

✧ RESEARCH PAPER ✧

Perceptions and expectations of Baccalaureate-prepared nurses in Jordan: Community survey

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Perceptions and expectations of Baccalaureate-prepared nurses in Jordan: Community survey

The overall purpose of this paper is to describe the process of utilizing community participation for curriculum design to develop a new school of nursing. A brief Community Needs Assessment Survey was carried out in order to explore community perceptions and expectations of Baccalaureate-prepared nurses in Jordan. The sample consisted of 152 participants who were staff nurses, nurse administrators, nurse supervisors, nurse educators, physicians, pharmacists and consumers of services. Data were collected through a self-administered survey form using open-ended questions. Participants were asked to describe their perceptions of nursing and nurses, the desired professional skills and personal characteristics of the Baccalaureate-prepared nurse, important curriculum contents and to provide suggestions or comments for improving the preparation of Bachelor of Science in Nursing (BSN) nurses. The findings indicated that nursing was viewed as a caring profession where nurses care for the person both in sickness and health. Several professional skills and personal characteristics emerged as being important for the BSN nurse, including clinical competence, the desire to continue learning, communication skills, ethical and moral character, critical thinking, assessment skills, and computer and English-language skills. The participants provided the desired curriculum contents and suggestions related to the expected skills. Implications for nursing education were discussed.

Key words: Baccalaureate nursing, nursing curriculum, nursing practice.

INTRODUCTION

The idea behind this Community Needs Assessment Survey evolved when the principal author (W.P.-N.) assumed the post of Dean of Nursing in a new public uni-

versity in Jordan and was entrusted with the planning and development of a curriculum for a new Baccalaureate degree programme in nursing. The questions that arose were:

1. How can the new nursing programme best prepare graduates to meet the needs of society and cope with the rapidly changing health-care system?
2. What should be done to create an appropriate curriculum that responds to the educational needs and

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challenges encountered by the nurse of the twenty-first century?

It became obvious that in order to answer these questions and carry out the duties effectively and efficiently, a careful assessment of the community perceptions and expectations of Baccalaureate-prepared nurses was essential. The present study intends to carry out this assessment and explore ways and means that would better prepare Baccalaureate-nursing students for entry into professional nursing practice.

Nursing education in Jordan

Baccalaureate nursing education in Jordan started in the academic year 1972–1973 with the establishment of the first-ever Baccalaureate degree programme at the University of Jordan in Amman.¹ Eventually, the programme was offered by other universities and academic institutions. Currently, there are six Bachelor of Science in Nursing (BSN) 4-year degree programmes, four of which are offered by public universities while private universities offer the other two. In addition, there are three BSN Completion Programmes (bridging programmes) for registered nurses who hold a diploma or associate degree.^{1,2}

In an attempt to meet the work force needs for nursing personnel in Jordan, various types and levels of nursing education programmes were created. Currently, the following levels of basic nursing education exist in Jordan as follows:

1. High school certificate-nursing branch: administered by the Ministry of Education during which students attend nursing courses in addition to general high school courses and obtain the secondary school certificate at the end of the programme and qualify as a 'Nurse Aid'.
2. Practical nurse programme: two academic years (18 months) of nursing studies in schools for practical nurses affiliated with the Ministry of Health and one school affiliated with the Royal Medical Services. To be eligible for admission to the programme, students should complete secondary school education successfully.
3. Associate Degree Programme: students pursue two academic years of study in one of the two Institutes for Allied Health Professions in Jordan or attend a programme run by the Royal Medical Services. Students should complete their secondary education before gaining admission to this nursing programme.
4. Registered Nurse Diploma Programme: students with a secondary school certificate pursue a programme of 39 months of nursing studies. The programme is offered

at two colleges of nursing affiliated with the Ministry of Health.

