

# Knowledge and Practices of Mothers Regarding Prevention and Management of Diarrhea in Under-Five Year Children

ZAFAR IQBAL BHATTI<sup>1</sup>, KHURRAM NAWAZ<sup>2</sup>, KHURRAM SHAH NAWAZ<sup>3</sup>, KHAWAR ABBAS CHAUDHARY<sup>4</sup>, ASIF ALEEM<sup>5</sup> MUJTABA HASSAN<sup>6</sup>

<sup>1</sup>Assistant Professor Department of Pediatrics, Niazi Medical & Dental College Sargodha, Pakistan

<sup>2</sup>Assistant Professor, Department of Pediatrics, Shahida Islam Medical & Dental College Lodhran, Pakistan

<sup>3</sup>Assistant Professor, Department of Pediatrics, Sahara Medical College Narowal, Pakistan

<sup>4</sup>Associate Professor, Department of Medicine, Continental Medical College Lahore, Pakistan

<sup>5</sup>Associate Professor, Department of Pediatrics, Continental Medical College Lahore, Pakistan

<sup>6</sup>Assistant Professor, Department of Medicine, Akhtar Saeed Medical College Lahore, Pakistan

Correspondence to Dr. Zafar Iqbal Bhatti, Email: drzibhatti@gmail.com, Cell: 0332-1144610

## ABSTRACT

**Background:** There has been expanded advance in decreasing the under-five mortality rate. Diarrhea is the main reason of death in children under the 5 years of age in whole world after the pneumonia. Child mortality is a core indicator of child health and well-being and therefore an overall measure of a country's health and economic pulse

**Aim:** To assess the knowledge and practices of mothers regarding prevention and management of diarrhea in under-five year age group children in rural community.

**Methodology:** A cross-section survey of 70 mothers was done in a rural community of Pakistan. Convenient sampling technique used in this research study.

**Results:** The mean difference of the pre intervention result is 29.61 and 18.10 and post intervention results is 42.27 and 24.74, while the post intervention results mean is .509 and .374, while the std. deviation of pre intervention result is 4.263 and std. deviation of post intervention result is 2.899.

**Conclusion:** In the current study it is concluded that knowledge is improved in mothers regarding prevention and management of diarrhea in under five year children by educational session.

**Keywords:** Knowledge, Practice, Mothers of under-five, Health education

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## INTRODUCTION

In acute diarrhea the bowel episodes increase and normally remained < 14 days. In other explanations, diarrhea sudden attack with the 3 or more runny or liquid episodes of stools in one day. Diarrhea that remained present 14 to 30 days is named as persistent diarrhea. The symptoms of chronic diarrhea lasts grater then one month. Acute diarrhea mainly due to infectious reason and it has different clinical manifestation like gut contribution, abdominal pain and cramps, nausea, vomiting. The other clinical features during acute diarrhea are fever, bloating, flatulence fecal urgency and passage of bloody stool. Another name of acute diarrhea is gastroenteritis, in intestinal infection mainly symptom is vomiting and sometime no vomiting (Riddle, DuPont et al. 2016).

Diarrhea is the main reason of death in children under the 5 years of age in whole world after the pneumonia. The 88% of the diarrhea load is due to the poor sanitation and unhygienic condition (Sohail 2017).

Death rate in under 5 years is reported 87/1000 in Pakistan. Diarrheal problem is considered a second leading cause of death after respiratory diseases. Average living conditions and low income are major contributing factors of diarrhea due to overcrowding. Researches depict inadequate knowledge and practices of mothers regarding diarrheal management (Mumtaz, Zafar et al. 2014)

In young children morbidity and illness are mostly problematic because the critical period of development is early childhood. In early childhood physical growth is faster

than other periods which are associated to age of 18 months. Disturbance of the this process due to diarrhea is not cause mortality but also can effect on the impaired cognitive development, these are mostly occur in less schooling, less economic productivity in adulthood (MacIntyre, McTaggart et al. 2014).

