



RESEARCH ARTICLE

ORAL HEALTH KNOWLEDGE ATTITUDE AND PRACTICE AMONG FAMILY MEMBERS OF DENTISTS RESIDING IN MADURAI CITY

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ABSTRACT

Objective: The aim of the study is to assess the knowledge, attitude and practice among the family members of dentists residing in Madurai city regarding their oral health. **Methods:** A 20 item, close ended, self-administered questionnaire was framed to assess the knowledge, attitude and practice towards oral health. After obtaining the informed consent the study participants were asked to fill the questionnaire. **Results:** Overall 68.1 % of family members have a sound knowledge about oral health. 74.1% of family members showed positive attitude towards oral health. 49.5 % have good practice towards oral health. **Conclusion:** The practice towards the oral health still needs to be improved.

INTRODUCTION

Oral hygiene is the practice of keeping the mouth healthy and clean by brushing and flossing to prevent oral diseases. The World Health Organization (WHO) has a definition of good oral health: "Oral health means being free of chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the mouth and oral cavity". Several oral diseases have important side effects on general health, while systemic conditions may show a mutual influence on oral health. Therefore, oral health care needs to be addressed by a multi-professional approach and should be integrated into comprehensive health-promoting strategies and practices. Optimally, total health care requires the combined efforts of the medical and dental professions. Raising public awareness about dental check-up may assist in early diagnosis. The affected population needs to receive information on oral diseases, risk factors and measures that can be adopted to prevent them.

The change from an unhealthy attitude to a healthy attitude will occur when adequate information and motivation are provided; and adequate practice of the measures is adopted by the subject. Undoubtedly, one of the methods for prevention is to improve the knowledge regarding promotion of health behavior and influence of self-effective methods on preventing diseases (Kaur et al., 2015). Knowledge is the confident understanding (theoretical or practical) of a subject with the ability to use it for a specific purpose. Knowledge acquisition involves complex cognitive processes: perception, learning, communication, association and reasoning. Attitude is an acquired characteristic of an individual. People demonstrate a wide variety of attitudes towards teeth, dental care and dentists. These attitudes naturally reflect their own experiences, cultural perceptions, familial beliefs and other life situations and they strongly influence the oral health behaviour. Attitudes are not learnt from text books, they are acquired by social interaction. The attitude towards oral health determines the health status of the oral cavity Health behaviour as defined by Steptoe et al. (1994) is 'the activities undertaken by people in order to protect, promote or maintain health, and to prevent disease'. The broad categories of factors that may influence individual and community health behaviour include: knowledge, beliefs, values, attitudes, skills, finance, materials, time and the influence of family members, friends, co-workers, opinion leaders and even health workers themselves.

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The people who have assimilated the knowledge and feel a sense of personal control over their oral health are more likely to adopt self care behaviour (Archana, 2008). “Charity begins at home” is a famous proverb that shows the deep essence of life. A person who is willing to help others should first assure the wellness of their own family members. Services provided to others are useless and unworthy if their own family members are in need. It is true that helping others brings peace and happiness but one cannot gain true happiness if his own family is suffering and he is out helping others. We must fulfil our responsibility towards our family before stepping out to improve the society. This holds for dental profession too. It is very empirical to know the oral health of our family members, and they should act as role model for patients friends and community. There is a need to determine the oral health knowledge, attitude and practice among family members of dentists. Lack of studies exists on determining the oral health behaviour of the family members of dentists. So, the present study was done to assess oral health knowledge, attitude and practice towards amongst the family members of dentists in Madurai city.