5. Registered Nurse Bachelor of Science in Nursing (BSN) programmes: students undertake 4 years at university level.

Strategic plan for nursing education in Jordan

Recognizing the need for improving the quality of nursing services and advancing the profession of nursing, the Jordanian Minister of Health decided to form a committee to study the situation of the nursing profession and midwifery in Jordan in 1994, and devise a strategic plan for advancing this profession in terms of both practice and education. A committee was then formed in late 1995 comprising 10 key nursing leaders from the Ministry of Health, the Royal Medical Services, the International Relief Agency, three public universities and the Jordanian Nurses and Midwives Council.¹ Following lengthy deliberations and hard work, the committee came up with nine recommendations to improve the quality of basic nursing education in Jordan (Table 1).

Table 1 Recommendations of the Committee for the Strategic Plan for Nursing Education in Jordan

1. Condense the programmes of basic nursing education and to limit them to two levels only (i.e. the Baccalaureate Programme and the Associate Degree Programme)
2. Support and enforce the Bridge Programmes to enable nurses to move up the educational ladder
3. Provide adequate number of Baccalaureate Nursing Programmes at the public and private universities
4. Review the various levels of nursing education and revise the titles to be awarded to graduates
5. Revise the admission criteria for the various nursing programmes
6. Prepare flexible nursing curricula that respond to societal needs
7. Organize and administer a comprehensive licence examination for the nursing graduates
8. Enforce certain requirements for the nursing instructors
9. Follow up on and constantly evaluate, modify and upgrade the educational programmes and the performance of graduates

Why Baccalaureate education is needed for nurses in Jordan

The Committee for the Strategic Plan for Nursing Education in Jordan and the Eastern Mediterranean Regional Advisory Panel on Nursing agreed that the basic education for the professional nurse not be less than the Baccalaureate level.^{2,3} However, a long transitional period is required to achieve this goal. Nurse leaders believe that reform of nursing education in Jordan is essential, and that Baccalaureate education will promote the development of competent and skilled nurses who are able to meet the changing health-care needs of society and adapt to the overall complex health-care system. Advances in science and technology, greater emphasis on promotion and maintenance of health, and developments in the field of education have all led to an increased demand for highly qualified nurses.⁴ Furthermore, higher education for nurses will also ensure the provision of high-quality nursing services to all clients.

Despite the presence of five Baccalaureate nursing programmes in Jordan (two of which are offered by private universities that attract very small numbers of students), Sultan and Al-Ma'aitah noted that there is still a big shortage of highly qualified nurses and more Baccalaureate programmes are required to provide sufficient numbers of nursing graduates.^{1,2} There are several factors contributing to this shortage of qualified nurses in Jordan, the most prominent being the remarkable increase in the number of hospital beds and treatment units as a result of the expansion in the health-care facilities in both the government and private sectors, and their treatment not only of local patients but of international patients as well. Many qualified nurses leave the country to seek better work opportunities and higher salaries in the Arab Gulf countries. Female nurses may quit nursing altogether for family reasons or because of inconvenient work schedules and rotating night shifts.

It is anticipated that recent advances in medical services will result in a notable increase in the number of elderly people, and subsequently an increase of chronic diseases and the need for more nurses to provide quality care for them. Finally, if the recommendations of the Strategic Planning Committee are to be implemented, there will be a great demand for Baccalaureate-prepared (or BSN) nurses, which will necessitate opening more university nursing programmes for regular students as well as for associate degree nurses to complete their BSN studies.

Significance of the study

This study was conducted as a brief Community Needs Assessment Survey to particularly identify the skills, qualifications and qualities essential for the BSN nurse from the perspective of employers, educators, consumers and health-care professionals, and to explore ways and means to better prepare BSN students for nursing practice. The main motivation behind this study is to use the findings to plan a new BSN curriculum that prepares nurses to provide high-quality care, meet the requirements of the changing health-care system and face the challenges of the twenty-first century. The authors believe that improving the quality and availability of higher education for nurses is a mandate for nurse educators and administrators. There have been comments about the existing curricula that indicate that courses are heavily loaded with theory but provide insufficient clinical training. Another critique was that they do not encourage critical thinking or problem-solving skills.

