

A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICES OF MOTHERS OF UNDER FIVE CHILDREN REGARDING DIARRHEA AND ITS HOME MANAGEMENT IN SELECTED DISTRICT OF PUNJAB

MANREET SANDHU & PROF. HCL RAWAT

ABSTRACT

A study was to assess knowledge and practices of mothers of under five children regarding diarrhea and its home management. A quantitative research approach with a cross sectional design was selected for the present study. Purposive sampling technique was used and 200 subjects were selected. A socio demographic sheet, a structured interview questionnaire and a self reporting checklist was selected to assess knowledge and practices of mothers of under five children. Analysis of the data was done by using both descriptive and inferential statistic The results of the present study revealed that the 52% mothers had inadequate knowledge regarding diarrhea and its home management and 48% mothers had adequate knowledge and more than half of the study subjects nearly 59.5% had poor practices and 40.5% had good practices regarding managing diarrhea at home. There is statistically significant association of knowledge with educational status, family income, source of information and number of children also there is significant association of practices were found with educational status of mother, occupational status of mother, source of information and number of children. The findings revealed that more than half of mothers are having inadequate knowledge and poor practices regarding diarrhea and its home management. So there is need to organize public health programs for mothers so as to improve their knowledge and practices regarding diarrhea and its home management.

KEY WORDS: Knowledge, practices, mothers, diarrhea, home management.

INTRODUCTION

Gastrointestinal infections are among the most common causes of morbidity and mortality around the world. Most are caused by viruses and some are caused by bacteria or other organisms. In underdeveloped and developing countries, acute gastroenteritis involving diarrhea is the leading cause of mortality in infants and children younger than 5 years of age.¹

Diarrhea is defined as the passage of loose, liquid or watery stools. These liquid stools are usually passed more than three times a day. However, it is the recent change in consistency and character of stools rather than the number of stools that is more important. However the WHO/UNICEF define “acute diarrhea as an attack of sudden onset, which usually last 3 to 7days but may last up to 10-14 days.”²

Diarrheal diseases are major cause of hospitalizations and child deaths globally. Together they account for approximately one in six deaths among children younger than five years of India’s more than 2.3 million annual deaths among children, about 334 000 are attributable to diarrheal diseases.³

A mother in the family occupies pivotal role. If she is educated and having a significant health awareness she will take the responsibility of increasing the total family health awareness, which facilitates high standards of living. Mother’s knowledge and children health are correlated factors. Since the child is unable to carry out even their daily activities mothers will be active health care providers. So that mother’s knowledge regarding causes of diseases, signs and symptoms, prevention and control are very essential. If the mother is having knowledge, she can save her child even in critical situation.⁴

During an investigator’s clinical posting in pediatric areas; investigator observed many cases of diarrhea among under five and by observing the mortality and morbidity rate due to diarrhea. The investigator felt the need for conducting the study to assess the knowledge and practices of mothers regarding diarrhea and its home management. With this background in mind researcher keenly undertook the study in selected district of Punjab.

OBJECTIVES

1. To assess the knowledge of mothers of under five children regarding diarrhea and its home management.
2. To assess the practices of mothers of under five children regarding diarrhea and its home management.
3. To determine the association between knowledge and practices with selected demographic variables.

MATERIALS AND METHODS

RESEARCH APPROACH

A Quantitative research approach

RESEARCH DESIGN

A cross sectional study design

RESEARCH SETTING

The study was conducted on mothers of under five children at rural and urban area of Faridkot.

Rural Area : Village- Bajakhana, Tehsil-Jaito, District- Faridkot.

Urban Area : Balwinder Singh Nagar, District- Faridkot

STUDY POPULATION

The study populations was mothers of under five children residing in urban and rural area of Faridkot and those were available during the time of data collection.

SAMPLE & SAMPLING TECHNIQUE

Sample size was 200 mothers of under five children. Purposive sampling technique was used to select the sample for the study. Out of 200 mothers 100 mothers were selected from rural area- Village: Bajakhana and 100 mothers were selected from urban area- Balwinder Singh Nagar of Faridkot.

CRITERIA FOR THE SAMPLE SELECTION

INCLUSION CRITERIA: -

1. Having under five children.
2. Available during the period of data collection.
3. Willing to participate in the study.

