



RESEARCH ARTICLE

KNOWLEDGE AND PRACTICES REGARDING ORAL HYGIENE AMONG MOTHERS OF
UNDER FIVE CHILDREN

*Sushma Kumari

Nursing tutor, Shri Mata Vaishno Devi College of Nursing, Katra, Jammu & Kashmir, India

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ABSTRACT

Introduction: Children are major consumers of health; they are the wealth of tomorrow. Oral hygiene is practiced every morning involving rubbing of the hard and soft palate, upper and lower gums, inner aspects of cheek, under surface and over surface of tongue and the teeth with or without tooth powder or paste probably. Children under the age of five years generally spend most of their time with parents and guardians, especially mothers, even when they attend preschool or nurseries. Poor knowledge and practices of parents towards oral health of infants and young children are associated with increase caries prevalence.

Methodology: In this Descriptive research design, 150 mothers of under five children were selected as a sample for the study by using Non- Probability sampling – convenient sampling technique. The data was collected by using structured knowledge Questionnaire to assess the knowledge and check list to practices on oral hygiene among mothers of under five children. Data analysis was performed by descriptive statistics and inferential statistics. SPSS-17 software was used and p value less than 0.05 were considered significant.

Result: Majority 52.0% mother of under five children had good level of knowledge, 38.0% mothers of under five children had fair level of knowledge, 6.7% mothers of under five children had excellent level of knowledge and only 3.3% mothers of under five children had poor level of knowledge regarding oral hygiene of their under five children. Majority 68.7% mothers of under five children had followed neutral practices, 22.0% mothers had followed positive practices and only 9.3% mothers of under five children had followed negative practices regarding oral hygiene of their under five children. The obtained value (0.127) shows that there is positive correlation between knowledge and practice indicating that the knowledge level increases then the practices also increases.

Discussion: Out of 150 mothers, 52.0% mother of under five children had good level of knowledge and only 22.0% mothers had followed positive practices, 68.7% mothers of under five children had followed neutral practices. Informational booklet on Oral Hygiene was provided to the Mothers of under five children to increase the knowledge and practices on Oral hygiene.

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INTRODUCTION

Children are major consumers of health; they are the wealth of tomorrow. Maintaining good oral hygiene is one of the most important things can do for teeth and gums. The prevalence of caries is increasing rapidly in developing nations, which is of concern because dental caries is mostly a childhood disease and 80% of the world's children live in the developing countries. In 2009 according to WHO age of under five children respond about 42.2% of the total population, so it indicates that health care of the under five children can contribute to the overall health status of the country, 90% of children have some tooth decay by 3 to 12 years of age.

The most likely reasons for this increase of dental caries in developing countries is a combination of poor nutrition and poor oral hygienic practices. Dental caries is a public health problem and the most common cause of tooth loss in preschool and school children. It is a process involving an imbalance in the interactions between the tooth surface/subsurface and the adjacent microbial bio film leading to deterioration of dental tissues. Attempts have been made to identify those individuals affected by increased dental caries experience through a wide variety of demographic, socioeconomic, dietary, physical, chemical, and microbiological factors. In the past 20 to 30 years, comparisons of existing epidemiological data noted a decline in the prevalence of dental caries, mainly among children and adolescents in industrialized countries. In Mexico, a moderate-income country, the dental caries problem has been

*Corresponding author: Sushma Kumari

Nursing tutor, Shri Mata Vaishno Devi College of Nursing, Katra, Jammu & Kashmir, India.

Oral health is concerned not only with the teeth, but also the whole mouth and its surrounding structures. It enables an individual to eat, speak and socialize without active disease, discomfort or embarrassment and contributes to general well being" and the individuals' quality of life". Oral health means more than good teeth; it is integral to general health and essential for well-being. It implies being free of chronic oral-facial pain, oral and pharyngeal (throat) cancer, oral tissue lesions, birth defects such as cleft lip and palate, and other diseases and the disorders that affects the oral, dental and craniofacial tissues, collectively known as the craniofacial complex.

