

FACTORS AFFECTING THE QUALITY OF CLINICAL EDUCATIONAL SERVICES FROM VIEWPOINT OF NURSING AND MIDWIFERY STUDENTS IN ISFAHAN

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ABSTRACT

Introduction: Clinical education is undoubtedly the most important and most basic part of nursing education program, and any shortcoming in the education of this group certainly affects the quantity and quality of public health services. Therefore, it is necessary that the education to have high quality and understanding the factors involved in this area requires research. Therefore, this study was conducted to assess factors affecting the quality of clinical educational services from the point of view of Operating room, Nursing and Midwifery Department Students in Isfahan.

Methods: In this cross-sectional study, 200 undergraduate students studying in fields of Operating room, Nursing and Midwifery of Isfahan University of Medical Sciences in the first semester of the academic year 2016-2017 were selected using simple random sampling. The first part included demographic characteristics and the second part was derived from the study of Ghorbaian et al on clinical education that its validity and reliability have been already approved, and the third part of the questionnaire included self-efficacy area of students that its reliability was already approved in the study conducted by Heshmati et al, and its reliability was obtained 0.85 by Cronbach's alpha coefficients. The mean score of measured dimensions was between 0 and 100 and tis range was classified in three levels of low, moderate, and high. Using descriptive statistics and independent t-test, data were finally analyzed.

Results: The mean age of male students was (21.6 ± 0.221) and mean age of female students was (21.6 ± 0.221). Mean score of measured dimensions was as follows: the area of goals of educational program (2.58 ± 0.419), educator (2.55 ± 0.474), dealing with student (2.46 ± 0.577), educational environment (2.41 ± 0.610), and evaluation (2.50 ± 0.592), and self-efficacy (2.32 ± 0.437). In the area of goals and educational program and educational environment area among clinical educational area, significant difference was found among students of three fields of midwifery, nursing and operating room (p-value <0.05).

Conclusion: Strengthening the individual characteristics of educators, the use of clinical educators in all clinical departments, increasing the motivation of educators and strengthening their capabilities, providing proper facilities and equipment in clinical departments, adopting appropriate methods for the evaluation, systematic educational development and planning , creating more appropriate educational clinical environment, and providing the principles of dealing with students properly in the clinical environment are recommended for fields of Operating room, Nursing and Midwifery in Isfahan University of Medical Sciences in order to improve the level of clinical education.

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Introduction

One of the most important tasks of the educational system is equipping graduates to the updated knowledge with the use of appropriate and effective teaching methods. In today's complex world, education plays an important role and governments and

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the world's great countries attribute their progress and development to development of their educational systems [1]. Development of education and creation of transformation and change in medical education has a great importance because its main mission is to educate powerful and competent forces that have necessary knowledge, attitude and skills to maintain and enhance the health of all people in society [2]. In fact, in the health system, "patients" are the main reason for the gathering of health and care team members. Medical staff in the surgery area as supporters of patient's right should examine the need of patients and their families to obtain information and assistance in the surgery area, and based on job and work ethic regulations, they are obliged to take action to determine and establish position and conditions leading to the safety and health of the patient [3]. Professional development is a serious and vital problem in professional nursing education. Therefore, educational program of this profession should be designed in such a way that in addition to the intellectual development of students provides the conditions for obtaining clinical expertise and skills. Universities as centers that contain important part of society are required to educate students who have the ability for prevention, treatment and health promotion in the society [4]. Nursing is the knowledge that simultaneous with science depends on action, so that in many studies, it is known as action-based profession [5]. Clinical education is undoubtedly the most important and most basic part of nursing education program. Nearly half of nursing education is at the undergraduate level and thus clinical education is at the heart of nursing education. The value of clinical education is accepted for all people and all experts of nursing education believe that the development of scientific and professional nursing education is impossible without improving clinical education [6]. In this course, students learn clinical skills in real terms and upgraded to provide for activity in the clinical environment [7]. As the objective of providing internship courses is to achieve practical skills by students, if students work under the supervision of educator who have clinical skills and familiar with clinical environment realities, they will gain better and more realistic skills [8]. In a study conducted by Ravanipour et al, it was revealed that scientific and practical weakness of nursing educators in gaining students' profession and qualification to enter clinical environment are among the barriers to obtain professional qualifications and abilities of students [9].