MATERIALS AND METHODS

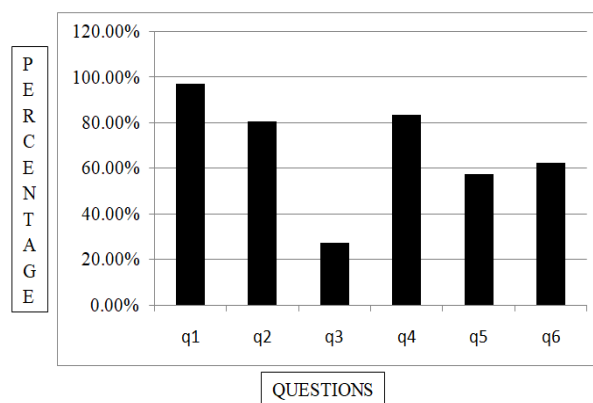
The family members of the dentists in the Madurai city were randomly selected. Out of 350 participants 329 consented to participate. Ethical clearance was obtained from the Institutional Ethical Review Board of Best Dental Science College . The aim and objectives of the research and the content of the questionnaire was explained to the family members of the dentists. Written Informed consent of participants was obtained from them before the start of the study. It was emphasized that strict confidentiality would be maintained at all times and that no names or personal details will be used in the write up of the study. Those who are intellectually challenged and persons below 10 years of age were excluded.

The pilot study was conducted for a period of two weeks in the month of September 2018 on 30 study participants. The feasibility of study and Validity of the questionnaire was analyzed. After analysing the results of the Pilot study results necessary changes in the questionnaire were made and the main survey was conducted between October to November of 2018. The validity of the questionnaire was checked by a panel of experts from the Department of Public Health Dentistry, Best dental science college, Madurai. 20 Questions were formulated in a way that would help in extracting the required information from the participants. A 20 item, close ended, self-administered questionnaire which was translated to local language (tamil) and was framed to assess the knowledge, attitude and practice was used to collect data from the study subjects. All the participants were given 10 minutes to fill the questionnaire. The participation was voluntary, and confidentiality was assured. In the questionnaire, six questions were framed to assess the participants’ knowledge, five questions were formulated to determine the attitude and nine questions were formulated to assess their daily practice towards oral health. The results are based upon the data obtained from 327 participants. The incomplete questionnaires were excluded. The data obtained in the present survey were entered into excel spreadsheets. A master table was prepared. Descriptive statistics were used to find out the frequency of Dental students answering the different options.

RESULTS

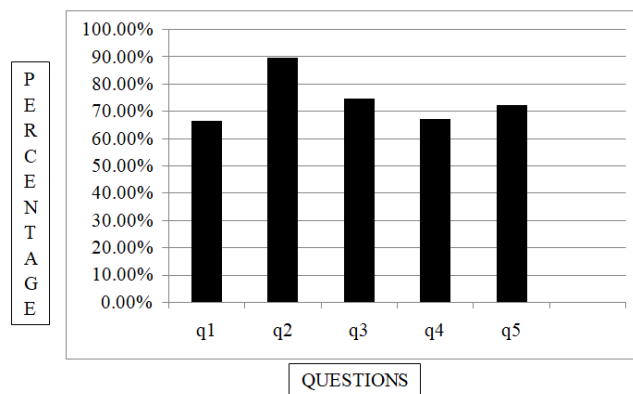
The present study was an attempt to evaluate the knowledge, attitude and practice regarding oral health among the family members of dentists in Madurai city. The total number of students participated in the study was 327. Data collected was entered in an Excel sheet. The total score for questions under knowledge, attitude and practice was calculated for every individual. The obtained results were tabulated.

Knowledge related to oral health: Overall 68.1 % of family members have a knowledge about oral health (graph 4). 97.2% thinks oral health is important. 80.7% were aware that oral health is an integral part of general health. only 27% were aware of dental floss. 83.7% were aware that biscuits, chocolates, cookies causes dental caries. 57.4 % were aware that frequency of consumption of chocolates and sweets increases caries risk. 62.6% were aware that systemic disease manifest in the oral cavity.



Graph 1. Positive responses regarding knowledge of the study participants towards the oral health

Attitude related to oral health: Overall 74.1% of family members showed positive attitude towards oral health (graph 4). 66.5% thinks that cleaning the tongue regularly is a necessity. 89.9 % thinks that it is necessary to rinse the teeth after every meal. 74.6 % consults their dentist on getting dental ache. 67.2 % thinks that replacing the missing tooth is necessary . 72.4 % thinks that the usage of toothpick/safety pin harms gingiva.



