

A Survey on Oral Hygiene Methods Practiced Amongst Patients Reporting Dentistry Department of IGIMS - A Tertiary Care Centre

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Abstract: Introduction: Good Oral hygiene is a necessity, lack of which results in a variety of different oral health problems. Preventive oral health knowledge, behavior and its practice are important ways of keeping our teeth healthy. Objectives: To assess the awareness and practices on oral hygiene methods amongst patients reporting to the outpatient department of dentistry of IGIMS, Patna. Materials and Methods: 546 children of age group 3-12 yrs were included in the study. Demographic details followed by detailed description on oral hygiene practices were recorded on a structured questionnaire. The questionnaire consisted of patient name, age, sex, various dentifrices used, oral hygiene instruments used and frequency of brushing. Data obtained were statistically analyzed using Chi square and results were obtained. Results: It was found that the use of toothbrushes (61.2%), non-medicated pastes (69.6) were most common among males & females. Cleaning 'once' (67.2%), followed by 'twice' & 'more than twice' was the most commonly reported frequency, among both males & females. Conclusion: Lack of oral health awareness and hygiene practices amongst the children was found in the study which was unsatisfactory. There is much-needed niche for implementing oral health awareness and education to parents and children both.

Keywords: Oral hygiene, Dental disease, Dental floss, Preventive Programs

1. Introduction

Oral diseases are a big public health problem all around the world. There has been increased in prevalence of oral diseases, mainly for individuals from low socio-economic groups.¹ In spite of better dental facilities population residing in urban areas are affected with a number of oral diseases.² Oral hygiene has remained as an ignored and unappreciated social problem.³ Maintenance of good oral hygiene is the basic requirement for healthy teeth and gingiva. Good oral health includes disease free teeth and supporting tissues. There are various materials (tooth brush, dental floss, interdental aids, mouth wash etc) and methods available which are used to remove food particles and other deposits from surfaces of teeth in order to keep them healthy.⁴ Inappropriate brushing times and/or the complete lack of the habit of brushing results in poor oral hygiene. Most people are unaware of the fact that there is a strong relationship between poor oral hygiene and systemic diseases.³

Prevention of oral disease can be achieved by optimizing the oral health practices in the form of proper tooth brushing, use of dental floss, dental visits at regular intervals, and proper dietary practices.⁵ The programs for the prevention of oral diseases concern educating about oral hygiene and healthy eating, fluoride prophylaxis, periodic checkups, sessions of

professional oral hygiene and secondary prevention programs.⁶ It is an important issue which needs continuous supervision from the health-care professional. However, to make these efforts succeed people should be made aware of the importance of oral health and show positive attitude towards the oral hygiene.⁷

Therefore, the present study was undertaken to assess the awareness and practices on oral hygiene amongst patients reporting to the outpatient department of dentistry of IGIMS, Patna.

1.1 Aim

To assess the awareness and practices on oral hygiene amongst patients reporting to the out patient department of dentistry of IGIMS, Patna.

1.2 Objectives

- 1) To assess the type of materials and methods used for cleaning teeth.
- 2) To determine the frequency of the methods used for maintaining oral hygiene.
- 3) To create the awareness, educate & motivate the children about the importance of oral hygiene maintenance.

2. Materials and Methods

A cross-sectional hospital based study was conducted on children reporting to the dental department of IGIMS for a period of 6 months. A total sample size of 750 was taken, out of which 546 children of age group 3-12 yrs were examined. The study protocol was cleared through the Institutional Ethical Committee. Informed consent was taken from the parents. Demographic details followed by detailed description on oral hygiene practices were recorded on a structured questionnaire. The questionnaire consisted of patient name, age, sex, various dentifrices used, oral hygiene instruments used and frequency of brushing. Data obtained were statistically analyzed using Chi square and results were obtained.

Inclusion Criteria

- 1) New patients attending dentistry OPD.
- 2) Children who were willing to participate.
- 3) Children aged between 3 to 12 years.

Exclusion criteria

- 1) Old patients in order to avoid duplication of data.
- 2) Those who were not willing to participate.
- 3) Children who were above 12 years of age.