Tazakori et al concluded that the accurately and precisely strengthening and implementation of current programs as well as the creation and supply of standard learning environment can increase clinical educational quality [10]. Ghorbanian, Abdullah Zadeh Mahlani and Haki also expressed that from the perspective of anesthesiology students, the most important factors affecting the status of education include clinical educator, educational goals and program and learning environment, respectively. In addition, from the point of view of operating room students, the most important factors affecting the status of education were educator, dealing with students, and educational goals and program, respectively [8]. Nowadays, low quality of education has become more visible than ever, or at least, it could be accepted that after the success in quantity dimension of education, now we should pay attention to quality of education. Improving the quality requires an understanding of the factors that can directly or indirectly affect the educational process. Educational quality is influenced by several factors that are associated with each other. Moreover, the fact is that lecture-based teaching methods are the most common in teaching methods still, so that this method of teaching in higher education such as the university continues. Continuous changes in the conditions and needs of life have made it necessary educations to be appropriate with needs of time. Therefore, high quality education is required. In addition, despite great success of educational in quantity development of education, acceptable success to access educational goals is seen less, so addressing the quality seems to be necessary. On the other hand, nursing because of the multiplicity and complexity of the role is a professional activity and requires higher sense of responsibility and caution. Any shortcoming in education of this group of students certainly affects the quantity and quality of public health services [9]. Despite the involvement of various factors on the quality of clinical education of students, in order to recognize and improve the strengths and resolve the weaknesses, the researchers decided to conduct a study to evaluate the factors affecting the quality of clinical education from the perspective of nursing and midwifery students in Isfahan.

Methodology

The present study was a cross sectional study conducted in the first semester of 2016-2017 in the Nursing and Midwifery Department of Isfahan University of Medical Sciences. The study population included 200 undergraduate students of operating rooms, nursing and midwifery, selected using simple random sampling. Inclusion criteria of study included nursing and midwifery school students who had completed at least one internship course in hospitals affiliated to Isfahan University of Medical Sciences and had consent to participate in research. One of the researchers after coordination with the participants explained the goals of the study to them and obtained their consent. Then, questionnaires were distributed among the samples and questionnaires were collected after responding them by students. Data were collected using a questionnaire that first part of it related to demographic characteristics (sex, age, field of study, semester, GPA) and the second part of the questionnaire was derived from the study of Ghorbanian et al [8] which contains 33 questions with five options of "strongly agree", "agree", "no idea", "disagree", "strongly disagree" in 5 areas of educational goals and programs (11 items), educator (9 items), dealing with a student (4 items), educational environment (6 items), and monitoring and evaluation (3 items). Reliability and validity of the questionnaire were already approved by Ghorbanian et al and its reliability was obtained 0.98 by Cronbach's alpha coefficient. Another part of the questionnaire related to investigating the self-efficacy of students consisted of 7 question with

five options of "strongly agree", "agree", "no idea", "disagree" and "strongly disagree" that its validity was confirmed already by Heshmati et al [7] and its reliability was obtained 0.85 by Cronbach's alpha coefficients. Questions were scored reversely. After collecting data and entering into SPSS-19 software, descriptive statistics (frequency, percentage, mean and standard deviation) test were used to analyze the data. The questionnaires were anonymous and all subjects were participated willingly and with consent and the information will remain confidential to the researchers.

