

## ORAL HEALTH AWARENESS AMONG SCHOOL TEACHERS

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### Abstract

School is an important platform for promoting oral health however; school teachers have little information on oral health awareness and practice. The present study was carried out to investigate the oral health awareness and practices of primary school teachers in Derabassi.

**Materials and Methods:** A cross sectional study of randomly selected public primary school teachers of Derabassi was conducted to access the knowledge, attitude and practice of oral health among them. Descriptive frequency was calculated using SPSS 22.0.

**Results:** 49% school teachers deemed regular tooth brushing as the best method for oral hygiene maintenance. 78.8% school teachers are familiar with common oral health diseases. 78% school teachers believed that one should brush twice a day. 60% of school teachers believed that they should visit dentist after every 6 months for regular dental checkups. No major difference was seen in knowledge and attitude towards dental awareness in both male and female genders.

**Conclusion:** Teachers should be trained at regular intervals regarding importance of oral health promotion for the students to educate and motivate children to maintain their oral health.

### INTRODUCTION:

Oral diseases presents a major public health problem. About 90% of school children experience caries, with the disease being most prevalent in Asian and Latin American countries(1). Therefore, education of school children on oral health should be provided because healthy oral habits are developed in early life and teachers being the first one to impart education plays an important role in it.

If teachers themselves are aware of various oral hygiene practices then only they will be able to provide the same knowledge to their students. The number of teachers worldwide at primary school level has been reported to be about 23.9 million. (2) There are many advantages of utilizing the services of school teachers in health education and health promotion activities such as; it provides continuity in instructions being given, integration of general and oral health with other activities as well as low cost associated with such programs(3)(4).

The lack of oral health knowledge and training on aspects of oral health (5),lack of resources (6),lack of time and failure to incorporate oral health into curriculum have been implicated as a barrier in teaching oral health education in schools (7). The study is done to investigate teachers' attitude towards oral health awareness and practices among them. It also provides information regarding the dental health which is imparted by school teachers to children.

### METHODOLOGY

A survey was conducted to access the knowledge, attitude and practice of oral health among primary and middle school teachers of Derabassi.

120 study participants were selected randomly from 5 different public schools in Derabassi , namely , LALA DEEP CHAND JAIN PUBLIC SCHOOL , DEEP MALA PUBLIC SCHOOL , DAV PUBLIC SCHOOL ,RK PUBLIC SCHOOL and LORD MAHAVIR JAIN PUBLIC SCHOOL. With the permission of the head of the school, the dental health questionnaires were distributed among school teachers and collected after 20 minutes. Teachers who were absent during the three consecutive visits to the schools and those with incomplete questionnaire were excluded from the study.

The data was compiled in MS Excel version 2016. The descriptive frequencies were calculated. The analysis was performed with the help of SPSS 22.0.

### RESULTS:

Final study sample consisted of 85 school teachers (male = 6, female = 79). Evaluation was done through a questionnaire, comprising 20 questions. Table no. 1 showed descriptive statistics of study population. Most teachers (78.8%) were familiar with the common oral diseases .To maintain oral hygiene, most teachers (49%) deemed regular tooth brushing as the best method. And while most teachers (78%) believed that one should brush twice a day, 69 % actually brush twice a day. Also 60% of the teachers believe that one should visit the dentist every 6 months for regular dental check – up. Table no. 2 showed knowledge, attitude and practice based on gender, school and years of employment. No major difference was seen in the knowledge, attitude and practice of males and females. It was also seen that teachers who had been employed for more than 10 years showed greater knowledge, attitude and practice regarding oral health.

