



Patient Satisfaction with Communication Skills of Dentist in Western Uttar Pradesh: A Pilot Study

Authors: ¹Palak Agarwal, ²Dharmendra Kumar Dubey, ³Shivi Khattri

Affiliations: ^{1,2}Symbiosis Institute of Health Sciences, Symbiosis International (Deemed University), Pune, Maharashtra India, ³Subharti Dental College and hospital, Meerut, Uttar Pradesh, India

ABSTRACT

Background: People use soft skills to talk, solve issues, motivate, lead in comparison to hard skills. In healthcare soft skills helps to arrange, plan, and control things in more efficient manner. They are an important key to success in dental practice. An efficient and effective interpersonal skill increases professionalism and confidence, widens friendliness, strengthens coordination and spreads optimism in a character. This study evaluates soft abilities of dentists in Meerut city. **Method:** This is a cross-sectional questionnaire-based study performed during the month of May and June 2020 among the patient visiting the private dental clinic in Meerut. Sample size of study was 350. Frequency and percentage of responses to every query have been mentioned. The data is analysed in IBM SPSS 2020 software. **Result:** Most of the respondents (87.40%) were satisfied with the treatment plan explained to them. Majority of respondents (3.7%) felt sufficiently concerned in their Treatment plan and 5.7% showed lack of confidence in the dentist however, 2.9% patient had a bad experience with the dentist. **Conclusion:** the study shows 19.4% dentist defined and replied patient problems beyond the expectancy of the sufferers. 79.4% felt that dentists met expectancies in being supportive and know what the patient was feeling. It is important to recognize the patient mind set and consequently formulate a treatment plan that will meet their requirements. By making the patients completely informed about the care offered by the dentist, dentist generally makes certain that the gesture is returned by way of being dependable and persevering with care.

Keywords: Communication, Dentist, Meerut, Patient Satisfaction, Soft skills

I. INTRODUCTION

Dentistry is a part of healthcare career which is responsible for making and nurturing appropriate dentist-patient relationships. Just like physician-patient relationships are critical aspect of any healthcare career especially so with dentistry. Patients visit dentist with oral health problems only when they have pain which hampers their quality of life. Seeking oral health care from a dentist is most of the times is a necessity only when there is an emergency dental problem which needs instant care. In today's times, particularly in this modern era where patients are aware of both preventive and restorative care other than emergency dental problems. With the rise in consumerism in dentistry, patients look for a dentist who is patient-targeted, individual-targeted instead of a dentist who is a famous characteristics of excessive doctor manipulative kind. A dentist who has adopted the

fashion of 'individual – centered' can be more patient-oriented and more accessible. This patient -centric approach of a dentist requires suitable verbal exchange and empathy abilities.

Strong interpersonal expertise is the capacity to make use of one's information effectively and efficiently. Skills can be acquired anytime and are necessary for working in an organization or any dental clinic or hospital. Social competencies are those personal values and skills that decide person's capability to fit in a particular team or an organization. The soft skills are competencies human beings use to resolve troubles, communicate, lead and assume creatively in assessment to hard skills, which can be machines, gear, item and are technically oriented. Interpersonal skills are used in non-public and regular lifestyles. Communication skill increases professionalism, boom confidence, increases coordination, friendliness, and spreads optimism in man or woman to extra volume. They also help in managing the changes that occur during the dental practice (Ram bhai, et al ,2016).

This process of verbal exchange requires empathy (Rouse and Hamilton,1989). Empathy can be defined as an ability to understand other person by imagining oneself in other persons situation. Without empathy verbal exchange with others might be one sided and it will create issues in relationships as we are unable to understand the feelings of others. It is vital that a dentist as an oral health physician should have capabilities of empathy for effective conversation with patients. This brings the idea of dignity holding care. It is likewise called psychosocial care. The connection among care provider's affirmation and affected person's self -perception, underscores the idea of dignity holding care. A dentist with empathy is aware of how his or her patient feels and will accordingly provide emotional guide. When the patient says, "I sense awful when my buddies ridicule me for my bad breath or crooked tooth" and the dentist is capable of respond by way of pronouncing, "Well, I apprehend how you sense. Let us together make out what's wrong with your teeth and we will come to a treatment which will be a great fit to you". This reply from a dentist will result in a sense of togetherness in patients. Empathy additionally helps in showing dignity and conserving the personhood of the patient. Dentists need to inspire patient to participate in decision making and check their willingness and capability to observe toward treatment plan for his/her oral health problem. This essentially strengthens the connection and also enables to construct a culture of kindness within the dental sanatorium set up.

