

Attitudes and communication factors related to oral health and periodontal treatment of adult population visiting to AME's Dental College And Hospital, Raichur, Karnataka – A questionnaire survey¹Dr. Shahay Jabeen S Biradar, BDS, MDS, Department of Periodontics and Oral Implantology²Dr. Shivanand Aspalli , BDS, MDS, Department of Periodontics and Oral Implantology³Dr. Nagappa G, BDS, MDS, Department of Periodontics and Oral Implantology**Corresponding Author:** Dr. Shahay Jabeen S Biradar, BDS, MDS, Department of Periodontics and Oral Implantology**Citation of This Article:** Dr. Shahay Jabeen S Biradar, Dr. Shivanand Aspalli, Dr. Nagappa G, “Attitudes and communication factors related to oral health and periodontal treatment of adult population visiting to AME's Dental College And Hospital, Raichur, Karnataka – A questionnaire survey”, IJDSIR - April - 2023, Volume – 6, Issue - 2, P. No. 199 – 206.**Copyright:** © 2023, Dr. Shahay Jabeen S Biradar, et al. This is an open access journal and article distributed under the terms of the creative common's attribution non-commercial License. Which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.**Type of Publication:** Original Research Article**Conflicts of Interest:** Nil**Abstract**

The global burden of chronic diseases is increased by the serious public health issue of periodontal disease, which is also very common. Oral hygiene has reportedly largely been a serious social issue that goes unacknowledged. Most diseases go undiagnosed or untreated due to lack of awareness of the association between oral hygiene and systemic diseases or disorders and misconceptions about common dental procedures. Assessing patients' attitudes and knowledge about oral health and various periodontal treatment options is the goal. The study comprised a total of 300 patients from the Raichur district who reported to the outpatient department of AME'S Dental college and hospital. All participants gave their consent after being fully informed. A systematic self-administered questionnaire was used to perform the study. A questionnaire consists

of 20 questions. The questionnaire data was statistically analysed using the SPSS software (IBM Corp 2013 ; Version 22.0; Armonk, NY). 148 of the 300 subjects had periodontal therapy, whereas the remaining 152 had not. The current study concluded that the general community had little knowledge about oral health care, periodontal treatment options, and the systemic implications of periodontal disease.

Keywords: Periodontal treatment, Oral Hygiene, Tooth Brush, Interdental Aids, Speciality of Periodontics**Introduction**

Periodontal disease is a major public health problem that is widespread and contributes to the worldwide burden of chronic diseases. Poor oral health knowledge and treatment techniques are factors that contribute to the constant growth in the prevalence of periodontal disease.¹Oral health knowledge is seen as a necessary

precursor for health-related behaviour. Oral hygiene has been recognised to be a largely disregarded and unrealized serious socioeconomic problem. Preventive oral health knowledge, conduct, and practise are critical components of oral health maintenance. According to the WHO, 15 to 30% of adults have tooth loss, and early detection and treatment can achieve periodontal disease prevention and control.²

Aim

To assess their attitude and awareness regarding oral health and different periodontal treatment modalities.

Materials and methods

The study included 300 patients from the Raichur district who presented to the outpatient department of AME'S Dental College and Hospital. All participants provided informed consent. The goal of the study, as well as all of the terms used in it, were explained to the respondents. The research was carried out using a structured self-administered questionnaire. A questionnaire has 20 questions. There were three sections to the questionnaire. The first section includes questions about oral hygiene routines. The second section of the questionnaire includes questions designed to help to understand and evaluate patients' attitudes and awareness of oral health. The third section of the questionnaire contains questions that will help understand and evaluate the patients' attitudes and awareness about Periodontal Health and Therapy. Patients aged above 20 years attending the dental outpatient department of AMES Dental college and Hospital and are willing to give verbal consent were included in this study. Patients with physical and mental illness, who are unable to respond to the questionnaire, were excluded from the study.

