ORIGINAL ARTICLE

ROLE OF DENTIST – PATIENT COMMUNICATION IN ORAL REHABILITATION

Iulia-Roxana Marinescu[1], Emma Cristina Drăghici[1*], Alexandru Andrei Iliescu[1*], Monica Scrieciu[2], Horia Octavian Manolea[3], Cosmin Tuţu[4], Sanda Mihaela Popescu[1]

[1] Department of Oral Rehabilitation, Faculty of Dentistry, University of Medicine and Pharmacy of Craiova, 200349 Craiova, Romania
[2] Department of Prosthetics Dentistry, Faculty of Dentistry, University of Medicine and Pharmacy of Craiova, 200349 Craiova, Romania
[3] Department of Dental Materials, Faculty of Dentistry, University of Medicine and Pharmacy of Craiova, 200349 Craiova, Romania
[4] Private Practice

All authors contributed equally to this work.

[*] Corresponding author:
Emma Cristina Drăghici, Alexandru Andrei Iliescu, ,
Department of Oral Rehabilitation, Faculty of Dentistry, University of Medicine and Pharmacy of Craiova, 200349 Craiova, Romania;
Email:
emma.draghici@umfcv.ro
alexandru.iliescu@umfcv.ro

Abstract: Communication is an important skill for dental professionals. For dentists, this means the best way to communicate diagnosis and treatment plan to the patient, altering favorable the patient's mood (minimizing fear, anxiety, increasing confidence, hope for favorable treatment results), influencing the patient's lifestyle and behavior. Objective: This study aimed to analyze how the communication between the dentist and the patient influences the treatment plan in oral rehabilitation. Results: 64 patients with ages between 17 and 62 years participated in the study. Patients were invited to participate in the study immediately after the end of the treatment session. Most of the patients included in the study received the requested treatment. This correlates positively with the level of education, most patients having higher education. Since patients in Romania have a low monthly income and dental treatment is extremely low compensated by a Dental Insurance, their addressability to the dentist is reduced, the main reasons for presentation being pain and the request for teeth extraction. Conclusion: Dentist-patient communication is positively influenced by the level of education, patients with higher education having a greater capacity to understand and accept the treatment plan.

Keywords: communication, influencing factors, patient, dentistry.

 DOI: 10.58179/RJDR1202

1. Introduction

Nowadays, communication is an important skill for dental professionals, because every doctor wants to have a good relationship with his patients. For the dentists, this means an accurate diagnosis of the patient's oral disease, changing 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 [1]. Dental anxiety is a form of anxiety that occurs when the patient is presenting to the dentist or just with the anticipation of dental treatment experience [2,3].

The idea of doctor-patient relationship and the medical dialogue have been described or mentioned in the history of medicine since the times of Ancient Greece (Plato), and in the modern medical and social science literature of the last 50 years [4,5,6].

Consumer society has significant implications for the 21st century dentist: patients want to be "involved" in treatment decisions and to have an experience that exceeds their expectations during their visit to the dental office [7]. The changing attitude of patients is the most key factor that contributes to the decline of "trust" towards the medical staff. Patients today have more options than ever before. If a dental office does not offer what the patient wants or needs - if the interaction with the dentist does not exceed his expectations - he does not perceive the doctor as "different and unique", and therefore, he will solve his problem by going to one of his competitors [8].

Communication is considered by The Nova Scotia Dental Association (NSDA), as part of the dentists' job to enable their patients to make informed decisions about their oral health by providing them with information about professional opinions, goals of dental treatment, and scientific findings in this field of knowledge [9,10].

The dentist must consider the patient's level of competence when communicating with him [11]. Patient competence is the patient's ability to understand the information necessary to make an informed treatment decision and to assess the foreseeable consequences of a decision or failure to decide about dental treatment [12].

2. Materials and method

This study aimed to analyze the way in which the communication between the dentist and the patient influences the implementation of the treatment plan in oral rehabilitation. The study included 64 patients aged between 17 and 62 years old, who were asked to participate in the study immediately after the end of the treatment session, so that the dentist who performed the treatment was not present when completing the questionnaire. The questionnaires were analyzed, and the data obtained have been used to create the tables included in the study.

The study received the positive approval of the University Scientific Commission of Ethics and Deontology no. 62/29.01.2024.

