



## Video Based Evaluation of a Communication Skills Training in Third Semester MBBS Students

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### ABSTRACT

Communication skills are a core area of competency for medical students for relationship building with patients. Students often lack confidence in communicating for lack of training in communication. The aim of this study was to assess if a short communication skills training program enhanced communication skills in third trimester MBBS students.

**Methods:** 28 Third semester students were selected using simple random sampling method and were divided into test group (n=14) and comparison group (n=14) with 5 females and 9 males in each group. The test group was exposed to four training sessions by a communication expert over a period of two weeks based on a modified Calgary–Cambridge guide format. Both groups were required to perform within 5 minutes a task of obtaining consent for bedside physical examination from a simulated patient. The sessions were videotaped and assessed. The communication task was assessed on seven communication processes and each process was assessed on a 5 point scale (does not do to does well)

**Results:** The mean of total scores in communication with trained group was 25.86 and untrained group 9.07 and the p value was highly significant ( $p=0.00$ ). Among same sex based sub groups Male – trained group = 25.11 Male- untrained group = 8.0 ( $p=0.00$ ), female – trained group = 27.20 Female- untrained group = 11.0 ( $p=0.001$ ). The mean of total time scores used for communication skills in the trained group was 2.36 and untrained group was 1.22 and the P value = 0.007 which is extremely significant. Among same sex sub groups male sub groups was highly significant. Male – trained group = 2.47, Male- untrained group = .96 ( $P=0.013$ ). However it was not significant among female sub groups. Female – trained group = 2.16 and female- untrained group = 1.67 ( $P=0.330$ ).

**Conclusion:** Students who underwent training in communication skills performed significantly better in communicating with the patient and used more time than the untrained students in interviewing. However both groups used less than 50% of the allocated time which is very unsatisfactory. We propose an early communication skills exposure and include it with the clinical practical curriculum in physiology.

### KEYWORDS

Communication skill, Relationship, Third semester students

### INTRODUCTION

One of the core areas of competency for medical students is Communication skill. Following completion of the first year and entering into third semester, medical students are expected to take history within the first few weeks of their clinical exposure. Students often lack confidence in communicating with patients. Most medical students acquire communication skills using the physician based role model during the last year of their studies [1].

Poor communication outcomes may stem, in part, from insufficient communication skills training and overreliance on role modeling. It was shown that teaching communication skills as a part of the curriculum leads to an increase in the ability to understand the patient's needs, comments and responses to these needs. [2]. Effective communication with patients reduces the patients' anxiety, and increases the patients' interest to accept recommendations. [5]. In the past different methods have been employed to evaluate communication skills among the students [3, 4]

With regards to the lack of formal communication skills training and the lack of confidence among third semester medical students, this study aimed to evaluate a short term communication skills training program.

### METHODS:

This study and the protocol were approved by the institutional ethical committee of the Velammal Medical College – Madurai. Participants were all third semester MBBS students of the Velammal Medical College. Students were selected on simple random sampling method. The number of students enrolled for this study were 28 (n=28). 14 Students underwent communication skills training (n=14) and the comparison group of 14 students (n=14) were not given training in communication skills. Each group included 5 female students and 9 male students.

There were four training sessions that was provided by an expert in communication skills. These sessions were based on a modified Calgary–Cambridge guide format. Each session included an hour of lecture, followed by an hour of practice session between the participating students. These sessions were spread over two weeks.

Following the training sessions, both the group of students were asked to complete a task in 5 minutes. The task was to get consent from a simulated patient near the bed side for physical examination. They were not required to do any physical examination. The name, age, occupation and presenting complaints of the simulated patient were given to the student 5 minutes prior to the task.

The task was video graphed without any other person or faculty in the room. The communication task was assessed on seven communication processes as listed below and each process was assessed on a 5 point scale (1= does not do, 2= does but not clear, 3= does clearly but language is poor, 4= does clearly with good language but not pleasant, 5= does clearly with good language and pleasantly). The time taken for the task was determined using the recorded video.

1. Greetings and introduction of self.
2. Establishing a rapport.
3. Ensuring patient comfort
4. Listening and eliciting important information,
5. Patient assurance and expression of gratitude and thankfulness.
6. Conversational flow and transitions
7. Paralanguage, in terms of tone, rate, volume, and disfluencies (oh, ha, hum),

All data were analyzed using SPSS package, version 21 (SPSS Inc., Chicago, IL.). The data was analyzed using the "t test" and were presented using mean ±SD. Comparison was made between groups and between same sex sub groups on communication processes and the time taken for the task.