Statistical analysis: The data collected from the questionnaire were statistically analysed by using SPSS software (IBM Corp 2013 ; Version 22.0; Armonk, NY).

Results

A total of 300 patients agreed to participate and responded to the questionnaire. The study included subjects with different occupations and different educational qualifications. Out of the 300 participants 148 has undergone periodontal treatment and 152 has not undergone periodontal treatment. 83.3% of population uses tooth brush to clean their teeth, 1.3% of population won't brush their teeth at al. 65.3% of population are aware of interdental aids, 36.3% changes tooth brush once in 3 months where as 20.0% changes tooth brush once in 6 months. 28.7% of population visits to dentist once in 6 months, 32.0% of population wont visit to dentist. 64.7% of population have experienced bleeding gums 65.7% thinks bleeding gums require treatment for bleeding gums. 34.7% visits to dentist when they have tooth pain, 31.3% when they have bleeding gums, 25.0% in case of sensitivity and 9% of population visits to dentist when they have chief complaint of food lodgement. 80.0% of population thinks adverse habits like smoking and tobacco chewing affects the oral health, 69.7% of population thinks improper oral hygiene affects the systemic health. 59.0% have undergone cleaning of their teeth, 56.0% feels that cleaning of teeth results in sensitivity and loosening of teeth. 36.7% have rejected periodontal treatment because of their family member experience, 24.7% have rejected periodontal treatment because of personal experience. 58.3% of population are aware of different treatments available for periodontal problems, 73.0% of population are satisfied by the treatment given by the dentist, for 78.0% of population dentist's advice helped to maintain their oral health, 71.0% of population are following the instructions given by the dentist, 74.0% want more information regarding gum diseases and treatment plan. 65.0% of population have visited the dentist for recall

follow – up visits. 56.3% of population are aware of speciality of Periodontics and Oral Implantology.

Table 1: Relationship between undergone of any periodontal treatment before with different questions.

Survey Questions	Have you undergone any periodontal treatment before?			Chi-square value	P value
	Yes [N=148]	No [N=152]	Total [N=300]		
	n (%)	n (%)	n (%)		
1. Do you brush your teeth, if yes then					
a) Brushes with tooth brush	129 (87.2%)	121 (79.6%)	250 (83.3%)	4.680	0.197 NS
b) Brushes with finger	13 (8.8%)	26 (17.1%)	39 (13.0%)		
c) Wont brush the teeth	2 (1.4%)	2 (1.3%)	4 (1.3%)		
d) Uses any other aids	4 (2.7%)	3 (2.0%)	7 (2.3%)		
2. Are you aware of interdental aids for cleaning of teeth?					
a) Yes	112 (75.7%)	84 (55.3%)	196 (65.3%)	13.795	0.000 S
b) No	36 (24.3%)	68 (44.7%)	104 (34.7%)		
3. How often do you change your tooth brush?					
a) Once in a month	43 (29.1%)	33 (21.6%)	76 (25.4%)	5.852	0.119 NS
b) 3 months	58 (39.2%)	51 (33.6%)	109 (36.3%)		
c) 6 months	26 (17.6%)	34 (22.4%)	60 (20.0%)		
d) 1 year	21 (14.2%)	34 (22.4%)	55 (18.3%)		
4. How often do you visit a dentist?					
a) Once in a month	41 (27.7%)	15 (9.9%)	56 (18.7%)	24.173	0.000 S
b) 3 months	36 (24.3%)	26 (17.1%)	62 (20.7%)		
c) 6 months	38 (25.7%)	48 (31.6%)	86 (28.7%)		
d) No visit to dentist	33 (22.3%)	63 (41.4%)	96 (32.0%)		
5. Did you experience any bleeding from your gums?					
a) Yes	116 (78.4%)	78 (51.3%)	194 (64.7%)	24.036	0.000 S
b) No	32 (21.6%)	74 (48.7%)	106 (35.3%)		
6. Do you feel that bleeding gums require dental treatment?					
a) Yes	110 (74.3%)	87 (57.2%)	197 (65.7%)	9.711	0.002 S
b) No	38 (25.7%)	65 (42.8%)	103 (34.3%)		

