

Awareness of Mothers Regarding Concept and Management of Diarrhea in Children of Taunsa Sharif, Pakistan

Hafiza Mehreen Gul¹, Sadia Batool², Sidra Bilal³ and Muhammad Ishtiaq⁴

ABSTRACT

Objective: To assess the knowledge of mothers regarding diarrhea and the management practices of pediatric diarrhea.

Study Design: Descriptive /cross-sectional study

Place and Duration of Study: This study was conducted at Tehsil Headquarter Hospital Taunsa Sharif from June 2016 to September 2016.

Materials and Methods: A Performa comprising of questions was prepared aiming was to know the understanding of mothers regarding diarrhea. Presented a mother of a baby suffering from diarrhea had been instructed by the primary doctor to take the most appropriate answer. All mothers are willing to answer questions that were included in the study. The results were obtained using SPSS 23. Mean median, mode calculated and results presented by using tables and charts.

Results: Total 90 mothers were interviewed with boys 43 (48%) and girls were 47 (52%). The majority of mothers 60 (66.5%) were belong to low socioeconomic status. The median age was 1.5 years. Between the ages of 20-30, 67 (74%) mothers, 17 (19%) over 30 years, and only 6 (7%) mothers younger than 20 years. 68 (76%) mothers knew that how to make correct preparation of ORS, 14 (15%) was incorrect and 8 (9%) did not know how to prepare oral rehydration salts (ORS). 47 (52%) mother knew the wrong amount though 35 (39%) knew the right amount giving after each loose motion. Most of the mothers 40 (44%) were utilizing municipal water, 28 (31%) groundwater, 19 (21%) water filters and 3 (3.34%) mothers were buying it.

Although 40 (44%) of mothers thought that as the number of increased stool is diarrhea, only 14 (15%) of mothers thought diarrhea as stool with liquid concentration. However, 33 (37%) mothers thought these two features of stool as diarrhea and 4 (4.5%) mothers did not know about diarrhea. 26 (29%) of mothers considered dirty hands while, feeder 14 (15%) and 15 (16%) water thought as pathogenic factors, respectively. Mothers of 60 (66%) were educated and 31 (34%) were uneducated. 79 (87%) mothers were housewives and 12 (13%) were working women.

Conclusion: The mother's knowledge about diarrhea has increased in all its aspects. It is necessary to recognize the concept of quantitative signs of dehydration, oral rehydration salts given and to promote continued conventional feeding during illness.

Key Words: ORS; Diarrhea; Dehydration

Citation of article: Gul HM, Batool S, Bilal S, Ishtiaq M. Awareness of Mothers Regarding Concept and Management of Diarrhea in Children of Taunsa Sharif, Pakistan. Med Forum 2017;28(2):11-14.

INTRODUCTION

Diarrhea is one of the leading causes of child mortality under the age of five, responsible for death of 760,000 children per year in the world.¹⁻⁴ Especially in underdeveloped countries⁵.

Most children die because of severe water loss (dehydration) and fluid loss, which can be compensated by oral rehydration (ORS) in most cases.⁶⁻⁹ Malnourished children have impaired immunity to life-threatening diarrhea, usually due to the high risk of bacterial infection, due to the large number of bacteria, through contaminated food, and the spread of parasite water from human to person.¹

The Integrated Management of Childhood Illness (IMCI) guidelines advise the use of oral rehydration therapy (ORT), along with continued feeding, and zinc for appropriate management of diarrhea.¹⁰

Most of the diarrhea episodes are cured at homes and mothers are the primary caregivers of children under the age of five.¹¹ WHO recommends that mothers and caregivers should be able to identify signs of dehydration, including excessive lethargy, poor skin tension and irritability, and baby without tears. One study showed that 73.1% of mothers identified only one

¹. Department of Obstetrics & Gynecology, Basic Health Unit Lakhani, Taunsa Sharif.

². Department of Obstetrics & Gynecology, THQ Hospital, Jatoi.

³. Department of Obstetrics & Gynecology, DHQ Hospital, Rajanpur.

⁴. Department of Obstetrics & Gynecology, BVH Bahawalpur.

Correspondence: Dr. Hafiza Mehreen Gul, Women Medical

Officer, Basic Health Unit Lakhani, Taunsa Sharif.

