A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE OF MOTHERS ABOUT ORAL REHYDRATION THERAPY IN FANDA AND BHAISAKHEDI VILLAGES OF BHOPAL

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ABSTRACT: BACKGROUND: Diarrhoea is a major cause of illness and death among young children in India. Most cases of childhood diarrhea can be treated at home by increased fluid intake and continued feeding during diarrheal episodes. In accordance with WHO guidelines, the Government of India promotes oral rehydration therapy, including the use of oral rehydration salt (ORS) packets or a recommended home-made solution (RHS) made from salt, sugar, and water. **METHOD:** This was a cross sectional study conducted among mothers having children less than 5 years to know about their knowledge attitude and practices related to ORS usage during diarrheal diseases. **RESULTS:** Most of the mothers i.e. 52% got information about ORS from Anganwadi, 54% of the mothers told that ORS usage during diarrhea decreases water loss, 52% of the mothers were not having knowledge about homemade ORS, 77% of the mothers directly consulted doctors when their children had diarrheal episodes hence they did not use ORS as a first remedy for management. **CONCLUSION:** This knowledge gap needs to be improved by the measures that are directed towards disseminating the knowledge, changing the negative attitudes and encouraging the better practices about usage of ORS in the mothers for the effective management of diarrhoea.

KEYWORDS: ORS, ORT, Diarrhoea, Mothers, Knowledge.

INTRODUCTION: Diarrhoea is a leading killer disease of children across the world, accounting for 9 per cent of all deaths among children under age 5 worldwide.⁽¹⁾ It was estimated that 4 billion episodes of diarrhea occur across the world each year, with more than 90% episodes occurring in developing countries.⁽²⁾ Most of the diarrheal deaths occur among children less than 2 years of age belonging to the South Asian and the sub-Saharan African region. In India acute diarrheal diseases are the second most common cause of death in under-five, accounting for about 8% of deaths in under -5 years age group. During the year 2013, about 10.7 million cases with 1535 deaths were reported in India.⁽³⁾ Average estimated incidence of diarrhea in children aged 0-6 years was 1.71 and 1.09 episodes/person/year in rural and urban areas.⁽²⁾ Children under three years old experience on an average three episodes per year.⁽¹⁾

Acute diarrheal disease with its associated dehydration has remained a challenging problem to the medical profession and the community in the third world countries especially in the children aged below five years.^(4,5,6,7) Since 1979 Oral Rehydration Therapy became the keystone approach to tackle the dehydration caused by diarrhea and from then onwards there was a steady decline in death toll caused by Diarrheal diseases.^(8,9)

However the use of oral rehydration solution largely depends, on the level of mother's knowledge and her attitude towards its use. The present study assesses the level of knowledge and

ORIGINAL ARTICLE

attitude of the mothers residing in a rural area towards the use of oral rehydration solution during diarrheal illness.

This study was carried out with an objective of assessing the knowledge, attitude and practice of mothers having children less than 5 years regarding the use of ORS in management of diarrhea in a rural area.

METHODOLOGY: This was a cross-sectional descriptive study carried out among families who reside in Fanda and Bhaishakhedi villages of Bhopal in central India during a period of 3 months to assess the knowledge and attitude regarding role of ORS in management of diarrhea. A total of 200 mothers were willing to participate in the study and they were enrolled in this study by using convenience sampling with inclusion criteria being mothers having children less than 5 years of age. In present study, data was collected by using a preformed and pretested questionnaire. The knowledge and attitude of the mothers pertaining to ORS was defined as awareness about the availability and preparation of ORS and its use in the management of diarrheal diseases. The questionnaire included questions concerning the knowledge about ORS, method of preparation and source of information about ORS and also the role of ORS in the management of diarrheal diseases. Data was also collected for socio demographic characteristics such as age, occupation, literacy. Socioeconomic status was based on modified Kuppuswamy scale for urban area.

RESULTS: As shown in the table-1 Most of the mothers i.e. 58%(29) were belonging to the age group 20-24 years and most of them were house wives i.e. 92% and almost 1/5th of them had completed their education up to Higher secondary i.e. 22% followed by another 1/5th i.e. 20% with their education status up to high school. 78% of the mothers who participated in the study were belonging to Upper Lower Class according to Kuppuswamy Classification of SES.

As shown in the pie chart (figure -1) Anganwadi was the main source of information about ORS to the mothers contributing to 52%, followed by Doctors who were the second most important source of information about ORS to the mothers contributing to 30%, in 12% of the mothers Television was the source of information and only 6% of the mothers sought information from their neighbors.

Bar diagram (Figure-2) shows that most of the mothers i.e. 54% were of the view that ORS during diarrhea decreases water loss, 22% of the mothers said that ORS improves diarrhea and only 8% said that ORS replenishes electrolytes during diarrhea. It was also observed that 24% of the mothers were not aware about why ORS is used during diarrhea.

