



# Knowledge, Attitude and Practices towards Oral Health among Law Students in Chennai

**Dr.M.P.Santhosh Kumar**

*Reader, Department of Oral and Maxillofacial Surgery  
Saveetha Dental College and Hospital*

*162, Poonamallee High Road, Velappanchavadi, Chennai, Tamilnadu 600077*

---

## Abstract

### Objective:

To assess the level of knowledge, attitudes, and practices regarding oral health among law students in Chennai.

### Methods:

A validated questionnaire of 22 questions, regarding the basic knowledge, attitude and practices toward oral health was distributed among 100 students randomly belonging to first year, second year, third year and final year of Saveetha School of Law, Saveetha university, Chennai. The data extracted were tabulated, statistically analyzed and results obtained. Results were calculated on the basis of frequency and percentages using SPSS.

### Results:

64% agreed that oral health is important for overall health of the body. 55% of students were aware that calculus causes bleeding gums. 65% of them agreed that mouth washes contain medications that can prevent or reduce gum problem, but only 12% of students were using mouth wash. 66% of students brush their teeth only once daily. 68% of students were not taking any other measures apart from tooth brushing for oral hygiene maintenance. Majority (49%) change their toothbrush only when it gets spoilt. According to 58% participants, one should visit dentist only when there is a problem.

### Conclusion:

Law students in the present study have a satisfactory level of knowledge about oral health care. However, the knowledge acquired must be transferred into daily practice. This can be achieved by a change in their attitude towards oral hygiene maintenance. Inclusion of oral health-oriented education programs in their curriculum would improve their knowledge and behaviour and they would be a good model to the community.

---

**Keywords**-Knowledge, Oral hygiene, Law students, Attitude, Oral health, Practices

---

## INTRODUCTION

Oral health is an integral component of general health as Sir William Osler said that 'oral cavity is the mirror of general health'. There is substantial evidence to suggest that oral health affects general quality of life.[1] Oral health is the standard of health which enables an individual to eat, speak and socialize without active disease, discomfort or embarrassment and which contributes to general well-being.[2] Oral disease qualifies as major public health problems owing to their higher prevalence and significant social impact.[3] Improvement in oral health-related knowledge is considered to be an essential prerequisite for improving oral health in a community.[4]

To improve oral health of the populations, World Health Organization has set the promotion of self care of as one of the goals for the year 2020.[5] Recommended oral self care (ROSC) includes tooth brushing more than once a day, lesser consumption of sugar containing snacks once daily or rarely and regular use of fluoride containing tooth paste. Studies have shown that there is an association between increased knowledge regarding oral hygiene and better oral health.[6,7] Those who have assimilated the knowledge and feel a sense of personal control over their oral health are more likely to adopt self-care practices. Developing such knowledge plays a key role in improving the oral health.[8] The young college students play a vital role in health promotion and preventive information dissemination among the family and their society. It is therefore important

that their oral health knowledge is good. Apart from that, their oral health attitude and practices conforms to the expectation of the population. The law students are not exposed to health care knowledge as medical professionals. Exploration of available literature revealed no study from this part of the country on law students and their knowledge, attitudes and practices toward oral health-related issues. Hence, the rationale of this study is to assess oral health knowledge, attitude and practice s (KAP) of law students in a private law college in Chennai city.

## MATERIALS AND METHODS

A cross sectional study was conducted during the academic year in March 2016 among the Law students of Saveetha Law College, Saveetha University, Chennai. 100 students were randomly enrolled in the study including first year, second year, third year and final year students. All students in the study voluntarily completed a questionnaire consisting of twenty two closed ended questions without conferring it with their fellow students. The questions in the questionnaire were designed to assess their basic knowledge, attitude and practices towards oral health and oral hygiene maintenance. Data management and statistical analysis were performed using the statistical software SPSS version 17.0. Frequencies and percentages were calculated for categorical data and results obtained.

## RESULTS

Table 1 gives the number of participants in each year of study. 57% were male students, 43% were female students. [fig 1]. Table 2 shows the level of knowledge, attitude and practices of law students regarding oral health related issues.

Majority (71%) of students were aware of number of permanent teeth in adult's mouth. 55% of students were aware that calculus causes bleeding gums and 52% answered it also leads to unhealthy gums. 53% replied that tooth decay is identified as black spot or hole in the tooth. 60% of students knew that fluorides prevent tooth decay. 65% of them agreed that mouth washes contain medications that can prevent or reduce gum problem, but only 12% of students were using mouth wash. 64% agreed that oral health is important for overall health of the body. 45% of students replied that they are concerned about oral hygiene maintenance, so that they can have good smile. 74% of students felt dental treatment as expensive. 65% were anxious to meet dentist for routine check ups or any dental treatment.

