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# Dental Health Knowledge Attitude and Practice Among teenage students in Kanpur

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#### **ABSTRACT**

Oral health has always been linked to aspects of individual knowledge, attitude, and practices. Behavioral aspects that include the increased intake of sugary foods and beverages, and lack of proper oral hygiene have been thought to be as the main causes of poor oral hygiene among teenage students. The knowledge of oral health is vital owing to its contribution to better oral health. This research aimed to explore the knowledge, attitude, and practice of dental care among the teen age students in kanpur . we concluded that targeted interventions and educational programs that address these barriers could promote better oral hygiene practices among the students.

#### Introduction

Knowledge of oral health is vital to the maintenance of good oral health: however, poor oral health remains a significant burden for individuals globally and in developing countries [1]. Oral health has always been linked to aspects of individual knowledge, attitude, and practices. Behavioral aspects that include the increased intake of sugary foods and beverages, and lack of proper oral hygiene have been thought to be as the main causes of poor oral hygiene among teenage students. oral health studies conducted in Nigeria, periodontal disease has been noted to occur at an early age, with a prevalence of 15%-58% in children aged 15 years and above and is attributable to increased consumption of Western-style diets [2]. Approximately 60%-90% of school-aged children and nearly all adults globally have dental caries. Additionally, severe periodontal disease affects nearly 15%-20% of adults aged 35 to 45 years. Globally, approximately 30% of people aged 65-74 have lost all their natural teeth [3]. The knowledge of oral health is vital owing to its contribution to better oral health; however, unless students develop good oral habits and attitudes and subsequently put them into practice, very little will be realized with regard improvement in oral health and hygiene.

## **MATERIAL AND METHODS**

This study was conducted among 500 teenage (13-19 yrs) students in Kanpur between 2021-2022. The participants were given an anonymous, self-administered, structured questionnaire to assess their oral health knowledge, attitudes, and practices. All subjects were asked to provide written informed consent from their parents prior to participation in the study. The cover page of the questionnaire provided an explanation of the objectives and methods of the study. This study received ethical approval from the ethical committee of Rama University. Questionnaire was in English and Hindi languages and participants were asked choose the one they preferred The research team guided the students in completing the questionnaire. The questionnaire was designed to obtain information from respondents regarding their socio-demographics, knowledge, attitude, practice, and utilization of dental care. There were 9 questions related to knowledge, 7 questions related to attitude, and 5 related to practice domain. Collected data were analyzed and Descriptive results were presented as percentages.

#### **Results**

The study included 500 participants, 260 (52%) females and 240 (48%) males. The survey revealed that 97% of the 500 respondents agreed that poor dental care can cause dental diseases, while only 3% disagreed. Regarding excessive drinking of water, 90% of the respondents agreed that it cannot cause dental disease, 4% agreed it could, and 6% did not know. Furthermore, 63% of the 500 respondents acknowledged that genetic inheritance could cause dental disease, while 27.4% disagreed, and 12.6% did not know. Finally, 79.8% of the respondents knew that trauma to the teeth could cause dental disease; while only 20% thought that trauma could not cause illness to the teeth.

Regarding attitude to dental care, 280(56%) respondents agreed that visiting the dentist was necessary, while 190 (38%) strongly agreed. Only 5 (1%) strongly disagreed, while 25 (5%) disagreed that visiting the dentist was necessary. Moreover, 70% of the respondents agreed that bad breath was associated with poor dental care, with 376 (15.2%) respondents strongly agreeing and 99 (19.8%) agreeing. However, 5 (1%) disagreed, and 5(1%) strongly disagreed, while 15 (3%) were indifferent.

As regards practice, most respondents used the up-down technique when brushing their teeth (65%), while 20% brushed left-right and 15% used both methods. Moreover, 43% of the respondents brushed twice daily, 56% brushed once daily, and only 1% brushed after every meal. About 205 students spent one to three minutes brushing their teeth (41%), while the others spent more time. Over half of the students replaced their toothbrushes every three months (57.7%), with the most common reason for replacement being the fraying of bristles. However, the use of dental floss was found to be low.

**Table 1 : Social-demographics of participants** 

VARIABLE	PERCENTAGE (%)
Age group/years	
13-14	160(32%)
15-16	170 (34%)
17-19	170(34%)
Sex	
Male	240 (48%)
Female	260 (52%)

Table: 2 Knowledge of dental care among respondents

VARIABLE	FREQUENCY (%)
Teeth being a living part of the body.	
Yes	436 (87.2)
No	27 (5.4)
I don't Know	37 (7.4)
Teeth receiving blood supply like other parts of the body.	
Yes	412(82.4)
No	55 (11.0)
I don't know.	33 (6.6)
Teeth have diseases like other parts of the body.	
Yes	425 (85.0)
No	52 (10.4)
I don't know	23 (4.6)
Eating fresh fruits causing disease to the teeth	
Yes	59 (11.8)
No	389 (77.8)
I don't know	56 (11.2)

Poor dental care causing disease of the teeth.

Yes	475 (97)			
No	20 (3)			
I don't know	5 (0)			
Excess drinking of water cause disease of the teeth				
Yes	20 (4.0)			
No	450 (90.0)			
I don't know	30 (6.0)			
Genetic inheritance causing disease of the teeth.				
Yes	315 (63)			
No	137 (27.4)			
I don't know	63 (12.6)			
Trauma causing disease to the teeth.				
Yes	399 (79.8)			
No	100 (20)			
I don't know	1(0.2)			

Table 3: Attitude towards dental care

Variables	Strongly disagree	Disagree	Indifferent	Agree	Strongly agree	Total
Brushing of the teeth is necessary	3(0.6%)	6(1.2%)	0	66 (13.2%)	425 (85%)	500 (100%)
Visiting the dentist is necessary	5 (1%)	25 (5 %)	0(0%)	280 (56%)	190 (38%)	500 (100%)
Bad breath is associated with poor dental care	5 (1%)	5 (1%)	15 (3%)	99(19.8%)	376 (75.2%)	500 (100%)

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Bad breath affects people's self-esteem	10 (2%)	25 (5%)	17 (3.4%)	159 (31.8%)	289 (57.8%)	500 (100%)
Brown teeth are as a result poor dental care	66 (13.2%)	95 (19%)	52 (10.4%)	172 (34.4%)	115 (23%)	500 (100%)
Dentist can help in teeth whitening	34 (6.8%)	79 (15.8%)	50 (10%)	218 (43.6%)	119 (23.8%)	500 (100%)
Other diseases of the body can emerge from poor dental care	119 (7%)	129 (19.5%)	99 (11.9%)	83 (41.2%)	70 (20.5)	500 (100%)

Table 4: Assessment of practice of dental care among the respondents

VARIABLE	FREQUENCY (%)
Tooth brushing technique	
Up-down	325 (65)
Left-right.	100 (20)
Both	75 (15)
Time of brushing teeth	
Morning only	280(56)
Night only	0 (0)
Morning and night	215 (43)
After every meal	5 (1)
Duration of brushing	
1-3 minutes	205 (41)
4-5 minutes	235 (47)
More than 5 minutes	60 (12)
Brushing in front of mirror	
Yes	285 (57)
No	215 (43)
Frequency of brush change	
Every month	90 (18)

Every 3 months	248 (49.6)
Every 6 months	145 (29)
More than 6 months	17 (3.4)

## Conclusion

knowledge, attitude, and practice of dental care among the teen age students in Kanpur vary and targeted interventions and educational programs that address these barriers could promote better oral hygiene practices among the students

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