## **ORIGINAL ARTICLE**

## Perception for educational environment among medical students, Nainital: A Mixed method Cross-sectional study

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## **ABSTRACT**

Background- Environmental measurement has drawn some attention in the context of health professional education, with special focus on its effects on students outcomes. We sought to clarify the impact of CBME modules on the learning environment. An understanding of the educational program environment can help improve quality assurance. Aim and Objectives- To gain insight into medical students' perception for Traditional and CBME curriculum for their educational environment in GMC Haldwani using DREEM Tool. To identify the strengths of current curriculum and suggestions for further improvement. Methodology- It is a mixed method Cross-sectional study conducted at Government Medical College Haldwani from November 2023-January 2024. In this study, the Dundee Ready Education Environment Measure (DREEM) tool was used for undergraduate medical students of traditional batch 2018 and CBME batch 2020. Scores obtained were expressed as mean ± Standard Deviation (SD). For qualitative part of the study, in depth interview of the 30 students of CBME Batch was conducted. Results- In quantitative part of the study ,we compared the DREEM scores of both the batches. The mean DREEM scores in this study were 120/200 for batch 2018 and 126/200 for batch 2020. Total scores were slightly high in CBME batch which means students of CBME batch were quite more satisfied with their learning environment. In qualitative part of the study we conducted in depth interviews with 30 randomly selected students from the CBME batch to understand the strengths of their curriculum and further ideas for improvement. Questions in the interview were asked under the domains of the DREEM tool. In qualitative part, reduction in duration of lectures and more research oriented teaching was suggested by the students. More student-centered activities like hospital visits and discussions of clinical scenarios were recommended. In social self perception, hostel rules to be relaxed more along with adding more of extra curricular activities were suggested. Conclusion- Both group of students had a positive perception of their learning environment, based on their scores. Through qualitative part of this study many strengths were perceived by the students of CBME curriculum along with the suggestions for further improvement.

## **KEYWORDS**

CBME; Perception; Educational Environment; DREEM

## **INTRODUCTION**

The educational environment has been studied across the entire spectrum from primary to tertiary level and even beyond to post-graduate training. Components of the educational environment include but are not limited to the physical infrastructure such as rooms for lectures, tutorials and clinical activities; facilitating and constraining

factors for learning; the atmosphere created by fellow students; and faculty including teaching, clinical and administrative staff (1,2)

The curriculum for Competency-Based Medical Education (CBME) includes a number of modules, including a one-month foundation course, an appropriately structured mentoring program, AETCOM (attitude, ethics, and communication),

Self-Directed Learning (SDL), and Early Clinical Exposure for first-year medical students in the 2020 batch . The CBME batch's students took part in nearly all of the activities that were put in place prior to the Covid-19 issue which forced the switch from in-person to online instruction.

This study was conducted in CBME Batch 2020 and the traditional batch (2018) of students at Government Medical College to find out how they felt about their respective atmosphere they were taught in. The 50-item Dundee Ready Education Environment Measure (DREEM), which allows for multiple forms of comparison assessments of the learning environment, was utilized to acquire students' perception of a particular medical curriculum.

There are several published metrics of the educational environment in health professional programs, despite the fact that they are not grounded on any particular educational theory.

A measure that is most frequently used is the Dundee Ready Education Environment Measure (DREEM). The DREEM has been widely used as a tool to gather information about the educational environment in many institutions.(3,4) It was originally developed at Dundee and has been validated as a universal diagnostic inventory for assessing the quality of the educational environment of different institutions.(5) It is a 50close-ended questionnaire statement, requests information about five domains: Students' perception of learning, Students' perception of teaching, Students' Academic self- perception, Students' perception of atmosphere and Students' social self-perception. Each statement response scored 0-4 on a 5-point Likert-type scale (Strongly disagree, Disagree, Unsure, Agree and Strongly

This study was conducted to gain knowledge about the students' perception for their respective curriculums. To best of our knowledge no such study has been conducted in this region before. Through is study, gaps can be identify and further studies can be done to assess factors influencing learning environment in medical education

## **Objectives**

- To gain insight in medical students' perception for Traditional and CBME curriculum for their educational environment in GMC Haldwani using DREEM Tool.
- To identify the strengths of current curriculum and suggestions for further improvement.

