The KAP study regarding Rural Mothers of Infants about Diarrhea In sheikh Zayed Hospital Rahim yar Khan
Dr.Fayyaz Hussain; Dr.Syed Imran Abbas Shah; Dr.Muhammad Imran Mazhar.

ABSTRACT:

BACKGROUND:
Diarrhea is leading cause of death in infants. 60% of Pakistan’s population lives in rural areas. It is therefore important to assess knowledge, attitude and practices of rural mothers of infants about diarrhea.

OBJECTIVE:
To Assess Knowledge, Attitude & Practices Of Rural Mothers Of Infants About Diarrhea

STUDY DESIGN:
Cross-sectional

PLACE AND DURATION:
This study was conducted at EPI center, in OPD and Diarrheal Unit of Pediatrics ward of Sheikh Zayed Hospital, Rahim Yar Khan, over a 4 months period i.e. duration from 15-10-2017 to 15-02-2018. A sample of 112 was collected by interviewing rural mothers of infants using a standard questionnaire.

METHODOLOGY:
Informed verbal consent was taken from all subjects under study before commencing data collection. Ethical approval was sought from institutional review board. The Performa contained different variables like age, no. of infants, mother’s education, monthly family income, Knowledge about causes of diarrhea, the signs of dehydration, Consequences of diarrhea, continuation of breast feeding during diarrhea, health seeking behavior, knowledge about preparation of ORS, Diet preferences during diarrhea and prevention of diarrhea.

RESULTS:
Out of 112 subjects, 58.9% of Mothers were between 20-29 years of age, Monthly family income of 55.4% was between 5000-15000, 49.1% Mothers were illiterate, 74.1% were House wives, 46.4% had knowledge that diarrhea was loose watery stools, 24.1% told that diarrhea was caused by contaminated water, 29.5% were of the view that signs of dehydration were combination of any of two of the Sunken eyes, Dry skin, Dec. Urine output, Thirst, Weight loss. 69.6% mothers had knowledge that consequences of diarrhea were being weak & lethargic, 68.8% mothers said that they continue breast feeding during diarrhea, 92.9% told that they consulted the doctor in case of diarrhea, 43.8% said that they took their child to doctor when the child was dehydrated. 37.5% started self-medication because of previous consultation of same child, 72.3% knew how to prepare ORS, 33% used the combination of any two things in diet of child in diarrhea; ORS, Khichri, Milk, Banana, Yogurt, Rice. 25% had knowledge about the prevention of diarrhea from the combination of any three of these; Boiling the water, Covering the food, Washing hand, Protection of food from flies, Keep environment & child clean.

CONCLUSION:
Majority of the mothers had a good understanding of diarrhea, knowledge about ORS and got doctor’s advice when the child had severe diarrhea. More than 70% of the mothers had knowledge how to prepare ORS and knowledge about prevention of diarrhea.

What is diarrhea?
Diarrhea is the passage of loose, watery stools and/or having bowel movements more frequently than usual.

Diarrhea is usually a symptom of an infection in the intestinal tract, which can be caused by a variety of bacterial, viral and parasitic organisms.

**Types:**

There are three clinical types of diarrhea:

1. Acute watery diarrhea – lasts several hours or days, and includes cholera;
2. Acute bloody diarrhea – also called dysentery; and
3. Persistent diarrhea – lasts 14 days or longer.

Acute diarrhea is defined as sudden onset of excessively loose stools of >10ml/kg/day in infants and >200gm/24hrs in older children which lasts <14 days. In chronic diarrhea the episode lasts >14 days1.

**Causes of diarrhea in infants:**

Infant’s diarrhea can be caused by a number of things, ranging from a change in diet to an intestinal infection. Any of the following can cause diarrhea in babies:

- An infection caused by a virus, bacteria or parasite; babies can pick up the bacteria and viruses that cause diarrhea through contact with contaminated food or water, or by touching contaminated surfaces and then placing hands into mouths.
- A food allergy or sensitivity to medicines
- Drinking too much fruit juice
- Poisoning
- Dietary protein or sugar intolerance.

The two causes highlighted in a study conducted by Shah N were dirty water and unhygienic food

**Symptoms:**

- Abdominal cramping or pain
- Abdominal swelling, bloating or distention
- Fecal incontinence
- Flatulence
- Indigestion
- Mucus or undigested food in feces
- Nausea and vomiting.

**Condition of infant during diarrhea:**

- Fever of 102 degrees Fahrenheit or higher
- Abdominal pain
- Blood or pus in the stool, or the stool is black, white, or red
- Lethargy
- Vomiting

**Signs of dehydration in infant:**

- Urinating less often than usual (fewer wet diapers).
- Irritability.
- Dry mouth.
- No tears when crying.
- Unusual drowsiness or lethargy.
- Sunken soft spot on the top of the baby's head.
- Skin that isn't as elastic as usual (doesn't spring back when gently pinched and released).
- Sunken eyes.
- Diarrhea remains a common cause of death in all children and is the second most common cause in those aged over 1 month. It is worth asking why children continue to die from this condition.

