A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING ORAL HYGIENE AMONG SCHOOL AGE CHILDREN IN SELECTED SCHOOLS OF WAGHODIA, VADODARA, GUJARAT

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Abstract: BACKGROUND This study was designed to investigate the Knowledge and practice regarding Oral Hygiene among School age children. Emphasis was put on trying to establish the relationship between gender, education status, No. of children in the family, ordinal position in the family , education of parents, any previous knowledge , source of knowledge. The validity and reliability of research instruments was established and data was collected from 60 children selected from Waghodia taluka using the Purposive Sampling technique. AIMS AND OBJECTIVES The aim of this study is to assess the level of knowledge and practice regarding oral hygiene among School Age Children in selected schools of Waghodia. MATERIAL AND METHOD: Descriptive research design was adopted to achieve the goal of the study. The tool consists of two parts: Structure Interview Schedule Questionnaire and Practice Checklist. 60 samples were collected from selected schools of Waghodia by Purposive Sampling technique. RESULTS The finding shows that the Pre-test knowledge and Practice score of School Age Children regarding oral hygiene with that selected demographical variables of Gender (28.56), Educational Status (80.93), Ordinal Position in the family(24.84), Education of Parents(χ^2=28.09), any previous regarding oral hygiene(6.22),and Source of Knowledge(29.38) were found to be significant at 0.05 level, Thus it can be interpreted that there is a significant association between knowledge and practice with selected demographic variables such as gender, educational status , ordinal position in the family, education of parents, any previous knowledge regarding oral hygiene and source of knowledge ,only no. Of children in the family (12.10) was not significant at 0.05 level. Thus it can be interpreted that there is a no significant association between knowledge and practice of school age children with their no. of children in the family. CONCLUSION The following conclusion can be drawn from the study findings, which are supported by evidence from the other literature. The School Age Children are having adequate Knowledge and Practice regarding oral hygiene. The self administered Structured Interview Schedule Questionnaire has shown remarkable association between socio demographical variables and their knowledge. Using the statistical formula we have computed the association between the demographic variables and their knowledge.

Key Words: Health, Gender, school age children, Waghodia.

1. INTRODUCTION:-

Health is a fundamental human right. It is central to the concept of quality of life. Health and its maintenance is a major social investment and is word wide social goal. Health is multidimensional. This health may be assessed by such indicators as death rate, infant mortality rate and expectation of life.

Health and disease are no longer related to where you are born, but rather to the socioeconomic setting in which you live. Oral disease demonstrates a strong relationship to socioeconomic status. Oral diseases such as dental caries, periodontal disease, tooth loss, oral mucosal lesions and orodental trauma, oropharyngeal cancer, HIV-related oral disease are major health problem word wide. Oral disease results mainly because of unhealthy lifestyles such as poor nutrition, diet and oral hygiene.

The oral cavity plays many important functional roles in humans. Some examples are the preparation and formation of bolus, taste and swallowing. In addition, it is the main site of verbal human communication and the primary entrance for two systems vital to human function, namely, the gastrointestinal tract and respiratory systems. Poor oral hygiene and consequent oral cancer can destroy the integrity of this area. Oral cavity cancers are more common in males than in females, with a ratio of 3:1–4:1.

2. STATEMENT OF THE PROBLEM:

"A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING ORAL HYGIENE AMONG SCHOOL AGE CHILDREN IN SELECTED SCHOOLS OF WAGHODIA".

3. OBJECTIVES OF THE STUDY:

- 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.

4. RESEARCH HYPOTHESES: -

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

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

The pilot study will be conducted on 7 samples to assess the reliability and feasibility of the tool using co-relation and coefficient techniques.

