Nursing And Midwifery Students Perception Of Educational Environment: A Cross Sectional Study In Iran

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Abstract
Aim: *educational environment in nursing and midwifery schools affects the quality and effectiveness of an education. The present study aimed to examine Iranian nursing and midwifery students perception of their educational environment.*
Methods: *In this exploratory cross-sectional study, all nursing and midwifery students (n=300) studying in Razi school of nursing and midwifery were invited to participate. The Dundee Ready Educational Environment Measure (DREEM) questionnaire was used to assess the nursing and midwifery students perception of their educational environment. All statistical analyses were performed using SPSS software (v18.0).*
Results: *Of 300 nurses who fit the criteria, 279 participated in the study (response rate 93%). The mean total DREEM score was 103.54±20.67. The mean domain scores for students' perceptions of learning, students' perceptions of teachers, students' academic self-perception, students' perceptions of atmosphere and students' social self-perceptions, were 26.04±5.58, 22.18±4.90, 17.95±5.37, 23.96±5.89 and 13.40±3.38 respectively.*
Conclusion: *perception of nursing and midwifery students in present study toward educational environment was more positive than negative. Further study recommended in this regards in among nursing and midwifery students in other developing countries.*
Key words: *Nursing student, midwifery student, educational environment, DREEM, developing country*

I. Introduction

In general medical education comprises three main components: A curriculum, an educational environment and faculty members that each of these components has an important function [1]. The educational environment (also named climate) in medical universities affects the quality and effectiveness of an education significantly [2, 3, 4, 5]. That also affects student's satisfaction [6, 7]. The educational environment includes all the academic influences to which students are exposed such as physical, cognitive, cultural, psychosocial, emotional, educational, and motivational factors [8,9]. The environment which impact students learning include: physical classroom, the curriculum, the teachers and the other students [10]. Innovations in medical curricula (which include a blend of classroom, workplace, clinical and community-based learning) and increasing diversity of the student population in medical courses have led to increased recognition of a need to evaluate the educational environment of medical schools [10]. However studies in this regards in developing countries such as our country is limited especially among nursing and midwifery students. So present study were conducted to examine nursing and midwifery students perception of educational environment.

II. Methods

This study employed a descriptive design and was conducted in Razi faculty of nursing and midwifery, Kerman, South East of Iran. Using convenience sampling, all nursing and midwifery students (n=300) were invited to participate in the study. Consent was implicit by respondent's decision to return the completed questionnaire. Participants were assured that all data would remain anonymous, kept confidential and be stored safely. Ethical approval was obtained from Kerman University of Medical Sciences and the heads of Razi faculty of nursing and midwifery prior to the collection of any data.

Data were collected from Jun to March 2015. Questionnaire packages containing a covering letter describing the aims of the study, a demographic variables questionnaire, and the Dundee Ready Educational Environment Measure (DREEM) questionnaire. The DREEM is a generic, highly reliable and diagnostic inventory. It is a 50-item inventory where each item is scored using a five-point Likert scale with 0=strongly disagree, 1=disagree, 2=unsure, 3=agree and 4=strongly agree. Seven negative items are scored in reverse order. The 50 items have been categorized into five domains a) Students' Perceptions of Learning (SPL)-12 items; maximum score is 48; b) Students' Perceptions of Teachers (SPT)-11 items; maximum score is 44; c) Students' Academic Self-Perceptions (SASP)-8 items; maximum score is 32; d) Students' Perceptions of Atmosphere (SPA)-12 items; maximum score is 48; e) Students' Social Self-Perceptions. The general scoring of the questionnaire is as follows: 0-50 (weak), 51-100 (plenty of problems), and 101-150 (more positive than negative) and 151-200 (perfect). Participants answered the questionnaire individually and returned the test to researcher. The validity and reliability of the Persian version of DREEM was determined in the previous study by Imanipour et al [8].

Descriptive statistics, Pearson correlation coefficient and independent sample T-test were used for data analysis. All statistical analyses were performed using SPSS software (v18.0) and a variable was considered to be statistically significant if $P< 0.05$.

III. Results

Among 279 students who answered the questionnaire 52 were male (18.6%) and 227 were female (81.4%), aged from 18 to 25 years. Of 279 students, 158 (56.6%) were nursing and 121 (43.3%) were midwifery. Most of the respondents were single (86%).