As shown in the pie chart (Figure-3) more than half of the mothers i.e. 52%(26) were not aware about the home made ORS, followed by 44%(22) mothers with a good knowledge about homemade ORS who told that it is a mixture of sugar and salt solution and only 4%(2) told that even daal water can be used as ORS.

As shown in the bar diagram (Figure-4) 77% of the mothers directly consulted the doctors when their children suffered from diarrhea hence they did not use ORS as the first remedy this was followed by a reason that the child is very small for the usage of ORS hence 15 % of the mothers did not use ORS and only 8% of the mothers said that their children did not want to drink ORS.

As shown in the table-2 out of total 200 mothers, 92 (48%) of the mothers used ORS during diarrhoeal episodes, 49 (24.5%) mothers had knowledge about correct method of preparation of ORS and 35 (17.5%) of them were knowing about the duration of ORS therapy. 20 (10%) of them were

ORIGINAL ARTICLE

knowing about the harm of giving too much ORS and 82 (41%) of them said that if vomiting continues then ORS has to be stopped.

Table-1: Socio Demographic Profile of the Mothers.

Variable	Frequency	Percentage
Mothers' age		
20-24 year	96	58%
25-29 year	72	36%
30-34 year	12	6%
Occupation		
House wife	184	92%
self employed	12	6%
Govt. employed	4	2%
Education		
Illiterate	36	18%
Primary	32	16%
Middle	36	18%
High School	40	20%
Higher secondary	44	22%
Graduate	4	2%
Post graduate	8	4%
Socioeconomic Status		
Upper Middle	16	8%
lower Middle	20	10%
Upper Lower	148	74%
Lower	16	8%

Fig. 1: Pie Chart depicting Source of Information about ORS to mothers

Fig. 2: Bar diagram showing the reasons of ORS usage by the mothers

Fig. 3: Pie chart Showing Knowledge of Mothers regarding Home Made ORS

Fig. 4: Bar Diagram showing the reason for non-usage of ORS during diarrheal

ORIGINAL ARTICLE

Table-2: showing the knowledge of mothers about ORS in relation to their education status

	Educational status of mother				Total (n = 200)
	Illiterate	Primary	Middle	Above	
Used ORS during diarrhea	5(2.5%)	16(8%)	18 (9%)	53 (26.5%)	96 (48%)
Correct Preparation of ORS	2(1%)	9(4.5%)	11(5.5%)	27(13.5%)	49 (24.5%)
Duration of ORS Therapy	1(0.5%)	4(2%)	9(4.5%)	21(10.5%)	35(17.5%)
Harm of giving too much ORS	0	2(1%)	5(2.5%)	13(6.5%)	20(10%)
Stop ORS, if vomiting continues	3(1.5%)	11(5.5%)	25(12.5%)	43(21.5%)	82(41%)

DISCUSSION: ORS is the discovery of 20th millennium to reduce the morbidity and mortality caused by diarrheal diseases but it is still far from being highly effective especially in developing countries due to lack of awareness about proper use of oral rehydration solution for management of diarrheal episodes.

In present study, although 82% of the mothers were educated 54% percent of the mothers were aware that ORS during diarrhoea decreases water loss while 24% of the mothers were not even aware about the reason of ORS usage during diarrhoea. Only 28.6% of the mothers were knowing about the correct method of preparation of ORS and only 20.7% of mothers were knowing about the duration of ORS therapy.

The results are somewhat different from the study conducted by Mahor G.R. in an Urban Slum area of Bhopal ⁽⁴⁾ who found that even though 75% of the mothers were educated 94.5% of them were aware about the reason of ORS usage during diarrhoea only 5.5% of them were not aware about the reason of ORS usage during diarrhoea and 39% of them were knowing about the correct preparation of ORS. In a similar study conducted by Rasania S.K. et al in few urban slums of Delhi ⁽⁵⁾ it was observed that the mothers considered ORS as other form of medication and not necessarily a replacement of body fluid.

Several studies conducted on the effectiveness of electronic and mass media have proven that awareness level of people about the use of oral rehydration therapy can be improved. Mothers regularly exposed to electronic mass media are much more likely to know about ORT efficiently.

CONCLUSION: In this study the knowledge of the mothers about the method of usage of ORS in managing diarrheal episodes was found to be insufficient. Although many mothers were aware about the fact that ORS is useful but most of them were not aware about its proper method of preparation and usage. This knowledge gap needs to be improved by the measures that are directed towards

ORIGINAL ARTICLE

disseminating the knowledge, changing the negative attitudes and encouraging the better practices about usage of ORS in the mothers for the effective management of diarrhea.

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