

# Perception of Patients Regarding Dental Scaling and Aesthetics, Attending Dental Care in a Tertiary Care Hospital

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## ABSTRACT

**Background:** There is no as such previous study that takes a glance on the perceptions of general public regarding effects of scaling. The objective of the study was to disregard the misconceptions about post-scaling sensitivity and tooth mobility, to disregard the belief that scaling's purpose is to whiten the teeth and to figure out how much awareness is there in our society regarding scaling. There is no information regarding the misunderstanding of dental scaling. This study is conducted on general public in Pakistan.

**Methods:** A cross-sectional survey conducted via a close ended questionnaire in the twin cities of Pakistan on a random sample of 238 individuals aged from 18 to 60 years age was conducted in April and May 2020.

**Results:** According to the results, 72.3% (172/238) participants were females and 27.7% (66/238) were males. More females had received scaling. 21-22 years age group had the highest scaling experience; also education level was related to scaling. About 87.4% (208/238) of the participants had received scaling once in their life, while 12.6% (30/238) had never experienced scaling. Of the subjects with complete data, 47.9% (114/238) got scaling done for teeth whitening, 39.9% (95/238) were advised scaling by their dentists before any procedure (braces, filling) and 12.2% (29/238) to reduce bleeding gums. Of those who had got scaling done, 44.1% (105/238) participants were scared before getting scaling done, 54.2% (129/238) individuals experienced pain and sensitivity during the procedure, 27.3% (65/238) individuals experienced sensitivity before scaling and 72.7% (173/238) had no sensitivity before the procedure. 56.3% (134/238) experienced sensitivity after getting scaling done, and for most of them this sensitivity was relieved within a week after treatment. 46.6% (111/238) individuals were told by their relatives and friends that scaling would increase their pain and loosen their teeth. 71.4% (170/238) patients were informed by their dentist that sensitivity is a normal part of recovery. 93.3% (222/238) patients found the treatment as beneficial and only 6.7% (16/238) marked it harmful. 92% (219/238) patients said that they would recommend scaling to others due to its beneficial effects.

**Conclusion:** This study shows lack of knowledge regarding scaling among general population. The patients should be properly educated about the procedure and its effects, and clear all the misunderstandings, before the procedure.

**Keywords:** Routine scaling and polishing; sensitivity; bleeding; periodontal disease

## INTRODUCTION:

**Background:** There is rising awareness among public for periodontal health. There is a rising concern for periodontal problems in public but people have misconceptions for scaling regarding increased tooth mobility, sensitivity, spacing in teeth and teeth appearing longer etc. Scaling and polishing are clinical dental procedures performed in periodontology, that are aimed to prevent periodontal diseases and improve dental aesthetics. (1)

There has been insufficient number of randomized controlled trials carried out to adequately address the stipulated question i.e. If sensitivity increases after scaling and root planning(2). According to evidence based dentistry, Root sensitivity occurs in approximately half of the patients following sub gingival scaling and root planning(3). The intensity of root sensitivity increases for a few weeks after therapy, after which it decreases. In clinical practice, it is recommended that patients should be made aware of the potential for root sensitivity prior to treatment.(4)

The incidence and severity of root sensitivity should be evaluated by subjective patient-reporting and the response to different modes of stimuli.(5,6)

The data from another study confirmed that meticulous plaque control diminishes RDS (Root-Dentin Sensitivity) problems and that scaling and root planning procedures in periodontal therapy result in an increase of teeth that respond to painful stimuli.(7)

According to the American Dental Association (ADA) **uncomfortable and sensitive teeth should last no more than a week.**(8,9)

Periodontal status impacts on life quality. This has implications in understanding the consequences of periodontal health and in the use of patient-centred outcomes in periodontal research.(10)

Misunderstandings regarding the scaling procedure, lead to delay in treatment of periodontal diseases(11), and this study aims to address those misunderstandings.

**Research Question/Hypothesis:** What are the perceptions of the patients regarding the effects of scaling and aesthetics in our society?

**Objectives:** The aim of this study is to take a glance at the perceptions of general public regarding effects of scaling, by better understanding the population's needs and concerns for dental health and address them in a better and efficient way on a clinical level.

