

Investigating the efficiency of nursing education program from the perspective of graduate students of nursing and midwifery

Shayesteh Salehi¹, Fariba Taleghani², Parastoo Afghari³, Mohammad Hassan Moghadasi⁴

ABSTRACT

Background: Continuous evaluation is required in order to ensure the university system's efficiency. One of the important aspects of evaluating the educational system's effectiveness is judging the system's ability in meeting environmental needs. The present research's goal has been to investigate nursing education's efficiency through investigating the graduate's condition and their views on education and studying in Isfahan University's School of Nursing and Midwifery in 2008.

Materials and Methods: This is a descriptive research which has investigated the nursing graduate's view on the nursing education efficiency. The sample of the present research contains one hundred graduates between the years 2001 and 2005 which have been chosen randomly to complete the questionnaire. The questionnaire is divided into five sections including; growth, demographic information, and satisfaction with professional development and the acquired scientific experiences during the education. The criteria of achieving educational goals, and acquiring individual and social development were used to determine the content of the questionnaire. Through further examination the validity of the questionnaire was calculated to be 0.85. The final analysis was done using the SPSS statistics software.

Findings: The majority of the participants were female and with an age range of 24 to 30. Among these, 55% were unemployed and 67% of them had no education higher than a bachelor degree. The mean scores of each of the efficiency fields were as following (the total score was 4): Professional growth 2.13 ± 0.36 , Satisfaction with the obtained scientific achievement during studies 2.80 ± 0.48 , achievement of the educational objectives 1.95 ± 0.51 and individual and social improvement 2.70 ± 0.36 , neither of which are desirable. There was no significant difference between the demographic information and education efficiency index.

Conclusions: Considering the results of the present research, the nursing education system's efficiency level in Isfahan University is medium. Acquiring the educational goals is not satisfactory for the students. According to the results of this research, some changes have been suggested to change the lesson plans.

Key words: Nursing education, program efficiency, professional development, objectives, satisfaction

¹ PhD, Associate professor, School of Nursing and Midwifery, Khorasgan Branch, Islamic Azad University, Isfahan, Iran.

² PhD, Associate professor, Nursing and Midwifery Care Research Center, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran.

³ Dentistry Student, Student Research Committee, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran.

⁴ BSn, Educational Office, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran

Address for correspondence: Shayesteh Salehi, PhD, Associate professor, School of Nursing and Midwifery, Khorasgan Branch, Islamic Azad University, Isfahan, Iran.
E-mail: sh.salehi@khuisf.ac.ir

Research Article of Isfahan University of Medical Sciences,
No: 287162.

INTRODUCTION

Continuous evaluation is required to ensure the university system's efficiency. The university system's efficiency is equivalent to its graduates' efficiency, knowledge and the probable future services presented by them. Since, today knowledge is founded on science, it is essential that the educated manpower be informed of new scientific findings and to utilize them during their education. Therefore, the university's internal and external efficiency evaluation should be undertaken continuously. From this point of view, a university system's efficiency can be defined as "the relationship between a university and the predetermined goals"^[1] If answering to environmental needs is one of the university's goals, the university performance should be evaluated by considering the attainment of the predetermined goals.

Effectiveness is a subcategory of the efficiency quality.^[1]

Access this article online

Quick Response Code:

Website:
www.***

DOI:

An essential part of increasing and controlling the efficiency and effectiveness of an education system is utilizing the quantity criteria in service investigation. The first step of this activity is to persuade educational institutes to ensure the quality of their performance. These criteria can also be used to achieve higher levels of efficiency in which the amount of profit has been calculated, and by considering this amount the presented service's value is investigated.^[2]

One of the important aspects of evaluating the educational system's effectiveness is judging the ability of the system in meeting the environmental needs. This aspect is called "*the educational results*". To evaluate this aspect the graduate's situation should be investigated and recognized.^[3] The graduates' knowledge and services are the university's products for its environment. These products are of quantitative and qualitative value. The quantitative aspect of graduates is the amount of services they present to the environment, and scientific, and technological products. This aspect is in proportion to the variable needs of a university system in order to gain external efficiency.