Literacy level is another contributing factor towards diarrheal management and influence death rate of under 5 years children. A direct relation exists in mothers' educational status and under-5 deaths. Researches show positive results regarding the mothers' educational effects on child health. Low death rate is found with increased maternal education (Sohail 2017).

Qureshi. F, (2018). Study show adequate knowledge among 30% mothers regarding diarrhea, moderate knowledge in 56.66% mothers & inadequate knowledge in 13.33% mothers. Results depict that mothers have inadequate knowledge regarding diarrheal management and prevention.

Lack of awareness can lead to improper utilization of wellbeing which are fundamental elemental of the society. Healthy practices adopted by the mother help to reduce the morbidity and mortality of under five year children. Mothers are the primary health care providers so that mother's knowledge regarding the causes of diseases, signs and indications, are fundamental in declining morbidity & mortality due to diarrhea (Padhy, Sethi et al. 2017).

There is a significant effect of educational intervention on diarrhea management and prevention. Structured educational program targeting health-care providers and mothers primarily focusing on management and prevention of diarrhea improve the clinical outcomes in children <5 years of age (Sunanda, Ramaiah et al. 2017).

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Deaths occurs due to diarrhea in under-five year children. In Pakistan there are no abundant studies conducted regarding the prevention and management of diarrhea in under five year children. That's why the study conducted regarding prevention and management of diarrhea.

## METHODOLOGY

A cross-sectional study design was used to assess the knowledge and practices of 70 mothers regarding prevention and management of diarrhea in under-five year age group children's in rural community. Convenient sampling technique was used in this research study. This sample technique was effective. Mothers of under -five years children who were interested to participate in the study gave the required information on knowledge and prevention of diarrhea. After taking informed consent data collected through adopted questionnaire. Data was analyzed using SPSS version 24.

## RESULTS

Table and graph 1 show the age of the participants. Total 70 participants included in the study, in which (16-20) years participants were 4.3%, (21-25) years participants were 22.9%, (26-30) years participants were 54.3% and (31 and above) years participants were 18.6%.

Table and graph 2 show that the qualification of the 70 mothers are in which 34.3 %mother were illiterate, 31.4% mother passed 5<sup>th</sup> class,31.4% mother passed 10<sup>th</sup> class and 2.9% mother were graduated.

Table and graph 3 shows the occupation of the mothers. Total number of mother was 70 in which 69 mothers were housewife and only one mother is employed.

Table 4 show the income per month of the participants in which 2.9% participants were 5000 income, 14.3% participants were 5000- 10000 income, 55.7% participants were 10000-15000 income and 27.1% participants were above 15000 income.

Table and graph 4 show the types family of the participants, 51.4% were nuclear family, 47.1% were joint family and 1.4% were nuclear family.

Table and figure 5 show the percentage of child under five years, in which 1 year child were 41%, 2 years child were 44.3%, 3 years child were 7.1% and 4 and above were 7.1%.

Knowledge of mothers regarding prevention and management of diarrhea and its remedial measures in the form of mean and standard deviation is depicted in following table.

Average mean and Standard Deviation knowledge score was 29.61. Practice score was 18.10 the average SD. of knowledge was 4.261. The average SD. of practice was 3.523. Results show inadequate knowledge and practices of mothers.

Table 1: Age (Frequency Table)

Valid	Frequency	%	Valid%	Cumulative%
16-20 years	3	4.3	4.3	4.3
21-25 years	16	22.9	22.9	27.1
26-30 years	38	54.3	54.3	81.4
31 and above	13	18.6	18.6	100.0
Total	70	100.0	100.0	

Table 2: Qualification

Valid	Frequency	%	Valid%	Cumulative %
Illiterate	24	34.3	34.3	34.3
5th passed	22	31.4	31.4	65.7
10th passed	22	31.4	31.4	97.1
Graduate	2	2.9	2.9	100.0
Total	70	100.0	100.0	

