

ORIGINAL ARTICLE

Apprehensions/ Fear due to Myths Associated with Scaling among the patients attending Tertiary Care Hospital

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ABSTRACT

Background: Oral health is thought to be an essential part of general healthiness. Poor oral hygiene can significantly affect the quality of life which may initiate deterioration of overall health.

Aim: To find out reasons or misapprehensions that stop the dental patients from getting scaling procedure.

Methodology: This questionnaire-based cross-sectional study was conducted in tertiary care dental hospital of Multan from November 2019 to February 2020. Three hundred and six patients filled a questionnaire designed and tested for this study. The ethical approval (MDC-1290) was taken from the Dental Hospital, informed consent was obtained from the participants in the study.

Results: Out of 306 participants, 49% participants were males and 51% were females. 24% percent participants reported that we have more than one reasons for avoidance of scaling procedure. Among other fears top-most were 16% participants believed that scaling is a painful procedure and 13% said that scaling increases the mobility of teeth.

Conclusion: Now-a-days misapprehensions or fear regarding scaling has been reduced because of self-awareness programs started by social media activists

Keywords: Anxiety, Fear, Mobility, Myth, Scaling, Pain, Sensitivity

INTRODUCTION

Oral health is thought to be an essential part of general fitness¹. Dental hygiene maintenance is the main part of numerous practices, with majority of the finding and planning the treatment happening during hygiene visits². Poor oral hygiene as a result of untreated dental diseases, can significantly affect the quality of life which may initiate deterioration of overall health³. Knowledge about the oral health maintenance is thought as a vital prerequisite for wellbeing-related behavior⁴.

Scaling is the procedure of removing calculus and plaque from the roots as well as crowns of teeth by the help of specifically designed hand instruments known as scalers or by ultrasonic devices⁵. Dentists recommend dental scaling when examination of the mouth discloses deposits (hard or soft) around the teeth⁶. Local anesthesia also use during this procedure if patient feels pain during scaling. Teeth becomes sensitive immediate after scaling so the dentist recommends desensitizing tooth paste after scaling. Plaque and calculus cause periodontitis which signs as pain and mobility in the tooth with bleeding gums. Scaling prevents gingivitis and periodontitis by removing deposits on the tooth and gums⁷. Scaling not only reduces the periodontitis but also enhance the esthetics of the tooth. Scaling prevents further tooth decay and also reduce the effect of systemic diseases on the oral tissues. Dental scaling is recommended twice in a year but it may be different in periodontal diseased patients⁸.

Myth originates from a Greek word "mythos" meaning thought, story of unknown origin or a speech. It is a conventional story generally concerning some being, occasion with or without a definable basis, hero, natural explanation or facts⁷. Taboo originates after a Tongan word "tabu", meaning forbidden or set apart. No taboo is recognized to be worldwide, but some are common in majority of civilizations⁸.

There are many myths and fears regarding oral hygiene maintenance^{7,8}. Scaling is a great fear in the population⁹⁻¹¹. Some people think that scaling breaks the tooth into the parts⁷. Post

Received on 13-10-2022

Accepted on 24-02-2023

operative sensitivity is also a big fear among the people to keep them away from the scaling. Some people apprehend that scaling can weak the tooth and cause mobility in the teeth⁷⁻¹².

All these fears and myths are more prevailed in developing countries. Pakistan is one of these countries because 43% population is illiterate and 64% people are resident of rural areas where quacks are more active than professional doctors¹².

This mentality and behavior had led to an elevated level of lack of education and ignorance among common people about different components and aspects of life including general health as well as dental health of humans. Constrained research has been published related to various myths among the patients of dentistry. So, this research will help a long way to overcome the knowledge gap.

METHODOLOGY

Study design: This cross-sectional survey was questionnaire-based and was conducted in Multan Dental College from November 2019 to February 2020. Patients who were less than twelve years old were excluded from the study.

Sample size: A questionnaire was filled from 306 participants to find out the myths and fears prevailing about scaling among the general population and to identify why people are reluctant in getting the scaling procedure done. Average number of patients in outpatient department is 57 per day.

Sampling technique: So, the sample size was calculated as 306 by Open-Epi online calculator with 95% confidence interval and level of significance at 5%.

Data collection procedure: Simple random sampling was used in order to get desired sample size. Informed consent from the partakers and Ethical approval (MDC-1290) from Multan dental hospital was taken prior to data collection. Age, Gender and myths/Fear are quantitative data collected from the given sample size. Data was collected and tabulated and analyzed in terms of frequency and percentage.

