

STUDENTS' PERCEPTION OF THE EDUCATIONAL ENVIRONMENT IN AN UNDERGRADUATE PAKISTANI MEDICAL COLLEGE

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ABSTRACT

Objective: To evaluate the students' perception of their educational environment.

Study Design: Descriptive study.

Place and Duration of Study: Army Medical College, in October 2011.

Material and Method: Sixty undergraduate final year students of the Army Medical College were included in the study. Dundee Ready Education Environment Measure (DREEM) was used to measure the educational climate of the college. The questionnaire of each student was analyzed and used to measure their perception of learning, perception of teachers, academic self-perception, perception of atmosphere, and their social self-perception. The scores were analyzed to evaluate educational climate using SPSS version 17.

Results: Eighty percent of students had the opinion that educational environment at Army Medical College Rawalpindi is more positive, than negative. The majority of students had a more positive perception of learning 42 (70%), and thought that the teaching was moving in the right direction 36 (60%). 49 (82%) students' perception of atmosphere was positive, and 45 (75%) students socially perceived the college not too bad.

Conclusion: The study highlights good educational environment at Army Medical College, but finds some need, for change in the curriculum towards betterment.

Keywords: Educational climate, Educational environment.

INTRODUCTION

Educational climate is the sum total of all conditions and elements, which make up the surroundings and influence the development and action of an individual with reference to the learning process, as perceived by the students¹.

It is an important and vital part of the curriculum, and affects teaching and learning in a medical college. It consists of physical surroundings as well as psychological and social influences affecting educational experience.

Having a healthy climate is the first step towards teaching, and learning, as it not only affects the learning of a medical student but also affects his attitudes, growth, and development towards becoming a doctor². Few studies have

been carried out in Pakistan on this issue. Such a study is important because studying educational climate is a form of need assessment, forms basis for SWOT analysis, for bringing required positive changes in curriculum. This results in better learning, and meeting outcomes³.

METHOD

This was a descriptive study, carried out at the Army Medical College. Sixty students of final year participated in the study. They were sampled using the convenience sampling technique.

Dundee Ready Education Environment Measure (DREEM) was used to measure the educational climate of the college. Developed by University of Dundee, the DREE Musing Delphi panel of experts, it contains 50 statements. The statements are grouped in subscales relating to students' perception of learning, students' perception of teachers, students' academic self-perception, students' perception of atmosphere,

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and students' social self-perception⁴. Each of the questions is marked on a five-point scale, of 0 to 4. A mean score of less than 2 for each item is considered alarming and requires to be looked further for improvement⁴. In addition they were given the option to write reasons, if they perceived any item with less score.

The DREEM questionnaire was distributed to available final year students, and they were asked to fill the questionnaire in their own time, and return in 15 days time. A reassurance was given that the individual data gathered will remain confidential and will not be shared with their respective training institution. Sixty willing students returned the filled form, with consent to participate in the study.

The questionnaire of each student was analyzed and used to measure their perception of learning, perception of teachers, academic self-perception, perception of atmosphere, and their social self-perception.

The data were analyzed using SPSS version 17. Frequency and percentages were used to describe the results.

RESULTS

Eighty percent of students had the opinion that educational environment at Army Medical College Rawalpindi is more positive, than negative. The majority of students (70%) had a more positive perception of learning, and 60% students thought the teaching is moving in the right direction (table 1).

Seven percent students were confident that they will pass, and 73 percent students were feeling more on the positive side towards their academic self-perception. Eighty two percent students' perception of atmosphere was positive, and 75% students socially perceived the college not too bad (Table 2)

DISCUSSION

Educational climate is a vital part of the curriculum, and affects teaching and learning in a medical college. Educational environment, and educational climate are viewed as similar, but are

different. The educational environment is the sum total of all conditions and elements, which make up the surroundings and influence the development and action of an individual with reference to the learning process⁵. Whereas educational climate is the educational environment as perceived by the student¹.

Having a healthy climate is the first step towards learning⁶. It affects students choosing medical college, specialties⁶, their growth, and attitudes⁷.

We studied educational climate because few such studies have been carried out in Pakistan, and it forms the basis for bringing relevant changes in the curriculum to meet the outcomes of the college³. It results in improved teaching and learning, increased motivation among the students, and a positive institutional profile⁸.