EXCLUSION CRITERIA:-

1. Not having under five children.
2. Not available during the period of data collection.
3. Not willing to participate in the study

SELECTION & DEVELOPMENT OF TOOL

After extensive review of literature and with consultation of experts, tool was developed had following sections:-

Tool I:

- 1) Socio- demographic profile of the study subjects

Tool II:

Part 1: Structured interview schedule to assess the knowledge of mothers of under five children regarding diarrhea and its home management

Part 2: Self reported checklist to assess the practices of mothers of under five children regarding home management of diarrhea. This part consists of 15 practice statements.

ETHICAL CONSIDERATION

Ethical committee of University College of Nursing and BFUHS gave ethical approval for the study to be conducted. Apart from this written informed consents were taken from each study subject. Confidentiality and privacy of the study subjects was maintained throughout the study.

DATA ANALYSIS

Data analysis was done as per the objectives of the study. Statistical analysis was performed using SPSS version 0.80 and IBM SPSS version 20.0.

Table 1
Frequency and Percentage distribution of Socio-demographic characteristics
N=200

S.,No	Variables	Frequency(f)	Percentage(%)
1.	AGE OF MOTHER (in years)		
	• 20-25	105	
	• 26-30	68	52.5
	• 31-35	23	34
	• 36-40	4	11.5
	40 and above	0	2
			0
2.	TYPE OF FAMILY		

	<ul style="list-style-type: none"> • Nuclear • Joint • Extended • Single parent 	74 125 0 1	37 62.5 0 0.5
3	RELIGION <ul style="list-style-type: none"> • Hindu • Muslim • Sikh • Christian 	60 6 130 4	30 3 65 2
4	EDUCATIONAL STATUS OF MOTHER <ul style="list-style-type: none"> • Illiterate • Primary and middle • Secondary • Senior secondary • Graduate and above 	51 41 46 42 20	25.5 20.5 23 21 10
5	OCCUPATIONAL STATUS OF MOTHER <ul style="list-style-type: none"> • Housewife • Labourer • Government employee • Private employee 	178 7 4 11	89 3.5 2 5.5
6.	FAMILY INCOME PER MONTH(in rupees) <ul style="list-style-type: none"> • < 10000 • 10001-15000 • 15001-20000 • 20001-25000 • >25000 	74 68 35 17 6	37 34 17.5 8.5 3
7	SOURCE OF INFORMATION REGARDING DIARRHEA AND ITS HOME MANAGEMENT <ul style="list-style-type: none"> • Radio • T.V • Newspapers/Books/Magazine/Journal • Relatives/Family members • Friends/Neighbours 	5 105 25 33 32	2.5 52.5 12.5 16.5 16

8	NUMBER OF CHILDREN		
	• One		
	• Two	91	45.5
	• Three	80	40
	• Four and above	26	13
		3	1.5

Table 2

Knowledge of mothers of under five children regarding diarrhea and its home management.

N= 200

Level of Knowledge	Range of knowledge Score	Frequency (n)	Percentage (%)
Inadequate	≤21.36	104	52
Adequate	>21.36	96	48
Total		200	100

Table 3

Mean, Median and standard deviation of knowledge score of mothers of under five children regarding diarrhea and its home management

Area	Maximum possible score	Maximum obtained score	Minimum obtained score	Mean	Median	Standard deviation
Knowledge	35	32	12	21.36	21	4.4722

Table 4

Frequency and percentage distribution of practices of mothers of under five children

S.NO	Level of practices	Range of practice Score	Frequency (n)	Percentage (%)
1.	Poor practices	≤8.225	119	59.5
2.	Good practices	>8.225	81	40.5
	Total		200	100

Table 5**Mean, Median and standard deviation of practice score of diarrhea and its home management**

Area	Maximum possible score	Maximum obtained score	Minimum obtained score	Mean	Median	Standard deviation
Practice	15	15	4	8.225	8	2.4215