Graph 2. Positive responses regarding the attitude of the study participants towards the oral health

Practice related to oral health: Overall 49.5 % have good practice towards oral health (graph 4). 91.7 % cleans their teeth with toothpaste and toothbrush. 81.3% uses soft and medium type of toothbrush.

Table 1: knowledge of the study participants towards the oral health

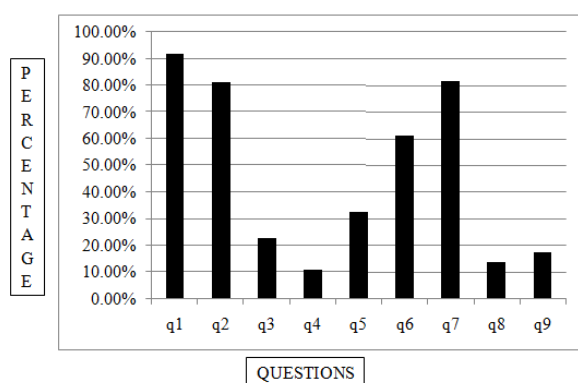
S.no.	Questions	Options	Respondents Total (%)
1.	Do you think oral health is important?	Yes	318 (97.2)
		No	9(2.8)
2.	Is oral health an integral part of general health ?	Yes	264(80.4)
		No	51(15.5)
		Don't know	12(3.6)
3.	Do you know what is flossing	Yes	89(27)
		No	238(73)
4.	Which of the following has high risk to develop dental caries ?	a)coffee/tea/ milk	44(13.4)
		b)biscuits/chocolates/ cookies	274(83.7)
		c)cereals/rice/wheat	9(2.7)
5.	Which of the following increases the caries risk?	a)Quantity of consumption of chocolates and sweets	134(40.9)
		b)Frequency of consumption of chocolates and sweets	188(57.4)
		c)Don't know	5(1.5)
6.	Can certain systemic diseases manifest in the oral cavity?	a)yes	205(62.6)
		b)no	45(13.7)
		c) don't know	77(23.5)

Table 2. Attitude of the study participants towards oral health

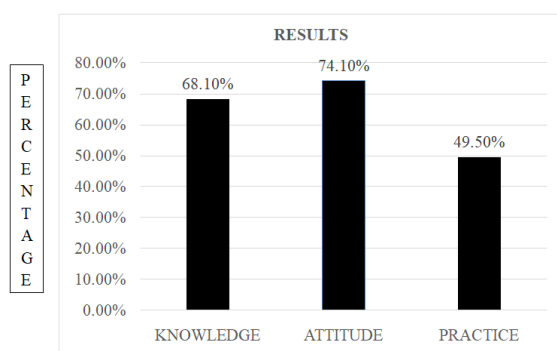
S.no.	Questions	Options	Respondents Total (%)
1.	Do you think cleaning the tongue regularly is a necessity?	a)yes	217(66.5)
		b)no	64(19.5)
		c)don't know	46(14)
2.	Is it necessary to rinse the teeth after every meal?	a)yes	294(89.9)
		b)no	33(10)
3.	What will you do if you get dental ache?	a)consult your dentist	244(74.6)
		b)take medications from pharmacy	58(17.7)
		c)bare the pain and do nothing	12(3.6)
		d)take medications on own	13(3.9)
4.	Do you think replacing the missing teeth is a necessity?	a)yes	220(67.2)
		b)no	68(20.7)
		c)don't know	39(11.9)
5.	Do you think usage of toothpick/safety pin harms gingiva	a)yes	237(72.4)
		b)no	90(27.5)