A powerful communication presents benefits both for patients and dentist. Benefits for patients are specifically affected person satisfaction and compliance. Higher ranges of patient pride and compliance are visible to be associated with physician's nonverbal conversation, behaviours which include distance between the health practitioner and affected person, ahead lean and frame orientation.

Knowing the importance of soft skills in dentistry, which ought to affect the affected person delight, the prevailing study was deliberate with goal to research the effect of gentle talents of dentists on patient's perception of quality.

There are studies which tells that patient characteristic can influence dentist perception about the patient, which may influence the dentist behaviour towards the patient. A study by O'Shea and others stated that dentist perceptions of patients falls under three categories(Corah and others 1986):

- **Dental sophistication** (maintaining oral health, believe in good oral healthcare)
- **Interpersonal Responsiveness** (shows respect, is attentive, courteous)
- **Compliance** (follow appointment slots, pay bills, accept treatment plant)

The current study also about the relationship between patients' qualities and dentist perception. Moreover, such attributes and perceptions are assessed to brings about result specifically in dentist practices, as patients perceive them.

Knowing the priority of soft skill in dentistry and which can affect satisfaction of the patient, the present study was planned to find the effect of soft skill of a dentist on the patient perception.

METHOD

The study is carried out in the month of May and June 2020 and is a cross-sectional questionnaire-based study (Rambhai, et al, 2016). The survey was done among the randomly selected patients visiting the private dental clinic in Meerut. A questionnaire of 22 questions was distributed among the patient who visited the dental clinic. The patients we given the forms after the treatment was done, so that they can share their experience. Prior to the start of the study permission was taken from the Head of Department, Symbiosis Institute of Health Science, Pune.

Sample Size: Since there was no predominant information available. Therefore, the sample size was determined using single proportion formula assuming that 50% of subjects suffering with communication between patient and dentist in the population. Considering the outcome variable sample size was calculated 385 for estimating the expected proportion with 5% absolute precision and 95% confidence. Due to limited time period of master dissertation thesis we could not reach the expected number (sample size).The final sample size was 350 for this study.

Questionnaire: Content, construct legitimacy of questions was checked in a pilot study on 30 arbitrarily chose patients who visited the OPD of Subharti Dental hospital, Meerut. These patients were excluded from the final study. After conducting the pilot study, an intensive conversation with the specialist was done to check the flaws in designing of questionnaire and corrections were made accordingly.

Data Collection

Participation of the patients was voluntary and anonymous. There was no confinement to incorporation of patients in view of sexual orientation, cast, religion and financial status. The participants provided information on their age, gender and also their comfortable level with male or female dentist. Instrument to evaluate soft skill was self – designed pretested questionnaire consisting 22 questions. The 22 questions survey consist of questions related patient satisfaction, anxiety and their perception of dentist behaviour and empathy. All the questions were in English however during interview communication was facilitated in nearby language by the investigator. The age group which responded was from 12yrs-65yrs above.

Statistical Analysis

The survey forms which were gathered were screened for culmination, any unfilled or incompletely filled form were disposed -off. All the forms were included for final examination and numbered sequentially. All question and responses were coded numerically. Data management and its verification was done with MS Office excel and analysed with IBM SPSS Software V.22.0. Results were presented in frequency and percentages of responses with descriptive statistics.