The mean total DREEM score was 103.54±20.67. The mean domain scores for students' perceptions of learning, students' perceptions of teachers, students' academic self-perception, students' perceptions of atmosphere and students' social self-perceptions, were 26.04±5.58, 22.18±4.90, 17.95±5.37, 23.96±5.89 and 13.40±3.38 respectively. In category "students' perceptions of learning" higher and lower score were related to Item" The teaching is too teacher centered" and "The teaching overemphasizes factual learning" respectively. In category "students' perceptions of teachers" higher and lower score were related to Item" The course organizers are knowledgeable" and "The course organizers espouse a patient centered approach to consulting" respectively. In category "students' academic self-perception" higher and lower score were related to Item" I have learned a lot about empathy in my profession" and "I am confident about passing this year" respectively. In category "students' perceptions of atmosphere" higher and lower score were related to Item" I feel comfortable in teaching sessions socially" and "The course is well time tabled" respectively. In category "students' social self-perceptions" higher and lower score were related to Item" I have good friends in this course" and "My accommodation is pleasant" respectively. Table 1 showed the DREEM domain scores in details.

Among demographics characteristics, only students age have effect of students perception significantly (mean score of total DREEM were higher in older students) (p<0.05). Table 2 showed response of nursing and midwifery students to DREEM domain separately.

IV. Discussion

The evaluation of the nursing and midwifery students perception of the educational environment at the nursing schools help educators and staff in measuring the quality of learning that occurs within this vital place [11]. The aim of present study was to examine Iranian nursing and midwifery students' perception of educational environment. Results revealed that students were interested in completing the inventory as evidenced by the high response rate (response rate of 93%). The overall mean DREEM score was 103.54±20.67, indicating that, students' perceptions of educational environment were positive.

With regards that learning environment is important in determining students' academic success, studies about perceptions of educational environment in medical schools has been increasing in recent years [7, 9, 12]. In one study in this regards in 2015, Imanipour et al., examined nursing and midwifery students' perceptions of educational environment with using DREEM questionnaire. Similar to finding of present study, student participant in Imanipour et al., study reported positive perception from their educational environment (Mean score of total DREEM was104.39). They also reported that strategies such as adopting student-centered approaches, revising the educational curriculum, strengthening student-teacher relationship, being sensitive and responsive to students' educational needs, providing constructive feedback to them, and creating a comfortable, friendly, and supportive atmosphere can improve the educational environment [8]. In other study in this regards in 2015, Abusaad et al., examined nursing students' perception from learning environment in a nursing school in Egypt. They reported that a perception of nursing students of their mastering learning environment is "more positive than negative. Strategy such as academic dishonesty among students, helping students cope with difficulty in learning, improving schedules so students are kept informed and prepared for their learning activities, creating a harmonious learning environment during students' clinical postings and providing strong

student support facilities for counseling, sporting and cultural activities on the campus recommended by Abusaad et al., for improving the educational environment in a nursing school [11]. In another study in 2015, Farajpour et al., examined midwifery students' perception of the educational environment based on the DREEM model. They surveyed 138 midwifery students. Similar to student in our study, students in Farajpour et al., study reported that their educational environment is positive. Farajpour et al., implementing new educational strategies needs for improving midwifery perception from their educational environment [2].

V. Conclusion

Learning environment is found to be important in determining students' academic success and learning. Present study revealed that nursing and midwifery students in Iran as a developing country have a positive perception from their educational environment. Further study recommended in this regards. Study among post graduate and doctoral nursing and midwifery students also recommended.

Limitation

As this study was based on a convenient sample and the participation was voluntary, there might have been a selection bias which might affect the possibility to generalize the results to all nurses.

