

Research Article

Evaluation of oral hygiene awareness and practices among medical students

Vinod S. Kamble^{1*}, Santosh M Biradar¹, Aparna Takpere², Shrinivas Reddy¹

¹Department of Community Medicine, ESIC Medical College, Gulbarga, Karnataka, India

²Department of Microbiology, Shri B. M. Patil Medical College, Bijapur, Karnataka, India

Received: 01 November 2015

Revised: 05 November 2015

Accepted: 14 November 2015

*Correspondence:

Dr. Vinod S. Kamble,

E-mail: vinod562@yahoo.co.in

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Oral diseases are major public health concern due to high prevalence and its impact on quality of life. Many studies have shown that lack of knowledge among rural people and negligent behavior among urban people are causes of dental diseases. Hence the present study was conducted to evaluate oral hygiene awareness and dental health problems in medical students.

Methods: A Cross sectional study was carried out on 1st MBBS students. All the students (83) present on the day of data collection were included in the study. Data was collected by pretested questionnaire and analyzed using percentages.

Results: Awareness among students about oral hygiene was good. All students in our study were brushing the teeth at least daily with toothbrush and paste. Only few students (13.2%) were using fluoride toothpaste and 67.4% were unaware of fluoride content. Nearly all students restrained from Alcohol Consumption and Tobacco Use. About 27.7% students had Pain /Discomfort in Past 12 Months and 18.1% consulted dentist. About 55% students visited dentist in last 5 years and most common reason was toothache.

Conclusions: The better result among medical students could be due to their better knowledge and socioeconomic conditions. Developing countries show lack of awareness and poor oral hygiene habits among large sections of the population, increasing the risk of oral health problems. More awareness should be created among general population to improve the oral health.

Keywords: Awareness, Oral hygiene, Dental health, Medical students

INTRODUCTION

Oral health is an important aspect of general health and wellbeing.¹ Oral hygiene if adopted properly can help get rid of oral diseases.² Many studies have proved that better knowledge in oral health practices and their attitude are linked to good habits with healthier oral cavity.³⁻⁶ Oral diseases are major public health concern due to high prevalence and its impact on quality of life.⁷ Many studies have shown that lack of knowledge among rural people and negligent behavior among urban people are causes of dental diseases.^{8,9} Oral hygiene is compromised

by unhealthy habits like tobacco use and lack of dental specialist care.¹⁰ Improving oral health is still a dream come true in developing countries like India.¹¹ So WHO has set the goals for the year 2020 as Recommended Oral Self Care (ROSC) which includes tooth brushing more than once a day, lesser consumption of sugar containing snacks once daily or rarely and regular use of fluoride containing toothpaste.²

Hence the present study was conducted to evaluate oral hygiene awareness and dental health problems in medical students.

METHODS

The study was conducted at ESIC medical college, Gulbarga. This was a cross sectional study and purposive sampling method was used to select 1st MBBS students (2015 batch) as study subjects. All the students who were willing to participate were included in the study. Those who were not willing to participate were excluded from study. After taking their informed consent total of 83 students present on the day of data collection were included in the study. Data was collected by pretested questionnaire and analysed using percentages.

RESULTS

Table 1: Awareness about oral hygiene.

	Response	No	%
State of Your Teeth	Very Good	15	18.1
	Good	47	56.6
	Average	18	21.9
	Poor	03	3.6
Brushing Teeth	Once A Day	66	79.5
	2 Times A Day	10	12.1
	>2 Times A Day	7	8.4
How Do You Brush Teeth	Use Of Tooth Brush	83	100
	Thread / Wooden picks	0	0
	Chew stick/Meswak	0	0
	Charcoal	0	0
Use of Tooth Paste	Yes	83	100
	No	0	0
Use of Fluoride Tooth Paste	Yes	11	13.2
	No	16	19.2
	Don't Know	56	67.4
Tobacco Use	Yes	1	1.2
	No	82	98.7
Alcohol Consumption	Yes	0	0
	No	83	100

74.7% students were confident of their healthy teeth and expressed as good and very good condition. All the students were brushing teeth daily and few students even brushed twice a day (12%). All students used toothbrush (100%) and paste (100%) for brushing the teeth. Only few students (13.2%) were using fluoride toothpaste whereas 67.4% were unaware about presence or absence of fluoride in their paste. It was good to observe from the study that almost all students restrained from Alcohol Consumption (100%) and Tobacco Use (98.7%) (Table 1).

It was observed from our study that 27.7% of students had Pain/Discomfort in Past 12 Months and 18.1% consulted dentist. About 55% students visited dentist in last 5 years and most common reason was toothache (18%) (Table 2).

Table 2: Dental health problems.

	Response	No	%
Last visit to Dentist	0-12 Months	15	18.1
	>1year	15	18.1
	>2 Years	3	3.6
	> 5years	12	14.4
	Never	38	45.7
Reason For Last Dentist Visit	Consultation	7	8.4
	Pain	15	18.1
	Routine Check	13	15.6
	Treatment	7	8.4
	Don't Know / Don't Remember	3	3.6
Pain/Discomfort In Past 12 Months	Yes	23	27.7
	No	55	66.2
	Don't know/ Don't Remember	5	6.1
Problem Of Teeth During Last 12 Months	Very Often	05	6.1
	Sometimes	10	12.1
	No Problem	68	81.9

DISCUSSION

Oral hygiene is linked to general awareness regarding healthy habits. All students in our study were brushing teeth at least daily with toothbrush and paste. Similar results were observed in study by Sugumari on dental students. More number of Dental students was brushing teeth twice daily compared to our students. This difference may be due their profession.^{1,12} These results were in contrast to study by Punitha et al among rural children where less use of tooth brush (51%) and tooth paste (45%) was observed mainly due to the lower awareness and economic condition.¹¹

