

Perception Of Patients Regarding Dental Scaling Reporting to Periodontology Department of Khyber College of Dentistry: A Descriptive Cross-Sectional Study

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Abstract

Background: In periodontology, clinical dental procedures such as scaling and polishing are performed with the intention of improving dental aesthetics and averting periodontal diseases. No previous research has examined the general public's perception of the effects of scaling. The purpose of the study was to debunk beliefs about tooth mobility and post-scaling sensitivity, as well as the idea that dental scaling is solely done to whiten teeth.

Objective: To assess how patients feel about the consequences of decreasing their reporting to the periodontology department.

Material and Methods: This descriptive cross-sectional study was conducted among patients visiting to Periodontology department of Khyber College of Dentistry Peshawar. Non-probability convenient sampling technique was adopted. A pre-structured questionnaire was used to collect data.

Results: According to the results, 41.1% (158) participants were females and 58.9% (226) were males. About 56.8% (218) of the participants had received scaling once in their life. 42.2% (162) got scaling done for teeth whitening, 20.6% (79) were advised scaling by their dentists before any procedure (braces, filing), 25.0% (96) to reduce bleeding gums, and 12.2% (47) to arrest gum inflammation. About 50.0% (192) participants were scared before getting scaling done, 62.8% (241) individuals experienced pain and sensitivity during the procedure, 67.2% (258) experienced sensitivity after getting scaling done, and for most of them, this sensitivity was relieved within a week after treatment. Like 46.6% (179) of patients were informed by their dentist that sensitivity is a normal part of recovery and 62.2% (239) patients found the treatment beneficial and only 37.8% (145) marked it harmful. Lastly 62.8% (241) of patients said that they would recommend scaling to others due to its beneficial effects.

Conclusion: The majority of patients had either good or moderate understanding of dental scaling, according to the results. It is often known that dentists can contribute to the advancement of dental scaling knowledge. Patients should be made aware of the goals of dental scaling by dentists.

Keywords: Scaling and polishing, Periodontology, mobility, sensitivity, and bleeding.

Introduction:

Periodontal health is becoming more widely known to the general public.^{1,2} Public concern over periodontal issues is growing, but myths about scaling persist about things like increased tooth mobility. In periodontology, scaling and polishing are clinical dental procedures used to enhance dental aesthetics and avoid periodontal disorders.⁵

Insufficient randomized controlled trials have been conducted to sufficiently answer the specified question, namely: Does sensitivity increase following scale and root planning? In almost half of the patients, evidence-based dentistry states, root sensitivity develops after subgingival scaling and root planning procedures. Following therapy, root sensitivity gets more intense for a few weeks before becoming less intense.⁶⁻⁹

Prior to treatment, it is advised in clinical practice to inform patients about the possibility of root sensitivity. Subjective patient reporting and the reaction to various stimuli should be used to assess the prevalence and severity of root

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sensitivity.¹⁰ The results of a different study corroborated the findings that careful plaque control reduces RDS (Root-Dentin Sensitivity) issues and that periodontal therapy's scaling, and root planning methods increase the number of teeth that react negatively to stimuli. Life quality is impacted by periodontal condition.¹¹ This has effects on how periodontal health is understood as well as how patient-centered outcomes are used in periodontal research. Many misconceptions are there among patients in regard to dental scaling. Some accept it causes post-usable awareness and tooth versatility, while others say it debilitates the teeth. People delay getting treatment because of these misconceptions, which causes periodontal diseases to develop. So, we need to dismiss those discernments with respect to dental scaling among patients. This study attempts to clear up misconceptions about the scaling method, which causes delays in the treatment of periodontal diseases.

Methodology:

It was a descriptive cross-sectional study conducted in Khyber Dental College. The study duration was 6 months. The sampling was non-probability, convenient sampling. The sample size was 384. Statistical Package for Social Sciences (SPSS) version 22 was used for the analysis of the data. Age range is 18-60 years. After getting ethical approval from the institutional research advisory group and then ethical approval from the head of NCS university system in Peshawar, data was gathered from patients answering to the Periodontology branch of Khyber School of Dentistry through poll. Pre-approved and organized Surveys were adjusted from a new report.¹² The survey included two sections, the initial segment contains segment information, and the subsequent part contains questions with respect to dental scaling.