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References

[1]. Ahmady S. Faculty development in. medical education: a comprehensive approach. Stockholm; 2009.
[2]. Farajpour F, Esaashari F, Hejazi M, Meshkat M. Survey of midwifery students' perception of the educational environment based on DREEM model at Islamic Azad University of Mashhad in the academic year 2014. Res Dev Med Educ, 2015, 4(1), 41-45.
[3]. Payne LK. Comparison of students' perceptions of educational environment in traditional vs. accelerated second degree BSN programs. Nurse Educ Today. 2013 Nov;33(11):1388-92.
[4]. Seabrook MA.Clinical students' initial reports of the educational climate in a single medical school. Med Educ. 2004;38(6):659-69.
[5]. Abraham R, Ramnarayan K, Vinod P, Torke S. Students' perceptions of learning environment in an Indian medical school. BMC Med Educ. 2008 Apr 11;8:20.
[6]. Haghdoost AA, Rafiei H, Raeisvandi A, Kazemzadeh Y. Post graduate student satisfaction from Kerman university of medical science educational services. Stride in Medical Education Development. 2015; 12(2):355-365.
[7]. Miles S, Leinster SJ. Medical students' perceptions of their educational environment: expected versus actual perceptions. Med Educ. 2007;41(3):265-72.
[8]. Imanipour M, Sadooghiasl A1, Ghiyasvandian S, Haghani H. Evaluating the Educational Environment of a Nursing School by Using the DREEM Inventory. Glob J Health Sci. 2015 Jan 14;7(4):211-6.
[9]. Yehia Sayed H, Gaber El-Sayed N. Students' perceptions of the educational environment of the nursing program in Faculty of Applied Medical Sciences at Umm Al Qura University, KSA. Journal of American Science, 2012;8(4): 69-75.
[10]. Dreyer A, Gibbs A, Smalley S, Mlambo M, Pandya H. Clinical Associate students' perception of the educational environment at the University of the Witwatersrand, Johannesburg. African Journal Of Primary Health Care & Family Medicine. 2015;7(1).
[11]. Abusaad FES, Mohamed HES, El-Gilany A. Nursing students' perceptions of the educational learning environment in pediatric and maternity courses using DREEM questionnaire. Journal of Education and Practice. 2015:6(29): 26-32.
[12]. Bakhshi H, Bakhshialiabad MH, Hassanshahi G. Students' perceptions of the educational environment in an Iranian Medical School, as measured by The Dundee Ready Education Environment Measure. Bangladesh Med Res Counc Bull. 2014;40(1):36-41.

Table1: Students response to each subscale of DREEM

DREEM subscale	Items	Number	Percent
Perception of learning	Very Poor	7	2.5
	Teaching is viewed negatively	95	34.1
	A more positive perception	170	60.9
	Teaching highly thought of	7	2.5
Perceptions of teachers	Abysmal	8	2.9
	In need of some retraining	123	44.1
	Moving in the right direction	148	53
	Model course organisers	0	0
Academic self-perceptions	Feelings of total failure	15	5.4
	Many negative aspects	83	29.9
	Feeling more on the positive side	166	59.7
	Confident	14	5
Perceptions of atmosphere	A terrible environment	14	5
	There are many issues which need changing	119	42.7
	A more positive attitude	145	52
	A good feeling overall	1	0.4
Social self-perceptions	Miserable	9	3.2
	Not a nice place	178	64
	Not too bad	88	31.7
	Very good socially	3	1.1

Table 2: Mean score of DREEM subscale for nurses and midwifery students separately

DREEM subscale	Items	Nurse	Midwifery	*P value*
Perception of learning	Very Poor	5	2	P=0.70, χ2=1.42, df=3
	Teaching is viewed negatively	50	45	
	A more positive perception	99	71	
	Teaching highly thought of	4	3	
Perceptions of teachers	Abysmal	5	3	P=0.88, χ2=0.24, df=2
	In need of some retraining	68	55	
	Moving in the right direction	85	63	
	Model course organisers	0	0	
Academic self-perceptions	Feelings of total failure	10	5	P=0.34, χ2=3.33, df=3
	Many negative aspects	44	39	
	Feeling more on the positive side	92	74	
	Confident	12	2	
Perceptions of atmosphere	A terrible environment	9	5	P=0.64, χ2=1.68, df=3
	There are many issues which need changing	61	58	
	A more positive attitude	87	58	
	A good feeling overall	1	0	
Social self-perceptions	Miserable	7	2	P=0.64, χ^2=1.68, df=3
	Not a nice place	95	83	
	Not too bad	54	34	
	Very good socially	2	1	