Results

In this study, 200 questionnaires of assessing quality of clinical education were completed by nursing and midwifery students of Isfahan University. Among 200 students studied, 86 were men (43 percent) and 114 were female (57 percent). In addition, 42 of them (21%) were studying in the operating room field of study, 119 (59.5%) in nursing field of study, and 39 (19 %) in midwifery field of study. The average score obtained by 200 students at the self-efficacy dimension was 2.32 ± 0.437 that as it was lower than mean of self-efficacy criterion [3], the weakness of the students' perspective in this dimension is seen. The average score in the area of educational program and goals was 2.55 ± 0.474 , it was 2.55 ± 0.474 in educator area, 2.46 ± 0.577 in dealing with educational environment, 2.41 ± 0.610 in educational environment, and 2.50 ± 0.592 in evaluation area. It was observed that from the perspective of students studied, the area of educational program and goals (average score 2.58) have the highest impact on clinical education, followed by educator (average score 2.55), evaluation (average score 2.50), dealing with students (average score 2.46), and the educational environment (average score 2.41), respectively. In the area of educational goals and programs, 81% of students were satisfied with determined tasks of the students and the training of professional ethics and correct relationship with the patient, and 78.5% of the students were satisfied with providing goals of the course on the first day of the internship. In this regard, 18.5 of them stated that there was no coordination between educational goals and coordination personnel expectations. In the area of educator, 73 percent of students were satisfied with appropriate clinical dealing with students and 17.5% of them stated that clinical educator had no adequate experience. In the area of evaluation, students' information of clinical evaluation at the start of internship course was evaluated appropriate in 70.5% of students, and in the area of dealing with students, strengthening the self-confidence of students in the clinical environment was reported in 66.5% of the students. In the area of educational environment, adequacy of facilities was reported appropriate in 65% of students, and adequate number of diseases case was reported in 63.5 f students [Table 1].

Table 1: frequency of clinical education components status separately for five areas studied from the perspective of students

areas	Components	No n (%)	relatively n (%)	Yes n (%)
Educational goals and programs	Specified tasks of student	20 (10)	18 (9)	162 (81)
	Providing course goals in first day of internship	17 (8.5)	26 (13)	157 (78.5)
	Coordination among educational goals and personnel expectations	37 (18.5)	49 (24.5)	114 (57)
	Educating students in line with internship goals	25 (12.5)	47 (23.5)	128 (64)
	Focus of students on course-related subjects	26 (13)	46 (23)	128 (64)
	Holding weekly conferences in clinical environment to increase scientific power of students	31 (15.5)	34 (17)	135 (67.5)

	Educating professional ethic and correctly communication with patient	17 (8.5)	21 (10.5)	162 (81)
	Observing prerequisites of internship course	26 (13)	32 (16)	142 (71)
	Observing clinical education stages (observation, educator assistant performance, direct performance)	22 (11)	31 (15.5)	147 (73.5)
	Giving importance to views of students in internship planning	28 (14)	36 (18)	136 (68)
	Coordination among theoretical teachings and clinical activities	24 (12)	40 (20)	136 (68)
Educator	Timely presence of clinical educator in the internship place	22 (11)	41 (20.5)	137 (68.5)
	Expectation of clinical educator with regard to timely presence of students in the internship place	33(16.5)	29 (14.5)	138 (69)
	Complete support of educator of student in the clinical environment	27 (13.5)	36 (18)	137 (68.5)
	Appropriate clinical dealing with students	32 (16)	26 (13)	142 (71)
	Adequate patience of clinical educator	21 (10.5)	33 (16.5)	146 (73)
	Reduced stress of student by clinical educator	30 (15)	33 (16.5)	137 (68.5)
	Clinical educator interest to clinical work	24 (12)	37 (18.5)	139 (69.5)
	Adequate experience of clinical educator	35 (17.5)	34 (17)	137 (68.5)
	Adequate skill of clinical educator in performing clinical tasks	33 (16.5)	34 (17)	133 (66.5)
Dealing with student	Proper dealing of educational supervisor with student	34 (17)	51 (25.5)	115 (57.5)
	Adequate cooperation of personnel with student	36 (18)	38 (19)	126 (63)
	Strengthening the self-confidence of student in clinical environment	29 (14.5)	38 (19)	133 (66.5)
	Student's decision-making power in patient care planning	31 (15.5)	42 (21)	127 (63.5)