Considering the fact that there is a global migration of qualified nurses and an increase in international collaboration, it is then inevitable that Baccalaureate programmes produce graduates that are able to compete not only at the national level but also at the regional and international levels.⁵ Many BSN graduates are now eager to travel and seek jobs in other countries, and some choose to further their education by studying for a Master or PhD abroad. In order for these undergraduates to be accepted at an accredited graduate programme in another country, they have to meet certain international standards in their basic nursing education.

No prior studies have been done in Jordan to assess the community needs (i.e. perceptions and expectations) of Baccalaureate-prepared nurses.

METHODS

The needs assessment study utilized a survey design in order to collect information from the participants about their perceptions and expectations of the Baccalaureate-prepared nurses.

Subjects

The non-probability sample was used in order to facilitate purposeful selection of participants from agencies that were either employers of BSN graduates, involved in clinical training of BSN students, or are responsible for educating nursing students such as physicians and pharmacists. The participants were chosen based on the

researchers' prior knowledge of their expertise in education or practice. They were approached at their workplaces by the principal researcher (W. P-N.) or the research assistant. Some consumers of nursing services were also included from the public using a convenient sampling method through personal contacts (word of mouth). The use of multiple referents for data collection is a technique called triangulation and is recommended to improve the credibility of the survey findings.⁶

The researchers distributed 192 surveys and collected 152, a response rate of 79%. The sample consisted of 65 nursing supervisors and administrators (42.8%), 12 physicians and pharmacists (8%), 16 staff nurses who provided direct care (10.5%), 22 consumers (14.5%) and 37 (24.4%) nurse educators from the BSN and associate degree programmes in the public and private sectors.

Data collection

A short semistructured self-administered survey that included two sections was used to collect the data for this study. The first section dealt with the demographic and employment information of the study participants (e.g. age, gender, education, occupation, years of experience and place of work). The second section included five open-ended questions to elicit information about the participants' perceptions and expectations of BSN graduates. The five open-ended questions covered the following areas: (i) definition of the nurse and nursing as a profession; (ii) the desired professional skills for the BSN graduate; (iii) the desired personal characteristics of the BSN graduate; (iv) the desired curriculum contents for BSN students; and (v) any comments or suggestions. Before its distribution, the survey was granted approval from a special Human Rights and Ethics Committee at the Hashemite University. The form was accompanied by a covering letter that briefly described the purpose of the study, the rationale for conducting it and instructions on how to complete the form. The covering letter also assured the participants their anonymity and the confidentiality of the information provided, and listed names and affiliations of the researchers. One of the researchers collected the data (W. P-N.) with the help of a research assistant.

Data analysis

Demographic data of the study participants were summarized using frequencies and percentages. The open-ended questions were analysed using the content analysis method, which is the analysis of the content of the narra-

tives to determine themes or patterns.^{6,7} All responses to the open-ended questions were coded independently by one researcher and one research assistant (W. P-N. and O. G. B.). Codes were developed into categories and sub-categories, and operational definitions were recorded for all major categories and subcategories; thus, the emerging themes were decided. The researchers and the research assistant then carefully reviewed the codes and categories for validation and consensus. This technique ensured the credibility and trustworthiness of the data.⁶

RESULTS

The results are outlined in five broad areas. The commonalities of perceptions and expectations of BSN Jordanian nurses, noting differences where apparent, are reported here.

Characteristics of study participants

More than half (58.5%) of the participants were women and 41.5% were men. Thirty-one percent of the sample were 20–29 years, 41% were aged 30–39 years, and 20% were 40–49 years. The majority of the participants (80%) lived in Amman and surrounding areas while 20% lived in Irbid.

Of subjects, 35.6% had a Bachelor degree, 34.2% had a Master's degree, 9.2% had doctoral degrees, 11.2% had an associate degree and 9.8% had high school certificates or less. Of participants, 42.8% were nursing administrators (including senior administrators, supervisors and department managers), 24.4% were nursing faculty and instructors, 10.5% were staff nurses who provided direct care, 8% were physicians and pharmacists and 14.5% were consumers (including students, housewives and other various occupations). The length of experience for employed participants varied from 1–20 years, with 54.8% having 10 years or more experience.

