



PERCEPTION ABOUT EDUCATIONAL ENVIRONMENT AMONG 1ST YEAR MEDICAL STUDENTS AT GOVERNMENT MEDICAL COLLEGE IN NORTH COASTAL ANDHRA PRADESH - A CROSS SECTIONAL STUDY.

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ABSTRACT

Background: A Educational environment can play a major role in the teaching learning process. In Competency Based Medical Education, there is a shift to student centred learning . Hence this study is being taken up to gain insights into students views on the teaching, learning, and learning environment.**Methods :**Using the Dundee Ready Educational Environment Measure (DREEM) questionnaire, we conducted a cross-sectional descriptive study at the Andhra Medical College in Visakhapatnam. The undergraduate first-year students (n = 250) were given the DREEM inventory. We measured how students felt about learning, about their teachers, about themselves academically, about the environment, and about themselves socially. The results were presented as mean (standard deviation) and analysed using an independent t-test. Results:The mean score of overall DREEM questionnaire is 128.01±14.77and among males it is 127.39±15.45 and in females it is 128.82±14.20. Indicates more positives than negatives.Students perception of educational environment was good.**Conclusion:**Recent changes in teaching, learning, methodology under CBME may have contributed to higher scores as compared. Teachers, surrounding environment, atmosphere should be moving towards excellence.

KEYWORDS : DREEM, Educational environment, Students' perception.

INTRODUCTION

Any educational activity should seek to provide students with high-caliber information in a favourable setting. The learning process of any learner is influenced by a number of things. The classroom atmosphere is essential among them. The way a learner views the classroom has a significant influence on how they learn. The curriculum and other elements affecting the learning environment may be better planned and improved as a result.

Academic accomplishment, subjective well-being, behavioural ambitions, and student happiness with the study programme all have a direct correlation to how students perceive their educational environment.

Students' learning experiences contain a variety of nuanced factors to which they may react differently. In order to improve the learning experience in connection to our teaching objectives, we can change the factors functioning in the educational environment or atmosphere of a certain institution or course if we can identify them and assess how students and teachers perceive them. (1) Successful training requires a supportive learning environment. The perceived environment may be referred to as the atmosphere. The atmosphere has been described as the heart and soul of the medical school environment and curriculum. The setting in which medical students learn has an impact on their success, contentment, and accomplishments. (2)

In Competency Based Medical Education, there is a shift to student centred learning . Hence this study is being taken up to gain insights into students views on the teaching, learning, and learning environment.

METHODOLOGY

Study Setting: This study was conducted in the Department of Community Medicine of Andhra Medical College, Visakhapatnam, Andhra Pradesh.

Study design: Cross-sectional study.

Study participants: 1st year MBBS students of Andhra Medical College. A total of 250 students were administered a validated DUNDEE READY EDUCATION ENVIRONMENT MEASURE (DREEM) questionnaire through Google forms among which only 175 students gave consent and answered.

Inclusion criteria: All the 1st year MBBS students of Andhra Medical College.

Exclusion criteria: The students who were not willing to give consent.

Study period: The study was conducted during the month of October 2022.

Data Collection tool: A validated DUNDEE READY EDUCATION ENVIRONMENT MEASURE (DREEM) Questionnaire.

DREEM gives a global score (maximum score 200) for the 50 items and has 5 subscales relating to students' perceptions of learning (POL, 12 items, maximum score 48), perceptions of teachers (POTs, 11 items, maximum score 44), academic self-perceptions (ASPs, 8 items, maximum score 32), perceptions of atmosphere (POA, 12 items, maximum score 48) and social self-perceptions (SSPs, 7 items, maximum score 28).

Each item is rated on a 5-point Likert scale from 0 to 4 where 0 is strongly disagree and 4 is strongly agree. There are 9 negative items (items 4, 8, 9, 17, 25, 35, 39, 48 and 50), for which correction is made by reversing the scores; thus after correction, higher scores indicate disagreement with that item. Items with a mean score of ≥ 3.5 are true positive points and those with a mean of ≤ 2.0 are problem areas; scores in between these 2 limits indicate aspects of the environment that could be enhanced. The maximal global score for the questionnaire is 200, and the global score is interpreted as follows: 0–50 very poor, 51–100 many problems, 101–150 more positive than negative and 151–200 excellent.[2]

It has a consistently high reliability and data can be collected and analysed according to variables such as year of study, ethnicity, gender, age and courses/attachments.[4]

Along with responses to this questionnaire, basic demographic data such as age, gender and professional year of study were noted.

Study Variables: 1.Student Perception Learning(SPL),2.Student Perception Teaching(SPT), 3.Student Academic Self Perception (SASP), 4.Student Perception of Atmosphere(SPA), 5.Student Social Self Perception(SSSP)

Data collection technique: A total of 250 students from 1st-year MBBS students were administered the DREEM questionnaire through Google forms among which only 175 students gave consent and responded.

Statistical analysis: Data analysis was performed using Microsoft Excel and IBM SPSS 17 (Statistical Package for Social Science ver.17). The categorical variables are presented as percentages or proportions. Continuous variables are presented as mean and standard deviation.