**TABLE NO. 1 DESCRIPTIVE STATISTICS OF STUDY POULATION:**

S.NO.	QUESTION	No.	%
1.	SOURCE OF KNOWLEDGE OF ORAL HEALTH		
	DENTAL OFFICE/CLINIC	15	17.6
	NEWSPAPER	7	8.2
	FRIENDS/NEIGHBOURS /FAMILY	8	9.4
	MAGAZINES/BOOKS	11	12.9
	TV/RADIO	18	21.1
	PHYSICIAN'S CLINIC	0	0
	MORE THAN ONE	23	27
	ALL	2	2.3
2.	FAMILIAR ORAL DISEASES		
	KNOW	67	78.8
	DON'T KNOW	18	21.2
3.	FACTORS AFFECTING ORAL HEALTH		
	DIET	26	30.5
	ORAL HABITS	12	14.1
	ORAL HYGIENE	9	10.5
	DENTAL AWARENESS	15	17.6
	ALL	0	0
	MORE THAN ONE	22	25.8
4.	HOW TO MAINTAIN ORAL HYGIENE		
	REGULAR BRUSHING	42	49.4
	USE OF TONGUE CLEANER	4	4.7

	USE OF MOUTH WASH	13	15.2
	REGULAR DENTAL VISITS	1	1.1
	ALL	0	0
	MORE THAN ONE	22	25.8
5.	NEED TO MAINTAIN ORAL HYGIENE		
	TO PREVENT TOOTH DECAY	25	29.4
	TO PREVENT BAD BREATH	11	12.9
	TO REDUCE DENTAL CARE COSTS	13	15.2
	TO PREVENT GUM DISEASES	8	9.4
	TO ENHANCE APPEARANCE	1	1.1
	MORE THAN ONE	26	30.5
6.	CAUSES OF TOOTH DECAY		
	IMPROPER BRUSHING	31	36.4
	NOT VISITING THE DENTIST	3	3.5
	CONSUMPTION OF STICKY FOOD	11	12.9
	BACTERIA	8	9.4
	ALL	0	0
	MORE THAN ONE	31	36.4
7.	CAUSE OF GUM DISEASE		
	IRREGULAR BRUSHING	18	21.1
	VIRAL INFECTION	5	5.8
	BACTERIAL INFECTION	41	48.2
	LACK OF REGULAR SCALING AND ROOT PLANING	4	4.7
	ALL	0	0
	MORE THAN ONE	15	17.6
8.	METHOD OF PREVENTING ORAL DISEASES		
	ADVICE AGAINST CONSUMPTION OF	22	25.8

	CARIES CAUSING FOOD ITEMS		
	MAKE CHILDREN AND THEIR PARENTS AWARE ABOUT ORAL HEALTH	20	23.5
	REFER STUDENTS WITH DENTAL PROBLEMS TO SCHOOL NURSE	1	1.1
	MORE THAN ONE	2	2.3
	ALL	3	3.5
16.	HOW MANY TIMES DO YOU BRUSH A DAY		
	ONCE	18	21.1
	AFTER EVERY MEAL	2	2.3
	TWICE	59	69.4
	I DON'T BRUSH	0	0
17.	DO YOU USE DENTAL FLOSS		
	YES	11	12.9
	NO	50	58.8
18.	HOW OFTEN DO YOU VISIT DENTIST		
	ONCE A MONTH	26	30.5
	ONCE IN 6MONTHS	24	28.2
	ONCE IN 3 MONTHS	21	24.7
	ONCE IN 10 YEARS	5	5.8
	MORE THAN ONE	2	2.3
	ALL	0	0
19.	WHY DID YOU LAST VISIT THE DENTIST		
	FOR REGULAR CHECKUP	23	27
	ADVICE AGAINST CONSUMPTION OF CARIES CAUSING FOOD ITEMS	22	25.8
	MAKE CHILDREN AND THEIR PARENTS AWARE ABOUT ORAL HEALTH	20	23.5
	FOR GETTING DECAYED TEETH FILLED	7	8.2

	FOR GETTING TEETH CLEANED	12	14.1
	FOR RELIEVING DENTAL PAIN	11	12.9
	DIDN'T VISIT EVER	2	2.3
	MORE THAN ONE	3	3.5
20.	MEASURES YOU TAKE TO PROMOTE ORAL HEALTH IN YOUR CLASS		
	GOOD ORAL HEALH	2	2.3
	TOOTH BRUSHING	52	61.1
	FLOSS AND MOUTHWASH	4	4.7
	VISIT TO DENTIST	9	10.5
	OTHERS	18	21.1