Perceptions of nursing as a profession

Almost all nurse administrators, educators and direct-care providers perceived nursing as an art and a science that is based on theories from nursing and other related fields. They viewed it as a humanistic profession, which is concerned with the care of the person as a whole biological, psychological, social and spiritual being. They also perceived nursing as a profession that involves the provision of care for healthy and sick individuals and groups, and requires certain educational preparation to meet the desired standards of nursing care.

Physicians and pharmacists defined nursing mainly as taking care of the patient as a whole entity (physically, mentally and psychologically), and implementing the doctor's orders. They also mentioned that 'nursing complements medicine and is an essential part of health care.' The consumers, on the other hand, viewed nursing as 'a profession that is mainly based on humanistic principles and is concerned with helping the sick persons in hospitals or at homes.'

Perceptions of the nurse

Nurse educators, administrators and direct-care providers perceived the nurse mainly as a person who practices the nursing profession, holds a recognized scientific nursing degree of not less than an associate degree, has a licence to practice nursing and is registered in the Jordanian Nurses and Midwives Council. The nurse carries out the nursing process with both healthy and sick clients.

Physicians and pharmacists viewed the nurse as the person who helps and takes care of the patient as a whole, in addition to assisting the physician and carrying out their orders. Some physicians stated that the nurse has an important role in the success of health care and that his / her role supplements that of the physician. For these reasons, nurses should be highly qualified.

The majority of consumers perceived the nurse mainly as a professional person who helps and takes care of the patient in a humanistic way. The nurse was viewed as an 'angel' by three consumers. Another two consumers viewed the nurse as the physician / helper who carries out the doctor's orders.

Professional skills and personal characteristics of the BSN nurse

The survey included two separate open-ended questions as follows:

1. What are the necessary professional skills for the Baccalaureate-prepared nurse?
2. What are the desired or expected personal characteristics of the Baccalaureate-prepared nurse?

Responses to these two questions were grossly overlapping. Therefore, in order to avoid redundancy, the authors decided to combine the answers to the two questions in this section (Table 2).

Several professional skills and personal characteristics were identified by all the study participants as essential and desired for the BSN nurse. Respondents expected the BSN graduate to be safe and competent in providing

Table 2 Desired professional skills and personal characteristics of the Bachelor of Science in Nursing (BSN) nurse

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|---------------------------------------------------------------------------------------------------------|
| 1. Competence in clinical/technical skills (including assessment skills and use of the nursing process) |
| 2. Ability to develop self and keep up with advances in nursing science and health-care technology |
| 3. Positive human relations and communication skills |
| 4. Application of moral and ethical principles |
| 5. Possessing a sense of responsibility and accountability |
| 6. Critical thinking and problem-solving skills |
| 7. Computer skills |
| 8. Proficiency in English language |

care, performing clinical procedures (such as wound care, medication administration and i.v. administration and monitoring) and in using medical equipment. Many participants mentioned the need for strong assessment skills. They stated that 'nurses should be able to recognize critical changes in the client's condition, properly assess the client and analyse the data.' Participants who had a nursing background noted the importance of using the nursing process. Participants were also of the opinion that the BSN nurse should have the ability and desire to develop self and to keep up with advances in nursing and health care through seeking continuing education opportunities such as participating in conferences and professional meetings, reading scientific journals or obtaining information from web sites. They commented that 'BSN nurses should be willing and motivated to seek learning opportunities, continue their education and keep up-to-date in terms of knowledge and skills.'

Positive human relations and communication skills were viewed as highly essential and desirable skills. Participants commented that 'the BSN nurse should be able to communicate properly (verbally and non-verbally) with patients, families, physicians and other health-care team members.' They expected the nurse to be kind, caring, patient, honest, cheerful, tactful and self-confident. In addition, the respondents expected the nurse to have good morals and to follow professional codes of ethics in providing care to clients, performing other duties and dealing with colleagues and health-care professionals.