5. CONCEPTUAL FRAMEWORK:

Health Promotion Model: - Nola. J. Pender

Model is considered a middle-range theory. Model described three basic categories,

- Individual Characteristics
- Activity Related Affect
- Behavioral Outcome

6. RESEARCH METHODOLOGY:

RESEARCH APPROACH	Evaluative Research Approach
RESEARCH DESIGN	Descriptive Research Design
SETTING	Brilliant primary and Crystal public school of Waghodia taluka.
SAMPLE	School Age Children
SAMPLE TECHNIQUE	Purposive Sampling Technique
TOOL-DEVELOPMENT	1. Semi-structured questionnaire for demographic data 2. Practice Checklist
CONTENT VALIDITY	content validity obtained by validation of research tools by 3 from child health nursing Asst. Prof. & 1 statistician
RELIABILITY	Using the Karl Pearson formula and applying split half method the reliability of 0.80
PILOT STUDY	Conducted on 7 School Age Children of Eklavy Senior Secondary School on 27th September 2016
DATA COLLECTION PROCEDURE	Collection was scheduled from 25th November 2016 – 28th November 2016
SAMPLE SLECTION CRITERIA	**Inclusion criteria:** ➢ Children who are in English medium. ➢ Children who are willing to participate. **Exclusion criteria**: ➢ Children those who are absent at the time of data collection
ETHICAL CONSIDERATION	Ethical consideration has been taken in the form of informed written consent from the participants of the study. Anonymity and confidentiality of the participants have been maintained during study.

7. 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 hygeine in study group.

Section 3 : Analysis of data releted 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 Knowlege regarding oral hygeine and their Source of Knowledge.

SECTION-1: DESCRIPTION OF SAMPLES ACCORDING TO DEMOGRAPHIC

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

N=60

	VARIABLES/ CHARACTERSTICS	FREQUENCY	PERCENTAGE (%)
1.	**GENDER :-**		
	Male	36	60
	Female	24	40
2.	**EDUCATIONAL STATUS:-**		
	1 std	27	45.00
	2 std	14	23.34
	3 std	08	13.33
	4 std	03	5.00
	5 std	08	13.34
3.	**NO OF CHILDREN IN THE FAMILY:-**		
	1	04	6.67
	2	21	35.00
	3	24	40.00
	4	06	10.00
	5 and more.	05	8.33
4.	**ORDINAL POSTION IN THE FAMILY**		
	1st Child	31	51.67
	2nd Child	15	25.00
	3rd Child	11	18.33
	4th Child	03	5.00
5.	**EDUCATION OF PARENTS :-**		
	Illiterate	00	00
	Primary	20	33.33
	High School	34	56.67
	Graduation	02	3.33
	Post –Graduation	04	6.68
6.	**ANY PREVIOUS KNOWLEDGE:-**		
	Yes	38	63.33
	No	22	36.67
7.	**SOURCE OF KNOWLEDGE :-**		
	Family and relatives	35	58.33
	School Teacher	22	36.67
	T.V and Radio	03	05.00
	News Papers.	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 AMONG SCHOOL AGE CHILDREN.
TABLE 2: DISTRIBUTION OF SCHOOL AGE CHILDREN BASED ON THEIR KNOWLEDGE CATEGORY   N=60

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

TABLE 3: DISTRIBUTION OF SCHOOL AGE CHILDREN BASED ON THEIR PRACTICE CATEGORY N=60

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

SECTION 3 : **ANALYSIS OF DATA RELATED TO CORRELATION BETWEEN KNOWLEDGE AND PRACTICE SCORES OF SCHOOL AGE CHILDREN REGARDING ORAL HYGIENE .**

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

H₁. There is a significant correlation between Knowledge and Practice score regarding oral hygiene among School Age Children.

TABLE 4: CORRELATION BETWEEN KNOWLEDGE AND PRACTICE OF SCHOOL AGE CHILDREN REGARDING ORAL HYGIENE.

VARIABLE	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:

H₂: There is a significant association between the Knowledge score regarding Oral Hygiene among School Age Children with their selected Demographical Variable.

TABLE 5: ASSOCIATION BETWEEN KNOWLEDGE SCORES OF THE SCHOOL AGE CHILDREN WITH SELECTED SOCIO-DEMOGRAPHIC VARIABLES.

