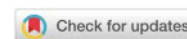


EFFECTIVE DOCTOR-PATIENT COMMUNICATION A KEY FACTOR FOR ASSESSING PATIENT SATISFACTION WITH DENTAL SERVICES PROVIDED

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Abstract: In recent years, great progress has been made in the communication between dental practitioners and their patients. In the 21 st century, communication has become an essential and necessary clinical skill for every dental professional. Communication skills are a skill that every medical professional must master in order to build the best possible relationships with patients. This includes the ability to form a certain idea about the patient's oral disease, altering the patient's mood (minimizing fear, anxiety, increasing confidence, hope for favorable treatment results), influencing the patient's lifestyle and behavior in order to carry out the recommendations given by the dental specialist treating him. They are described in the scientific literature the different models of the relationship between the doctor and the patient, as well as the research of authors regarding the importance of good communication about the patient's dental treatment procedure satisfaction.

Aim: The present study aims to investigate the impact of efficient communication towards patient satisfaction with the quality of dental services provided.

Materials and methods: Sociological survey has been carried out. For the respondents' convenience participating in the research, the opportunity to choose between two options for filling out the survey card is provided: a paper survey card and Online questionnaire created in Google Forms. A survey was conducted on a voluntary basis in May-July 2023. The results of the survey are presented in table and graphic form, which are accompanied by analyzes and conclusions. For the purposes of the research, 358 patients treated by fourth, fifth- and sixth year students in the facility of the Faculty of Dental Medicine at the Medical University of Varna - were surveyed.

Results: There is a positive correlation observed from the survey between effective doctor-patient communication and patient satisfaction with the quality of dental services provided. Good communication with the patient strengthens the trust in the dentist and helps the patient anxiety of the upcoming dental manipulations.

Conclusion: Quality dental services are the basis for the success of the diagnostic - treatment process of any dental practice. Communication with the patient and his relatives is the duty of every dentist, which is of great importance for preserving the mental health of the patient. Great attention is paid to the development of communication skills by dental practitioners. According to a number of studies, effective communication with patients is at the heart of the success of any dental practice. Following some basic rules in communication is a key factor in a good relationship between the dentist and the patient.

Keywords: communication, satisfaction, quality of dental services

1. INTRODUCTION

In recent years, great progress has been made in the communication between dental practitioners and their patients. In the 21 st century, communication has become an essential and necessary clinical skill for every dental professional. Communication skills are a skill that every medical professional must master in order to build the best possible relationships with patients. This includes the ability to form a certain idea about the patient's oral disease, altering the patient's mood (minimizing fear, anxiety, increasing confidence, hope for favorable treatment results), influencing the patient's lifestyle and behavior in order to carry out the recommendations given by the dental specialist treating him. They are described in the scientific literature the different models of the relationship between the doctor and the patient, as well as the research of authors regarding the importance of good communication about the patient's dental treatment procedure satisfaction. Within the doctor-patient communication relationship, the doctor must be able to recognize and correctly interpret the patient's verbal and non-verbal messages; to use the correct verbal and non-verbal means of communication to convey information to the patient, depending on the nature of the message and the context (severity of illness, type of patient, emergency, etc.) (1,8,11). Human motivation includes needs, reasons, interests, beliefs, tendencies, intentions, desires,

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and aspirations. The dentist must consider the patient's level of competence when communicating with him. (9) Patient competence is the patient's ability to understand the information necessary to make a treatment decision and to reasonably assess the foreseeable consequences of a decision or failure to make a decision about dental treatment. (6) Health culture as a part of the general culture of the patient is a system of knowledge, values, habits, skills and behavior to satisfy the need for protection, restoration and strengthening of personal and public health. Continuously improving the health culture of patients, through screening and preventive campaigns, is the basis of analyzing and overcoming the risk factors for dental health. Communication plays an important role in patient motivation. Represents the ability to communicate with the patient to stimulate behavioral changes. The ability of the participants in the communication act - dental doctors and patients to understand each other with the same technical terms gives them the opportunity to better perceive information and carry out effective communication. (14) It is necessary for the dentist to treat the patients admitted for treatment at the dental clinic with respect and empathy. The factors that influence communication are accessibility, literacy, prior knowledge of patients related to dental health. (13) Benevolence, responsiveness and compassion on the part of the treating dentist lead to effective communication in dentistry. Patients have been shown to trust dentists who are able to understand their pain. (12) The authors conclude that the importance of communication skills along with related concepts is well documented in dentistry. (2,3,10) According to Enkling et al. patients evaluate the quality of the dental doctor mostly according to his interpersonal skills. (5) The desire of patients to be informed about the duration and type of treatment, their expectations of sympathy from the dental doctor who refers to their fear, shows the presence of a strong emotional component in the communication process between the dentist and the patient. Although there are different studies on communication skills, what they all have in common is that they all point to the ability of dentists to express themselves clearly and accurately as a key competency, using comprehensive language, ability to listen to patients and involve them in decision-making about their dental treatment. (4,7)