Contact No: 0342 6417280

Email: mehreengul408@gmail.com

Received: November 11, 2016; Accepted: December 29, 2016

of these signs.¹² Therefore, knowledge about this diarrhea mother is very important part. Awareness and perception of mothers regarding diarrhea and individual and family actions to prevent and / or control the disease, have vital importance of reducing diarrhea-related diseases and mortalities.¹³

Oral rehydration therapy (ORT) is simple, inexpensive and most effective in primary Interventional management of diarrhea. It can be easily initiated by the mother at home / caregiver as soon as possible in the onset of diarrhea.¹⁴

MATERIALS AND METHODS

This was Cross-sectional descriptive study; location of this study was Tehsil Headquarter hospital Taunsa Sharif and was conducted from June 2016 to September 2016.

A Performa comprising of questions was prepared aiming was to know the understanding of mothers regarding diarrhea

Presented a mother of a baby suffering from diarrhea had been instructed by the primary doctor to take the most appropriate answer. All mothers are willing to answer questions that were included in the study. Mothers if they were reluctant to answer the questionnaire were skipped from study.

Data Analysis: The results were obtained using SPSS 23. Mean median, mode calculated and results presented by using tables and charts.

RESULTS

Total 90 mothers were interviewed with boys 43 (48%) and girls were 47 (52%). The majority of mothers 60 (66.5%) were belong to low socioeconomic status. The median age was 1.5 years. Between the ages of 20-30, 67 (74%) mothers, 17 (19%) over 30 years, and only 6 (7%) mothers younger than 20 years. 68 (76%) mothers knew that how to make correct preparation of ORS, 14 (15%) was incorrect and 8 (9%) did not know how to prepare oral rehydration salts (ORS). 47 (52%) mother knew the wrong amount though 35 (39%) knew the right amount giving after each loose motion. Most of the mothers 40 (44%) were utilizing municipal water, 28 (31%) groundwater, 19 (21%) water filters and 3 (3.34%) mothers were buying it.

Although 40 (44%) of mothers thought that as the number of increased stool is diarrhea, only 14 (15%) of mothers thought diarrhea as stool with liquid concentration. However, 33 (37%) mothers thought these two features of stool as diarrhea and 4 (4.5%) mothers did not know about diarrhea. 26 (29%) of mothers considered dirty hands while, feeder 14 (15%) and 15 (16%) water thought as pathogenic factors, respectively. Mothers of 60 (66%) were educated and 31 (34%) were uneducated. 79 (87%) mothers were housewives and 12 (13%) were working women.

The majority of mothers 82 (92%) were aware about one or more dehydration signs. Only a small number 6 (7%) of mothers did not have any knowledge of dehydration signs. Nearly half of the participating mothers 46(51%) want to stop routine diet during diarrhea. Most of the participating mothers 61(68%) were against to give medicine by themselves while 28(31%) favored self-medication.

DISCUSSION

Acute watery diarrhea is a self-limiting disease and over 90% of cases can be successfully treated with oral rehydration therapy and continued feeding without using anti-diarrheal drugs.¹⁵ Socio-demographic factors like education of the mothers, employments, and mother's age consociate with knowledge of the mothers around diarrhea and diarrhea care

Although mothers know that the level of diarrhea and the management at home, level of awareness, knowledge is often inadequate. This study shows that 92 (96.8%) of mothers believe that the number of stools is increased or stool with fluid congruent or bothas diarrhea.

According to another study, 63.6, 64.3 and 75 mothers have a certain understanding of diarrhea and its management¹⁶⁻¹⁸. In recent years, many studies have demonstrated increased knowledge about oral rehydration.

In our study, 90.5% of mothers were having knowledge of oral rehydration,¹⁹ whereas in other studies 95%²⁰ and 97.6% of mothers were having facts about oral rehydration salts and its usefulness is also in management due to dehydration of diarrhea.²¹

A similar study by Ahmed A et al, in Rawalpindi & Islamabad, 75% of mothers²² and a study by Bhatia et al 86.7% of mothers claiming that they have knowledge about oral rehydration solution (ORS).²³ The percentage difference was influenced by maternal knowledge and practice regarding oral rehydration, which is expected to be influenced by the mass media and the time factor of health professionals.

