

## Diarrhea and its Management Among Mothers of Under Five Children in Selected Community Area

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### Abstract

A study was conducted to assess the knowledge regarding diarrhea and its management among the mothers of under five children in selected community area at Kusugal, Hubball. Thirty (30) mothers were selected by non probability; purposive sampling technique. The knowledge was assessed by using structured interview technique. The study results revealed that in Pre-test majority of the subjects 20 (66.67%) had average knowledge, 4 (13.33%) had good knowledge and 6 (20%) had poor knowledge respectively. Where as in Post-test majority of subjects 26 (86.67%) had good knowledge and 4 (13.33%) had average knowledge respectively regarding the diarrhea and its management.

**Keywords:** Knowledge; Diarrhea; Planned Teaching Programme.

### Introduction

“Parents have a divine responsibility to care for and guide their children.”

*David O. McKay.*

Children are vital role to the nations present and its future parents, grandparents, aunts, and uncles are usually committed to providing every advantage possible to the children in their families, and to ensuring that they are healthy and have the opportunities that they need to fulfill their potential.

Common health problem in children such as common cold, fever, coughing, sore throat, running nose, vomiting, breathing difficulty, eating disorder, dental carries, conjunctivitis, skin rashes, abdominal pain and diarrhea,.

Diarrhea is common among children and contributes substantially to pediatric morbidity and mortality worldwide. Diarrhea is a major public health problem in developing countries. An estimated 1.8 Billion episodes of diarrhea occurs in each year and 3 million children under the age of 5 years die due to diarrhea. Cornea also acts like a filter keeping out harmful UV rays. Thus, if the cornea loses its clarity due to nutritional deficiency, diseases or injury, loss of vision occurs.

In India diarrheal disease is a major public health problem among children under the age of 5 years. Diarrhea kills nearly 5 lakhs children a year in India. In Karnataka diarrhea kills 2% of neonate's yearly.

The proportion of children in India under five years age who had an episode of diarrhea and dehydration in all over India 61.7%, Northern region 75.3%, Hariyana 92.3%, Himachal Pradesh 69.6%, Punjab 55.3%, Central region 70%, Bihar 66.2%, Madhya Pradesh 91.0%, Rajasthan 61.6%, Uttar Pradesh 56.6%, Southern region 52.6%, Andhra Pradesh 65.2%, Karnataka 38.0%, Kerala 45.1%, Tamil Nadu 63.7%, Western region 46.1%, Gujarat 43.2%, Maharashtra 47.9%, Eastern region 47.9%, Assam 53.8%, Orissa 69.3%, West Bengal 31.4%.

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Children can be saved from various other deliberating diseases if they are kept healthy during the first few years of valuable life. The majority of the children suffering from diarrheal diseases could be managed effectively and scientifically by the mothers at home in the early stage of onset of self care activities. Thus the morbidity and mortality rate caused by diarrhea can be reduced by mother's efforts.

### **Problem statement**

"A study to evaluate the effectiveness of planned teaching programme on knowledge regarding diarrhea and its management among the mothers of under five children in selected community area, Hubballi".

### **Objectives of the study**

1. To assess the knowledge of mothers of under five children regarding diarrhea and its management.
2. To evaluate the effectiveness of Planned Teaching Programme on knowledge of diarrhea and its management among the mothers of under five children in terms of gain in post-test score.
3. To find the association between the pre-test knowledge scores of mothers with their selected demographic variables.

### **Hypotheses**

$H_1$ : The mean post-test knowledge scores of mothers of under five children regarding diarrhea and its management will be higher than the mean pre-test scores at 0.05 level of significance.

$H_2$ : There will be statistical association between pre-test knowledge scores of mothers of under five children regarding diarrhea and its management with their selected demographic variables at 0.05 level of significance.

### **Materials and Methods**

- ❖ *Research approach*: evaluative research approach.
- ❖ *Research design*: pre experimental; one group pre-test and post-test design
- ❖ *Variables under study*:
  - Independent Variable: Planned Teaching Programme on diarrhea and its management.

- Dependent Variable: Knowledge of mothers of under five children regarding diarrhea and its management.
- ❖ *Research setting*: community area, Kusugal, Hubballi.
- ❖ *Research population*: The target population of the study was mothers of under five children.
- ❖ *Sample*: mothers of under five children staying in community area, Kusugal, Hubballi were selected.
- ❖ *Sample size*: Thirty (30) mothers of under five children.
- ❖ *Sampling technique*: Non probability: purposive sampling technique.

### **Criteria for selection of samples**

The criteria for selection of samples in this study involves:

#### **Inclusion criteria**

- Mothers who have under five children.
- Mothers who are available during the period of data collection.
- Mothers who can read and write Kannada.

#### **Exclusion criteria**

- Mothers of under five children who are not willing to participate in the study.
- Mothers who are sick during data collection.