Educational environment	Appropriate number of students in clinical environment	47 (23.5)	39 (19.5)	114 (57)
	Adequate number of patients for learning	45 (22.5)	30 (15)	125 (62.5)
	Adequate welfare facilities in department	38 (19)	32 (16)	130 (65)
	Adequate number of diseases cases	37 (18.5)	36 (18)	127 (63.5)
	Using educational aid tools in the clinical environment	34 (17)	43 (21.5)	123 (61.5)
	Providing adequate motivation for employment in future in the clinical educational environment	41(20.5)	41(20.5)	118(59)
Evaluation	Educator activity evaluation by student	24 (12)	44 (22)	132 (66)
	Student's information of clinical assessment at the beginning of internship course	33 (16.5)	26 (13)	141 (70.5)
	Adequate monitoring on clinical education process	37 (18.5)	40 (20)	123 (61.5)

It was found that mean age was not significantly among male students (21.6 ± 0.221) and female students (21.3 ± 0.130) (p -value = $0.248 > 0.05$). Among five areas of clinical education, only mean score of educational environment was different significantly between two groups of male and female students (p -value = $0.001 < 0.05$) so that mean score obtained by male students (2.64) was significantly higher than that in female students (2.24). Mean score of self-efficacy between two male and female students was not significantly different [Table 2].

Table 2: determining and comparing the mean score obtained in self-efficacy dimension and five areas of clinical education in terms of gender

Area	Gender	N	Mean	SD	T test statistic	p-value
Self-efficacy	Male	86	2.38	0.046	1.16	0.110
	Female	114	2.27	0.046		
Educational goals and programs	Male	86	2.63	0.039	1.61	0.102
	Female	114	2.54	0.042		
Educator	Male	86	2.56	0.046	1.65	0.649
	Female	114	2.53	0.048		
Dealing with student	Male	86	2.55	0.058	1.77	0.078
	Female	114	2.40	0.056		
Educational environment	Male	86	2.46	0.045	5.09	0.001*
	Female	114	2.24	0.063		
Evaluation	Male	86	2.59	0.058	1.87	0.063

	Female	114	2.44	0.059		
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*if the p-value is less than 0.05, difference is significant

It was found that mean age of students in three fields of study of midwifery, nursing and operating room was not significantly different ($p\text{-value} = 0.102 > 0.05$). The mean score obtained in the area of educational programs and goals and area of educational environment among five clinical educational areas had significant difference among students of three different fields of studies of midwifery, nursing and operating room ($p\text{-value} < 0.05$), so that the mean score obtained in area of educational goals and program among operating room students (2.41) was significantly lower than that in students of nursing (2.61), and midwifery (2.67). in addition, the educational environment area, the mean score obtained by midwifery students (2.20) was less than that in students of operating room (2.35) and nursing (2.51) [Table 3].

Table 3: determining and comparing mean score obtained in dimension of self-efficacy and five areas of clinical education in terms of field of study

Field of study		Self-efficacy	Educational goals and program	Educator	Dealing with student	Educational environment	Evaluation
Number of operating room	n	42	42	42	42	42	42
	mean	2.32	2.41	2.48	2.38	2.35	2.41
	SD	0.432	0.430	0.468	0.637	0.641	0.645
Nursing	n	119	119	119	119	119	119
	mean		2.61	2.52	2.50	2.51	2.53
	SD		0.420	0.501	0.551	0.353	0.555
Midwifery	n	39	39	39	39	39	39
	mean	2.41	2.67	2.71	2.44	2.20	2.53
	SD	0.423	0.359	0.358	0.593	0.731	0.648
F test statistic		1.78	4.83	2.90	0.784	4.19	0.621
p-value		0.310	0.009	0.058	0.458	0.017	0.539

