



**PRACTICES OF MOTHERS OF UNDER FIVE YEARS CHILDREN
REGARDING HOME MANAGEMENT OF DIARRHEAL DISEASES IN
SOKOTO SOUTH LOCAL GOVERNMENT**

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Abstract

Diarrheal diseases account for 1 in 9 child death worldwide, making diarrhea the second leading cause of death among children under the age of 5. Also the prevalence of diarrheal disease in the developing countries of the world is estimated to be 13million episode of diarrhea with 3.2 million deaths occurring among children annually. This study aims to evaluate the cultural practice of mothers of under 5 year children regarding home management of diarrheal diseases in sokoto south local government. A descriptive cross sectional study was used; convenience sampling method applied and a sample size of 174 used. The instrument used for data collection was questionnaire The responses were collected and analyzed using SPSS version 24. The main fluids given by mothers at home include ORS and Maize gruel constituting 48.2% and 19.9% respectively. 26.2% gave salt sugar solution. The study recommended that educational program should be established to improve mothers` knowledge on how to prepare salt sugar solution properly. Similarly, it should also include health education on the dangers of herbal medicine and its limited role in treatment of diarrhea. The study concluded that majority of the mothers had good knowledge of diarrhea and there were reasonable high use of ORS in the management of diarrhea.

Key words: Home, Management Practices. Diarrhoea, Mothers, Knowledge: Level of awareness of mothers of under 5years children regarding diarrheal diseases.

INTRODUCTION

BACKGROUND OF THE STUDY

Children 0-5years is a vital group in the community and constitute about 13% of the population. Due to the still developing immunological system and poor sense of hygiene among the parents these children are prone to many infections and the commonest among them being diarrhea and acute respiratory tract infections (Fayaz, Aesha, Imtiaz, Thakur, Muzaffar & Samina, 2009).

Diarrheal diseases account for 1 in 9 child death worldwide, making diarrhea the second leading cause of death among children under the age of 5 for children with HIV, diarrhea is even more deadly: the death rate for these children is 11 times higher than the rate for children without HIV. despite this sobering statistics, strides made over the last 10years have shown that, in addition to rotavirus vaccination and breastfeeding, diarrhea prevention focus on safe water and improve hygiene and sanitation is not only possible, but cost effective. (Center for Disease control [CDC], 2013).

Also the prevalence of diarrhea disease in developing countries of the world is estimated to be 13,000million episode of diarrhea with 3.2million death occurring among children annually (WHO, Geneva). 80% of these deaths occur in children under 2years of age. 9.5% of all deaths (200,000) in infants and 23-30% in under five age group children due to diarrhea with a heavy economic burden and account for 15% of all pediatric beds. (Fayaz, et'al, 2009)

Researches were conducted in different part of the world like Iran (Haroun, 2013) establishing poor knowledge of women and South Africa (john, 2015) which found women to had been using ORT.

Although much progress has been made in reducing under-five (U5) mortality, the current rate of 74 per 1000 live births (which implies that 1 in every 14 children in Kenya do not get to celebrate their fifth birthday) is an indicator that a lot of work still needs to be done if the country is to meet the sustainable goal between 2015 and 2030. Whereas much attention has been given to illnesses such as malaria and programs such as immunization, diarrhea, which is easy and inexpensive to treat, continues to cut short the lives of dozens of Kenyan children every day.

International Journal of Nursing and Medical Science 2018; 7 (2), 782-792

It has been reported that managing diarrhea at home is quite common among mothers of under-five children especially in the rural areas, however, their level of knowledge on the use of ORT is poor (Ansari et al, 2010). Few studies carried out on home management of diarrhea in Nigeria have shown an unsatisfactory level of knowledge and poor methods of home management of childhood diarrhea, Therefore mothers of under-five children's poor knowledge in the management of diarrhea is a contributory factor to its morbidity and mortality. Despite universal popularity of oral rehydration solution (ORS) in preventing dehydration due to diarrhea, its use in practice is very low. Under-utilization is further complicated by incorrect preparation of ORS which is related to lack of mothers' prior experience. Despite reports from the above researches, there was no research conducted so far in sokoto south local government to determine the knowledge and perception of mothers regarding home management of diarrheal diseases, and this necessitate the study.

Research Questions

- 1- What are the practices of mothers of under-five year's children regarding home management of diarrhea?
- 2- What are beliefs of mothers of under five years children regarding home management of diarrhea?

