



## A Study on Awareness and Practices of Oral Hygiene and its Determinants Among the Patients Attending General Outpatient Department of Medical College, Kolkata

### OPEN ACCESS

#### Key Words

Oral diseases, important community health issue, stressful experiences, genetic predisposition

#### Corresponding Author

Sudipto Mondal,  
Department of Community  
Medicine, Medical College and  
Hospital, Kolkata, India

#### Author Designation

<sup>1</sup>Junior Resident

<sup>2</sup>Professor

**Received:** 20 September 2024

**Accepted:** 25 November 2024

**Published:** 29 November 2024

**Citation:** Sudipto Mondal and Nirmalya Manna, 2024. A Study on Awareness and Practices of Oral Hygiene and its Determinants Among the Patients Attending General Outpatient Department of Medical College, Kolkata. Res. J. Med. Sci., 18: 392-398, doi: 10.36478/makrjms.2024.12.392.398

**Copy Right:** MAK HILL Publications

<sup>1</sup>Sudipto Mondal and <sup>2</sup>Nirmalya Manna

<sup>1,2</sup>*Department of Community Medicine, Medical College and, Kolkata, India*

#### ABSTRACT

Oral diseases are an important community health issue because they are more widespread and have an impact on an individual's standard of life. Poor oral hygiene, stressful experiences, developmental issues and genetic predisposition are all potential causes of oral disorders. The present research was conducted with the objectives of finding out the sociodemographic traits of the patients who visit the Medical College, Kolkata's general outpatient department, determining the awareness and practices regarding oral hygiene among the said study participants and to find out the factors associated with awareness and practices regarding oral hygiene. Our research was a facility based observational descriptive type of epidemiological research with a cross-sectional design. The research was conducted in the General outpatient department (GOPD) of Medical College, Kolkata. A pre-designed, pre-tested, semi-structured data collection form containing information on socio-demographic characteristics and questions concerning awareness and practices regarding oral hygiene was applied. Awareness regarding oral hygiene was associated (statistically significant) with gender, tobacco usage, gum bleeding, foul smell from mouth, toothache, difficulty doing day-to-day activities and self-consciousness or embarrassment due to teeth, mouth or dentures. Practice regarding oral hygiene was associated (statistically significant) with age, gender, socioeconomic status, marital status, tobacco usage, gum bleeding, foul smell from mouth, toothache, difficulty doing day-to-day activities and self-consciousness or embarrassment due to teeth, mouth or dentures. It is necessary to show Information Education Communication materials that illustrate the detrimental consequences of tobacco use on oral health. Increasing contact with dental practitioners requires overall strengthening of oral health services.

## INTRODUCTION

Oral diseases are an important community health issue because they are more widespread and have an impact on an individual's standard of life<sup>[1]</sup>. Since the oral cavity serves as a 'reflection' and entryway to the body, oral health is now regarded as being just as important as systemic health and knowledge about oral health must start with an understanding of the dynamics of the oral cavity, which includes not only how strong teeth affect a person's physical and psychological well-being but also how they develop, function, communicate, look and socialize<sup>[2]</sup>. Poor oral hygiene, stressful experiences, developmental issues and genetic predisposition are all potential causes of oral disorders<sup>[3]</sup>. Among the most common oral disorders affecting people globally are gum issues, tooth decay, maligned teeth and cancerous issues<sup>[4]</sup>. By emphasizing the importance of maintaining excellent oral health, many of the aforementioned issues can be managed on a personal and population level, which will ultimately lead to a shift in oral health attitudes and behaviours at the local level<sup>[5]</sup>. 95% of Indians have gum disease, but only 50% of Indians use a toothbrush and a paltry 2% of people visit the dentist according to the Indian Dental Association's National Oral Health Survey<sup>[6]</sup>. In India, preventive dental care is scarce in urban regions and virtually non-existent in rural ones<sup>[7]</sup>. By informing people about oral health, a significant portion of these conditions can be addressed simultaneously on an individual and societal level, hence enhancing dental hygiene habits<sup>[3]</sup>. For habits related to oral health, a proper grasp of oral hygiene should be crucial. On thorough literature search it was found that research on dental hygiene in this region of the nation is scarce. Keeping the aforesaid background in mind, the present research was conducted with the objectives of finding out the sociodemographic traits of the patients who visit the Medical College, Kolkata's general outpatient department, determining the awareness and practices regarding oral hygiene among the said study participants and to find out the factors associated with awareness and practices regarding oral hygiene.

