

Perception of patients regarding periodontal disease and its management

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ABSTRACT

Objective: To assess the perception of patients regarding periodontal diseases and their management coming to University Dental Hospital, the University of Lahore.

Methodology: This study was descriptive correctional in nature. Data was collected with the help of a questionnaire. A pilot study with the sample size of 100 participants was conducted in University Dental hospital, University of Lahore.

Results: 42% participants reported that they had any treatment for gum disease such as scaling and root planning (deep cleaning). 58% participants reported that experience as unpleasant. The reason for this as per the participants was the cost of dental treatment in the last visit (44%). 84% participants perceived that scaling as cleaning of teeth. 66% participants reported that scaling can cause sensitivity. Majority of patients (52%) reported their oral health as fair.

Conclusion: A modified self-report questionnaire represents a valuable and adequate tool for the screening and surveillance of periodontitis at the population level.

Keywords:

INTRODUCTION

The most prevalent problem among oral health issues is periodontal disease. In population of USA, among 30years old or above, about half of the population suffers from periodontitis.^{1,2} In Europe, prevalence of periodontitis is even higher than USA.³ Gingival bleeding, recession of the gingival margin, and halitosis are the main presentations of early stages of periodontitis whereas in advanced disease, hypermobility, migration, and tooth loss resulting in impaired oral function, esthetics, and quality of life.⁴

For the treatment of periodontal treatment, it is important to seek consultation about the abnormal symptoms. However, periodontitis is a silent disease in which pathological changes take a long time before pain, discomfort, and functional disability occur.⁵ For that reason, people often misjudge the occurrence and severity of periodontal disease and seek treatment when advanced attachment loss has already occurred.^{6,7}

A recent contribution provided evidence of low sensitivity (disease perception), but high specificity (health perception) values for self-reported bleeding gums^{8,9} and low to moderate sensitivity and specificity for oral malodor,^{10,11,12,13} while little is known about self-perceived tooth mobility.^{10,11,14,15} In contrast, people demonstrated the ability to refer to their own dental history, number of remaining teeth, previous experience of restorations, presence of prostheses, and screening of urgent dental care.^{6,9} Self-awareness of periodontal health status influences oral health-seeking behaviour and is related to the utilization of dental services for early detection and prevention of periodontal disease. So, the study aimed to assess the perception of patients regarding periodontal

diseases and their management coming to University Dental Hospital, the University of Lahore.

METHODOLOGY

This study was descriptive correctional in nature. Data was collected with the help of a questionnaire. The aforementioned questionnaire has been excerpted from self-reported questionnaire based surveys conducted by Carra et al.¹⁶ and Wu et al.¹⁷ And later modified by research members. The said questionnaire has been translated into the native language for convenience and comprehension of study participants.

A pilot study with the sample size of 100 participants was conducted in University Dental hospital, University of Lahore. The study sample included the patient of periodontology department. Intention of pilot study was to validate the questionnaire so that it can be later used for larger population groups and in more than one hospital settings. A questionnaire was filled by the participants after receiving a written informed consent. The anonymity and privacy of participants was respected. To draw a comparison between subjective and objective findings, an examiner blinded from the data and contents of questionnaire was undergone basic periodontal examination of each participant. After data collection and clinical examination results were tabulated and discussed. Data was analysed by software SPSS 23.0.

RESULTS

Gender was taken as demographical variable. Out of 100 participants, 44% were males and 56% participants were female patients.