For this study, out of tools available to measure educational climate, Dundee Ready Education Environment Measure (DREEM)⁴, developed by University of Dundee, was selected. Its consisting 50 statement sare grouped in subscales relating to students' perception of learning, students' perception of teachers, students' academic self-perception, students' perception of atmosphere, and students' social self-perception⁴. DREEM was chosen because it has been translated in many languages, validated, and administered in many western, and eastern countries⁹⁻¹¹ including Pakistan in a study by Khan J S et al (2011)¹². DREEM is used to tell strength and weaknesses of a medical college, and can be used as a predictive tool to predict academic performance of the students⁹.

The majority of students (80%) in our study had the opinion that educational environment at Army Medical College Rawalpindi is more positive, than negative. Similar overall results were seen in different studies worldwide, and done in Pakistan^{13, 14}.

The analysis of the answers given by our students revealed their following perceptions:

Students’ perception of learning

Overall there was a more positive perception of learning. The students thought that there was a structured training program in the college, which was being implemented rigorously, and teachers were trying to ensure that teaching time was being put to good use. The teaching was towards the right side of the spectrum of SPICES mode. It was more teachers centered. They perceived that

involved in learning process. There was an emerging trend among teachers to make lectures interactive, use audiovisual aids effectively. Introduction of case based learning in the college has also helped in active learning. The clinical learning in wards was active. The students were somewhat aware of learning objectives of the course. They thought that teachers helped a little to develop confidence in them. Many did not give

Table-1: Students’ perception of Educational environment, Learning, and Teachers.

	Educational environment			
	Very poor	Plenty of problems	More positive than negative	Excellent
No of students	0 (0%)	6 (10%)	54(80%)	0(0%)
	Learning			
	0-12 Very poor	13-24 Teaching is viewed negatively	25-36 A more positive perception	37-48 Teaching highly thought of
No of students	0(0%)	16(27%)	42 (70)	2 (3%)
	Teachers			
	0-11 Abysmal	12-22 In need of some retraining	23-33 Moving in the right direction	34-44 Model teachers
No of students	0(0%)	18(30%)	36(60%)	6(10%)

Table-2: Students’ academic self-perception, perception of atmosphere, and social perception.

	Academic self-perception			
	0-8 Feeling of total failure	9-16 Many negative aspects	17-24 Feeling more on positive side	25-32 Confident
No of students	0(0%)	12(20%)	44(73%)	4(7%)
	College atmosphere			
	0-12 A terrible environment	13-24 There are many issues which need changing	25-36 A more positive atmosphere	37-48 A good feeling overall
No of students	0(0%)	9(15%)	49(82%)	2 (3%)
	Social perception			
	0-7 Miserable	8-14 Not a nice place	15-21 Not too bad	22-28 Very good socially
No of students	0	12(20%)	45(75%)	3 (5%)

effort were their to shift teaching, and learning towards student centered learning. These included teaching being made stimulating, and students were encouraged to become actively

constructive feedback, and did not motivate their students to learn. The emphasis on long-term learning was implicit.

Students' perception of teachers

The role of teachers in educational environment is important. Majority of teachers had military background, and were authoritarian. It was emphasized that climate is not perceived healthy if teachers are seen as authoritative⁸. But, many, at the same time tried to ensure an environment of respect, and dignity, without humiliating, or embarrassing students. All teachers were knowledgeable to varying extent, and possessed relevant postgraduate qualifications of their specialty. It was rare for teachers to possess a qualification in medical education. The students perceived few teachers did not teach well, and were not prepared for the teaching session. Teaching methods making learning difficult affects educational climate negatively⁸. Some lacked good communication skill, were serious, of high military rank, and it was difficult for students to reach them. Many teachers taught using traditional one-way lectures, which were boring, and not interesting. They also changed small group discussion, or clinical teaching session into a mini lecture. Perhaps that is why 30% students thought teachers need training. At the same time 6% students perceived role model teachers presence in the faculty.

Students' academic self-perception

Unfortunately, only 4% students were confident of their success. But, encouragingly, 73% students had feeling more towards positive side. The self-efficacy among the students seemed to be not very high. This was reflection of educational environment, as students thought teaching and learning was good, but not exceptional, they did not find many role-model teachers, nor the atmosphere was extremely motivating. This might be also, because teachers gave less constructive feedback, and tried to motivate their students.

Students' perception of atmosphere

The college is a military medical college. The atmosphere reflects the military setting, in which rules, and regulations are followed in military

way. Perhaps this was one of the causes of fewer students, the atmosphere as having a good feeling overall. They perceived that efforts were being made to keep an atmosphere of respect, and value. In majority of learning experiences the students felt slightly relaxed. The atmosphere enabled them to concentrate on their learning. Many students were reluctant to ask questions. They thought cheating was very difficult.