RESULTS

In this study, around 350 responses were received. The 250 respondents filled the survey questionnaire on google forms and 100 forms were filled by the patients manually in the private clinic in Meerut city. According to Table-1 among 350 respondents, maximum 275 (78.6%) come to know about the dentist via friends and relative and around 60 (17.1%) patients were referred by another doctor and remaining 15 (4.3%)by the advertisement and hoardings. The patients have a frequent visit to the dental clinic so they were categorized as few visits out of 350 around 148 (42.3%) have few visits, no dental visits 16 (4.6%), once or twice dental visits 116 (33.1%) and around 70(20%) have regular visits to the dental clinic. The main reason behind visiting the dental clinic is Check -up and consultation 95 (27.1%), then scaling 52 (14.9%), Root canal treatment 51 (14.6%), dental fillings 50(14.3%) and orthodontics treatment 38 (10.9%).The patient were also asked about their level of comfort with male or female dentist so majority of the patient respondent for both 313 (89.4%) and for female dentist 18 (5.1%), male dentist 19(5.4%). 98.8% respondents felt that their dentist was supportive and understood what they were feeling, however 1.1 % does not felt supportive (Qno.5). Total 298 (85.1%)

respondents felt that their dentist always listens to their sufferings while 48(13.7%) felt that only sometimes they were given attention and 4 (1.1%) feels that they never given attention. (Qno.6) Almost 342 (97.7%) respondents were asked about their discomfort and problems during the treatment while 8 (2.3%) were not satisfied (Qno.7). Majority of 312 (89.1%) respondents were informed about the payment options while 7 (2%) denied and 31 (8.9%) were informed sometimes (Qno.8). 97.4% respondents were satisfied with the behavior of the staff and 2.6% found that it was not upto the mark (Qno.9). About 307 (87.7%) patients were able to maintain their oral hygiene after the treatment while 0.9% denied to maintain and 11.4% did have a say about what changes they have to make in their oral hygiene. The principal reason behind dissatisfaction of the patients is multiple visits for the treatment (22.6%), appointment time slots (11.1%), longer waiting duration (6.6%), overpriced treatment (2.9%) and 56.9% does have any reason for dissatisfaction.

Table 1: Showing the response of the Patients

S No.	Questions	Options	Frequency	%
1	How do you come to know about your dentist	advertisements and hoardings	15	4.3
		referred by another doctor	60	17.1
		via a friend or relative	275	78.6
2	How frequently have you visited your dentist.	Few dental visits	148	42.3
		No dental visit	16	4.6
		Once or Twice dental visit	116	33.1
		Regular dental visits	70	20
3	Reason for visiting the dentist	Check-up and consultation only	95	27.1
		Dental filling	50	14.3
		Orthodontic treatment	38	10.9
		Root canal treatment	51	14.6
		Scaling (teeth cleaning)	52	14.9
		Tooth removal/ extraction	39	11.1
		Others	25	7.1
4	Do you feel comfortable with male dentist or female dentist	Both	313	89.4
		Female	18	5.1
		Male	19	5.4
5	Did you feel your dentist was supportive and understood what you were trying to feel and experience	below expectation	4	1.1
		beyond expectation	68	19.4
		met expectation	278	79.4
6	Do you think your dentist is a patient listener	Always	298	85.1
		Never	4	1.1
		Sometimes	48	13.7
7	Did your dentist ask you about your discomforts and problems during the treatment	no	8	2.3
		yes	342	97.7
8	were you informed about the payment options	always	312	89.1
		never	7	2
		sometimes	31	8.9
9	Were you happy with how the staff / associates treated you	below expectation	9	2.6
		beyond expectation	49	14
		met expectation	292	83.4
10	After talking with your dentist were	Maybe	40	11.4

	you able to know what changes you have to make in your dental health in next few months	no	3	0.9
		yes	307	87.7
11	Reason for dissatisfaction	appointment time slots	39	11.1
		longer waiting duration	23	6.6
		multiple visits	79	22.6
		overpriced treatment	10	2.9
		none	199	56.9