### **Description of the tool**

Section- I: Socio- Demographic Data

Section- II: Structured Interview Schedule

Part-A: 04 Items on General Information about Diarrhea

Part-B: 04 Items on Causes of Diarrhea

Part-C: 07 Items on Signs and Symptoms of Diarrhea

Part-D: 04 Items on Effects or Complications of Diarrhea

Part-E: 11 Items on Management of Diarrhea

### **Procedure for the data collection**

Step 1: Formal permission was taken from the Medical Officer Byahatti (Kusugal). The main study was conducted in the month

- of September 2017 at Kusugal among 30 mothers of under five children.
- Step 2: Structured Interview schedule was administered to assess the knowledge regarding Diarrhea and its management.
- Step 3: The data collected was tabulated and analyzed.
- Step 4: The data gathered were analyzed and interpreted using descriptive and inferential statistics.
- Step 5: Descriptive statistics like computing frequency, mean, median, mode, standard deviation and range to describe the data.
- Step 6: Use of inferential statistics like paired' test, and Chi-square test.
- Step 7: Analyzed data was represented in the form of tables, graphs, etc.

**Results and Discussion**

The data presented under the following sections:

*Section I:* Distribution of sample characteristics according to demographic variables of respondents.

*Section II:* Analysis and interpretation of knowledge scores of subjects regarding Diarrhoea and its Management.

*Section III:* Testing hypotheses.

*Section I: Distribution of sample characteristics according to demographic variables of respondents.*

**Table 1:** Frequency and percentage distribution of mothers of under five children according to their socio-demographic variables. n = 30

Sl. No	Demographic variables	Frequency (f)	Percentage (%)
1	<i>Mothers Age (in years)</i>		
	a. Less than 20	0	0%
	b. 21-25	15	50%
	c. 26-30	11	36.67%
	d. 31-35	4	13.33%
2	<i>Child Age (in years)</i>		
	a. 0-1	6	20%
	b. 2-3	16	53%
	c. 4-5	8	27%
3	<i>Educational Status of Mother</i>		
	a. No-formal education	4	13.33%
	b. Lower primary education	15	50%
	c. Higher primary education	9	30%
	d. Graduate	2	6.67%
4	<i>Religion</i>		

	a. Hindu	14	46.67%
	b. Muslim	16	53.33%
	c. Christian	0	0%
	d. Others	0	0%
5	<i>Occupational Status of Mother</i>		
	a. House wife	24	80%
	b. Coolie	6	20%
	c. Private job	0	0%
	d. Govt. job	0	0%
6	<i>Family Income</i>		
	a. Below 5000	16	53.33%
	b. 5000-10000	13	43.33%
	c. above 10000	1	3.33%
7	<i>Type of House</i>		
	a. Pucca house	9	30%
	b. Semi pucca house	18	60%
	c. Kachha house	3	10%
8	<i>Type of Family</i>		
	a. Nuclear	19	63.33%
	b. Joint	11	36.67%
	c. Extended	0	0%
9	<i>Water Facilities</i>		
	a. Tap water	29	96.67%
	b. Hand pump	1	1.33%
	c. Open well	0	0%
10	<i>Lavatory</i>		
	a. Own latrine	25	83.33%
	b. Public latrine	1	3.33%
	c. Open air defecation	4	13.33%
11	<i>Sewage Disposal</i>		
	a. Open drainage	8	26.67%
	b. Closed drainage	22	73.33%

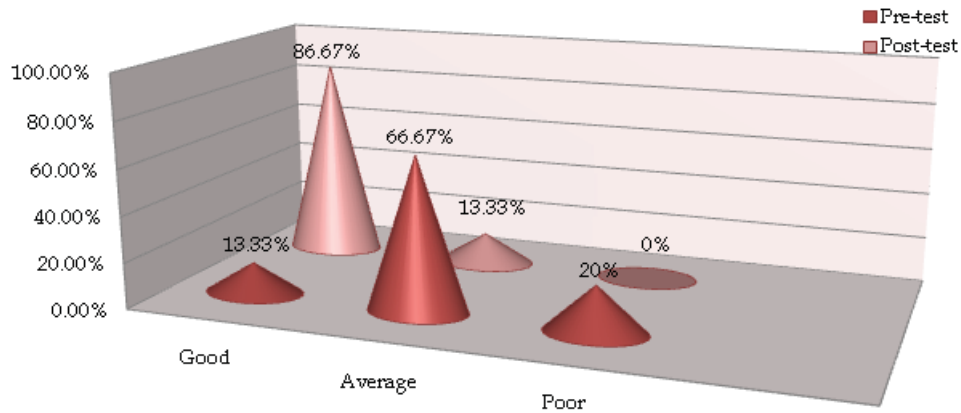
*Section II: Analysis and interpretation of knowledge scores of subjects who have exposed to Planned Teaching Programme regarding diarrhea and its management.*

