

# KNOWLEDGE AND PRACTICES OF RURAL MOTHERS ABOUT DIARRHEA AMONG INFANTS

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## ABSTRACT

**Background:** Diarrhea is one of the most common cause of morbidity and mortality in children. **Objective:** To assess knowledge and practices of rural mothers about diarrhea among infants. **Methodology: Study design** Cross-sectional study. **Place and Duration:** This study was conducted at EPI center of OPD and diarrheal unit of children ward Sheikh Zayed Hospital Rahim Yar Khan, from 15<sup>th</sup> March to 15<sup>th</sup> May 2016. A total of 224 rural mothers of infants were included in the study by non probability consecutive sampling technique. Before commencing with the data collection, informed consent was taken. The performa was designed and pretested and it contained variables like age, mother's education, mothers occupation, family income per month, knowledge about definition of diarrhea, causes of diarrhea, signs of dehydration, consequences of diarrhea, preparation of market available ORS sachet, continuation of breast feeding during diarrhea, consultation with doctor during diarrhea, time of consultation with the doctor, diet preferences during diarrhea and preventive measures applied by mothers during diarrhea. All the data collected was recorded on the performa, entered and analyzed by using SPSS version 16. **Results:** Mean age of mothers was 27±5 years. In our study (49.10%) months were illiterate. Regarding mothers occupation 74.11% were housewives. Regarding Knowledge of the mothers on definition of diarrhea 46.43% told loose watery stool, 3.57% told increased frequency and 36.61% told both loose watery stool and increased frequency. As regards causes of diarrhea, (24.11%) pointed out contaminated water, (9.82%) eating mud and (26.78%) told both contaminated water and eating mud. Regarding signs of dehydration (9.82%) sunken eyes, (6.25%) dry skin and (25%) considered both Sunken eyes and Dry skin. Regarding practices during diarrhea, 68.76% continued breast feeding during diarrhea, 92.86% consulted doctor but before consulting the doctor, 21.88% did self medication and 65.62% consulted the doctor when condition of child was not improving. 33% gave diet preferences to both ORS and khichree, 26.79% ORS and 6.69% khichree only. 40.89% applied boiling the water, covering the food and keeping child and environment clean as preventive measure during diarrhea whereas 22.32% did boiling the water and covering the food only, whereas, 3.57% boiling the water only and 2.67% covering the foods only. **Conclusion:** Majority of the mothers has good knowledge and practices about diarrhea but still many of them do not have clear idea about prevention and ideal practices to be adopted during diarrhea and they should be focused. There is a need of health education program to be started in the rural areas of Rahim Yar Khan.

**Key Words:** Knowledge, Practices, Rural Mothers, Diarrhea, Prevention, Treatment.

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## INTRODUCTION

Diarrhea is defined as “the passage of three or more loose or liquid stools per day or more frequent than normal for the individual”.<sup>1</sup> Diarrhea accounts for significant proportion of childhood deaths in South Asia,<sup>2</sup> most important is first year of life.<sup>3,4</sup> The overall incidence of diarrhea remains unchanged however mortality is decreasing.<sup>5</sup> Diarrhea is one of the preventable and curable disease. Early diagnosis and prompt initiation of management has a key role in reducing mortality is diarrhea children.<sup>6</sup> Role of mother is very important if we want to reduce mortality related with the diarrhea in infants.<sup>7</sup> Diarrhea is not lethal itself, improper knowledge of the mothers and their misdirected approach towards its management leads to high degree of mismanagement and result in severe

dehydration.<sup>8,9</sup> Studies have been conducted in different areas of our country regarding knowledge and practices of mothers of infants about diarrhea but very little has been done in rural areas in this regard. The objective of the study was to assess the knowledge and practices of rural mothers about diarrhea among infants and its management.