**Treatment and management package:**

The IMCI strategy includes three important components:

1. Integrated management of ill children in facilities and health centers.
2. Health system strengthening, particularly drugs and logistics support.
3. Community IMCI, or promotion of key family and community practices.

For all the sick children ask the caregiver about child’s problem.

Does the child have diarrhea?

If yes…………
  - Ask for how long?
  - Is there blood in the stools?

Look and feel:

Look at the child’s general condition.
  - Lethargic, unconscious, restless or irritable?
  - Look for sunken eyes.

Offer the child fluid. Is the child
  - Not able to drink or drinking poorly?
  - Drinking easily, thirsty?

Pinch the skin of the abdomen.

Does it go back:
  - Very slowly? (longer than 2 second)
  - Slowly?

Then classify diarrhea according to signs and symptoms.

**Plan to treat diarrhea:**

- Council the mother on the 4 rules of home treatment.
  - Give extra fluid.(tell the mother how to mix and give ORS)
  - Give zinc supplementation.(age 2 months upto 5 years; tell the mother about dosage of zinc and how to give zinc supplements)
  - Continue feeding.(exclusive breast feeding if age less than 6 month)
  - When to return.
Treat for severe dehydration quickly.

Give follow up care.

Objectives

1. Improve knowledge about causes & management of diarrhea in infants.
2. Improve mother’s knowledge about feeding her infant during diarrhea.
3. To assess the knowledge of mothers about management of diarrhea.

METHODOLOGY

RESEARCH DESIGN:

Cross-sectional

Setting:

The Research was conducted at EPI center of OPD and Diarrheal Unit of Pediatrics ward of Sheikh Zayed Hospital, Rahim Yar Khan.

Duration:

Research was conducted for duration of 4 months i.e. from 15-10-2017 to 15-02-2018

Population:

Rural Mothers of infants of age 15-49 years of Rahim Yar Khan

Sampling Technique:

Consecutive Sampling Technique.

Sampling Size:

What Is Diarrhea?

Sample size was 112.

Inclusion Criteria:

I. Mothers who belonged to rural union councils of Rahim Yar Khan.
II. Who had given the consent.
III. Women who had an Infant.

Exclusion Criteria:

I. Mothers of infants who did not give the consent.
II. Mothers having no Infant.
III. Mothers who belonged to the urban areas.

Data Collection:

The Performa contained different variables like age, no. of infants, mother’s education, monthly family income, Knowledge about causes of diarrhea, signs of dehydration, Consequences of diarrhea, continuation of breast feeding during diarrhea, health seeking behaviour, preparation of ORS, Diet preferences during diarrhea and prevention of diarrhea. All the collected data was recorded on Performa.

Data Analysis:

The data was entered on computer program SPSS version 14. The quantitative data was presented as mean, median, mode and standard deviation. The qualitative data was presented as frequencies and percentages. Tables were also drawn to present the data.
Table-1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loose watery stool</td>
<td>52</td>
<td>46.4%</td>
</tr>
<tr>
<td>Increased frequency</td>
<td>4</td>
<td>3.6%</td>
</tr>
<tr>
<td>Both</td>
<td>41</td>
<td>36.6%</td>
</tr>
<tr>
<td>Blood in stool</td>
<td>2</td>
<td>1.8%</td>
</tr>
<tr>
<td>All three</td>
<td>4</td>
<td>3.6%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>9</td>
<td>8.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>112</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Table-1** shows that 46.4% mothers know that diarrhea is loose watery stools.

**Knowledge about Causes of Diarrhea**

**Table-2**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
</table>
Table-2 shows that 24.1% mothers have knowledge that diarrhea is caused by contaminated water.

Do You Continue Breast Feeding During Diarrhea?

Table-3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>77</td>
<td>68.8%</td>
</tr>
</tbody>
</table>
Table-3 shows that 68.8% mothers said that they continue breast feeding during diarrhea.

**When You Will Take Your Child To Doctor?**

**Table-4**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately</td>
<td>5</td>
<td>4.5%</td>
</tr>
<tr>
<td>When condition is not improving</td>
<td>46</td>
<td>41.1%</td>
</tr>
<tr>
<td>When child is dehydrated</td>
<td>49</td>
<td>43.8%</td>
</tr>
<tr>
<td>When Self-medication fails</td>
<td>3</td>
<td>2.7%</td>
</tr>
<tr>
<td>NO</td>
<td>9</td>
<td>8.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>112</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
Table-4 shows that 43.8% mothers said that they will take their child to doctor when the child is dehydrated.

