

Knowledge, Practice and Attitude of Mothers Regarding Oral Rehydration Salt

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ABSTRACT

Objective: To assess awareness about the knowledge; attitude and behaviour of mothers about use of ORS.

Study Design: Cross-sectional study

Place and Duration of Study: This study was conducted at the Pediatric Outpatient Department, Civil Hospital Bahawalpur from May 10, 2015 to July 25, 2015.

Methods and Materials: This study was conducted on mothers who attended Pediatric Outpatient Department, Civil Hospital Bahawalpur with 2 months to 5 years old child having history of diarrhea at the time of visit of the hospital or within the last two weeks. The mothers were interviewed by the one of the researchers using a structured questionnaire about ORS including the demographic data.

Results: There were 200 mothers included in this study. Their mean age \pm SD was 27.78 ± 7.637 years. Among the studied mothers 18.5% were having at least secondary school certificate and 90% mothers were house wives. 4.5% mothers did not hear about ORS, 50.5% heard it from medical practitioners, 33.5% from some family member/ neighbours while 16.5% from media. ORS use within the last two weeks was in 44.5% cases of diarrhea. 49% mother gave opinion that it 'stops diarrhea', 29.5% 'does not know' while 21.5% gave opinion that it 'stops dehydration.' 38% mothers knew the correct technique for making ORS solution. 35% mother were in the opinion of giving ORS to the child by 'cup and spoon' in 70 (35%), 34% by cup and 31% by feeding bottles. There were only 34% mothers could prepare ORS correctly. 33% mothers described the correct amount of ORS solution to be given to the child while 41.5% mothers replied to continue giving ORS even if child developed vomiting

Conclusion: The awareness of mothers about the use of ORS is moderate. Further community based research is needed in this respect.

Key Words: Oral rehydration salt; Awareness; dehydration; Diarrhea

Citation of article: Faisal UA, Rubab A, Tahseen SA. Knowledge, Practice and Attitude of Mothers Regarding Oral Rehydration Salt. Med Forum 2016;27(8):10-12.

INTRODUCTION

Diarrheal diseases are the second most common cause of mortality among children below five years of age globally. There are about 1.5 million deaths per year due to diarrheal diseases¹. In Pakistan 100-150 children die every day as a result of diarrheal-related illnesses². Pakistan stands at number six among the highest mortality countries due to diarrheal diseases¹.

The World Health Organization goal is to end childhood deaths due to diarrhea by the year 2025. Most of the cases of diarrhea are simply managed by giving zinc and oral rehydration salt [ORS]³. The current ORS use is, globally, decreasing the mortality due to diarrhea by 69% and it may reduce by 93% if 100% coverage is achieved⁴. The report published by the United Nations Children's Fund in 2016 mentioned that use of ORS in Pakistan was only in 38% cases of diarrhea⁵.

Keeping in mind above facts about ORS, this study was planned. The objective of this study was to assess awareness about the knowledge; attitude and behaviour of mothers about the use of ORS. This study will help us in future planning about use of ORS in the community

MATERIALS AND METHODS

This cross-sectional study was conducted on mothers who attended Pediatric Outpatient Department, Civil Hospital Bahawalpur from May 10, 2015 to July 25, 2015 with 2 months to 5 years old child having history of diarrhea at time of visit of the hospital or within the last two weeks. After explaining the study purpose and details, thereof, those who agreed to participate in the study were interviewed by the one of the researchers using a structured questionnaire about ORS including the demographic data. The interview was conducted in English, Urdu or in local languages according to the understanding of mother. The Performa was filled by the same researcher who conducted interview. The mothers who refused for the interview, or whose child was serious enough needing urgent admission were excluded from the study.

The data collected were entered and analyzed by using SPSS version 15. Data were expressed as percentages or proportions.

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Received: May 12, 2016;

Accepted: June 03, 2016

RESULTS

There were 200 mothers included in this study. Their mean age \pm SD was 27.78 \pm 7.637 years. Among the studied mothers 37 (18.5%) were having at least secondary school certificate, 106 (53%) were having education less than secondary school certificate while 57 (28.5%) did not go to school in their lives. There were 180 (90%) mothers who were house wives, 11(5.5%) were teachers, 8(4%) housemaid and 1 (0.5%) tailor.

In response to the question, 'did you hear about ORS and if yes then by whom?' 9 (4.5%) mothers reply was 'no' while 101 (50.5%) mothers heard it from some medical practitioners, 67 (33.5%) from some family member/neighbours while 33 (16.5%) from media.

In response to the question, 'have you used ORS within the last two weeks or using it for the present illness?' 89 (44.5%) mothers reply was 'yes' while 111(55.5%) mothers reply was 'no'.