*if the p-value is less than 0.05, difference is significant

Discussion

Clinical education is one of the most important aspects of medical and paramedical students' education playing an important role in professional future of these students and educating and training health and medical trained workforce. This study was conducted to investigate the factors affecting the quality of clinical education from the viewpoint of students studying in fields of operating room, Nursing and Midwifery in Isfahan University of Medical Sciences in the first semester of academic year 2016-2017. The mean score achieved by students of operating room, nursing, and midwifery in all areas of study was at the moderate to high level. In the educator area, 68.9% of students believe that educator can be an effective factor in clinical education. The educator role can reduce stress of student in the clinical environment and increase their self-esteem and capability, which it is in line with study conducted by Naserian et al [8]. Zahraei et al [11] considers educator role as an important and relevant role in clinical education that is consistent with our results. In the area of dealing with student, 63% of

students evaluated the cooperation of staff among the effective factors in clinical education. In the study conducted by Aghvami, students were satisfied with staff cooperation in various clinical departments that is consistent with present study [12]. Henderson believes that favorable clinical support of students in the clinical environment leads to acquisition of skills and abilities. Cooperation of staff in clinical departments with educational educators and students will result in better and safe performance in their future profession [13]. In the educational area, 62.5% of students believe that adequate number of patients for learning can be a strong point in clinical education that is consistent with the study of Heshmati et al [7]. According to Watton, in cases where the number of patient or disease cases is low and student does not achieve to educational goals, by preparing film and creating clinical educational centers, learning can be enhanced and achieving to educational goals can be facilitated [14]. In this study, 65% of students considered adequate welfare facilities in the department as an effective factor in clinical education. Delaram and Abedini et al study indicates weakness in the educational – treatment system in providing appropriate educational and welfare facilities [15, 16]. In this regard, it is recommended that development centers of medical education adapted to new technologies and new educational methods in the world to standardize clinical educational courses or make use of experiences of other universities through communicating with Universities of Medical Sciences of country. In the area of educational program and goals, 79% of the students considered this factor as an important factor in the quality of clinical education, and 67.5% of the students considered holding weekly conference in clinical environment effective in enhancing the scientific power of students, which is not consistent with results of Ghorbanian et al [7]. Scientific conferences can be very effective in improving scientific and practical knowledge of students, if they are held with accurate planning and scientific practices. In this study, 78.5% of students believe that providing course goals on the first day of internship can be a contributing factor in the quality of clinical education that is consistent with the study of Khademolhosseini et al [17]. These researchers believe that providing internship course at the beginning of internship to student is useful in development of educational goals as the base for clinical evaluation. Additionally, they referred to high rate of specified tasks of student and professional ethic education and correct communication with patient, which it could be an effective factor in clinical education quality. It is consistent with the study of Sabzmakan et al [18]. In the area of evaluation, 66% of students believe that monitoring and can be an objective and accurate criterion to assess practical skills of students. Additionally, 70.5% of students considered student informing of evaluating the clinical evaluation at the beginning of internship course as an effective factor in clinical education quality, which it is not consistent with the study conducted by Peiman et al [19]. Being aware of the way of evaluation causes students to focus more on points emphasized in terms of evaluation in order to achieve internship course and evaluation goals. Assessment of self-efficacy of students also shows that students of all three fields of operating rooms, nursing, and midwifery have weak self-efficacy and self-esteem. It seems that students have lower self-efficacy in clinical environments since they failed to create good relationship and communication with personnel in clinical environment. Therefore, it is recommended that content course with goal of enhancing the self-efficacy of students to be included in curriculum of students. Limitations of this research included lack of quick access to students and as this study sufficed to information obtained by questionnaire, some of the participants might avoid stating their real views. Therefore, according to the points mentioned above, it is recommended that similar studies with larger samples to be conducted to increase the value of results obtained.

Conclusion

Strengthening the personal characteristics of educators, the use of clinical educators in all clinical departments, increasing motivation of educators and strengthening their capabilities, providing the facilities and equipment in all clinical departments, adopting appropriate methods for the evaluation, systematic educational development and planning, systematic , creating an atmosphere that is more appropriate for clinical education and providing the principles of dealing with students properly in the clinical environment in fields of operating room, Nursing and Midwifery are recommended in order to improve the level of clinical education of Isfahan University of Medical Sciences.