In the investigation of the university system's developments, considering the following qualitative aspects are essential: the skills of the active population with a university education, the extent of the use of these skills, their ability to find jobs related to their field of study, and the extent the major's content is in accordance with the industrial, technical and service changes.^[1]

One of the important goals of investigating graduates is providing information about the extent of their achievements in individual and professional goals, and evaluating them according to the university experiences. The results of this evaluation can be presented to authorities involved in strategic planning in order to develop a higher educational quality in universities.^[4] Delaney (1997) believes that researches related to graduates are the base of educational program evaluation through the criteria of developing knowledge, people skills, presenting knowledge, and the skills needed for work. He also believes that graduates, as those who have experienced the educational program from the beginning to the end, can present a unique point of view. They are in fact the representatives of group educational efforts, and they have formed according to the process of acceptance, support, consulting, and the other complementary components of the education plan. Graduates, after finishing their study, have stated their experiences from a new perspective and so a large number of medical centers undertake the graduate's evaluation program.^[5]

Parkyn (1991) believes there are four important reasons for doing the research on graduates:

1. Investigation on the graduate's point of view provides an opportunity for attaining objective facts.
2. The evaluation which is based upon the graduates point of view, will effectively investigate the participants perception on the affairs related to training.
3. Graduates evaluation would make a distinction between the investigations on the academic experience of the graduates with the cases which are mainly acquired through the educational program.
4. Researches about graduates provide appropriate information with which long-term educational goals can be evaluated.

Parkyn believes that graduates should be questioned about the effects of the education experience on their lives, and this should be repeated 5, 10 15, and 20 years after graduation. This is because they have lived a considerable time with the experiences acquired from the university and can state the effects of these changes over time on their lives.^[6]

Cavazos (1991) in the case of the function of previously done researches, states:

"These researches can be used to recognize the existing problems in the educational system and determine the needs of university's educational program. Doing these researches can provide information about the content of specialized and general courses and the general educational needs and the areas related to the student's services. Authorities would also be provided with the information about the planning sources and the systematic decisions".^[7]

Mavis (2005) has expressed similar views on this case. He believes that the graduate feedback has been beneficial in, further evaluating, and directing the educational program. In addition, these feedbacks inform the educational program's directors of the current students and graduates, and present the work team with useful information about the educational program's performance.^[8]

The most important point is that research on graduates plays important roles in the relationship between the educational work team and graduates, and it helps the development of programs for professional recognition and orientation. The results of the present research can also be used for institutional planning, budgeting in different levels, the university validation and self evaluation.

Through presenting the university with the research report in certain periods of time, we can help the authorities in making better decisions.

Considering the importance of the educational system's efficiency, the present research has been done with the goal of investigating the result of the nursing education system and through the investigation of the graduate's situation and their point of view on studying at the Isfahan Nursing and Midwifery College. In this research the nursing education efficiency has been evaluated by the investigation of the first level of efficiency, the nursing graduates' situation and their satisfaction with the scientifically acquired experiences during their education, the rate of reaching the educational goals of individual, social, and professional development by answering the questionnaire.

MATERIALS AND METHODS

The present research is a descriptive-analysis which has investigated the nursing graduate's ideas on the efficiency of nursing training. The area of this research has been the nursing and midwifery college and the research population have been one hundred graduates (fall 2002 – fall 2006) who had the entrance criteria and were chosen randomly to answer the questionnaires. Seventy five out of one hundred questionnaires were answered (75%) and analyzed. There were a number of criteria for entering the research; having graduated (at least six months in advance to the research), passing the research pre-requisite classes, not being a transferred or guest student, not being employed during the education, not being a conditional student, and being interested in participating in the research. The samples were chosen from nursing students (BA, fall 2002 – fall 2006) and included one hundred nursing graduates. Questionnaires were the tools used for collecting data in this research.

These were questionnaires which were used by other universities for evaluating the graduate's ideas and were changed according to Iran's educational program. The content validity of these questionnaires was determined through the answering of the questionnaires by fifteen nursing and midwifery faculty members and Ph.D. students studying this major, and implementing the suggested reforms. Later the questionnaire's reliability was determined by means of retesting (with the correlation of 0.85).

The questionnaire contains questions in five parts. The first part collects demographic information; the graduates situation in terms of occupation, being occupied in public

or private sanitary and remedy centers, having a job related to their major, deciding to continue studying, and job promotion (including writing an article in a general magazine, publishing a scientific article or publishing a book, participating in national or international conferences, using the internet for acquiring information about their profession, studying a scientific magazine to get general information). Totally seventeen questions were addressed in this part.

