

Assessment of Dental Care Seeking Behaviour and Attitude among Adults in a Metropolitan City in Southern India- An Observational Study

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ABSTRACT

Introduction: Understanding the factors that promote or impede dental visits is a prerequisite for devising healthcare changes because underuse of dental services is linked to an increased burden of oral disorders.

Aim: The study aimed to comprehensively explore the factors that could have a positive or negative influence on oral health care seeking behaviour among adults in Chennai.

Materials and Methods: The present descriptive, cross-sectional study was conducted among patients visiting the Outpatient Department (OPD), SRM Dental College, Ramapuram, Chennai, India from April 2019 to January 2020. A structured questionnaire was administered via both printed and online Google forms to adult patients aged above 18 years. Google forms were shared via WhatsApp social media platform. A total of 503 completed responses were statistically analysed. The Chi-square test and logistic regression analysis was applied to assess the association and the strength of association between the various factors and dental visits.

Results: A total of 503 subjects were surveyed of which 75.94% had visited a dentist previously, of which males were 216 and females were 287. The most frequently cited reasons for not visiting a dentist were lack of time (60.23%), high cost (56.06%) and not having dental problems (52.88%). It was observed that higher number of respondents who perceived dental problems as serious or life threatening (65.80%), felt they had poor oral health (2.18%) and need dental treatment (53.87%) had been to the dentist more often in the past. A significant association was observed between dental visits and educational qualification, family structure, time constraints, absence of dental problems, religious beliefs and perceived need for treatment (p -value <0.05).

Conclusion: Among Indian studies, the current study found the highest frequency of dental visits. Dental visits were hampered by the time constraints, high cost of dental treatment and a lack of dental problems. Awareness that regular dental visits enhance good oral health was comprehended and linked to a higher frequency of dental visits. The study highlights the importance of providing affordable, high quality dental care as well as promoting public awareness in order to overcome barriers to dental service utilisation.

Keywords: Barriers, Dental service, Indian population, Oral healthcare, Survey questionnaire, Utilisation

INTRODUCTION

Oral health is an important component of overall health, and oral diseases are a major threat to public health worldwide. According to the Global Burden of Diseases (GBD), injuries and risk factors study, an estimated 3.5 billion people suffer from common oral conditions such as untreated caries, severe periodontitis, severe tooth loss and other oral disorders. Almost half of the world's population is disabled as a result of oral diseases and tooth loss has been identified as the leading cause of Disability Adjusted Life Years (DALYs) totaling 7.6 million. Indeed, from 1990 to 2015, almost 25 years, it was observed that global oral health did not improve, indicating a greater need for better oral health policies to be implemented, as well as to increase oral health awareness among the general population to prevent the incidence of dental diseases [1,2].

Preventive methods such as rigorous self-care oral hygiene and regular dental check-ups can help to reduce the incidence and severity of oral diseases, as well as improve overall quality of life [3,4]. Dental attendance is a health-related behaviour, and the factors that influence it are explained by several models, including the health belief model, the theory of reasoned action, Theory of Planned Behaviour (TPB), the Transtheoretical model, and the social cognitive theory [5-7]. Multiple internal factors such as beliefs, attitudes, intention, knowledge, and expectations, and external factors such as past experiences, physical, social, and economic conditions, have been hypothesised to influence behaviour [8-10].

Oral healthcare is frequently neglected in developing countries such as India, and this apathy is attributed to lack of awareness, lack of knowledge, high cost, lack of time, availability of dentists and the belief that dental diseases are not serious or life threatening among other factors. These do not apply uniformly to all populations or individuals; there are disparities based on gender, age, socio-economic situation, geographic region, educational level, physical and psychological disability, and so on. Individual and population level healthcare reforms can be made by recognising the factors that obstruct or facilitate better oral health [11-13].

Literature search revealed that only three studies have been previously carried out in Chennai, among adults on the self-assessed barriers to dental visit by Nandhini L et al., in 2013, Francis DL et al., in 2017 and Krishnan L et al., in 2019 [14-16]. Therefore, the aim of the present study was to thoroughly investigate the factors identified as determinants that could have a positive or negative impact on dental visiting patterns among adults in Chennai, one of the major metropolitan cities in South India, in order to improve our understanding of oral health seeking behaviour.