TABLE 6**Percentage distribution of practice checklist**

S.NO	Practices followed by mothers while managing diarrhea at home.	Frequency of right responses (n)	Percentage of right responses. (%)
1	Prepares O.R.S. at home	57	28.5
2	Boils water to prepare O.R.S	58	29
3	Dissolves 1 packet of commercially available ORS in one litre of boiled and cooled or filter water	164	82
4	Avoids using bottle while giving O.R.S. to child	127	63.5
5	Gives watery dal , soup and mashed potatoes	118	59
6	Gives O.R.S. after each episode of diarrhea	77	38.5
7	Gives breast feeding after each episode of diarrhea	64	32
8	Gives small and frequent feedings during diarrhea	80	40
9	Uses once prepared O.R.S. within 24 hours	54	27
10	Treats mild dehydration with O.R.S. and oral fluids only	81	40.5
11	Washes hands before preparing food and feeding the child	196	98
12	Maintains hygiene of the cooking area	198	99
13	Avoids giving medication to the child in case of watery diarrhea	93	46.5
14	Takes the child for routine immunization during diarrhea	78	39

Table 7
Association of knowledge with socio-demographic characteristics of study subjects

Sr. No.	Variables under study	Knowledge				Total
		Inadequate (n) (%)		Adequate (n) (%)		
1.	AGE OF MOTHER (in years)					$\chi^2=4.6627$ df=3 p=.1981 ^{NS}
	20-25	59	29.5	46	23	
	26-30	36	18	32	16	
	31-35	8	4	15	7.5	
	36-40	1	0.5	3	1.5	
	40 and above	0	0	0	0	
2.	TYPE OF FAMILY					$\chi^2=2.375$ df=2 p=.3051 ^{NS}
	Nuclear	42	21	32	16	
	Joint	60	30	65	32.5	
	Extended	0	0	0	0	
	Single parent	1	0.5	0	0	
3.	RELIGION					$\chi^2=1.9806$ df=3 p=.5764 ^{NS}
	Hindu	33	16.5	27	13.5	
	Muslim	2	1	4	2	
	Sikh	66	33	64	32	
	Christian	3	1.5	1	0.5	
4.	EDUCATIONAL STATUS OF MOTHER					$\chi^2=41.3119$ df=4 p=.000 ^S
	Illiterate	40	20	11	5.5	
	Primary and middle	27	13.5	14	7	
	Secondary	22	11	24	12	
	Senior secondary	14	7	28	14	
	Graduate and above	1	0.5	19	9.5	
5.	OCCUPATIONAL STATUS OF MOTHER					$\chi^2=7.1090$ df=3 p=.06 ^{NS}
	Housewife	98	49	80	40	
	Labourer	3	1.5	4	2	
	Government employee	1	0.5	3	1.5	
	Private employee	2	1	9	4.5	

6.	FAMILY INCOME PER MONTH(in rupees)					
	< 10000	48	24	26	13	$\chi^2=14.6367$ df=4 p=.0054 ^S
	10001-15000	37	18.5	31	15.5	
	15001-20000	13	6.5	22	11	
	20001-25000	5	2.5	12	6	
>25000	1	0.5	5	2.5		
7.	SOURCE OF INFORMATION					
	Radio	2	1	3	1.5	$\chi^2=15.7696$ df=4 p=.0032 ^S
	T.V	56	28	49	24.5	
	Newspapers/Books/ Magazine/Journal	5	2.5	20	10	
	Relatives/Family members	18	9	15	7.5	
Friends/ Neighbours	23	11.5	9	4.5		
8.	NUMBER OF CHILDREN					
	One	61	30.5	30	15	$\chi^2=17.5300$ df=3 p=.0004 ^S
	Two	34	17	46	23	
	Three	9	4.50	17	8.5	
Four and above	0	0	3	1.5		

NS=Non Significant ($p>0.05$)

**Significant ($p<0.05$)

TABLE 8

Association of practices with socio demographic characteristics of study subjects

N= 200

Sr. No.	Variables under study	Practices				Total
		Poor		Good		
		(n)	(%)	(n)	(%)	
1.	AGE OF MOTHER (in years)					
	20-25	69	34.5	36	18	$\chi^2=4.4097$ df=3 p=.2204 ^{NS}
	26-30	39	19.5	29	14.5	
	31-35	10	5	13	6.5	
36-40	2	1	2	1		

