# Students' Perceptions of the Educational Environment in a Northern Iran University of Medical Science

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**Abstracts: Aim:** This study aimed to evaluate the current situation of clinical departments in order to explore the viewpoint of interns and trainee according to the Dundee ready educational pattern (DREEM) in Mazandaran University of Medical Science. **Design and Setting:** the samples included all intern and externs of medical department who were studying in Mazandaran University of Medical Science. **Methods and Materials:** This was a cross sectional study which comprised students who selected by convenience methods. The standard questionnaire used to assess the view of students who were intern or trainer in Mazandaran University of Medical science during 2012. The questionnaire comprised four subscales i.e. learning (12 item), educational environment (12 item), teachers (11 item) and perceived ability (12). **Statistical analysis:** SPSS software was used to analysis the collected data. We employed ANOVA, Pierson and Structural Equation Modelbing. **Results:** the findings showed the mean is above 3 and significance level is belowe0.05 which implies the view of interns is average toward teacher efficacy, educational environment, learning condition and perceived self-ability. **Conclusions:** according to the findings, authors suggests to future researchers to explore the clinical departments situations in different cultures and regions with different medical educational related factors in order to provide better knowledge regarding gaps in health care systems.[ Gorji P  NJIRM 2014; 5(5) :13-16]

**Key Words**: interns, clinical departments, education, view of students.

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**Introduction:** The evaluation of learning and education process always emphasized by educational department regarding the nurturing of the manpower in society is depending on education processes. Several factors influence the learning process such as teacher, education program, and necessary sources. However the education environment is extremely related to attitude of teacher toward students, education program, occupational and organizational culture, the view of students toward learning environment and social environment[1]. The first evaluation pattern for education namely college university environment scale (CUES) coined in 1963. The CUES pattern suggested evaluation of facilitate scholarships, courtesy and respect and developing social responsibility. Roff (1997) introduced a pattern  namely Dudnee ready educational in Dundee University of Schotland which designed to determine educational plans related problems and effectiveness of changes in educating. The pattern also assesses the difference between real condition and appropriate condition[2]. Varma and colleges used DREEM in order to evaluate the effectiveness of changes in syllabuses plan among female students studies general physician. They administered the questionnaires in several hospitals to evaluate the educational environment and reported according DREEM the situation is in average condition?[3]. In worldwide research paper the importance of evaluating educational environment highlighted and it is emphasized to design appropriate questionnaires to evaluating the indexes of learning condition in education environments. Through several studies in Iran and rest of countries the researchers pertaining the part of evaluating program to show the importance of determining education related problems [4,5,6,7]. Pimparyon also using DREEM reported appropriate educational environment among nurses in clinical departments [8]. In recent studies conducted in Iran in order assessing the rate of satisfaction of interns in emergency department, the students believed that regarding their job necessities in future the education should include the health care centres and social conditions also. Because standing with supervisor behind the bed of patients could not help them to learn performing independently [9]. In another study in Bosinia only 5% of interns reported and only 80% were able for injection [10].

Another study done in this area investigating the perceptions in graduated physicians and teachers of Medical Sciences University's aboutquality of education. The physicians believed that teaching theory syllables which are not exactly related to their efficacy in treatment are exhausting and time vesting in the clinical departments [11]. Therefore this study aimed to investigate the perceptions of interns and trainers of Mazandran University of Medical Sciences according to the DREEM pattern to determine the status of clinical departments. Subject and Methods

This cross sectional study performed in educational hospitals of Mazandaran University of Medical Science during 2012. All students of internship stage targeted as sample of the study. (N=83). The sampling done through convenience method. All clinical departments included in this study i.e. surgery, gynecology, emergency, neonatal.

**Tool:** The standard questionnaire used according to the DREEM pattern. The pattern included four parts i.e. learning, educational environment, teachers and self-efficacy. The questioner comprised 47 items with four subscales namely learning (12 items), educational environment (12 items), teachers (11 items) and self-efficacy (12 items). One survey in Iran reported appropriate reliability in a pilot study with 0.76 chronbakh alpha and during the randomized control study chronbakh alpha were 0.77, 0.62, 0.76, 0.79 for total, learning, educational environment and teachers[12].

**Statistical Analyses:** Statistical analysis; SPSS software were used to analysis the collected data. We employed ANOVA, Pierson and Structural Equation Modeling.

**Results:** The results revealed out of 183 students 31 (16.9) were male and 152 (83%) were female. The age mean was 23.6± 6.1 with age range of 19-30. 33 students (18%) were in internship stage and 150 (82%) in training stage. The descriptive results also revealed that mean of learning are equal to 28.2 which mean learning is relatively inappropriate. The rest variables also are in the same conditions teachers is 27(11-39), educational environment is 29(12-45) and self-efficacy 19(8-

30). The table shows the mean averages of all variables are above 3 and p values are less than 0.05. The view of students about teaching, educational environment, self-efficacy and learning is average.

**Table 1: The Results of One Sample T-Test (Mean Value= 3)**

| Variables | Sig | T | Mean | Situation |
|-----------|-----|---|------|-----------|
| Teachers | 0.000 | 13.60 | 3.6 | Average |
| Educational Environment | 0.000 | 14.3 | 3.5 | Average |
| Self-efficacy | 0.000 | 12.5 | 3.7 | Average |
| Learning | 0.000 | 10.4 | 3.8 | Average |

**Discussion and Conclusions:** The overall mean DREEM score for our samples was found to be 104/200. According to the practical guide of McAleer and Roff2, this indicated a slightly positive rather than a negative educational environment, which is below the high category of achievable scores.

According to the results of the current study most of interns and trainers reported moderate viewpoint, although their view was slightly inappropriate in term of learning subscale. They believed that the clinical departments need to be rearranged appropriately. The clinical departments designed mostly to teach the theory topics however the students need to be educated practically.

