

# Assessment of Attitude of First Year Medical Undergraduate Students Towards Communication Skills Training: A Cross-sectional Study

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## ABSTRACT

**Introduction:** Attitude, Ethics and Communication modules (AETCOM) for undergraduate medical students have been suggested by the Indian Medical Council (2015) in the new curriculum based on competencies. There is a need to assess the attitude of students towards communication skills training modules. Communication Skills Assessment Scale (CSAS) is an accepted tool for it.

**Aim:** To assess the attitude of first year medical undergraduate students towards communication skills learning programme.

**Materials and Methods:** The present cross-sectional study was conducted in Department of Physiology at Government Medical College, Aurangabad, Maharashtra, India, in the third week of November 2016. Total 60 students from first year undergraduate (MBBS) course were included in the study. The CSAS questionnaire has 26 items using five-point Likert scale with 13 positive and

13 negative statements about communication skills training labelled as Positive Assessment Scale (PAS) and Negative Assessment Scale (NAS). The scores were compared for gender groups and English medium and vernacular medium group by Independent two-tailed student's t-test.

**Results:** Sixty students (34 females and 26 males) were present with mean age of  $18.4 \pm 0.8$  years. Overall, PAS was  $53.5 \pm 7.8$ , and NAS was  $32.2 \pm 6.1$ . Among 26 males, PAS was  $52 \pm 10.7$ , and among 34 females it was  $54.7 \pm 4.4$  (p-value=0.18). NAS in males was  $34.2 \pm 6.3$ , whereas, in females, it was  $30.7 \pm 5.6$  (p-value=0.026).

**Conclusion:** The findings indicate the acceptability of communication skills training among first year MBBS students. There is a need to utilise these positive perception among students and train them to become competent doctors with the desired communication skills.

**Keywords:** Competency based curriculum, Perception, Traditional education

## INTRODUCTION

There is a lack of formal communication skills training in the current Indian medical curriculum, and medical professionals are graduating without assessing their communication skills competence. There seems to be an unclear and disturbing doctor-patient relationship manifested by violent interactions leading to strikes by resident doctors in government hospitals and frequent medicolegal issues. Medical Council of India came up with Attitude, Ethics, Communication (AETCOM) modules as per the competency-based curriculum [1]. The learner's attitude towards the training of communication skills is a significant aspect that influences the perception regarding the importance of these skills and their behaviour [2]. The impact of the communication skills teaching is dependent on the value given by the students to such training [3].

The assessment of student's attitudes towards such communication skills training programs can give an insight into their perceptions about the program. Communication Skills Assessment Scale (CSAS), which has two components, i.e. Positive Attitude Scale (PAS) and the Negative Attitude Scale (NAS), is a validated and accepted scale to measure the attitudes of students towards communication skills training in diverse student populations [4-6].

Marambe KN et al., study from Sri Lanka assessed the attitudes of undergraduate medical students towards communications skills training. Most medical students were aware of the advantages of communication skills training, but a sizeable minority of the students had reservations regarding the utility of communication skills training sessions. It was recommended that Sri Lanka faculty put in efforts to change the attitudes of medical students by improving the training and assessment strategy [7]. Alotaibi FS and Alsaeedi A studied

Saudi Arabian medical student's attitudes towards communication skills training using CSAS. The students had significant positive attitudes towards the communication skills training [8]. The communication skills training in India is at a nascent stage. There is a need to assess the student's attitudes and concerns on the subject as they are the essential stakeholders.

There are an adequate number of studies on the subject from western countries [7-8]. However, there is a lack of literature from Asia regarding the student attitudes toward communication skills training. Thus, there was a need for more studies on the subject from the Asian continent, especially from India. Hence, present study was conducted to assess the first year medical undergraduate student's attitudes towards communication skills learning by using CSAS scale.

## MATERIALS AND METHODS

This cross-sectional study was conducted in the Department of Physiology at Government Medical College, Aurangabad, Maharashtra, India, in third week of November 2016. Institutional Ethics Committee approved the study protocol (Letter Number: IEC-GMCA/293/2016 dated 28/9/2016), and informed consent was taken from all the participants. An information sheet was provided to the students, and permission was taken.

**Inclusion criteria:** All first year medical undergraduate students (total batch strength=150) were informed regarding the time of activity to be conducted in the third week of November 2016. All the students who were present for the activity and willing to give consent were included in the study.

**Exclusion criteria:** Students who were not willing to give consent were excluded from the study.

## Study Procedure

The permission to use CSAS was taken from Rees C et al., who designed the scale [9]. Details regarding the communication skills training concept were described to students. The orientation regarding the AETCOM module and its proposed allotted hours in first year curriculum was explained to them.

Students filled the questionnaire along with details like the medium of instruction, interest in literature, humanities or music, how do they rate themselves as a speaker, whether they would like formal communication skills training courses during clinical years. This additional data was collected to get an overview regarding the aspects related to communication skills.