MATERIALS AND METHODS

The present descriptive, cross-sectional study was conducted among patients visiting the OPD, SRM Dental College and Hospital, Chennai, India between April 2019 to January 2020. Convenience sampling was followed for recruitment. The ethical clearance was obtained from the Institutional Review Board of SRM University

(SRMU/M&HS/SRMDC/2021/S/011). Informed consent was obtained verbally and voluntarily from those respondents willing to participate in the survey. They were requested to participate based on their free will and were not compelled or pressurised.

Inclusion criteria: Subjects who were fluent in English or Tamil, who were willing to participate and those with smart phones and internet access with WhatsApp installed were included in the study.

Exclusion criteria: Subjects who were completely edentulous or required special care were excluded from the study.

Sample size calculation: Sample size was calculated using the formula $n = \frac{DEFF * Np(1-p)}{(d^2/Z21-\alpha/2*(N-1)+p*(1-p)}$ based on the percentage frequency of outcome factor i.e., 67% frequency of dental visits in the study population reported by Poudyal S et al., in 2010 [17]. The sample size needed for 97% and 99% confidence interval was 417 and 587, respectively. After eliminating questionnaires with incomplete responses a final sample size of 503 was statistically analysed.

Questionnaire

Extensive scientific literature search was carried out and the determinants influencing dental visits were identified [17-27]. Additionally, a brief one to one discussion was also carried out among the patients and general public visiting the outpatient clinic of the Department of Periodontics, SRM Dental College, Chennai, India, to identify those factors that influence their decision to either visit or not visit a dentist as applicable to this population. Based on the information collected and the review of literature, a questionnaire was designed to extract data on demographic characteristics, marital status, family structure and on 15 factors that are associated with dental visiting behaviour.

The questionnaire was designed such that the language was simple, clear and capable of being understood without much explanation (self-explanatory). The questionnaire had a total of 22 questions including the demographic, personal details and details of dental visit [Annexure 1].

- In the first section, details were collected on the demographic characteristics (age, gender, educational qualification, occupation, income per month), marital status and family structure.
- The second section intended to collect details on 15 factors that are probably associated with dental visits. The following factors were assessed like self-perceived oral health status and need for treatment, awareness of regular dental visits, history of previous dental visits, reason for visiting the dentist, experience during the most recent visit (whether pleasant/unpleasant) and whether this influenced subsequent dental visits, high cost of dental treatment, lack of time, fear of dentist/dental treatment, perceiving dental problems as serious or life threatening, scheduling an appointment as per convenience, not experiencing dental problems, religious beliefs, and life circumstances of more significant concern .

The questionnaire was subsequently checked for legibility and comprehensibility among 15 dentists, postgraduate students, and members of the general public, and minor adjustments were made based on their feedback. The research goal as well as guidelines for filling out the form was added to the questionnaire. The questionnaire's reliability was tested by administering it twice to the same group of 50 people at one week intervals (test-retest). The questionnaire's internal consistency (Cronbach alpha) was 0.87. The Tamil version of the questionnaire was then prepared by forward and backward translation of the English questionnaire by a professional well versed in both the languages. In addition, Google form was created in English and distributed via social media. There were 539 responses in all. The paper responses were manually entered, whereas the responses from Google forms were automatically entered into a Microsoft Excel sheet. Thirty six printed survey forms had incomplete responses and were therefore excluded from the

study. Finally, 503 completed questionnaires were collected for data entry and statistical analysis.

STATISTICAL ANALYSIS

The data was compiled and analysed with IBM Statistical Package for the Social Science software version 26.0, Armonk, NY: IBM Corp. Released 2019. Frequencies and percentages were used to describe the responses. The Chi-square test was utilised to determine the association between dental visits and the evaluated variables. Fisher's-exact test was employed if any anticipated cell frequency was less than five. Univariate and multivariate logistic regression analysis were used to calculate crude and adjusted Odds Ratios (OR) with 95% Confidence Intervals (CI) to measure the strength of association between the various predictor factors (independent variables) and their influence on dental visits as the outcome (dependent variable). The significance level was set at 5% ($\alpha=0.05$).