3. Results

Table 1 & Graph 1(a & b) showed 50.5% were males & 49.5 were females. Age wise distribution depicted that the largest subject of the study population was of 8 year old children, which was 23.4%, followed by 9 year old children (20.5%).

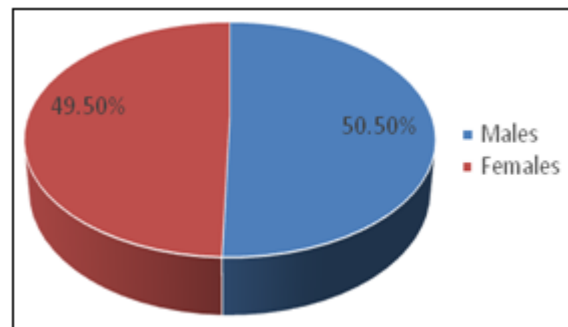
Table 2 & Graph 2 showed the genderwise comparison of usage of different types of dentifrices. It was found that the use of non-medicated pastes was the most common practice among both males & females. The use of desensitising & medicated pastes was not reported by any of the subject. The use of ayurvedic paste was found to be significantly more common among females as compared to males.

Table 3 & Graph 3 showed the genderwise comparison of usage of different types of oral cleaning aids. It was found that the toothbrush were the most commonly reported oral hygiene aid, among both males & females, followed by 'datun'. The use of proxa brush was not reported by any of the subject. The use of toothbrush was found to be significantly more common among females as compared to males.

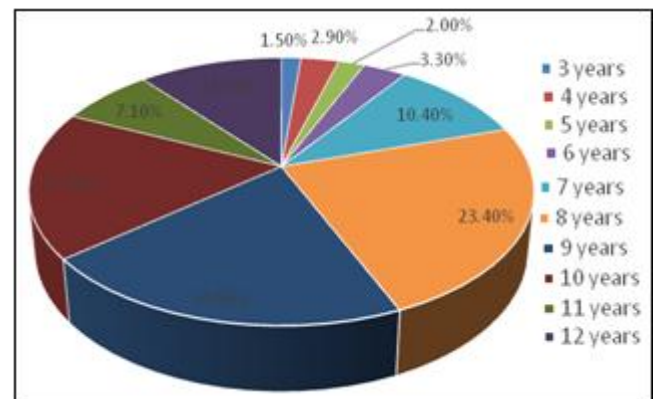
Table 4 & Graph 4 showed the genderwise comparison of frequency of oral cleaning. It was found that the 'once' cleaning was the most commonly reported frequency, among both males & females, followed by 'twice' & 'more than twice'. Twice cleaning was found to be significantly more common among females as compared to males.

Table 1: Demographic profile of study population

		Frequency	Percent
Gender	Males	276	50.5%
	Females	270	49.5%
Age	3 years	8	1.5%
	4 years	16	2.9%
	5 years	11	2.0%
	6 years	18	3.3%
	7 years	57	10.4%
	8 years	128	23.4%
	9 years	112	20.5%
	10 years	97	17.8%
	11 years	39	7.1%
	12 years	60	11.0%
Total		546	100.0%