**Preparation Of ORS**

**Table-5**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>81</td>
<td>72.3%</td>
</tr>
<tr>
<td>No</td>
<td>31</td>
<td>27.7%</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table-5 shows that 72.3% mothers know how to prepare ORS.

**Knowledge About Prevention**

**Table-6**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling the water</td>
<td>4</td>
<td>3.6%</td>
</tr>
<tr>
<td>Covering food</td>
<td>3</td>
<td>2.7%</td>
</tr>
<tr>
<td>Washing hand</td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td>Protection of food from flies</td>
<td>3</td>
<td>2.7%</td>
</tr>
<tr>
<td>Keep environment</td>
<td>16</td>
<td>14.3%</td>
</tr>
</tbody>
</table>
Table-6 shows that 25% mothers have knowledge about the prevention of diarrhea from the combination of any three of the following:

<table>
<thead>
<tr>
<th>and child clean</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Comb. of any two</td>
<td>25</td>
</tr>
<tr>
<td>Any three</td>
<td>28</td>
</tr>
<tr>
<td>Any four</td>
<td>10</td>
</tr>
<tr>
<td>Any five</td>
<td>1</td>
</tr>
<tr>
<td>All</td>
<td>7</td>
</tr>
<tr>
<td>Don’t know</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>112</strong></td>
</tr>
</tbody>
</table>

In this study, nearly about 6.3% mothers were less than 20 years of age, 58.9% were between 20-29 years of age, 32.1% were between the ages of 30-39, 2.7% mothers were above 39 of age. The study done by Famara Sillah et.al indicated that maternal age had no significant association with attitude of the mothers.

In Present study when asked about the signs and symptoms of diarrhea in infants 9.8 % of mothers told that their

Discussion

Diarrhea is a major cause of illness and death among young children in developing countries. Treatment guidelines issued by the World Health Organization (WHO) indicate that most cases of childhood diarrhea can be treated at home by increasing the fluid intake and by continued feeding during the diarrheal episodes.
infants had sunken eyes, 4.5% said dry skin, 1.8% will have Dec. urine output. 8.9% will have thirst problem. 16.1% will have weight loss. 8.9% don’t know the exact signs of the diarrhea, 29.5% of mothers know that signs of diarrhea are combination of any of two of following Sunken eyes, Dry skin, Dec. Urine output, Thirst, Weight loss. Nearly about 69.6% of mothers know that consequences of diarrhea are weakness & lethargic state of body. 25% mothers think that the consequence is weight loss. 4.5% mothers think that their child will become unconscious. 0.9% mothers think that their child can die.

In this research 68.8% of mothers said that they continue breast feeding during diarrhea. 31.3% of mothers don’t feed their babies during diarrhea. Conversely 93.6% mothers in our research said that breastfeeding should be continued during diarrhea that is also depicted from the findings by Khalili M where 63.2% mothers continued consistent breastfeeding during diarrhea.

In the present study it was shown that when mothers were asked about what they would do when they came to know that their infants had diarrhea, 92.9% of mothers said that they consult doctor in case of diarrhea while 7.1% do not consult a doctor. Nearly about 43.8% of mothers said that they always take their child to doctor immediately, while 41.1% mothers said that they take their child to doctor when the child is dehydrated, 2.7% mothers take their child to doctor when self-medication fails. 8% do not take their child to doctor. In another similar study regarding health seeking practices, 52.5% mothers consulted doctor after two days while 30% mothers opted for self-medication.

In this study when the mothers were asked about how they can prevent their infants from diarrhea, 25% of mothers told about boiling the water, covering the food, washing hand, protection of food from
flies, keep environment & child clean. While others had no idea of preventive measures.

Conclusion

1. Research showed that most of the mothers lack health seeking behavior about infant’s diarrhea due to illiteracy.
2. Most of the mothers had awareness about importance of ORS in diarrhea.
3. Most of the mothers had knowledge about danger signs of diarrhea i.e. sunken eyes, jaundice, lethargy & weakness.
4. Most of the mothers consulted doctor in case of severe diarrhea.
5. Burden of diarrheal diseases had solid association with mother’s education.

1. Mother’s education play an important role in the health of infants. So focus should be there on mother’s education.
2. Educate the mothers to boil water before use and restrict their infants from eating mud.
3. Ask the mothers about the importance of ORS and guide them how to prepare it in their homes.
4. Self medication should be discouraged.
5. Traditional food (banana, khichri) should be given during diarrhea.
6. Give health education to mothers to keep their home environment clean, use boiled water, cover food items, hand washing and infant hygiene along with ORS is best prevention from diarrhea.

Recommendations

References