RESULTS

Out of 503 completed responses, the mean age of the survey population was 32.47 ± 12.2 years with 39.16% of them falling into the younger age group (18 to 24 years). Males were 216 (42.94%) of the 503 responders, while females were 287 (57.06%). It was evident that 97.60% of them were educated, 54.27% were employed, and 29.22% earned more than 20,000 Indian rupees a month. Out of total respondents, 50.69% were married and 55.86% lived in joint households. Almost 75.94% of the respondents reported visiting a dentist previously and majority of them (66.49%) visited for emergency purposes. A 107 (28.01%) respondents had an unpleasant or bad experience at the dental clinics and this resulted in 89.71% postponing their subsequent dental visits [Table/Fig-1].

It was observed that female respondents (77.70%), those over 35-year-old (81.19%), higher educational qualification (81.25%), unemployed respondents (81.08%), those earning 10,000 to 20,000 Indian rupees monthly (78.38%), married respondents (79.22%), and those living in nuclear families (80.63%) sought dental care more frequently than their counterparts. Dental visits were found to have a significant relationship with educational qualifications and family structure based on Chi-square test (p -value < 0.05) [Table/Fig-1].

Lack of time (60.23%), high cost (56.06%) and not experiencing dental problems (52.88%) were the frequently cited reasons for not visiting a dentist. On the other hand, decision to visit a dentist was not influenced by fear of dentist/dental treatment (62.82%), religious beliefs (91.25%), life circumstances (56.26%) or appointment scheduling (66.40%). It was observed that higher number of respondents who perceived dental problems as serious or life threatening (65.80%), felt they had poor oral health (2.18%) and need dental treatment (53.87%) had been to the dentist more often in the past. Likewise, those who were aware that regular dental consultations are essential for optimum oral health (62.02%) used dental service more. A significant association was observed between dental visits and lack of time, absence of dental problems, religious beliefs and perceived need for treatment using Chi-square test (p -value < 0.05) [Table/Fig-2].

[Table/Fig-3] shows the logistic regression analysis to determine the strength of association between the independent variables and dental visits (dependent variable). It was noticed that respondents aged more than 45 years utilised dental services 2.09 times more than that of 18 to 24 years age group after adjusting the effect of other variables (adjusted OR=2.09, 95% CI 1.06-4.13, p -value=0.033). Likewise, individuals graduated with either degree or diploma/postgraduation visited dentist more frequently (adjusted OR=1.98, 95% CI=1.10-3.57, p -value=0.02). Participants living in nuclear family structure reported significantly greater frequency of dental visits than those living in joint families. Likewise, respondents who felt that they need dental treatment visited dentist significantly more often than their counterparts (Crude OR=1.78, 95% CI 1.17-2.69,

Variables		Study population N (%)	Visited a dentist		Chi-square test p-value*
			No	Yes	
			N (%)	N (%)	
Age group (years)	18 to 24	197 (39.16%)	57 (28.93%)	140 (71.07%)	0.130
	25 to 34	104 (20.68%)	26 (25.00%)	78 (75.00%)	
	35 to 44	101 (20.08%)	19 (18.81%)	82 (81.19%)	
	≥45	101 (20.08%)	19 (18.81%)	82 (81.19%)	
Gender	Male	216 (42.94%)	57 (26.39%)	159 (73.61%)	0.288
	Female	287 (57.06%)	64 (22.30%)	223 (77.70%)	
Education	School	80 (15.90%)	28 (35.0%)	52 (65.0%)	0.044*
	Diploma/Degree	283 (56.26%)	65 (22.97%)	218 (77.03%)	
	Postgraduate	128 (25.44%)	24 (18.75%)	104 (81.25%)	
	Uneducated	12 (2.38%)	4 (33.33%)	8 (66.67%)	
Occupation	Unemployed/Not working	74 (14.71%)	14 (18.92%)	60 (81.08%)	0.332
	Employed	273 (54.27%)	62 (22.71%)	211 (77.29%)	
	Student	142 (28.23%)	41 (28.87%)	101 (71.13%)	
	Retired	14 (2.78%)	4 (28.57%)	10 (71.43%)	
Income per month (INR)	≤10,000	72 (14.31%)	19 (26.39%)	53 (73.61%)	0.901
	>10,000-20,000	74 (14.71%)	16 (21.62%)	58 (78.38%)	
	>20,000	147 (29.22%)	34 (23.13%)	113 (76.87%)	
	No income	210 (41.74%)	52 (24.76%)	158 (75.24%)	
Marital status	Married	255 (50.69%)	53 (20.78%)	202 (79.22%)	0.244
	Single	232 (46.12%)	65 (28.02%)	167 (71.98%)	
	Divorced/Separated	13 (2.58%)	3 (23.08%)	10 (76.92%)	
	Widowed	3 (0.59%)	0 (0.0%)	3 (100.0%)	
Family structure	Joint family	281 (55.86%)	78 (27.76%)	203 (72.24%)	0.029*
	Nuclear family	222 (44.13%)	43 (19.37%)	179 (80.63%)	
Visit to dentist	Yes	382 (75.94%)	NA		
	No	121 (24.05%)			
Past dental experience	Pleasant	275 (71.98%)	NA		
	Unpleasant/Bad	107 (28.01%)			
Postponement of future dental visit due to past unpleasant experience	Yes	96 (89.71%)	NA		
	No	11 (10.28%)			
Reasons for visiting the dentist	Emergency/pain/swelling/fractured teeth	254 (66.49%)	NA		
	Filling/Root canal treatment	25 (6.54%)			
	Periodontal problems	32 (8.37%)			
	Extraction	57 (14.92%)			
	Orthodontic treatment/ulcers/consultation/bad breath/others	14 (3.66%)			

