ORAL HYGIENE AMONG SCHOOL AGED CHILDREN: A DESCRIPTIVE SURVEY

==========

Rajesh. P Joseph
Associate Professor,
Department of Paediatric Nursing,
Sumandeep Nursing College,
Sumandeep Vidyapeeth deemed to be University, Piparia, Waghodia,
Vadodara, Gujarat, India
Email: rajesh.p.joseph@gmail.com

ABSTRACT

BACKGROUND: Dental caries and poor oral hygiene cause pain and have an effect on activities of children such as playing, sleeping, eating and school attendance. Previous studies on the prevalence of dental caries and poor oral hygiene have focused more on urban than rural communities in the developing countries.

AIMS: The aim of this study is to assess the level of knowledge and practice regarding oral hygiene among School Age Children in selected schools

MATERIALAND METHODS: Descriptive survey design was adopted to carry out the study. 60 samples were selected included in the study from selected schools by Purposive Sampling technique. Structured questionnaire was used to assess the knowledge and checklist was used to assess the practice regarding oral hygiene among school aged children. Collected data was analysed by using descriptive and inferential statistics.

RESULTS: The finding shows that there was a significant association between knowledge and practice with selected demographic variables of samples such as gender, educational status , ordinal position in the family, education of parents, any previous knowledge regarding oral hygiene and source of knowledge ,and the variable number of children in the family (12.10) was found not significant at 0.05 level. The knowledge and practice of the samples regarding oral hygiene was found adequate and good.

CONCLUSION: The School Age Children had adequate Knowledge and Practice regarding oral hygiene. The self administered Structured Interview Schedule Questionnaire has shown association between socio demographical variables with their knowledge. The study can be implicated in different forms in order to inculcate school children knowledge.

Key Words: *Oral hygiene, Knowledge, practice, school age children*

INTRODUCTION

Dental caries is a common oral health problem in children and occurs in individuals of all socio-economic class. Poor oral hygiene has also been seen to be quite high in children especially those living in rural areas. Lack of dental services at the primary health-care level is said to account for the poor oral health status of rural children in Nigeria.Rural areas usually have fewer dentists per population and are more deprived, thereby reducing access to dental care for children in these communities[1].

The WHO has provided "information series on school health" to advocate "health-promoting schools." They have also implemented strategies for oral health promotion in schools. Oral health and dental camps have become an integral part of school curriculum. Indian school textbooks had basic and adequate information on oral health. Literature review showed the wide perspective of school health education with different modes of education, different educators, reinforcements, and follow-up periods in different parts of the world. Research evaluating the effectiveness of various modes of oral health education (OHE) and its different combinations in improving the oral health status of children has been on the rise in the last decade[2].

STUDY OBJECTIVES

Assess the level of Knowledge and Practice regarding Oral Hygiene among School Age Children.

- Find out correlation between Knowledge and Practice regarding Oral Hygiene among School Age Children.
- Find out the association between the existing Knowledge of School Age Children with their selected demographic variables.

RESEARCH HYPOTHESES: -

H_1- There will be significant correlation between Knowledge and Practice score regarding oral hygiene among school age children.

H_2- There will be significant association between the knowledge score regarding oral hygiene among school age children's with their selected demographical variable.

MATERIAL & METHODS

The researcher has adopted descriptive evaluative research approach to carry out the present study. Sixty school going children were identified from selected schools by purposive sampling technique by applying inclusion and exclusion sampling selection criteria. The purpose of the study was well explained and assent form and informed consent was obtained. A semi structured questionnaire was prepared and administered to collect data regarding knowledge on oral health and checklist was made to assess the practice of children regarding oral hygiene. The tool was exposed to content validation and reliability assessment. The values obtained through Karl Pearson correlation was 0.80, hence the tool was found effective. Formal permission was obtained from the schools for data collection and ethical approval was collected from institutional ethical committee. Pilot study was conducted to find out the feasibility of performing main study and it had no challenges.

ANALYSIS AND INTERPRETATION

The data collected were edited, tabulated, analyzed, interpreted and finding were presented in from of tables and diagrams represent under the following areas.

Section 1: Demographic description of the sample's characteristics.