Table 3: Occupation

Valid	Frequency	%	Valid%	Cumulative %
House wife	69	98.6	98.6	98.6
Employed	1	1.4	1.4	100.0
Total	70	100.0	100.0	

Table 4: Types of family

Valid	Frequency	%	Valid%	Cumulative %
Nuclear Family	36	51.4	51.4	51.4
Joint Family	33	47.1	47.1	98.6
Extended Family	1	1.4	1.4	100.0
Total	70	100.0	100.0	

Table5: Income per month

Valid	Frequency	%	Valid%	Cumulative %
5000	2	2.9	2.9	2.9
5000- 10000	10	14.3	14.3	17.1
10000-15000	39	55.7	55.7	72.9
Above 15000	19	27.1	27.1	100.0
Total	70	100.0	100.0	

Table 6: Number of under five children

Valid	Frequency	%	Valid%	Cumulative %
1	29	41.4	41.4	41.4
2	31	44.3	44.3	85.7
3	5	7.1	7.1	92.9
4 and above	5	7.1	7.1	100.0
Total	70	100.0	100.0	

Average Mean of knowledge and practices

Description	Average mean	Average SD.
Knowledge	29.61	4.261
Practice	18.10	3.523

Fig. 1: Age

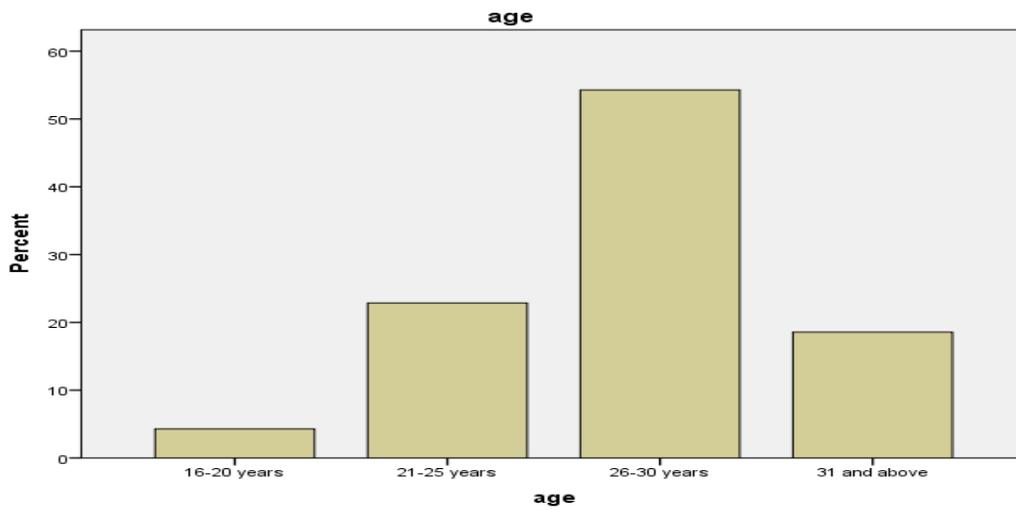


Fig. 2:

