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Assessment of Oral Hygiene Awareness and Practices among the non-teaching staff of a Dental Institute Rashmi Saikhedkar¹, Samkit Jain², Shilpa Jain³, Arpit Jain⁴

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ABSTRACT

AIMS AND OBJECTIVES: To evaluate the oral hygiene awareness and practices among the non-teaching staff of a dental institute.

MATERIALS AND METHODS: The study was conducted in a Dental College and Hospital. A total of 90 people among the non-teaching staff working in this institute were selected for the study. A predesigned questionnaire comprising of 25 questions was prepared. All the willing participants were asked to fill up this questionnaire with details as their age, gender and post in the institute. The oral hygiene awareness and practices among these participants were analysed as per the responses obtained.

RESULTS: Oral health awareness among the non-teaching staff was satisfactory. They were aware that taking care of teeth, oral cavity should start from the childhood itself. They also agreed that good oral hygiene practices, good diet and avoiding all adverse habits is important to have a good oral health and teeth.

CONCLUSION: Overall, oral hygiene awareness and practices among the non-teaching staff is satisfactory but can always be improved by making them understand about the importance of good oral health, hygiene and teeth.

INTRODUCTION

A good overall general health of a person includes a good healthy oral cavity and teeth as well. A healthy oral cavity is necessary for the overall physical, mental well-being and a quality life of an individual.

WHO defines oral health as state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects as cleft lip and palate, tooth decay, periodontal diseases, tooth loss, few other diseases and disorders that limit the individual's capacity in biting, chewing, smiling and psychological well-being[1].

A new definition by FDI World Dental Federation, defines oral health to be multifaceted, which includes the

ability to speak, smile, smell, taste, touch, chew, swallow and convey a range of emotions through facial expressions with confidence and without pain, discomfort and diseases of the cranio-facial complex[2].

Unfortunately people do not consider oral cavity and teeth as an important part of the body. Along with this belief there is almost no or very little awareness and knowledge regarding the importance of a good oral health, hygiene and teeth. Thus the oral cavity and teeth get neglected and remain in a bad state.

This survey tries to evaluate the awareness regarding oral health and hygiene practices among the non-teaching staff in a dental institute taking into consideration their age,

gender, post in the institute and knowledge regarding oral hygiene and practices.

MATERIALS AND METHODS

This study was conducted in College of Dental Science and Hospital, Rau, Indore, India. A total of 90 people among the non-teaching staff, working in this institute were selected for the study. All the participants were explained about the study and a well informed written consent was obtained. Those who were not willing were not included in the study. A self designed questionnaire of 25 questions was prepared. All the participants were asked to fill up the form with their details as age, gender and their post in the institute.

All the participants were employed in this institute and belonged to various post as office and management staff, peons, nursing staff, drivers, security staff, canteen staff et cetera.

The responses were manually recorded in Google Forms and the statistical analysis was done by using Microsoft Excel Spreadsheet software 2019. Frequency distribution and p-value was analysed and chi square test was done.

RESULTS

The study comprised of 90 participants out of which 58 were males and 32 were females. The results were analysed as per the responses obtained in the questionnaire.

Among the total participants, majority of the staff was

from the housekeeping 38 (42.2%). Next group in the list were the nursing staff 19(21.1%) [Figure 1]

55 (61.1%) of the participants said they have at least visited the dental surgeon once and even got the dental treatment done. But 67 (74.4%) said that they do not visit a dental surgeon regularly. This was a bit surprising that being a regular staff of the dental institute still only 23 (25.6%) said they regularly visit a dental surgeon.

89 (99.9%) participants said they clean their teeth at least once a day in the morning. In this good finding, those who brushed twice a day were only 30 (35.6%) while 57 (63.3%) said they brush only once a day.

As regards the timing of brushing majority 40 (44.4%) reported brushing for less than a minute only. 74 (82.2%) said they don't use hard brush to clean teeth in better way. 87 (74.4%) agreed and believed that brush should be changed every 3 to 4 months. There was not much difference 37 (41.1%) and 36 (40%) in horizontal and combination way of brushing respectively.

74 (82.2%) said they do not use any cleaning aid as floss or mouthwash. 59 (65.6%) said they clean their tongue also.

Among the adverse oral habits 53 (59%) said they do not consume tobacco, gutka regularly. They also said that they are aware that adverse oral habits can cause harm and various diseases such as cancer of mouth 69 (76.7%). 60 (66.7%) were aware that oral and general health are

related and systemic diseases can have effect on oral cavity and vice versa.

