

Knowledge, Attitude and Practices Regarding Diarrhoea and its Management at Home among Mothers of Under-Five Children Residing within a Subcentre Area in Dibrugarh District, Assam

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Abstract: Diarrhoea is a leading cause of mortality among under-five children in India. Diarrhoea leads to loss of body fluids as well as electrolytes. It is important to restore the losses as it can lead to dreaded consequences due to dehydration. Dehydration can be prevented by replacement of fluid by simply giving oral rehydration salt (ORS) solution or other home available fluids. To assess the knowledge, attitude and practices regarding diarrhoea and its management at home among mothers of under-five children residing within a sub-centre area in Dibrugarh district, Assam. A cross-sectional study was conducted from September to December 2011 among mothers of the under-five children residing within a sub centre area under Lahowal Block PHC of Dibrugarh District, Assam. A total of 190 mothers participated in the study and the relevant information was collected by a house-to-house survey using a pre-designed, pre-tested proforma after taking the informed consent. Out of 190 mothers, 54.7% could define diarrhoea correctly and 75.8% sought medical treatment for diarrhoea. 74.2% mothers used ORS out of which 61.0% knew its correct use while 53.2% knew the correct method of its preparation. Information about ORS was obtained from health personnel by 74.5% mothers. Only 56.3% mothers knew about home available fluids, out of which sugar and salt solution was the choice in majority of cases (42.1%). Only 5.2% of mothers used to increase feeding their children during episodes of diarrhoea. The study reveals that there is a dearth in knowledge, positive attitude and lack of healthy practices regarding the management of diarrhoea at home by mothers of under-five children. Thus there is a need of behaviour change communication activities to increase the awareness level of mothers.

Keywords: Diarrhoea, Dehydration, Oral rehydration salt, Home available fluid, Under-five children.

INTRODUCTION

Diarrhoea is the second leading cause of death among under-five children globally. Nearly one-in-five child deaths which are about 1.5 million each year – is due to diarrhoea [1]. With an annual diarrhoea incidence of 2-4 episodes per child, a substantive part of childhood in the developing countries is spent combating diarrhoea [2]. In India, acute diarrhoeal disease accounts for about 13% deaths in under-five years age group [3].

Diarrhoea leads to loss of body fluids as well as electrolytes during each episode. Dehydration resulting from it is a significant cause of death for young children in developing countries. Dehydration can be prevented by replacement of fluid by simply giving oral rehydration salt solution (ORS) or other home available fluids (HAF) which helps to reduce the

complications. Fluid replacement should begin as early as possible when diarrhoeal episode occurs [1].

A number of studies have also reported the importance of home management of diarrhoea with oral rehydration salt solution or home available fluids in prevention of severe dehydration in children [4,5]. According to district level household survey-3 (DLHS-3), 34% children with diarrhoea in Assam receive ORS [6].

Continuing feeding along with administration of oral rehydration therapy during each episode of diarrhoea helps in the absorption of fluids from the gut into the bloodstream to prevent dehydration [1]. The caregiver specially the mother can play an important role in the management of diarrhoea at home. Hence the awareness of mothers regarding the disease and its home management is of utmost importance.

With this background, the present study was conducted to assess the knowledge, attitude and practices regarding diarrhoea and its management at home among mothers of under-five children residing within a sub-centre area in Dibrugarh district, Assam.

MATERIALS AND METHODS

A community-based cross-sectional study was conducted from September to December 2011 in Hilloidhari gaon sub-centre area under Lahowal Block PHC of Dibrugarh district, Assam. There are a total of 35 sub-centres under Lahowal block PHC. The Hiloidhari gaon sub-centre was selected randomly from these 35 sub-centres. It caters to a total population of 2423. Under this sub-centre area all the mothers having under-five children who suffered from at least a single episode of diarrhoea in their life time were included in the study. Out of a total of 204 mothers having under-five children, 190 could be contacted and participated in the study.

The relevant information was collected by a house-to-house survey using a pre-designed, pre-tested proforma after taking informed consent from the mothers. Information on knowledge of diarrhoea as a disease, its causes, use of ORS and HAF, feeding habits during the episodes of diarrhoea, health seeking behaviour were obtained using the proforma. The World Health Organization (WHO) definition of diarrhoea which is the passage of unusually loose or watery stools, usually at least three times in a 24 hour period was used for the purpose[7]. Data was analysed using standard statistical software: SPSS (version 16.0) and presented by using percentage.

Inclusion criteria

All the mothers having under-five children who gave consent.

Exclusion criteria

The mothers of under-five children who did not give consent and those who did not cooperate to participate.

RESULTS

The total no of mothers interviewed during the study period was 190. Most of the respondents were literate (68.4%) and housewives (71.5%). Majority (42.1%) belonged to socio economic class III. 104 (54.7%) mothers could specify what is diarrhoea correctly.

As shown in Table 1, the most important reasons cited by mothers regarding causes of diarrhoea were poor personal hygiene (44.2%) followed by indigestion (19.5%) and infection (18.4%) while 5.3% did not know about the causative factor. As shown in Table 2. out of 190 mothers, majority (75.8%) sought medical treatment from health personnel while 5.3% did not seek any treatment when their children suffered from diarrhoea. As shown in Table 3, out of 190 mothers, 184 had heard of ORS. 74.2% mothers used ORS to treat diarrhoea at home among which 53.2% knew the correct method of its preparation and 61.0% knew the correct method of its use.