## METHODOLOGY

This was a cross-sectional study, conducted at EPI centre of OPD and Diarrheal unit of children Ward of Sheikh Zayed Hospital Rahim Yar Khan. The duration of the study was two months from 15<sup>th</sup> March to 15<sup>th</sup> May 2016. A total 224 rural mothers of infants were included in the study by non probability consecutive sampling technique. Those mothers who gave the informed verbal consent were included in the study. An exclusion criteria followed was; those

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mothers who did not give the consent, not having an infant and belonged to the urban areas of Rahim Yar Khan. The performa was designed and it contained different variables like age, mothers education, mothers occupation, family income per month, knowledge about definition of diarrhea, causes of diarrhea, signs of dehydration, consequences of diarrhea, preparation of market available ORS sachet, continuation of breast feeding during diarrhea, consultation with doctor during diarrhea, time of consultation with doctor, diet preferences during diarrhea and preventive measures applied by mothers during diarrhea. All the data collected was recorded on the performa, entered and analyzed by using SPSS version 16 of computer programme.

## RESULTS

A total of 224 rural mothers of infants were included in the study. Mean age of mothers was noted  $27 \pm 5$  years. Majority of mothers 132(58.93%) were between 20-29 years of age, 124 mothers(55.53%) has family income per month between 5000-15000 PKR, 110 mothers (49%) were literate and 166 mothers(74.10%) were housewives. (Table I).

**Table I: Demographic features of study subjects (n=224)**

Variables	Frequency (%)
<b>Age in Groups (years)</b>	
<20	14 (6.25%)
20-29	132 (56.93%)
30-39	72 (32.14%)
>39	6 (2.68%)
<b>Monthly Family Income (in PKR)</b>	
<5000	58 (25.89%)
5000-15000	124 (55.35%)
>15000	42 (18.76%)
<b>Mother's Education</b>	
Illiterate	110 (49.10%)
Primary	56 (25.00%)
Middle	24 (10.71%)
Metric	18 (8.03%)
Above Metric	16 (7.16%)
<b>Mother's Occupation</b>	
House Wife	166 (74.11%)
Govt. Servant	14 (6.25%)
Agriculture Workers	24 (10.71%)
Any Others	20 (8.93%)

**Table II: Knowledge about Diarrhea of Study Subjects**

Definition of diarrhea	Frequency No (%)
Loose watery Stool	104 (46.43%)
Increased Frequency	8 (3.57%)
Both Loose watery stool and increased Frequency	82 (36.61%)
Don't Know	30 (13.38%)
<b>Causes of diarrhea</b>	
Contaminated water	54 (24.11%)
Eating Mud	22 (9.82%)
Contaminated Water and Eating Mud Both	60 (26.78%)
Teething	20 (8.92%)
Evil Eye	20 (8.92%)
Don't Know	48 (21.45%)
<b>Sign of Dehydration</b>	
Sunken Eyes	22 (9.82%)
Dry Skin	14 (6.25%)
Both Sunken Eyes and Dry Skin	56 (25.00%)
Thirsty	20 (8.93%)
Weight Loss	33 (14.73%)
Sunken Eyes + Dry Skin + Thirst	24 (10.71%)
Sunken Eyes + Dry Skin + thirst + weight loss	20 (8.92%)
Don't Know	35 (15.64%)
<b>Consequence of Diarrhea</b>	
Weak and Lethargic	156 (69.64%)
Wt loss	56 (25%)
Will because unconscious	10 (4.46%)
Death	2 (0.90%)
<b>Preparation of ORS Packet available in Market</b>	
Yes	162 (72.30%)
No	62 (27.70%)

Knowledge of the mothers regarding definition of diarrhea, 104 mothers (46.43%) considered loose watery stool as diarrhea. Regarding causes of diarrhea, 60 mothers (26.78%) told both contaminated water and eating mud as main causes of diarrhea. Regarding signs of diarrhea, 56 mothers(25%) considered both Sunken eyes and Dry skin as signs of dehydration, 162 mothers (72.30%)

has knowledge for correct preparation of ORS of market available sachet. (Table II)

Regarding practices during diarrhea, 154 mothers (68.76%) continued breast feeding during diarrhea, 208 mothers (92.86%) consulted doctor during diarrhea but before consulting the doctor 49 mothers (21.88%) did self medication. 74 mothers (33.05%) gave diet preferences to both ORS and khichree and 90 mothers (40.89%) applied boiling the water, covering the food and keeping child and environment clean as preventive measure during diarrhea. (Table III)