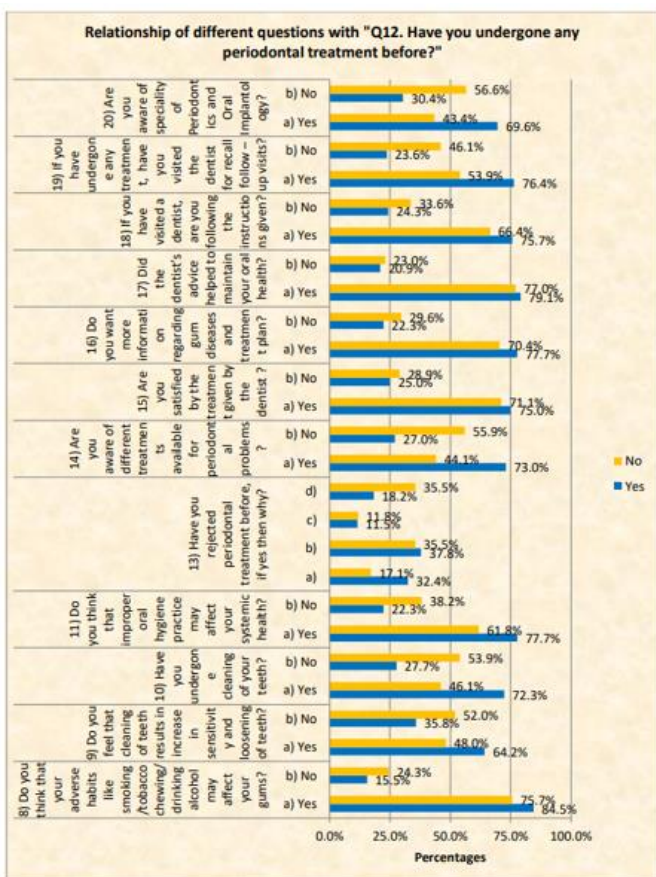
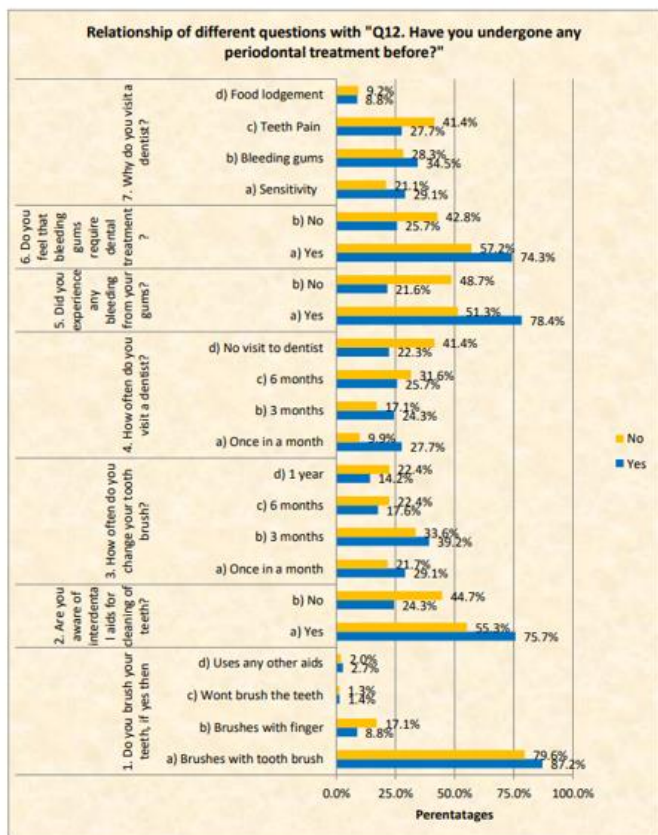
Table 2: Relationship between undergone of any periodontal treatment before with different questions