RESULTS

The age of the students ranged from 18 to 25 years. The maximum number of participants was in the age range of 18-20 years (61.9%). The mean (SD) age of the participants was 20.3±(0.91) years. 175 out of 99 (56%) were female and 76 (44%) male. The majority of students

reside in hostel 125 (71.3%) and about 50 (28.7%) were day scholars. The majority of the students 121 (69.2%) had schooling with state syllabus than compared to CBSE and ICSE. Among the 175 students, 90 secured 66.75% marks in recently conducted internal exam. The education status of the participants father, we found that 69 (39.2%) of them were graduates and around 14 (11.8%) had completed their education up to high school. Based on the mother education status of the participants, we found that 50 (28.7%) of them had a professional degree, 42 (24.5%) had graduated, and around 34 (19.2%) had completed education up to high school. (Table 1)

Table no 1 : Socio-demographic profile (n-175)

Category	Number of study participants	Percentage (%)
Age in years		
• 18-20	108	61.9
• 21-23	66	37.8
• 24-25	1	0.3
Gender		
• Male	76	44
• Female	99	56
Place of stay		
• Day scholar	50	28.7
• Hosteller	125	71.3
Board of pre -university schooling		
• CBSE	39	22.4
• ICSE	15	8.4
• State	121	69.2
Percentage of marks secured in recently conducted internal exam.		
• <50%	5	2.4
• 51-65%	47	26.9
• 66-75%	90	51.7
• >75%	33	18.9
Education of father		
• Illiterate	1	0.7
• Primary school	3	1.7
• Middle school	4	2.1
• High school	14	8.0
• Intermediate/Diploma	25	14.3
• Graduate	69	39.2
• Professional degree	59	33.9
Education of mother		
• Illiterate	4	2.1
• Primary school	6	3.5
• Middle school	8	4.5
• High school	34	19.2
• Intermediate/Diploma	31	17.5
• Graduate	42	24.5
• Professional degree	50	28.7

Overall / global scores of participants were for SPL 32 out of 48, SPT 27 out of 44, SASP 21 out of 32, SPA 30 out of 48, SSP 17 out of 28.comparison of maximum score to obtained score were shown in figure no 1

The total global score of overall DREEM questionnaire is 128.01±14.77and among males it is 127.39±15.45 and in females it is 128.82±14.20 indicates more positives than negatives.

Mean scores of males and females with p value shown in table no 2. There were no statistically significant difference between boys & girls (p value 0.22).

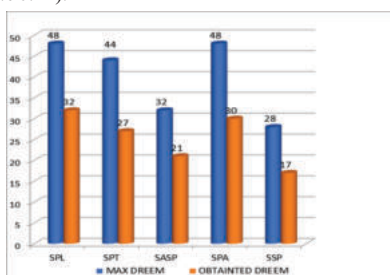


Figure no 1 : Maximum and obtained DREEM scores of participants

Table no 2 : Means scores of students for each domain

Domain	Max score	Mean score of Boys	Girls	P value
SPL	48	32±1.2	31±2.3	0.22
SPT	44	26±3.3	27±1.9	
SASP	32	21±3.5	20±2.6	
SPA	48	29±2.6	30±3.5	
SSP	28	17±4.1	16±2.3	

DISCUSSION

The DREEM assessment generated a "profile" of the benefits and drawbacks of our institution as seen by students. This baseline data can be used to monitor the learning environment further. The excessive emphasis on factual learning, authoritarian instructors, unhelpful prior learning techniques, the extensive curriculum (which makes it impossible to memorise it all),(4.5) the absence of a support system for stressed-out students, and the boredom they felt throughout the course are a few of the areas we have identified as cause for concern. Stakeholders at the institute will concentrate on these essential areas in order to improve the learning environment and experience for the students.

A management strategy for an educational institution can be successful if it includes systematic evaluations, feedback, and actions to fill in the gaps. The DREEM has been utilised by numerous universities across the world (6 to 14) to determine the benefits and drawbacks of the course materials, instructional methods, and learning environment, which are the primary determinants of student performance and knowledge acquisition.

The overall mean score for our institution was 128.01±14.77 and among males it is 127.39±15.45 and in females it is 128.82±14.20 , which is in the positive range for overall students' perception about their institute. This is a better score compared to other institutions in India which follow the traditional way of teaching; 101.23 in University College of Medical Sciences and GTB Hospital, University of Delhi, India;(15) 107.44 in Kasturba Medical College, India (16) and 117 in Melaka Manipal Medical College (Manipal Campus), Manipal, Karnataka, India.(12) Some of the universities which follow innovative, student-centred, problem-based learning (PBL) curriculum showed relatively high total score, as in Dundee University, the UK (global score is 13 9), (17)Liverpool Medical School, the UK (133),[18] Lund University, Sweden (144),(19) and Xavier University School of Medicine, the Netherlands (131.79).(17) Contrary to the concern expressed by Roff about the traditional curriculum scoring <120/200, (4) our institute has scored >120 similar to other Indian institutes. (20) In a study conducted in Ankara University, Turkey, despite the student-centred, integrated, problem-based curriculum, they have noticed a lower global DREEM score of 117.63.(21).

CONCLUSION

Recent changes in teaching, learning, methodology under CBME may have contributed to higher scores as compared to other studies. This CBME curriculum should follow in every institute in order improve education environment. Teachers, surrounding environment, atmosphere should be moving towards excellence. It is important to note that routinely looking into the results of the regular assessment of students' perspectives can help to enhance the learning environment for students.

Conflicts of interest, none declared

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