**Table III: Practices about Diarrhea of study subjects (4=224)**

Continuation of Breastfeeding	Number (%)
Yes	154 (68.76%)
No	70 (31.24%)
Consultation with Doctor	
Yes	208 (92.86%)
No	16 (7.14%)
Time of consultation with Doctor	
Immediately	10 (4.46%)
When condition not improving	147 (65.62%)
When self condition fails	49 (21.88%)
No	18 (8.04%)
Diet preference during diarrhea	
ORS	60 (26.79%)
Khichri	15 (6.69%)
Banana	21 (9.37%)
Yogurt	25 (11.16%)
Boiled rice	15 (6.69%)
ORS and Khichri	74 (33.05%)
ORS, Khichri and Yogurt	14 (6.25%)
Application of Prevention	
Bulling the Water	8 (3.57%)
Covering to food	6 (2.67%)
Washing hands	20 (8.93%)
Keep interment and child clean	32 (14.28%)
Boiling water and covering to food	50 (22.32%)
Boiling water, covering food and keep interment and child clean	90 (40.18%)
Don't Know	18 (8.03%)

## DISCUSSION

In our study, 132 mothers (58.93%) were between 20-29 years of age group with mean of 27.27 + 5.37 years, 124 mothers (55.35%) has 5000-15000 PKR family income per month while 114 mothers (50.90%) were literate. In our study knowledge of mothers about diarrhea was

satisfactory. A study conducted in Iran also showed that mothers education played an important role in this regard.<sup>10</sup>

In this study, 36% has correct knowledge about definition of diarrhea while a study conducted in Bangladesh reported high knowledge about of mothers correct definition of diarrhea.<sup>11</sup> In our study 60 mothers (26.78%) told that both contaminated water and eating mud were the main causes for diarrhea. This is comparable to results highlighted by Shah N.<sup>12</sup> In our study when asked about the signs of dehydration, 56 mothers (25%) told that both dry skin and sunken eyes both were the main signs, 89 mothers (38%) responded by giving sunken eyes or dry skin or thirst or weight loss, these findings are consistent with a study done in Gambat, Sindh, Pakistan.<sup>13</sup>

Regarding consequences of diarrhea, 156 (69%) mothers pointed out that child will become weak and lethargic due to diarrhea. Similar results were also shown by Mumtaz Y.<sup>14</sup> In our study, 162 mothers (72.30%) knew how to correctly prepare market available ORS packet as compared to 86% a study were knew correct preparation of ORS.<sup>15</sup> In our study, 154 mothers (65.62%) continued breast feeding during diarrhea which is in contrast with Khalili M.<sup>10</sup>

208 mothers (92.86%) consulted the doctor and 147 mothers (65.62%) consulted the doctor when the condition of the child was not improving. 49 mothers (21.88%) consulted doctor after doing self medication. In contrast another study 30% mothers did self medication.<sup>14</sup> In this study, 74 mothers (33%) gave both ORS and Khichri and 60 mothers (26.79%) gave only ORS to the kids during diarrhea. A study conducted in Burkina stated that during diarrhea, 50% mothers gave pulses, khichri, rice water and banana while 25% gave only ORS.<sup>16</sup>

Regarding application of preventive measures, 90 mothers (40.8%) applied boiling the water, covering the food and keeping the child and environment clean in contrast to Karnataka study only 25% mothers boiled the water.<sup>17</sup> In another study, 45% mothers gave the importance to personal hygiene.<sup>18</sup> Limitation of our study is that due to finances, we have done consecutive sampling and duration of study was only two months. While the strength is that we have focused on rural mothers because majority of population of our country is living in the rural areas.

## CONCLUSION

Majority of mothers has good knowledge and practices regarding diarrhea but still many of them has still not clear idea about prevention and ideal practices to be adopted during diarrhea. There is a need of health education program to start in the rural areas of Rahim Yar Khan.

### Conflict of interest

The authors have declared no conflict of interest.

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