Results:

The age frequency of the population in which the highest age is recorded as 60 years, and the lowest age range is 18-20 years. We categorize our age groups into 9 subgroups with group intervals of five years. Of a total of 384 participants in our study, 58.9% (226) participants were male, and 41.1% (158) participants were female.

The patients who had done scaling before. Of a total of 384 participants, 56.8% (218) patients reported that they had done scaling before while 43.2% (166) reported that they had not done scaling before, and it was the first time of doing scaling.

The participants had various reasons for scaling which is described in detail table 1.

The current study shows that of the total participants, 9.9% (38) participants are visiting the dentist after 3 months for dental scaling, 20.3% (78) participants are visiting the dentists after 6 months for scaling, 31.5% (121) participants are visiting the dentist once a year for

the first visit of them for dental scaling.

Reason	Frequency	Percentage
The dentist is recommended (e.g. before filling, braces)	79	20.6
whiten your teeth	162	42.2
to reduce bleeding	96	25.0
to arrest gum inflammation	47	12.2
Total	384	100.0

Table 1: Reason for doing Scaling

The beliefs of participants regarding dental scaling. 20.1% (77) of participants believe that dental scaling causes tooth mobility, 20.6% (79) participants believe that dental scaling causes tooth sensitivity, 4.2% (16) participants believe that dental scaling causes gum inflammation, 30.2% (116) participants believe that dental scaling causes tooth weakening, and 25.0% (96) participant believe that dental scaling cause none of the above conditions. The above figure shows that 50.0% (192) participants were scared before getting dental scaling while 50.0% (192) were not scared before getting dental scaling. 41.9% (161) participants reported that their teeth were sensitive before getting dental scaling while 58.1% (223) participants reported that their teeth were not sensitive before getting dental scaling.

Among the 384 participants, 67.2% (258) participants said that they experienced pain or sensitivity after the dental scaling while 32.8% (126) participants said that they did not experience any pain or sensitivity after the dental scaling.

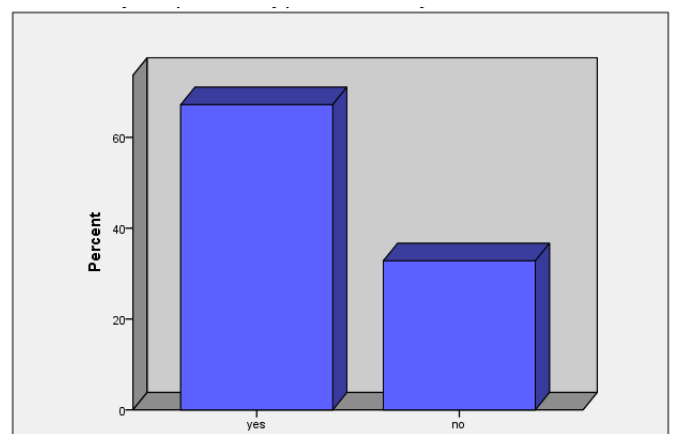


Figure 1: Experience Any Pain or Sensitivity After the Treatment

Among the patients who had post-scaling sensitivity 46.1% (177) participants said that their post-scaling sensitivity lasted less than a week, 27.1% (104) participants said that the post-scaling sensitivity lasted 1-2 weeks, 20.1% (77) participants said that the post-scaling sensitivity lasted more than 2 weeks, and 6.8%

dental scaling, and 38.3% (147) participants are having (26) participants said that the post-scaling sensitivity

lasts in more than a month.

The current study shows how many participants were told by anyone around them (friends, relatives, etc.) that scaling will increase pain or loosening of the teeth. Among 384 participants, 57.8% (222) patients said that they were told by anyone around them that scaling increases pain and teeth loosening while 42.2% (162) participants said that they came without anyone telling or advising them about dental care

Discussion:

This study meant to figure out the impression of patients in regard to dental scaling answering to the department of Periodontology Khyber College of Dentistry. To put it another way, our objective was to find out what people thought about dental scaling and how it affected their teeth. We also wanted to dispel any misconceptions about it because these misconceptions will obstruct the timely treatment of periodontal diseases and the prevention of these conditions, which can be done with dental scaling.