## MATERIALS AND METHODS

Our research was a facility based observational descriptive type of epidemiological research with a cross-sectional design. The research was conducted in the General outpatient department (GOPD) of Medical College, Kolkata. There are two designated rooms for the GOPD in the New OPD building of Medical College, Kolkata-one for male patients and other one for the female patients exclusively. The study was conducted during the months of February to March of 2024. Paul *et al.* in their research on awareness and practices of oral hygiene conducted in a similar setting (GOPD) in another tertiary care hospital of Kolkata, found out

that 61.61% of the study participants had 'not so good oral hygiene practices'<sup>[8]</sup>. Considering an absolute precision of 10% and a non-responsive rate of 10%, we arrived at a minimum sample size of 99.94 using the Cochran's formula, i.e.,  $n = [(Z1-\alpha)^2 \times p \times q] / l^2$ . The sample size was rounded off to 100. Systematic random sampling was applied after proportionate stratification to attain the samples. 8 days were allotted for data collection (One day per week for 2 months., 4 days for female GOPD and 4 days for male GOPD). On average 85 patients attended the Female GOPD and 36 patients attended the Male GOPD as per data of previous month from the OPD register. 100 samples were divided proportionally i.e., 85:36. So 70 female and 30 male patients after rounding off. For the female GOPD,  $70/4 = 17.5 \approx 18$  samples were to be collected per day. [Sampling Interval =  $85/18 = 4.72 \approx 5$ ]. 1<sup>st</sup> patient was chosen by a random number between 1-5. Then every 5th patient was chosen until desired number was reached. Similarly, for the male GOPD,  $30/4 = 7.5 \approx 8$  samples were to be collected per day. [Sampling Interval =  $36/8 = 4.5 \approx 5$ ]. 1<sup>st</sup> patient was chosen by a random number between 1-5. Then every 5th patient was chosen until desired number was reached. All the patients attending the general outpatient department of Medical College, Kolkata within study period above 12 completed years of age and willing to participate were included in this research. We excluded those who were unable to respond properly due to critical physical or mental illness. The researchers prepared a pre-designed, pre-tested, semi-structured data collection form containing information on socio-demographic characteristics and questions concerning awareness and practices regarding oral hygiene. Other questions to gather information on tobacco usage, whether ever noticed bleeding from your gums within a year, whether ever noticed foul smell from your mouth within a year, whether ever suffered from toothache within a year, whether had difficulty doing day-to-day activities because of problems with teeth, mouth or dentures and whether have been self-conscious or embarrassed because of teeth, mouth or dentures-were also included in the form. Local-language versions of the form were face- and content-validated by public health experts from the department of Community Medicine, Medical College, Kolkata. This was tested for internal consistency (Reliability) through Cronbach's alpha [0.83 (awareness), 0.79 (practice)]. Socio-economic status was categorized into low-income (median and below per capita monthly income) and high-income (above median per capita family income). Marital status was divided into participants who were currently married and those who were currently unmarried-consisting of the widowed, divorced or separated and unmarried participants. Occupation-wise the participants were clubbed in to the following categories-those engaged

in gainful employment and those, not engaged in gainful employment (not engaged in gainful employment=Homemaker+Student+Unemployed+Retired person). Regarding outcome, awareness regarding oral hygiene was scored and categorized as Poor awareness (Median and below awareness score) and Adequate awareness (above median awareness score). Similarly, for practice regarding oral hygiene, the categories were Poor Practice (median and below Practice score) and Good Practice (above median Practice score). For the scoring, the correct answers were given a value of one (1) and incorrect answers were given a value of zero (0)<sup>[9-11]</sup>. Correct responses were tabulated in (table no.1 and 2). Data was collected by face-to-face interview. Collected data were entered into Microsoft excel spreadsheet 2021 and it was cleaned for incompleteness. Final Information Sheet was prepared and analyzed using SPSS version 20. Suitable tests for statistical analysis were used (example-chi-square test) to examine relationship among variables at  $p < 0.05$  level of significance. Suitable tables and diagrams were prepared.

