



# Communication Skills Teaching Methods in Dental Education – a Review

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## Abstract

Communication skills of dentists have been demonstrated to be part of the good dental practice. The aim we set ourselves in this study was to review the literature related to the methods of teaching communication skills at dental faculties, and develop a handout in the Bulgarian language about leading a successful conversation with a patient.

According to some authors, the most important principles for effective communication training include the use of practical exercises, clinically relevant scenarios, students' self-assessment tools, videotapes, participation of patient actors, and training in small groups. Another communication training program is the so-called Miller pyramid. Using the method of objective structured clinical examination (OSCE) can also be an effective way of teaching communication skills to dental students.

The conclusion to be made is that communication skills should be taught across the entire dental curriculum as this leads to better understanding and sufficient outcome.

## Keywords

communication skills, communication techniques, dental practice

## INTRODUCTION

Communication is about sending and receiving a message and in medicine it means building a doctor-patient relationship, listening, showing empathy, and gaining trust.<sup>1-3</sup>

In recent years the reasons a patient follows a given dental therapy have been investigated. The role of communication used during dental treatment – verbal and non-verbal is the basis of these studies. It has been proved that effective patient-doctor communication can enhance patient satisfaction, improve health outcomes<sup>4</sup>, and improve adherence to treatment plans.<sup>5</sup> Poor communication can limit patient understanding of their illness or treatment and lead to poorer patient outcomes, or to complaints against services and clinicians.<sup>6</sup> Recognizing the importance of having doc-

tors that can demonstrate an acceptable standard of communication skills has renewed interest in communication skills training in undergraduate medical and dental education.<sup>7</sup>

With the emergence of communication skills training as a core component of the undergraduate medical/dental curriculum, there is a need to be able to demonstrate that the wide range of communication skills perceived as necessary for appropriate clinical practice can be feasibly taught, acquired and transferred to a clinical setting.<sup>8</sup> This includes evidence that this educational process leads to changes in the behaviour of health care providers. Some previous research has indicated that communication skills can be taught and learned in both simulated and actual clinic environments.<sup>9,10</sup>

In theory, engaging in successful communication is easy, but its use in the clinical practice is still difficult for dental practitioners. The reason might be the widespread passive way of learning communication skills at the university level, without adequately assessing the students' skills, as well as the need to use a combination of verbal and non-verbal communication techniques.<sup>11,12</sup>

There are a few common strategies to measure the effectiveness of communication skills teaching methods. The evaluation of the competence of students' verbal communication skills is best assessed during observations of simulated consultations with standardised patients followed by constructive feedback.<sup>13-15</sup> The feedback is crucial, but it has to be specific, non-judgemental and descriptive.<sup>13</sup> Another useful tool according to some studies is the objective structured clinical exam (OSCE) where a marking scheme is used to evaluate different components of communication whilst ensuring a more standardised assessment for all students.<sup>16</sup>

Given the variability of communication education programmes, it is important to create a curriculum that combines knowledge, skills and attitude, as well as verbal and non-verbal communication.

## AIM

The aim of the present study was to investigate the most common methods of teaching communication skills in dental education. Based on it, a handout in the Bulgarian language will be developed about leading a successful conversation with a patient in the dental practice.

## MATERIALS AND METHODS

Pubmed, Google Scholar, Medline and the Cochrane Database were searched for studies published in English, German and Bulgarian from 1990 to 2018. Some of the basic communication skills teaching methods are set in the nineties, so a long period of time got considered for this review. Relatively few restrictions on the inclusion criteria were put in order to sample the breadth rather than depth of the literature on this subject.

The following search terms were used: 'communication skills', 'interpersonal communication', 'communication skills training', 'dentist-patient relations', 'dental students', 'undergraduate', 'dental education', 'teaching', 'curriculum', 'clinical competence'. Database searching began in 2015 and continued to 2019. The aim was to search for synthesizing publications. The initial database searches with the single search terms resulted in over 5000 hits, so that search terms were combined, duplicates got removed. As the review intended to present articles that provided the most common communication skills teaching methods 27 full-text articles were included in the final synthesis.