Materials and method

Descriptive, cross sectional design was used to assess knowledge and cultural practices of mothers regarding home management of diarrheal diseases in under five years children in Sokoto south.

Sample Size And Sampling Procedure

One hundred and seventy four (174) samples was used. A simple random sampling was used to select one ward (Sarkin Zamfara B) from the local government area. One district was also chosen at random out of the sarkin Zamfara B ward. The respondents were selected using convenience sampling technique

International Journal of Nursing and Medical Science 2018; 7 (2), 782-792

Research Instrument:

The instrument for data collection was a structured questionnaire. It consist of four sections; section 'A' elicit responses on socio demographic characteristics, section 'B' elicit mothers knowledge regarding diarrheal diseases, section 'C' elicit mothers perception regarding diarrheal diseases, and section 'D' probe the practice of home management of diarrheal diseases among respondents.

Reliability Of The Research Instrument

Test re-test reliability was established by conducting a pilot study on similar respondent at wamako local government area.

Method of Data Collection

Data was collected through administration of questionnaires. The respondents were met at their various houses, and a research assistant who is part of the community assisted in the data collection, and a total of 174 questionnaires were administered to 174 mothers and 164 were retrieved.

Data Analysis

SPSS statistical package version 24 was used to analyze the responses and was presented in tables, mean and other graphs.

Ethical Consideration

An ethical approval was collected from the department of nursing Usman DanFodio University sokoto. Ethical approval was sought from the village head of Sokoto south and consent was received from mothers.

RESULTS

4.1 SOCIODEMOGRAPHIC CHARACTERISTICS

Table 4.1 SOCIODEMOGRAPHIC CHARACTERISTICS

AGE	FREQUENCY	PERCENTAGE
15-20	21	12.8
21-25	36	22.0
26-30	74	45.1
Above 30	33	20.1
Total	164	100.0
ETHNICITY		
Hausa	118	72.0
Igbo	6	3.7
Yoruba	12	7.3
Others	28	17.0
Total	164	100.0
LEVEL OF EDUCATION		
Primary	46	28.0
Secondary	40	24.4
Tertiary	10	6.1
Islamic	68	41.5
Total	164	100.0
OCCUPATION		
House wife	64	39.0
Self employed	72	43.9
Civil servants	28	17.1
Total	164	100.0

Table 4.2 PRACTICE OF HOME MANAGEMENT OF DIARRHEAL DISEASES.

S/N	ITEMS	Frequency	Percentage
22	Number of mothers that their child had diarrhea before	141	86
23	The time of the diarrheal episode		
a	Less than 6months	34	24
b	after 6 months	107	76
24	What led to the diarrhea?		
a	After introduction of food	43	30.5
b	after weaning	83	58.9
c	Others	15	10.6
25	Where did you seek for care?		
a	hospital/health centers	41	29.1
b	chemist	34	24.1
c	traditional healer	52	36.9
d	Others	14	9.9
26	when your child had diarrhea, what do you give him or her at home.		
a	Nothing	13	9.2
B	special food/drink	51	36.2
C	herbal medicine	48	34.1
D	buy antibiotics from chemist	16	11.3
E	Others	13	9.2
27	Mothers that increases feeding	76	53.9
28	Mothers that increases fluid intake	83	58.9
29	What type of fluid do you give your sick child at home?		
A	Water	5	3.5
B	salt sugar solution	37	26.2
C	ORS	68	48.2
D	Akamu	28	19.9
E	Others	3	2.1

International Journal of Nursing and Medical Science 2018; 7 (2), 782-792

The above table shows that majority of the mothers (86%) their children had diarrheal disease. Out of this, 24% experience it when the child is less than 6 months while the majority (76%) had it when the child is more than 6 month. 30.5% of diarrheal episode occur after introduction of food, 58.9% after weaning and 10.6% due to other causes. During the episode, 29.1% of the respondents seek care at hospitals/health care centers, 24.1% at chemist, while the majority (36.9%) at traditional healers, and 9.9% at other places. Majority of the respondents (36.2%) give special food/drink, 9.2% of the respondents do nothing to their child during the episode, 34.1% give herbal medicine, 11.3% administer antibiotic from chemist, and 9.2% give other remedies. Also majority of the respondents increases feeding (53.9%) and fluid intake (58.9%). 48.2% of the respondents which is the majority give ORS during the episodes, 26.2% give salt sugar solution, 19.9% give Akamu, 3.5% give only water, and 2.1% give other fluids.