**TABLE NO.2 CORRELATION OF KNOWLEDGE, ATTITUDE AND PRACTICE OF ORAL HEALTH WITH GENDER , SCHOOL AND YEARS OF EMPLOYMENT**

CRITERIA	KNOWLEDGE	ATTITUDE	PRACTICE
<b>GENDER</b>			
MALE	3.83	2.83	3.5
FEMALE	3.74	3.39	3.39
<b>SCHOOL</b>			
LALA DEEP CHAND	5.81	3.54	3.36
DEEP MALA	4.82	3.41	3.82
DAV PUBLIC SCHOOL	4.61	3.76	3.23
RK PUBLIC SCHOOL	3.44	1.55	2
LORD MAHAVIR JAIN	2.71	3.35	4
<b>YEARS OF EMPLOYMENT</b>			
1-5	3.17	3.01	3.13
6-10	2.47	1.90	2.04
GREATER THAN 10	4.53	3.26	3.6

## DISCUSSION:

School teachers play a major role in influencing the knowledge, attitude and behavior of school children. But it has been observed from different studies carried out in India that there is need to improve the oral health education and awareness among school teachers(8)(9).

According to our knowledge, no study has been carried out in Derabassi region to assess oral health awareness among school teachers. So, the present study was carried out to assess oral health awareness among school teachers-representatives of Derabassi.

Around 62.3% teachers had the knowledge of cause of dental caries namely improper tooth brushing, not visiting the dental clinic, consumption of sticky foods, bacterias; while the percentage is only 50% in the study conducted in Pondicherry (2014) (8).

About 69.4% school teachers in Derabassi brush twice daily. The findings are comparable to study conducted in Thiruvallur (2016), by John et al where 73.7 % of school teachers brush their teeth twice daily.(9)

78% of school teachers in Pondicherry used tongue cleaner as an additional oral hygiene measure (8) as compared to school teachers in Derabassi where only 24.7% used tongue cleaners. The percentage is less because of lack of oral health knowledge in regards to tongue cleaning. There is need to raise awareness among school teachers regarding the tongue cleaners

Only 21.1% of teachers in our study were aware of the fact that irregular brushing causes gum diseases. Although this rate was more when compared with the studies done by al Tamini and Peterson which showed that one third of the total school teachers did not know anything about relation between tooth brushing and gum diseases(10) in Saudi Arabia in 1998.

In the survey, 12.9% of teachers know that eating sticky food causes tooth decay. These findings are very less as compared to the studies conducted by Peterson et al(11) in Romania in 1993 where 23.3% of teachers ascertained eating sweets and ice-cream causes tooth decay.

About 61% teachers attributed that reducing intake of sticky food decreases oral diseases which is almost similar to the study conducted by Ramroop et al in which two third of teachers thought dental decay could be prevented by eating less sugar(12) in 2011.

Only 12.9% of teachers visited the dentist when they experienced dental pain. This finding is consistent with the study done in Nigeria by A Ehizele et al in 2011(13).

About 68.5% of teachers knew about the role of fluoride in preventing tooth decay which is same as to the study done in Northern Israel by Dr. Horold D. sagan et al in 1999(14).

Around 74.9% of teachers believe that a child should brush at least twice a day while according to study done by Ankita Mota et al in 2016, 88.7% of teachers in Mumbai believed in brushing twice a day can reduce dental diseases(15).

The teachers believed that children's teeth should be regularly checked by dentist for prevention of oral diseases.

The Ministry of Health and Family Welfare, Government of India under National Oral Health Policy has emphasized on oral health training(16) and education in school curriculum. In the study carried, teachers also reported an interest in giving oral health education to school children. Therefore, such training programmes should be held at regular intervals in schools to impart dental knowledge.

This study has got certain limitations such as it is cross-sectional in nature and has a small sample size. So, there is need to carry longitudinal study with a large sample size.

## CONCLUSIONS:

Oral hygiene practices were found to be satisfactory among school teachers, but knowledge regarding the same is lacking and there is still a definite need for teacher training program on basic health knowledge. Oral health education must be included in school curriculum on a regular basis for better response.

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