	40 and above	0	0	0	0	
2.	TYPE OF FAMILY					
	Nuclear	46	23	28	14	$\chi^2=1.0856$ df=2 p=.5811 ^{NS}
	Joint	72	36	53	26.5	
	Extended	0	0	0	0	
	Single parent	1	0.5	0	0	
3.	RELIGION					
	Hindu	35	17.5	25	12.5	$\chi^2=2.9852$ df=3 p=.3938 ^{NS}
	Muslim	3	1.5	3	1.5	
	Sikh	77	38.5	53	26.5	
	Christian	4	2	0	0	
4.	EDUCATIONAL STATUS OF MOTHER					
	Illiterate	39	19.5	12	6	$\chi^2=33.8037$ df=4 p=.0000 ^S
	Primary and middle	34	17	7	3.5	
	Secondary	25	12.5	21	10.5	
	Senior secondary	16	8	26	13	
	Graduate and above	5	2.5	15	7.5	
5.	OCCUPATIONAL STATUS OF MOTHER					
	Housewife	113	56.5	65	32.5	$\chi^2=12.5940$ df=3 p=.0055 ^S
	Labourer	3	1.5	4	2	
	Government employee	0	0	4	2	
	Private employee	3	1.5	8	4	
6.	FAMILY INCOME PER MONTH(in rupees)					
	< 10000	51	25.5	23	11.5	$\chi^2=8.6964$ df=4 p=.0690 ^{NS}
	10001-15000	39	19.5	29	14.5	
	15001-20000	21	10.5	14	7	
	20001-25000	6	3	11	5.5	
	>25000	2	1	4	2	
7.	SOURCE OF INFORMATION					
	Radio	2	1	3	1.5	$\chi^2=14.7813$ df=4 p=.0050 ^S
	T.V	66	33	39	19.5	
	Newspapers/ Books/	7	3.5	18	9	

	Magazine/Journal					
	Relatives/Family members	20	10	13	6.5	
	Friends/ Neighbours	24	12	8	4	
8.	NUMBER OF CHILDREN					
	One	66	33	24	12.5	$\chi^2=14.9978$ df=3 p=.0017 ^S
	Two	39	19.5	41	20.5	
	Three	14	7	12	6	
	Four and above	0	0	3	1.5	

NS=Non Significant ($p>0.05$)

**Significant ($p<0.05$)

DISCUSSION

The present study revealed that 89% mothers were housewives, 11% works outside the home and 45.5% had one children which is supported by study conducted by **Amir Abdollah Ghasemi , Ahmad Talebian , Negin Masoudi Alavi , Gholam Abbas Mousavi (2013)**⁵ revealed that 93% mothers were housewives, 7% were working outside the home and 55% mothers had one child.

The present study revealed that 78.5% mothers defines diarrhea correctly. About 63% mothers had adequate knowledge regarding preventive measures and 30% mothers had knowledge regarding diet to be given in diarrhea and 82% mothers were aware about O.R.S sachet. The knowledge of 52% mothers were inadequate and practices were also poor. These findings are supported by study conducted by **Kiran Kumar Rokkappanavar, S. R. Nigudgi et al (2015)**⁶ which revealed that most of the mothers defines diarrhea correctly. 40.68% mothers had knowledge regarding preventive measures to prevent diarrhea, 49.50% mothers had adequate knowledge regarding diet to be given to child during diarrhea. 86.27% mothers had knowledge regarding O.R.S sachet. The knowledge and practices of mothers regarding diarrhea and its management were unsatisfactory.

The present study conducted on 200 mothers revealed that 52% mothers had inadequate knowledge regarding diarrhea these findings are supported by the study conducted by **Merga N, Alemayehu T (2015)**⁷ on 232 revealed that 37% mothers had adequate knowledge whereas remaining had inadequate knowledge.

The present study revealed that there is statistically significant association of knowledge with family income and number of children and statistically significant association of practices with occupational status of mother these findings were supported by the study conducted by **Ushapriya Mathiazhakan (2016)**⁸ which revealed that

significant association was found between knowledge with family income and number of children and practices with occupational status of mother.

CONCLUSION

On the basis of the findings of the study, it is concluded that 52% mothers had inadequate knowledge regarding diarrhea and its home management and 48% mothers had adequate knowledge. The mean knowledge score was 21.36 and standard deviation was 4.4722. In case of practices, more than half of the study subjects nearly 59.5% had poor practices and 40.5% had good practices regarding diarrhea and its home management. The mean practice score was 8.225 and standard deviation was 2.4215.

It was also found that knowledge regarding diarrhea and its home management had a significant association with educational status, family income, source of information and number of children. There was a significant relationship between practices regarding diarrhea and its home management with educational status of mother, occupational status of mother, source of information and number of children.

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