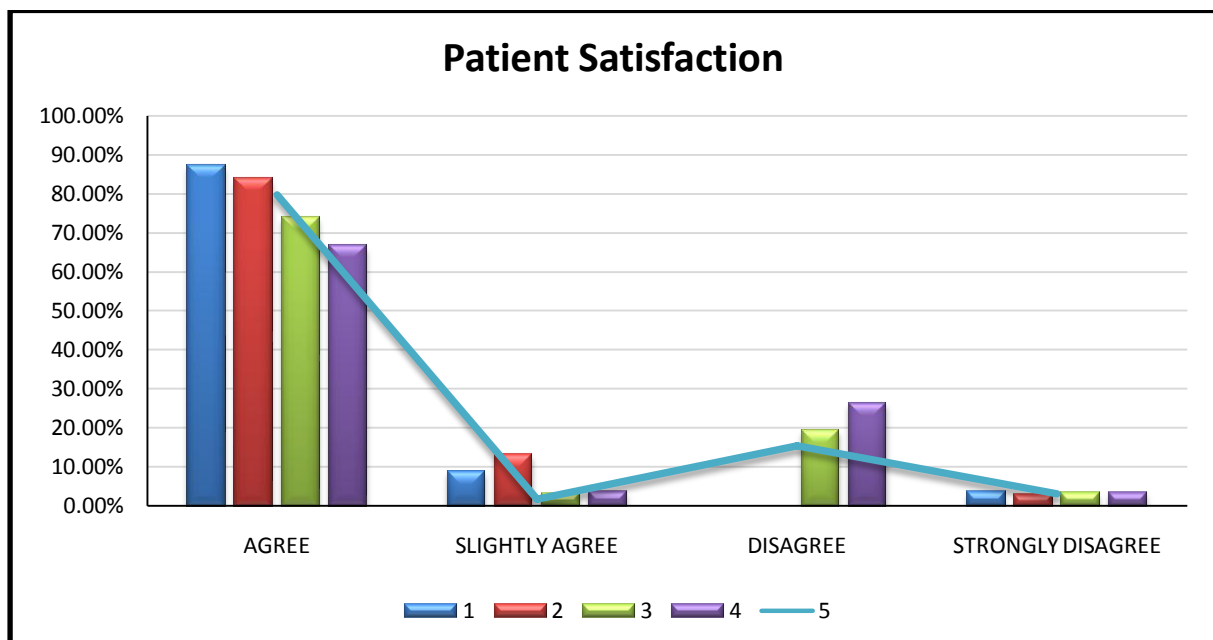
Graph-1:The majority of (87.40%) felt that they were explained about the treatment plan and only 3.70% strongly disagreed while 8.90% respondents slightly agree with the explanation of treatment plan.

84% of the patients agreed that their dentist was thorough in his procedure while minimum of 2.90% of patients strongly disagreed and 13.10% slightly agreed. Maximum 74% of respondents for provision of the treatment options by the dentist and 3.40 % strongly disagreed while 3.10% slightly agreed and 19.40% disagreed.

According to the graph around 66.60% respondents agreed that they were told about the pro and cons of the treatment whereas 3.40% strongly disagreed and 26.30% disagreed, 3.70% slightly agreed.

79.70% patients were satisfied with the time given to them by the dentist while 3.10% were not satisfied and 15.40% patients disagreed and 1.70% slightly agreed to the satisfaction with the time given to them.

Graph-1: Patient Satisfaction



Median, first quartile and third quartile

Regular dental check-up: Median is 4 which denotes around 50% patients rated below very good and 50% of patients above very good. In favor of regular dental check-up and Q1 (lower quartile) is 3 which means that

around 25% of patients rated good. According to results are inclined towards regular dental check-ups as lower quartile and upper quartile are in range of 3-5 which means they are moderate to high and are in favor of regular dental check-ups.

Satisfied with contacting practice on phone: Q1 (lower quartile) is 3 which means that below 25% of patients rated good experience on contacting practice on phone and Q3 (upper quartile) is 4 which means that around 50% patients rated very good and minimum value is 2 which means 25% of patients rated poor as they felt unsatisfactory on contacting practice on phone. There are 4 outliers so we can ignore it. Patients have given moderate response on contacting practice by phone as Q1 (lower quartile) and Q3 (upper quartile) are in range of 3-4.

Satisfied with the dentist at clinic: minimum value is 3 which denotes that around below 25% of patients rated good for the dentist work. Q1 (lower quartile) is 4 which means around 50% rated very good. There are 4 outliers. Patients are highly satisfied with the dentist as Q1 (lower quartile) and Q3 (upper quartile) ranges between 4-5.

The warmth greetings given to patient by the dentist: median is 4.5 which means more than 50% respondents rated very good for the warmth given to them by the dentist. The minimum value is 3 which means around 25% rated good. Q1 (lower quartile) is 3 which means around 25% felt good with the warmth given to them by the dentist. Number of outliers is 4. Patients are highly satisfied with the warmth given to them by the dentist as Q1 (lower quartile) and Q3 (upper quartile) ranges between 3 and 5.