N=60

Sl. No	Variables	Knowledge Score			Chi square Value	Df	Inference
		Good	Average	poor			
1	**Gender**						
	a) Male	10	27	0	28.56	2	28.56>5.9 S
	b) Female	10	11	2			
2.	**Educational Status**						
	a) 1 std	13	13	0	80.93	8	80.93>14. S
	b) 2std	2	11	2			
	c) 3std	4	4	0			
	d) 4std	0	2	0			
	e) 5std	2	7	0			

3.	**No. of Children in the Family**						
	a) 1	2	2	0			
	b) 2	5	15	1			
	c) 3	10	14	0	12.10	8	12.10<14. NS
	d) 4	2	3	1			
	e) 5 and more	1	4	0			
4.	**Ordinal Position in the Family**						
	a) 1st Child	10	20	1			
	b) 2nd Child	5	9	1	24.84	6	24.84>12. S
	c) 3rd Child	4	7	0			
	d) 4th Child	1	2	0			
5.	**Education of Parents**						
	a) Illiterate	0	1	0			
	b) Primary	8	11	1			
	c) High School	9	24	0	28.09	6	28.09>12. S
	d) Graduation	0	2	0			
	e) Post –Graduation	2	2	0			
6	**Any previous Knowledge regarding oral hygiene**						
	a) Yes	8	29	1	6.22	2	6.22>5.99 S
	b) No	11	11	0			
7	**Source of Knowledge**						
	a) Family and relatives	12	23	0			
	b) School Teacher	5	16	1	29.38	6	29.38>12. S
	c) T.V and Radio	2	1	0			
	d) News Papers.	0	0	0			

Formula Used for Association

$$X^2 = \frac{(O - E)^2}{E}$$

O = Observed frequency
E = Expected frequency

$$E = \frac{Row\ Total * Column\ Total}{Total\ frequency}$$

Df = (r-1) (c-1)

MAJOR FINDINGS OF THE STUDY AND DISCUSSION

The following are the major findings of the study with discussion:

Demographic Data

Out of 60 samples are selected demographical variables such as gender in which 36(60%) are male , 40% are female, education status in which 27(45%) belongs to 1std, 14(23.34%) belongs to 2std, 8(13.33%) belongs to 3std, 3(5%) belongs to 4std, 8(13.34%) belongs to 5std. No. of children in the family in which 4(6.67%) are having 1, 21(35%) are having 2, 24(40%) are having 3, 6(10%) are having 4, 5(8.33%) are having 5 and more child. Ordinal position in the family in which 31(51.67%) are 1st child, 13(25%) are 2nd child, 11(18.33%) are 3rd child, 3(5%) are 4th child. Education of parents in which 0(0.00%) illiterate, 20(33.33%) are having primary, 34(56.67%) are having high school, 02(3.33%) are having graduation, 04(6.68%) are having post –graduation. Any previous knowledge 38(63.33%) are having knowledge and 22(36.67%) are not having knowledge, source of knowledge 35(58.33%) from family and relatives, 22(36.67%) from school teacher, 3(5%) from T.V. and radio, 0(00%) from newspaper.

Assessing the Knowledge And Practice Regarding Oral Hygiene

The finding shows that the pre-test knowledge and practice score of School Age Children regarding oral hygiene with that selected demographical variables of of gender (28.56), educational status (80.93), ordinal position in the family(24.84), education of parents(χ^2=28.09), any previous knowledge regarding oral hygiene(6.22),and source of knowledge(29.38) were found to be significant at 0.05 level, Thus it can be interpreted that there is a significant association between Knowledge and Practice with selected demographic variables such as gender, educational status , ordinal position in the family, education of parents, any previous knowledge regarding oral hygiene and source of knowledge ,only no. Of children in the family (12.10) was not significant at 0.05 level. Thus it can be interpreted that there is a no significant association between Knowledge and Practice of School Age Children with their No. of children in the family.

8. CONCLUSION:

The following conclusion can be drawn from the study findings, which are supported by evidence from the other literature.

The school age children are having **adequate mean Knowledge score was 13.78** and **mean Practice score was 12** regarding oral hygiene. The self administered Structured Interview Schedule Questionnaire has shown remarkable association between socio demographical variables and their knowledge. Using the statistical formula we have computed the association between the demographic variables and their knowledge.

9. RECOMMENDATIONS:

On the bases of the findings of the study; it is recommended that:

- The study can be utilized to conduct further research study in the field of knowledge and practice regarding oral hygiene.
- A similar study can be done to prepare structured interview schedule questionnaire for assessing the knowledge and practice regarding oral hygiene among school age children.
- A similar study can be done with structured interview schedule questionnaire
- Similar study can be conducted in urban areas.

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