

Oral health: How much do you know? – A study on knowledge, attitude and practices of patients visiting a North Indian dental school

Agiapal Singh¹, Ramandeep Singh Gambhir¹, Simarpreet Singh¹, Vinod Kapoor², Jagjit Singh³

Correspondence: Dr. Ramandeep Singh Gambhir
Email: raman1g@yahoo.co.in

¹Department of Public Health Dentistry, Gian Sagar Dental College and Hospital, Rajpura, Punjab, India,
²Department of Oral Surgery, Gian Sagar Dental College and Hospital, Rajpura, Punjab, India,
³Department of Periodontics, Gian Sagar Dental College and Hospital, Rajpura, Punjab, India

ABSTRACT

Objective: This study was carried out to assess the knowledge, attitude and behavior among patients visiting the out-patient department (OPD) of Gian Sagar Dental College and Hospital, Rajpura. **Materials and Methods:** A cross-sectional study was conducted on 642 subjects who visited the OPD of Gian Sagar Dental College and Hospital. A self-constructed questionnaire was given to each of the participant. Responses from the subjects were calculated in terms of numbers and percentages. **Result:** Three hundred six (48%) of the subjects had never visited a dentist before. 304 (47%) of the subjects still prefer other cleaning aids over toothbrush. 207 (32%) subjects were of the view that dental health has no effect on general health, whereas 219 (34%) subjects were of the opinion that tooth loss is a natural sequel of the aging process. **Conclusion:** There is a dearth of knowledge and careless attitude among people in regard to dental health. People need to be motivated and their concepts regarding the importance of dental health should be made clear through various campaigns and personal counseling.

Key words: Dental school, knowledge, oral health, patients

INTRODUCTION

Oral health is a highly personalized concept the awareness, of which highly relies on an individual's culture and socio-economic status. It can be defined as a standard of health of the oral and related tissues, which enables an individual to eat, speak and socialize without active disease, discomfort or embarrassment and which contributes to general well-being.^[1] Keeping a healthy oral profile requires joint efforts from the dentist as well as the patient himself. One of the most important factors that decide the dental health of a population is the outlook of its people toward their dentition.^[2]

Oral health has been documented as equally important as general health. Moreover, knowledge about oral health

has been cited as an important factor that determines overall health.^[2] It affects physical and psychological and social well-being of a person. Chronic diseases such as diabetes, obesity and caries, which share common risk factors are on an increase in developing countries leading to poor quality of dental as well as general health.^[3,4] Treatment of the dental diseases involves high costs like many other diet and health related diseases.^[5,6] Most of people tend to ignore their impending dental problems, which later on multiply and affect the overall health. Failure of the people to realize this fact has led millions of them to suffer intractable toothache, poor quality-of-life ultimately ending up with few teeth.

Although many studies have been carried out from time to time to assess the knowledge and behavior

How to cite this article: Singh A, Gambhir RS, Singh S, Kapoor V, Singh J. Oral health: How much do you know? - A study on knowledge, attitude and practices of patients visiting a North Indian dental school. *Eur J Dent* 2014;8:63-7.

Copyright © 2014 Dental Investigations Society.

DOI: 10.4103/1305-7456.126244

of people about oral health, there is still a dearth of education regarding the same especially for rural people, who make up for more than 70% of the population in India.^[7] Furthermore, even the people living in cities, in spite of having easy reach to dental care, fall prey to dental diseases due to their negligence in dietary habits and unhealthy life-style.^[8]

Very few researches dealing with knowledge and awareness regarding oral health have been carried out on Indian population particularly in rural areas. Therefore, aim of the present study was:

- To determine oral health awareness among the patients visiting the out-patient department (OPD) of Gian Sagar Dental College and Hospital
- To access their level of understanding in regard to oral health practices.

MATERIALS AND METHODS

Study population and ethical clearance

A cross-sectional study was conducted on the patients visiting the OPD of Gian Sagar Dental College and Hospital, Rajpura. Ethical clearance was obtained from the ethical committee of Gian Sagar Dental College and Hospital for conducting the study. A pilot survey was conducted on 50 subjects to judge the aptness of the questionnaire and it was found that an average of 10 min was needed to answer all the questions.

