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Bridging the Gap: Attitudes Towards Communication Skills and Their Assessment in Medical Education

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Abstract

Objectives: 1. To assess MBBS Phase III-Part-1 medical student's attitudes towards need of communication skills. 2. To assess communication skills among MBBS Phase III-Part-1 medical students. ***Methodology:*** This is an interventional study conducted among MBBS Phase 3 students of a medical college to assess students' attitude towards need of communication skills in medical education and observed communication skill scale to assess communication skill before and after educational intervention. Data was analysed for descriptive statistics and paired t test for determining association. ***Results:*** Impact of educational intervention on communication skills and attitudes towards need of communication skills in medical education. Gender-based comparisons revealed no statistically significant differences. Observed communication skills assessment score also improved notably post-intervention. Rapport building increased from 2.10 to 3.69, attention and patience while listening rose from 3.42 to 5.81, and responsiveness improved from 1.65 to 4.00. ***Conclusion:*** There was a positive change in attitude towards need of communication skill. Significant improvement in skills was observed among both genders.

Keywords: ***Communication skills, attitude, observed communication skills test, medical students.***

Introduction

Communication skills are widely recognized as a critical component of medical education, supporting both the quality of patient care and efficiency of clinical practice. Doctor-patient relationship is hugely dependent on physicians ability to precisely convey information, listening empathetically, and learn communication skill in various clinical scenarios. Large number of studies have shown how effective communication will contribute to improved patient compliance, higher levels of patient satisfaction and better health outcomes [1,2].

Over three decades, there is increasing emphasis on importance of communication skills in medical curriculum. Indian medical education has given importance to clinical and technical skills, with little focus on training in communication skills. Recent reforms in curricular that is development of Attitude, Ethics & Communication (AETCOM) modules, highlighted the need of emphasizing communication skills and importance of training early on these skills [3]. Though its importance is highlighted research findings show that there is no standardized assessment and teaching to master skills in communication. This gap will lead young doctors into clinical practice without required proficiency in interacting with patients, families, and colleagues, which will contribute to compromising in patient-centered care. Measure to combact this deficit, like formal training modules and targeted interventions have shown measurable improvements in both skill and attitudes [4]. Assessments methods like use of such as observed skills checklists and Communication Skill Attitude Scale (CSAS) are important tools that can be adopted for measuring these competencies and also for framing future educational strategies [5].

Communication skills are important pillars in various areas of health care delivery like interviewing, explaining treatment adherence and counseling etc. One of the critical role of IMG is to be a good communicator which is vital to be a good leader. Though psychomotor skills are usually assessed regularly in the program but communications skills are not assessed which is vital faceing real-life situations [6].

Aspegren mentioned in his guide that though communication skills are taught/learnt in CBME, but that can be easily forgotten if its not regularly practiced. Medical students should be trained and also assessed regularly all areas of communication like paraverbal, verbal and nonverbal to train them to face real life situation in health care delivery [7,8]. The current study addresses this gap by deploying validated tools to measure attitudes and competencies before and after a structured training program, thereby contributing evidence to inform curricular development and optimize the training of future physicians.

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Objectives

1. To assess MBBS Phase III-Part-1 medical student's attitudes towards need of communication skills.
2. To assess communication skills among MBBS Phase III-Part-1 medical students

Methodology

This is an interventional study conducted among MBBS Phase III, Part 1 students of Shri Atal Bihari Vajpayee medical college and RI, Bengaluru posted in dept. of Community Medicine. Total participants included in the study after obtaining informed consent were 52. Study was initiated after obtaining ethical clearance from institutional ethical committee clearance. Study was conducted to assess participants attitude towards need of communication skills in medical education using validated communication skill attitude scale (CSAS) originally developed by Charlotte Rees et. al and communication skills were assessed by validated observed based communication skill (OBCS) checklist originally developed by Archana Chauhan et. al before and after an educational intervention. 9,10 Validated CSAS consists of 26 components to assess the attitude towards need of communication skills which had equal number of positive and negative attitude components with five-point Likert's scale (Annexure 1). This questionnaire was administered to the study participants to assess their attitude. OBCS consists total of 8 domains and 35 items that covered verbal, nonverbal and paraverbal components (Annexure 2). Study participants were allotted standardised patients for interviewing and they were assessed by faculty through one to one observation. Each observed skill was scored one for yes and zero for no. After enrolling participants in the study attitude towards communication skill was assessed by administering CSAS and communication skills were assessed by OBCS (Day 1) through one to one observation by faculty. Following preintervention assessment, educational intervention was done by lecture on AETCOM module on communication skill followed by small group discussion (Day 2) and on day 3 videos on good and bad communication skills were shown which was followed by small group discussion. Post education intervention assessment for change in attitude and observed communication skill was done after 4 weeks to assess the impact of intervention. For analyses of attitude scores scoring for negative attitude were reversed (for positive attitude, strongly agree was scored 5, agree 4, neutral3, disagree 2 and strongly disagree 1). Data was collected and entered in excel and analyzed for descriptive statistics and to determine association between change in attitude score and communication skills before and after intervention paired t test was used. P value of less than 0.05 was considered statistically significant.