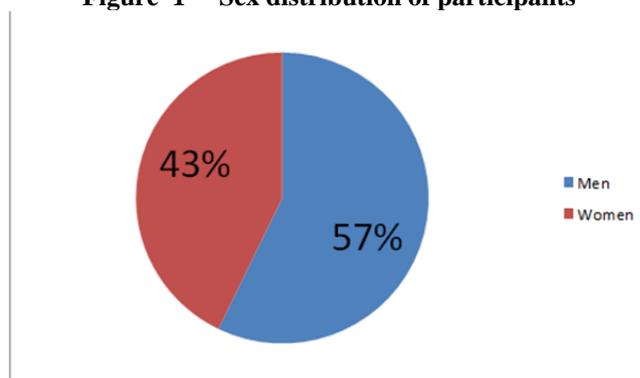
78% of students brush for less than 3 minutes. 66% of students brush their teeth only once daily and 21% brush twice daily. Half of the participants (52%) were not aware of nature of toothbrush they were using and majority (49%) change their toothbrush only when it gets spoilt. In addition to toothbrush, 23% used tongue cleaner and only 9% used dental floss. 68% of students were not taking any other measures apart from tooth brushing for oral hygiene maintenance. More than half of the participants (57%) have

carbonated drinks daily and 47% students consume sweets daily. Only 13% of students rinse their mouth with water always after eating. 69% of students have not visited dentist so far. According to 58% participants, one should visit dentist only when there is a problem. 22% said, should visit the dentist, once in 6 months.

**Table 1 Participants year-wise**

Year of study	Frequency	Percentage
1 <sup>st</sup> year	32	32%
2 <sup>nd</sup> year	20	20%
3 <sup>rd</sup> year	18	18%
Final year	30	30%

**Figure 1 Sex distribution of participants**



**Table 2 Knowledge, attitude and practices regarding oral health**

Questions	Options	Frequency	Percentage
How many permanent teeth are present in adult's mouth?	20	0	0%
	28	23	23%
	32	71	71%
	26	6	6%
If bleeding occurs while brushing what does it mean?	Food particles	20	20%
	Calculus/tartar	55	55%
	Stains	10	10%
	Don't know	15	15%
If there is yellow or brownish discolouration near tooth/gum, what is it?	Gum infection	44	44%
	Healthy gums	4	4%
	Unhealthy gums	52	52%
How do you notice, if there is tooth decay/cavity?	Black spot and hole in the tooth	53	53%
	Bleeding	8	8%
	Tooth pain	32	32%
	Don't know	7	7%
Fluorides prevent tooth decay/cavity?	Agree	60	60%
	Disagree	30	30%
	Don't know	10	10%
Mouth washes contain medications that can prevent or reduce gum problem?	Agree	65	65%
	Disagree	20	20%
	Don't know	15	15%
Where do you learn on oral health?	T.V	50	50%
	Internet	20	20%
	Newspaper	22	22%
	Magazine	8	8%
Do you think, oral health is important for overall health of our body?	Yes	64	64%
	No	36	36%

Questions	Options	Frequency	Percentage
Why should you take care of teeth and gums?	To have good smile	45	45%
	To prevent bad breath	10	10%
	To keep teeth in healthy condition as long as possible	25	25%
	To reduce future dental treatment	20	20%
Do you feel dental treatment is expensive?	Yes	74	74%
	No	26	26%
Do you have anxiety or fear to visit a dentist for routine check up or any treatment?	Yes	65	65%
	No	35	35%
How often do you think, you should visit the dentist?	Once in 6 months	22	22%
	Once in a year	15	15%
	Once in two years	5	5%
	When there is a problem	58	58%
How many times do you brush your teeth daily?	Once	66	66%
	Twice	21	21%
	More than two times	5	5%
	After every meal	8	8%
How much time do you brush?	1-2mins	35	35%
	2-3mins	43	43%
	3-4mins	17	17%
	More than 5 mins	5	5%
In addition to the tooth brush and tooth paste what else do you use to keep your tooth clean?	Dental floss	9	9%
	Tongue cleaner	23	23%
	none	68	68%
What kind of tooth brush do you use?	Hard	23	23%
	Medium	10	10%
	Soft	15	15%
	Don't know	52	52%
How often do you change your tooth brush?	Every 3 months	10	10%
	Every 6 months	31	31%
	When it gets spoilt	49	49%
	Cannot decide	10	10%
Do you use mouth wash?	Yes	12	12%
	No	88	88%
How frequently do you eat sweets?	Daily	47	47%
	3-4times a week	34	34%
	Occasionally	15	15%
	Never	4	4%
How frequently do you take carbonated drinks?	Daily	57	57%
	3-4 times a week	23	23%
	Occasionally	11	11%
	Never	9	9%
Do you rinse your mouth with water after eating?	Always	13	13%
	Sometimes	53	53%
	Never	34	34%
Have you ever visited a dentist?	Yes	31	31%
	No	69	69%

