Original article

Clinical Education from the perspective of nursing students of North Khorasan University of Medical Sciences and the amount of interest and understanding of their field of study in academic year 2008-09

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Abstract

Introduction: Clinical training is the heart of the professional teaching in nursing field because it takes over half of a training time of nursing students, and it is the basis of their professional skills acquisition, and it should always be evaluated to improve its quality condition. The object of this study is searching the clinical training condition from the nursing student's point of view and finding their interests and knowledge of their own major in Medical Science Faculty in the north of Khorasan.

Methods: This research is an analytic-descriptive study that was done on 91students of the 4th semester and higher in educational year of 2009-10. The data gathering tool was a planned questionnaire consisting of three parts of demographic information. Some questions were about the amount of the students' knowledge of nursing field and the third section was related to the clinical training questions. For data analysis, the frequency distribution, mean and required tests in SPSS software 15 version were used.

Result: 51.6 percent of students evaluated the university clinical training in a good level. Meanwhile , the domains of teaching programming and clinical instructors were assessed 57.1 and 73.6 percent ,respectively, in a good level and the clinical training environment and its assessment 57.1 and 49.5 percent, respectively', in the average level. The students knowledge of their own major showed a significant difference from the average of clinical instructors $P=0.01$ and the teaching programming $P<0.001$.

Conclusion: determining the teaching programming and having the experienced clinical instructors in these domains, caused positive opinions in students, and in this section the students main problems are their need to facility provision, the equipment of clinical environment and the processes of clinical evaluation that it is not beyond expectation because this university is newly established.

 Key words: Clinical training, Point of view, Nursing students, Interest and motivation

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Introduction

Nursing education is an important part of higher education system that directly and critically and directly deals with the life of human being. The health of a population depends on preventive measures, health education, and quality of treatment. Nurses play a

pivotal role in delivering health services to the population. It is therefore, prudent to establish an integrated scientific and professional system, including but not restricted to universities, in order to provide the society with productive human resources (1).

Currently, modern nursing education systems follow different models with all sharing the education of clinical skills a fundamental part of their education process (2).

Learning nursing involves attaining several clinical skills (3).Clinical education involves teaching (and learning) how to practice lessons already taught (and learned) theoretically. Considering that nurses step in people's lives (4) increasing the quality of the nursing education will be mirrored in the improved health of the society (5).Quality and quantity of the nursing education is affected by several factors (19). The first step in improving an education system is to understand its deficits. Previous studies investigating the quality of nursing education are not consistent with some reporting that the nursing education quality is accepting while others reported some deficits (6-9).

We, therefore, investigated the quality of nursing education in the northern Khorasan University of medical sciences. Since the nursing students are directly involved in education (20, 21), we also examined their knowledge about and their attitude towards nursing education.

Materials and Methods

A convenient sample of semester 4 and above nursing students was selected for the current study. All 100 eligible students were provided with questionnaire of which 91 students agreed to complete the questionnaire and did so. Data were secured using a self-report questionnaire with 3 main components. First component included demographic information (age, sex, semester, quality of performance, and residency).We used grade point average (GPA) as an index of quality of performance. It is calculated by dividing the total amount of grade points earned by the total amount of credit hours

attempted. In the educational system of Iran grade points range from 0 to 20. The second component included two items regarding knowledge of students about their major at the time of entrance to the school and at the time the study. There were also two items examining the degree to which a participant was interested in his/her major and the degree to which a participant was motivated to continue studying nursing. Responses were rated based on a 4-point Likert Scale. The third component included items regarding quality of education. Items were categories into four dimensions of educational programming (11 chara-cteristic items), clinical trainers (15 characteristic items), educational environment (10 characteristic items), and clinical evaluation (5 characteristic item).The participants were asked to rate (weight) their answers on a 4-point Likert Scale: never (1), sometimes (2), often (3), and always (4). For each dimension a score was calculated as a weighted mean of rated responses to characteristic items. We, then, standardized the score values so that the maximum total score equaled 100.The quality of education in each dimension was then discretized as weak (0-24%), moderate (25-49%), good (50-74%), and very good (75-100%).The validity of the questi-onnaire was examined and confirmed by 10 faculties of the northern Korasan University of medical sciences. The reliability of the quest-ionnaire was examined using Cornerback's alpha ($\alpha=0.81$).

Data are presented as mean (SD) and frequency (%) for continuously and categorically distributed variables, respectively. All statistical analysis was performed using SPSS 15.The statistical significance of mean education quality scores between men and women was examined using t-test. To examine if education quality vary by levels of knowledge about nursing, the degree to which students were interested in nursing, or the degree to which their disposed to continue study nursing we used analysis of variance (ANOVA). Tukey test was used for post-hoc analyses. Statistical level of sign-ificance was set at P-values <0.05.