MATERIAL AND METHODS

A Quantitative research approach was adopted for the study. A descriptive research design was utilized to achieve the objectives of the study. The study was conducted in selected rural villages of Mohali that were Daun and Badhmajra. Researcher's familiarity with setting and availability of required sample were also considered while selecting the study group. The target population is all the mothers of under five children residing in selected rural areas of Mohali. In the present study the 150 mothers of under five children in the rural villages of Daun and Badhmajra were selected by using non probability, convenient sampling technique. Interview schedule with semi structured self developed questionnaire developed to assess knowledge on oral hygiene, This section consist of 20 question to assess the knowledge on oral hygiene. Checklist for practices on oral hygiene was developed by the researcher, This section consists of 17 items.

Knowledge of subjects was graded as given below

Level of knowledge	Score
Poor	0-5
Average	6-10
Good	11-15
Excellent	16-20

Practices of the subjects were graded as below

Level of practices	Score
Negative	1-5
Neutral	6-12
Positive	13-17

Content validity of the tool was made and necessary modification were made according to the expert's opinion and tool was finalized. Ethical approval to conduct the study was obtained from sarpanch of Daun and Badhmajra village, Punjab. Written informed consent was obtained from the study subjects regarding their willingness to participate in the research project. Demographic variables were collected by using interview technique and privacy is provided. Ethical principles were adhered too throughout the study. For descriptive research design, demographic variable, structured knowledge questionnaire and check list was collected. Data was collected from 150 mothers of under five children. After the data collection, informational booklet on oral hygiene were provided to the mothers of under five children. Data collection procedure terminated by thanking the mothers of under five children for their Co-operation. According to objectives the data was organized, tabulated.

Analysis was done by using descriptive and inferential statistics. Descriptive statistics used was frequency; mean, mean percentage, standard deviation and inferential statistics calculated by χ^2 and Pearson Correlation.

RESULTS

Demographical variables description

Table 2 depicts that majority 52.0% mother of under five children had good level of knowledge, 38.0% mothers of under five children had fair level of knowledge, 6.7% mothers of under five children had excellent level of knowledge and only 3.3% mothers of under five children had poor level of knowledge regarding oral hygiene of their under five children. Figure 1 depicts that majority 68.7% mothers of under five children had followed neutral practices, 22.0% mothers had followed positive practices and only 9.3%mothers of under five children had followed negative practices regarding oral hygiene of their under five children. Figure 2 shows the correlation between knowledge and practices regarding oral hygiene by Karl Pearson correlation formula. The obtained value (0.127) shows that there is positive correlation between knowledge and practice indicating that the knowledge level increases then the practices also increases.

Table 1. Frequency and percentage distribution of subjects according to their socio demographic variables

N=150			
S. No.	Socio-demographic variables	Frequency (f)	Percentage (%)
1.	Age of mother(in years)		
	20 – 25	32	21.3
	26 – 30	43	28.7
	31 – 35	41	27.3
2.	Above 35	34	22.7
	Type of family		
3.	Nuclear	59	39.3
	Joint	91	60.7
4.	Age of the child(in years)		
	1 – 2	13	8.7
	2 – 3	56	37.3
	3 – 4	50	33.3
5.	4 – 5	31	20.7
	Educational Status		
6.	Illiterate	25	16.7
	Metric	58	38.7
	Senior secondary	46	30.6
	Graduate and above	21	14.0
7.	Religion		
	Sikh	35	23.3
	Muslim	52	34.7
	Christian	22	14.7
8.	Hindu	41	27.3
	Monthly family income (in Rs.)		
	Below 5000	20	13.3
	5000 – 10000	70	46.7
	10001 – 15000	37	24.7
9.	Above 15000	23	15.3
	Working status		
	Working	35	23.3
10.	Non-working	52	34.7
		22	14.7

DISCUSSION

The study was conducted using a descriptive research design, subject were selected by Non – Probability sampling-convenient sampling technique. The sample size was 150.