**Ethical Consideration:** The Scientific Advisory Committee and the Institutional Ethics Committee for Human Research of Medical College, Kolkata, granted permission before commencement of the research. No interventions were performed on the subjects for the study. The interviews were conducted after participants gave their written informed consent. Anonymity was preserved throughout the whole study, and each participant was identified by their serial number. The study population's identities were kept private.

## RESULTS AND DISCUSSIONS

**Socio-Demographic Characteristics:** Mean age ( $\pm$ SD) of the study participants was 37.95 ( $\pm$ 13.125) years and their median age was 39 (IQR=20.00) years. The age range was from 15 years-69 years (Range=54). 70% of the study participants were female. 58% followed Islam. 75% of the participants were from general category of caste and the rest were from reserved category. 69% of the patients were from joint families. Equal number of the study participants were rural and urban residents. 53% of the participants were from low-income socio-economic status. 21% were illiterate. 56% of the study participants were homemakers. 69% of the study participants were married.

**Other Oral Hygiene-Related Variables:** 38% of the participants used tobacco. 65.78% (25) among the 38 tobacco users used both smoking and chewing tobacco. 46% of the participants never noticed bleeding from their gums within a year. 31% of the study participants occasionally noticed foul smell from

their mouth within a year. 40% of them never suffered from toothache within a year. 51% of the patients never had difficulty doing their day-to-day activities because of problems with teeth, mouth or dentures last year. 45% of the participants never during the last year have been self-conscious or embarrassed because of teeth, mouth or dentures.

**Awareness Regarding Oral Hygiene:** 96% of the participants agreed to the item "Sweets affect teeth adversely" and 79% agreed to the item "Smoking tobacco is a risk factor for oral cancer". 37% of the study participants disagreed to the item "The smokeless form can cause mouth cancer", whereas 44% agreed to the item "Certain systemic diseases can manifest in the oral cavity". 85% of the participants agreed to the item "Oral health has an influence on the overall quality of life". 74% of the study participants responded that their source of information about oral health was television. Mean Awareness-score ( $\pm$ SD) was 3.39 ( $\pm$ 1.27) and median Awareness-score was 3 (IQR=2). The Awareness-score ranged from 0-5 (Range =5). 55% participants had poor awareness. Awareness regarding oral hygiene was associated (statistically significant) with gender, tobacco usage, gum bleeding, foul smell from mouth, toothache, difficulty doing day-to-day activities and self-consciousness or embarrassment due to teeth, mouth or dentures. Males (OR=0.405, 95% CI= 0.163-1.006), those who use tobacco (OR=40.737 95% CI=8.885-186.782), participants with gum-bleeding within a year (OR= 5.905, 95% CI=2.483-14.042), participants with foul smell from mouth within a year (OR=4.089, 95% CI= 1.621-10.314), participants with toothache within a year (OR= 2.337, 95% CI=1.032-5.294), participants with difficulty doing day-to-day activities within a year (OR= 3.238, 95% CI=1.420-7.386) and participants with self-consciousness or embarrassment due to teeth, mouth or dentures within a year (OR=7.953, 95% CI= 3.247-19.479) were less aware.

**Practice Regarding Oral Hygiene:** 83% of the study participants responded that they use toothbrush. 63% responded that they clean teeth only once daily. 38% of the patients responded that they have no fixed time for cleaning teeth. 67.48% (56) among the 83 participants who used toothbrush responded that they changed their brush only when broken or lost or bristles become useless and only 9.63% (8) changed their toothbrush at least once every 6 months. 66% of the participants responded that they did not clean their tongue daily. 83% of the patients responded that they did not use liquid mouth wash. 82% of the study participants rinsed their mouth every time after eating. 67% of the participants responded that they do not use any inter-dental aid. 77% of the patients responded that they visited their dentist only if there is a

**Table 1: Scoring for Awareness Related Items**

Item	Option	Score
"Sweets affect teeth adversely"	Agree	1
	Neither agree nor disagree	
"Smoking tobacco is a risk factor for oral cancer"	Disagree	0
	Agree	1
"The smokeless form can cause mouth cancer."	Neither agree nor disagree	
	Disagree	0
"Certain systemic diseases can manifest in the oral cavity."	Agree	1
	Neither agree nor disagree	
"Oral health has an influence on the overall quality of life."	Disagree	0
	Agree	1
	Neither agree nor disagree	
	Disagree	0
	Agree	1