Another professional characteristic seen as necessary for the nurse was to have a sense of responsibility and accountability. The participants noted that 'nurses should feel responsible for and bear the consequences of their

actions since they deal with human lives'. Moreover, critical thinking and problem-solving skills were identified as desired skills for the BSN nurse. Respondents stated that the ability to think critically, analyse situations, reason, solve problems and make clinical decisions are required characteristics for the nurse to function effectively in the current health-care system. They expected the nurse to be intelligent, creative, analytical and able to deal with difficult situations. Other skills perceived by some respondents as necessary for the BSN nurse were computer skills and English language proficiency because English is the language used for the study and practice of nursing, medicine and other health-care disciplines in Jordan.

Important curriculum contents for the BSN nurse

Participants were asked to indicate which curriculum content areas they believe to be important to prepare the BSN nurse. Participants agreed that basic sciences such as anatomy, physiology, microbiology and pharmacology are required in addition to the nursing core courses such as fundamentals, medical surgical nursing, maternal and child health, psychiatric nursing, community health and leadership (Table 3).

Moreover, many participants identified the need for certain courses to be included within the curriculum such as communication skills, health education, research concepts and principles, health assessment and moral, ethical and professional standards. General education courses such as English, computer applications and philosophy were viewed as necessary for the students in order to have 'educated minds rather than degree holders'. Comments from the respondents included the necessity to change the methods of teaching so that it is not focused on transfer-

ring information but on encouraging critical thinking and problem solving. They noted that it is important to teach students how to think, how to make decisions and how to utilize the knowledge acquired in solving problems. In this way, they can develop themselves and adjust to nursing practice. Some participants also referred to the importance of including primary-care concepts into the curriculum.

Other suggestions or recommendations

The last question in the interview invited the respondents to add any other comments or suggestions they deem appropriate. About one-third of the sample recommended more emphasis on clinical practice and applications of nursing knowledge. They indicated that more clinical training is required for the students and that the students need to be shown the connection between theory and practice. Several participants suggested that more time be allocated to the last clinical course to provide more training opportunities for students (Table 4).

The second main suggestion was to find a suitable method to screen students before admission to the BSN programme to ensure that they have a positive attitude, candid interest and desire to be a nurse. Examples given for screening methods were to conduct interviews with the applicants or sit an admission test as this will help select those who are willing and motivated to continue in nursing, and to focus on quality, not quantity. One person even stated that nurses should 'try to work on attitudes, the most difficult part in our practice'.

A third suggestion was to enhance the communication skills of the students. 'Students should be taught how to establish and maintain effective communications with all disciplines, patients, and families.'

Table 3 Important curriculum contents for the BSN nurse

1. Basic sciences and humanities (e.g. anatomy, physiology, pharmacology, microbiology and statistics)
2. Nursing core courses (e.g. fundamental, medical-surgical nursing, maternal and child health)
3. Communication and teaching skills
4. Research
5. Health assessment
6. Ethics and professional standards
7. General education courses (e.g. English language, computers and philosophy)

Table 4 Consumer's suggestions for improving the preparation of Bachelor of Science in Nursing (BSN) graduates

1. Increase clinical training
2. Screen students before admission for attitude and interest in nursing
3. Emphasize communication skills
4. Enforce compliance with professional standards and continuing education
5. Enhance problem-solving abilities
6. Encourage research conduct and utilization

The fourth suggestion offered was that schools should enforce compliance with ethical and professional standards as well as agency policies and regulations. Special mention was made regarding patients' rights, confidentiality and sense of responsibility, loyalty and putting the patient's needs above one's own.

The fifth suggestion was to encourage research conduct and utilization.

Research is abandoned . . . and we know that nurses' power is in their knowledge, and nurses can't have a profession without a strong body of knowledge refined and articulated through research activities. The student should be required to do a research project for graduation where he / she studies a clinical nursing problem or issue and makes conclusions and recommendations on how to deal with it. This will help them to recognize the importance of research in nursing.