2. MATERIALS AND METHODS

Sociological survey has been carried out. For the respondents' convenience participating in the research, the opportunity to choose between two options for filling out the survey card is provided: a paper survey card and Online questionnaire created in Google Forms. A survey was conducted on a voluntary basis in May-July 2023. The results of the survey are presented in table and graphic form, which are accompanied by analyzes and conclusions. For the purposes of the research, 358 patients treated by fourth, fifth- and sixth-year students in the facility of the Faculty of Dental Medicine at the Medical University of Varna - were surveyed. Approval to start the research was received from the Research Ethics Commission (KENI) at Varna Medical University after preparing and presenting document worksheet on the subject of the research. The results of the survey were statistically analyzed to assess their reliability and representativeness. Data was processed with IBM statistical software SPSS Statistics v.23. The statistical methods used to process the results are descriptive statistics and correlation analysis.

3. RESULTS

The factor variables: age and gender were studied and analyzed. 358 patients with an average age of 47.5 ± 17.4

years (30-65 years) took part in the survey. Patients aged between 25 and 44 years are the largest survey participating group - 122 people, and most of the participants are 44 years old. (Fig.1)

Regarding the gender criterion, 227 (67%) of those who participated in the survey were women and 131 (36%) were men. The ratio of women: men is approximately 2 :1.

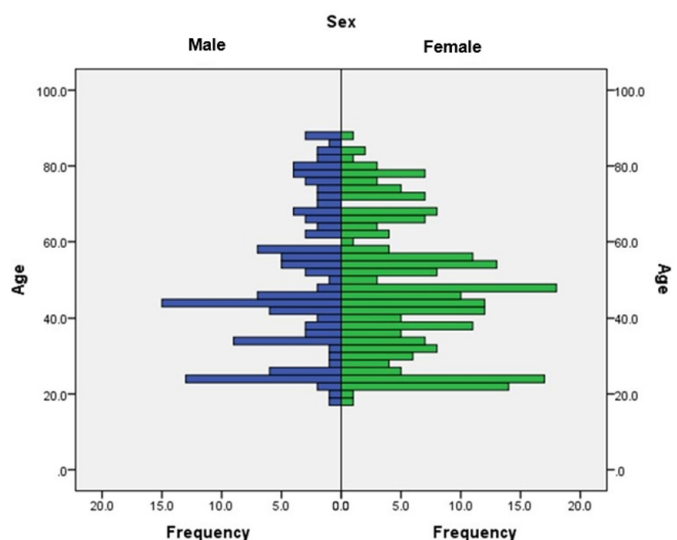


Fig. 1 Age pyramid according to gender

In the 60-74 age group fewer participants were involved -52 patients. The participants aged 75 and over were the least numerous, only 36 patients. The choice of communication approach between the dentist and the patient is related to the age of the patient.

Dental services for elderly patients are characterized by a number of features related to the vulnerability of this age group, which is affected by various co-morbidities and reduced physical, cognitive and financial capabilities. Finding ways to keep older patients visiting the dental office is possible by improving the dentist-patient relationship, effective communication between them and providing high quality dental care by increasing the self-esteem of the elderly and their place in society, by increasing the role of oral health in their quality of life, where we mean the pleasure of eating and normal diction. The dentist has the moral and professional obligation to create, from the first contact and during the entire diagnostic-treatment process of examination and care, the best climate for cooperation, based on conveying a sense of confidence regarding the positive development of the disease, its family and social reintegration. Self-esteem (behavior and attitude) is the basis of the doctor-patient relationship and is the first condition for therapeutic success. The dentist must recognize and correctly interpret the patient's verbal and non-verbal messages. Effective communication between the dental practitioner and the adult patient gives him faith and hope for the ultimate success of the dental treatment, brings confidence, strength and determination spirit in the patient.