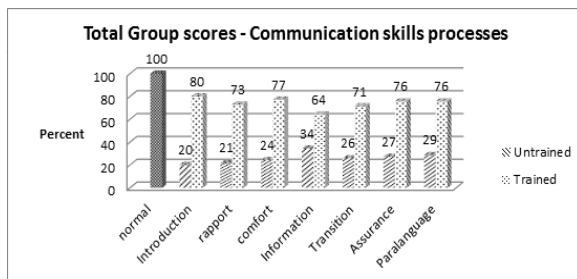


Figure no 1: Communication skills processes

The mean of total scores in communication skills between the two groups were statistically significant ( $p < 0.05$ ). The mean of total scores in communication with trained group was 25.86 and untrained group 9.07 and the p value was highly significant ( $p=0.00$ ). Comparing mean of total scores in communication skills within same sex based sub groups were also highly significant. Male – trained group = 25.11 Male- untrained group = 8.0 ( $p =0.00$ ), female – trained group = 27.20 Female- untrained group = 11.0 ( $p =0.001$ )

The mean of total time scores used for communication skills in the trained group was 2.36 and untrained group was 1.22 and the P value = 0.007 which is extremely significant. Comparing mean of total time score used for communication skills among male sub groups was highly significant. Male – trained group = 2.47, Male- untrained group = .96 ( $P =0.013$ ). However it was not significant among female sub groups. Female – trained group = 2.16 and female- untrained group = 1.67 ( $P =0.330$ ).

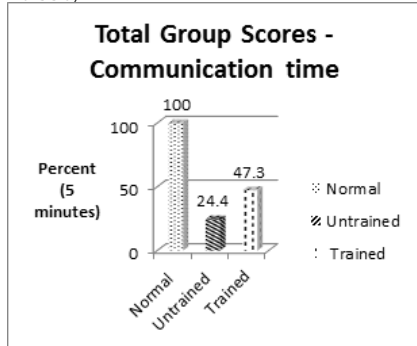


Figure no 2: Total subgroup communication skills processes

Table: 1 The Mean score between groups and same sex sub groups on total communication skill processes and total communication skill time scores ( $p < 0.05$  significant)

		Untrained		Trained		P value
		Scores	± SD	Scores	± SD	
1	Total communication skill process scores – groups	9.07	2.30	25.86	5.51	0.000
2	Total communication skill process scores – males	8.00	1.93	25.11	5.11	0.000
3	Total communication skill process scores – females	11.0	1.58	27.20	6.57	0.001
4	Total communication skill time scores – groups	1.22	0.62	2.36	1.30	0.007
5	Total communication skill time scores – males	.96	0.54	2.47	1.52	0.013
6	Total communication skill time scores – females	1.67	0.52	2.16	0.91	0.330

DISCUSSION

Results from this study were encouraging and showed significant differences between groups that received communications training ( $25.86 \pm 5.51$ ) and those who had not received communications training ( $9.07 \pm 2.30$ ). The trained students have scored best in "Greetings and self-introduction" where the untrained group has scored their least (80% and 20% respectively). The trained group scored moderately well in "Gathering information" and the untrained students have scored their maximum in this skill (64% and 34% respectively). This shows that students don't give much importance to pleasant greetings and introducing self while approaching a patient. This may be because they consider patient as a case to be studied and not as a human being with feelings.

Among the sub groups, trained males have done significantly well in communication processes when compared to untrained males (71.7% and 27.6% respectively) similar results were seen among females (77.7% and 31.4% respectively)

It is important to spend time when interacting with the patients especially when building rapport. Although the trained group has used more time in communication than the untrained group (47.3% and 24.4 % respectively) they had used < 50% of the allocated time (5 minutes). This could be because of the lack of planned content for interaction, indicating the necessity for the students to plan their interview before approaching the patient.

Among the sub groups the trained males have scored better in the usage of time than the untrained males (49.4% and 19.2% respectively). However there was no significant difference among the females (43.2% and 33.4% respectively).

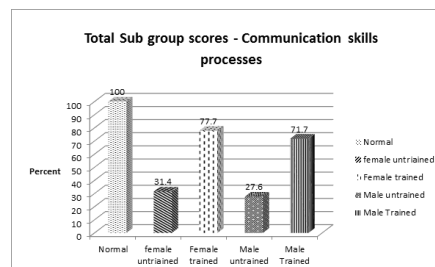
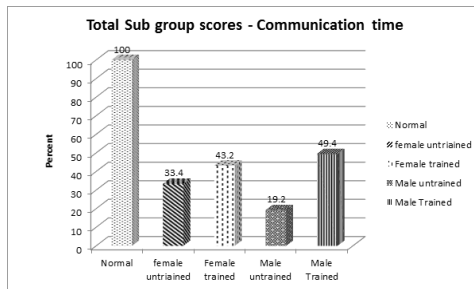


Figure no 3: Subgroup communication skills processes



**Figure no 4: Total subgroup communication skills processes**

## CONCLUSIONS

This study assessed whether a brief training session in third semester students improved their communication skills using a simulated patient. This training was found to enhance the communication skills. The results show that the comparison group who did not receive training scored very poorly. The outcomes of this study indicate that effective communication between third semester students and their patients may be acquired and refined through a short course that addresses basic interviewing skills. OSCE was a very useful evaluation tool used for a standardized assessment of students' competency in communication skills. Early exposure to communications skills should be considered when developing the curriculum content and assessed as a part of evaluation in clinical skills. We propose that Communication skills be included in the second semester as a part of Physiology clinical practical curriculum.

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