Survey Questions	Have you undergone any periodontal treatment before?			Chi-square value	P value
	Yes [N=148]	No [N=152]	Total [N=300]		
	n (%)	n (%)	n (%)		
7. Why do you visit a dentist?					
a) Sensitivity	43 (29.1%)	32 (21.1%)	75 (25.0%)	6.933	0.074 NS
b) Bleeding gums	51 (34.5%)	43 (28.3%)	94 (31.3%)		
c) Teeth Pain	41 (27.7%)	63 (41.4%)	104 (34.7%)		
d) Food lodgement	13 (8.8%)	14 (9.2%)	27 (9.0%)		
8) Do you think that your adverse habits like smoking /tobacco chewing/ drinking alcohol may affect your gums?					
a) Yes	125 (84.5%)	115 (75.7%)	240 (80.0%)	3.631	0.057 NS
b) No	23 (15.5%)	37 (24.3%)	60 (20.0%)		
9) Do you feel that cleaning of teeth results in increase in sensitivity and loosening of teeth?					
a) Yes	95 (64.2%)	73 (48.0%)	168 (56.0%)	7.950	0.005 S
b) No	53 (35.8%)	79 (52.0%)	132 (44.0%)		
10) Have you undergone cleaning of your teeth?					
a) Yes	107 (72.3%)	70 (46.1%)	177 (59.0%)	21.352	0.000 S
b) No	41 (27.7%)	82 (53.9%)	123 (41.0%)		
11) Do you think that improper oral hygiene practice may affect your systemic health?					
a) Yes	115 (77.7%)	94 (61.8%)	209 (69.7%)	8.926	0.003 S
b) No	33 (22.3%)	58 (38.2%)	91 (30.3%)		
13) Have you rejected periodontal treatment before, if yes then why?					
a) Due to personal experience	48 (32.4%)	26 (17.1%)	74 (24.7%)	15.555	0.001 S
b) Due to family member experience	56 (37.8%)	54 (35.5%)	110 (36.7%)		
c) Due to friends experience	17 (11.5%)	18 (11.8%)	35 (11.7%)		
d) Due to any other reasons	27 (18.2%)	54 (35.5%)	81 (27.0%)		

Table 3: Relationship between undergone of any periodontal treatment before with different questions

Survey Questions	Have you undergone any periodontal treatment before?			Chi-square value	P value
	Yes [N=148]	No [N=152]	Total [N=300]		
	n (%)	n (%)	n (%)		
14) Are you aware of different treatments available for periodontal problems?					
a) Yes	108 (73.0%)	67 (44.1%)	175 (58.3%)	25.757	0.000 S
b) No	40 (27.0%)	85 (55.9%)	125 (41.7%)		
15) Are you satisfied by the treatment given by the dentist ?					
a) Yes	111 (75.0%)	108 (71.1%)	219 (73.0%)	0.593	0.441 NS
b) No	37 (25.0%)	44 (28.9%)	81 (27.0%)		
16) Do you want more information regarding gum diseases and treatment plan?					
a) Yes	115 (77.7%)	107 (70.4%)	222 (74.0%)	2.081	0.149 NS
b) No	33 (22.3%)	45 (29.6%)	78 (26.0%)		
17) Did the dentist's advice helped to maintain your oral health?					
a) Yes	117 (79.1%)	117 (77.0%)	234 (78.0%)	0.189	0.664 NS
b) No	31 (20.9%)	35 (23.0%)	66 (22.0%)		
18) If you have visited a dentist, are you following the instructions given?					
a) Yes	112 (75.7%)	101 (66.4%)	213 (71.0%)	3.102	0.078 NS
b) No	36 (24.3%)	51 (33.6%)	87 (29.0%)		
19) If you have undergone any treatment, have you visited the dentist for recall follow – up visits?					
a) Yes	113 (76.4%)	82 (53.9%)	195 (65.0%)	16.544	0.000 S
b) No	35 (23.6%)	70 (46.1%)	105 (35.0%)		
20) Are you aware of speciality of Periodontics and Oral Implantology?					
a) Yes	103 (69.6%)	66 (43.4%)	169 (56.3%)	20.883	0.000 S
b) No	45 (30.4%)	86 (56.6%)	131 (43.7%)		