Almost all surveyed patients 329 (91.9%) responded with complete agreement to the statement that the document they signed was clearly and comprehensibly explained to them. 20 people (5.6%) agreed with this statement, 7 (2%) of the patients answered that they had no opinion on this issue, 1 (0.3%) disagreed, and only 1 (0.3%) respondent strongly disagreed. (Fig.2)

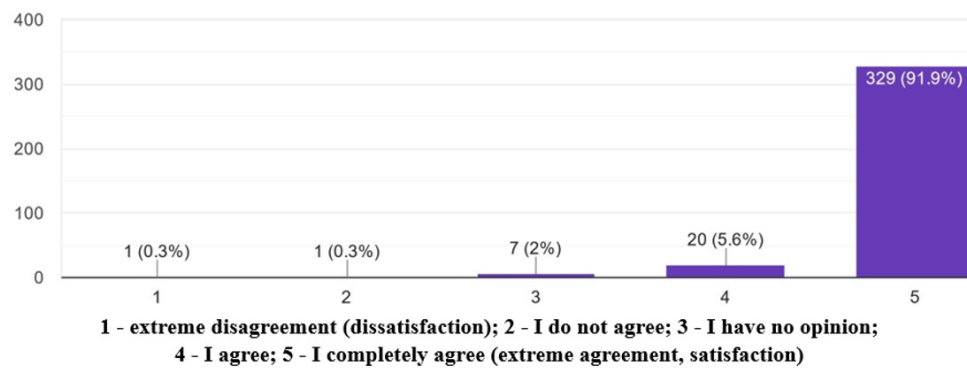


Fig. 2 The informed consent document that I undersigned was clearly and comprehensively explained

302 (84.4%) of the patients who took part in the study responded with full agreement (satisfaction) to the statement "I was informed about all the tests clarifying my exact diagnosis, about the risks they entail and about the way they are carried out." 10% responded that they agree, 14 (3.9%) have no opinion, a small fraction 4 (1.1%) disagree and a very small fraction 1 (0.3%) strongly disagree. (Fig.3)

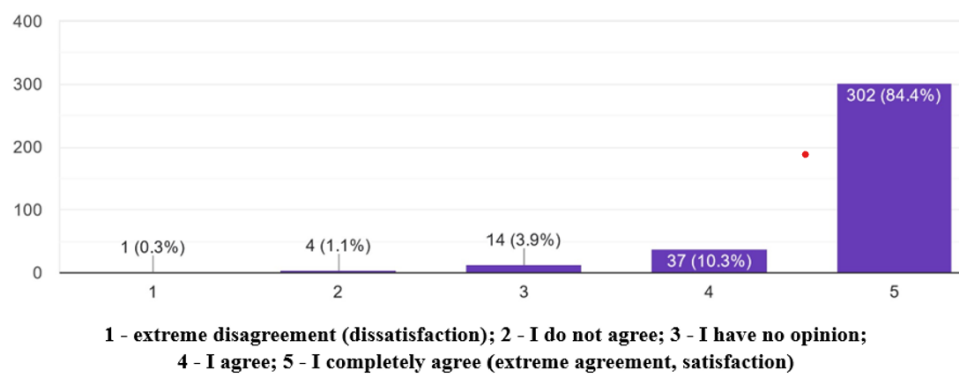


Fig. 3 I was informed about all the tests clarifying my exact diagnosis, about the risks they entail and about the way they are carried out

A large part of the surveyed patients 294 (82.1%) were completely satisfied with the information provided to them. Support the opinion that information about their current condition, potential risks and possible treatment alternatives is provided in a way that is clear and understandable to them. Only 1 patient, 0.3% of all participants in the survey strongly disagreed with this statement. (Fig.4)

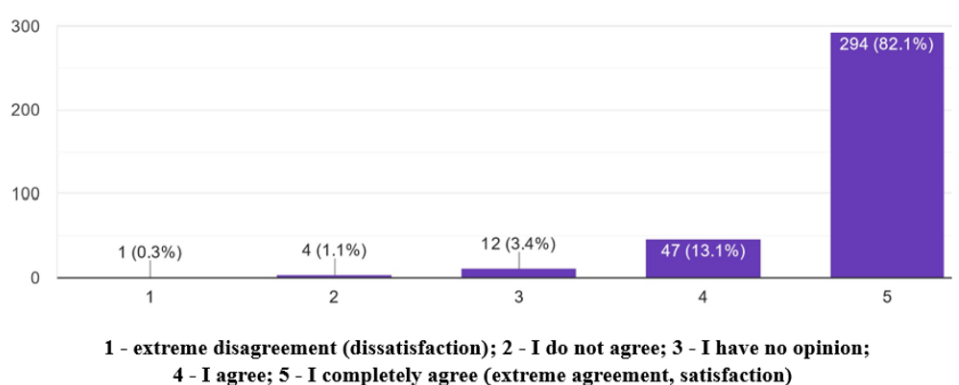


Fig. 4 I was provided information clearly and comprehensively about my current condition, potential risks and possible treatment alternatives