Findings

The participation rate was 91%. The mean age of participants was 21.2 (0.3) with 63% being female. About 70% of participants were staying dorms. Mean AGP of the male students participated in the current study was 15.5 (0.6) and that of female students was 15.8 (0.3). Among students participated, 37.4% were in their 4th semester, 38.5% in their 6th semester, and 24.2% in their 8th semester.

At time of entrance to the university, the level of the knowledge of students about their major was rated as very low by 30.2%, low by 50.55, high by 14.3%, and very high by 4.4%. The corresponding figures at the time of the current study were8.8, 14.3, 58.2, and 18.8%, respectively.

As shown in Table 1, students most frequently reported the quality of educational in dimensions of programming and clinical trainers to be good. For dimensions of educational environment and clinical evaluation most frequently reported level was middle (moderate).

As shown in Table 2, the mean quality scores of different dimensions of education assigned by men did not differ by those of women except for the dimension of educational programming where men had more favorite evaluation (P-value=0.010).

The attitude of students towards the quality of education varied by the degree to which they know their major and the degree to which they interested in continuing studying nursing. As the level of the knowledge about their major increased, so did the mean quality score the students assigned to the dimension of the educational programming (P for trend <0.001). The more motivated were the students to continue their nursing education, the better they evaluated the quality of education in terms of programming (P for tend <0.05).

As the level of the knowledge about their major increased, so did the mean quality score the students assigned to the dimension of the competency of the clinical trainers (P for trend <0.001). The more motivated were the students

to continue their nursing education, the better they evaluated the quality of education in terms of the competency of the clinical trainers (P for tend <0.001).

Also no linear trend was observed across levels of motivation for continuing education and the assessments made by students regarding educational environment, there was a statistically significant difference between least motivated and most motivated student, with the latter conferring more favorite evaluation (P-value=0.030).

Discussion

We observed that the majority of students assessed the quality of nursing education to be good in terms of the competency of the clinical trainers and programming and to be moderately good in terms of educational environment and clinical evaluation.

Table 1. Attitude of the nursing students towards different dimensions of the clinical education

	Weak N(%)	Moderate N(%)	Good N(%)	Very good N(%)
Educational programming	0(0)	34(37.4)	52(57.1)	5(5.5)
Lecturers competency	0(0)	18(19.8)	67(73.6)	6(6.6)
Educational environment	14(15.4)	70(76.9)	7(7.7)	0(0)
Clinical evaluation	0(0)	45(49.5)	40(44)	6(6.5)
Total	0(0)	42(46.2)	47(51.6)	2(2.2)

Table 2.Quality scores assigned by nursing students to the different dimensions of the clinical nursing education.

Dimension	Female	Male	P value[a]
Educational programming	2.2(0.47)	2.0(0.56)	0.010*
Clinical lecturers competency	2.3(0.41)	2.2(0.58)	0.080
Clinical education environment	1.9(0.47)	1.9(0.61)	0.600
Clinical evaluation	1.9(0.53)	1.9(0.69)	0.900

Values are reported as mean (SD)
[a] Derived from t test
*Significant at 0.05 level

Finding from previous studies have not been conclusive with inconsistent conclusion being made with respect to the quality of nursing education (3, 5, 7, 9-16).

The competency of the clinical trainer has been shown to be assessed as good by student (5, 9) in some studies but not all studies (10, 11). The students' clinical performance has been shown to be directly associated with the competency of their trainers (3). That difference in the level of education achieved by the lecturers could have possibly contributed to the differences observed in different studies.

The findings on the dimension of educational programming have neither been conclusive (5, 7, 12).Favorably assessed educational programming could be at least in part be explained by the good cooperation between lecturers and department of education.

Educational environment has been frequently observed to meet students' expectations (9, 12, 13). Students have been observed to complain of quality and quantity of the equipment needed for practicing nursing, the number of patients referred and admitted to their relevant educational hospitals (13). Learning opportunities has been previously reported to be scares (14-16).

Clinical evaluations have been previously shown not to be satisfactory to the students (9, 17, 18). It has been shown that students frequently ask for revision regarding the way their clinical skills have been evaluated (18). Such conflicts might have had their roots in the lack of the objective rather subjective evaluation criteria. Establishing such criteria area necessity since evaluation should looked upon as fundamental component of educational programming. Furthermore, unless the evaluation regarding the students' performance is highly accredited by them and valued as fair, they are unlikely to pursue compensating their shortcomings. Moreover, so long as learning is the goal of teaching, it is based on these evaluations that an educational system is able to assess how well it achieved educational goals.

Conclusion

We have investigated the attitude of the students towards the most important dimensions of the nursing education in association with their interest in and motivation for learning nursing. The quality of the nursing education did not generally meet the students' expectations. Future studies are required to determine how satisfactory is the clinical education to students of other subject areas or how satisfactory is the educational system to teachers. Considering the critical rule that nurses play in the realm of health is an emergent necessity to improve the nursing education system.

Acknowledgements

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