Study sample

The study sample consisted of 642 subjects selected using a simple random sampling technique. Individuals older than 18 years of age were included in the study. The purpose of the study was informed and explained to the participants and those who voluntarily agreed to participate in the study and gave a written consent were asked to fill the questionnaire according to the response format provided in the questionnaire.

Questionnaire

A self-made closed ended questionnaire written in English language was given to each one of them. In order for them to fully understand the questionnaire, the subjects selected were above 18 years. The questionnaire form was divided into two parts. The first part of the questionnaire collected the demographic details of the individuals participating in the study such as age, sex, gender, occupation etc., The subsequent part was designed with questions to assess the knowledge, attitude and practices related to oral health such as number of milk teeth, number

of permanent teeth, source of dental knowledge, time devoted toward brushing etc., [Table 1].

Data collection

The questionnaires were handed to the patients while they were seated in the waiting area of the out-patient department. At all times, one of the investigators was present with the respondent while the questionnaires were being filled to ensure that the concerned respondent did not discuss the questions or the answers with any other patients sitting in the waiting area and also to make sure that the concerned respondent fully understood the questions as well as the probable answers completely.

Statistical analyses

The data was first transferred to Microsoft Excel. For data analyses, each positive response was given a score '1' and each negative response was assigned a score '0'. Results were statistically analyzed using SPSS package version 15.0 (SPSS, Chicago, IL, USA) in terms of percentages. However, no attempt was made to correlate the findings with one another in terms of descriptive statistics and using other statistical tests.

Table 1: Questionnaire used for collecting information from the study subjects

Part A
Name
Age
Gender
Occupation
Educational qualification
Marital status
Part B
Number of milk teeth in the oral cavity?
Why do you think milk teeth are important?
Do you think dental health is important?
How do you clean your teeth?
Source of your knowledge regarding dental health?
Do you think oral health affects general health?
Have you ever visited dentist before?
Reason of your first visit?
Do teeth during childhood and adulthood differ?
Source of your knowledge regarding dental health?
How do you clean your teeth?
How many times do you brush in a day?
Time devoted toward cleaning/brushing?
Do you use mirror while cleaning/brushing?
Purpose of teeth in our mouth?
Do you think oral health affects general health?
Loss of teeth with advancing age is normal?
Do you think professional cleaning weakens our teeth?
Do dental problems get cured themselves?

RESULTS

This present study was carried out on 642 subjects. Among them, 64.8% were males and 35.2% were females. All the subjects were above 18 years of age. The age distribution was variable [Figure 1]. The number of subjects in 18-24 age group was maximum being 266 (41.5%). In view of their education background, 229 (35.8%) of subjects were having education only up to secondary level. The detailed educational distribution is depicted in Figure 2. Approximately, 449 (70%) of the study subjects belonged to rural areas with farming as their primary source of earning meals.

The results pointed out that educational level was one of the important factors that governed the knowledge, attitude and behavior of the people [Figure 3]. Almost 554 (86%) of the subjects didn't know the number of deciduous teeth present and 584 (90%) of subjects were of the opinion that deciduous teeth are insignificant or were unaware of their importance. 263 (40%) study subjects didn't find it important to visit the dentist. 263 (41%) subjects cited parents as their primary source of knowledge regarding oral health.

Furthermore, 306 (48%) subjects had never visited dentist before and 186 (61%) of those who did, cited