**Table 2: Scoring for Practice Related Items**

Item	Option	Score
"How do you clean your teeth?"	Both 'Toothbrush' and 'Toothpaste'	1
	Any other option/s	0
"How often do you clean your teeth?"	Twice daily	1
	Any other option	0
"When do you clean your teeth?"	Both 'Before breakfast' and 'After dinner'	1
	Any other option/s	0
"How often did you change your toothbrush?"	At least once every 6 months	1
	Any other option/s	0
Time of last examination for oral cancer	Within past year	1
	Any other option/s	0
"How often do you clean your tongue?"	Once daily or more frequent	1
	Any other option/s	0
"Do you use tongue cleaners?"	Yes	1
	No	0
"Do you use liquid mouthwash?"	Yes	1
	No	0
"How often do you rinse your mouth after eating?"	Every time	1
	Sometimes	0
"Do you use any inter-dental aid?"	Dental floss	1
	Inter-dental brush	1
"How often do you visit your dentist?"	Any other option/s	0
	At least once every 6 months	1
	Any other option/s	0

**Table 3: Distribution of Study Subjects According to Awareness Regarding Oral Hygiene and Selected Variables (n=100)**

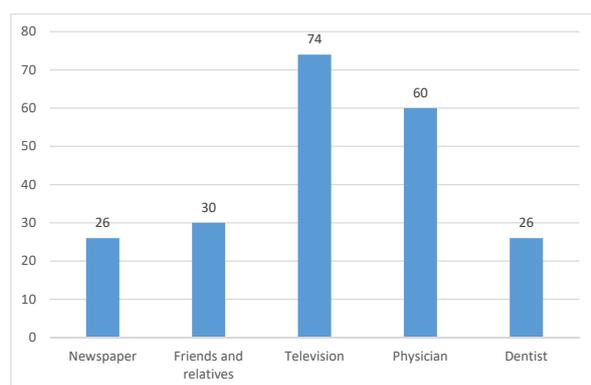
Variables	Awareness Score		Statistical test
	Poor Awareness, n (%)	Adequate awareness, n (%)	
<b>Age (in years)</b>			
39 years and below	33 (55.00)	27 (45.00)	$\chi^2$ (df)=<0.0001 (1) P=1
Above 39 years	22 (55.00)	18 (45.00)	
<b>Gender</b>			
Female	34 (48.57)	36 (51.43)	$\chi^2$ (df)=3.896 (1) P=0.048*
Male	21 (70.00)	9 (30.00)	
<b>Religion</b>			
Hinduism	22 (52.38)	20 (47.62)	$\chi^2$ (df)=0.201 (1) P=0.654
Islam	33 (56.90)	25 (43.10)	
<b>Caste</b>			
General	43 (57.33)	32 (42.67)	$\chi^2$ (df)=0.660 (1) P=0.417
Reserved	12 (48.00)	13 (52.00)	
<b>Type of family</b>			
Joint	41 (59.42)	28 (40.58)	$\chi^2$ (df)=1.757 (1) P=0.185
Nuclear	14 (45.16)	17 (54.84)	
<b>Place of residence</b>			
Rural	30 (60.00)	20 (40.00)	$\chi^2$ (df)=1.010 (1) P=0.315
Urban	25 (50.00)	25 (50.00)	
<b>Socioeconomic status</b>			
Low income	34 (64.15)	19 (35.85)	$\chi^2$ (df)=3.815 (1) P=0.051
High income	21 (44.68)	26 (55.32)	
<b>Educational status</b>			
Illiterate	14 (66.67)	7 (33.33)	$\chi^2$ (df)=1.462 (1) P=0.227
Literate	41 (51.90)	38 (48.10)	
<b>Occupational status</b>			
Engaged in gainful employment	19 (63.33)	11 (36.67)	$\chi^2$ (df)=1.203 (1) P=0.273
Not engaged in gainful employment	36 (51.43)	34 (48.57)	
<b>Marital status</b>			
Currently married	35 (50.72)	34 (49.28)	$\chi^2$ (df)=1.644 (1) P=0.200
Currently not married	20 (64.52)	11 (35.48)	
<b>Tobacco use</b>			
Uses tobacco	36 (94.74)	2 (5.26)	$\chi^2$ (df)=39.102 (1) P=<0.0001*
Does not use tobacco	19 (30.65)	43 (69.35)	
<b>Bleeding from gum</b>			
Ever within a year	40 (74.07)	14 (25.93)	$\chi^2$ (df)=17.256 (1) P=<0.0001*
Never within a year	15 (32.61)	31 (67.39)	
<b>Foul smell from mouth</b>			
Ever within a year	46 (64.79)	25 (35.21)	$\chi^2$ (df)=9.478 (1) P=0.002*
Never within a year	9 (31.03)	20 (68.97)	
<b>Toothache</b>			
Ever within a year	38 (63.33)	22 (36.67)	$\chi^2$ (df)=4.209 (1) P=0.04*
Never within a year	17 (42.50)	23 (57.50)	
<b>Difficulty doing day to day activities</b>			
Ever within a year	34 (69.39)	15 (30.61)	$\chi^2$ (df)=8.036 (1) P=0.005*
Never within a year	21 (41.18)	30 (58.82)	
<b>Self-consciousness or embarrassment due to teeth, mouth or dentures</b>			
Ever within a year	42 (76.36)	13 (23.64)	$\chi^2$ (df)=22.539 (1) P=<0.0001*
Never within a year	13 (28.89)	32 (71.11)	