The respect shown to patient by the dentist: minimum value is 3 which means around 25% of patients rated good for respect shown to them by the dentist. Q1 (lower quartile) is 4 which is 50% according to which maximum of the patients rated very good. Patients are highly satisfied with the respect shown to them by the dentist as Q1 (lower quartile) and Q2 (upper quartile) ranges from 4-5.

Confidence in dentist: minimum value is 3 according to which 25% respondents rated good for confidence in dentist. Q1 (lower quartile) is 4 which means 50% respondents rated very good and have confidence in dentist. Median 4 according to which 50% of overall patients rated very good. Patients are more inclined towards dentist confidence as Q1 and Q2 ranges from 4-5 which is increasing moderate to high.

Experience rating: the minimum value is 1 which means less than 25% respondents rated very poor for dissatisfaction with private dental practice. Median is 4 around 50% patients rated very good and are satisfied with private dental practice. Q1 (lower quartile) is 3 around 25% rated good for private dental practice. Patients are more inclined toward private dental practice as Q1 and Q3 ranges from 3-5 which is increasing from moderate to high.

DISCUSSION

The main objective of this study is to measure the satisfaction of the patient with the communication skill of the dentist. Healthcare sector today is turning out to be more patient focused and subsequently patient's insight of care and evaluation of fulfillment level must be paid attention as it has a great impact on the treatment and prognosis of the patient in future. Soft skills have a major role in creating patient-dentist relationship. It is a bunch of character attributes, like a proportion of one's enthusiastic knowledge and is an imperative part in adding to the achievement of a training. The main fundamental desires for a patient from their dentist are: Friendliness, compassion, dependability, control, choices and options.

In this study it was found through the survey that majority of the respondents come to know about the dentist from their friends and relatives. By this it is interpreted that they were satisfied with their previous dentist. A well-disposed and congenial dental specialist is continuously favored over an inconsiderate or harsh one.

Respondents were also asked about the comfortable level with male dentist or female dentist, around 89% patients were comfortable with both. This proves that the upcoming generation is not gender biased and does not consider gender when it comes to decision making in choosing a dentist. Soft skills of a dental specialist regarding the treatment plan explanation, responding to questions and listening appropriately to the patients' worries without intruding on them is moreover significant. Relating to the patient and tuning in to them mindfully will help in what the patient needs. It is additionally imperative to convey it back to the patient that the problem has been perceived and utilizing his basic reasoning aptitudes an answer can be formulated which addresses patient's issues. By this we can say that with the dentist empathy and proper explanation of the treatment plan increases patient satisfaction.

In the survey the majority of (87.40%) felt that they were explained about the treatment plan, by this we can say that a notable number of dentist's communicated well with the patients and it is believed that investing more energy with patients at their underlying visit will make more improvement. Treating a patient overall and not simply the illness, giving them choices and making them a part of their treatment and also make them feel they have control over situation. This will give patient sense of belongingness and patient will have increase trust in dentist. There is an increasing in satisfaction of patient's about dentist taking care about their discomfort during the treatment. As dentist should always be compassionate and try to make the patient feel calm during the treatment which will create positive reassurance among patients. Training the front desk person to welcome the patients, asking him, how was his arrangement while closing his visit, settling on follow up decisions if uneasiness is envisioned, appropriately speaking via phone and keeping away from any miscommunications, help fabricate relations with the entire group and make them feel greater. Majority of the respondents were satisfied with the communication skills of the dentist so by this we can say that soft skill has a major role in maintaining doctor -patient relationship.

CONCLUSION

Inside the constraints of the current investigation, I finish up that communicating abilities structure an indispensable aspect of a dental specialist's character also, should be acted as an individual as well as a group (i.e., with partners and staff) for a fruitful dental practice with cheerful patients. Patients see administration quality by looking at their desires to genuine encounter. It is exceptionally important to comprehend the patient thinking as there is a need to plan treatment that meets their prerequisites. Laying it out plainly if the patient sees care at a certain level however expected something more unique, and afterward they will be dissatisfied. Both observation and desire are perspectives and we as dental specialists need to get this interrelation to keep our patients upbeat. By making patients completely educated accomplices in the care given by the dentist, it is guaranteed that the motion is returned by being faithful and proceeding with care with that particular dentist. Work fulfillment, re-established inspiration and expanded efficiency can be accomplished by utilizing powerful communicating abilities.