[Table/Fig-1]: Frequency and percentage distribution of demographic characteristics, dental visits, previous dental experience and reason for visit. Chi-square test for association between dental visits and the variables evaluated.

*p-value <0.05 was considered statistically significant

Factors		Visit to dentist		p-value
		No N (%)	Yes N (%)	
Factors that deter dental visits				
High cost of dental treatment	Yes (282, 56.06%)	68 (24.11%)	214 (75.89%)	0.973
	No (221, 43.93%)	53 (23.98%)	168 (76.02%)	
Shortage/lack of time	Yes (303, 60.23%)	60 (19.80%)	243 (80.20%)	0.006*
	No (200, 39.76%)	61 (30.50%)	139 (69.50%)	
No dental problems	Yes (266, 52.88%)	75 (28.20%)	191 (71.80%)	0.021*
	No (237, 47.11%)	46 (19.41%)	191 (80.59%)	
Factors that do not influence dental visits				
Fear of dentist or dental treatment	Yes (187, 37.17%)	54 (28.88%)	133 (71.12%)	0.052
	No (316, 62.82%)	67 (21.20%)	249 (78.80%)	

Fixing an appointment at your convenience	Yes (169, 33.59%)	38 (22.49%)	131 (77.51%)	0.558
	No (334, 66.40%)	83 (24.85%)	251 (75.15%)	
Religious beliefs/faith	Yes (44, 8.74%)	16 (36.36%)	28 (63.64%)	0.046*
	No (459, 91.25%)	105 (22.87%)	354 (77.12%)	
Circumstances and situations in life	Yes (220, 43.73%)	47 (21.36%)	173 (78.64%)	0.213
	No (283, 56.26%)	74 (26.15%)	209 (73.85%)	
Factors that favour dental visits				
Dental problems are serious/life threatening	Yes (172, 34.19%)	49 (28.49%)	123 (71.51%)	-
	No (331, 65.80%)	72 (21.75%)	259 (78.25%)	
Awareness that regular dental visit is necessary for good oral health	Yes (312, 62.02%)	68 (21.79%)	244 (78.21%)	0.129
	No (191, 37.97%)	53 (27.75%)	138 (72.25%)	
Self-perceived oral health status	Excellent (72, 14.31%)	22 (30.56%)	50 (69.44%)	0.201
	Good (290, 57.65%)	73 (25.17%)	217 (74.83%)	
	Fair (130, 25.84%)	25 (19.23%)	105 (80.77%)	
	Poor (11, 2.18%)	1 (9.10%)	10 (90.90%)	
Self-perceived need for treatment	Yes (271, 53.87%)	52 (19.19%)	219 (80.81%)	0.006*
	No (232, 46.12%)	69 (29.74%)	163 (70.26%)	

[Table/Fig-2]: Frequency and percentage distribution of the variables. Chi-square test for association between dental visits and the factors evaluated. *p-value <0.05 was considered statistically significant.