The second part collects information on professional development during their study including: presenting an article by using different sources, using the Internet in course activities, article translation, applying theoretical concepts to practice, participating in student conferences without presenting an article, and clinical skills needed for working in specialized areas.

This part also contains: Individual development ability, the ability to lead other people, self-confidence in stating ideas, ability to perform research plans, the ability to use communication technology, decision making, problem solving ability, the ability to participate in group activities, the ability to use scientific principles, performing nursing activities independently, the ability to work within teams and different job-related groups, the ability to use moral principles in professional decisions, commitment to constant job development and learning throughout their life time .

The third part consists of satisfaction of the acquired scientific experiences during the education which is evaluated by criteria such as: the ability to meet the supervisor when needed, the quality of the information given by the supervisor, the purpose of the chosen classes, conducting a survey about training.

The fourth part contains gaining educational goals through the quality of the presented professional courses, the quality of the basic courses of education, the main courses, specialized, practical, and training and field training courses.

The fifth part contains individual and social development which includes: having advanced education related to the profession, learning life skills, presenting institutional and professional services, presenting voluntary services in the society, and secondary social activities.

Procedure: After asking the authorities for permission to use the student files and archives and to extract the nursing graduates (2002 – 2006) names and addresses, the questionnaires were sent to one hundred randomly

selected graduates and the envelopes were stamped with the return stamps. Respondents were assured of the confidentiality of the answers through the questionnaire's guide.

Data Analysis: Frequency was used for analyzing the descriptive statistic's data and the test was used in order to investigate the relation between some indicators.

FINDINGS

The majority of respondents (73%) did not work as a student and the majority of the working students (80%) worked more than 25 hours per week. The majority of the respondents' average mark was between 15 and 17 (56%). Incidentally, a high percentage of student's average mark was higher than 17 (28%). The majority of graduates did not go on to study a postgraduate degree (90%). The highest percentage of the research participants had full-time jobs (41.1%). Incidentally, 26.5% of them were unemployed and were seeking jobs. The majority of the employed are working in hospitals (83.4%) and 95.5% of them are working as nurses. The majority of employed graduates (62%) could find a job six months after their graduation and 61.33% are working in jobs related to their special major. The main reason of not working in their own major, in 51.7% of cases has been the inability to find a suitable job, and passing the man power program, for the majority of research prerequisite classes, (53.3%) has been the cause of finding a job. The income of the majority of research participants is 1500000 to 3000000 (52.2%), although, the majority of respondents (92%) are not satisfied with their income. Also, using the Internet to acquire information on their profession (34%) and studying one scientific magazine to acquire general information (47%) have been the activities of most graduates' toward professional development.

The activities of student's participating in conferences without presenting an article (46.6%), and using theoretical concepts in action (44%) were the most common activities of the participants in the present research. These participants believe that the university education has been almost effective in professional development, while it has been less effective in designing and performing research programs (57.4%). In increasing independence in nursing activities the university education has been effective (41.3%).

The participants ranked average (65.3%) in team work, while ranking over average and more than expected

(62.6%) in their commitment to constant life learning.

The graduates' satisfaction of the above mentioned experiences was a weak and average one (between 72% and 49%). According to the participants, the best quality of education is related to the education of special courses such as medical, surgical, pediatric, and psychiatric nursing. The average quality of education is related to basic courses such as Anatomy, physiology, Biochemistry, and so forth (65.3%). The percentage of satisfaction with main courses, such as pharmacology, Epidemiology, and so forth, has been 53.3%. Respondents believe that the college had created an effective cooperation between individual and social development in the five presented parts (between 44% and 73%). The results also indicate that from the graduates' point of view, the knowledge and skills acquired during studying have prepared them for their current jobs (69.3%). The majority of respondents

(80%) were studying in Isfahan's Nursing and Midwifery Collage (80%). The research also indicated that the close relatives of one or more university masters and the majority of respondents who studied at this University (70.6%) would also choose Isfahan Nursing and Midwifery College. The majority of the respondents of nursing major (82.7%) were satisfied with the educational experiences they acquired in Isfahan Nursing and Midwifery College. The majority of respondents (88.6%) were satisfied with the college atmosphere.

