



## Formal Training of Communication Skills for Dental Undergraduates ...Need of an Hour.

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### ABSTRACT

It is observed that formal training given on basic communication skills (CS) during medical undergraduate years can help to develop better doctor patient relationship throughout the clinical practice. Developing communication skills was felt as a need through formal training as well as in assessment, hence Maharashtra University of Health Sciences, India, incorporated it in curriculum. To sensitize and train third year BDS students for communication skills and evaluate the module through their feedback. 55 third year BDS students were sensitized for communication skills through a module. The module was divided into four important aspects; 1) Components and barriers of effective CS while dealing with patients, 2) Training for effective communication viva voce examination, 3) communicating effectively with different types of patients, 4) Improve Prescription writing as communication skill. Knowledge gained by the participants through the module was statistically analyzed by comparing pre and post test results. At the end module was evaluated by the feedback obtained from students. Wilcoxon signed rank test used for comparison of responses before and after the implementation of module, showed highly significant differences. 98% students wrote in the feedback that the module was a key to learn nuances in routine clinical practice and guide to communicate well in viva. Sensitizing and training third year BDS students for communication skills was effective and would remain as an important component of University curriculum.

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### Introduction

It is proved that communication is a significant clinical skill that can be taught and learned (1). Evidence-based studies also state that effective interpersonal and communication skills are associated with better health outcomes. Contrast to it, ineffective communication skills may lead to malpractice claim, suits and medication errors (1, 2).

Medical students who did not have specific training in communication skills declined in their interviewing performance over the clinical years (2). Medical school guidelines and various associations including Association of Canadian Medical Colleges [ACMC] reflect international recognition of the importance of teaching and assessing communication skills during undergraduate medical training (1).

Courses conducted on communication skills have witnessed better attitude among medical students towards clinical practice (3). Throughout the undergraduate degree, increased integration between communication and clinical knowledge is important in learning to use the two skill sets together, so as to closely reflect what happens in clinical practice (4). Although Maharashtra state University has started assessing the students for communication skills but they need to be formally trained and assessed before the

examinations, for communication skills (CS). The current study was planned to design and implement the module based on communication skills. This module would help for the initial training of students for communication skills towards better doctor patient relationship and eventually to become good clinician. Module was specially designed to include areas to deal with viva voce examination or interviewing skills and prescription writing which should be well managed by using verbal and non verbal cues of communication. These are few areas where students need an improvement apart from dealing with different type of patients.

It was observed that, in the available published data, very few authors contributed for training dental undergraduates for communication skills. It is found and analyzed that students are not confident to appear for viva voce examination and not formally trained for prescription writing too. So the present module was designed in such a way that, it would not only deal with training to develop doctor patient relationship but also emphasize on building viva voce and prescription writing as communication skills.

### Materials and method

After getting approval from institutional ethics committee, 55 third year BDS students were sensitized

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through a module based on communication skills. One day module was designed and divided into four important aspects of communication skills with specific duration for each. There were sessions on each aspect separately:

- 1) Components and barriers of effective CS while dealing with patents
- 2) Training for effective communication viva voce examination
- 3) Communicating effectively with different types of patients
- 4) Improve prescription writing, as a communication skill.

This program had trained faculty who were enrolled to conduct the module on communication skills for medical students. All the four sessions of communication skills module were critically designed to incorporate the necessary elements according to student level. In the first session verbal, non verbal and written documents were explained as components of communication. Non verbal cues stands for major component of effective communication was demonstrated. Role of active listening was also discussed in this session.

Second session included tips for preparation before and at the time of appearing for viva. The methods were explained in terms of psychological preparation and need of using effective eye contact, posture and attentiveness.

In clinical practice there are variety of patients visits and to deal with them different strategies can be used, was well dramatized and delivered to students through third session.

Fourth session covered the importance of prescription such as; prescription provides the exchange of information necessary to assess a patient's health condition, implement treatment of medical problems, and evaluate the effects of treatment on a patient's quality of life. A prescription is a written, verbal and non verbal or electronic order from a practitioner to a pharmacist for a particular medication for a specific patient.

Clinical practice includes prescription writing and explaining it to patients. Only writing prescription without detailing about the drugs in verbal form would stand incomplete. Hence the module on prescription writing was planned to explain about how it can be made better by using verbal and non verbal cues.

All the sessions were interactive. The second and third sessions were having role plays by faculty and students to develop better understanding and interest as well. The third session especially was executed in dramatized fashion to demonstrate variety of patients, their personalities, moods, attitude with inclusion of keys to deal with them. To analyze about the knowledge gained by students through module, pre and post module MCQ test was carried out. The test paper was designed with seven multiple choice questions based on basics of CS which were covered in detail through sessions.

Module was evaluated by the feedback obtained from students at the end. Feedback was a combination of four closed ended questions and two open ended questions. Designed feedback format and MCQ test paper were validated by senior faculty of the ethics committee.

#### Results and statistical analysis

Total 55 third year students attended the module. The results were obtained and calculated as two major headings: A) Comparison of pre and post test and B) Feedback of CS module.