RESULTS

Out of 306 participants, 150(49%) were males and 156(51%) were females. 34(11.13%) respondents were less than 14 years, 71(23.20%) partakers were from the age group 14-24 years, 126(41.17%) respondents were from the age group 25-34 years & 75(24.50%) respondents were 35 or above years old. 301(98.36%) partakers had the opinion that awareness programs should be conducted on and off (Table 1).

Table 1: Socio-demographic characteristics

Variable name with category	Frequency & %age	
Gender	Male	150 (49%)
	Female	156 (51%)
Age	< 14 years	34 (11.13%)
	14-24 years	71 (23.20%)
	25-34 years	126(41.17%)
	35 and above	75(24.50%)
Awareness programs should be conducted regarding these myths	Yes	301(98.36%)
	No	5(1.64%)

Fifteen (5%) participants feared that the gap between teeth could well be increased after scaling. According to 31(10%) partakers, scaling procedure can result in increased sensitivity. 12(4%) stated that we heard that one of the main complaints after this procedure would be loss of tooth surfaces or increased roughness of surfaces. 15(5%) partakers were afraid of cross infection during the entire scaling procedure. 25(8%) partakers were hesitant of scaling procedure because of high cost of treatment. 74(24%) participants reported that we have multiple (more than one mentioned above) reasons for avoidance of scaling procedure (Table 2).

Table 2: Fears/reasons which prevent the participants to avail the scaling procedure

Other reasons	n
Increases gap between teeth	15(5%)
Increases sensitivity	31(10%)
Post scaling tooth surfaces loss/roughness	12(4%)
Fear of cross-infection	15(5%)
High cost of treatment	25(8%)
More than one reason	74(24%)

DISCUSSION

Incidence of a various misapprehensions and taboos harmfully affected the dental health of our community. Appropriate education makes the people more practical and realistic.

Results of our research illustrates that 5% participants believed that pain will be long-lasting after the scaling which is contrary to another study where forty two percent people reported this cause¹³.

Sixteen percent partakers of our study believed that scaling is a painful procedure which is different from results (forty one percent) of another study done by Khan¹⁴. Ten percent partakers reported anxiousness which can be comparable to twenty six percent reported by Farooq¹³.

Thirteen percent participants thought that increases mobility of teeth was the reason which hinders them from receiving the treatment. In another study 33% of the participants believed this reason¹².

While other study conducted by Sharma revealed that many partakers believed that procedure of scaling leads to teeth loosening¹⁵. These results were also quite different from the study done by Ain TS where seventy three percent people believed in this reason¹⁶. The reason of difference of results is that the study of India had been conducted in under-developed area of Kashmir. This sort of misapprehension may also be inherited because of

false exaggerated information spread by those who already had bad dental experiences in past¹⁷.

In our study Five percent participants feared that the gap between teeth could well be increased after scaling which is far less than the results (59%) described by Farooq¹³. This low percentage may be because of the fact that since the last couple of years, social media sites have gained a great deal of attention and they have become a vital means of spreading awareness about health among many members of society¹⁸.

According to ten percent partakers of our study, scaling procedure can result in increased sensitivity. Sometimes dental specialists face numerous misapprehensions from patients, which can later have a huge impact on dental health of populace¹⁹.

In present study 12(4%) stated that we heard that one of the main complaints after this procedure would be loss of tooth surfaces or increased roughness of surfaces. This may be due to manual scaling procedure availed by many patients. As Yaghini et al demonstrated that manual scaling results in increased root surface roughness when compared with ultrasonic scaling²⁰. Present study indicates that 15(5%) subjects were afraid of cross infection during the entire scaling procedure whereas another study shows that 22.3% of the participants believe that visiting the dental surgeon is harmful as it could lead to Hepatitis B and C¹². This improved result may be due to the fact that teaching hospital environment is considered as safer and more accurate than private dental clinics and this may also be due to the awareness spread via social media²¹. In the study of Farooq¹³ 32% subjects reported that this treatment is costly while in this study 8 percent partakers were hesitant of scaling procedure because of high cost of treatment. In this study twenty four percent participants reported that we have multiple (more than one mentioned above) reasons for avoidance of scaling procedure. These factors could lead to avoidance of scaling and post-scaling follow up¹³. People should be educated by the dentists about dental health, oral hygiene and above mentioned misapprehensions²².

Practical Implication: This study will help the dentist to cope with myths of scaling in the community which will enhance the counseling ability of the dentists. The dentists who work in the community should be focused on these myths and guide the people to get rid of these myths.

CONCLUSION

Now-a-days misapprehensions or fear regarding scaling has been reduced because of self-awareness programs started by social media activists. There is also a need to educate the public regarding various oral health issues by dental health providers. Government should also take responsibility to start oral hygiene awareness campaigns or programs in the community so that morbidity of dental diseases could be reduced.

Conflict of interest: Nothing to declare

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