 DOI: 10.58179/RJDR1202

3. Results

64 patients aged between 17 and 62 years old participated in the study, of which 64.06% were women and 35.94% were men, 18.75% from rural areas and 81.25% from urban areas (Table no. 1.). Two age groups are highlighted: teenagers and young people aged between 17 - 35 years (57 patients - 89.06%), i.e. the overwhelming majority and the rest adults over 35 years old (7 patients - 10.94%).

Table 1. Demographic data of the participants in the study.

Patients	Urban	Rural	Total
	No / %	No / %	No / %
Women	33/ 80.48	8/ 19.51	41/ 64.06
Men	19/ 82.6	4/ 17.39	23/ 35.94
Total	52/81.25	12/ 18.75	64/ 100

* Description.

The reasons for presenting to the dentist were, in the vast majority, pain (30.9%) and a claim for tooth extraction (32.3%) and, to a lesser extent, scaling (14%), and periodic control (12.6%). Requests for more complex treatments, such as oral rehabilitation with bridges or removable dentures or implant prostheses, were found in a small number of patients (8.06%) (Table 2).

Table 2. Patients' reason for dental visit.

The reason for coming to the dentist	Women		Men		Total
	Urban	Rural	Urban	Rural	No / %
	(No / %)	(No / %)	(No / %)	(No / %)	
Toothache	9/12.64	4/5.61	5/7.02	4/5.61	22/30.9
Tooth extraction or treatment of a dental problem	7/9.83	3/ 4.21	8/11.23	5/7.02	23/32.3
Scaling or other treatment unrelated to a specific dental problem	7/9.8	1/1.4	2/2.8	0/0	10/14
Dental bridge or removable denture or implant prosthesis	2/ 3.22	0/0	3/ 4.83	0/0	5/8.06
Periodic inspection	9/12.6	0/0	0/0	0/0	9/12.6
Other	1/ 1.07	0/0	1/ 1.07	0/0	2/2.14

The patients included in the study primarily requested the application of fillings (45.5%) or, as the patients say, "fillings". In a smaller number, the requested treatments were extraction (16.4%), scaling (11.3%), bridge (7.5%) or root canal treatment (7.5%). No patient requested treatment with a removable denture or periodontal surgery. Very few patients were interested in teeth whitening (3.7%). A small part of the patients did not

 DOI: 10.58179/RJDR1202

request a certain treatment, they just came for periodic check-up (1.2%) (Table 3).

Table 3. The data obtained when asking: "What treatment did you request at the last visit to the dentist?".

The requested treatment	Women		Men		Total
	Urban	Rural	Urban	Rural	No / %
	(No / %)	(No / %)	(No / %)	(No / %)	
I don't know/no treatment.	2/2.53	1/1.26	1/1.26	1/1.26	5/6.32
Tooth filling	18/22.78	5/6.32	7/8.86	6/7.59	36/45.56
Tooth Extraction	4/5.06	2/2.53	5/6.32	2/2.53	13/16.45
Scaling	8/10.12	0/0	1/1.26	0/0	9/11.39
Teeth whitening	2/2.53	0/0	1/1.26	0/0	3/3.79
Dental bridge	2/2.53	1/1.26	2/2.53	1/1.26	6/7.59
Removable prosthesis	0/0	0/0	0/0	0/0	0/0
Endodontic Treatment	2/2.53	1/1.26	2/2.53	1/1.26	6/7.59
Periodontal surgical interventions	0/0	0/0	0/0	0/0	0/0
Others	1/1.26	0/0	0/0	0/0	1/1.26
Total	39/49.36	10/12.65	19/24.05	11/13.92	79/100

Participant responses about the treatments recommended by dentists were mostly "I don’t know or no treatment" (29.7%), followed by fillings (22.9%), then, in descending order, scaling (10.8%), bridges (9.4%), whitening (4%), periodontal surgery (2.7%) (Table 4).

Table 4. Responses of patients to the question "Instead of the treatment you requested, what other treatment did the dentist suggest?".