**Aim:**

- To disregard the misconceptions about post-scaling sensitivity and tooth mobility
- To disregard the belief that scaling's purpose is to whiten the teeth
- To figure out how much awareness is there in our society regarding scaling.
- To investigate complaints about dental scaling

## METHODOLOGY

**Study design and Setting:** A cross-sectional survey was conducted via a close ended questionnaire in the twin cities of Pakistan.

**Duration of study:** Study was completed within four months (March to June 2020).

**Subject sampling:** Purposive sampling technique used and a total sample of 238 people collected.

**Inclusion criteria:**

- Population including the general public in the twin cities of Pakistan with history of scaling done at least once in their lives.
- Male or Female regular/routine attenders at dental practice
- Aged 18 – 60 years
- Good general health

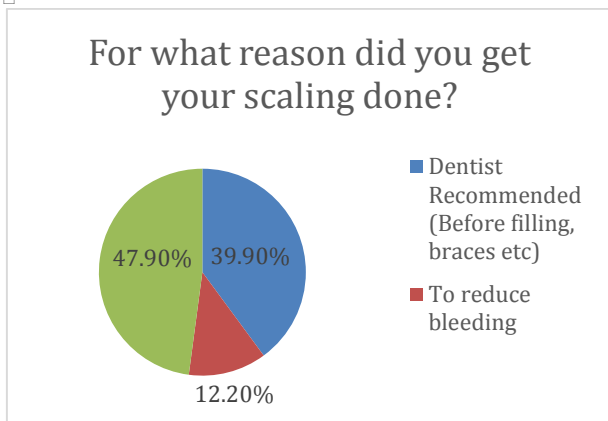
**Exclusion criteria:** Incomplete questionnaires were excluded from the study.

**Data Collection:** A validated questionnaire was given to the subjects in order to evaluate the perceptions of the general public regarding effects of scaling.

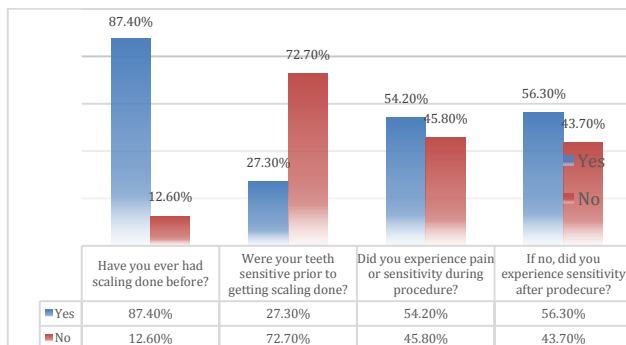
- Ethical considerations:** Ethical approval was obtained from the university board and consent was taken from the participants before commencing the study. All data is kept anonymous and confidentiality was maintained.
- Data management:** Data is entered in Statistical packages for social sciences (SPSSv22)
- Data analysis:** Data is analyzed in the form of pie charts and graphs to evaluate the reasons for getting scaling done, to evaluate the prevalence and duration of post-scaling sensitivity and mobility and positive/negative perception of scaling.

**RESULTS**

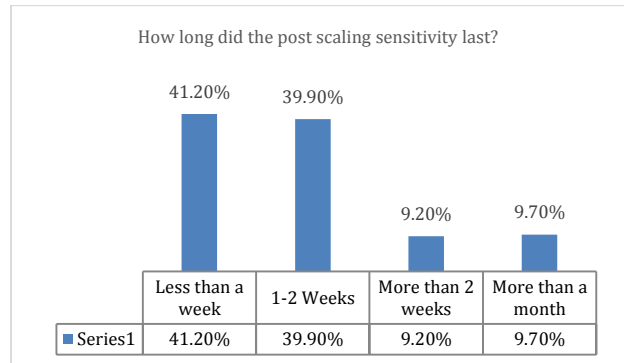
- Demographics of population
  - Female 172/238 (72.3%)
  - Male 66/238 (27.7%)
- Have you ever had your scaling done before?
  - Yes 208/238 (87.4%)
  - No 30/238 (12.6%)
- For what reason did you get your scaling done?
  - Dentist recommended (e.g. before filling, braces) 95/238 (39.9%)
  - To whiten your teeth 29/238 (12.2%)
  - To reduce bleeding 114/238 (47.9%)