## Questionnaire

The questionnaire had 26 items with 13 positive and 13 negative worded statements regarding communication skills related training labelled as Positive Assessment Scale (PAS) and Negative Assessment Scale (NAS) respectively [9]. The score ranged from 1 (minimum indicating strong disagreement) to 5 (maximum indicating strong agreement) for each question. The range of PAS and NAS was from 13 to 65 based on the total of Likert scale, with higher PAS or NAS scores reflecting stronger positive or negative attitudes respectively. Cronbach's alpha was calculated for PAS and NAS. Cronbach's alpha indicates the internal consistency of a questionnaire. It ranges between 0 and 1, with higher values indicating more reliability.

The scores were compared for gender groups and English medium and vernacular medium group.

## STATISTICAL ANALYSIS

Independent two-tailed student's t-test was used for the comparison of the groups. Descriptive data was described as mean±Standard Deviation (SD). Microsoft Excel 2013 version was used for calculations. A p-value <0.05 was considered to be statistically significant.

## RESULTS

Total 60 students were present, and the response rate was 100%. Mean age of the students was 18.4±0.8 years. There were 34 females (56.7%) and 26 males (43.3%) among the study participants.

There were 42 students (70%) from English medium and 16 students (26.7%) from the vernacular medium with 2 (3.3%) blank entries. Sixteen students (26.7%) had an interest in humanities, 28 (46.7%) in music, 11 (18.3%) in literature, four students (6.7%) were not interested in these domains and there was 1 (1.7%) blank entry. Twenty nine students (48.3%) rated themselves as good speakers, 16 (26.7%) as average, 10 (16.7%) as excellent, and five students (8.3%) rated themselves as poor speakers. When asked whether they would like formal courses in communication skills training, an overwhelming 53 students (88.3%) mentioned yes; only five students (8.3%) said no, whereas two students (3.3%) did not answer the question.

[Table/Fig-1] shows the PAS and NAS scores of the students and the comparison between the groups.

Characteristics	Number of students	PAS		NAS	
		Mean±SD	p-value	Mean±SD	p-value
All students	60	53.5±7.8	-	32.2±6.1	-
Male	26	52±10.7	0.18	34.2±6.3	0.026
Female	34	54.7±4.4		30.7±5.6	
English	42	52.4±8.6	0.1	32.5±6.1	0.76
Vernacular	16	56.2±4.9		31.9±6.6	

[Table/Fig-1]: PAS and NAS scores of students and their comparison as per gender and medium of instruction. p-value was calculated using unpaired t-test.

Cronbach's alpha for PAS was very good at 0.87 whereas it was lower for NAS at 0.62. Females had significantly (p-value=0.026) lower mean NAS score (30.7±5.6) compared to the male students (34.2±6.3). The mean PAS scores was higher in females (54.7±4.4) compared to the male students (52±10.7), but the difference was not statistically significant (p-value=0.18). The mean PAS score for English medium students was 52.4±8.6 and for vernacular medium students was 56.2±4.9. The medium of instruction did not have a significant difference in PAS scores (p-value=0.1). The mean NAS score for English medium students was 32.5±6.1 and for vernacular medium students was 31.9±6.6. The medium of instruction did not have a significant difference in NAS scores (p-value=0.76).

[Table/Fig-2] reflects the mean and standard deviation of scores of individual PAS questions. The question regarding the importance of good communication skills for becoming a good doctor had a very positive response from all the students with the mean score of 4.87±0.34. The least mean score for a PAS question i.e. Learning communication skills is fun was 3.08±1.18. These findings may indicate that students recognise the importance of communication skills in medical practice but perceive that learning the communication skills may not be interesting or funny.

Item No.	Items of PAS	Mean	SD
1	In order to be a good doctor I must have good communication skills.	4.87	0.34
4	Developing my communication skills is just as important as developing my knowledge of medicine.	4.24	0.95
5	Learning communication skills has helped or will help me respect patients.	4.52	0.72
7	Learning communication skills is interesting.	4.13	0.95
9	Learning communication skills has helped or will help facilitate my team-working skills.	4.57	0.83
10	Learning communication skills has or will improve my ability to communicate with patients.	4.47	0.89
12	Learning communication skills is fun.	3.08	1.18
14	Learning communication skills has helped or will help me respect my colleagues.	4.42	0.94
16	Learning communication skills has helped or will help me recognise patients' rights regarding confidentiality and informed consent.	4.24	0.9
18	When applying for medicine, I thought it was a really good idea to learn communication skills.	4.05	1.08
21	I think it's really useful learning communication skills on the medical degree.	4.45	0.83
23	Learning communication skills is applicable to learning medicine.	3.9	1.02
25	Learning communication skills is important because my ability to communicate is a lifelong skill	4.57	0.79

[Table/Fig-2]: Positive attitudes scores (PAS) among all participants.