The suggested treatment	Women		Men		Total
	Urban	Rural	Urban	Rural	No / %
	(No / %)	(No / %)	(No / %)	(No / %)	
I don't know/no treatment.	13/17.56	1/1.35	8/10.81	0/0	22/29.72
Tooth filling	9/12.16	3/4.05	3/ 4.05	2/ 2.7	17/22.97
Tooth Extraction	5/ 6.75	4/ 5.4	3/ 4.05	1/ 1.35	13/17.56
Scaling	7/ 9.45	0/0	1/ 1.35	0/0	8/10.81
Teeth whitening	3/ 4.05	0/0	0/0	0/0	3/ 4.05
Dental bridge	3/ 4.05	0/0	3/ 4.05	1/ 1.35	7/ 9.45
Removable prosthesis	0/0	0/0	0/0	0/0	0/0
Endodontic Treatment	1/ 1.35	0/0	0/0	0/0	1/ 1.35
Periodontal surgical interventions	0/0	0/0	2/ 2.7	0/0	2/ 2.7
Others	0/0	0/0	0/0	1/ 1.35	1/ 1.35
Total	41/ 55.4	8/ 10.81	20/ 27.02	5/ 6.75	74/100

 DOI: 10.58179/RJDR1202

Correlating the answers to questions numbered 2, 3, 4, we made the following 4 groups of patients:

- group I: 68.75% of patients received the requested treatment,
- group II: 14.06% of patients requested a treatment and the doctor recommended something else and they accepted,
- group III: 4.68% of the patients requested a treatment and the doctor recommended something else and they did not accept it,
- group IV: 12.51% of patients claim that the doctor did not recommend any treatment or they do not remember.

The majority of patients in group I (patients who received the requested treatment) have higher education (65.9%) – 19 women out of 27, 10 out of 17 men, while almost a third (22.7%) of these patients have high school. As for the average monthly income, it is below 1500 lei for most of these patients (72.7%) - 70.37% of women and 88.23% of men.

Most of the patients in group II (patients who requested a treatment and the doctor recommended something else and accepted) have higher education - 77.77% of the patients. No patient in this group falls into the training level of grades 1-8. Regarding the average monthly income, it is for most of these patients below 1500 lei (25%) and between 1500 and 2500 lei per month (25%).

The patients from group III (patients who requested treatment and the doctor recommended something else and did not accept it) have higher education (66.6%), while almost a third (33.3%) of these patients graduated highschool. As for the average monthly income, it is below 1500 lei for most of these patients (66.66% of these patients).

Most of the patients in group IV (patients who claim that the doctor did not recommend any treatment or that they do not remember) have higher education - 75% of patients, while almost a quarter of these patients graduated highschool. As for the average monthly income, it is below 1500 lei for most of these patients (75%). As can it be seen from the analyzed data, in the four groups of patients the distribution according to the level of training and according to the average monthly income is almost similar, so these two variables do not seem to influence the doctor-patient communication.

4. Discussions

The reasons for the patients coming to the dental office are pain and the request for teeth extractions and less for scaling and periodic control, which shows a low level of oral health education. Most of the patients included in the study received the requested treatment. This correlates positively with the level of education. The treatment requested was mostly the treatment of dental caries by teeth fillings. Patients refuse expensive treatments, then teeth extractions for financial, pain and discomfort reasons. The refusal of expensive treatments is justified by the average monthly income (most patients have a minimal monthly income).

 DOI: 10.58179/RJDR1202

Sondell [13] published a review of the literature, where different doctor/dentist-patient relationships and communication characteristics are described and analyzed, suggesting a new model of dentist-patient communication, which states that what is done and what is said during dentist-patient encounters will have an impact on outcome. It is concluded that a theory of communication is lacking in the dental context, and the need to develop a reliable and valid interaction analysis system for patient-dentist communication is confirmed.

A scoping review [14] on communication tools in esthetic dentistry concluded that only little is known about implementing communication tools in dentistry and their impact on patient communication and patient satisfaction. It is stated that verbal and visual communication methods like PowerPoint presentation for patient information [15], before and after photos of other patients, wax-up on the model of the patient, intraoral mock-up and digital computer-imaging simulation positively influence patient satisfaction, patient-dentist relationship, information retention, treatment acceptance, quality of care or treatment outcome.

Communication between the dentist and the patient influences the realization of the complex treatment plan. Since patients in Romania have a low monthly income, their addressability to the dentist is reduced. Dentist-patient communication is positively influenced by the level of education, patients with higher education having a greater capacity to understand and accept the treatment plan. Patients prefer doctors to communicate with them in a patient-centered manner and female dentists usually have higher communication abilities compared with males [16]. The dentists considered important to show interest in their patients' symptoms, use language that is easy to understand, explain the (dental) problem clearly and discuss the treatment plan with their patients [17].