## **MATERIAL & METHODS**

The state of Uttarakhand, which is divided into the regions of Kumaon and Garhwal, is located in

northwest India. Uttarakhand state has six medical colleges. Two of the six are private medical colleges and the remaining four are government-run. Kumaon region has two government medical colleges. This study was carried out at GMC Haldwani, which is situated in Uttarakhand's Kumaon region.

## Study settings

This cross-sectional study was conducted for a period of 3 months i.e. from November 2023-January 2024 at Government Medical College, Haldwani, Uttarakhand. This college is affiliated with Hemwati Nandan Bahuguna Uttarakhand Medical Education University (HNBUMU), Dehradun. It is the first postgraduate college in Uttarakhand recognized by the Medical Council of India . It admits 125 students every year for undergraduate program.

## Study design

It is a mixed-method cross sectional-study using self-administered close-ended and questionnaire guide. DREEM (Dundee Ready Education Environment Measure) tool were employed to gather quantitative data on students' perception of their learning.

## Study participants

There were 125 students in batch 2018 during admission. In addition to 125 students, 24 students were transferred from a private medical college, Dehradun (Uttarakhand). We acquired the perceptions of students (n=149) in the 2018 batch who were exposed to traditional curriculum. The perceptions were analysed and compared to the 125 students of the batch 2020 who experienced the NMC'S CBME program. Complete enumeration of students of both the batches was done. A total of 149 students from traditional Batch 2018 and 125 students from CBME Batch 2020 were involved. For data collection Google form using the DREEM questionnaire with close ended questions in likert scale was given. It was developed undergraduate health professionals. It was intended to be universal and cultural free inventory.(6) It has been shown to be independent of culture, and its translated version to various languages has been used in many countries (7). One questionnaire guide including all the domains of DREEM tool for in depth interview was also used for purposively selected 30 students of CBME batch.

## Inclusion criteria

Those who gave consent for participation.

## **Exclusion criteria**

Students not available during the data collection.

#### Data collection

A total of 149 students of Batch 2018 and 125 students of Batch 2020 were invited to take part in

the study. The aim of the study and the precise interpretation of the questionnaire items were conveyed to the students in both batches. The preservation of their anonymity and confidentiality was assured. The DREEM questionnaire in google form was shared to each student following the acquisition of informed consent. Google forms were shared by generating and displaying QR code in the class. Students who were present at the time of data collection were asked to scan the QR code for directing them to google forms and in such manner, only those students who were available during the data collection were only eligible for filling out the questionnaire.

The filled-out google forms were collected and data was analysed. Basic demographic details were not taken into consideration as we are conducting study on learning environment which is same for all students, everyone is residing in campus in the same environment.

Similarly, one questionnaire guide was used for qualitative part of the study, in which the categories were framed same that of the five domains of the DREEM questionnaire in the CBME Batch 2020. In depth interviews were acquired from 30 of the students.

#### Data analysis

Students' perception of learning, Students' perception of teaching, Students' academic selfperception, the atmosphere they perceive, and students' social self-perception are the five areas covered by the 50-statement, close-ended questionnaire. On a 5-point Likert-type scale, each statement response received a score between 0 and 4 (Strongly disagree, Disagree, Unsure, Agree, and Strongly agree). The scores for the negative comments were reversed. Quantitative data was collected and shifted to computer for analysis. Data was manually imported into Statistical package of Social Sciences (SPSS) version 26 for statistical analysis. Responses from the students through questionnaire guide utilizing the domains of DREEM tool were recorded and transcribed. By using

manual content analysis and coding, every student's response to the questionnaire guide was evaluated. Codes, subcategories, and categories were all part of the taxonomy system. The inductive coding technique was utilized for the coding. Under subcategories (strengths and suggestions for improvement), comparable codes were brought.