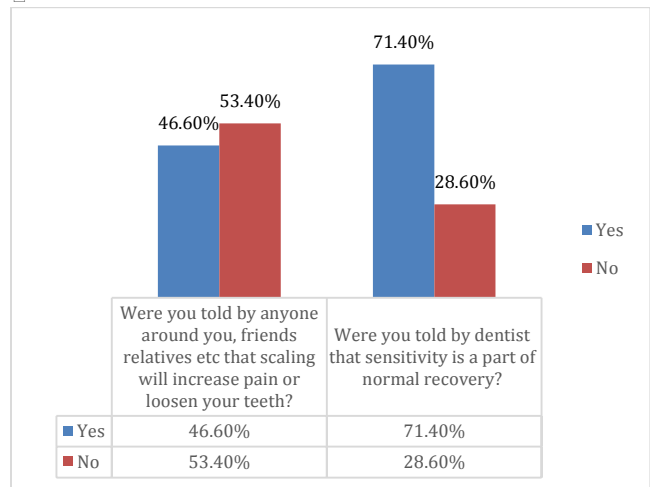
- Were you scared before getting your scaling done?
  - Yes 105/238 (44.1%)
  - No 133/238 (55.9%)
- Were your teeth sensitive prior to getting your scaling done?
  - Yes 65/238 (27.3%)
  - No 173/238 (72.7%)
- Did you experience any pain or sensitivity during the procedure?
  - Yes 129/238 (54.2%)
  - No 109/238 (45.8%)
- If no, did you experience any sensitivity after the treatment?
  - Yes 134/238 (56.3%)
  - No 104/238 (43.7%)



- How long did it last?
  - Less than a week 98/238 (41.2%)
  - 1-2 weeks 95/238 (39.9%)
  - More than 2 weeks 22/238 (9.2%)
  - More than a month 23/238 (9.7%)



- How did you find the treatment to be?
  - Beneficial 222/238 (93.3%)
  - Harmful 16/238 (6.7%)
- Were you told by anyone around you (Friends, relatives etc) that scaling will increase the pain or loosen your teeth?
  - Yes 111/238 (46.6%)
  - No 127/238 (53.4%)
- Were you told by the dentist that the sensitivity is a normal part of recovery?
  - Yes 170/238 (71.4%)
  - No 68/238 (28.6%)



- Would you recommend scaling to anyone?
  - Yes 219/238 (92%)
  - No 19/238 (8%)

**Ethical Considerations:** Nil

**DISCUSSION**

More female participants took part in this study than male participants. Most of the participants of this study had got their scaling done before. Only 12.6% participants had not experienced scaling before. Majority of participants (47.9%) got scaling done to reduce bleeding gums, 39.9% on dentists recommendation and 12.2% to whiten their teeth. 44.1% participants experienced dental fear and anxiety before the procedure. Majority of participants (72.7%) did not experience sensitivity before getting scaling done.

54.2% participants experienced pain and sensitivity during the procedure and 56.3% experienced pain and sensitivity after the treatment. Pain and sensitivity lasted for less than a week for 41.2% participants. 93.3 % participants found scaling as a beneficial procedure. 53.4% participants were not told by others that scaling will increase their pain and loosen teeth. 71.4% participants were told by the dentist that sensitivity was a normal part of recovery.

The dentists should educate the patients about the scaling procedure before hand and explain the after effects of the procedure and clear all the misconceptions and myths regarding the procedure(12). They should also explain the beneficial and harmful effects of scaling. Patient education is very important to clear the misconceptions of patients regarding scaling(13).

Public health policy makers should not only make efforts to provide access to scaling and dental procedures for general public, But also work on patient education and counseling as well(14). So that misconceptions and myths about dental procedures will gradually reduce and population's oral health conditions will improve(15,16).

## CONCLUSIONS

The Dentist should educate and counsel his patients about scaling and other dental procedures before starting treatment. This is beneficial for the better health and recovery of patient and improves patient compliance.

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