\* P<0.05-conveying statistically significant relationship.

**Table 4: Distribution of Study Subjects According to Practice Regarding oral Hygiene and Selected Variables (n=100)**

Variables	Practice Score Poor Practice, n (%)	Good Practice, n (%)	Statistical test
<b>Age (in years)</b>			
39 years and below	25 (41.67)	35 (58.33)	$\chi^2$ (df)=7.735 (1) P=0.005*
Above 39 years	28 (70.00)	12 (30.00)	
<b>Gender</b>			
Female	32 (45.71)	38 (54.29)	$\chi^2$ (df)=4.972 (1) P=0.026*
Male	21 (70.00)	9 (30.00)	
<b>Religion</b>			
Hinduism	27 (64.29)	15 (35.71)	$\chi^2$ (df)=3.703 (1) P=0.054
Islam	26 (44.83)	32 (55.17)	
<b>Caste</b>			
General	42 (56.00)	33 (44.00)	$\chi^2$ (df)=1.084 (1) P=0.298
Reserved	11 (44.00)	14 (56.00)	
<b>Type of family</b>			
Joint	40 (57.97)	29 (42.03)	$\chi^2$ (df)=2.208 (1) P=0.137
Nuclear	13 (45.16)	18 (54.84)	
<b>Place of residence</b>			
Rural	29 (58.00)	21 (42.00)	$\chi^2$ (df)=1.004 (1) P=0.316
Urban	24 (48.00)	26 (52.00)	
<b>Socioeconomic status</b>			
Low income	33 (62.26)	20 (37.74)	$\chi^2$ (df)=3.885 (1) P=0.049*
High income	20 (42.55)	27 (57.45)	
<b>Educational status</b>			
Illiterate	14 (66.67)	7 (33.33)	$\chi^2$ (df)=1.993 (1) P=0.158
Literate	39 (49.37)	40 (50.63)	
<b>Occupational status</b>			
Engaged in gainful employment	19 (63.33)	11 (36.67)	$\chi^2$ (df)=1.837 (1) P=0.175
Not engaged in gainful employment	34 (48.57)	36 (51.43)	
<b>Marital status</b>			
Currently married	31 (44.93)	38 (55.07)	$\chi^2$ (df)=5.823 (1) P=0.016*
Currently not married	22 (70.97)	9 (29.03)	
<b>Tobacco use</b>			
Uses tobacco	36 (94.74)	2 (5.26)	$\chi^2$ (df)=42.861 (1) P<0.0001*
Does not use tobacco	17 (27.42)	45 (72.58)	
<b>Bleeding from gum</b>			
Ever within a year	40 (74.07)	14 (25.93)	$\chi^2$ (df)=20.930 (1) P<0.0001*
Never within a year	13 (28.26)	33 (71.74)	
<b>Foul smell from mouth</b>			
Ever within a year	45 (63.38)	26 (36.62)	$\chi^2$ (df)=10.590 (1) P=0.001*
Never within a year	8 (27.59)	21 (72.41)	
<b>Toothache</b>			
Ever within a year	41 (68.33)	19 (31.67)	$\chi^2$ (df)=14.158 (1) P<0.0001*
Never within a year	12 (30.00)	28 (70.00)	
<b>Difficulty doing day to day activities</b>			
Ever within a year	34 (69.39)	15 (30.61)	$\chi^2$ (df)=10.358 (1) P=0.001*
Never within a year	19 (37.25)	32 (62.75)	
<b>Self-consciousness or embarrassment due to teeth, mouth or dentures</b>			
Ever within a year	42 (76.36)	13 (23.64)	$\chi^2$ (df)=26.783 (1) P<0.0001*
Never within a year	11 (24.44)	34 (75.56)	

\* P<0.05-conveying statistically significant relationship.