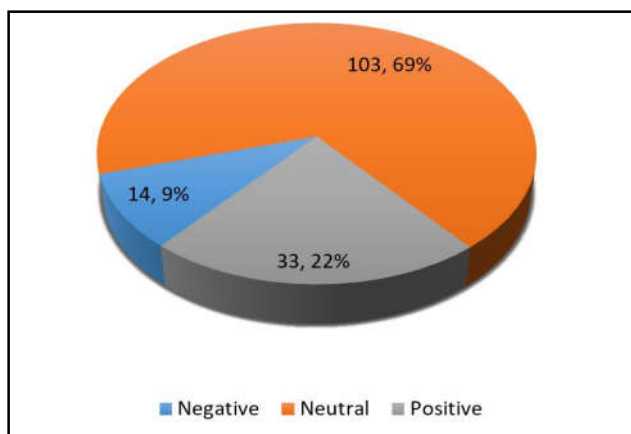
Table 2. Level of knowledge among mothers regarding oral hygiene of their under five children

N=150					
Level of Knowledge	Score	Frequency (f)	Percentage (%)	Median (Min.-Max.)	Mean \pm SD
Poor	0-5	5	3.3	11.0	11.1 \pm 2.9
Fair	6-10	57	38.0	(4.0-18.0)	
Good	11-15	78	52.0		
Excellent	16-20	10	6.7		

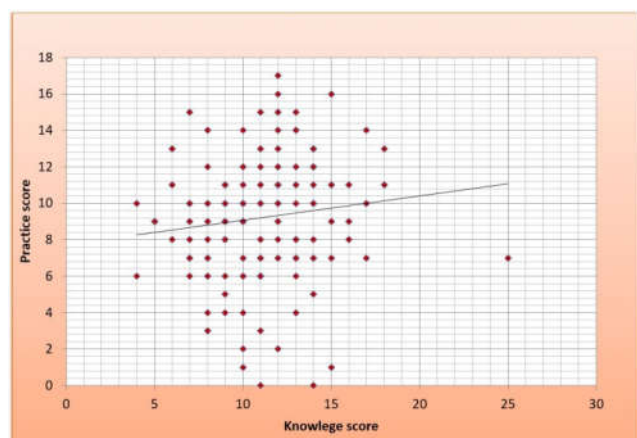
Table 3. Associate the Knowledge score of mothers of under five children with socio- demographic variables

N = 150										
S. No	Selected socio-demographic variables	Poor (n=5)	Fair (n=57)	Good (n=78)	Excellent (n=10)	n	χ^2 , df, p-value			
1.	Age of mother (in years)	f	%	f	%	f	%	n		
	20 - 25	01	3.1	11	34.4	17	53.1	03	9.4	32
	26 – 30	00	00	23	53.5	18	41.9	02	4.6	43
	31 – 35	00	00	12	29.3	27	65.8	02	4.9	41
	Above 35	04	11.8	11	32.4	16	47.0	03	8.8	34
2.	Type of family									
	Nuclear	02	3.4	26	44.0	29	49.2	02	3.4	59
	Joint	03	3.3	31	34.0	49	53.9	08	8.8	91
3.	Age of the child (in years)									
	1 - 2	01	7.6	06	46.2	06	46.2	00	0.0	13
	2 - 3	01	1.8	23	41.1	27	48.2	05	8.9	56
	3 - 4	02	4.0	19	38.0	25	50.0	04	8.0	50
	4 - 5	01	3.2	09	29.0	20	64.6	01	3.2	31
4.	Educational Status	f	%	f	%	f	%	f	%	n
	Illiterate	01	4.0	12	48.0	12	48.0	00	0.0	25
	Matric	03	5.2	23	39.6	28	48.3	04	6.9	58
	Senior secondary	01	2.2	18	39.1	23	50.0	04	8.7	46
	Graduate and above	00	0.0	04	19.0	15	71.5	02	9.5	21
5.	Religion									
	Sikh	00	0.0	11	31.4	22	62.9	02	5.7	35
	Muslim	05	9.6	21	40.4	23	44.2	03	5.8	52
	Christian	00	0.0	11	50.0	09	40.9	02	9.1	22
	Hindu	00	0.0	14	34.2	24	58.5	03	7.3	41
6.	Monthly Family Income									
	< 5000	00	0.0	11	55.0	09	45.0	00	0.0	20
	5000– 10000	04	5.7	29	41.5	36	51.4	01	1.4	70
	10001-15000	01	2.7	10	27.0	23	62.2	03	8.1	37
	> 15000	00	0.0	07	30.4	10	43.5	06	26.1	23
7.	Working Status									
	Working	02	2.9	22	31.9	38	55.1	07	10.1	69
	Non working	03	3.2	35	43.2	40	50.0	03	3.6	81