Table 3: Practice of the study participants towards oral health

S.no.	Questions	Options	Respondents Total (%)
1.	How do you clean your teeth?	a)toothpaste and toothbrush	300(91.7)
		b)toothpowder and toothbrush	27(8.2)
2.	What type of toothbrush you use?	a)soft	145 (44.3)
		b)medium	121(37)
		c)hard	22(6.7)
		d)ultra soft	15(4.5)
		e)don't know	24(7.3)
3.	How do you brush ?	a)horizontal	105(32)
		b)vertical	79(24.1)
		c)circular	28(8.5)
		d)horizontal and vertical	74(22.6)
		e)horizontal and circular	28(8.5)
		f)vertical and circular	13(3.9)
4.	When do you change your tooth brush?	a)1 month once	75(22.9)
		b)3 months once	160(48.9)
		c)6 months once	53(16.2)
		d)12 months once	4(1.2)
		e)when the brush starts fraying	35(10.7)
5.	How many times do you brush daily ?	a)1	218(66.6)
		b)2	106(32.4)
		c)3	3(0.9)
6.	How long do you brush?	a)less than a minute	42(12.8)
		b)1-3 minutes	201(61.4)
		c)3-5 minutes	61(18.6)
		d)more than 5 minutes	23(7)
7.	Have you ever consulted your dentist?	a)yes	268(81.9)
		b)no	59(18.0)
8.	IF YES How often do you visit dentist?	a)once in 3 months	13(3.9)
		b)once in 6 months	44(13.4)
		c)once in a year	10(3.0)
		d)only when needed	201(61.4)
9.	Do you use mouthwash?	a)yes	92(28.1)
		b)no	177(54.1)
		c)sometimes	56(17.1)



Graph 3. Positive responses regarding the practice of the study participants towards oral health



Graph 4: The overall knowledge attitude and practice of the study participants towards oral health.

22.6 % brushes both in horizontal and vertical direction. 10.7 % changes the brush when it starts to fray. 32.4% brushes twice daily. 61.4% brushes for 1-3 minutes. 81.6% had consulted their dentists. 14 % visits their dentist every 6 months. 17.1 % uses mouthwash when in need. The graph (graph 4) was constructed based on the average of positive answers the study participants chose with respect to knowledge, attitude and practice towards the oral health.

DISCUSSION

Dentist is the one who educates the community. Educating the community when their own family members are in need goes vain. So assessing the oral health maintenance of their family members becomes important. The study questionnaire was anonymous to prevent social desirability bias. The questionnaire was filled in the presence of investigator in prescribed time to minimize bias. Studies with similar objectives are limited preventing its comparison. It is the first study to be conducted among the family members of the dentists in assessing the behaviour of the family members of dentists towards oral health. A Study conducted by Mahmoud F. Jaber et al among Male Quassim students found that they had good knowledge on the basic oral health measures, but their attitude regarding oral health was diverse and practices toward oral health were relatively poor (Jaber et al., 2017). A study conducted by SimranpreetKaur et al among the health professional in Ludhiana found that despite high literacy rate for health care professionals, oral health knowledge was average. They showed a positive attitude towards dental treatment (Kaur, 2015). Similar to this study, Oral health knowledge, attitude and behaviour of adults in China by Ling

zhu et al showed that only 27% brushes twice daily whereas 32% does in the present study. But the difference is not much significant (Zhu et al., 2005). Another similar study by Lin et al showed that the knowledge was poor among the Chinese adults of Guangdong province, only 35% stated that the sugar and sweet foods were responsible for dental decay whereas in this present study 83% stated the same (Lin, 2001). Another study done by Dr. Mohammed Sultan Al- Darwish among school children in Qatar found that the oral health knowledge is below the satisfactory level. Parents were the most popular source of oral health knowledge for the children followed by dentists, school teachers, and media (Al-Darwish, 2016). Another similar study done by Abishek Mehta et al among school children in Panchkula, India also found that their oral health knowledge, attitude, practices towards oral health were poor (Mehta, 2012). A study done by RajeshwarDigra et al among prison inmates found that the oral health knowledge was poor among prisoner. They showed their negative attitude towards dental treatment. The reason might be restricted freedom of movement in the prison, which is main barrier to access to oral health care services (Digra, 2015). The limitation of the study is that the comparison was not done with the family members of general population.

Conclusion

The dentist is the one who educates the community and also treats the oral diseases among the people in the society. We assume that if a family includes a dentist, the families' oral health is taken care. This study throws light on the issue. From the above results it has been concluded that the practice towards the oral health still needs to be improved. The present study reflects the status of knowledge, attitude and practice regarding oral health of people of Madurai city.

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Conflicts of interest: There are no conflicts of interest

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