**Fig. 1: Distribution of Study Participants According to their Source(s) of Information About Oral Health. (Multiple Responses, n=100)**

complain. 39% never had an oral cancer examination. Mean Practice-score ( $\pm$ SD) was 3.89 ( $\pm$ 2.98). median Practice-score was 3 (IQR=5). The Practice-score ranged from 0-10 (Range=10). 53% participants displayed poor practice. Practice regarding oral hygiene was associated (statistically significant) with age, gender, socioeconomic status, marital status,

tobacco usage, gum bleeding, foul smell from mouth, toothache, difficulty doing day-to-day activities and self-consciousness or embarrassment due to teeth, mouth or dentures. More aged people (OR=0.306, 95% CI=0.131-0.715), females (OR=0.361, 95% CI=0.145-0.898), participants with low income (OR=2.228, 95% CI=0.999-4.966), those who are currently not married (OR=0.334, 95% CI=0.134-0.828), those who used tobacco (OR=47.647, 95% CI=10.324-219.889), participants with gum-bleeding within a year (OR=7.253, 95% CI=2.995-17.564), participants with foul smell from mouth within a year (OR=4.543, 95% CI=1.763-11.709), participants with toothache within a year (OR=5.035, 95% CI=2.114-11.993), participants with difficulty doing day-to-day activities within a year (OR=3.818, 95% CI=1.662-8.768) and participants with self-consciousness or embarrassment due to teeth, mouth or dentures within a year (OR=9.986, 95% CI=3.974-25.095) demonstrated more poor practice. In summary, 55% of participants lacked awareness of oral hygiene and awareness was statistically significant in relation to gender, tobacco use, gum bleeding, bad breath, toothache, difficulty performing daily tasks and self-consciousness or embarrassment related to teeth, mouth, or dentures.

In contrast, 53% of participants exhibited poor oral hygiene practice and practice was statistically significant in relation to age, gender, marital status, socioeconomic status, tobacco use, gum bleeding, bad breath, toothache, difficulty performing daily tasks and self-consciousness or embarrassment related to teeth, mouth, or dentures. Paul<sup>[8]</sup> found out that 61.60% of the participants displayed "not good practices" and practices of oral hygiene was significantly associated with gender, education, residence and socioeconomic status, whereas current research shows poor practice among 53% participants. The current research also revealed that oral hygiene practice was significantly associated with gender and socioeconomic status-findings in concordance with Paul *et al.* Current study revealed that 63% participants brushed only once daily and 83% used toothbrush. Sharma<sup>[12]</sup> found out that 61.09% brushed their teeth once daily and 82.67% used toothbrush-both findings similar to current research. 54% of the participants ever noticed bleeding from their gums and 71% of the study participants ever noticed foul smell from their mouth within a year in current research. According to Sharma<sup>[12]</sup> only 33.43% and 52.28% participants complained of bleeding gums and bad breath respectively. Marneedi<sup>[13]</sup> reported that 78.2% brushed only once a day. They also reported that 47% of the participants did not deem necessary to use a tongue scraper. In current research, 66% of the study participants responded that they did not clean their tongue daily and 67% of the study participants responded that they did not use tongue cleaners. Mahore<sup>[14]</sup> in their facility-based study demonstrated that only 10.5% of the study subjects brushed twice or more per day. 54.2% subjects visited their dentist only when they suffered from dental problems. In our research 77% of the participants visited their dentist only if there is a complain. According to Mahore<sup>[14]</sup>, 65.3% of subjects gathered information on oral health from television. In our research also, television emerged as the most common (74%) source of information regarding oral hygiene, followed by physician (60%) and friends and relatives (30%). According to Singh<sup>[15]</sup> 38.39% of the survey participants reported having "good oral hygiene practices," whereas the remaining 61.61% reported having "not so good oral hygiene practices." Furthermore, compared to men, illiterates and rural residents, females, literate individuals and urban dwellers exhibited more "good practices," with the differences appearing to be statistically significant. The majority of participants (16.14%) obtained their dental health knowledge from television, with recommendations from friends (40.97%) and the dentist (35.71%) coming next. Recall bias and conscious falsification might be present because lack of oral hygiene might feel embarrassing to the individual. Usage of Inter-dental aids such as floss and inter-dental brush was very low due to

majority low-income socio-economic status. Majority were from secondary or lower education, so information such as brush stroke movements, types of bristles used in brush could not be elicited.

