

The curriculum of nursing BSc course in the viewpoints of the graduates and last-year students of Semnan Nursing School

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ABSTRACT

Background: Curriculum evaluation is a part of any educational system and one of the main factors that can lead education from its static position to a more dynamic one.

Objective: To evaluate the curriculum of nursing BSc course by surveying the graduates and last-year students of Semnan Nursing School.

Methods: The sample group in this descriptive qualitative study is all last-year students and graduates of the first 11 years of foundation of Semnan Nursing School. Data-collecting tool was a questionnaire consisting of two parts: demographic data and survey questions. The questionnaire was distributed after determining its content validity and scientific reliability. Data were analyzed using descriptive statistical indices including mean value and standard deviation.

Results: The units of some courses should be changed and the content of some other courses are not compatible or has no use in the field of nursing. Some of them don't help understanding the specialized courses. Some of the settings are not appropriate for education and the students often can't use their theoretical knowledge in clerkship. The equipment and facilities are not suitable in all settings and the students of other schools have to share equipment, except in "community health clerkship". The samples found all the duties assigned by their instructors effective in their education—except in "community health clerkship. They believed that all of the instructors have enough expertise in clinical training.

Discussion: In order to improve the quality of education, the decision-makers and faculty members are recommended to review the nursing curriculum. Further studies are needed to achieve more accurate results. The results of all these studies will show the problems that the graduates would probably encounter in their job environment, and either theoretical or clinical education is of more use to them. It's hoped that changing the curriculum could meet the nation's needs to expert nurses.

Keywords: EVALUATION, CURRICULUM, GRADUATES, NURSING STUDENTS

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Introduction

A pioneer educational system is a system able to evaluate and change its programs and operations according to the expectations and requirements of the society and of the students. The structure of these programs needs to be changed based on modern approaches. These approaches are result-based and value the products and outcomes. The educational curriculum, teaching-learning process, educational activities and their results, and those who come out of this system, are all to be considered in this approach. The quality of education is another important concern. The benefits of educational activities for the students, the expertise achieved during the education period, the role of educational activities in this achievement, and the educational life in training centers, are the priorities of a modern educational

approach.

The outcomes and products of an educational system are its graduates who are expected to be able to meet the society's requirements (1). In order to examine the efficiency of an educational system and its success in achieving its pre-determined goals, the products of the system should be evaluated. There are two ways to perform this evaluation. First, we can get information about the efficacy of products from the hiring institutes' authorities. Second, we can ask the graduates themselves about their abilities, the curriculum and its efficiency, and whether the academic education was able to help them in their professional responsibilities.

In order to get more accurate results in any evaluation, two or more samples -which are expected to have similar characteristics- are often compared (2). In educational systems, these two

similar samples are the graduates and the students of the final year. The students and graduates, as the main elements of education, are the most important sources of information for evaluation. The viewpoints of these two groups should be studied in all universities and schools to achieve more comprehensive and expanded results.

The decision-makers should have access to accurate and realistic information, so that they could design the educational program efficiently and desirably. This could not be done unless all stakeholders and interested groups express their views about the program. By evaluating the curriculum, we can collect and analyze the data necessary to fill the informational gaps, improve the development and implementation of the program, and ultimately achieve the goals. Clearly, the lack of correct and real data can impair the whole system (3).

Fink considers curriculum evaluation to be a dynamic research into the features and characteristics of the curriculum, and the objective of this research is to provide information about its effectiveness in order to improve its efficiency and quality. He argues that with evaluation, we can analyze the structure, activities and organization of the curriculum (4).

The main function of program evaluation is to provide a level of data which can result in achieving program objectives. In fact, evaluation can answer the questions about the program activities and provide an in-depth view toward the management and implementation of the program. Program evaluation can also examine the scope of its influence on other sectors and the reliability of its results (5).

Considering the importance of curriculum in changing the learners' knowledge, attitude and practice, and by using a powerful tool named evaluation, it can be determined whether the curriculum was successful in achieving the pre-defined objectives and in keeping itself up-to-date.

The nursing curriculum in Iran is approved by the "Supreme Council of Programming in Medical Groups" and its mission is to train expert nurses needed by various health, treatment and education sectors in the country. In this curriculum, students pass different courses including basic, main, general and specialized courses. A considerable part of education in this field is dedicated to clinical training as clerkship and internship.

Some of these courses may be of no use, and long hours may be spent just to teach subjects that are not important. Surely, skills should be taught that

the students would need in order to perform a specific task thoroughly and rationally. Some courses are not able to transfer necessary skills and/or there's not enough time to do so. The important things are the tasks that the students must perform and are passing the courses to perform them (6). Thus, the curriculum should be based on the students' responsibilities and should have implication in their profession.

Assessment of the viewpoints of students and graduates toward the curriculum is the first step to identify the problems and shortcomings of the curriculum and to determine the aspects of the curriculum that need to be reviewed and revised.