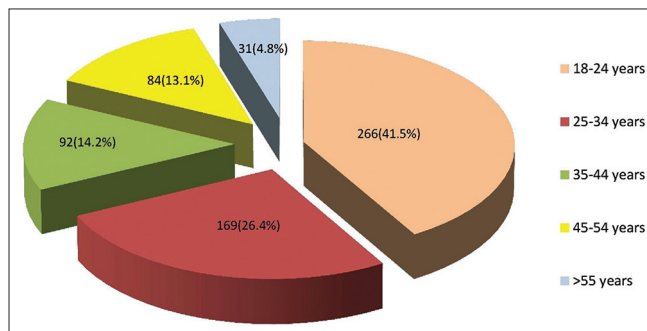


Figure 1: Distribution of study population according to age

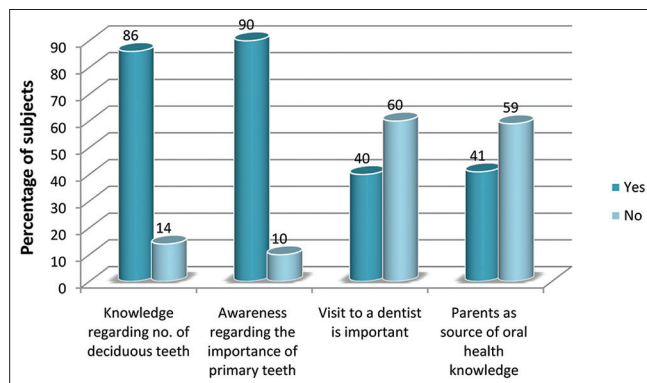


Figure 3: Knowledge regarding deciduous teeth, visiting dentist and source of oral health knowledge

extraction and pain as the reason for the first visit. In spite of all the educational awareness programs being carried out, 304 (47%) of the subjects still prefer other cleaning aids over toothbrush like datun (a wooden stick of the neem tree common in rural areas) as a cleaning aid [Figure 4]. Among the ones using toothbrush, 233 (69%) subjects brushed only once a day and 367 (58%) subjects do not use a mirror while brushing. Moreover, the brushing times were found to be surprising. Majority of the study subjects (407, [64%]) brush their teeth only for 1 min and only 17 (3%) subjects devoted 2-5 min toward brushing [Figure 5].

Figure 6 depicts the view of the respondents toward oral health and seeking dental treatment. 207 (32%)