#### **RESULTS**

A total of 149 students from the 2018 batch (traditional batch) and 125 students from the 2020 batch (CBME) responded to the DREEM questionnaire. The mean DREEM scores in this study were 120/200 for traditional Batch 2018 and 126/200 for CBME Batch 2020(table 1). Scores in the range of 101 – 150 are viewed as more positive than negative. Compared to regular batch students, the CBME batch students were found to be more satisfied with the learning environment, as evidenced by their higher DREEM score. There was no significant change in perception of learning in both groups of students. But there was significant improvement in items in perception of teaching like 'The teachers get angry in the class, I feel able to ask the questions I want, The course is well time tabled. In academic self perception 'I am able to memorize all I need, I am confident about passing this year and students from CBME Batch perceive more relevance of learning in their healthcare career. Both the overall scores and the individual items in the domains of atmospheric perception and social self-perception is not significant except of itemsnew learning group felt cheating as a problem in their institute. Thy also feel that course is well timetabled, the atmosphere was relaxed during seminars/tutorials , they found the experience disappointed ,they were able to concentrate well during lectures and were rarely bored in this course. Significant change was seen in items like 'I have good friends in this college, there is a good support system for students who get stressed I seldom feel lonely and My social life is good.'

Table 1 DREEM scores of students of Traditional and CBME curriculum batch

Statements	Batch 2018 Mean	Batch 2020 Mean
I am encouraged to participate in the class	2.66±0.71	2.7 <u>±</u> 0.71
The teaching is often stimulating	2.41±0.90	2.57±0.81
The teaching is student-centred.	2.32±0.99	2.61±0.81
The teaching is well-focused	2.4 <u>±</u> 0.94	2.67±0.77
The teaching helps to develop my competence	2.43±.90	$2.67 \pm 0.8$
The teaching time is put to good use	2.42±0.92	2.73±0.69
The teaching over-emphasizes factual learning	$1.43 \pm 0.77$	1.32±0.75
I am clear about the learning objectives of the course	2.76±0.70	2.85±0.70
The teaching encourages me to be an active learner	2.52±0.79	2.62±0.84
Long-term learning is emphasized over short-term learning	2.46±0.88	2.77±0.75
The teaching is too teacher-centred	$1.69 \pm 0.80$	1.89±0.85
I feel I am being well-prepared for my profession	2.46±0.93	2.57±0.80