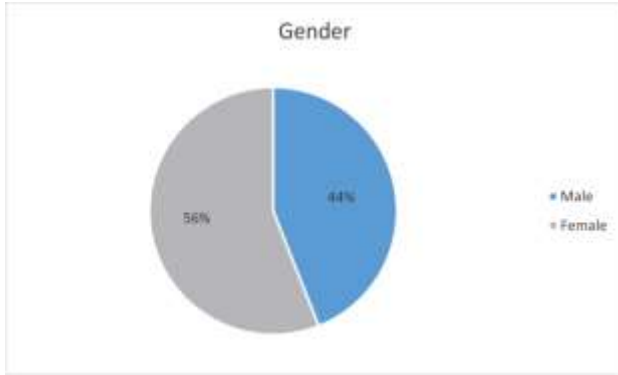
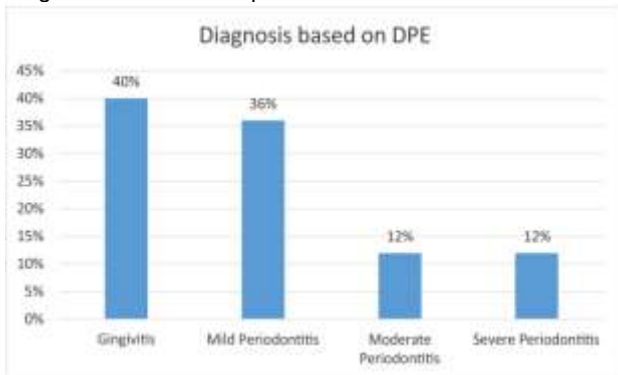


Figure 1| Gender wise sample distribution

Out of 100% of patients, 40% participants were diagnosed with gingivitis, 36% participants were diagnosed with mild periodontitis, 12% participants were diagnosed with moderate periodontitis and 12% participants were diagnosed with severe periodontitis.



Graph 1| Diagnosis based on detail periodontal examination

Majority of the participants reported pain in the tooth as reason for the visit to dental hospital (54%). 54% participants reported that for scaling, it is their first visit. 52% participants reported that they brush once daily on regular bases and 72% participants reported that they change their brush every 3months. Horizontal brushing technique was reported by majority of participants (58%). Majority of the participants reported that they never use any inter-dental aid like floss, etc., in last 7 days apart from brushing (86%). Majority of the participants reported that they never use any dental rinsing material like mouth, etc., in last 7 days apart from brushing (66%). 48% participants reported that sensitivity to hot and cold could not be treated by sensitivity toothpastes. 42% participants reported that their gums bleed sometimes during while brushing. 60% participants reported that during the past 3 months, they have noticed that a tooth doesn't look right. 78% participants answered in negative that they ever had any teeth become loose on their own without any injury.

42% participants reported that they had any treatment for gum disease such as scaling and root planning (deep cleaning). 58% participants reported that experience as unpleasant. The reason for this as per the participants was the cost of dental treatment in the last visit (44%). 84% participants perceived that scaling as cleaning of teeth. 66% participants reported that scaling can cause sensitivity. 62% patients reported that they do not think that the roots of teeth are more can see more roots of teeth than in past. Regular checkups, so that they don't lose any tooth in future was the answer of 60% patients as the element of motivation for them to come for the follow up visit at a given time suggested by your dentist. 36% patients answered that they will prefer scaling after the dental treatment for which they came to hospital. Majority of the patients (44%) reported time as possible hurdles faced for retreatment.

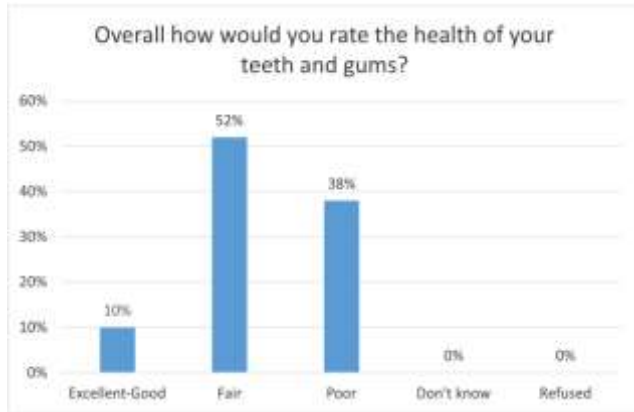
Table 1| Patients' perception regarding periodontal disease and its management