75 (83.3%) agreed if one has to have a healthy teeth and oral cavity for a healthy long life then care of the teeth and oral cavity should start from childhood itself.

Having all teeth healthy with clean oral cavity and a good smile, increases overall confidence of an individual was agreed by 69 (76.7%) participants.

The results show attitude, awareness and knowledge regarding oral hygiene was quite satisfactory among the participants, oral hygiene healthy practices were also being regularly followed by most of the participants. The adverse oral habits also were less or almost nil in most of the participants.

Having all the teeth healthy, with good oral hygiene habits and abstain from adverse oral habits will give them a good smile, confidence, general health was a good attitude of the participants towards oral hygiene.

STATISTICAL RESULT

Statistical analysis showed the p value was <0.05 which is statistically significant.

DISCUSSION

Oral health is a fundamental component of general health with physical and mental well being which exists along a continuum , influenced by values and attitudes of people and communities . It also reflects the physiological social and psychological attributes that are essential to the

quality of life[3].

Oral cavity , teeth and oral health act as a mirror and reflect a lot about the systemic and general health of an individual . Oral cavity and teeth are an integral part of the body and need to be taken care of as of rest of the body .

Health and hygiene are inter related . Health is defined as a condition of being sound in a body , mind as spirit specially freedom from physical diseases or pain .The word hygiene is derived from the word HYGEIA , the goddess of health in Greek mythology . It is defined as a science of health and embraces all the factors which contribute to a healthy living [4].

Unfortunately , oral cavity , teeth and oral hygiene are not considered important and actually taken for granted. People have a belief that oral cavity and teeth do not have a life threatening aspect and so there is no need to take care of the oral cavity unless any discomfort arises .People claim ,when they are not in any trouble , why visit a dental surgeon on a regular basis . It is observed , people go to a dental surgeon , only in pain, swelling or any such oral discomfort.

This attitude is partly because of ignorance , lack of awareness, regarding the importance of a good oral hygiene and clean teeth. Also there is no trend or behaviour of having a regular dental visit to a dental surgeon. This leads to an overall poor , neglected oral

cavity and teeth .

A study in South Poland among adults by Wojeiech et al , reported that only 8% of the people visited their dental surgeon on a regular basis , while 53% of the people reported to a dental surgeon only in discomfort in the teeth and oral cavity [5].

A study reports that 28% of the people visited a dental surgeon , only in some pain in teeth and oral cavity , while 51% had a regular visit to a dental surgeon and got the dental treatments also done. This was a good finding , that shows a good awareness regarding oral health and hygiene [6].

A close relation exists between oral health awareness , hygiene and socioeconomic status . A study by Chandrashekhar et al was done on dental health awareness among municipal employees of Mysore city . As per the findings of this study , poor socioeconomic status groups have a poor oral hygiene and oral hygiene practises as compared to a high socioeconomic status .This article stressed on the efforts that need to be made to improve the oral hygiene status and health in these groups [7]. Good oral and general health are inter dependent and inter related . Various diseases and disorders of the teeth and the oral cavity can have ill effects on the general systemic health of the individual. Poor oral hygiene , oral infections , swollen gums , decayed teeth, bone loss , abscess can lead to inability to

chew , leading to nutritional deficiency and a poor general health. Likewise , various systemic diseases , disorders , certain syndromes , malignancies, nutritional deficiencies as of vitamins , regular intake of some drugs can show and cause direct ill effects on the oral health of the individual , thus compromising both general and oral health [8].

Awareness regarding a good oral hygiene and good oral hygiene habits need to be taught, right from the childhood days to the children , so that these habits remain and are put into practise in every day routine [9].

A study on oral health and hygiene practises among high school students in Hooghly , West Bengal is in accordance with the findings that awareness regarding oral hygiene , with good oral hygiene habits and knowledge needs to be improved in the school children on a regular and strict basis [10].Parents at home and teachers in schools , have to make efforts to motivate their children and students to have a good oral cavity and teeth with good oral hygiene habits from the very beginning itself [11].

In a dental college both the teaching faculty and the students play a big role in improving and maintaining a good oral hygiene and health of the people. Dental students , themselves need to get more knowledge , improve their oral health behaviour and learn adequately about oral health and hygiene so that the patients visiting

them for the treatment also, get aware regarding good oral cavity and teeth [12].

Even the qualified , experienced teaching faculty of a dental institute should have a good knowledge and awareness regarding oral hygiene and practises. They should regularly arrange continuing education programmes for both their students and patients , to help them have a good oral cavity and teeth [13].