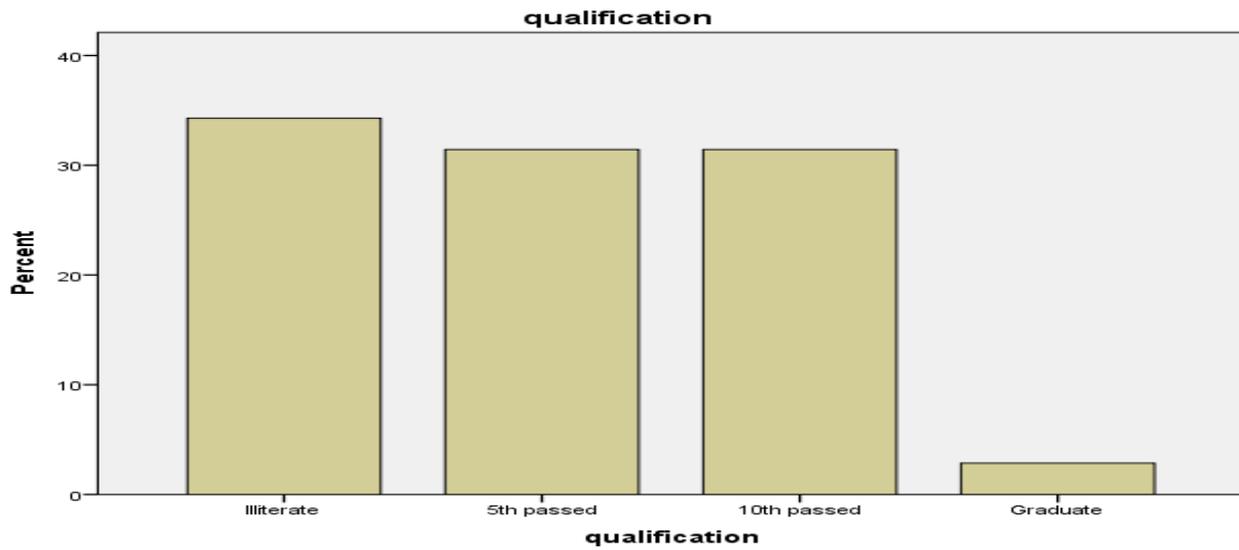


Fig. 3:

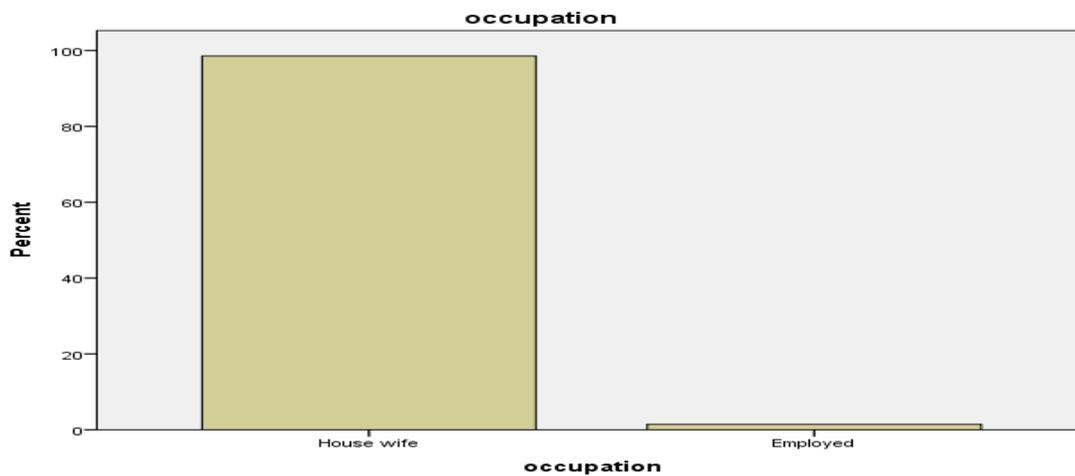
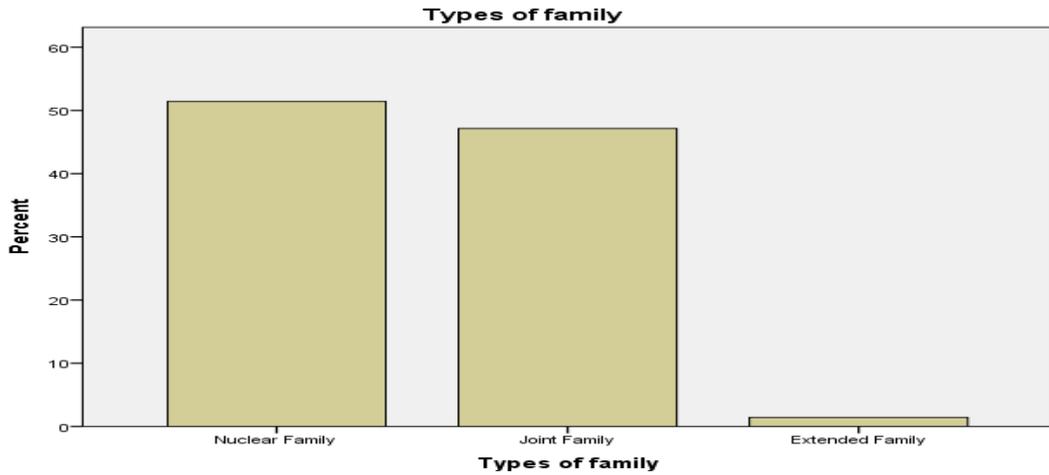
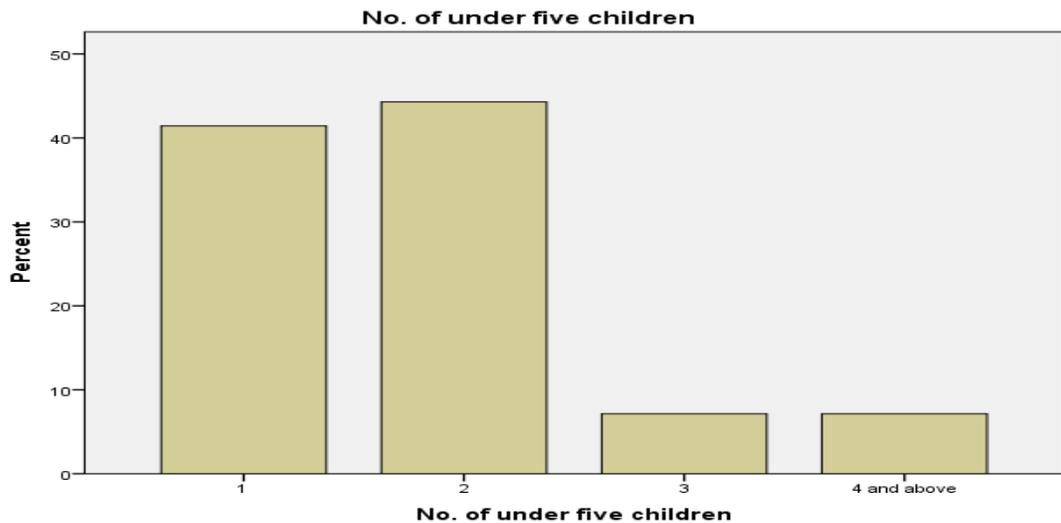