The teach are were linearly adeas his		2.05.1.0.64	2.42   0.60	
The teachers were knowledgeable	2.95±0.64	3.12±0.69		
The teachers (clinicians) were patient with patie	2.87±0.60	2.95±0.71		
The teachers ridicule the students	2.08±0.90	2.22±0.89		
The teachers are authoritarian	1.59±0.86	1.73±0.90		
The teachers are good at providing feedback to	2.55±0.84	2.63±0.79		
The teachers provide constructive criticism here	2.31±0.89	2.31 <u>±</u> 0.87		
The teachers give clear examples		2.76 <u>±</u> 0.72	2.88 <u>±</u> 0.64	
The teachers get angry in the class		$2.08\pm0.90$	2.03 <u>±</u> 1.24	
The teachers are well prepared for their classes		$2.73\pm0.70$	2.91±0.68	
The teachers(clinicians) had effective commun	nications with the	2.86±0.68	2.93±0.65	
patients				
I feel able to ask the questions I want		1.79±1.04	2.44 <u>±</u> 0.87	
I learned a lot about empathy in my profession.		2.56±0.76	2.85±0.76	
Learning strategies which worked for me before	continue to work	2.52±0.79	2.67±0.84	
for me now				
Last year's work has been a good preparation for	or this year's work	2.62±0.72	2.74±0.77	
I am able to memorize all I need	•	2.65±0.68	2.69±0.99	
I am confident about passing this year		2.52±0.79	2.63±0.81	
My problem-solving skills are being well-develo	ped here	2.44±0.87	2.69±0.82	
Much of what I have to learn seems relevan		2.59±0.72	2.94±0.63	
healthcare				
The teaching helps to develop my confidence		2.62±0.72	2.63±0.87	
The atmosphere is relaxed during ward teaching	כ	2.61±0.76	2.53±0.88	
The course is well timetabled	•	1.90±1.06	2.57±0.88	
Cheating is a problem in this college		2.08±1.05	2.51±1.04	
The enjoyment outweighs the stress of the cour	·ce	2.55±0.75	2.33±0.95	
The atmosphere motivates me as a learner	30	2.53±0.80	2.59±0.85	
The students irritate the teachers		2.19±1.03	2.20±0.97	
The atmosphere was relaxed during lecture		2.52±0.88	2.67±0.78	
There were opportunities to develop interperso	anal ckille	2.71±0.75	2.61±0.87	
I felt comfortable in class socially	iliai SkiiiS	2.59±0.81		
	utorials		2.73±0.80	
The atmosphere was relaxed during seminars/tu	utoriais	2.02±0.88	2.71±0.81	
I found the experience disappointed		1.97±0.88	2.27±0.97 2.52±0.90	
I was able to concentrate well during lectures		2.33±0.82		
I am rarely bored in this course		1.94±0.93	2.87±0.75	
I have good friends in this college		2.90±0.92	2.71±0.82	
My accommodation is pleasant		2.61±0.87	2.60±0.80	
There is a good support system for students wh	o get stressea	2.16±1.03	2.18±0.82	
I am too tired to enjoy the course		1.89±0.93	1.82±0.82	
I seldom feel lonely		2.27±0.93	2.6±0.8	
My social life is good		2.57±1.02	2.39±0.86	
DREEM SCORE INTERPRETATION	C	l		
DOMAIN	Score	Interpretation		
Perception of learning	0-12	Very poor		
	13-24	Teaching is viewed r	•	
	25-36	A more positive app		
	37-48	Teaching highly thou	ught of	
Perception of teaching	0-11	Abysmal		
	12-22	In need of some reti	•	
	23-33		ht direction Model	
	34-44	teachers		
Academic self-perception	0-8	Feeling of total failu		
	9-16	Many negative aspects		
	17-24	Feeling more on the	positive side	
		Confident		
	25-32			
Perception of atmosphere	0-12	A terrible environme	ent	

	13-24	There are many issues that need changing
	25-36	A more positive atmosphere
	37-48	A good feeling overall
Social self-perception	0-7	Miserable
	8-14	Not a nice place
	15-21	Not too bad
	22-28	Very good socially
Total DREEM score (200)	0-50	Very poor
	51-100	Plenty of problems
	101-150	More positive than negative
	151-200	Excellent

Table 2 shows the total score of CBME batch for each of the DREEM questionnaire's five domains. The SPL domain received a total score of 30.1/48 (62.7%). SPT scored 28.2/44 (64%) overall, whereas

SASP scored 21.8/32 (68.1%). The overall score for the SPA domain was 17.2/28 (61.4%), whereas the SSP domain scored 30.2/48 (62.9%).

Table 2 Mean score of each domain in CBME batch

DOMAINS	MEAN	INTERPRETATION
Perception of learning	$30.1 \pm 8.57$	A more positive approach
Perception of teaching	$28.2 \pm 8.93$	Moving in the right direction
Academic self-perception	$21.8 \pm 6.49$	Feeling more on the positive side
Perception of atmosphere	$30.2 \pm 10.7$	A more positive atmosphere
Social self-perception	$17.2 \pm 6.63$	Not too bad

A questionnaire guide including all domains of DREEM tool was used for the students exposed to the CBME program, under which strengths of the

CBME curriculum and the suggestions for further improvement were asked. (Table 3)

Table 3 Strengths perceived by the students of CBME batch (n=30)