FIGURE:



Discussion

Periodontal diseases, which include gingivitis and periodontitis, are likely the most frequent diseases in the world (Guinness World Records 2001). According to the most recent Global Burden of Disease Study (1990-2010), 1. Severe periodontitis is the sixth most common disease worldwide, with an overall prevalence of 11.2% and an estimated 743 million people affected, and 2. The global burden of periodontal disease increased by 57.3% from 1990 to 2010. Several research conducted by Levin and Landesman,³ Davis et al⁴ have revealed that a questionnaire can assist dentists enhance their diagnosis and prognosis skills, as well as help patients confess their concerns. It has been proven that toothbrushes with frayed bristles are inefficient for adequate cleaning and create side effects such as mouth ulcers and gingival recession, and it has been recommended that toothbrushes be replaced every three months. Poor self-care oral hygiene practises lead to the formation of dental biofilms, which initiates and sustains the periodontal disease process.^{5,6} 69.7% of population thinks improper oral hygiene affects the systemic health which is in accordance with Bhatia et al⁷ Gingival bleeding is an early symptom of periodontal disease and a significant risk marker for pre-existing periodontal inflammation, which accounts for periodontitis initiation and progression. 64.7% of population has experienced bleeding gums where as 35.3% has not. This study is in accordance with studies of Nagarajan and pushpanjali⁸, Teronen and Knuttila⁹ and Kallio et al¹⁰. 65.7% thinks bleeding gums require treatment for bleeding gums. For periodontal health to be maintained over time, regular check-ups and maintenance are necessary. The signs and symptoms that the research population chose to seek a dental consultation for, however, divided opinion. Surprisingly, only 50% of people attend the

dentist when they are in pain. The primary reason people went to the dentist seemed to be dental discomfort. Self-Frequent examination and care are required for long-term periodontal health. However, there was disagreement over the signs and symptoms for which the research group thought a dental consultation. 65.0% of population have visited the dentist for recall follow – up visits which is in accordance with studies done by Gokula Nathan et al.¹¹ The general public has several misconceptions about conventional dental care. When asked about scaling, the majority of participants stated that it causes tooth mobility and sensitivity. Similar results were seen with Pralhad and Thomas study¹². Answers on understanding of treatments available for treatable periodontal disorders such as brown gums, recession, replacement of lost teeth with dental implants, and the use of laser in periodontal therapy were inadequate, indicating a need for increased awareness of these elements. When asked if they had received any periodontal therapy in the past, 50.6% had never received periodontal treatment and 49.3% had received periodontal treatment. With reference to population who has undergone periodontal therapy there is statistically significant results are seen with respect to

- Awareness of interdental aids for cleaning of teeth
- Visit to dentist
- Awareness of bleeding gums and need of treatment for bleeding gums,
- Undergoing for cleaning of teeth and after effects of cleaning of teeth
- Improper oral hygiene affects the systemic health,
- Awareness regarding speciality of periodontics and oral implantology
- Different periodontal treatment available and visited the dentist for recall follow –up visits.

Conclusion

The current study found that the general community had little knowledge about oral health care, periodontal treatment options, and the systemic implications of periodontal disease. The health of one's teeth and gums has an impact on one's overall health. The mouth is full of bacteria, the majority of which are innocuous, but because the mouth is the gateway to both the digestive and respiratory tracts, some of them can cause disease.

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