Independent factors		Univariate logistic regression				Multivariate logistic regression			
		Crude odds ratio	95% CI for OR		p-value [†]	Adjusted odds ratio	95% CI for OR		p-value [‡]
			LL	UL			LL	UL	
Age group (years)	18 to 24	1.00				1.00			
	25 to 34	1.22	0.71	2.09	0.46	1.32	0.71	2.44	0.36
	35 to 44	1.75	0.97	3.15	0.06	1.76	0.90	3.43	0.09
	≥45	1.75	0.97	3.15	0.06	2.09	1.06	4.13	0.03*
Gender	Male	1.00				1.00			
	Female	1.24	0.82	1.88	0.28	1.37	0.86	2.18	0.17
Education	School	1.00				1.00			
	Diploma/Degree	1.80	1.05	3.08	0.03*	1.98	1.10	3.57	0.02*
	Postgraduate	2.33	1.23	4.42	0.001	1.92	0.95	3.84	0.06
	Uneducated	1.07	0.29	3.89	0.91	0.96	0.23	3.96	0.95
Family structure	Joint family	1.00				1.00			
	Nuclear family	1.59	1.04	2.44	0.03*	1.10	0.69	1.77	0.66
Self-perceived oral health status	Excellent	1.00							
	Good	1.30	0.74	2.30	0.35				
	Fair	1.84	0.95	3.59	0.07				
	Poor	4.40	0.53	36.5	0.17				
Self-perceived need for treatment	Yes	1.78	1.17	2.69	0.006*	1.37	0.86	2.19	0.18
	No	1.00				1.00			
Awareness that regular dental visit is necessary for good oral health	Yes	1.37	0.91	2.08	0.13	NA			
	No	1.00				NA			
Shortage/lack of time	Yes	1.77	1.17	2.68	0.006*	1.53	0.96	2.438	0.069
	No	1.00				1.00			
Fear of dentist or dental treatment	Yes	1.00				NA			
	No	1.50	0.99	2.28	0.05	NA			
Dental treatments are Not serious/life threatening	Yes	1.00				NA			
	No	1.43	0.94	2.18	0.09	NA			
No dental problems	Yes	1.00							
	No	1.63	1.07	2.47	0.02*	0.91	2.33	0.115	
Circumstances and situations in life	Yes	1.00							
	No	1.92	1.00	3.69	0.04*	1.06	4.51	0.034*	

[Table/Fig-3]: Binary regression analysis to evaluate the strength of association between dental visits (dependent variable) and the independent variables influencing the same. *p<0.05 was considered statistically significant; [†]Univariate Logistic Regression, [‡]Multivariate Logistic Regression; CI: Confidence interval; OR: Odds ratio; LL: Lower limit; UL: Upper limit

p-value=0.006). Surprisingly, those who were busy and were pressed for time had visited dentist 1.77 times (p-value=0.006) more than their counterparts, likewise those who had no dental problems also

visited dentist 1.63 times (p-value=0.02) more. These respondents frequently cited emergency or acute symptoms as the reason for dental visits.

DISCUSSION

Any activity conducted with the goal of preventing or detecting disease or enhancing health and well-being is characterised as health related behaviour. This includes behaviours such as exercise, smoking, diet, alcohol consumption, use of health services and adherence to medical regimens [28,29]. Dental problems are frequently ignored because they are perceived as not being serious or life threatening. Understanding the factors that facilitate or obstruct dental visits is a prerequisite for developing healthcare reform policies [30,31]. As a result, the goal of this study was to determine the impact of several determinants on dental treatment utilisation among adults in Chennai, South India.

The findings from this study revealed that almost 3/4th of the participants (75.94%) reported visiting a dentist at least once before and such a higher frequency of dental attendance has never been reported till date from any Indian studies. On the contrary, lower dental service utilisation has been frequently reported from various Indian states [Table/Fig-4] [17-23]. Such a wide difference noticed between this study and others possibly could be attributed to the sampling technique and the sample characteristics i.e., urban population, predominantly educated and employed respondents.

