Jordan. A comparison of Iran, Turkey, and Jordan showed a lack of international viewpoint and interdisciplinary approaches and overlooking continuous learning in the nursing profession's educational goals of Iran, which is consistent with the results obtained by Borzou et al. (2017). According to these scholars, nursing schools of Iran are limited to geographical boundaries, and their goals do not match the current needs of the community (14), which necessitates the revision and correction of the philosophy, mission, and goals of the postgraduate education level.

According to the results obtained by Adib Haj Bagheri, nursing education programs (e.g., postgraduate education level) do not have a clear written philosophy, goals, and mission, are not proportional to the needs of society, and lack the necessary quality. The result has been numerous

unused theses, relative learning mainly at the knowledge level, slight behavior change, and lack of sufficient skills in specialized education, management, and nursing (39). In terms of the content of curricula, clinical issues were the main stressors of nursing students, and theoretical training should be combined with practice in clinical settings. In addition, using nursing theories in performing professional roles in the curriculum of Turkey was among the noticeable issues, which was ignored in the BSc curriculum of Iran. In general, the content of postgraduate education courses in Iran and Jordan is mostly theoretical and related to research, education, and nursing theories while their practical aspects are limited. Therefore, it is recommended that the proper foundation be laid for improving evidence-based care through accurate revisions and planning in curricula, which ultimately leads to the connection between nursing theories and practice (40). In this regard, our findings are congruent with the results obtained in Greece (41), Ireland (42), Scotland (43), Tehran University of Medical Sciences, Tabriz University of Medical Sciences, and Ilam University of Medical Sciences (44). The results of these studies were indicative of the inefficiency of nursing curricula in creating the necessary capabilities in nurses, developing creative and critical thinking, and using training in clinical settings. There is a lack of historical, social, philosophical, and political programs and courses on organizational concepts and emerging issues affecting nursing. Therefore, it is suggested that educational workshops be held in this regard (14).

The need to focus on training capable and competent nurses according to the changing and growing needs of service recipients has increased daily considering the importance of scientific and practical competence in nursing and the role of different levels of nursing, especially in postgraduate education courses, in meeting the needs of society. In general, different nursing skills and activities are

required with the development of information and medical technology, and genetics information. For instance, there is an increasing emphasis on research and clinical activities related to prevention, acute treatment, and palliative care with an increased elderly population (45). The expected capabilities and roles have not been defined comprehensively in the educational plan of Iran, and the exact job location for nursing graduates is not specified, especially at the postgraduate education level. In practice, there was no specific position for postgraduate nursing graduates in Iran, and these people are hired like expert nurses in every part of the hospital, regardless of the needs of the health care system and the community. Therefore, attention should be paid to the formation of a suitable organizational structure and defining nursing postgraduates' actual role based on society's needs in their education, which is also confirmed by Aghaei & Ghorbani (46, 47).

On one hand, the goal of nursing PhD programs is training nursing leaders and scientists in areas of creating new knowledge, education, research, policymaking, and management, so that they could meet the comprehensive needs of healthcare systems (48). However, in clinical settings, the fields and employment contexts of nursing PhD programs are not yet available, and this issue requires a review of the country's organizational chart. With regard to the advancements in the field of nursing service provision in Turkey and Jordan, especially at care and community levels (49, 50), it seems logical to use the experiences of these countries in the field of education (mission, goals, content, orientations, and expected capabilities). The nursing MSc orientations have been established in all three countries based on the needs of individuals and communities. One of the strengths of the educational program in Turkey is presenting different PhD orientations while no specific orientations are observed in Jordan, similar to Iran, at this level.

One of the advantages of the present study was comparing three middle-eastern countries, which

was not carried out before. However, one of the major drawbacks of the current research was the information related to the curriculum, where the information existing in school websites, reports, and related texts were used. While some schools have published comprehensive information, others have presented a summary and their information may be somewhat incomplete. In terms of articles, we assessed the available ones. In fact, while the researcher attempted to achieve full information about this matter, there may be some shortcomings in full data recovery due to the mentioned limitations. In addition, the overall status of nursing schools of the country may not be presented by assessing these schools, and mentioning the word country was due to the study of a group of nursing schools together. Therefore, it is recommended that a comparison be made with other valid schools in future studies. Moreover, it is suggested that further studies be carried out in the field of graduates' acquired abilities and the content of the program be surveyed to address possible weaknesses of these programs.

## Conclusion

According to the results of the present study, there were some differences in the nursing curricula of Iran, Turkey, and Jordan regarding the content of their BSc programs, student admission, and postgraduate education orientations. Therefore, the weaknesses of the program could be improved by enhancing the quality of curricula through the use of experiences of foreign universities so that active and motivated nurses could be trained at all health service levels in the country. In order to improve and correct the nursing curriculum in Iran, some measures include changing the syllabus and content of the courses of all levels in accordance with the stated mission and goals, using nursing theories at the BSc level to further familiarize students with evidence-based performance, more emphasis on

community-based nursing care, applying interviews to select nursing postgraduate students, and establishing multiple orientations at nursing PhD level along with explaining and determining the expected position and roles of graduates of this course in clinical settings.

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