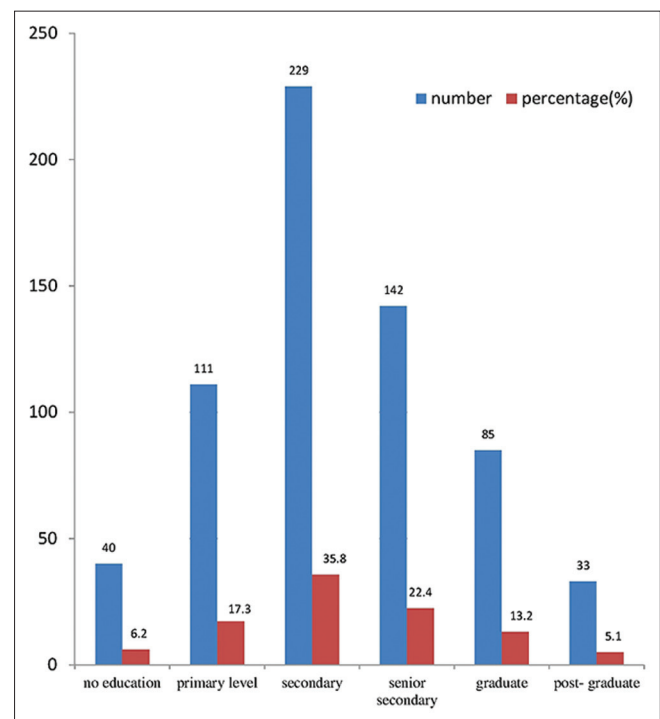


Figure 2: Education level of the subjects under study

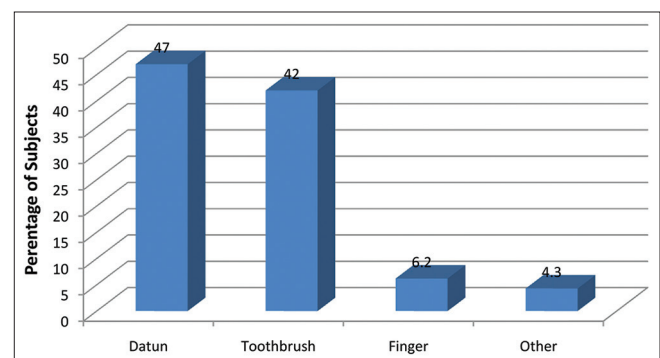


Figure 4: Various cleansing aids used by the study subjects

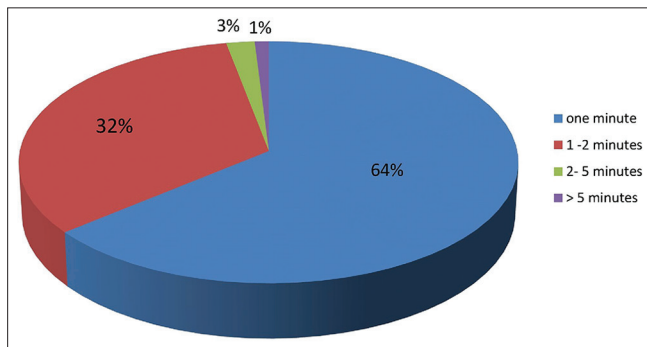


Figure 5: Time devoted toward tooth brushing among the study subjects

subjects were of the view that dental health has no effect on general health, which tells us about their level of unawareness regarding dental health. To add on 186 (29%) subjects believed that oral problems can not cause general body problems. 219 (34%) subjects believe that tooth loss is a natural squeal of the aging process. Misconceptions about dental treatment go a long way in averting patients to consult the dentist in case of need. Approximately, 340 (53%) subjects were of the view that dental treatments hurt and causes pain.

DISCUSSION

Oral health is an integral part of general health and a valuable asset for any individual. Oral health has always been remained a neglected entity. People have underestimated consequences of bad oral health, which have led to bigger problems which later on become difficult to treat. Unawareness regarding our oro-dental health highly depends on one's educational level.

The present study showed that educational level of the study subjects is directly proportional to the knowledge possessed by him/her and the behavior he/she practices toward his health. About 62% of the study subjects believed that oral health problems have nothing to do with the systemic problems. We as dental health professionals understand that that a core group of risk factors are common to many chronic diseases and injuries. The four most prominent non-communicable diseases-cardiovascular diseases, diabetes, cancer and chronic obstructive pulmonary diseases-share common risk factors with oral diseases.^[4] People should be made aware of all these facts in order to lead a healthy and longer life.

Similar studies in different nations have also been carried out in the past to assess the knowledge, attitude and behavior among different groups, professionals,

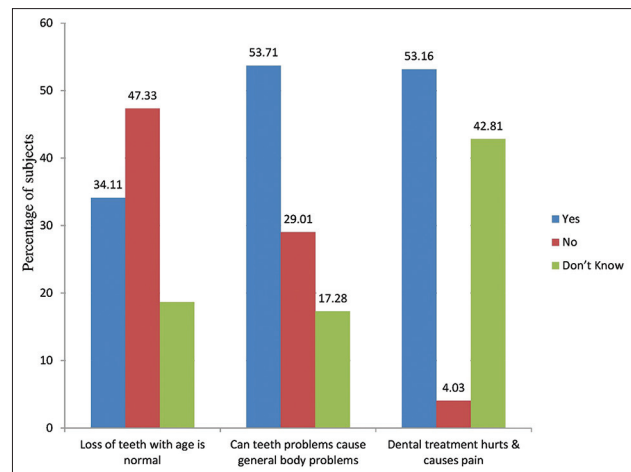


Figure 6: View of the subjects toward dental health and seeking dental treatment

students and populations.^[9] Unfortunately, oral health standards in India still pose a major problem due lack of awareness. About 48% of the subjects in the present study never visited a dentist and about 61% of the remaining only visited in case of a problem or extraction, which is in agreement to results obtained by various studies.^[10-12] About 69% people brushed only once a day, which is more than the results of the study conducted elsewhere.^[11] On the other hand, according to some other study reports about 74% subjects brush their teeth about twice a day showing a vast difference in dental professionals and common people.^[13,14] Parental guidance plays a very crucial role in modifying the behavior of children. In our study, only 41% of the subjects cited parents as a primary source of knowledge regarding oral health where 60% cited other sources showing that most parents do not indulge in guiding their children. These findings were found to be in congruence with findings from previous studies supporting evidence that parents are neglecting oral habits of the subjects under study.^[15-17]

Fear of pain is one of the important factors that prevent patients from visiting the dentist. In spite of numerous advances in the field of dentistry, phobia of pain during treatment still persists among a large number of populations acting as an obstacle in the path of dental treatment. In our study, almost 53% of the subjects think that pain is inevitable while undergoing a dental procedure. A study carried out by some other authors brought out similar results.^[18] This finding points out toward the fact that fallacies related to dental treatment are still prevalent among the people obstructing them to take the apt decision regarding dental treatment.