Discussion of Findings

The age distribution of mothers shows that majority of the mothers (45.1%) were within the age range of 26-30years. Most of the respondent studied (72.0%) are Hausa's, the rest of the ethnic groups were Yoruba, Igbo and others. The ethnicity reflected a typical composition of Sokoto State where majority of the indigenes are hausa. Most of the mothers had Islamic knowledge, while others had one form of formal education or the other. Approximately half of the care givers were self-employed (43.9%), this is followed marginally by unemployed (39.0%) and very few were civil servants.

Of the 164 mothers, majority had good knowledge of ORS, while very few had poor knowledge of ORS. Also majority of the respondents had good knowledge on home preparation of ORS, while very few had poor knowledge on home preparation of ORS. This is in contrast with a study conducted in rural community in Nigeria (2010), on knowledge of ORS, child feeding and drug use practices which showed that many of the mothers lacked accurate knowledge about ORS and specific causes of diarrhea as they associated it with divergent causes. Almost all the respondent were aware of ORS/Salt Sugar Solution, and most of them agreed that ORS/Salt sugar solution is effective for the treatment of diarrhea. Of the 164 mothers studied, majority strongly agreed that lack of general hygiene is the main cause of childhood diarrheal diseases, while some are on the view that contaminated food ingestion and microorganism are the sole cause of

International Journal of Nursing and Medical Science 2018; 7 (2), 782-792

diarrhea in children. This is in contrast with a study done in a rural community in Kenya (2014), which shows that perceived causes of diarrhea were unclean water, bad eye, false teeth, and breast milk (Cynthia 2015). On dehydration, majority of the mothers studied strongly agree that diarrhea causes dehydration.

In this study, majority of the mothers seek care from chemist, traditional healers while some from hospital, and other places like religious leaders. Of the 164 mothers studied, more than half of the mothers gave ORS and herbal medicine. Also few of the mothers buy antibiotics from chemist, while very few gave nothing to their children when they had diarrhea. this is in line with a study conducted in Kenya and the findings shows that almost all the respondents (99.0%) were aware of oral rehydration solution/salt sugar solution (ORS/SSS): and 87.7% agreed that ORS/SSS is effective for the treatment of diarrhea, but only 40.9% 44.3% gave ORS/SSS, while 29.4% gave antibiotics/antidiarrheal drugs to their children who suffered diarrhea. Only 40.9% knew how to prepare ORS/SSS correctly, and the correct knowledge of ORS/SSS preparation was significantly associated with the source of information (Haroun, 2015). It is also contrary to a descriptive cross sectional study conducted among 200 caregivers of children under the age five years in Gorau village Goronyo local government area Sokoto state Nigeria in 2012. The study revealed that majority of the fluids given by the care givers at home to their children were ORS and maize gruel (Akamu) constituting 38.3and 20.9% of the total fluid given respectively (Usman, 2013).

5.2 Implications to nursing

The study findings indicate that the mothers who had adequate knowledge on diarrhea disease utilize health facilities more often and also give ORS to their children. Also those that did not have western education refer their children to traditional healers and religious places.

The major challenge here for nurses is discharging their duties as nurses in terms of health educating the mothers on how to manage diarrhea at home through giving of fluid that are familiar and acceptable to the child in adequate volume, such as rice water, yoghurt, and ORS agreed by the UNICEF. Nurses should ensure replacement of fluid and electrolyte losses, provision of good perineal care to prevent anal sores and irritation in the perineal area, promotion of rest to reduce peristalsis, encourage nutritious diet such as low fibred food, brat diet (banana, rice, apple), potassium rich food, and avoidance of

International Journal of Nursing and Medical Science 2018; 7 (2), 782-792

excessively hot or cold fluids, and also educate the mothers not to give anti-diarrheal drugs at onset of diarrhea as diarrhea is the body's protective mechanism to rid itself of bacteria and toxins.

Recommendations/Conclusion

Based on the findings from the study, the following recommendations were made:

- Awareness campaigns and health education on early recognition, and appropriate management of childhood diarrheal diseases and when to seek care outside home should be organized.
- The health care providers should make efforts at teaching mothers how to prepare salt sugar solution properly either in groups or individually such as door to door visits through community health care providers.
- Health education on the dangers of unprescribed antibiotics and their limited role in treatment of diarrhea.
- Health education by health care providers on the preventive aspect of childhood diarrheal diseases such as proper hand washing.