##### A) Comparison of pre and post test

All the students who attended the module solved pre and post test MCQs. SPSS v 16.0 was used for analysis.

Wilcoxon signed rank test was used for comparison of responses of the students before and after sensitization to the module. P value less than 0.05 was considered to be significant, which suggests improvement in knowledge among students for communication skills and its various components.

Most of the students gave option a, informations (81.8%), as an answer to question 1, while after sensitization to module 98.2% of the students responded option b, information, meanings and feelings are shared in communication, as an answer. There was highly significant difference in responses given by students before & after sensitization of module. 60% of the students gave option c, audiovisual, as an answer to question 2, while after sensitization to module 78.2% of the students responded to option b which was correct answer, to the fact asked about most important component of CS. Most of the students gave option b, false (81.8%), as an answer to question 3, while after sensitization to module 96.4% of the students responded option a which was correct answer to the question as; patient centered communication may not involve patient at all.

Before introduction to module, 30.9%, 32.7% & 27.3% of the students gave option b, c & d as an answer to question 4 which was based on rules of active listening. After sensitization to module especially on active listening, 90.9% of the students responded option b as an answer which stated the rules of active listening. Most of the students gave option a (89.1%) as an answer to question 5, while after sensitization to module 94.5% of the students responded option e as an answer which said that viva voce tests only knowledge. Question 6 was asked based on prescription writing and its significance. Majority of the students gave option b (74.5%) as an answer to question 6, while after sensitization to module 100% of the students responded option b as an answer which showed that students could learn through it. Most of the students gave option a (78.2%) as an answer to question 7, while after sensitization to module 87.3% of the students responded option d which says that prescription is verbal, nonverbal and written form of communication. (Table)

#### Response of the students to the questions before & after sensitization to module:

Q No.	Pre module Correct answer (% of students)	Post module Correct answer (% of students)	pvalue
1	5.5%	98.2%	<0.001
2	1.8%	78.2%	<0.001
3	18.2%	96.4%	<0.001
4	30.9%	90.9%	<0.001
5	1.8%	94.5%	<0.001
6	74.5%	100.0%	<0.001
7	10.9%	87.3%	<0.001

##### B) Feedback on module

Feedback on the module was obtained where 100% students answered all the questions asked in questionnaire. Feedback was a combination of 4 closed ended questions followed by two open ended questions. 96% students said that CS module was useful. According to 88% students, duration of the module was sufficient. 95% students felt that timing of the module was correct. Sessions were apt and able to clearly elaborate their content was commented by 96% students for session-1, 100% students for session 2, 98% students for session 3 and 96% students for session 4. 100% students were interested to attend similar module with advance information in final year or during Post Graduate years. Overall the feedback for communication skills module was

positive and was thought as an appropriate medium to learn patient doctor relationship at budding stage.

### Discussion

University of Health Sciences Maharashtra (MUHS), India, has started evaluation of student in formative exams for communication skills. In India, BDS students deal with patients in person, from third year onwards. So this cross sectional study was designed to sensitize and train undergraduates in initial years of dentistry to deal with patients and further clinical examinations.

One day module was conducted which included four basic components of communication skills including handling viva to improve interviewing skills. All the sessions were carried well and appreciated by participants which can be proved with the positive feedback obtained at the end of the module. Secondly pre and post test, MCQ examination based on communication skills has shown improvement in the scores signifying the knowledge gained after the module.

The first descriptions of communication training emerged in the early 1970s, and the subject was established in most medical schools. It is observed that, compared to the widespread research on postgraduate communication training programs, there are less factual undergraduate training sessions (5). Early introduction of communication skills programs, which are continued throughout all the years of the curriculum had shown effectivity in improving confidence and reducing the number of errors made in clinical practice (4,5). Training modules for CS would definitely help to fill the gap and to understand the clinical needs for BDS undergraduates with the future scope to include advance training for communication skills.

It is observed that attitudes of medical students toward communication skills training may be associated with their perceptions of the importance of these skills. In addition, medical students who had more positive attitudes toward communication skills training had more knowledge about appropriate communication behaviors with patients. These findings have several implications for the process of teaching communication skills to medical students (3). However, in the study by Kevin B, author (3) said that fourth-year medical students were more confident than first-year students in terms of their perceived ability to communicate with patients which suggests that actual clinical experience communicating with patients might be more important for building confidence. It is experimented that, initial interaction with patients or simulated patients for first-year students can have a positive effect on their communication confidence levels (3). As discussed earlier it is accepted that communication skills and clinical practice are tied parameters which can help to improve clinical practice in future. Present study also insist on having communication skills training program in third year and can be continued to final year curriculum for better reinforcement.

To evaluate efficacy of training modules, feedback is the useful and reliable tool. In the current study, students gave and commented in the feedback that they found the module very useful to deal with different type of patients. This finding co-relates with the review that, there is overwhelming proof of communication skills in building patient-doctor relationship which can be taught as well as learnt (2, 6). Another finding is that these skills are easily forgotten if not maintained by practice (2). This directs medical educationist to reinforce communication skills training program as and when they are required to implement.