### DISCUSSION

This study evaluated the oral health-related knowledge, attitudes and practices of law students belonging to Saveetha university. Health is a universal human need. It has been established that optimal health cannot be attained independent of oral health. In our study, 64% agreed that oral health is important for overall health of the body.

In our study, 55% of students were aware that calculus causes bleeding gums and 52% answered it also leads to unhealthy gums and a similar result was obtained in the study conducted by Taani (2002).[9] In the present study, the knowledge regarding oral health and oral hygiene maintenance was satisfactory, whereas poor knowledge on the perception of oral health was reported among engineering students of Thiruchengode.[10]

In our study, a very high percentage (66%) of law students reported of brushing their teeth only once daily and 21% of students brushed twice daily which is similar to studies by Prasad *et al.* [10] and Gasgoos *et al.* [11] who reported small percentage 30.7% and 15.4%, respectively. The present observation may be due to the occupancy of the students in their curricular activities and ignorant attitude toward oral hygiene, considering it as less important.

In contrary other studies have reported that a higher percentage of university students brushed their teeth twice daily. Kakkad *et al.* [12] found 67% of the engineering students brushed their teeth twice daily. Peltzer and Pengpid [13] reported it to be 67.20% in University students, Rimondini *et al.* [14] described a much higher percentage (92.1%) in Italian University students. Half of

the participants of this study changed their tooth brush only when it gets spoilt. Majority of them brushed their teeth for less than 3 mins.

In this study, only about 32% students were using adjunct oral hygiene aids such as dental floss (9%) and tongue cleaner (23%), which is contrary to the finding reported by Gasgoos *et al.* [11] where 48.7% 1st year University students of Mosul, and 70.40% students in the study by Kakkad *et al.* [12] were using such adjunct oral hygiene aids. Hamilton and Coulby [7] found that a high percentage (44%) studied in North Eastern Ontario used dental floss; in contrast, this current study reported only 9% students used dental floss. This could be attributed to the lack of oral health education or they were unaware of beneficial effects of using dental floss.

In the current study, only 31% had visited the dentist which is similar to that reported by Prasad *et al.*[10] in which 44.3% had visited the dentist at least once. Fear of visiting the dentist and dental procedures could be the cause for this and 65% of law students rightly agreed. Three-fourth of the participants felt dental treatment to be expensive which could be another reason for not visiting the dentist. In contrary Peltzer and Pengpid [13] reported a very high percentage (75.8%) of students visiting the dentist.

According to our study, 47% participants consume sweets daily, which is similar to studies by Harikiran *et al.*[15] in which 56.1% of 11-12 years students of Bangalore city, consumed sugar daily and Kakkad *et al.*[12] with 49.60% participants consuming sweets daily. In contrast lower percentage for the same (33.7%) was described by Prasad *et al.*[10] among engineering students of Tiruchengode. Most of our participants did not rinse their mouth with water after eating food.

In the present study, only 22% agreed a routine oral check up is necessary once every 6 months, whereas according to Kakkad *et al.* [12] 34.20% responded for oral check-up. Higher findings were seen for visiting dentist for regular check up according to Prasad *et al.*[10] and Wierzbicka *et al.*[16] which was 43.9% and 66% respectively. 58% replied that dentist should be visited only when there is a problem.