* Significant (p- value = 0.05)



N=150

Figure 1. Practices among mothers related to oral hygiene of their under five children

N=150

Figure 2. Correlation analysis of knowledge and practices among mothers regarding oral hygiene of their under five children

The first objective of the study to assess the level of knowledge among mothers regarding oral hygiene of their under five children: It revealed that majority 52.0% mother of under five children had good level of knowledge, 38.0% mothers of under five children had fair level of knowledge, 6.7% mothers of under five children had excellent level of knowledge and only 3.3% mothers of under five children had poor level of knowledge regarding oral hygiene of their under five children.

The second objective of the study to assess the practices among mothers regarding oral hygiene of their under five children: It revealed that majority 68.7% mothers of under five children had followed neutral practices, 22.0% mothers had followed positive practices and only 9.3% mothers of under five children had followed negative practices regarding oral hygiene of their under five children.

The third objective of the study to correlate the knowledge and practices among mothers regarding oral hygiene of their under five children: It shows the correlation between knowledge and practices regarding oral hygiene by Karl Pearson correlation formula. The obtained value (0.127) shows that there is positive correlation between knowledge and practice indicating that the knowledge level increases then the practices also increases.

The fourth objective of the study to find out the association between the findings and selected socio-demographic variables: It revealed that in relation to age of mother, the obtained χ^2 value (17.567) was statistically significant ($p = 0.05$). So it can be concluded that there was association between the knowledge of mothers regarding oral hygiene of their under five children and with age of mother. In relation to type of family, the obtained χ^2 value (2.661) was statistically non significant (0.05). So it can be concluded that there was no association between the knowledge of mothers regarding oral hygiene of their under five children and with type of family. In relation to age of the children, the obtained χ^2 value (5.426) was statistically non significant (0.05). So it can be concluded that there was no association between the knowledge of mothers regarding oral hygiene of their under five children and with age of children. In relation to educational status, the obtained χ^2 value (8.211) was statistically non significant (0.05). So it can be concluded that there was no association between the knowledge of mothers regarding oral hygiene of their under five children and with educational status. In relation to religion, the obtained χ^2 value (13.477) was statistically non significant (0.05). So it can be concluded that there was no association between the knowledge of mothers regarding oral hygiene of their under five children and with religion. In relation to monthly family income, the obtained χ^2 value (24.514) was statistically significant (0.05). So it can be concluded that there was association between the knowledge of mothers regarding oral hygiene of their under five children and monthly family income. In relation to working status, the obtained χ^2 value (3.881) was statistically non-significant (0.05). So it can be concluded that there was no association between the knowledge of mothers regarding oral hygiene of their under five children and with working status.

The fifth objective of the study to develop an instructional material among mothers regarding oral hygiene of their under five children: After the data collection, instructional

material regarding oral hygiene of their under five children were given to the mothers of under five children.

Conclusion

It was found that Majority 52.0% mother of under five children had good level of knowledge, 38.0% mothers of under five children had fair level of knowledge, 6.7% mothers of under five children had excellent level of knowledge and only 3.3% mothers of under five children had poor level of knowledge regarding oral hygiene of their under five children. Majority 68.7% mothers of under five children had followed neutral practices, 22.0% mothers had followed positive practices and only 9.3% mothers of under five children had followed negative practices regarding oral hygiene of their under five children. The obtained value (0.127) shows that there is positive correlation between knowledge and practice indicating that the knowledge level increases then the practices also increases.

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