Section 2: Analysis of data related to Knowledge and Practice scores of school age children regarding oral hygiene in study group.

Section 3: Analysis of data related to Correlation between Knowledge and Practice scores of School Age Children regarding oral hygiene.

Section 4: Analysis of data to find association between pre -existing knowledge score with selected variables of School Age Children such as Gender, Educational standard, No. of Children's in family, Ordinal Position in the family, Education of Parents, Previous Knowledge regarding oral hygiene and their Source of Knowledge.

RESULTS

SECTION-1: frequency and percentage distribution of school age children based on their socio-demographic variables.

n=60

1.	**Gender**		
	Male	36	60
	Female	24	40
2.	**Educational Status**		
	Grade 1	27	45.00
	Grade 2	14	23.34
	Grade 3	08	13.33
	Grade 4	03	5.00
	Grade 5	08	13.34
3.	**No of children in the family**		
	One	04	6.67
	Two	21	35.00
	Three	24	40.00
	More than three	06	10.00
	5 and more.	05	8.33
4.	**Ordinal Position in the Family**		
	First born child	31	51.67
	Second child	15	25.00
	Third child	11	18.33
	Fourth child	03	5.00
5.	**Education of Parents**		
	No formal education	00	00
	Primary	20	33.33
	High School	34	56.67
	Graduation	02	3.33
	Post –Graduation	04	6.68
6.	**Previous Knowledgeon oral hygiene**		
	Yes	38	63.33
	No	22	36.67
7.	**Source of Knowledge**		
	Parents & family members	35	58.33
	School Teacher	22	36.67
	Television & Radio	03	05.00
	Mass media	00	00

The data given in table 1 show that frequency and percentage distribution of school age children which includes gender, Educational status, number of children in family, ordinal position in the family, education of parents, any previous knowledge, source of knowledge.

SECTION-2: ANALYSIS OF KNOWLEDGE AND PRACTICE SCORES REGARDING ORAL HYGIENE

N=60

Sr. No	Knowledge Level	Frequency (f)	Percentage (%)
A	Good	38	63.33
B	Average	20	33.33
C	Poor	2	3.34

DISTRIBUTION OF SCHOOL AGE CHILDREN BASED ON THEIR PRACTICE CATEGORY

n=60

Sr. No.	Area of practice	Frequency (f)	Percentage (%)
A.	Good	19	31.66
B.	Average	40	66.63
C.	Poor	1	1.68

SECTION 3: CORRELATION BETWEEN KNOWLEDGE AND PRACTICE SCORES OF SCHOOL AGE CHILDREN REGARDING ORAL HYGIENE

In order to find the correlation between Knowledge and Practice of School Age Children regarding oral hygiene, following hypothesis is formulated and tested: -

H_1. There is a significant correlation between Knowledge and Practice score regarding oral hygiene amongSchool Age Children.

CORRELATION BETWEEN KNOWLEDGE AND PRACTICE OF SCHOOL AGE CHILDREN REGARDING ORAL HYGIENE

VARIABLES	MEAN	SD	CORRELATION
Knowledge	13.78	0.34	0.367
Practice	12	0.22	

SECTION 4: ANALYSIS OF DATA TO FIND ASSOCIATION BETWEEN KNOWLEDGE SCORES OF THE SCHOOL AGE CHILDRENSWITH SELECTED SOCIO-DEMOGRAPHIC VARIABLES

This section deals with the findings of the association between Knowledge scores with selected Socio-Demographic Variables.

To test the association between the knowledge and socio-demographic variables, the following research hypothesis is formulated:

H_2: There is a significant association between the Knowledge score regarding Oral Hygiene among School Age Children with their selected Demographical Variable.

Discussion

The present study revealed that among the 60 school children 63.3% had good (38) knowledge, 33.3% had average (20) knowledge and 3.3% had poor knowledge (02) and practice of oral hygiene was observed that good (19), average (40) and poor (01).

Another cross sectional study conducted by Mishra A, Pandey RK, Chopra H, Arora V (2018) assessed the oral health status using the World Health Organization for the oral health awareness in children, 2004 found that Children with uneducated parents have often experienced toothache, brushes once a daily and frequently visits the dentist for toothache compared to children of educated parents.