Medical students study about oral cavity and teeth also. A study was done to assess the awareness of oral hygiene and oral hygiene practises among a group of medical students by Vinod Kamble et al. They reported that the awareness regarding oral health and oral hygiene practises were quite satisfactory in these medical students . This is good and important as these medical students can help their patients to have a good oral cavity and teeth [14].

Dental practitioners of the city are regularly doing dental check up and treatments for their patients . They themselves can and should teach and motivate people regarding a good oral cavity and teeth. A study reports that dental professional need to themselves adopt good oral hygiene habits and abstain from all the adverse oral habits so as to be an inspiration for their patients to get motivated for having a good oral health and clean teeth [15, 16] .

Oral hygiene habits and practises have an important role

in having a good healthy oral cavity and teeth . These few good oral hygiene habits include regular twice a day brushing , flossing and use of mouthwash where ever indicated , regular dental visits with timely dental treatments , avoiding sugary junk food , keeping away from all adverse oral habits .

Irregular , only once a day brushing , use of a hard abrasive tooth powder and a hard brush ,a wrong brushing technique all can cause irreparable tooth loss and a poor oral health and hygiene [17].

Among these, twice a day brushing specially in the night time is one of the most basic aspect for clean teeth and oral cavity . A study reports that the awareness regarding the importance of twice a day brushing among the people was 78%, but unfortunately only 32% of them actually followed this habit of twice a day brushing [18].

Among the gender groups , studies have reported that females have a good habit of brushing twice a day almost (88.8%), as compared to males 60.9%. Females are said to visit a dental surgeon and get the dental treatment done more than males. Females are more aware and conscious regarding their teeth ,oral cavity, their looks and smile , for which a healthy clean teeth and oral cavity are very important [19]. In this study also habit of

brushing twice a day was found to be more in females(47%).

Medical and all paramedicals belong to the field of human health and disease . They should themselves have good oral hygiene and habits. Few studies report that there is a lack of exposure among the medical ,dental , ayurvedic and other para medical professionals regarding the importance of a good oral cavity and teeth [20]. These professionals should be trained to motivate people regarding a good oral health and hygiene and encourage them to adopt good oral hygiene habits .

Most of the studies regarding awareness of oral hygiene and oral hygiene practises agree to the findings that in

general , people have a poor oral hygiene and are not at all aware of good oral hygiene practises.

A drastic step and efforts need to be taken up and implemented by both dental surgeons and people together . These efforts will include few steps as educational and motivational camps , improving the attitude and knowledge regarding oral cavity and teeth ,regular dental check ups and dental treatments, helping the non affording class of people so that the expenses of dental treatment are minimised , motivating people to follow good oral hygiene practises and to remain away from all adverse oral habits and various other ways possible.

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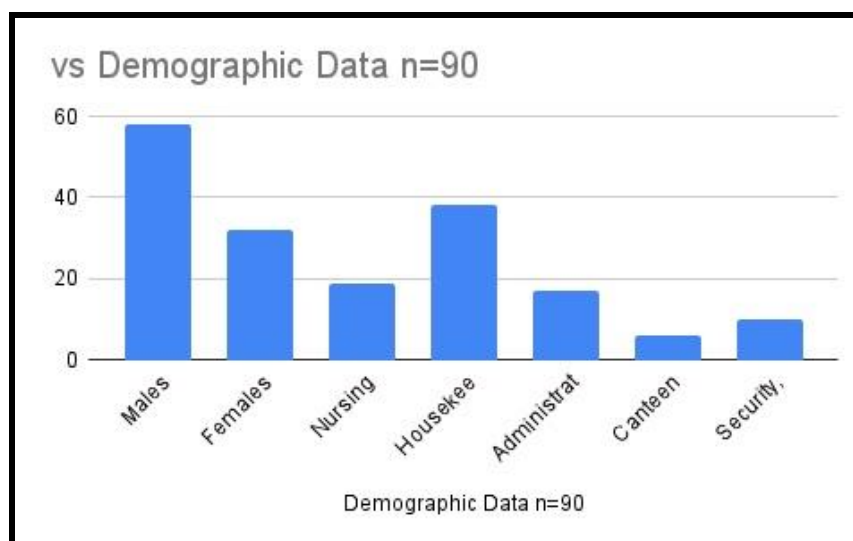