ACKNOWLEDGEMENT

We would like to acknowledge the faculty of Subharti Dental College and hospital and Symbiosis Institute of Health Sciences for supporting directly and indirectly to completion of this article.

Conflict of interest:

There is no conflict of interest

Funding source:

There is no funding for this article.

References

- [1] Street, Jr RL. Patients' satisfaction with dentists' communicative style. *Health Communication*. 1989 Jul 1;1(3):137-54.
- [2] Rambhia M, Shah K, Bhate P, Kalra D, Rajeev H. Evaluation of Patient Satisfaction Based on Communication Skills of Dentists in Mumbai City: A Cross-Sectional Questionnaire Based Survey. *INTERNATIONAL JOURNAL OF SCIENTIFIC STUDY*. 2016 Feb 1;3(11):48-52
- [3] Rouse RA, Hamilton MA. Dentists' technical competence, communication, and personality as predictors of dental patient anxiety. *Journal of Behavioral Medicine*. 1990 Jun 1;13(3):307-19.
- [4] Fico AE, Lagoe C. Patients' perspectives of oral healthcare providers' communication: considering the impact of message source and content. *Health communication*. 2018 Aug 3;33(8):1035-44.
- [5] Corah NL, O'Shea RM, Bissell GD. The dentist-patient relationship: mutual perceptions and behaviors. *The Journal of the American Dental Association*. 1986 Aug 1;113(2):253-5.
- [6] Jones LM, Huggins TJ. Empathy in the dentist-patient relationship: review and application. *NZ Dent J*. 2014 Sep 1;110(3):98-104.
- [7] Goldsmith C, Slack- Smith L, Davies G. Dentist- patient communication in the multilingual dental setting. *Australian Dental Journal*. 2005 Dec;50(4):235-41.
- [8] Woelber JP, Deimling D, Langenbach D, Ratka- Krüger P. The importance of teaching communication in dental education. A survey amongst dentists, students and patients. *European Journal of Dental Education*. 2012 Feb;16(1):e200-4.
- [9] Sondell K, Söderfeldt B, Palmqvist S. Underlying dimensions of verbal communication between dentists and patients in prosthetic dentistry. *Patient education and counseling*. 2003 Jun 1;50(2):157-65.
- [10] Timofe MP, Albu S. Quality management in dental care: patients' perspectives on communication. a qualitative study. *Clujul Medical*. 2016;89(2):287.
- [11] Nestel D, Betson C. An evaluation of a communication skills workshop for dentists: cultural and clinical relevance of the patient-centred interview. *British dental journal*. 1999 Oct;187(7):385-8.
- [12] Van der Molen HT, Klaver AA, Duyx MP. Effectiveness of a communication skills training programme for the management of dental anxiety. *British dental journal*. 2004 Jan;196(2):101-7.
- [13] Myers HL, Myers LB. 'It's difficult being a dentist': stress and health in the general dental practitioner. *British dental journal*. 2004 Jul;197(2):89-93.
- [14] Carey JA, Madill A, Manogue M. Communications skills in dental education: a systematic research review. *European Journal of Dental Education*. 2010 May;14(2):69-78.
- [15] Ayn C, Robinson L, Nason A, Lovas J. Determining recommendations for improvement of communication skills training in dental education: A scoping review. *Journal of Dental Education*. 2017 Apr;81(4):479-88.
- [16] Busby M, Burke FJ, Matthews R, Cyrta J, Mullins A. The development of a concise questionnaire designed to measure perceived outcomes on the issues of greatest importance to patients. *British dental journal*. 2012 Apr;212(8):E11-.
- [17] Collett HA. Influence of dentist-patient relationship on attitudes and adjustment to dental treatment. *The Journal of the American Dental Association*. 1969 Oct 1;79(4):879-84.
- [18] Kadanakuppe S. Effective communication and empathy skills in dentistry for better dentist-patient relationships. *J Dent ProblSolut* 2 (3): 058-059. DOI: 10.17352/2394-8418.0000. 2015;20.
- [19] Grewal N, Sethi T, Grewal S. Widening horizons through alternative and augmentative communication systems for managing children with special health care needs in a pediatric dental setup. *Special Care in Dentistry*. 2015 May;35(3):114-9.
- [20] Horowitz AM, Wang MQ, Kleinman DV. Opinions of Maryland adults regarding communication practices of dentists and staff. *Journal of health communication*. 2012 Nov 1;17(10):1204-14.
- [21] Kulich KR, Berggren U, HALLBERG LR. A qualitative analysis of patient-centered dentistry in consultations with dental phobic patients. *Journal of health communication*. 2003 Mar 1;8(2):171-87.
- [22] Lahti S, Tuutti H, Hausen H, Kaarianen R. Patients' expectations of an ideal dentist and their views concerning the dentist they visited: do the views conform to the expectations and what determines how well they conform?. *Community dentistry and oral epidemiology*. 1996 Aug;24(4):240-4.