In 33.3% of respondents' view the preparation acquired during their education at this college for their higher education has been good and for 29.3% it has been weak.

From the majority of graduates' point of view, the quality of education in Isfahan Nursing and Midwifery College has been good (62%).

The mean scores of each of the efficiency fields were as in the following (the total score was 4): Professional growth 2.13 ± 0.36 , Satisfaction with the obtained scientific achievement during studies 2.80 ± 0.48 , achievement of the educational objectives 1.95 ± 0.51 and individual and social improvement 2.70 ± 0.36 .

DISCUSSION

The main goal of investigating the graduates' point of view is to be informed of their point of view in order to help the development of activities related to curriculum development, reviewing, and reforming.^[1] In this research the researchers have also acquired information from the

graduates' point of view.

In the current study 26.5% of graduates are seeking jobs, however according to the study by Tootoonchi et al. 40.2% of graduates have been unemployed. For 62% of graduates the time period before finding a job has been 6 months, and for 29% of them it has been 1 year.^[9] 61.33% of graduates are occupied with jobs related to their majors and 38.67% are occupied with jobs unrelated to their majors. It is evident that because of ever increasing the number of B.S. nursing courses on the one hand and unemployment on the other hand, the chance of finding a suitable job decreases. Also, those whose job is nursing have to work for two or even three shifts to earn an income and to fulfill their financial needs. Therefore one of the reasons of a number of graduates for not working as a nurse is that it is not possible to develop the job professionally. The results of the research done in California Science University demonstrate that all graduates are occupied and 92% of them have jobs related to their majors.^[2]

In the current study 63% of the students were not satisfied with their income. In the study done by Tootoonchi et al., 20% of the graduates were also dissatisfied with their income, considering the difficulties of the nursing job, and the economic situation in the society^[9], it seems that the graduates' dissatisfaction is logical and close to reality. A study in the U.S in 2007, along with the nurses' dissatisfaction with their income, emphasized on supporting the nurses financially.^[10]

The graduates' activities in the last year have been studying a scientific magazine to acquire general information (47%), using the internet to gain information related to their jobs (34%), however writing an article in a general magazine, publishing a scientific article or a book, and participating in conferences and national and international congress have a very low frequency.

In the study of Saberian and Haji Aghajani, the majority of graduates have not had any activity in the field of compiling a book, translation and article publication.^[11]

The activities of participating in student conferences without presenting an article (46.6%), using theoretic concepts in practice (44%), and translating an article (40%) are of the research participants' activities during their study at the college. It is considered that graduates were not active in participating in student conferences by presenting an article, writing an article by using various sources, and using the Internet for course activities.

The results of the research done in California Science University have demonstrated that more than half of the graduates have had promotions in their jobs in the last ten years.^[2] They have also participated in writing books and articles. 94.5% of graduates study magazines, 84% of them read entertaining books, and 80% study scientific books.^[4]

By investigating these results it can be said that the graduates' activities related to professional development are not satisfactory.

The greatest effect of the college has been gaining the ability to do nursing activities (41.3%), and the least effective of the college programs has been gaining the ability to plan and perform research programs (57.4%). In addition, 62.6% of the ability in professional commitment is announced to be more than average and more than expected, and 61.3% of the ability to use moral principles and make professional decisions. 65.3% of the team work has been done in a week; this has been recognized as medium level. In the study of Abedi et al., graduates experienced weakness in preparation in cases such as theoretical knowledge, clinical skills, the ability to make the right decision, and facing critical situations in the working environment.^[12]

In the Philadelphia University study, graduates have considered the university completely effective in preparing them for different skills in most cases.^[4]

In the case of satisfaction of the acquired scientific experiences during their education, the results demonstrated that being able to contact the supervisor was rated 66.6%, the quality of the supervisor's given information 70.6%, stating the purpose of chosen classes 70.9%, conducting an opinion poll for the graduates about education 72%, and availability in helping students outside the class in postgraduate level has been 49.4%.