Shaghaghian S, Bahmani M, Amin M (2015) also stated in his cross-sectional study that Oral health status of preschool children in Shiraz was less than optimal and had a significant impact on their OHRQoL. Therefore, improvement of children's OHRQoL could be achieved by improving their home dental care. Strategies promoting parental attitude about the importance of children's tooth brushing may significantly influence children's oral hygiene and are highly recommended.

Akinyamoju CAet al.. (2018) did a cross-sectional study involving 778 schoolchildren from 12 public primary schools. Dental caries was assessed using the decayed, missing and filled teeth (DMFT) index and oral hygiene status by the simplified oral hygiene and gingival indices.The occurrence of dental caries appears to be increasing in rural Nigerian schoolchildren, but still within WHO limits. Oral hygiene status was poor and gingivitis was common.

Blake H et al (2015) had identified in their Cohort study among Children's regarding dental knowledge and found significant improvement following the intervention, with improvement evident at immediate follow-up and maintained 6 weeks later. Significantly

more children reported using dental floss 6 weeks after the intervention compared with baseline. No significant differences were detected in toothbrushing or dietary behaviors.

Al-Kheraif AA (2008) conducted a study to evaluate the oral hygiene habits and utilization of professional dental health services by all the children in the primary schools, and to compare the differences in oral hygiene awareness (OHA) and dental health status of schoolchildren who are exposed to dental health education and those who are not. Tooth brushing for 2 times a day or after meals were more common among schoolchildren of study group, than school children of control group. The main reason cited by study group, and by control group for visiting the dentist was that they had severe toothache.

Leroy R, Jara A, Martens L, Declerck D (2011) done a cross sectional study aimed to describe oral hygiene habits, oral hygiene status and gingival health in Flemish pre-school children and to explore factors associated with these clinical oral health variables.The study recommended that Parents should be motivated to start brushing at an early age and brush thoroughly in order to maintain good oral health in their offspring. Special attention should go to children raised by mothers with a lower educational level.

Conclusion

Oral hygiene is a good virtue for all human beings. Parents are the role model and inspirations for the children. Hence the habit of brushing twice a day must start with parents. Frequent oral health checks up also an additional tool for the maintenance of good oral health. Children has to be awarded and rewarded for having problem free oral cavity and other related issues.

Ethical clearance

The study was conducted after obtaining written consent from the participants and formal approval from the institutional ethics committee.

Conflict of interest

The author declares that there is no conflict of interest to disclose.

Source of funding

The researcher didn’t receive any funding from other sources and declares that this is a researcher’s self funded project.

References

1. Adekoya-Sofowora CA, Nasir WO, Oginni AO, Taiwo M. Dental caries in 12-year-old suburban Nigerian school children. Afr Health Sci 2006;6:145-50.
2. Petersen PE. Challenges to improvement of oral health in the 21st century – The approach of the WHO global oral health programme. Int Dent J 2004;54:329-43
3. Mishra A, Pandey RK, Chopra H, Arora V. Oral health awareness in school-going children and its significance to parent's education level. *J Indian Soc Pedod Prev Dent*. 2018;36(2):120-124
4. Shaghaghian S, Bahmani M, Amin M. Impact of oral hygiene on oral health-related quality of life of preschool children. *Int J Dent Hyg*. 2015;13(3):192-198.
5. Akinyamoju CA, Dairo DM, Adeoye IA, Akinyamoju AO. Dental caries and oral hygiene status: Survey of schoolchildren in rural communities, Southwest Nigeria. *Niger Postgrad Med J*. 2018;25(4):239-245
6. Blake H, Dawett B, Leighton P, Rose-Brady L, Deery C. School-Based Educational Intervention to Improve Children's Oral Health-Related Knowledge. *Health Promot Pract*. 2015;16(4):571-582.
7. Al-Kheraif AA, Al-Bejadi SA. Oral hygiene awareness among female Saudi school children. *Saudi Med J*. 2008;29(9):1332-1336.
8. Leroy R, Jara A, Martens L, Declerck D. Oral hygiene and gingival health in Flemish pre-school children. *Community Dent Health*. 2011;28(1):75-81.