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Interventions For Improving Dental Student's Interpersonal Communication- A Need Assessment Study

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Abstract

Introduction: In this modern era, communication skills are to be given prime importance to meet good outcomes in providing patient care. Deficiency of this skill seems to occur due to a lack of training for students since it is not in the overt curriculum, this necessitates the development of module-based training for it. The gap in communication skills and the ways to teach can well be addressed in the module by proper needs assessment methods.

Methodology: A mixed-method approach was used in this study. In the first step, curriculum coordinators/key communication skills teachers and faculty members were asked to fill out a validated questionnaire based on the need, methods, and objectives of communication training. They were asked to identify training methods and types based on their knowledge of curricula and teaching experience. This quantitative data was collected using google forms and Microsoft forms and were analyzed. The second step involved a qualitative research design whereby we collected, analyzed data to understand the need for curriculum updates in dental education. The study used the technique of free listing and pile sorting to address the issues of communication skills training to 15 faculty members who had already filled the survey forms and had given consent to be a part of the study. The participants were asked individually to enumerate various perceived ideas on the questions posed. The analysis of the collected data was performed in the statistical program visual anthropac 4.98.1 to obtain the Smith salience index.

Results: The study results revealed that there is a need to incorporate communication skills training to dental students as they feel that will build confidence, enhance a good doctor-patient relationship, and will make an ideal doctor.

Conclusions: The findings reinforce the need for teaching communication skills in dentistry. The current study provides an opportunity for dental educators to consider the next frontiers to be better equipped with communication skills to improve the strained doctor-patient relationship.

Introduction

Effective communication is an important component of good dental practice as it influences doctor-patient relationships, and subsequently good patient outcomes[1]. Hippocrates, in his quotes on communication, said: "The patient, though conscious that his condition is perilous, may recover his health simply through his contentment with the goodness of the physician". A strong sentence intuitively refers to the healing aspects of the doctor-patient relationship. Communication with the patient is as old as medicine and is a central part of every interpersonal meeting within the healthcare system[2]. As research reveals that effective communication is connected with satisfaction, compliance, and better health outcomes, it is widely acknowledged that we need to teach healthcare students how to communicate with patients and their colleagues. Health Professionals apart from having clinical skills and knowledge also need good communication skills, the right attitude, and excellent Inter-Professional (IP) behavior to work as a team in a health care setup [3,4]. Teaching and learning the above aspect has been incorporated into the existing medical curriculum and the role of an 'Indian Medical Graduate (IMG) has been defined as a communicator and a Life- long learner professional by introducing the AETCOM module. The Medical Council of India has decided to implement the Attitude, Ethics, and Communication module (AETCOM) in all medical schools across the country which will act as a forerunner of the transition to a competency-based undergraduate medical education program envisaged by the Medical Council of India [5].

The Dental Council of India has also realized the importance of the above training and has sent an official notification dated 1st of July 2021 asking to establish a Dental education unit and train dental faculty and students on communication skills and teamwork. The council also recommended starting a facilio train the dental teachers in pedagogy.[6] International dental curricula accrediting bodies have emphasized communication as a core curriculum element [7-9]. There is a conflict between process and content to be incorporated in teaching communication skills (CS) in dental education. There are dental schools that have recognized the importance of communication skills training and have added it to the dental curriculum, yet the mode of teaching is through didactic passive learning methods. Such observational learning methods are completely theoretical and have very little scope for skill development, are easily forgotten, and are rarely put into practice [10]. Hence there is a need to recognize the importance of incorporating communication skills in dental education and be aware of the challenges that need to be addressed before the initiation of the process.

Aim

This study explored the experiences and perspectives of both experienced clinicians and dental faculty on teaching and learning communication skills (CS) for dental undergraduate students. The goal was to identify gaps and develop a module on CS training for dental undergraduate students for future incorporation in the dental curricula.

Subjects and Methods

The study commenced only after obtaining clearance/approval from the Institutional Ethics Committee (Reference no: 20060). We conducted a mixed-method study between September

and December 2020 and included the dental faculty from all five dental schools in Mangalore. The first part of the study included a survey using google and Microsoft forms. We developed a 55-item questionnaire under the subcategory of attitude, behavior, perceived effectiveness, student practices, need for a communication module, and perceived barriers in implementing communication training for undergraduate students.

The questionnaire made was validated and sent out as part of a regular online survey using google and Microsoft forms, which was sent to all dental faculty (n = 115). It was filled in anonymously and voluntarily by the study participants who had work experience of more than 10 years in their respective specialty and were attached to teaching institutions. They were asked to answer the question marking "Definitely Yes", to "Definitely No" for the 55 items listed and scoring 1–5 for the overall degree of preparedness regarding communication

skills training. An electronic follow-up reminder was sent once, a week after the questionnaire was initially sent out, yet we could only get 67 responses.

Analysis- Data from the surveys were analyzed descriptively using means and percentages and statistically using SPSS 24.