CONCLUSION

There is a dearth of knowledge and careless attitude among subjects in regard to dental health in the present study. Therefore, there is an urgent need to educate and motivate people about oral health and related problems. The results of this cross-sectional study are an indicator to a major problem, which is often neglected by the population as well as the governing health care bodies. The awareness about oral hygiene and dental health needs to be spread by dental professionals. This approach has to be extended beyond the clinics through various outreach programs in the areas, which are less accessible to oral health facilities. Media can also play a role in educating people and motivating them to visit a dentist after regular intervals. Last but not the least we as dentists, as a part of the system have a responsibility toward our society to educate and motivate this uneducated/ educationally backward group so that we can move a step forward to create a healthy environment.

REFERENCES

1. Udoeye C, Aguwa E. Oral health related knowledge and behaviour among nursing students in a Nigerian tertiary hospital. *Int J Dent Sci* 2009;7:2.
2. 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.
3. Ashley FP. Role of dental health education in preventive dentistry. In: Murray JJ, editor. *Prevention of Dental Disease*. 3rd ed. Oxford: Oxford University Press; 1996. p. 406-14.
4. Petersen PE, Bourgeois D, Ogawa H, Estupinan-Day S, Ndiaye C. The global burden of oral diseases and risks to oral health. *Bull World Health Organ* 2005;83:661-9.
5. Petersen PE. The World Oral 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 Suppl 1:3-23.
6. Sheiham A. Dietary effects on dental diseases. *Public Health Nutr* 2001;4:569-91.
7. Patil AV, Somasundaram KV, Goyal RC. Current health scenario in rural India. *Aust J Rural Health* 2002;10:129-35.
8. Gundala R, Chava VK. Effect of lifestyle, education and socioeconomic status on periodontal health. *Contemp Clin Dent* 2010;1:23-6.
9. Kwan SY, Holmes MA. An exploration of oral health beliefs and attitudes of Chinese in West Yorkshire: A qualitative investigation. *Health Educ Res* 1999;14:453-60.
10. Jain N, Mitra D, Ashok KP, Dundappa J, Soni S, Ahmed S. Oral hygiene-awareness and practice among patients attending OPD at Vyas dental college and hospital, Jodhpur. *J Indian Soc Periodontol* 2012;16:524-8.
11. Zhu L, Petersen PE, Wang HY, Bian JY, Zhang BX. Oral health knowledge, attitudes and behaviour of adults in China. *Int Dent J* 2005;55:231-41.
12. Neamatollahi H, Ebrahimi M, Talebi M, Ardabili MH, Kondori K. Major differences in oral health knowledge and behavior in a group of Iranian pre-university students: A cross-sectional study. *J Oral Sci* 2011;53:177-84.
13. Neeraja R, Kayalvizhi G, Sangeetha P. Oral health attitudes and behavior among a group of dental students in Bangalore, India. *Eur J Dent* 2011;5:163-7.
14. Ganss C, Schlueter N, Preiss S, Klimek J. Tooth brushing habits in uninstructed adults – Frequency, technique, duration and force. *Clin Oral Invest* 2009;13:203-8.
15. Al-Omiri MK, Al-Wahadni AM, Saeed KN. Oral health attitudes, knowledge, and behavior among school children in North Jordan. *J Dent Educ* 2006;70:179-87.
16. Taani DQ. Periodontal awareness and knowledge, and pattern of dental attendance among adults in Jordan. *Int Dent J* 2002;52:94-8.
17. Rajab LD, Petersen PE, Bakaeen G, Hamdan MA. Oral health behaviour of school children and parents in Jordan. *Int J Paediatr Dent* 2002;12:168-76.
18. Marya CM, Grover S, Jnaneshwar A, Pruthi N. Dental anxiety among patients visiting a dental institute in Faridabad, India. *West Indian Med J* 2012;61:187-90.

Access this article online

Quick Response Code:



Website:
www.eurjdent.com

Source of Support: Nil.
Conflict of Interest: None declared