This study clearly shows that although the knowledge of law students is acceptable, their practices towards oral hygiene maintenance is inadequate and a change in attitude has to be made to achieve optimal oral health. Dramatic change in the trend of oral diseases may be attributed to modification in the dietary habits, improved oral hygiene practices, effective use of fluorides, and establishment of community preventive programs.[17] Students must be motivated to maintain good oral health through adequate oral health promotion programs.[18,19] Systematic community oriented oral health promotion programs are needed to prevent and control dental diseases. These programs has to involve partnership of college authorities with dental-care providers such as dental colleges or public health departments.[20]

## CONCLUSION

Law students in the present study have a satisfactory level of knowledge about oral health care. However, the knowledge acquired must be transferred into daily practice. This can be achieved by a change in their attitude towards oral hygiene maintenance. Inclusion of oral health-oriented education programs in their curriculum would improve their knowledge and behaviour and they would be a good model to the community.

## REFERENCES

1. Purohit BM. Assessment and validation of the oral impact on daily performance instrument among adults in Karnataka, South India. *Community Dental Health* 2012;29(3): 203-8.
2. An oral health strategy for Northern Ireland. Department of health and Social Sciences: 1995. Available from: <http://www.dhsspsni.gov.uk/ohstrategy.pdf>.
3. Petersen PE. The world health report 2003: continuous improvement of oral health in the 21st century – the approach of the WHO global oral health programme. *Community Dent Oral Epidemiol* 2003;31:3-23.
4. Mehta A, Kaur G. Oral health-related knowledge, attitude, and practices among 12-year-old schoolchildren studying in rural areas of Panchkula, India. *Indian J Dent Res* 2012;23:293.
5. Hobdell M, Petersen PE, Clarkson J, Johnson N. Global goals for oral health 2020. *Int Dent J* 2003;53:285-8.
6. Woolgrove J, Cumberbatch G, Gelbier S. Understanding dental attendance behaviour. *Community Dent Health* 1987;4:215-21.
7. Hamilton ME, Coulby WM. Oral health knowledge and habits of senior elementary school students. *J Public Health Dent* 1991;51:212-9.
8. Humagain M. Evaluation of knowledge, attitudes and practices about oral health among secondary level students of rural Nepal. *Webmed Cent Dent* 2011;2:1-11.
9. Taani DQ. Periodontal awareness and knowledge, and pattern of dental attendance among adults in Jordan. *Int Dent J* 2002;52:94-8.
10. Prasad AK, Shankar S. Oral health KAP of first year engineering students of KSR College of technology, Thiruchengode, the future rulers. *J Indian Assoc Public Health Dent* 2010;16:143-7.
11. Gasgoos SS, Jazrawi KH, Ajrab MG. Dental health knowledge, attitude and behavior among first year university students, Mosul. *Al-Rafidain Dent J* 2007;7:138-52.
12. Kakkad DN, Murali R, Krishna M, Shamala, Yalamalli M, Kumar AV. Assessment of Oral Hygiene Knowledge, Attitude and Practices among Engineering Students in North Bangalore: A Cross-sectional Survey. *Int J Sci Stud* 2015;3(1):84-9.
13. Peltzer K, Pengpid S. Oral health behaviour and social and health factors in university students from 26 low, middle and high income countries. *Int J Environ Res Public Health* 2014;11:12247-60.
14. Rimondini L, Zolfanelli B, Bernardi F, Bez C. Self-preventive oral behavior in an Italian university student population. *J Clin Periodontol* 2001;28:207-11.
15. Harikiran AG, Pallavi SK, Hariprakash S, Ashutosh, Nagesh KS. Oral health-related KAP among 11- to 12-year-old school children in a government-aided missionary school of Bangalore city. *Indian J Dent Res* 2008;19:236-42.
16. Wierzbicka M, Petersen PE, Szatko F, Dybizbanska E, Kalo I. Changing oral health status and oral health behaviour of schoolchildren in Poland. *Community Dent Health* 2002;19:243-50.
17. Bratthall D, Hänsel-Petersson G, Sundberg H. Reasons for the caries decline: What do the experts believe? *Eur J Oral Sci* 1996;104:416-22.
18. Sharda AJ, Shetty S. A comparative study of oral health knowledge, attitude and behavior of first and final year dental students of Udaipur City, Rajasthan. *J Oral Health Community Dent* 2008;2:46-54.
19. Al-Ansari J, Honkala E, Honkala S. Oral health knowledge and behavior among male health sciences college students in Kuwait. *BMC Oral Health* 2003;3:2.
20. Gangwar C, Kumar M, Nagesh L. KAP toward Oral Health, Oral Hygiene and Dental Caries Status among Anganwadi Workers in Bareilly City, Uttar Pradesh: A Cross-Sectional Survey. *J Dent Sci Oral Rehab* 2014;5(2):53-7.