As shown in Table 4. out of 184 mothers who had knowledge about ORS, majority (74.5%) obtained information about it from health personnel followed by relatives (10.3%) and chemist (8.7%). As shown in Table 5. out of 190 mothers, 107 (56.3%) had knowledge about home available fluids. The most commonly used home available fluid as cited by the mothers was sugar and salt solution (42.1%) followed by dal water (26.2%). As shown in Table 6. of the total mothers, 56.9% continued to feed usual amount of food and /or breast feed their children during diarrhoeal episode, while 37.9% reduced the usual amount of food. Only 5.26% increased the amount of food to children with diarrhoea.

Table-1: Knowledge of mothers regarding causes of diarrhoea

Causes of diarrhoea	Number	Percentage (%)
Poor personal hygiene of mother and child	84	44.2
Indigestion	37	19.5
Infection	35	18.4
Hot food	13	6.8
Evil's eye	11	5.8
Does not know	10	5.3
Total	190	100

Table-2: Treatment seeking behaviour of mothers during diarrhoeal illness

Treatment seeking behaviour	Number	Percentage (%)
Health personnel	144	75.8
Chemist	13	6.8
Quack	11	5.8
Left over drug prescribed earlier	8	4.2
Herbal preparation	4	2.1
No treatment	10	5.3
Total	190	100

Table-3: Knowledge of the mothers regarding ORS

Knowledge regarding ORS	Number	Percentage (%)
Ever heard of ORS (n= 190)		
Yes	184	96.8
No	6	3.2
Ever used ORS to treat diarrhoea at home (n =190)		
Yes	141	74.2
No	49	25.8
Correct method of preparation of ORS (n =141)		
Yes	75	53.2
No	66	46.8
Correct method of use of ORS (n=141)		
Yes	86	61.0
No	55	39.0

Table-4: Source of information of mothers regarding ORS

Source of information	Number	Percentage (%)
Health personnel's	137	74.5
Relatives	19	10.3
Chemist	16	8.7
Others	12	6.5
Total	184	100

Table-5: Type of home available fluids (HAF) used by mothers

Type of HAF	Number	Percentage (%)
Sugar and salt solution	45	42.1
Dal water	28	26.2
Lemon drink	13	12.2
Fruit juice	11	10.2
Vegetable soup	10	9.3
Total	107	100

Table-6: Feeding pattern during diarrhoeal illness

Feeding pattern	Number	Percentage (%)
Usual amount	108	56.9
Increased	10	5.2
Decreased	72	37.9
Total	190	100

DISCUSSION

In the present study 54.7% mothers could define diarrhoea correctly which is comparable to the study done in Rewa, Madhya Pradesh [8]. However a higher percentage was obtained in studies done in Karnataka and Nepal respectively [9,10].

Most of the mothers (44.2%) attributed poor personal hygiene followed by indigestion (19.5%) and infection (18.4%) as the cause of diarrhoea in this study. This is consistent with the finding obtained by Chaudhary P. *et al.* [11]. However, Rakkappanavar et al found that teething (30.88%) was the most common

cause of diarrhoea [9]. Thus it is seen that mothers had limited knowledge regarding the cause of diarrhoea.

Regarding health care seeking practices, 75.8% mothers sought treatment from health personnel which was higher than the studies done by Rokkappanavar *et al.* (32.8%) and Rehan *et al.* (39.6%) respectively [9,12]. However a higher prevalence (92.0%) was found by Choudhary P. *et al.* which might be due to increased literacy rate in their study compared to the present study [11].

In the present study, 74.2% mothers used ORS to treat diarrhoea at home which is in line with the study conducted by Chaudhary P. *et al.* (76.0%). However a lower prevalence was obtained in studies conducted by Rasanía S.K. *et al.* (46%) and Adimora G.N. *et al.* (9.9%) [13, 14].

In the present study, although 68.4% mothers were educated, yet 61.0% and 53.2% mothers knew the correct use and method of preparation of ORS respectively. This finding was comparable to the studies done by Rokkappanavar K.K. *et al.* (58.52%), Shah M.S. *et al.* (53%) and Sultana A. *et al.* (60%) [9,15,16]. However, Rasanía S.K. *et al.* found that the correct method of preparation of ORS was practiced by 38.7 % mothers which was lower than the present study [13].

In this study, majority of mothers (74.5%) got information about ORS from health personnel which was higher than the study conducted by Sultana A. *et al.* (37.2%) [16]. Though the health personnel was a major source in providing information regarding the ORS, more IEC activities are needed to provide more information to mothers.

In the present study 56.3% mothers knew about home available fluids, the choice of majority of which was sugar and salt solution (42.1%) followed by dal water (26.2%) and lemon drink (12.2%). Shah M.S. *et al.* in his study found that 36.1% mothers knew about HAF and the choice of majority was sugar and salt solution (48.8%) [15]. Similar observation was found in the study done by Rehan H.S. *et al.* [12]. The reason for higher percentage of use of sugar and salt solution might be its easy preparation.

The feeding of the child should not be decreased or withheld during the episode of diarrhoea. In the present study a substantial proportion of mothers (37.9%) decreased feeding when their children suffered from diarrhoea. Similar finding of restriction of diet by a major section of mothers was obtained by Rokkappanavar K.K. *et al.* [9].

CONCLUSION

The present study reveals that there is a dearth in knowledge, positive attitude and lack of healthy practices regarding management of diarrhoea at home by mothers of under-five children. There is a need to scale up behaviour change communication activities and disseminate the knowledge to the mothers to enable them to manage diarrhoea at home and encourage positive practices among them. This in turn will help to reduce the burden of diarrhoea from the society.

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