Older age and more experience have a profound positive effect on attitudes and awareness regarding communication skills in this study. Dentists with experience more than 4 years are always or often resourced (books, articles, videos) about communication skills with patients, are always or often very convincing when proposing the treatment plan to the patients, using open questions, attending always or often communication skills courses more than the younger and less experienced doctors [16,18].

The average monthly income is a key factor in communication. Due to the lack of information, regarding the positive effects of dental prophylaxis that reduces long term treatment costs, patients arrive at the dental office in advanced stages of degradation of their oral health, when the treatments have become complex are expensive and almost impossible to pay with an extremely low monthly income.

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

 DOI: 10.58179/RJDR1202

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 [1]. Excellent communication between the dental professional and the patient promotes better oral health [19].

The patients' trust in their dentist's decisions regarding their dental care turned out to be a significant predictor of both satisfaction and loyalty [17,20].

The visit to the doctor must influence the patient's emotional states and worries. Doctors are not only professionals, experts, but also people to whom people turn when they feel vulnerable. Therefore, support, empathy (understanding of the other person's condition), care and trust, as well as the accurate examination of mental states and emotions are important elements in building a cooperative relationship and also represent the key to the feeling of well-being, the patient feeling cared for and understood [21-23].

The most important communicative strategy in dentistry is a brief, but convincing description of the procedures the doctor will perform to the patient. This has an anxiety-reducing effect, which is significantly important in dentistry [17,24]. Delivering professional explanations in simple language is also the first step to engage patients and make them partners in their own care, which has been shown to increase satisfaction [25].

Patients with different awareness levels and health culture come to the dental office. The dentist must consider the patients' ability to understand the information necessary to make a treatment decision and to assess the foreseeable consequences of a decision or non-decision [26].

The specialized literature clearly mentions the fact that the future in service marketing is the professional approach to customer relations [27]. In the "hyper-competitive" era we live in, maintaining long-term growth requires those who offer services to find new ways to win „customers". Therefore, instead of keeping their customers at a distance, service providers must develop strategies and tactics to bring them closer. If companies - including dental offices - want to succeed in today's competitive market, where customers are becoming smarter and "loyalty" towards the service provider is decreasing, it is time for a major change. It is time to become aware of a new term in an old concept, namely "Success in the relationship with the client" [28].

Health culture and management as a part of the patient's general culture and knowledge 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 [26].

Dentists play a significant role in oral health and prevention, so, they should have a positive attitude and self-efficacy in doctor-patient communication with practical applications. Communication skills should be

 DOI: 10.58179/RJDR1202

included as an important educational goal for dentists and given enough weight in objective, systematic clinical assessments [16].

5. Conclusions

Doctors should have care and compassion towards the patients because their caring attitude and the patient's trust determine the satisfaction and agreement regarding the treatment. When patients perceive their interaction with the doctor as personalized – they are listened to, respected and confident that they are talking to someone who wants to help them – they feel special and cared for. The dentist's attitude is especially important when communicating with patients, therefore, clinical skills must be mixed with human skills, such as building a lasting relationship based on communication and understanding the patient from a psychosocial point of view, together with his expectations, worries and emotions.

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Author contributions

All authors read and approved the final manuscript. All authors have equally contributed to this work.

Acknowledgements

Not applicable.

Funding information

Not applicable.

Conflict of interest statement

No potential conflicts of interest concerning this study.

Data availability statement

Data availability at request.

Ethics statement

The study received the positive approval of the University Scientific Commission of Ethics and Deontology no. 62/29.01.2024.

ORCID

Iulia-Roxana Marinescu: https://orcid.org/0000-0002-1254-7201
Alexandru Andrei Iliescu: https://orcid.org/0000-0003-2325-6757
Monica Scrieciu: https://orcid.org/0000-0003-0696-7100
Horia Octavian Manolea: https://orcid.org/0000-0002-2710-5537
Sanda Mihaela Popescu: https://orcid.org/0000-0003-3011-6322

How to cite:

Marinescu IR, Drăghici EC, Iliescu AA, Scrieciu M, Manolea HO, Popescu SM. Role of dentist-patients communication in oral rehabilitation. Rom J Dent Res. 2024;.Vol 1(Nr 2):19-28.