- [23] Marzola R, Derbabian K, Donovan TE, Arcidiacono A. The science of communicating the art of esthetic dentistry. Part I: patient- dentist- patient communication. *Journal of Esthetic and Restorative Dentistry*. 2000 May;12(3):131-8.
- [24] Maybury C, Horowitz AM, Wang MQ, Kleinman DV. Use of communication techniques by Maryland dentists. *The Journal of the American Dental Association*. 2013 Dec 1;144(12):1386-96.
- [25] Mellor AC, Milgrom P. Dentists' attitudes toward frustrating patient visits: relationship to satisfaction and malpractice complaints. *Community dentistry and oral epidemiology*. 1995 Feb;23(1):15-9.
- [26] Mostafa MM. An empirical study of patients' expectations and satisfactions in Egyptian hospitals. *International Journal of Health Care Quality Assurance*. 2005 Dec 1.
- [27] Narayanan A, Greco M. The Dental Practice Questionnaire: a patient feedback tool for improving the quality of dental practices. *Australian Dental Journal*. 2014 Sep;59(3):334-48.
- [28] Newsome PR, Wright GH. A review of patient satisfaction: 2. Dental patient satisfaction: an appraisal of recent literature. *British dental journal*. 1999 Feb;186(4):166-70.
- [29] Nowak MJ, Buchanan H, Asimakopoulou K. 'You have to treat the person, not the mouth only': UK dentists' perceptions of communication in patient consultations. *Psychology, Health & Medicine*. 2018 Jul 3;23(6):752-61.
- [30] Patil MS, Patil SB. Geriatric patient–psychological and emotional considerations during dental treatment. *Gerodontology*. 2009 Mar;26(1):72-7.
- [31] Ranjan P, Kumari A, Chakrawarty A. How can doctors improve their communication skills?. *Journal of clinical and diagnostic research: JCDR*. 2015 Mar;9(3):JE01.
- [32] Rankin JA, Harris MB. Patients' preferences for dentists' behaviors. *Journal of the American Dental Association (1939)*. 1985 Mar 1;110(3):323-7.
- [33] Riley III JL, Gordan VV, Rindal DB, Fellows JL, Qvist V, Patel S, Foy P, Williams OD, Gilbert GH, Dental Practice-Based Research Network Collaborative Group. Components of patient satisfaction with a dental restorative visit: results from the Dental Practice-Based Research Network. *The Journal of the American Dental Association*. 2012 Sep 1;143(9):1002-10.
- [34] Riley III JL, Gordan VV, Hudak-Boss SE, Fellows JL, Rindal DB, Gilbert GH, National Dental Practice-Based Research Network Collaborative Group. Concordance between patient satisfaction and the dentist's view: findings from the National Dental Practice-Based Research Network. *The Journal of the American Dental Association*. 2014 Apr 1;145(4):355-62.
- [35] Rouse RA, Hamilton MA. Dentists' technical competence, communication, and personality as predictors of dental patient anxiety. *Journal of Behavioral Medicine*. 1990 Jun 1;13(3):307-19.
- [36] Rozier RG, Horowitz AM, Podschun G. Dentist-patient communication techniques used in the United States: the results of a national survey. *The Journal of the American Dental Association*. 2011 May 1;142(5):518-30.