Place of study	Sample size/Frequency of dental visits/ Factors influencing dental visits	Author, Year (ref)
Nellore, Andhra Pradesh	600 samples, 36%, Pain or emergency reasons (71%), no dental problem (60%), lack of time (45.8%), high cost (33.3%), fear of dental procedures (48.6%), long distance (26.3%), oral problems are not serious (51%)	Nagarajuna P et al., 2016 [18]
Jaipur, Rajasthan	180 samples, 38.5%, Pain (35.3%), dental problem not severe (43.1%), neglect (22.4%), no dental problem (15.5%), no time (8.6%), high cost (6.9%), fear of dentist/dental treatment (1.7%), long treatment time/frequent visits (1.7%)	Devaraj CG and Eswar P 2011 [19]
Vijayawada, Andhra Pradesh	1800 samples, 64.17%, pain (38%), routine examination (4%), lack of knowledge (30%), dental problem not severe (23%), no time (20%), high cost (12%), negligence (12%), fear of dentist/dental treatment (3%)	Rambabu T and Koneru S 2018 [20]
Rural Maharashtra	700 samples, 53.1%, pain (42.6%), fear (24.3%), no time (10.9%), expensive (12.4%), lack of knowledge (6.6%), not important (8.7%)	Deolia SG et al., 2020 [21]
Rural Andhra Pradesh	200 samples, 26%, pain (5.5%), costly (23.2%), no time (14.5%), negligence (37.1%), no accompanying person (11.1%), dental problem no affect regular work (17.9%)	Yaddanapalli SC et al., 2020 [22]
Manglore, Karnataka	182, 67%, no dental problem (60.7%), no time (12.7%), fear (12%), not serious (4.7%), long distance (1.3%), previous unpleasant experience (1.3%), dental diseases recur (2%), cannot be treated by anyone (2%), other reasons (3.3%)	Poudyal S et al., 2010 [17]
Tenali, Andhra Pradesh	1500, 35.4%, tooth pain (13.1%), long time (1.3%), fear (1.7%), no time (4%), negligence (2.4%), expensive (2.1%), only when experience pain (0.7%), milk teeth will shed off (1.9%)	Yaddanapalli SC et al., 2020 [23]
Chennai, Tamil Nadu	503, 75.94%, Lack of time (60.23%), high cost (56.06%), not experiencing dental problems (52.88%), dental problems are life threatening or serious (65.80%), poor self-perceived oral health (2.18%), self-perceived need for treatment (53.87%)	Appukuttan D et al., 2021

[Table/Fig-4]: Comparative studies with their significant findings.

Women and those aged above 35 years, showed better dental attendance and this was in agreement with Kelly M et al., Locker D et al., Mc Grath C et al., Kadaluru U G et al., [24-27]. In general, women show more positive attitude towards oral health than men hence, it is logical that they demonstrate better oral healthcare seeking behaviour [32-34]. However, based on the observations from multiple studies the influence of gender on dental visits is rather conflicting, because it is also dependent on multiple factors such as education, cultural background, religion, financial independence, behaviour, attitude etc. Studies by Devaraj CG and Eswar P, Rambabu T and Koneru S, Yaddanapalli S et al., are in accordance

with the present findings [19,20,22]; on the contrary Nagarajuna P et al., Kakatkar G et al., reported otherwise [18,35].

In this study, unemployed participants claimed greater dental attendance and it was discovered that they were mostly women who worked at home; hence, the better observed dental care behaviour is justifiable. Studies show that those with higher educational qualifications have better oral health awareness and oral health care behaviours in general; this study found a similar result [36,37]. The observation that 62.02% of respondents felt that dental visits are necessary even in the absence of any dental/oral problems and that visiting a dentist on a regular basis promotes good oral health emphasised the preceding fact. Šiljak S et al., observed that highly educated and employed adults with high wealth index and presence of non communicable diseases living in urban settings visited dentist more frequently [12].

Industrialisation, modernity, and urbanisation have resulted in a shift towards nuclear family structures in cities, so it's not surprising that married people living in nuclear households visit the dentist more frequently [38]. In a study of Jordanian adults Obeidat S et al., discovered that married people went to the dentist three times more than unmarried people [39]. Family structure was also a significant predictor of dental attendance, according to Mc Grath C et al., [26]. Those who were married and living together went to the dentist more frequently than single mothers [26].