The frequency of brushing is linked to oral hygiene. Many studies have shown that less frequent tooth brushing was associated with high probability of having poor oral hygiene.¹³

Fluoride is necessary for mineralization of teeth. Many Studies have shown that fluorides prevent and arrest dental caries.¹⁰ In our study very few (13.2%) students used fluoridated tooth paste and many were unaware of fluoride content of toothpaste whereas Lavanya et al reported 44.58% of the dental students and staff, regularly used a fluoridated tooth paste for brushing.¹

Smoking is a life style disease and many young people are addicted to smoking. In our study fortunately 99% students did not use tobacco. Similar results were observed by Lavanya et al where 93.6% of the dental students and staff, were found to be non-smokers.¹ According to a study conducted by Gopinath et al 18.1% of dental professionals had used tobacco at some point or

the other.² In contrast study conducted by Arthie et al showed 24% of dental patients were smokers. Many studies have revealed that smoking has a negative effect on periodontal health.^{14,15}

Oral health is always a last priority unless it troubles the patient in the form of pain, caries or gum problems etc. People visit dentist only when there is a problem. In our study toothache was the most common reason for visit to dentist. A study conducted in Norway among adults by Sarah et al showed that only 28% visited a dentist when in pain or lost a filling and 51% visited a dentist regularly.¹⁶ Another study in Southern Poland among adults by Wojciech et al observed only 8% visited a dentist for regular check-up and 53% visited a dentist only in case of a tooth ache.¹⁷

CONCLUSION

The large variation in results could be because of difference in dental awareness among different societies around the world. The better result among medical students could be due to their better knowledge and socioeconomic conditions. Developing countries show lack of awareness and poor oral hygiene habits among large sections of the population, increasing the risk of oral health problems. Keeping in view about the WHO goals2 for the year 2020 “Recommended Oral Self Care (ROSC)”, more awareness should be created among general population to improve the oral health.

ACKNOWLEDGEMENTS

The authors are very grateful to the students who participated in the study and helped collect the data.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Reddy L, Saimadhavi N, Sudhakara Reddy R, Ramesh T, Padma Reddy, Saikiran Ch. Oral hygiene practices and habits among dental students and staff in a dental college India. *Cumhuriyet Dent J*. 2014;17(1):7-13
2. Gopinath V. Oral hygiene practices and habits among dental professionals in Chennai. *Indian J Dent Res*. 2010;21(2):195-200.
3. Zhu L, Petersen PE, Wang H-Y. Oral health knowledge, attitudes and behavior of children and adolescents in China. *Int Dent J*. 2003;53:289-98.
4. Chander Shekar BR, Reddy C, Manjunath BC, Suma S. Dental health awareness, attitude, oral health-related habits and behaviours in relation to socio-economic factors among the municipal employees of Mysore city. *Ann Trop Med Public Health*. 2011;4:99-106.
5. Dagli RJ, Tadakamadla S, Dhanni C, Duraiswamy P, Kulkarni S. Self-reported dental health attitude and behavior of dental students in India. *J Oral Sci*. 2008;50:267-72.
6. Bhat PK, Kumar A, Aruna CN. Preventive oral health knowledge, practice and behavior of patients attending dental institution in Bangalore, India. *J Int Oral Health*. 2010;2:1-6.
7. Kapoor D, Gill S, Singh A, Kaur I, Kapoor P. Oral hygiene awareness and practice amongst patients visiting the Department of periodontology at a Dental College and Hospital in North India. *Indian J Dent*. 2014;5:64-8.
8. Patil AV, Somasundaram KV, Goyal RC. Current health scenario in rural India. *Aust J Rural Health*. 2002;10:129-35.
9. Gundala R, Chava VK. Effect of lifestyle, education and socioeconomic status on periodontal health. *Contemp Clin Dent*. 2010;1:23-6.
10. McKelvey VA, Thomson WM. A qualitative study of oral health knowledge and attitudes among staff caring for older people in Dunedin long-term care facilities. *New Zealand Dental Journal*. 2003;99(4):98-103.
11. Punitha VC, Sivaprakasam P. Oral hygiene status, knowledge, attitude and practices of oral health among rural children of kanchipuram district. *Indian Journal of Multidisciplinary Dentistry*. 2011;1(2):115-8.
12. Elavarasu S, Thangavelu A, Sekar S, Saravanan J, Selvaraj S. Evaluation of oral hygiene practices and awareness among dental students in Namakkal district. *Int. Journal of Clinical Dental Science*. 2014;5(2).
13. Villalobos-Rodelo J, Medina-Solis CE. Socioeconomic and sociodemographic variables associated with oral hygiene status in Mexican school children aged 6 to 12 years. *J Periodontol*. 2007;816-22.
14. Thangavelu A, Elavarasu S, Saravanan J. Oral health practices and awareness among patients at the department of periodontics at J.K.K.N Dental college and hospital, Komarapalayam. *IJCDs*. 2014;5(1):13-6.
15. Puscasu CG, Totolici I. Study regarding the connection between the oral hygiene status, plaque control methods and the periodontal involvement in a group of adults. *OHDMBSC*. 2007;6(3):12-8.
16. Adekoya SM, Brustad M. Oral health of adults in northern Norway – A pilot study. *Norsk Epidemiologi*. 2012;22(1):31-8.
17. Skorupka W, Zurek K, Kokot T, Nowakowska-Zajdel E, Fatyga E, Niedworok E. Assessment of oral hygiene in adults. *Cent Eur J Public Health*. 2012;20(3):233-6.

Cite this article as: Kamble VS, Biradar SM, Takpere A, Reddy S. Evaluation of oral hygiene awareness and practices among medical students. *Int J Community Med Public Health* 2016;3:83-5.