	Bleeding gums	Pain in the tooth	Replacement of the tooth/teeth	Extraction of the tooth	Orthodontic Treatment
Which of the following problem motivated you to come to dental hospital?	18%	54%	10%	6%	12%
How often you visit your dentist for scaling?	In 3months	In 6months	Once a year	It's my first visit	
	4%	6%	36%	54%	
How often do you brush your teeth?	Once daily regularly	Once daily irregularly	Twice daily regularly	Sometimes	
	52%	4%	42%	2%	
How often should you change your toothbrush?	3months	6months	1year	Till bristles get fray	
	72%	20%	0%	8%	
Which type of brushing technique do you think is better?	Horizontal	Vertical	Roll	Not aware	
	58%	28%	14%	0%	
Aside from brushing, your teeth with toothbrush in the last 7 days how many times did you use dental floss or any other device to clean between your teeth? Mean number of days:	Never	Once or more	Refused		
	86%	12%	2%		

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	Never	Once or more	Refused		
Aside from brushing your teeth with toothbrush in the last 7 days how many times did you use mouthwash or any other dental rinse that we use to treat any dental disease?	66%	34%	0%		
	Yes	No	May be		
Do you think sensitivity to hot and cold can be treated by sensitivity toothpastes?	42%	48%	10%		
	Always	Sometimes	No	Don't know	Refused
Does your gum bleed while brushing?	24%	42%	34%	0%	0%
	Yes	No	Don't Know	Refused	
During the past 3 months have you noticed a tooth that doesn't look right?	60%	38%	2%	0%	
	Yes	No	Don't Know	Refused	
Have you ever had any teeth become loose on their own without any injury?	20%	78%	2%	0%	
	Yes	No	Don't Know	Refused	
Have you ever had any treatment for gum disease such as scaling and root planning (deep cleaning)?	42%	56%	0%	2%	
	Satisfactory	Unpleasant	Poor		
What was it like?	34%	58%	8%		
	Too much pain	Too costly	Problem didn't resolve	Doctor didn't pay attention to my problem	
If the last visit was unsatisfactory, what was the reason for it?	0%	44%	36%	20%	
	Cleaning	Whitening	Arrests gum inflammation	Decrease tooth mobility	
What do you expect from scaling?	84%	6%	12%	2%	
	Tooth loss	Mobility	Bleeding after the procedure	Sensitivity	
Do you believe scaling can cause?	8%	10%	16%	66%	
	Yes	No	Don't Know	Refused	
Do you think that you can see more roots of teeth than in past?	38%	62%	0%	2%	
	Pain in the tooth/gums	Regular checkups, so that I don't lose any tooth in future	Depends on finances	Depends on time	
What will motivate you to come for the follow up visit at a given time suggested by your dentist?	20%	60%	4%	16%	
	Scaling	Filling for a tooth which is not painful at the moment	Front tooth replacement for esthetics	Back tooth replacement for better chewing	
After receiving the dental treatment for which you initially came with, which other dental procedure is more important to you (if you need all of them)?	36%	26%	18%	20%	
	Time	Expense	Distance	Careless attitude	
What possible hurdles do you face for retreatment?	44%	12%	10%	34%	

Majority of patients (52%) reported their oral health as fair.



DISCUSSION

Preventing and controlling periodontal diseases are effective measures in order to avoid its development and ensure health maintenance not only of the teeth supporting tissues, but also the mouth and the individual as a whole, since periodontal diseases are associated with systemic conditions such as the difficulty of diabetes metabolic control, respiratory and cardiovascular diseases.¹⁴ Majority of the participants (52%) reported that they brush once daily on regular bases whereas a study conducted in Sao Paulo reported that 56% participants brush their teeth trice a day.¹⁸ 72% participants reported that they chance their brush every 3months. Horizontal brushing technique was reported by majority of participants (58%). Majority of the participants reported that they never use any inter-dental aid like floss, etc., in last 7 days apart from brushing (86%). Majority of the participants reported that they never use any dental rinsing material like mouth, etc., in last 7 days apart from brushing (66%). 48% participants reported that sensitivity to hot and cold could not be treated by sensitivity toothpastes. 42% participants reported that their gums bleed sometimes during while bushing. 60% participants reported that during the past 3 months, they have noticed that a tooth doesn't look right. 78% participants answered in negative that they ever had any teeth become loose on their own without any injury.

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A modified self-report questionnaire represents a valuable and adequate tool for the screening and surveillance of periodontitis at the population level. Similar studies need to be conducted for the Pakistani population generally and efforts should be made to give better awareness to the patients about disease

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