Respondents in this study did not feel that fear of dentist or dental treatment, religious beliefs, circumstances/situations in life or fixing an appointment at convenience influenced their decision to visit a dentist. However, lack of time, high cost and not experiencing any dental problems hampered dental visits. In agreement with numerous Indian studies, majority of the subjects visited the dentist primarily for emergency/acute problems like pain, swelling, fractured tooth [17-19,40].

Limitation(s)

Online surveys save a significant amount of time and money while also being more cost effective and convenient. However, there is a sampling bias, and only literate people with internet access are eligible to participate. As a result, the findings of this study cannot be generalised to the general population and are more relevant to this specific sample of urban residents. Another limitation of self-reported studies, such as this one, is that subjects may be unable to grade themselves appropriately, may give socially acceptable answers, and may under or over-report dental visits due to memory issues.

CONCLUSION(S)

The study results indicate that the most prevalent reasons for not visiting the dentist are the high expense of dental treatment, time constraints, and the lack of dental problems. Those who viewed dental problems as significant and life-threatening, as well as those who believed they had poor oral health and needed care, went to the dentist more frequently. Furthermore, the awareness that regular dental visits enhance good oral health was comprehended and linked to a higher frequency of dental visits in this study. The study underscores the importance of providing affordable, high-quality dental treatment in both the public and private settings to overcome financial barriers. The government should develop better oral healthcare policies and allocate more funds to oral health promotion programmes. Additionally, improving the infrastructure and providing quality dental care in government health centres will increase the likelihood of more individuals visiting the dentist.

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ANNEXURE-1

1. **Age:**
2. **Gender:** Male/Female
3. **Education:**
 - a. School education
 - b. Degree/diploma
 - c. Postgraduation
 - d. Uneducated/no formal education
4. **Occupation:**
 - a. Unemployed
 - b. Employed
 - c. Retired
 - d. Student
5. **Income per month:**
 - a. ≤10,000 rupees
 - b. 10,001-20,000 rupees
 - c. >20,000 rupees
 - d. No income
6. **Marital Status:**
 - a. Married
 - b. Single/Not married
 - c. Divorced/Separated
 - d. Widow/Widower
7. **Family Structure:**
 - a. Joint family
 - b. nuclear family
8. **Can you tell us: what do you think or feel about your oral health status?**
 - a. Excellent
 - b. Good
 - c. Average/Fair
 - d. Poor
9. **Can you tell us: do you think that you need dental treatment?**
 - a. Yes
 - b. No
10. **Are you aware that regular dental visit is necessary for good oral health?**
 - a. Yes
 - b. No
11. **Have you visited a dentist before?**
 - a. Yes
 - b. Never

If never visited a dentist before, Go to question 15
12. **How was your previous/past dental experience?**
 - a. Pleasant/good
 - b. Unpleasant/bad
13. **Did you postpone your next visit to the dentist due to the bad experience?**
 - a. Yes
 - b. Never
14. **What was the reason for visiting the dentist? _____**
15. **Do you think that high cost of dental treatment is a reason for not visiting a dentist or postponing your visit?**
 - a. Yes
 - b. No
16. **Is shortage/lack of time because of your busy work schedule or work at home a reason for not visiting dentist or postponing your visit?**
 - a. Yes
 - b. No
17. **Is fear of dentist and dental treatment a possible reason for not regularly visiting a dentist or postponing your visit?**
 - a. Yes
 - b. No
18. **Do you think that dental problems are not serious or life threatening so you don't visit dentist or postpone your visit?**
 - a. Yes
 - b. No
19. **Do you think that fixing an appointment at your convenience with the dentist is difficult so you don't visit a dentist or postpone your visit?**
 - a. Yes
 - b. No
20. **Do you think that you have no dental problem so there is no need to visit a dentist or postpone your visit?**
 - a. Yes
 - b. No
21. **Do you have religious beliefs/faith that prevents you from visiting a dentist or postpone your visit?**
 - a. Yes
 - b. No
22. **Are circumstances and situations in your life (e.g., children exam. visit by relatives, your health is not well) a reason for not visiting a dentist or postponing your visit?**
 - a. Yes
 - b. No