The results of analysis factor also showed that variables can determine the variance of the scale between 53%-62%. Education and learning required appropriate technology in all levels. All factors are relevant and affect each other. Therefore the weak points should evaluate constantly inorder to enhancement of education in clinical departments.

Results of studies regarding the viewpoint of interns are different. For example, one study conducted in Hong Kong cleared that nursing

students were not satisfied with their clinical department environment[13]. Other studies conducted in England and Australia showed that nursing students had positive attitudes about their clinical department's environments [14, 15]. This difference may be related to dissimilarity in cultures and educational environments between developed and under developing countries.

Regarding assessment of the clinical department in perceptions of students, some studies were conducted in another part of Iran. For example, Shahbazi and Salami showed that nursing students were not satisfied with their clinical departments [16]. Also, Zaighami et al. reported that many of Iranian nursing students viewed their clinical department as inappropriate [17]. On the other hand, Salimi et al manifested that students believed that the quality of their clinical department's environment was moderate [18].

Most negative viewpoint of nursing students regarding clinical departments was associated to the relationship of personnel and students. The results of Ghodsbin and Shafakhah showed that in viewpoint of nursing students, non-cooperation of nursing staff was the main preventing factor in clinical education [19]. Aiken believed in magnet hospitals personnel's and physicians communicating positively with each other [20].

Other problem of interns and trainee was that their task was not related to their future work in clinical settings. Zaighami et al. also reported that the main problem of nursing students in clinical setting was unspecified task orientation [17]. This study had some limitations. The study included only interns and trainee from Mazandaran University of Medical Science who participated in the study. So, we suggest that in other studies, the viewpoint of nursing instructors regarding quality of clinical departments to be assessed.

**Declaration**: There is no conflict of interest in this study

**Reference:**
1. Salimi T, Khodayarian M, Rajabioun H, Alimandegari Z, Anticchi M, Javadi S, Namjoo Z. A survey on viewpoints of nursing and midwifery students and their clinical instructors at Faculty of Nursing and Midwifery of ShahidSadoughi University of Medical Sciences towards clinical education during 2009-2011. J Med Edu Dev. 2012; 7(3): 67-78
2. Roff S, McAleer S, Harden RM, Al-Qahtani M, Ahmed AU, Deza H, et al. Development and validation of the Dundee Ready Education Environment Measure (DREEM). Med Teach. 1997;19(4):295–299.
3. Varma R, Tiyagi E, Gupta JK. Determining the quality of educational Climate across multiple undergraduate teaching sites using the DREEM Inventory. BMC Med Educ. 2005;5(1):8.
4. Said N M, Jaafar R, Arzuman H. A Study of Learning Environments in the Kulliyyah (Faculty) of Nursing, International Islamic University Malaysia. Malays J Med Sci. 009;16(4):15–24.
5. Genn JM. Curricular, environment, climate, quality and changes in medical education: Unifying perspective. Med Teach 2001; 23 (4):337-44.
6. Cleary TS. Indicators of quality. Plan High Educ 2001; 29 (3): 19-28
7. Hutchinson L. ABC of learning and teaching: Educational environment. BMJ 2003; 326: 810-2.
8. Pimparyon P, Roff S, McAller S, Poonchai B, Pemba S. Educational environment, student approaches to learning and academic achievement in a Thai nursing school. Med Teach. 2000;22(4):359–364.
9. B. Zamanzad, M. Moezzi, H. Shirzad. Rate of satisfaction and evaluation of medical students (interns and externs) from the quality of clinical education in the Shahre-korduniversity of medical sciences-2005. JSUMSA. 2007. 9(1); 13-21.
10. Masić I, Dedović-Halilbegović G, Novo A, and Izetbegovíc S. Quality assessment of education at Faculty of Medicine University of Sarajevo. Med Arh. 2006; 60 (6): 396-400

11. Khosravi F, Haghdust AA, Nuhi E. The evaluation of viewpoints of interns, teachers and graduates of Kerman regarding suitability of syllabuses in clinical labs of medicine students. JQUMS, 2002,68: 22-74

12. Aghamolaei T, Fazel I. Medical students' perceptions of the educational environment at an Iranian Medical Sciences University. BMC Med Educ. 2010;10:87

13. Chan DS, IP WY. Perception of hospital learning environment: a survey of Hong Kong nursing students. Nurse Educ Today. 2007;27(7):677–84

14. Midgley K. Pre-registration student nurses perception of the hospital-learning environment during clinical placements. Nurse Educ Today. 2006;26(4):338–45

15. Dunn SV, Hansford B. Undergraduate nursing students' perceptions of their clinical learning environment. J AdvNurs. 1997;25(6):1299–306

16. Shahbazi L, Salimi T. Attitudes of nursing and midwifery students on clinical status ; 8(2): 97-103. JSSUMSHS. 2000;8(2):97–103. [Persian]

17. Zaighami R, Faseleh M, JahanmiriSh, Ghodsbin F. Nursing student's viewpoints about the problems of clinical teaching. JQUMS. 2004;30 [Persian]

18. Salmani N, Amirian H. Comparison of nursing students and instructors view Azad University of Yazd on the status of clinical education environment. St Dev Med Edu. 2005;3(1):11–8. [Persian]

19. Ghodsbin F, Shafakhah M. Facilitating and Preventing Factors in Learning Clinical Skills from the Viewpoints of the Third Year Students of Fatemeh School of Nursing and Midwifery. Ir J Med Edu. 2008;7(2):343–52. [Persian]

20. Aiken, L. Havens, D. Sloan, D. The magnet nursing services recognition program: A comparison of two groups of magnet hospitals. Am J Nur. 2000. 100(3):26-35.