Fig. 4:



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Fig.5:



**DISUSSION**

Social determinants in this study are showing that most of the mothers are illiterate, 34.35% mothers are primary education, 31.4 are secondary education and 2.9 mothers graduate. Similar study conducted about Mother’s knowledge, attitude and practice regarding prevention and management of diarrhea in children in Southern Odisha (Padhy, Sethi et al. 2017).

In this study good knowledge about definition of diarrhea 42.27%. Mothers have good knowledge and practices. In this study mothers have not good knowledge and practices about diarrheal management before health education. Similar results are also seen in the study by Patric Kelly et al. in a study by Neelma Kunwar et al showed that 72% of the mothers knew the correct definition of diarrhea which is higher than this study.

In this study the mean knowledge score was 29.61 with SD 4.261. The mean practice score was 18.10 with SD 3.523. Similar study conducted Chauhan et al. about diarrhea prevention and management; result showed that

there was increased in level of knowledge. The selected practices showed there were adequate practices. A study conducted by Joseph and Naregal in 2014 about evaluation of diarrheal management education. Data analysis revealed that the mean post score was higher than the mean pre-test score.

**CONCLUSION**

It is concluded that mothers of under five year children have average knowledge and practice regarding prevention and management of diarrhea. Educational intervention related to diarrheal care has the potential to make a great impact on the health of children. There is a need to improve mother’s knowledge to decrease diarrheal morbidity and mortality. So, training and education session should be arranged by community management for improving the knowledge and practice of community women regarding prevention and management of diarrhea.

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