Educational interventional module

Day 1: Pre-test on CSAS (through questionnaire that was filled by study participants) and OBCS (was assessed by faculty through one to one observation)
Day 2: AETCOM module on communication skill followed by small group discussion
Day 3: Videos on good and bad communication skills followed by small group discussion

↓ After 4 weeks of intervention

Post test: Using CSAS and OBCS

- Outcome variables: Change in the attitude towards need of communication skills and improved communication skill score

Results

Figure 1: There were total of 52 participants enrolled in the study. Among them, half were male and half were female. Which represented equal proportion of male and females in the study.

Table 1 shows a comparison of participants attitude towards need of communication skill scores. There were total of 26 questions in attitude scale, among them 50% of questions were representing negative attitude and 50% representing positive attitude for the ease of analysis and to determine association. Before educational intervention, the mean positive attitude score was 43.8 (SD=5.43) and post educational intervention it was significantly increased to 58.4 (SD=2.08) with a t-test value of -21.88 ($p < 0.001$). Their was statistical significant association between change in negative attitude score before and after intervention i.e a significant increase from a mean of 51 (SD=4.62) pre-intervention to 54.5 (SD=2.11) post-intervention ($t = -5.57$, $p < 0.001$), indicating an improved recognition of importance of communication skill needs following the intervention.

Table 2: Gender-based attitude towards need of communication skills comparisons showed no statistically significant differences between males and females either before or after the intervention. Though the improvement in the mean score was higher among males when compared with pre-intervention score but no significant association was observed between the genders. Post-intervention positive attitude means were 58 (SD=2.23) in males and 58.8 (SD=1.83) in females (p=0.175), with negative attitude scores at 54.4 (SD=1.84) and 54.6 (SD=2.44), respectively (p=0.701). Pre-intervention positive attitude scores were 42.6 (SD=5.14) for males and 45.3 (SD=5.51) for females (p=0.068), and negative attitude scores were 50 (SD=4.45) and 52.2 (SD=4.64), respectively (p=0.091). These findings suggests that impact of educational intervention was similar among both genders.

Table 3: Represents the OBCS scores of study participants that was assessed before and after the educational intervention. There were total of 35 parameters to assess communication skill, among them only eight parameters showed statistical significance. Among other parameters there was improvement in the score between before and after intervention but significant association was not seen. Parameters represented in the table showed improvements across all observation based communication skills post-intervention with p-values < 0.001. For example, rapport building improved markedly from a mean score of 2.10 (SD=1.09) pre-intervention to 3.69 (SD=1.00) post-intervention ($t = -12.05$). Similarly, clear and precise communication increased from a mean of 2.69 (SD=1.57) to 3.52 (SD=0.78), and the demonstration of attention and patience while listening rose from 3.42 (SD=1.29) to 5.81 (SD=1.12). Other behaviors such as responsiveness, empathy, support, and summarization showed comparable significant enhancements.

Figure 2: Represents comparison of pre and post educational intervention scores for observed based communication skill assessment among study participants. Results showed measurable improvements in the test scores of all categories that is represented in figure-2 after educational intervention. Rapport building" increased from 2.096 to 3.692, "Responsiveness" increased from 1.654 to 4 and Attention" showed a substantial rise from 3.423 to 5.808. Other areas of communication like "Introduction," "Clarity," "Empathy," "Support," and "Summarization" also showed improvement in scores, highlighting improved performance in areas of communication.