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References

1. MOHAGHEGHIAN S, AHMADIAN G, SAADATMAND Z. Recognition and application of new teaching models among the humanities faculty members. 2013
2. Mazak, S, Yousef, A, Mohammad Hossein, H, Comparing educational factors affecting the quality of education in Faculty of Social Sciences in Tabriz Islamic Azad from the perspective of teachers and students.
3. N P. Berry & Kohn's operating room technique. Elsevier Health Sciences. 2016.
4. MohammadPour A, Najafi S, Khosravan S, Mansourian M. Effective factors on the quality of clinical education from students and clinical instructors' s perspective of Gonabad nursing and midwifery faculty and its improvement solutions. *Journal of Medical Education Development*. 2014;7(16):107-15.

5. Pollard C, Ellis L, Stringer E, Cockayne D. Clinical education: a review of the literature. *Nurse Education in Practice*. 2007;7(5):315-22.
6. Bagheri H, Bazghaleh M. Clinical education and its related factors in nursing: A qualitative meta-synthesis study. *Journal of Nursing Education*. 2016;4(4):26-39.
7. Heshmati H. Effective Factors in Clinical Education Quality from the Viewpoints of Operation Room and Anesthesiology Students in Torbat Heydarieh University of Medical Sciences. *Iranian Journal of Medical Education*. 2015;15:601-12.
8. Ghorbanian N, Abdollahzadeh Mahlani F, Kazemi Haki B .Effective Factors on Clinical Education Quality Anesthesiology and Operating Room Students View. *Education Strategies in Medical Sciences*. 2014;6(4):235-9.
9. Azemian A. The standards of professionalism in nursing: the nursing instructors' experiences. *Evidence Based Care*. 2014;4(1):27-40.
10. tazakori z, mehri s, mobaraki n, dadashi l. Assessing the status of clinical education from perspectives of operation room students. *Journal of Health And Care*. 2016.
11. HASAN ZR, ATASH SG, SALEHI S, EHSANPOUR S, HASANZADEH A. COMPARING THE FACTORS RELATED TO THE EFFECTIVE CLINICAL TEACHING FROM FACULTY MEMBERS'AND STUDENTS'POINTS OF VIEW.
12. Agvami MS. Satisfaction with nursing students at the university of Zanjan. *Zanjan Univ Med Sci J*. 2010;3(4):1-6.
13. Henderson A, Twentyman M, Heel A, Lloyd B. Students' perception of the psycho-social clinical learning environment: an evaluation of placement models. *Nurse education today*. 2006;26(7):564-71.
14. Wotton K, Gonda J. Clinician and student evaluation of a collaborative clinical teaching model. *Nurse education in practice*. 2004;4(2):120-7.
15. Delaram M. Clinical education from the viewpoints of nursing and midwifery students in Shahrekord University of Medical Sciences. *Iranian journal of medical education*.35-129:(2)6;2006 .
16. Abedini S, Aghamolaei T, Jomehzadeh A, Kamjoo A. Clinical education problems: the viewpoints of nursing and midwifery students in Hormozgan University of Medical Sciences. *Bimonthly Journal of Hormozgan University of Medical Sciences*. 2009;12(4):249-53.
17. Khademolhoseini S, Alhani F, Anooshe M. Pathology of clinical training in nursing students of intensive care unit: A qualitative study. *Journal of Critical Care Nursing*. 2009;2(2):81-6.
18. Sabzmakan L, Azizi F. Mutual Viewpoints of Faculty Members and Residents Regarding Clinical and Educational Performance Compliance with Professional Ethics in Qazvin University of Medical Sciences. *Iranian Journal of Medical Education*. 2015;14(11):1007-19.
19. Peyman H, Darash M, Sadeghifar J ,Yaghoubi M, Yamani N, Alizadeh M. Evaluating the viewpoints of nursing and midwifery students about their clinical educational status. *Iranian Journal of Medical Education*. 2011;10(5):1121-30.