Further, participants suggested modifying the teaching-learning methods to foster creativity and to engage the students more in the learning process. They noted that this could be accomplished by:

. . . developing some self-learning modules, training the students on how to search for information on their own rather than relying heavily on lectures, encouraging their participation in professional activities and helping them to recognize the value of continuing education and life-long learning.

Finally, some of the consumer participants and physicians offered suggestions on how to improve the work conditions and provide incentives for nurses. Examples given were to reduce the number of night-shift rotations, provide shift differentials and clear job descriptions, and increase the basic salary for nurses. They also called for educating the public about the role of the nurse.

DISCUSSION

During the 1990s, many signals were given to nurse educators that Baccalaureate degree nurses must be prepared in different ways to meet the health-care needs of the twenty-first century and compete successfully.^{3,8-11} Graduates of Baccalaureate programmes are expected to be able to function in the increasingly complex health-care system, handle different types of health conditions, collaborate with other health professionals and demonstrate leadership abilities. The current study was done with the intention to use the results to develop a

Baccalaureate nursing programme that can produce quality nurses for the new century.

The findings of this study indicated that nursing professionals perceived nursing as an art and a science that is concerned with the holistic care of individuals and groups both in health and sickness. However, physicians, pharmacists and consumers viewed the nursing profession mainly as caring for the sick person, assisting the physician and implementing doctor's orders. Similarly, although the nurse was perceived by other health professionals and consumers as having an important role in the success of health care, they still viewed the nurse as being concerned mainly with the care of the sick and as a physician-helper. These findings indicate that the meaning of nursing as a profession, the scope of nursing practice and the various roles of the nurse are not well understood by the public. Consistent results were obtained in the studies done by Grossman and Northrop in 1993 and by Huffstutler *et al.* in 1998.^{12,13} The public needs to recognize the importance of autonomous nursing practice. Nurses have a responsibility to educate the public about their profession and their roles.

The great majority of the study respondents believed that nursing is a caring and humane profession and that nurses are caring individuals. Indeed, caring is an important aspect of nursing and the art of caring must be cultivated through nursing education in order to help students become caring nurses.¹⁴

The study participants pointed out several important personal and professional characteristics that are desired and expected in any BSN nurse. Of primary importance was that the nurse be a safe and competent practitioner who is skilled in performing nursing procedures, and knows how to use medical equipment. Respondents suggested that educators emphasize the application of theory to clinical practice, and possibly increase the hours allocated to the last culminating clinical course of the senior year. Providing adequate clinical experience to students has always been a major concern to Baccalaureate nurse educators. However, knowledge explosion and the rapid changes in health-care agencies and technology have made the role of educators more difficult. In reference to this issue, the American Association of Colleges of Nursing¹⁰ in 1998 questioned, 'As knowledge and practice expand, can we possibly prepare beginning level professional nurses for the future in a 4-year time frame?' The options given for consideration were the inclusion of a mandated internship period that follows the Baccalaureate pro-

gramme but precedes licensing, or changing the focus of Baccalaureate graduates from generalists to specialists in selected areas of practice. The last option raises many concerns and seems problematic.

The study participants indicated the importance of possessing strong assessment skills by the BSN graduates. Indeed, there is a wide agreement among nurse leaders and practitioners that Baccalaureate nurses need strong assessment skills which include not only physical assessment but also psychosocial, functional and risk assessment.^{10,11,15} Nurses need to know how and what to assess, what to do with the information and how to make sound judgements about nursing interventions based on the findings.

The desire to learn and keep abreast of new developments in the field was an expected characteristic of the BSN nurse. Educators have a formidable task to prepare students for the future by providing a strong foundation for a lifetime of professional development.^{11,15} This could be done by utilizing active learning strategies with students such as requesting them to search for and discuss information about specific topics, perform small group learning activities, and use written communication skills that are relevant and engaging.