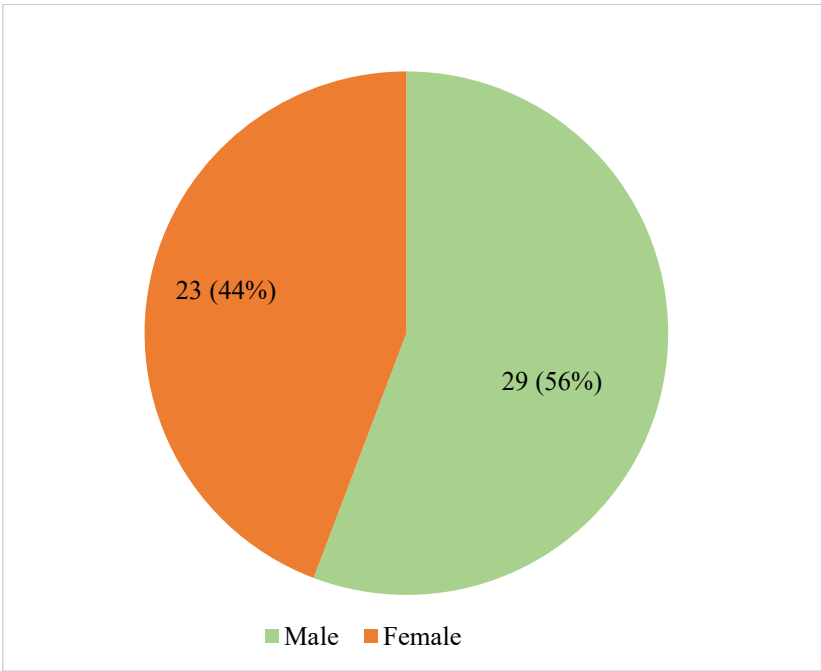

Figure 1: Gender Distribution of study participants

Table 1: Comparison of attitude towards need of Communication Skill among study participants before and after educational intervention

Attitude towards need of communication skills	Pre intervention score			Post intervention score			T test*	P value
	Mean	SD	SE	Mean	SD	SE		
Positive attitude scores	43.8	5.43	0.753	58.4	2.08	0.288	-21.88	<.001
Negative attitude scores	51	4.62	0.641	54.5	2.11	0.293	-5.57	<.001

Table 2: Association of attitude towards need of communication skills among both genders before and after educational intervention

Attitude towards need of communication skills	Male			Female			T test	P value
	Pre-test score			Post-test score				
	Mean	SD	SE	Mean	SD	SE		
Pre-intervention- Positive attitude scores	42.6	5.14	0.954	45.3	5.51	1.148	-1.865	0.068
Pre-intervention- Negative attitude scores	50	4.45	0.827	52.2	4.64	0.968	-1.723	0.091
Post-intervention- Positive attitude scores	58	2.23	0.414	58.8	1.83	0.381	-1.376	0.175
Post-intervention- Negative attitude scores	54.4	1.84	0.342	54.6	2.44	0.51	-0.386	0.701

Table 3: Association of Observation based communication skill assessment of study participants before and after educational intervention

Observed behaviour	Pre-intervention score			Post intervention test score			T test	P value
	Mean	SD	SE	Mean	SD	SE		
1. Rapport building	2.096	1.089	0.1511	3.69	1.001	0.1388	-12.05	<.001
2. Introduction	1.423	0.667	0.0925	2.28	0.723	0.1003	-8.41	<.001
3. Clarity - Communicates clearly and precisely.	2.692	1.566	0.2172	3.52	0.779	0.1081	-5.11	<.001
4. Attention - Shows interest and listens with patience	3.423	1.289	0.1787	5.81	1.121	0.1554	-12.51	<.001
5. Responsiveness - Encourages the patient to express himself/herself.	1.654	1.027	0.1424	4.0	0.929	0.1288	-14.46	<.001
6. Empathy - Shows compassion with values	1.096	0.869	0.1205	2.40	0.693	0.0962	-10.77	<.001
7. Support - Shows willingness to help patient with his/her concerns	1.154	1.055	0.1463	3.5	1.111	0.1541	-15.63	<.001
8. Closes an interview-Summarization	0.404	0.569	0.0789	1.42	0.605	0.084	-9.75	<.001