Themes	Subthemes identified	Stude	nts	Direct quotes
		No.	%	-
	Integrate the theoretical	12	40%	"it has helped us learn about the
	knowledge with the clinical			application of our knowledge
	practice	4.4	270/	clinically"
	Develop interpersonal communication skill	11	37%	"the new modules helped to develop various qualities like better communication skills"
Perception of Learning	Overcome fear of public speaking	08	27%	"it increases the confidence & make us to speak infront of others"
	Modules like ECE , AETCOM,	07	23%	"the modules are quite informative.
	AITO are quite informative			They covered all the important topics"
	Very efficient and cooperative	18	60%	"teachers were professional themselves so they were efficient"
Perception of	Knowledgeable teachers and well versed in the topic	17	56%	"they were well versed with the topic and made the understanding easy"
Teaching	Make things easier to learn and interactive	11	37%	"They used examples to make concept easy"
	Modern teaching learning methods helped a lot	10	33%	"They used modern methods which helped a lot"
	Evolved to be knowledgeable student	12	40%	"I came out to be knowledgeable"
	Self directed learning helped too much	10	33%	"SDL helped to learn things better"
	Library was helpful	08	27%	"Our library is good enough for focused study"

Academic self perception	Better clinical application	08	27%	"I could able to apply theoretical knowledge in clinically"
	Vertical and horizontal integration helps in better understanding	07	23%	"Integration classes helped in, in integrating all subjects in one"
	Good learning atmosphere	16	53%	"Aaaanyone can learn in good atmosphere like ours"
	Positive competitive environment	15	50%	"Students were in competition but in a positive way which is really good"
Perception of	Relaxed friendly atmosphere and no hesitation	15	50%	"Atmosphere of the classes was relaxed and friendly"
atmosphere	Good sitting arrangement	14	47%	"Sitting arrangementsI would like to say was quite good except that there is a need for AC"
Social self	Interactive helping senior students	16	53%	"Yes, seniors are good and helpful"
perception	Motivation from seniors	15	50%	"They used to motivate us most of the times"
	Ragging free campus	7	24%	"Campus was ragging free along with anti ragging committee"
	Comfortable accommodation and campus	6	20%	"We have quite comfortable rooms in hostel"

### Strengths

"Table 3 shows that in learning, integration of the theoretical knowledge with the clinical practice helped to develop interpersonal communication skill also they overcome fear of public speaking. Modules like ECE, AETCOM, AITO were found quite informative by most of the students. Students perceived teaching very efficient as teachers were cooperative and knowledgeable, they made things easier to learn, helped to build concepts ,also modern teaching learning methods helped a lot. Similar findings have been seen in a study by Selvi SK et al(9).

In academic self perception students felt themselves to be knowledgeable. Self directed learning helped too much. Students' attitude towards reading books had improved as a result of Table 4 Suggestions for further improvement

the SDL sessions. Library facility in the campus was helpful specially during the exams. Their recommendations to extend the library's hours at night will complement this. They found that there was better clinical application due to ECE. They feel that Vertical and horizontal integration helps in better understanding.

According to them, positive competitive environment with good sitting arrangement in the classes helped them to get relaxed, friendly and hesitation free atmosphere. Interactive, helping & motivating senior students aided in getting good academic performance. Ragging free campus ,good academic support system, comfortable accommodation and campus provided assistance throughout their course.

Subject	Ideas for improvement	Studen	ts	Direct quotes
		No.	%	_
Learning	Integration to be emphasized more	12	40%	"I believe Integration classes should be added more"
	More interaction may be helpful	11	37%	"Teachers are interactive but they should be more interaction should be there"
Teaching	Should be more clinically oriented	14	47%	"I think clinical correlation should be more"
	Duration of teaching to be reduced	09	30%	"I think duration of lectures should be reduced to 30 minutes"
	Research oriented teaching	07	23%	"Teaching should be research oriented during elective postings"
	Active participation from students	08	27%	"Students should also participate more actively during classes"