[Table/Fig-3] shows the mean and standard deviation of scores of individual NAS questions. The question 'I don't need good communication skills to be a doctor' had a very high score i.e. 4.75±0.54 indicating strong agreement with the statement. This may indicate that the students do not consider good communication skills as an essential or mandatory requirement for becoming a doctor.

Item No.	Items of NAS	Mean	Standard deviation
2	I can't see the point in learning communication skills.	4.03	1.02
3	Nobody is going to fail their medical degree for having poor communication skills.	2.72	1.22
6	I haven't got time to learn communication skills.	3.62	1.22
8	I can't be bothered to turn up to sessions on communication skills.	2.86	1.18
11	Communication skills teaching states the obvious and then complicates it.	3.56	0.95

13	Learning communication skills is too easy.	2.9	1.02
15	I find it difficult to trust information about communication skills given to me by non-clinical lecturers.	3.53	1.19
17	Communication skills teaching would have a better image if it sounded more like a science subject.	3.17	1.38
19	I don't need good communication skills to be a doctor.	4.75	0.54
20	I find it hard to admit to having some problems with my communication skills	3.05	1.14
22	My ability to pass exams will get me through medical school rather than my ability to communicate.	3.03	1.3
24	I find it difficult to take communication skills learning seriously.	3.38	1.34
26	Communication skills learning should be left to psychology students, not medical students.	4.2	1.16

**[Table/Fig-3]:** Negative Attitudes Scores (NAS) among all participants.

## DISCUSSION

The students had positive attitudes towards communication skills training reflected by higher PAS and lower NAS scores. Cronbach's alpha for PAS was very good at 0.87, and it was 0.62 for NAS. The low Cronbach's alpha for NAS may be due to confusion regarding Likert scale marking for negative statements among the students. It should be evaluated whether it can be overcome with modifications in instructions and guidelines to students. The female students had significantly lower NAS scores and also higher PAS scores, although PAS difference was not statistically significant. Even though results should be viewed in the context of limitations like a small and convenience sample, but it is quite encouraging that 53 out of 60 students have directly expressed the desire for formal communication skills training. Also, less than half the students i.e. 29 students (48.3%) were confident as good speakers and most students i.e. 55 (91.7%) of them had interest in humanities or other extracurricular activities. Thus, the students are the suitable candidates for the implementation of the formal communication skills training and likely to benefit from it.

The results are supported by similar reports from the literature [8, 10-11]. Wright KB et al., study reported that first-year and final year undergraduates had similar positive attitudes towards communication skills training, although final year students were more confident [10]. The female students were more positive towards communication skills training as per their study results. A recent study from Central India studied the impact of longitudinal communication skills training program on dental students and found that it was beneficial. The students were very positive towards its beneficial effect on patient management [12].

Timilsina S et al., from Nepal have also reported that first-year medical undergraduates were positive towards communication skills training [13]. They recommended an early inclusion of communication skills training in the medical curriculum. So, communication skills training modules can be included in the curriculum from the preclinical stage itself. However, a recent study in 2018 from Gujarat in Western India found that a large number of students had negative attitudes towards communication skills training and thought that communication skills would not impact their success in exams. The researchers thought that objective questions based entry exams to medical courses contribute towards the higher importance placed by students on the knowledge domain. They suggested that early exposure to communication skills learning is needed as the students are more amenable to change in attitudes at this stage [14].

The designing of practical assessment modules for communication skills during the medical curriculum is essential as assessment drives learning [15].

Douglas AH et al., study recently reported the experiences and perceptions of medical students from Nepal regarding the teaching of communication skills [16]. They concluded that communication skills training is still in a very preliminary stage in South Asian

countries although it is among the top priorities to be addressed. They found that the undergraduate medical students are positive towards the communication skills training. Molinuevo B et al., study observed that the residents, undergraduate students and tutors from Medicine department valued the communication skills training. They stressed the need for assessing attitudes of students towards communication skills training and suggested that more longitudinal studies are needed on the subject [17].

Thus, further research is needed on the subject to understand it better and adapt the curriculum according to the needs and response of the students.

## Limitation(s)

The study had a small and convenience sample size that included students from a single institute which may affect the generalizability of the study results.

## CONCLUSION(S)

The findings indicate the acceptability of communication skills training among the institute first-year students. The positive attitudes of the students reflect the potential for success of AETCOM module and stress the importance of proper implementation. The faculties need to be sensitised and trained for the purpose so that the Indian Medical Graduate develops all round competencies. There is a need to expand the scope of the study to multiple centres across the Marathwada region. Longitudinal studies should be done to find the impact of the AETCOM module. The establishment of feasible and well accepted teaching and assessment of communication skills can help in improving the doctor patient relationship.

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