In the feedback the comments were in favor of role plays played in the module. The role plays were learning through fun. The faculty playing simulated patients and role of confused student during viva was extremely appreciated. Simulations and role-play are effective instructional methods for developing communication skills including opening and closing consultations, conducting the consultation in a logical manner, improving body language, using language at the level of understanding of the patient and using clear verbal and written communication( 4,7,8). The firstly tried session ever, on handling viva, revealed many key points like, to pass a viva, a candidate must not only possess a thorough understanding of the subject but must also be able to convey this to the examiners. Tailoring revision style to the exam style and practicing questions and answers as preparation for viva would help students to perform better (9), were the basic guidelines given through session.

In the session of handling viva, with guidelines and attractive role plays, 96% student felt motivated to prepare and appear for oral examinations which is similar with Winefield HR's study where majority of the students (81%) felt better prepared to interview after the training(7).

It has been suggested that evaluation of the competence of students' verbal communication skills is best done during observations of simulated consultations with standardized patients followed by constructive feedback (10,11,12,13). Session on dealing with different types of patients had powerful impact on students which was analysed by feedback. The fundamental techniques like, empathize, understand and listen carefully to patient, taught in the module can be well practiced henceforth in chair-side clinical examinations. The role of active listening and factors influencing it were also well perceived and appreciated by the students, which was reflected through the feedback given.

Students felt more confident and oriented to appear for viva voce after the module as it could explain the basic strategies to prepare for any subject during examination and could learn the importance of body language while dealing with it. Prescription writing was never thought as an important factor or component of CS, while after module they realize the significance of it and were ready to use the skills taught to write and explain the prescription to patients. Feedback of the overall module was excellent. They were ready to have advanced module on CS in final year BDS or in postgraduate course. They felt that it could have been for few more hours or for additional day to have more detail discussions on dealing with different patients and handling viva voce.

Although the study has impregnated the importance of communication skills on students' mind, however, one day's training or less can-not be very effective (2). The study has relatively small sample size which allowed for only a limited interpretation of the results and remained as another limitation for it. To evaluate the actual effectiveness of the module, the students should be assessed in formative exams, which would remain as another limitation of this study as they were not assessed in the clinics for communication skills and would be considered as future perspective. It can be said that this module addressed the knowledge and perception about effective CS but whether it has actually improved the CS could not proved.

It is reported that for communication skills, teachers themselves be trained first, it is an important component of the health professionals' accreditation.

Not only should the communication skills of the teacher be evaluated, but the teaching modules within the program should also be evaluated on a regular basis (5,6). This program had trained faculty who were enrolled to conduct the module on communication skills for medical students. The module was evaluated and validated keenly as it was the first module for Dentistry in Maharashtra state, India.

Looking at the effective response to module, it is worthwhile to offer students the possibility to reflect on and practice their communication skills at an early stage of their degree program. As this approach will enable them to acquire and expand their competencies throughout the curriculum for later use.

**Conclusion-** The module came out to be effective in terms of understanding about basics in communication skills and its application in clinical practice. Sensitizing and training third year BDS students for communication skills was effective and would remain as vital component of University curriculum.

Adding more components like hands-on training in communication skills in different clinical situations can be incorporated in the module in future batches.

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#### Appendix 1

##### MCQ

1. Communication is a two way interaction where.....are shared

a. Information

**b. Information, meanings and feelings**

c. Information, meanings

d. meanings, feelings

2. The most important component of Communication skill can be.....

a. Verbal

**b. Non verbal**

c. Audiovisual

3. Sometimes patient centered communication may not involve patient at all

**a. True**

b. False

4. Rules of active listening can be all, except:

a. Give undivided attention

**b. Keep asking questions whenever necessary**

c. Give proper feedback

d. Use proper body language and gestures

5. Components that are tested during viva are;

a. Knowledge and skills

- b. Attitude, knowledge and skills
- c. skills, attitude
- d. Only skills
- e. Only knowledge**

6. A good clinician need not share diagnostic details and prescribed drug details with the patient

- a. True
- b. False**

7. Prescription writing is .....communication

- a. Written, Verbal
- b. Verbal, Non verbal
- c. Nonverbal
- d. Verbal, Nonverbal, written**

**Appendix 2**

Student Feedback Form

1. The communication skills module was useful to me.  
yes/to some extent/cant say/no

2. The duration of the module was...  
Sufficient/ more /less

3. The timing (date/day/time) was.....  
Correct/cant say/badly timed

4. The sessions for this module were able to clearly elaborate their content;  
a. components and barriers of effective communication  
yes/to some extent/ cant say/no

b.Handling viva  
yes/to some extent/ cant say/no

c. Dealing with different types of patients  
yes/to some extent/ cant say/no

d.Precscription writing  
yes/to some extent/ cant say/no

5. Would you be interested to attend similar module (with advance information)in the final year BDS or as a post graduate?

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6. Do you wish to add some sessions to improve this module? or suggestion you would like to give.

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