Of the responses indicated in the questionnaire, 299 (83.5%) confirmed that they were given the opportunity to ask questions about the risks and dangers associated with the procedures (diagnostic and therapeutic) that were applied to them, only three people 0.8% of all participants in the survey have the opposite opinion, and have answered that they strongly disagree. (Fig.5)

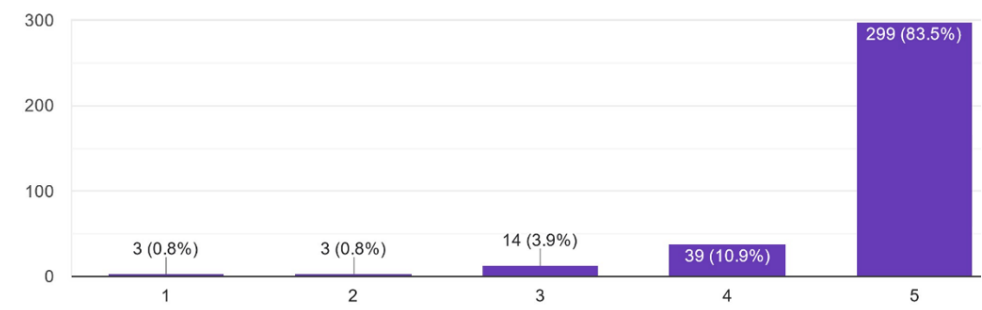


Fig. 5 I was given the opportunity to ask questions about the risks and dangers associated with the procedures (diagnostic and therapeutic) that were applied to me

The majority of patients 314 (87.7%) answered positively, expressing their final agreement (satisfaction) that during the diagnostic-treatment process they were informed about all performed dental manipulations. (Fig.6)

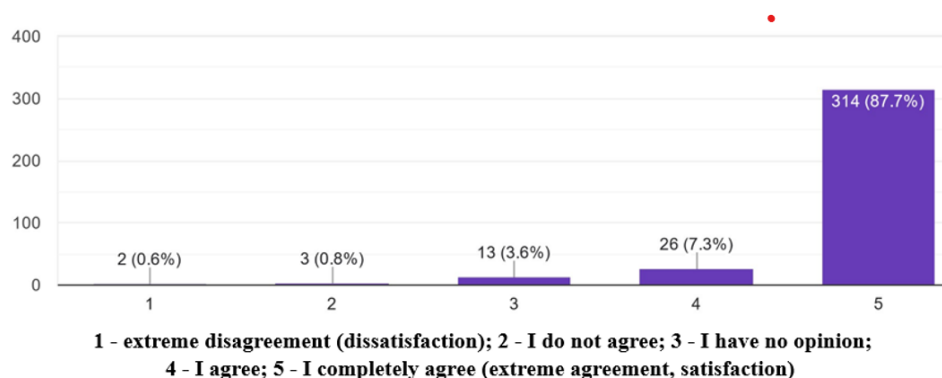


Fig.6 During the diagnostic-treatment process I was informed about all performed dental manipulations

A large proportion of the 344 participants, of whom 307 (85.8%) strongly agreed and 37 (10.3%) agreed, confirmed that they received all of the additional clarifications they requested regarding the treatment plan provided to them

Results of the conducted questionnaire were obtained, where a positive moderate correlation dependence was observed between the patient's awareness of the tests that specify the diagnosis, the risks that they entail and the way they are performed, and the patients' satisfaction with the quality of the dental services provided (Spearman $\rho = 0.417$, $p < 0.001$).

There is a directly proportional dependence, a positive moderate correlation dependence between the clearly and comprehensibly provided information and patient satisfaction with the quality of the provided dental services performed by students in the teaching facilities of the Faculty of Dental Medicine at Varna Medical University (Spearman $\rho = 0.335$, $p < 0.001$).

4. DISCUSSIONS

There is a positive correlation observed from the survey between effective doctor-patient communication and patient satisfaction with the quality of dental services provided. Good communication

with the patient strengthens the trust in the dentist and helps the patient anxiety for the upcoming dental manipulations. The ability of dental practitioners to accept the views and emotional state of patients is extremely important for effective communication between them. The information provided to the patient during the diagnostic and treatment process must be accurate and complete. The informed consent document that the patient signs must be explained to him in a clear and comprehensible way. The patient must be informed about all the tests specifying the exact diagnosis, about the risks they entail and about the way they are performed. In the course of the diagnostic and treatment process, the patient must be explained all the risks to his health when using anesthetics. The patient should be made aware of the potential risks and all possible treatment alternatives. The patient should be given the opportunity to ask questions about the risks and dangers associated with the procedures (diagnostic and therapeutic) performed on him. During the treatment process, the patient should be informed about all the manipulations performed. The dentist must provide any additional clarifications requested by the patient regarding the treatment plan.