The study concluded that majority of the mothers had good knowledge of diarrhea and there were reasonable high use of ORS in the management of diarrhea. Knowledge on recognition of signs and symptoms of dehydration is inadequate.

REFERENCES

1. Abiola AO.A., Ndama A.L., Idris S.H., Jiya N.M., Ibrahim MTO:(2010). *Home management of child hood diarrhea among mothers in Sokoto Nigeria. Tropical journal of health sciences.* Available at www.ajol.info/index.php/tjhc/article/view/52801
2. Abusaeed K.,(2012); *Assessment of mothers knowledge on home management of childhood diarrhea in Nigerian setting: International journal of pharmaceutical Research and Bioscience; vol 1(4):168-184*

International Journal of Nursing and Medical Science 2018; 7 (2), 782-792

3. Ahiadike C.,(2014): *breast feeding, diarrhea and sanitation as component of infant and child health: a study of large scale survey from Ghana and Nigeria*. Journal of biosocial science; 32(1): 47-61
4. Ansari M., Izham.I., Ibrahim.M., Hassali.A.M., Shankar.R.P., & Koirala,M.S(2015). *Mothers beliefs and barriers about childhood diarrhea and its management in moriag District, Nepal*.BMC research notes. Available at www.biomedcentral.com/1756-0500/5/576
5. Center for Disease control and prevention [CDC], (2013). *Global diarrhea burden*. Html
6. Center for sustainable Development [CSD], 2015, *Oral rehydration therapy*. Accessed from www.Csd-1.org/oral-rehydration-techniques/.
7. Constipation in children. 2015, medindia accessed from www.medindia.net/education/family_medicine/constipation-management.htm
8. Cynthia B.,(2013)*Informal consultation on epidemiologic estimate for child health, child health and adolescent health development*. World health organization, WHO/CAH/GHD/August 2013
9. Fayaz A.,Aesha F., Imtiaz A., Thakur M., Muzaffar A., and Samina M., (2014) *International journal of health science: management of diarrhea in under five at home and health facilities in Kashmir*, 3 (2); p 171-175 doi pmc 3068810
10. George O.K., John O.I.,&Babatunji A.D., (2012): *Perception and management of diarrheal diseases by traditional healers in north-eastern Nigeria: journal health population and Nature*; vol 19(12): 91-99
11. Haroun. A.,.....Ibrahim Q(2010):*international journal of health sciences.A scientific publication by qassim university int j.health sci (qassim)*;3(2): 171-175
12. Jhon P., (2015), *South African journal of child health: child health* 9(2) accessed from www.sajch.org.za/Index.pip
13. *Management of diarrhea* . (2015), Medindia. Accessed from [www.medindia.net/education/diarrhea in children Management. Html](http://www.medindia.net/education/diarrhea_in_children_Management.Html)

International Journal of Nursing and Medical Science 2018; 7 (2), 782-792

14. mukhtar A., Plain S., Mohammed I., Ibrhim M (2015): *The role of mothers in the management of childhood diarrhea in Nepal; Australasian medical journal: 1(14): 235-238*
15. National population commission [NPC],(2015), *final 2006 census report*, accessed 8th august,2015, <http://enim.wikipedia.org/wiki/kwa>
16. Nelson A. E., (2014):*Surveillance of childhood diarrheal Diseases in Honk- Kong using standardized hospital discharge data: Cambridge journals online, Cambridge university press; 132: 619-626*
17. Payush G.,(2016) *Essential of paediatric Nursing second edition pp. 309-311*
18. Tobin E. A.,(2015): *Knowledge of ORS, child feeding and drug use practices in south-south Nigeria; Nigerian journal of clinical practice:14(2): 237-241 DOI 10.4103/1119-3077.84028*
19. Umesh D.P., Joseph S.B., Roger I.G., (2013): *the Global burden of diarrheal disease in children: Bulletin of the World Health Organization; 81:4*
20. Usman A. E., (2009): *Research project on Home management of diarrheal diseases in under five years children in shekar barde, kumbotso local government Area, Kano State*
21. Sabin L. (2007) *an exact sampling formula for the wright-fisher model and a solution to a conjecture about the finite Island Model pmc journal.177(2) 1249-1254*
22. World health organization (WHO),(2012) *Management of diarrhea in under five.* accessed from www.who.int/medicenter/factsheet/fs378/en/.
23. World Health Organization (WHO) (2013).*Management of a child with a serious infection. guidelines for first-referral level in developing countries.*

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