## RESULTS

The research shows that some of the most important principles for effective communication training include the use of practical exercises, clinically relevant scenarios, students' self-assessment tools, videotapes, participation of patient actors, and conducting the training in small groups.

It is recommended that training in communication techniques should have a practical nature, because passive learning does not lead to the required results.<sup>10</sup>

The need for appropriate communication in the medical practice has led to the development of a manual for teaching communication and social skills in medical universities in German-speaking countries entitled "Basel Consensus Statement".<sup>17</sup> Its aim is to help teachers improve the curriculum in the field of communication and social skills. The main competences, which every graduate student in medicine and dentistry must possess, are respecting the patient, recognizing one's own strengths and weaknesses, recognizing the needs of the patient, catching the non-verbal aspects of communication (gestures, facial expressions, posture, etc.), respect the individuality of the patient and his personal views; stick to their own values and norms of behavior; intent to work in a team.<sup>17</sup>

The most frequently used method of teaching communication skills in dental schools in the USA and Canada is lectures, followed by roleplaying with videotape.<sup>12</sup> Patient-instructors are also being utilized in dental education. This program uses clinical scenarios to teach and evaluate students' process and content skills using standardized scales and checklists. It is an effective and time efficient means of teaching history-taking and interviewing skills as well as an effective evaluation tool.<sup>18-21</sup>

According to George Miller, the successful communication training program is based on four clinical competence skills – the so-called Miller pyramid.<sup>22,23</sup> This training program does not require additional teachers, but is an effective tool in improving students' communication skills.<sup>24</sup> At the lowest level of the pyramid is knowledge (knows), followed by competence (knows how), performance (shows how), and action (does). "Action" focuses on what occurs in practice rather than what happens in an artificial testing situation. Work-based methods of assessment target this highest level of the pyramid and collect information about doctors' performance in their normal practice.

Based on the Miller Pyramid, a communication skills training program has been developed, including training, observation, simulation, and experience. But communication skills should be taught across the entire curriculum as this leads to better understanding and sufficient outcome.<sup>25</sup>

Another teaching and assessment method is the objective structured clinical examination (OSCE). This is a standardized student assessment tool which has been used for decades in medical education. In recent years, it has also been introduced to dental medicine. Using OSCE, dental students' interpersonal skills can be evaluated based on

the communication curriculum.<sup>26</sup> This method requires standardized patients. Students go through several OSCE stations: gathering information, problem solving, explanation of diagnosis, examination and more. At the end, they receive an objective assessment of their skills from the tutor as well as feedback.

In order to achieve effective communication, the following skills should be acquired during the training course:

- Informing the patient (students choose the most appropriate method of communication with the patient and use comprehensible language without medical terms).
- Patient interview (students use open-ended questions, listen carefully, try to understand the patient's perspective and wishes).
- Retrieving informed consent for treatment.
- Closing conversation (summarizes, agrees on next steps).<sup>27</sup>

This type of training requires teachers to be role models – excellent teachers, effective supervisors, powerful tutors, and supportive persons who use dynamic and diverse teaching methods and have an individual approach to educating their students.<sup>28</sup>

Effective training techniques are roleplaying, patient interviews and videotapes. However, conducting them in large groups can lead to poorer results due to the inability of the students to concentrate on the situation.<sup>29</sup>

According to Bulgarian dentists and dental students, using specific interpersonal skills is an important element of the good dental practice.<sup>30</sup> However, the majority of Bulgarian respondents, mainly the older practitioners, did not study this discipline.

An interesting aspect of communication training is the introduction of the Internet and new technologies into the daily life of dental students. According to a survey, almost 88% of the dental students use the Internet to search for information, but only 21% use it to search for information for their studies.