In response to the question, 'what is the role of ORS in diarrhea?' 98 (49%) replied it 'stops diarrhea', 59 (29.5%) replied 'does not know' while 43 (21.5%) replied it 'stops dehydration'.

When asked 'how to prepare ORS solution?' 76 (38%) mothers described the correct technique, 99 (49.5%) the incorrect technique while 25(12.5%) told they 'do not know',

When asked 'how to give ORS to the child?' the response was 'cup and spoon' in 70 (35%), 'by cup only' in 68(34%) and by feeding bottles in 62 (31%) cases.

When asked 'how long can you keep prepared ORS?' 68 (34%) responded '24 hours', 102(51%) responded 'as long as it is not consumed' while 30(15%) responded 'do not know'.

When asked 'how much ORS solution to be given to the child?' 66 (33%) mothers described the correct amount, 99 (49.5%) incorrect amount while 35(17.5%) told they 'do not know'.

In response to question, 'what to do if child develops vomiting?' 83 (41.5%) mothers replied to 'continue giving ORS' 42(21%) replied to 'stop giving ORS' while the answer of 75 (38.5%) mothers was 'do not know'.

DISCUSSION

In the developing countries the incidence of diarrhea remains unchanged and in such cases oral rehydration therapy is the treatment of first choice.

The mean age of mothers in this study was 27.78 \pm 7.64 years while it was 28.7 \pm 3.7 in the study conducted in Karachi⁶. The mean age of mothers was 23.68 (\pm 4.89) years in the study done in India⁷.

Among the studied mothers 18.5% were having at least secondary school certificate. The other studies done in Rawalpindi⁸ and Karachi⁶ showed that 29% and 64%

mothers were having at least secondary school certificate. The study done in Lahore⁹ showed that 56.9% mothers were uneducated. The study conducted in Nepal¹⁰ showed only 1% mother possessed secondary school certificate while 96.8% mothers were having secondary school certificate in the study conducted in South Africa¹¹.

There were 90% mothers who were house wives in our study. The studies conducted in Rawalpindi (8) and Karachi⁶ showed nearly similar results. The study done in South Africa¹¹ showed that 60.6% mothers were not doing any job.

There were 4.5% mothers who did not hear about ORS, 50.5% heard it from medical practitioners, 33.5% from some family member/ neighbours in our study. The study conducted in Karachi⁶ showed that that 49% mothers did not know about ORS while the study done in South Africa¹¹ showed that 10.6% mothers did not hear about ORS. The main source of information was medical practitioners. The study conducted at Lahore¹² showed that in 73% cases ORS use was advised by medical practitioner/ specialist.

The ORS use was in 44.5% cases in our study. The studies conducted at Lahore^{9,12} showed that 49.67% - 84.7% mothers used ORS. The studies done in South Africa¹¹ and in India⁷ showed that use of ORS was 66% and 94.4% respectively.

There were 21.5% mothers who gave the opinion that it 'stops dehydration' and 49% that it 'stops diarrhea' while the study conducted at Rawalpindi (8) showed that 75% mothers gave opinion that it 'stops dehydration'. The study conducted in Nepal¹⁰ and in South Africa¹¹ showed that only 8.5% and 18.3% mothers, respectively, were in the opinion that ORS 'stops dehydration'.

There were 38% mothers knowing the correct technique for making ORS solution in our study. The studies conducted in Lahore^{9,12} showed that 42.8%-62.5% mothers knew the correct technique while the studies conducted in Karachi^{6,13} showed that 80%-82% mothers were able to make ORS solution correctly. There were only 6% mothers in Nepal¹⁰ while 34% in South Africa¹¹ who knew the correct technique.

There were 34% mothers who knew the correct answer to give ORS by cup in our study while 51.8% mothers gave ORS by cup in the study done in South Africa¹¹.

There were only 34% mothers who gave the correct answer that prepared ORS should be used within 24 hours and similar results were noted in the study conducted in Karachi⁶.

There were 33% mothers who described the correct amount of ORS solution to be given to the child in our study. There were only 1% mothers in the study conducted in Nepal¹⁰ while 68.5% mothers in the study done in India⁷ who knew the correct amount of ORS to be given.

There were 41.5% mothers who gave the correct answer 'to continue giving ORS even if child develops vomiting'. The study conducted in Karachi⁶ showed that 36% and the study done in South Africa¹¹ showed that 45.8% mothers were in the opinion of continuing ORS therapy even in the presence of vomiting.

There is variable awareness both nationally and internationally and needs improvement.

CONCLUSION

The awareness of mothers about the use of ORS is moderate. Further community based research is needed in this respect.

Conflict of Interest: The study has no conflict of interest to declare by any author.

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