A qualitative research design was planned to understand the need for curriculum updates in dental education. The qualitative part of the study used the technique of free listing and pile sorting to address the issues of communication skills training among undergraduate dental students. The qualitative study was done among 15 faculty members of a dental college in Mangalore, Karnataka, South India. There was strong consensus among the authors that experience is likely to be the most valuable tool in developing clinical communication skills. Hence the 15 faculty members were chosen for their reputation as being good communicators and excellent clinicians. These participants were admitted to the study after acquiring a written informed consent form and had also responded to the first part of the study. The method of free listing and pile sorting [11, 12] were implemented to determine the need and training requirement for dental students.

The qualitative method of free listing commenced by posing three probe questions:

1. Why do you think communication skills training for undergraduate dental students is important?
2. What are the possible ways by which communication skills training for undergraduate dental students can be done?
3. What are the barriers to accommodating communication training in their curriculum?

15 faculty members were asked to list out different perceived needs, modes, and barriers to teaching communication skills. The assessment of written responses was solely based on the basic measures of central tendency. Evaluation of the given response was done by obtaining the Smith"s Salience Index. Smith"s saliency index refers to the" importance, representativeness or prominence of items to individuals or the group". It is a measure by word frequency across lists and word rank within the lists. The chief idea behind the smith saliency index is that while the responses are being enumerated the faculty writes the items with greater salience first. Before this analysis, the recorded responses by various participants were grouped under a similar heading. The obtained results from the software are subjected to analysis using Visual Anthropac. From the results; forty-five responses were taken for pile sorting. From the obtained results, 15 responses for questions 3 and 7, and 14 responses were selected based on the salience value.

Pile sorting:

Following the free listing, the method of pile sorting was employed. Pile sorting focuses on determining the participant's way of correlating the given set of items. The selected salient items were written separately and were provided to the participants. The participants were then allowed to categorize the perceived reasons solely based on their specific criteria and to explain the reason for piling. Successive clustering was appreciated. The obtained data were processed in "VISUAL ANTHROPAC" to get multidimensional scaling and cognitive mapping. To get the collective picture, multidimensional scaling and hierarchical cluster analysis of pile sort data were done. The results of cognitive mapping illustrate the similarity in the given items.

Results

A mixed-method analysis was done to assess the need for communication skill training for dental undergraduate students.

The first part of the study was a quantitative assessment that was done using online survey tools. The questionnaire was designed to assess the attitude, behavior, perceived effectiveness, student practices, and perceived barriers in implementing communication training for undergraduate students.

Our study participants were in the age range of 38-55 years and had an academic work experience of more than 10 years in a dental college. The result of the study showed that more than 74% of study subjects felt that developing communication skills among dental students is essential for patient management. 65% of people felt that communication skills should be part of the undergraduate curriculum and that learning communication skills can improve the interactions of students with patients. More than 62% of our participants felt that teaching communication skills to undergraduate students is important and will be helpful in other aspects of their professional and personal life. Table 1 portrays the overall attitude of faculty members on the questions posed regarding the need assessment.

Table 2 shows the results of their perception of patient care. From the results, it can be deduced that more than 62% of them respond to patients' emotions and psychological issues. More than 50% of them feel they avoid using medical jargon and patients as part of their treatment plan. They also feel it's important to develop a teaching module on communication for the next generation.

Table 3 shows the results of the perceived effectiveness of such training when implemented.

More than 50% of our dental faculty feel that communication if taught can make students communicate with their patients better. They feel that students will make patients part of treatment decisions and also will seek feedback from patients and respond to patients' emotions and psychological issues.

Table 4 depicts the results of the student practices as felt by the faculty. The majority of our participants feel that communication skills are not adequately assessed in the present curriculum. They feel that communication skills can be learned through observation, standardized patients (actors), and role-plays. This study also emphasized the importance of supervision and feedback in effective training.

More than 50% of them feel that students feel intimidated when patients show their emotions and that students are more at ease talking to educated patients and relatives than the illiterates. They also feel that students lack the knowledge, skills, time, and interest to participate in such training programs if implemented. More than 80% of staff members denied that they are disinterested in teaching or learning communication skills. But they highlighted the fact that the curriculum is already extensive and

communication skill is not incorporated and has not been given weightage.

Table 5 is a concise summary of the various responses gathered during the second part of the study.

The qualitative part of the study showed that the most influential factor is a good explanation of the treatment plan to the patient with a salience value of 0.67 followed by a better understanding of patient complaints with a value of 0.133. It is evident from the above results that avoiding conflicts, good DPR, and building good practices also can be a positive out of teaching communication skills to students. Many were of opinion that with good communication skills it becomes easier to share ideas with peer groups and also will be in a better position to explain treatment failures and complications associated which indirectly avoids conflicts and litigation in practice. Another key factor is that such modules teach how to empathize with patients and gain their confidence which goes a long way in clinical practice as shown in Table 6.

Figure 1 shows the outcomes or positive impact of teaching communication skills from a teacher s perspective. The study shows that effective interpersonal and communication skills are associated with improved health outcomes and make the individual empathic, and learns leadership skills and these qualities make an ideal doctor.