Academic self perception	Passive to active learning mode	07	23%	"Students should be engaged in their learning by discussing, thinking and practical activities"
	Air conditioning required for proper ventilation	18	60%	"As there is no AC facilities in Lecture theatres, its quite uncomfortable during summers! think it should be made available in every classroom"
	Library in the hostel may be helpful	11	37%	"Library should be made available in the hostels also"
Perception of atmosphere	24*7 library facility to be made available	10	33%	"It would be helpful if library is open 27*7"
•	Hostel rules to be relaxed more	06	20%	"there are restrictions in the hostels, rules must be relaxed"
Social self perception	Extra curricular activities should be more	12	40%	"There should is be more frequency of ECA"

#### Suggestions

Table 4 shows that in learning domain, integration classes to be emphasized more. More interaction between teachers and students may be helpful. More clinically & research oriented teaching and reduction in duration of lectures were suggested. More student-centred activities like hospital visits and discussions of clinical scenarios were recommended.

In academic self perception , active participation from students and passive to active learning mode were suggested. In suggestions for improving atmosphere, air conditioning requirement for proper ventilation were included. In perception of atmosphere 24\*7 library facility by adding nighttime library hours, a library within the hostel and a gym within the girls' hostel were recommended. In social self perception students feel that hostel rules to be relaxed more along with addition of more extra curricular activities.

#### **DISCUSSION**

This study was conducted in CBME Batch 2020 and the traditional batch of students at our medical college to find out how they felt about their respective atmosphere they were taught in. The 50-item Dundee Ready Education Environment Measure (DREEM), which allows for multiple forms of comparison assessments of the learning environment, was utilized to acquire students' perception of a particular medical curriculum.

Regardless of culture or nation, DREEM tool has been created and verified for usage. It has been used in a variety of contexts and for a number of goals, such as figuring out what students think makes an ideal learning environment, examining climate expectations to compare academic achievers and underachievers, comparing learning environments across institutions, comparing learning environments at various institutions,

pinpointing problem areas within curricula, establishing a baseline prior to curriculum reform, and figuring out how students are responding to ongoing curriculum reform.

We have included a total of 274 students of two batches which includes both male and female students Aneela Umber et al included a total of 250 students in their study.(8)All the students were female as UMDC is an institution for females only. However E Gudrun et al stated male to female ratio of 41.1% to 59.8% in his study.(9)

Similarly, cross sectional study was conducted by Panda et al at Odisha, India using Dundee Ready Education Environment Measure (DREEM) questionnaire among 278 undergraduate students of four semesters.(10)

The mean DREEM scores in this study were 120/200 for batch 2018 and 126/200 for batch 2020. The total mean score of DREEM in Educational Environment at University Medical and Dental College, FSD was 112/200 (56%) Scores in the range of 101 – 150 are viewed as more positive than negative. Similarly, Preethi G Pai et al. in their study revealed that all the groups of students perceived their learning environment positively.(11) The mean total DREEM score was 135.37 (+/- 19.33) with the scores ranging from 72 to 179 in a study by Brett Vaughan et al. (12) Overall mean score was 118.8 indicating relative satisfaction of students with the perceived environment at Odisha, India.(8) The mean DREEM score (n = 226) was recorded by Abraham R et al. (16) According to Naser SM et al. undergraduate students at Calcutta National Medical College and Hospital were happier with their learning environment than postgraduate students, as evidenced by their higher DREEM scores. The perceptions of male and female students differed negligibly.(17)

In this study there was significant improvement in most of the domain items in the batch exposed to

the CBME curriculum except perception of learning. Similarly, K. SENTHAMIL SELVI et al found that there was significant improvement in most of the domain items in the batch exposed to the CBME curriculum compared to the batch exposed to the traditional curriculum, except for items such as 'The students irritate the teachers, the teachers get angry in class, I am confident about passing this year, and I seldom feel lonely'.(13)