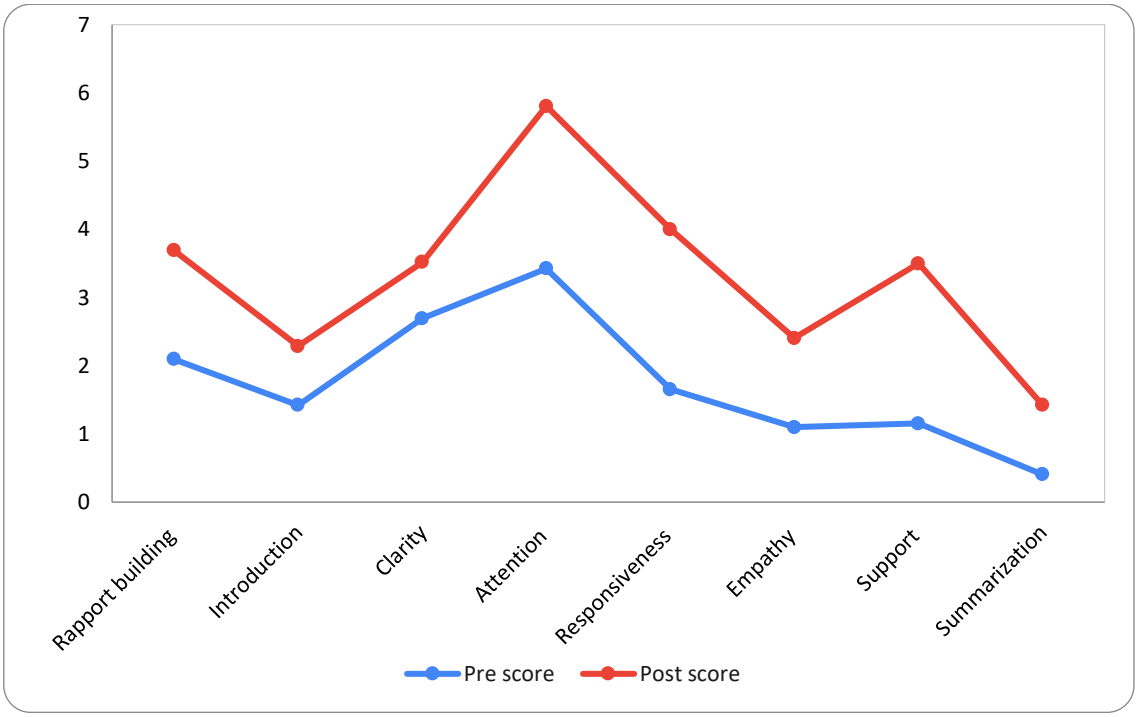

Figure 2: Observed based Communication Skill assessment score before and after educational intervention among study participants

Discussion

Validated CSAS originally developed Charlotte Rees *et al*. highlighted its usefulness in spotting changes in attitudes with communication training; several other studies that utilized CSAS have shown similar positive shifts in attitude among students highlighting importance of communication after targeted educational interventions [9]. A study Nilesh Chavda *et al*. showed comparable improvement in attitudes towards need of communication skills and skills as such among medical students using CSAS that used simulated patient. This study also reinforced the effect of experiential learning [4].

Our study showed significant positive change in attitude among medical after targeted educational intervention. Findings of our study aligns with other similar studies by Dacre *et al*. and Joyce *et al*. which showed how structured communication skills training can help in improving attitudes and skills among medical students. Change in positive attitude scores from 43.8 to 58.4 and negative attitude scores also increasing significantly highlights increased recognition of criticality of communication skills which aligns with findings of study by Bennett and Lyons. Author in this study have also emphasized the importance of integrating communication skills in medical curriculum that is important component for professional development [11,2].

Gender-based analyses in this study showed no significant differences in change in attitude or gaining communication skills which is similar to the findings in the study by Joyce *et al*. the finding in our study and the study by Joyce *et al* showed similar change in attitude and skills after training across both genders [2].

A study by Archana Chauhan *et al*. showed significant improvement in domains like rapport building, attention, and responsiveness after educational intervention which are consistent with our study findings [10]. Similarly, Ellemieke Rasenberg *et al*. highlighted the importance of integrating theory knowledge with practice tarining, emphasising the importance of combining two methods (didactic and experiential methods) as its done in this study (lectures, videos, and group discussions) [5].

Observed communication skills like rapport building, attention and listening, responsiveness, summarization empathy, and support all showed significant improvement post educational intervention with statistically significant association. The results in this study are similar to the finding of study by Chavda *et al*., the findings showed that adopting simulated patient in training improves skills in communication effectively. The significant rise in practical communication behaviors, such as attention and patience while listening increasing from 3.42 to 5.81, matches the evidence reported by Rasenberg *et al*. highlighting that integrated communication skills training facilitates transfer from classroom to clinical practice [4,5].

Knut Aspegren's Beme emphasized in the review the need of repeated and reinforced training to sustain communication skills. Structured interventions can produce measurable short-term improvements but for longer-term retention of improved skill is still a challenge as shown across various literatures. Our study findings substantiate the importance of educational interventions for bridge the gap between knowledge and applied communication competence [7].

To summarize, this study's results highlights large body of evidence highlighting that formal, repeated training in communication skills with use of validated scales like CSAS and OBCS can significantly improve medical students' attitudes, behaviors and skills.

Conclusion

Training and assessment in communication skill is critical component for Indian Medical graduates. Integrating more than one method in training and assessment may significantly contribute to training of medical students in preparing them to face real life clinical scenarios in areas of communication.

Limitations

- This study was conducted including small sample size which may limit the generalizability of the results.
- Short duration of the intervention may have impacted the scores in post interventional assessment.

Declarations

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Conflict of interest

None

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Ethical Clearance

Ethical approval obtained from institutional ethical committee

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