The objective of this research is to answer the question "what is the opinion of the students and graduates about the nursing BSc curriculum?" The answer will help us recognize the strengths and weaknesses of the curriculum and improve its efficiency in future by performing reforms. It can also prevent insufficiencies and problems during the program implementation as much as possible, and the future activities can be performed on a more rational and practical program.

Materials and Methods

This cross-sectional descriptive survey was designed on the basis of CIPPO¹ model in order to evaluate the educational curriculum. Four kinds of evaluation were suggested by Seap (context, input, process and output evaluation) among which only the viewpoints of the students and graduates (outputs) were evaluated in this study.

All last-year students and graduates of the first 11 years of foundation of Semnan Nursing School were included in the sample group. Since the sample group included all study population, no specific sampling method was required.

Data gathering tool was a questionnaire containing 2 sets of questions: First, demographic information including age, sex, occupational background and current job in the case of graduates, and age and sex in the case of students. Second, there were questions about the opinion of the respondents toward each theoretical and clinical course provided in the nursing BSc curriculum. The name of each course was mentioned separately and different scaling was used for each item including:

1- Appropriateness of the number of units allocated to each course (to be increased, to be decreased, no change),

¹ Curriculum- Input- Process- Product- Output

- 2- Consistency of the content of courses with nursing profession (does have, doesn't have, no comment),
- 3- Utility of the courses in nursing (does have, doesn't have, no comment),
- 4- Helping to understand other courses (does help, doesn't help, no comment),
- 5- Consistency of the clerkship setting with the requirements of specialized courses (does have, doesn't have, no comment),
- 6- Potential to use theoretic knowledge in clerkship setting (does exist, doesn't exist, no comment),
- 7- Equipment and facilities provided to use specialized theoretical knowledge (enough, not enough, no comment),
- 8- Overlapping of the clerkship setting with the duties of students from other fields of profession (does exist, doesn't exist, no comment),
- 9- Effectiveness of the duties assigned in specialized courses in learning clerkship courses (does have, doesn't have, no comment),
- 10- Instructors' skills for training students in clinical courses (enough, not enough, no comment), and
- 11- Appropriateness of clerkship shifts for learning clinical courses (morning, afternoon, evening, all three).

Table 1 shows the list of courses in basic science and clerkship.

After determining the validity and reliability, the questionnaires were given directly to the students, and mailed to the graduates' addresses in two stages so they could also return them by mail. Among 197 graduates, 119 were excluded because of incomplete mailing address or incomplete answers, and 78 completely answered questionnaires were analyzed using PE2 and SPSS softwares.

Results

The results show that 50% of the graduates are 25-29 years of age (mean= 28.23, SD= 5.414) and 62.5% of the students are between 22 and 25 (mean= 21.875, SD= 0.835). Most graduates (60%) are male. With 61.4% of the graduates having less than 5 years of experience in professional jobs, most (54.28%) are working as a nurse.

The respondents believed that it's better to increase the number of units for almost all courses –the exceptions include Islamic education, biostatistics, community health nursing, Persian language and

TABLE 1. Courses of nursing curriculum

Basic Science and Specialized Courses	Clerkship
Anatomy	Community health nursing
Biochemistry	Health Assessment
Biostatistics	Internal medicine & Surgery
Computer science	Mother and Baby
History of nursing	Nursing management
Islamic education	Nursing technique
Medical emergencies	Pediatric nursing
Mental health	Specific nursing
Microbiology and Parasitology	
Nutrition	
Persian language	
Pathology	
Patient training	
Pharmacology	
Physical training	
Physiology	
Social psychology	
Specialized English language	

physical training courses. In this regard, the English language course and the Islamic education course received the highest (87.18%) and lowest (17.94%) votes, respectively.

According to the viewpoints of the respondents, the content of most courses were consistent with the requirements of nursing profession and the highest percentage belonged to "specific nursing" course (93.58%). Most of the respondents (80.68%) regarded social psychology course as inconsistent; they also had the same opinion about Islamic education, Persian language, biostatistics and physical training courses.

All samples believed that "specific nursing" course can be used in the field of nursing, but 53.84% had the opposite opinion about Islamic education course. The only other courses that had no use in nursing profession were Persian language and physical training.

The majority (91.02%) announced that internal medicine, surgery and English language courses helped them to understand other courses, while Islamic education course had no effect in this regard (76.92%).

In respect of clerkship courses, the results are provided in table 2.

The results show that most of the respondents (80.76%) preferred the morning shift for the community health clerkship, while 6.42% and 3.84% favored the afternoon and evening shifts for nursing techniques course, respectively. Of all

TABLE 2. The results concerning clerkship courses according to the opinions of majority of respondents

Clerkship course	Consistency with specialized courses		Potential to use theoretic knowledge		Enough equipment and facilities		Overlap with other students		Effectiveness of the assigned duties		Instructors' skills for clinical education	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Internal medicine & surgery	*			*		*	*		*		*	
Community health		*		*		*		*		*	*	
Nursing techniques	*			*		*	*		*		*	
Mother and baby		*		*		*	*		*		*	
Pediatric nursing	*			*		*	*		*		*	
Health assessment		*		*		*	*		*		*	
Specific Nursing	*		*			*	*		*		*	
Nursing Management	*			*		*	*		*		*	

the samples, 28.21% believed that all three shifts are suitable for nursing management and health assessment courses.