No significant difference in the perception of learning was seen in both the batches. Similarly Rajesh Varma et al found in their study that the educational learning environment did not vary between centres.(9) Mean value of the domain of Perception of learning in CBME batch was 30.1±9.28. Mean value of domain of Perception of teaching was 28.2±8.93. Mean value in academic self perception was 21.8±6.49 .Mean value in perception of atmosphere was  $30.2\pm10.7$ . In social self perception mean value was 17.2 ± 4.87. Aneela Umber et al found in their study that the total score of SPL domain was 30.02/48 (62.54%). The total score of SPT domain was 23.06/44 (52.40%), while that of SASP was 19.28/32 (68.85%). The total score of SPA domain was 27.54/48 (57.34%) and that of SSP was 12.46/28 (44.5%).(8)

Reem Abraham et al revealed in their study that first-year students were found to be happier with the MMMC learning environment than their clinical batch counterparts, as evidenced by their higher DREEM scores.(14)

The highest mean score differences between the two stages were seen in the fields of academic self perception(SASP), social self-perception(SSP), and perception of learning(SPL) in all courses, with statistically significant differences.

Globally, there were more good than negative scores. Additionally, the combined score for the two batches was higher than the lowest. However, the greatest score was not achieved in any of the domains, indicating room for improvement. Actually, DREEM scores improved for all learning environment domains. However, the problematic items with mean score ≤2 were "The teaching overemphasizes factual learning" i.e. 1.32±0.75. "The teaching is too teacher-centred i.e 1.89±0.85". "The teachers are authoritarian" i.e 1.73±0.90 and "I am too tired to enjoy the course" i.e 1.82±0.82.

The comparison of two batches in this study showed positive differences in DREEM scores. The ways in which students perceived various parts of the learning environment were less deficient after using DREEM. In the upgrade, it also assisted in identifying trouble spots. Moreover, the instructional environment could be improved and modified using DREEM.

Every domain received an encouraging overall score. Every one of the five domains' trouble spots was mirrored in the individual scores. There was discernible variation in the perceptions of students of two batches. Therefore, all domains had room for improvement. Programs for mentorship and faculty development would support students during stressful times and enhance the teaching and learning process. Using the DREEM inventory, this little study has yielded valuable information on how students perceive their learning environment. The findings of this DREEM study suggest that, in order to improve teaching and learning, a supportive environment must be established in addition to interventions that are designed and put into place to address unsatisfactory aspects of the learning environment.

#### **CONCLUSION**

Response rate in this study was 100% and was similar in a study conducted at Army College of Medical Sciences, Delhi Cantt, New Delhi, India.(15,16) Students' perception of atmosphere and social self-perception both improved with the implementation of the CBME curriculum. We should be concerned about the perceptions. few areas are of quite concern as they score less than 2.

#### **RECOMMENDATION**

This study was helpful in identifying several issues that need more attention. To gauge the effectiveness of corrective action, the survey must be conducted in upcoming batches.

## **LIMITATION OF THE STUDY**

A scientific perspective on the educational environment and students' perspectives can be obtained by using DREEM as a diagnostic tool in an undergraduate medical institution. This tool can also be used to compare different educational environments—different institutions, different departments within the same institution, individual departments—as well as the perceptions of low and high achievers, teachers, actual students, and ideal students. In the near future, the researchers hope to conduct focus groups to learn more about the perspectives of the students on the issues that received an unsatisfactory score. A mean score of less than two indicates that the items are the primary elements. This is so that we can identify the primary issues and potential solutions by holding focus groups. Items with a mean of less than two indicate subpar learning environments. Some of the crucial elements that must be highlighted are bettering student feedback, offering constructive criticism, providing instruction in learning

methodologies, and developing problem-solving abilities.

#### **RELEVANCE OF THE STUDY**

These areas require special consideration, and immediate corrective action plans.

#### **AUTHORS CONTRIBUTION**

All authors have contributed equally.

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#### **CONFLICT OF INTEREST**

There are no conflicts of interest.

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# DECLARATION OF GENERATIVE AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors haven't used any generative AI/AI assisted technologies in the writing process.

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