Figure 1: Demographic Data

TABLE 1: Frequency Distribution of Attitude and Awareness Response

The frequency distribution (%) of candidates answers about ATTITUDE AND AWARENESS.				Chi square	p value
		90	(%)	0.033	0.857
Have you ever consulted a dentist and have undergone dental treatment?	YES	35	38.89		
	NO	55	61.11		
Do you regularly visit or consult your dentist for check up?	YES	67	74.44	1.209	0.272
	NO	23	25.56		
Is it important to have all teeth present and in healthy condition in your mouth	Yes	69	76.67	5.848	0.05
	No	4	4.44		
	Not necessary	17	18.89		
Does professional cleaning(Scaling) loosens the teeth?	Yes	16	17.78	2.95	0.28
	No	51	56.67		

	Don't know	23	25.56		
Does healthy smile boost up the confidence?	Yes	74	82.22	2.56	0.278
	No	1	1.11		
	Not necessary	15	16.67		

TABLE 2: Frequency Distribution of Knowledge response

The frequency distribution (%) of candidates answers about Knowledge.				Chi square	P value	
		90	(%)			
Are teeth an important element/part of your body?	Yes	87	96.67	0.007	0.935	
	No	3	3.33			
Does tobacco based tooth powder effect the outer layer of the tooth?	Yes	60	66.67	7.45	0.02	P < 0.05
	No	10	11.11			
	Don't know	20	22.22			
Do you think if teeth are well taken care of since beginning/childhood will keep them healthy?	Yes	75	83.33	1.169	0.557	
	No	2	2.22			
	Not necessary	13	14.44			

Do you think dental problem can cause disease in your body/organ and even signs of those diseases can be seen in mouth?	Yes	60	66.67	19.162	0	P<0.05
	No	12	13.33			
	Don't know	18	20.00			
Do dietary habits have some effect on health of your teeth?	Don't know	17	18.89	1.33	0.513	
	No	10	11.11			
	Yes	63	70.00			
Do you thing regular smoking, consumption of tobacco, and areca nut have adverse effects on gums and teeth and may even cause diseases such as cancer etc.	Yes	69	76.67	6.66	0.036	P<0.05
	No	9	10.00			
	Don't know	12	13.33			

TABLE 3: Frequency Distribution of Practice response

The frequency distribution (%) of candidates answers about Practice.						
		90	(%)	Chi square	p value	
Do you clean/brush your teeth daily?	No	1	1.11	1.833	0.176	
	Yes	89	98.89			

What do you use to brush your teeth?	Finger	9	10.00	4.29	0.117	
	Neem stick/ Meswak	1	1.11			
	Toothbrush	80	88.89			
What do you use to brush your teeth with?	Home remedies	2	2.22	66.56	0	P<0.05
	Nothing	2	2.22			
	Tooth powder	9	10.00			
	Toothpaste	77	85.56			
How many times do you brush your teeth?	Multiple times a day	1	1.11	4.99	0.082	
	Once a day	57	63.33			
	Twice a day	32	35.56			
How long do you brush your teeth?	1 min	40	44.44	3.94	0.139	
	1-2 mins	32	35.56			
	More than 2mins	18	20.00			
Do you regularly change your tooth brush	Yes	67	74.44	0.354	0.552	
	No	23	25.56			
Do you use hard bristle brush to clean your teeth for effective cleaning	Yes	16	17.78	0.57	0.45	

	No	74	82.22			
Which method do you use for brushing your teeth	Combination of both	36	40.00	3.59	0.16	6
	Right to left(from one end to other end of the mouth)	37	41.11			
	Up and down	17	18.89			
Do you also use mouthwash, saline rinse and floss to clean your teeth	No	74	82.22	0.032	0.85	8
	Yes	16	17.78			
Do you brush your teeth soon after you wake up	No	8	8.89	2.16	0.33	8
	Sometimes	2	2.22			
	Yes	80	88.89			
Do you chew your food from both sides	Never noticed	2	2.22	1.73	0.42	1
	No	22	24.44			
	Yes	66	73.33			
Do you clean your tongue too?						
	Yes	59	65.56	10.59	0.00	5
	No	24	26.67			
	Sometimes	7	7.78			

How do you clean your tongue with?	Finger	23	25.56	8.017	0.046	P<0.05
	Tongue cleaner	23	25.56			
	Tooth brush	13	14.44			
	Water	31	34.44			
Do you consume tobacco and areca nut regularly	No	53	58.89	10.39	0.006	
	Sometimes/Occasionally	9	10.00			
	Yes	28	31.11			

CONCLUSION

There is a general consensus that awareness regarding oral hygiene and a good oral health is not satisfactory among majority of the population.

A time has come to change and improve the attitude, awareness and knowledge regarding good oral cavity, teeth and the various oral hygiene habits among the general population and incorporate only the beneficial ones, to have a good oral hygiene, health and teeth.

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