The clinical teachers agreed that a communication skills module should be included in the future dental curriculum and can be taught in multiple modes. They suggested that such a course be taught through role-plays, Mock drills, webinars, and small group discussions. They stressed the need to teach the local language as it can be a stumbling block in terms of patient communication. Feedbacks to be obtained from patients about their experience with the student was also a remark on modes of teaching communication skills. Observation of mentors was yet another suggestion by the study group as shown in Table 7.

The feedback depicted in pile 2 speaks about the online mode as an option for teaching communication skills. our study subjects feel that video-reviewing and online mode is usually well received by the majority of students. Our faculty felt that the use of clinical learning using simulated patients who are skilled at presenting complex clinical conditions and delivering specific feedback should be the components of a communication skills course.

Table 8 shows that there are multiple barriers to teaching communication skills to undergraduate students. There seems to be a vicious circle in the dynamic relationship between student interest and academic leaders who have marginalized the incorporation of these skills within the curriculum. Limited investment in educational methodologies and training for teachers tend to foster negative attitudes towards training among both students and faculty. language training represents a major challenge and will require significant attention in the training module. Cultural diversity in the Indian context represents a major challenge as shown in Figure 3. It also emphasized negative attitudes towards the training because of a lack of understanding as to why they are useful, lack of trainers, and non-incorporation in the existing curriculum.

Discussion

Good communication between patients and doctors leads to better rapport, great health outcomes, reduced legal hassles, and higher satisfaction thereby enhancing a good doctor-patient relationship(DPR)[13-16]. With increasing violence on doctors, we must introduce some modules on good communication skills to our undergraduates to better prepare them for the future. Patients of the present era expect doctors to be available, listen to them, be supportive, empathetic, and communicate in simple language [17-19]. To meet the above requirement, it is relevant

to assess the need for such a module from the teaching faculty, hence a study was planned towards this end.

Our study results revealed that there was a strong consensus among faculty members that clinical communication skills are valuable tools needed in the formative stages of a graduate's life. Developing good communication skills are integral to healthcare providers as it builds doctor-patient interaction, good working relationships, and increased patient satisfaction. They also felt that effective communication may enhance compliance and lead to improved health outcomes. This was in line with other studies [20-23] Similar studies conducted also reveal that Communication and Interpersonal Skills are competencies that should be taught in health care institutions irrespective of the content and processes.[24-26]

The study wanted to know the mode of delivery of this CS training, the general opinions offered and the similarity of statements by key informants offer a perspective on the need of teaching local language to enhance better communication between the doctor and the patient. Language learning is a skill that can be perfected only through constant practice and continuous exposure to the target language. Students in India are taught English as a second language and the regional language is given priority. Hence most patients who belong to lower socio-economic strata will be well versed with the local language of that state or town rather than English. Hence it becomes imperative for students attending health care courses to know the local language for ease in communication with patients. even though they are exposed to language studies right from their primary level. When questioned about teaching approaches for training in CS, the study participants spoke about role-plays and videography than traditional teaching methodologies like lectures and workshops. Observation of mentors was also among the top few teaching methodologies mentioned by the faculty members.

Studies done in the same line show that educational input generally improves communication skills through a technique called 'experiential'[27], which includes role-play, simulated patients, and supervised practical training[28-29]. Experiential learning gives a structured cyclical learning approach giving due importance to practice, reflection, and feedback delivered by experienced professionals [30-31]. Communication skills in the dental curriculum have not been taught as a part of the formal course [32]. It is supposed to be an inbuilt attitude and emulated by looking at seniors or teachers who act as role models.

Our study participants highlighted certain barriers, faculty members voiced their personal opinions on the most significant problems or barriers to incorporating and developing these skills. These key informants have come to a consensus on certain principal problems: lack of enthusiasm by students to learn communication, lack of time, multiple local spoken languages and lack of trainers, and shortage of training hours. The negative attitudes of teachers and limited training provided to the faculty were also added to the list of barriers mentioned by our study group. Studies have shown that teacher training is the key and that a lack of qualified or experienced teachers can be a major barrier [33]. Many others studies have also identified these barriers to varying degrees in recent years. Few studies have also revealed that communication is innate, unscientific, and doesn't need any academic credibility[34, 35]. The major barrier is to integrate communication skills training with clinical training in a tight curriculum designed by the DCI. Faculty training is also an important task that is lacking in many dental colleges for multiple reasons [36,37]. Clinicians are often focused on their practice and have less academic orientation, yet they are tasked with supervising

students in the pre clinics and dental clinics. They are expected to provide feedback to students on their clinical work and for their communication with patients [38].

This mixed method analysis demonstrates a need for incorporation of clinical communication skills for dental students. The times emerging reinforce the challenges identified for the future practitioners if such training is not delivered in a systematic manner at an early age.

Conclusion- Communication skill is now graded as a core competency and is needed to build adequate relationships with patients and their families. Teamwork is yet another quality that needs to be introduced to the younger generation of healthcare workers. The present scenario demands teaching communication as a 'need-to-know skill to prevent assaults and litigations. An Interprofessional Communication Skills teaching module is the need of the hour and undoubtedly will bring about a change in future practitioners irrespective of the specialty.

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