Discussion

The results show that the students and graduates believed the number of units and the content of some courses are not appropriate. Biabangardi et al found the same results about the consistency of the content of some courses with the requirements of nursing profession (7).

An interesting note is that most respondents thought social psychology course is not suitable. This should be considered carefully. Dugass argues that the practice of nursing is integrated with dignity and respect for life and the human rights and there should be no demarcation in terms of nationality, race, beliefs, age, sex, and political or social status, and health care workers must devote themselves to all individuals, families and society in coordination with other groups (8). Thus, it seems that social psychology can provide much help for the nurses to understand the differences between all individuals and patients. However, 80.76% found this course irrelevant with the practice of nursing. A possible reason is that the content of this course has not been prepared in accordance with the realities of nursing profession. The content should be based on future "responsibilities". Abbott believes that in order to determine what should be taught, a *responsibility analysis* should be performed (9). This analysis can demonstrate the range of skills and behaviors necessary for a specific task and can also show which techniques has less importance. The objective of each course should be providing the students with the skills and

knowledge necessary for a specific responsibility (10).

A considerable part of the respondents (20.51%) believed that community health nursing is irrelevant with nursing profession and 10.25% had no comment on the subject! The current increasing tendency to emphasize on health provision and to reject patient-based hospital cares demonstrates the necessity of comprehensive, constant and continuous health care. Nurses can play a major role in this regard, if their position is clearly acknowledged. In the current situation where the extent of nursing is restricted to the hospitals, it's obvious that the community health course would be of no use. Biabangardi et al showed the same results (7). These two studies highlight the necessity of revising and redefining the nurses' role in the health system.

The majority of the sample group believed that Persian language and Islamic education courses are not consistent with the requirements of nursing profession. Considering the importance of using a fluent language in professional and daily conversations and writings and preparing scientific reports, and also the significance of nurses' moral and humanitarian responsibilities in their practice, it seems that the content of these courses should be revised so that they would have more correlation with this profession. Also, the instructors should try more to demonstrate the significance of these courses, using interesting and real examples with a view to nursing practice. The course of computer science has also received a low score in terms of consistency of the content, utility in nursing, and helping to understand other courses. The main reason is that computer technology has not been integrated in the country's nursing system to facilitate its

operations. There is no doubt that in order to collect, classify, summarize and analyze data, an accurate, fast and reliable tool is needed; which can be provided by computer technology. Substantial expansion of science, including medical science which is estimated to double each 5 years, intensifies the necessity of such tool. Therefore, it seems necessary to revise the content of this course in order to familiarize the students with developments in modern information systems and keep them up-to-date in the information explosion era. The research performed by Shah-Hosseini confirms that in the students' viewpoints, the content of computer science course should be changed and become more practical (11).

Table 2 showed the opinions of students and graduates regarding clerkship courses. Biabangardi et al also showed that, except in specific nursing course, the students believe that the equipment and facilities in all clerkship courses are not enough (7). Since the main goal of educational system is to prepare expert personnel for each sector, the graduates must have all practical abilities required for each specific profession. Lack of efficient practical training will result in a situation in which the graduates will have no confidence in their own competence and capabilities and will not have an effective performance in the face of real problems. Education authorities should try to provide facilities that are necessary for the achievement of these practical skills. If real patients cannot be used by any reason, there are other methods for training nurses such as simulation-patients or passing clerkship in more sophisticated and bigger centers.

This survey showed that the duties assigned in all clerkship courses –except community health nursing- have a positive effect in clinical education, and all instructors have enough expertise in teaching specialized clinical courses. However, Biabangardi et al showed that according to the students' opinion, this positive effective is not clear in all courses (7). Shah-Hosseini expressed that internal medicine and surgery courses and community health course had the highest and lowest efficiency, respectively (11). The results showed that the majority of respondents believed morning shift is the most appropriate for clinical education. Biabangardi et al also found the same result (7).

Recommendations

It is recommended that the educational groups, in coordination with all faculty members, determine the must-learns and educational objectives according to the students' educational needs and the society's requirements based on responsibility analysis. Minimum educational requirements should be determined and developed as special objectives of the curriculum. Then, theoretical and clinical curriculum could be designed according to these determined objectives (12). At the beginning of each educational course, the main objectives should be discussed with the students and then repeated in each session separately. Moreover, the utility of each educational subject in nursing should be explained using real and practical examples. In addition, there should be a strong connection and cooperation between nursing school and educational hospitals in order to familiarize the students with real job environment, especially when an interesting clinical case is admitted in the hospital.

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