Participants have highlighted positive human relations and communication skills as important characteristics for BSN nurses. This is consistent with the results of other studies done in the USA and the UK that indicated that written, verbal and non-verbal communication skills are essential for the professional nurse.^{11,15-17} Interviewing, teaching, negotiating and networking skills are vital to quality nursing practice. The American Association of Colleges of Nursing has also designated communication skills as a core competency that should be acquired in Baccalaureate nursing programmes.¹⁰

Application of moral and ethical principles as well as professional standards were expected of BSN graduates. The Jordanian Nurses and Midwives Council has recently adopted an elaborate Code of Ethics for professional nursing practice in Jordan.¹⁸ This Code of Ethics guides the relationships between the nurse and the receivers of nursing services, the nurse and society, and the nurse and the nursing profession. It also describes the patients' rights, the ethical decision-making process, how to solve ethical problems and the desired personal characteristics of the professional nurse. Baccalaureate nurse educators in Jordan must utilize this important document to facilitate the development of ethical and professional values

among nursing students. Baccalaureate graduates must have the knowledge and skills to identify potential and actual ethical issues and to assist in resolving these issues.¹⁰

Another desired characteristic of the BSN graduates mentioned by the study participants was critical thinking and problem-solving skills. Other researchers have obtained similar results.^{11,15,16} Prospective employers want to recruit thinking professionals who can make clinical decisions, solve problems in actual practice and seek guidance when needed. Practice experts stated that the nurses who provided optimum care were reflective and were forward thinking. In addition, critical thinking has been a measure of the quality of Baccalaureate nursing programmes.^{10,19,20} Students should be motivated and challenged to think critically through the use of active learning strategies in both theory and clinical courses.

Other professional characteristics that were desired by some study respondents were computer and English-language skills. These skills can facilitate communications among health professionals and clients, especially in this age of high technology and global connections.²¹ They can also facilitate the acquisition of up-to-date scientific information and promote life-long learning.

As regards to the curriculum contents, Mooneyhan and colleagues noted that it is crucial to identify essential curriculum contents in order to develop programme components that are acceptable internationally, and can produce quality nurses.²² This had also been emphasized by Ashbaugh and Kasten and Biley and Smith.^{23,24} Besides the basic sciences and the nursing core courses, participants in the present study indicated that it is necessary to teach students communication and teaching skills, health assessment, critical thinking, research methodologies, ethical and professional standards, computer applications and English. These content areas are consistent with the essential knowledge and competencies recommended for Baccalaureate nursing education by the World Health Organization and the American Association of Colleges of Nursing.^{3,10}

CONCLUSION

In developing the new Baccalaureate nursing programme at a recently established public university in Jordan, the Faculty of Nursing has carefully considered and incorporated the findings of the present study as well as the guidelines and suggestions provided by the World Health Organization Regional Office for the Eastern Mediterranean and the American Association of Colleges of

Nursing.^{3,10} The concepts of caring, autonomy, accountability, creativity, ethical practice and life-long learning were integrated in the overall curriculum. The new curriculum is oriented to health and primary care. It includes a course on health promotion and health education throughout the lifespan, and emphasizes primary care in the various nursing courses. Applications of the nursing process are integrated throughout the curriculum.

In consideration with the overall results of the needs assessment study described here, the nursing faculty decided to adopt problem-based learning strategies such as case studies, discussion questions and group activities in order to promote critical thinking, creativity and problem-solving skills. Problem-based learning helps students integrate knowledge learned in different courses into solving practical problems. It is a way to bridge the gap between academic knowledge and real-life clinical application.^{23,24}

Other especially needed courses were also decided to be included in the curriculum such as communications, epidemiology, computers and nursing issues and trends. Furthermore, a special attention was given to building strong health assessment skills among students and to teaching not only physical but psychosocial and spiritual assessments. Further, to better prepare students for entry into practice, the nursing faculty decided to allocate 9 h to the last culminating practicum course. Finally, the new curriculum, based on community inputs, utilizes active learning techniques that are expected to encourage nursing students to take responsibility for their learning, be creative and be active participants in the teaching / learning process.

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