The majority of students learn from lectures, almost 70% learn from their university teachers, and 60% from textbooks, but almost 95% of the students would like to have lectures put online.<sup>31</sup> The use of new technologies is fundamental in contemporary education and is related to the strong need for quick access to information. This includes the use of computers, Google and social media where students can exchange information among themselves in virtual groups.<sup>32</sup> It is essential, however, that students learn to be independent learners – not only to understand the information but also discover it themselves and put it to use in everyday life.<sup>33</sup>

The Internet is not designed only for scientific information. Students and dentists must be taught to recognize such information.<sup>34</sup> However, diversity of educating sources can help students and doctors improve their communication skills. Therefore, adequate training in information technology would increase the proper use of electronic media.<sup>35,36</sup>

## DISCUSSION

Communication skills in dental practice is a relatively new course of study. The review question is – which is the best way to effectively teach communication skills among undergraduate students? The studies included show a variety of techniques. Programs with practical component turn out to be more effective than lectures.<sup>16</sup>

A paternalistic model of behavior has been imposed on the Bulgarian health system for many years<sup>37</sup> – treatment without giving and retrieving information or discussing the diagnosis and alternative treatments.<sup>38</sup> This requires a paradigm shift. The patient should be the center of every treatment and this can only be achieved through effective training in interpersonal skills. According to some studies, communication skills can be taught accompanied by a strong faculty support. Each communication skills curriculum should be introduced early and continue throughout the whole study course. It is most effective when it is longitudinal in nature and coincides with the on-going professional practice education.<sup>16,39</sup>

An important strategy in teaching communication skills should be the integration of communication in clinical skills, increasing the confidence of undergraduate students, improving interviewing skills and establish a permanent understanding of communication.<sup>40</sup>

For this purpose, an original model for conducting an interview in dental practice in the Bulgarian language is needed, as well as a short guide for dentists and dental students. It can help dentists improve their communication skills and build a trusted and long-lasting relationship with their patient.

The communication guide should offer a brief explanation about the importance of communication in the dental practice and its determining factors:

1. Basic rules of patient-centred communication
2. Checklist for preparation for a patient interview
3. Communication Model
4. Expanded communication scheme for the dental practice

This guide can be used in communication skills programs in Bulgarian dental schools for a continuous and long-term training.

## Limitations

This study has a number of limitations. First, a great number of the studies describe communication skills teaching programs for medical schools. The implementation in dental education is made because of the similarities in both educational programs, although specifics in communication style in the dental practice were not considered.

Second, the inclusion and exclusion criteria used in the review, such as inclusion of non-dental studies and studies published prior to 2000, may also have limited the study findings by reducing the number of potentially beneficial observations and suggestions affecting communication skills training improvement.

Based on the literature regarding the long-term impacts of communication skills on patient oral health outcomes, it is clear that further research and evaluation of the training components is needed. Additionally, due to challenges associated with initiating curriculum changes in educational institutions, exploration of models and mechanisms to promote these preliminary changes would be of significant benefit.

## CONCLUSIONS

Dentists are required to interact with patients on a personal level within few minutes of meeting. Therefore, it is essential to provide dental students with effective, skills-based communication training. In this way they can be better equipped to cope with patients' fear and anxiety, to identify patients' problems and offer a solution, adjusted to their individual needs and perceptions.

The lack of time and resources at dental universities interferes however with successful communication skills training. University teachers can be an important source of information and this requires building a well-structured, interactive, and continuous communication training program with practical application. The use of manuals and guides can help improving the dentist-patient conversation in the stressful everyday work and achieving a satisfying dentist-patient relationship.

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## Методы обучения коммуникативным навыкам в обучении дентальной медицине – обзор

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### Резюме

Доказано, что коммуникативные навыки стоматологов являются одной из важнейших составляющих хорошей стоматологической практики. Целью данного исследования является обзор литературы, относящейся к методике обучения коммуникативным навыкам на факультетах дентальной медицины, и разработка брошюры на болгарском языке о том, как вести успешный разговор с пациентом.

По мнению некоторых авторов, наиболее важные принципы обучения эффективному общению включают использование практических упражнений, клинически адекватных сценариев, инструментов для самооценки студентов, видео, участие пациентов-актёров и обучение в небольших группах. Еще одна программа обучения коммуникативным навыкам – это так называемая «Пирамида Миллера». Использование метода объективного структурированного клинического обследования (objective structured clinical examination (OSCE) также может быть эффективным способом обучения навыкам общения студентов-стоматологов.

Мы пришли к выводу, что коммуникативным навыкам следует обучать на протяжении всего курса обучения дентальной медицине, поскольку это ведёт к лучшему пониманию и хорошему результату.

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### Ключевые слова

коммуникативные навыки, коммуникативные техники, стоматологическая практика

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