According to Bazargan these cases are of the most important experiences in student education which can affect the graduates' abilities.^[3]

From the Graduates perspective the university has been unable to reach the educational goals to a satisfactory level. This is of great importance because the specific courses such as skill laboratory, and placements form the basis of nursing professional education and therefore reaching its goals are very important. Dehghani et al., in their investigation with the aim of determining education problems, concluded that acquiring the skill of undertaking nursing processes, and educating patients has

been almost weak and the educational process in this field should be modified.^[13] However, in the Philadelphia University study, graduates have ranked the quality of education as very good.^[4]

In relation to the college's cooperation between individual and social development, having advanced education related to the profession (52%) and learning life skills (73.4%) have been confirmed by the graduates but the ranking of other criteria has been very low.

In the research on Southern Carolina University, more than 505 graduates were satisfied with their experiences related to individual and social development which were because of the effect and cooperation of the college's management.^[14]

Suggestions

1. Basic changes should be made in nursing course planning in the three areas of input, process and output.
2. Plans should be made for nursing graduates work
3. Actions should be taken in order to provide for nurses, especially the newly employed ones, financially
4. The needed planning should be undertaken for keeping the relationship between graduates and nursing college should be observed.
5. In the case of reaching the educational goals, needed supervision and guidance should be given and needed improvements and changes should be made.
6. Improvement of the education in the field of planning processes, and connection with clinical environment should be considered.
7. It is recommended to pay special attention to the graduates' suggestions as the ones who have properly felt the educational system's problems.

REFERENCES

1. Yamini Dozi Sorkhabi M. Introduction of university system

- function. Tehran: Shahid Behshti University Publication; 2001.
2. McMahon WW. An efficiency-based management information system. Pais: Unesco, International Institute for Educational Planning; 1993.
3. Bazargan A. Educational Evaluations. Tehran: Samt Publications; 2001.
4. Alumni Survey Executive Summary. University of the Sciences in Philadelphia [Online]. 2003; Available from: URL: www.usciences.edu/.../alumnisurvey/2003/execsummary.shtm
5. Delaney AM. Quality Assessment of Professional Degree Programs. *Research in Higher Education* 1997; 38(2): 241-64.
6. Parkyn DL. The role of alumni in the assessment of affective outcomes [Online]. 1991; Available from: URL: <http://www.eric.ed.gov/PDFS/ED342315.pdf>
7. Cavazos C. Gauging Alumni Perceptions of the Effectiveness of the Masters of Public Administration (MPA) Program at Texas State University-San Marcos in Meeting its Mission: A Follow-Up Study [Project]. Texas: Department of Political Science, Public Administration Program, Texas State University-San Marcos; 1991.
8. Mavis BE. Graduate Follow-up Surveys Are a Good Idea [Online]. 2005; Available from: URL: <http://www.facs.org/education/rap/mavis.html/>
9. Totoonchi M, Naji I, Rafieyan M, Soeleymani B. A study of nursing alumni employment situation in Isfahan. *Journal of Research in Medical Sciences* 1997; 2(2).
10. Lavin MA, Meyer GA, Ellis P. A Dialogue on the Future of NursingPractice. *International Journal of Nursing Terminologies and Classifications* 2007; 18(3): 74-83.
11. Saberian M, Haji Aghajani S. Study of Job Future of Semnan Nursing School Graduates. *Iranian Journal of Medical Education* 2003; 3(9): 52-7.
12. Abedi HA, Heidari A, Salsali M. New Graduate Nurses' Experiences of their Professional Readiness during Transition to Professional Roles. *Iranian Journal of Medical Education* 2004; 4(2): 69-78.
13. Dehghani KH, Dehghani H, Fallah Zadeh H. The Educational Problems of Clinical Field Training Based on Nursing Teachers and Last Year Nursing Students View points. *Iranian Journal of Medical Education* 2005; 5(1): 24-33.
14. University Of South Carolina. Alumni Survey Report [Online]. 2001; Available from: URL: <http://www.ipr.sc.edu/effectiveness/accountability/alumni/2001>. 2011. Ref Type: Generic

How to cite this article: Salehi SH, Taleghani F, Afghari P, Afghari MH. Investigating the efficiency of nursing education program from the perspective of graduate students of nursing and midwifery. *Iranian Journal of Nursing and Midwifery Research* 2012; 17(4): 284-289.

Source of Support: Isfahan University of Medical Sciences, **Conflict of Interest:** None declared.