Graph 1(a): Gender profile of study population

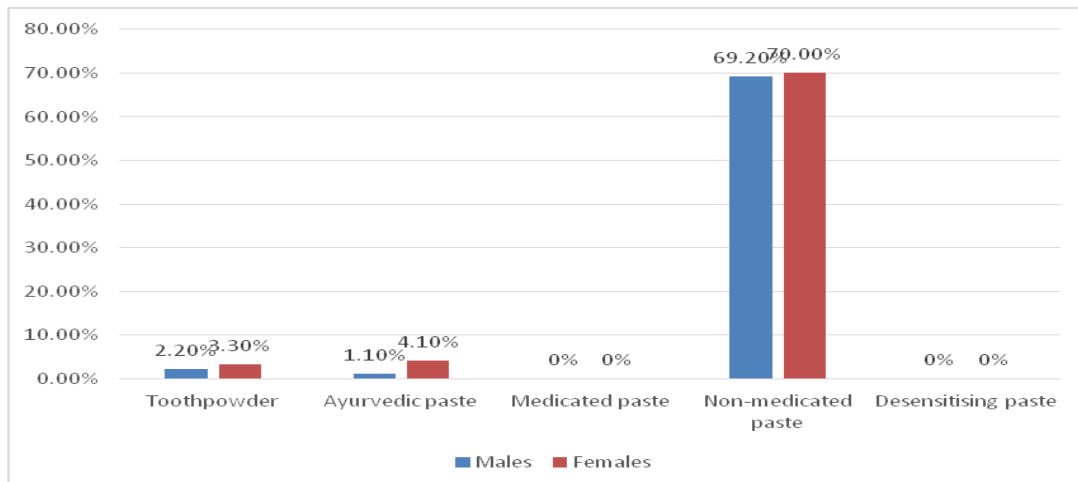


Graph 1(b): Age profile

Table 2: Genderwise comparison of usage of different types of dentifrices

Dentifrices		Gender		Total	P value
		Males	Females		
Toothpowder	N	6	9	15	0.444, NS
	%	2.2%	3.3%	2.7%	
Ayurvedic paste	N	3	11	14	0.031, S
	%	1.1%	4.1%	2.6%	
Medicated paste	N	0	0	0	-
	%	0%	0%	0%	
Non medicated paste	N	191	189	380	0.853, NS
	%	69.2%	70.0%	69.6%	
Desensitizing paste	N	0	0	0	-
	%	0%	0%	0%	

Chi square test

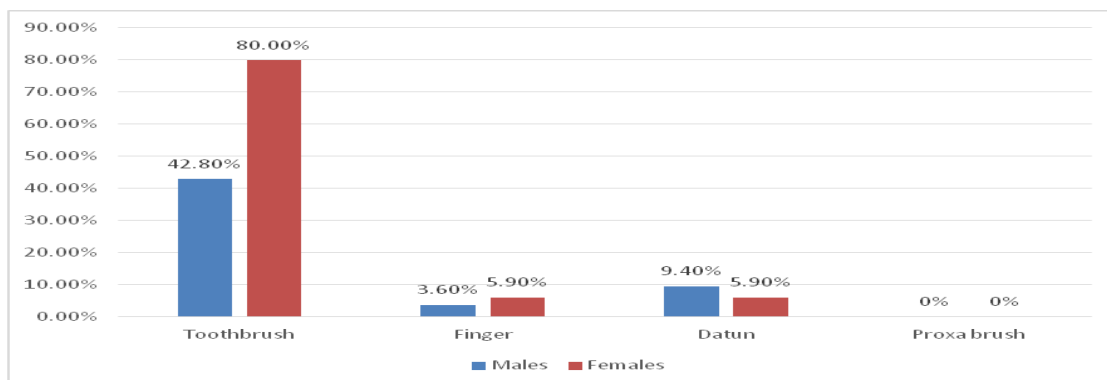


Graph 2: Genderwise comparison of usage of different types of dentifrices

Table 3: Genderwise comparison of usage of different types of oral cleaning aids

Type of cleaning aid		Gender		Total	P value
		Males	Females		
Toothbrush	N	118	216	334	<0.001, S
	%	42.8%	80.0%	61.2%	
Finger	N	10	16	26	0.232, NS
	%	3.6%	5.9%	4.8%	
Datun	N	26	16	42	0.149, NS
	%	9.4%	5.9%	7.7%	
Proxa brush	N	0	0	0	-
	%	0%	0%	0%	