Students' social perception

Due to cultural reasons, there was little socialization between opposite sex, and it was discouraged. The accommodation was good; met physical needs of the students. The atmosphere was competitive, with long studying hours. Students generally feel tired, and burned out. To relax, there were venues, and activities of socialization in the college. All had good friends, but few felt lonely, and bored. Majority felt that the college was not too bad a place to socialize. And more importantly, majority was of the view that there was no support system at college level to diagnose students in stress, and help them.

The students gave few reasons for some problems in educational environment that were identified. Our students thought the main reason was stress during the education process. These included examination, examination grades, academic overload, and lack of leisure time¹⁵. Lack of appropriate feedback was also an important factor in our study. Lack of feedback is an important factor affecting educational climate in a Greek medical school¹⁶.

Items identified for remedial using DREEM questionnaire, may be further explored using qualitative data. The combined methodology allows actions to address common causes of students' dissatisfaction¹⁷.

CONCLUSION

The study highlights good educational environment at Army Medical College, but finds some need, for change in the curriculum towards

betterment. Further qualitative studies are needed, for items of concern highlighted by this study to further improve the educational climate.

REFERENCES

- Genn JM. AMEE Medical Education Guide No.23: Curriculum, environment, climate, quality and change in medical education - a unifying perspective. Dundee: Association for Medical Education in Europe; 2001.
- Jefferys M, Elston MA. The medical school as a social organization. *Med Educ.* 1989; 23:242-51.
- Genn JM, Harden RM. What is medical education here really like? Suggestions for action research studies of climate of medical education environment. *MedTeach.* 1986; 8 (2) : 111-24.
- Roff S, McAleer S, Harden RM, Al-Qahtani M, Ahmed AU, Deza H. Development and validation of the Dundee Ready Education Environment Measure (DREEM). *Med Teach.* 1997;19: 295-9.
- Dorlands illustrated medical dictionary. 28th ed. Philadelphia: WB Saunder Company; 1988.p.563.
- Cross V, Hicks C, Parle J, Field S. Perceptions of the learning environment in higher specialist training of doctors: implications for recruitment, and retention. *Med Edu.* 2006; 40 : 92-96.
- Jefferys M, Elston MA. The medical school as a social organization. 1986; 23: 242- 251.
- McAleer, Soemantri D, Roff S. Educational environment. In: Dent JA, Harden M eds. *A Practical Guide for Medical Teachers.* London: Churchill Livingstone; 2009.
- Al-Hazimi A, Zaini R, Al-Hiyani A. Educational environment in traditional and innovative medical schools: a study in four undergraduate medical schools. *Educ Health (Abingdon).* 2004; 17: 192-203.
- Abraham R, Ramnarayan K, Vinod P, Torke S. Students' perceptions of learning environment in an Indian medical school. *BMC Med Educ.* 2008; 8:20.
- Roff S. The Dundee ready Educational Environment Measure (DREEM) -a generic instrument for measuring students' perception of undergraduate health professions curricula. *Med Teach.* 2005; 27(4): 322-5.
- Khan JS, Tabasum S, Fatima M. DREEM ON: validation of the Dundee ready education environment measure in Pakistan. *J Pak Med Assoc.* September 2011 [Cited 2012 November 25]. Available from: http://www.jpma.org.pk/full_article_text.php?article_id=2973.
- Riquelem A, O proto M, Oproto J. Measuring students' perception of educational climate of the new curriculum at Pontificia Univerdiad Catolica de chile: Performance of Spanish translation of the DREEM. *Edu Health.* 2009; 22 (1):1-11
- Khan SJ, Tabasum S, Yousafzai UK, Mukhtar O. Measuring the medical educational environment in undergraduate medical colleges across Punjab, Pakistan. *Biomedica.* 2011; 27: 14-8.
- Divaris K, Barlow PJ, Chendea SA. The academic environment: the students' perspective. *Eur J Dent Educ.* 2008; 12(Suppl. 1): 120-30.
- Kossioni AE, Varela R, Ekonmmu I, Lyrakos G, Dimoliatis DK. Students'perceptions of the educational environment in a Greek dental school, as measured by DREEM. *Eur J Dent Edu.* 2011; 16 (1).
- Whittle S, Whelan B, Murdoch-Eaton DG. DREEM and beyond: studies of the educational environment as a means for its enhancement. *Edu Health.* 2007; 20 (1): 7.