For the preparation of ORS, in our study 73 (76.8%) of mothers correctly reviewed oral rehydration was also consistent with the preparation of study by Aiza M, et al, 228 (76%).

A study by Taha found that 64% of mothers and another study in Lahore, 69.3% of mothers do the correct preparation of ORS.^{24,25} This percentage increase may be due to the control of diarrheal disease programs promoted by Pakistan government-supported activities.²⁶

In the current study, 64 (67.4%) of mothers were in against to start medicine by themselves, in a study by Aiza M, et al¹⁹ where only 21% of patients were against self-medication. Finding in our study 50.5% of mothers stopped regular feeding during diarrheal episodes. Findings in other study show that 96 cases (32%) of

cases stopped or reduce feeding.¹⁹ In a study by Khan MA, et al, same diet as before diarrhea was given in 59.9% of cases and in 40.6% of cases either feeding was stopped or reduced in quantity.²⁷ while in other scrutiny 43.9% reduced or stopped usual food or mothers breastfeeding, 48.6% gave normal amounts of food or breastfeeding & only 7.5% increase in the amount of food or breast-feeding of children with diarrhea.²⁸

Foods should never be limited during illness, and the preferred goal should be to maintain energy and higher levels of other nutrients in the intake. Community disease control give recommendation those children receiving semi-solid or solid foods, were continue their routine diet during diarrheal episodes.²⁹

In this study 28.4% of mothers attributed dirty hands as major factor of diarrhea in other study FGD participators considered teething as the chief source of diarrhea.³⁰ In another study in rural communities in Kenya, 58.2% thought that contaminated water was the chief reason of diarrhoea.³¹

CONCLUSION

The mother's knowledge about diarrhea has increased in all its aspects. It is necessary to recognize the concept of quantitative signs of dehydration, oral rehydration salts given and to promote continued conventional feeding during illness to handle this problem carrying high morbidity and mortality.

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

REFERENCES

- World Health Organization. Diarrheal disease fact sheet. 2013; 330.
- Marie AC, Mark WJ. Evaluation of the Gastrointestinal Tract. In: Wells, Barbara G, DiPiro Joseph T, Schwinghammer Terry L, Hamilton Cindy W, editors. Pharmacotherapy Handbook. 6th ed. McGraw-hill: medical Publishing Division; 2005.p.605-76.
- Motlagh ME, Heidarzadeh A, Hashemian H, Dosstdar M. Patterns of Care Seeking During Episodes of Childhood Diarrhea and its Relation to Preventive Care Patterns: National Integrated Monitoring and Evaluation Survey (IMES) of Family Health. Islamic Republic of Iran. *Int J Prev Med* 2012; 3: 60-67.
- King CK, Glass R, Bresee JS, Duggan C. Centers for Disease Control and Prevention. Managing acute gastroenteritis among children: oral rehydration, maintenance, and nutritional therapy. *MMWR Recomm Rep* 2003; 52: 1-16.
- Boschi-Pinto C, Velebit L, Shibuya K. Estimating child mortality due to diarrhoea in developing countries. *Bull World Health Organ* 2008;86: 710-7.
- Parker L, Lamont DW, Wright CM, Cohen MA, Alberti KG, et al. Mothering skills and health in infancy: the Thousand Families study revisited. *Lancet* 1999; 353:1151-1152.
- World Health Organization. Treatment of dehydrated patients. Readings on diarrhoea, student manual. Geneva: World Health Organization. 1992; 65-78.
- Ahmed F, Ansaruzzaman M, Haque E, Rao MR, Clemens JD. Epidemiology of post shigellosis persistent diarrhea in young children. *Pediatr Infect Dis J* 2001; 20: 525-0.
- Patel AB, Ovung R, Badhoniya NB, Dibley MJ. Risk factors for predicting diarrheal duration and morbidity in children with acute diarrhoea. *Ind J Pediatr* 2012;79(4):472-7.
- WHO. Handbook: IMCI Integrated Management of Childhood Illness. Geneva: WHO; 2005.
- Ghasemi AA, Talebian A, MasoudiAlavi N, Mousavi GA. Knowledge of mothers in management of diarrhea in under five children, in Kashan, Iran. *Nurs Midwifery Stud* 2013;1:158-62. doi: 10.5812/nms.10393
- Mengistie B, Behane Y, Worku A. Predictors of oral rehydration therapy use among five children with diarrhea in Eastern Ethiopia: a community based case control study. *BMC Public Health* 2012;12(1):1029
- Othero DM, Orago AS, Groenewegen T, Kaseje DO, Otengah PA. Home management of diarrhea among under fives in a rural community in Kenya: household perceptions and practices. *East Afr J Public Health* 2008;5:142-6.
- World Health Organization/United Nations Children's Fund: Clinical Management of Acute diarrhea. NewYork: WHO/UNICEF; 2004.
- Biloo AG, Tanveer SH, Habib F: Management of diarrhoea in children 1994; 26(42): 56-57 &15-17.
- Amare D, Dereje B, Kassie B, Tessema M, Mullu G, et al. Maternal Knowledge and Practice Towards Diarrhoea Management in Under Five Children in FenoteSelam Town, West Gojjam Zone, Amhara Regional State, Northwest Ethiopia. *J Infect Dis Ther* 2014;2: 182.
- Aiza M, Afsheen BR, Tahir MA. Knowledge, Attitude and Practices of the Mothers Regarding Oral Rehydration Solution, Feeding and Use of Drugs in Childhood Diarrhoea. *PJMHS* 2012;1(6):107-2.
- Khalili M, Mirshahi M, Zarghami A, Rajabnia M, Farahm F. Maternal Knowledge and Practice Regarding Childhood Diarrhea and Diet in Zahedan, Iran. *Health scope international quarterly J Health Scope* 2013;2(1):19-24.