Chi square test

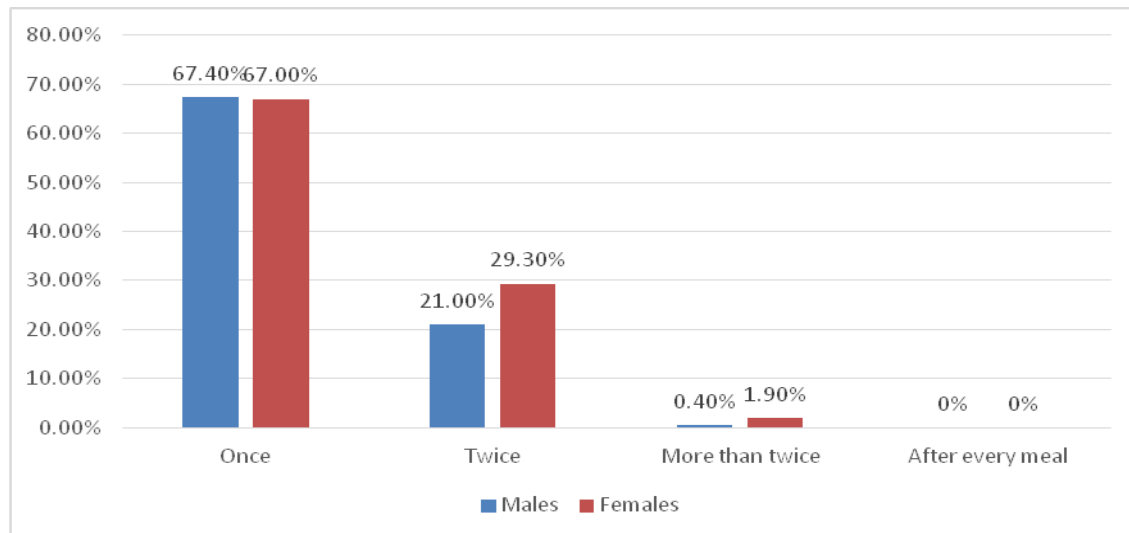


Graph 3: Genderwise comparison of usage of different types of oral cleaning aids

Table 4: Genderwise comparison of frequency of oral cleaning

Frequency of cleaning		Gender		Total	P value
		Males	Females		
Once	N	186	181	367	0.999, NS
	%	67.4%	67.0%	67.2%	
Twice	N	58	79	137	0.03, S
	%	21.0%	29.3%	25.1%	
More than twice	N	1	5	6	0.119, NS
	%	0.4%	1.9%	1.1%	
After every meal	N	0	0	0	-
	%	0%	0%	0%	

Chi square test



Graph 4: Genderwise comparison of frequency of oral cleaning

4. Discussion

Oral hygiene is highly neglected in developing country like India in both rural and urban population. Preventive oral health knowledge and its implementation are the important ways of keeping our oral cavity healthy. Hence, the present study was undertaken to assess the awareness and practices on oral hygiene amongst patients reporting to the outpatient department of dentistry of IGIMS, Patna.

In our study the use of non-medicated paste was the most common practice among both males & females. The similar studies by **Oberoi et al.**, **Kapoor et al.** also showed the use of this material was common to be at 84.4 and 90.3%, respectively.^{5,8} The use of ayurvedic paste was also found to be used by children and it was significantly more common among females as compared to males.

In the present study the majority of the children were using toothbrush as an oral hygiene aid and was similar to study done by **Goryawala et al.** Study done by [**Hind Al-Johani**, **Tseveenjav et al.**] reported that the use of toothbrush was significantly more common among females as compared to males which was similar to our study. Secondly, Datun was also seen using by children. The use of proxa brush was not reported by any of the subject. This was same as the finding from study by **Oberoi et al.** and **Jain et al.**^{2,9,10,5,11}

In our study it was found that the cleaning 'once' was the most commonly reported frequency, among both males & females which was in favor to study done by **Al-Omiri et al.**, followed by 'twice' & 'more than twice'. Twice cleaning was found to be significantly more common among females as compared to males.

5. Conclusion

There was lack of knowledge, attitude and practices towards parents & children regarding oral hygiene maintenance which was not satisfactory. Hence, there is a need to educate the general population regarding oral hygiene maintenance.

Various public health awareness programs through different mediums such as camps, media, news are encouraged to create awareness of oral hygiene. Such innovative methods of reaching the public not only ensure a healthy individual but a healthy over all society.

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