Without effective communication, the efforts of the dental specialist will not have the necessary effect, because important information is exchanged in the communication process, relationships of mutual understanding, partnership and trust are built. In his daily contacts with patients, the dental doctor must be guided by many moral principles: To form an individual approach to the patient, consistent with his psychological and dental health. To relieve the patient - this requires continuous improvement of the dental technique used to perform the manipulations and procedures, with the aim of reducing pain and unpleasant sensations. Psychologically the patient should also be protected, avoiding the influence of iatrogenic factors. Using words to evoke patient's positive emotions is a healing factor. Encouraging the patient's numerous modern medical and diagnostic devices should be part of the medical worker's work. Respecting and honor the patient's privacy and keeping professional secrecy is a must. In order to achieve trust in the dentist-patient relationship, appropriate communication methods must be applied and each patient must be approached individually and according to their needs. The patient's trust in the dentist is an extremely important factor for effective communication and a favorable outcome of the treatment. Good communication can help set clear and realistic expectations and help achieve a better quality of dental care for the patient. Patient trust is built on transparency, openness, sincerity and good communication with the dentist and his team.

5. CONCLUSIONS

Quality dental services are the basis for the success of the diagnostic - treatment process of any dental practice. Communication with the patient and his relatives is the duty of every dentist, which is of great importance for preserving the mental health of the patient. Great attention is paid to the development of communication skills by dental practitioners. According to a number of studies, effective communication with patients is at the heart of the success of any dental practice. Following some basic rules in communication is a key factor in a good relationship between the dentist and the patient.

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REFERENCES

- Anghel, P. (2007). *Strategii eficiente de comunicare*, Ed. Viața și Sănătate, București.
- Azimi S, AsgharNejad Farid AA, Kharazi Fard MJ, Khoei N. (2010). Emotional intelligence of dental students and patient satisfaction. *Eur J Dent Educ* ;14(3):129-32.
- Carey JA, Madill A, Manogue M. (2010). Communication skills in dental education: a systematic research review. *Eur J Dent Educ* ;14(2):69-78.
- Corah NL, O'Shea RM, Pace LF, Seyrek SK. (1984). Development of a patient measure of satisfaction with the dentist: the Dental Visit Satisfaction Scale. *J Behav Med.* ;7(4):367-373.
- Enkling N, Marwinski G, Jöhren P. (2006). Dental anxiety in a representative sample of residents of a large German city. *Clin Oral Investig.* ;10(1):84-91.
- Etchells E., G. Sharpe, Ph. Walsh et al. (1996). Bioethics for clinicians: 1. Consent. *CMAJ*, 155:177-180;

- Hobgood CD, Riviello RJ, Jouriles N, Hamilton G. (2002). Assessment of communication and interpersonal skills competencies. *Acad Emerg Med.* ; 9(11):1257-1269
- Humphris G, Freeman R. (2021). Editorial - The importance of studying communication processes in the dentist: patient interaction. *Community Dent Health.*;38(4):222-223.
- Khalifah AM, Celenza A. (2019). Teaching and Assessment of Dentist-Patient Communication Skills: A Systematic Review to Identify Best-Evidence Methods. *J Dent Educ.*;83(1):16-31.
- Pau AKH, Croucher R. (2003). Emotional intelligence and perceived stress in dental undergraduates. *J Dent Educ.*;67(9):1023-8. 13.
- Rozier RG, Horowitz AM, Podschun G. (2011). Dentist-patient communication techniques used in the United States: the results of a national survey. *J Am Dent Assoc.*;142(5):518-30.
- SmithAJE. (2019). Serie: Communicatie in de tandartspraktijk. Met communicatie bouwen aan een goede tandarts-patiëntrelatie [Series: Communication in the dental practice. Building a good dentist-patient relationship with communication]. *Ned Tijdschr Tandheelkd.*;126(1):37-44.
- Tseng W, Pleasants E, Ivey SL, Sokal-Gutierrez K, Kumar J, Hoeft KS, Horowitz AM, Ramos-Gomez F, Sodhi M, Liu J, Neuhauser L. (2020). Barriers and Facilitators to Promoting Oral Health Literacy and Patient Communication among Dental Providers in California. *Int J Environ Res Public Health.*;18(1):216.
- Yuan S, Humphris G, Ross A, MacPherson L, Freeman R. (2019). Recording communication in primary dental practice: an exploratory study of interactions between dental health professionals, children and parents. *Br Dent J.* ;227(10):887-892.