19. Zafar M. Knowledge and Attitude towards and Preventive Practices Relating to Diarrhea among Mothers Under Five Years of Children: Findings of a Cross-Sectional Study in Karachi. *Pak J Infect DisTher* 2013; 2:1.
20. Adimora GN, Ikefuna AN, Ilechukwu G. Home management of childhood diarrhoea: Need to intensify campaign. *Nigerian J Clin Prac* 2011; 14(2):237-41.
21. Jha N, Singh R, Baral D. Knowledge, attitude and practices of mothers regarding home management of acute diarrhea in Sunsari, Nepal. *Nepal Med Coll J* 2006;8(1):27-30.
22. Ahmad A, Malik IA, Iqbal M: Use of ORS (Nimkol) in management of childhood diarrhoea by mothers in suburbs of Rawalpindi, Islamabad. *J Pak Med Assoc* 1990;40(8): 178-2.
23. Bhatia V, Swami HM, Bhatia M, Bhatia SPS. Attitude and practices regarding diarrhea in rural community in Chandigarh. *Ind J Pediatr* 1999; 66:499-3.
24. Taha AZ. Assessment of mother's knowledge and practice in use of oral rehydration solution for diarrhea in rural Bangladesh. *Saudi Med J* 2002;23(8):904-8.
25. Acute watery diarrhea in young children, current practices in rural community, Lahore *Pak Paed J* 1998;22(4):149-2.
26. Khan MA, Bari A: Diarrhoeal training units and control of diarrhoeal disease in Pakistan. *Pak Pediatr J* 1990;14(1): 23-5.
27. Khan MA, Nayyer G, Ramzan A. Feeding practices before and during diarrhoea, *Pak Paediatr J* 1987; XI (1): 25.
28. Berisha M, Gashi SH, Gashi M, Ramadani N. Maternal practice on management of acute diarrhea among children under five years old in Kosova. *TAF Prev Med Bull* 2009;8(5):369-2.
29. CDC. Managing acute gastroenteritis among children 2003;November21, /52(RR16):1-16.
30. Nigatu M, Tadesse A. Knowledge, Perception, and Management Skills of Mothers with Under-five Children about Diarrhoeal Disease in Indigenous and Resettlement Communities in Assosa District, Western Ethiopia. *J Health PopulNutr* 2015;33(1): 20-30.
31. Othero DM, Orago AS, Groenewegen T, Kaseje DO, Otengah PA. Home management of diarrhea among underfives in a rural community in Kenya: household perceptions and practices. *East Afr J Public Health* 2008;5:142-6.