**Table 2:** Mean, Median, Mode, Standard Deviation and Range of knowledge score of subjects regarding diarrhea and its management. n = 30

Area of Analysis	Mean	Median	Mode	Standard Deviation	Range (H-L)
Pre-test	10.4	10	09	4.18	18
Post-test	19.1	18	17	3.46	14
Difference	8.7	08	08	0.72	04

**Table 3:** Frequency and percentage distribution of knowledge scores of subjects regarding diarrhea and its management. n = 30

Knowledge score	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Good (16-30)	04	13.33%	26	86.67%
Average (7-16)	20	66.67%	04	13.33%
Poor (0-7)	06	20%	00	00%



**Graph 1:** The cone diagram represents the distribution of the subjects according to their level of knowledge scores.

*Section III: Testing of hypotheses.*

H<sub>1</sub>: The mean post-test knowledge scores regarding diarrhea and its management will be higher than the mean pre-test scores of mothers of under five children at 0.05 level of significance.

**Table 4:** Mean difference (d), standard error of difference and paired 't' values of knowledge scores of subjects regarding diarrhea and its management. n = 30

Mean difference (d)	Standard error of difference	Paired 't' Values	
		Cal	Tab
8.7	0.061	27.619*	1.699

**Table 5:** Association between pre-test knowledge scores and selected demographic variables among mothers of under five children. n = 30

Sl. No	Demographic Variables	Good	Average	Poor	Chi-square		d.f
					Cal	Tab	
1.	<i>Mothers age (in years)</i>						
	a. Less than 20 years	00	00	00			
	b. 21-25 years	02	10	03	4.429	9.488	4
	c. 26-30 years	01	09	01			
	d. 31-35 years	01	01	02			
2.	<i>Child age (in years)</i>						
	a. 0-1 year	01	04	01			
	b. 2-3 years	00	12	04	6.647	9.488	4
	c. 4-5 years	03	04	01			
3.	<i>Educational status of mother</i>						
	a. No formal education	01	02	01			
	b. Lower primary education	01	10	04	16.711*	12.592	6
	c. Higher primary school	00	08	01			
	d. Graduate	02	00	00			
4.	<i>Religion</i>						
	a. Hindu	02	09	03			
	b. Muslim	02	11	03	0.19	5.991	2
	c. Christian	00	00	00			
	d. Others	00	00	00			
5.	<i>Occupational status of mother</i>						
	a. House wife	04	15	05			
	b. Coolie	00	05	01	1.6533	5.991	2
	c. Private job	00	00	00			
	d. Govt. job	00	00	00			

Sl. No	Demographic Variables	Good	Average	Poor	Chi-square		d.f
					Cal	Tab	
6.	<i>Family Income</i>						
	a. Below 5000	01	10	05			
	b. 5000-10000	03	09	01	4.07	9.488	4
	c. Above 10000	01	01	00			
7.	<i>Type of House</i>						
	a. Pucca	02	05	02			
	b. Semi-Pucca	01	14	03	3.66	9.488	4
	c. Kaccha	01	01	01			
8.	<i>Type of Family</i>						
	a. Nuclear	01	13	05			
	b. Joint	03	07	01	3.5877	5.991	2
	c. Extended	00	00	00			
9.	<i>Water facility</i>						
	a. Tap water	04	19	06			
	b. Hand pump	00	01	00	0.508	5.991	2
	c. Open well	00	00	00			
10.	<i>Lavatory</i>						
	a. Own latrine	03	17	05			
	b. Public	01	00	00	7.181	9.488	4
	c. Open-air defecation	00	03	01			
11.	<i>Sewage disposal</i>						
	a. Closed drainage	05	06	00	3.401	5.991	2
	b. Open drainage	02	14	06			

Table 5 Reveals that The calculated chi-square value was lesser than the tabulated value for the following variables Mothers age, Child age, Religion, Occupational status of mother, Family Income, Type of House, Type of Family, Water facility, Lavatory, Sewage disposal. Hence,  $H_2$  was rejected in these variables. Whereas in Case of Educational status of mother, the calculated chi-square value was greater than the tabulated value. Hence  $H_{2,3}$  was accepted.

### Recommendations

On the basis of study findings the following recommendations have laid;

- A similar study can be undertaken for a larger sample for a longer period of time thus broad generalization will be possible.
- A similar study can be replicated in different settings.
- A similar study can be conducted on attitudes of parents towards diarrhea.
- A comparative study can be done between rural and urban women.
- An experimental study can be under taken

using a control group and experimental group with randomized sampling.

- A follow up study can be done to determine the effectiveness of planned teaching programme.

### Conclusion

Based on the findings of the study, the following conclusions were drawn:

Overall study results reveals that Mothers of under five children at Kusugal, Hubballi had an average knowledge regarding diarrhea and its management. There was a need for improvement in level of knowledge regarding diarrhea and its management among the mothers of under five children. So Planned Teaching Programme was effective in improvement of knowledge of mothers.

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