## CONCLUSION

Programs to raise awareness of oral health should be conducted periodically. Primary care doctors bear the primary duty and responsibility and their contacts with patients and families make them more approachable and palatable. By raising public knowledge of and promoting better oral hygiene habits, dental practitioners and the media can work with the government to help prevent oral health issues. It is necessary to show. Information Education Communication materials that illustrate the detrimental consequences of tobacco use on oral health. Increasing contact with dental practitioners requires overall strengthening of oral health services. To investigate the obstacles to implementing proper oral hygiene practices, further research is needed.

## REFERENCES

1. Butt, A.M., B. Ahmed, N. Parveen and N. Yazdanie., 2009. 1. Oral health related quality of life in complete dentures. *Pak Oral Dent J.*, 29: 397-402.
2. Bana, K.M., F. Ahmad, S.H. Danish, N.F. Bana and A.R. Kazmi., 2016. 1. Non communicable diseases and oral health: Introspection. *Pakistan Journal of Medicine and Dentistry.*, Vol. 5.
3. Parveen, N. and B. Ahmed., 2011. 1. Oro dental health: awareness and practices. *Journal of University Medical and Dental College.*, 2: 5-10.
4. Pitts, N.B., D.T. Zero, P.D. Marsh, K. Ekstrand and J.A. Weintraub et al., 2017. Dental caries. *Nat. Rev. Dis. Primers*, 3: 1-6.
5. Sohail, A., A. Amjad, M. Jabbar, M. Munawar, A. Nauman and N. Zahid, 2022. Awareness and Practices of Patients Regarding Oral Hygiene Visiting Dental OPD Sharif Medical and Dental College, Lahore. *Pak. J. Med. Health Sci.*, 16: 36-38.
6. Shah, N., 2001. Geriatric oral health issues in India. *Int. Dent. J.*, 51: 212-218.
7. Paul, B., M. Basu, S. Dutta, S. Chattopadhyay, D. Sinha and R. Misra, 2014. Awareness and practices of oral hygiene and its relation to sociodemographic factors among patients attending the general outpatient department in a tertiary care hospital of Kolkata, India. *J. Family Med. Primary Care*, 3: 107-111.
8. Mangla, M., P. Sharma and N. Srivastava., 2016. 1. Oral health awareness among different professionals. LAP LAMBERT Academic Publishing., Vol.

9. Jain, N., D. Mitra, K. Ashok, J. Dundappa, S. Soni and S. Ahmed, 2012. Oral hygiene awareness and practice among patients attending OPD at Vyas Dental College and Hospital, Jodhpur. *J. Indian Soc. Periodontology*, 16: 524-528.
10. Sharma, R., S. Singh, H. Rajmani and H. Degra, 2015. An evaluation of the current oral hygiene practices and attitude toward oral health in the population of Jaipur, India. *Int. Dent. And Med. J. Adv. Res. VOLUME 2015*, 1: 1-6.
11. Marneedi, P.N., S.G. Sooraparaju, V. Kumar and T.S. Rao., 2020. 1. Knowledge, Behavior and attitude towards oral health among population visiting a dental college and hospital in south india, A Cross Sectional Study. group., Vol. 51.
12. Mahore, R.K., V. Gupta and R.K. Panika, 2021. Assessment of Knowledge, Attitude and Practices Regarding Oral and Dental Hygiene among Dental Outpatients in Central India. *J. Sci. Soc.*, 48: 73-78.
13. Singh, D., V.K. Tiwari and S. Raj., 2018. 1. Knowledge awareness and practice regarding oral hygiene and its consequences among dental patient attending OPD in tertiary care hospital in Delhi. *IOSR J Dent Med Sci.*, 17: 7-16.