A total of 384 members participated in our review, of which 58.9% (226) members were male, and 41.1% (158) members were female. Of these 384 members the most elevated age was recorded as 60 years, and the least age range was recorded as 18-20 years. In our research, we figured out that of a sum of 384 members, 56.8% (218) members had done scaling while 43.2% (166) members had not done scaling previously and it was their most memorable time doing scaling. A comparative report was directed by S. Kiani et al. in Isfahan in 2016, who took 200 members to figure out the information, perspectives, and practices of patients with respect to dental scaling. Out of 200 members, 48.5% (97) members said that they had done dental scaling before while 51.5% (103) members said that they had not done dental scaling previously.¹³

According to the current study the various convictions of individuals with respect to dental scaling. According to the findings of RZ Langrial et al., who carried out a study to find out the Fear Due to Myths Associated with Scaling among patients attending Tertiary Care Hospital in 2023, approximately 20.6% of participants believe that dental scaling causes tooth sensitivity and 20.1% of participants complained that it increases tooth mobility. Both of these assertions are quite supported by the findings of the study. He viewed that 31(10%) of the members gripped that dental scaling increments tooth awareness while 13% said that scaling expands the versatility of teeth.¹⁴

The additionally shows that around 30.2% of members said that dental scaling causes tooth debilitation, which was unequivocally upheld by IM Gowdar et.al in 2021. He found that 35.27% concurred that scaling would debilitate the tooth structure which was like the aftereffects of Saravanan and Thirineervannan where 34% said that scaling would debilitate the tooth structure.¹⁵

As per the research we conducted, of the 384 members, 41.9% (161) said their teeth were not delicate before dental scaling, and 67.2% (258) said they were encountering

distress and responsiveness in their teeth following dental scaling. Conversely, B Von Troil et al. completed a review to break down the information about the predominance of root responsiveness after periodontal treatment purposefully. He guaranteed that when periodontal treatment, the commonness of root responsiveness was 9-23% and 54-55%, separately. Following 1-3 weeks of treatment, there was a spike in the level of root responsiveness, which then, at that point, died down.¹⁶

In our study 62.2% of members said that the dental scaling treatment was advantageous to them while 37.8% of members said that the dental scaling treatment was destructive to them, which is in gone against by one more review led by M Nadeem et.al. from July 2019 to December 2019 in the Outpatient Department (OPD) of the dental block at Darul Sehet Hospital, Karachi, he discovered that 99 percent of participants said that dental scaling treatment is beneficial to them.¹⁷

In current study, members were given some information about suggestions for dental scaling. Out of 384 members, 62.8% (241) members said that they would prescribe dental scaling to everybody. The following findings are weakened by the study by B Zara et al. to figure out the View of Patients With respect to Dental Scaling and Style, Going to Dental Consideration in a Tertiary Consideration Emergency clinic. She figured out that out of 238 members, 92% (219/238) members said that they would prescribe scaling to others because of its gainful impacts.¹²

Conclusion:

The greater part of the patients had gotten dental scaling once in their life. For teeth whitening, the majority of patients underwent scaling. The greater parts of the members were told by their family members and companions that scaling would expand their aggravation and relax their teeth. The majority of patients stated that they would all recommend scaling their teeth.

Recommendations:

Before the activity, patients should be sufficiently educated about the reason regarding scaling and its result. Patients ought to be educated about the scaling procedure ahead of time by their dental specialists, who ought to likewise explain any fantasies and confusions and examine the medical procedure's eventual outcomes. The benefits and inconveniences of scaling ought to likewise be talked about. Patient training is basic in dispersing patients' legends about dental scaling.

Wellbeing advancement crusades should convey the way that scaling teeth is a treatment for periodontal sickness. This information ought to be surveyed in information, demeanor and conduct, and viability of schooling of periodontal illness concentrates on from now on.

It ought to be the public authority's liability to start local area missions or projects elevating oral cleanliness attention to dissipate individuals' legends about dental scaling and other dental methods.

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Author Contributions

1. Abdul Samad - Literature Review, Manuscript Writing
2. Sana Ullah - Data Analysis, Conception, Design, Review
3. Zulkafif - Data Collection, Methodology of the Study
4. Muhammad Zulkifal- Literature Review, Data Collection