

ACUTE WATERY DIARRHOEA IN UNDER-FIVE CHILDREN: PERCEPTION OF THE CAUSES, HEALTH SEEKING BEHAVIOURS AND BARRIERS OF MOTHERS TO CARE IN A PRIMARY HEALTH CARE CENTRE IN MAIDUGURI, NIGERIA.

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ABSTRACT

Background: Acute watery diarrhoea (AWD) is usually associated with complications, such as dehydration, electrolyte imbalance and acute renal failure. The WHO definition of home case management for diarrhoea includes among others; the recognition of danger signs of diarrhoea that requires immediate care and seeking help from an appropriate health facility.

Objectives: To examine mothers' or care givers' perception of the causes of AWD, indications and barriers to health seeking behaviour during AWD in under-5(U-5) children in Maiduguri.

Methods: The study was carried out in October 2006 at Yerwa Primary Health Care Centre (PHCC) in Maiduguri, Nigeria. Quantitative method by the use of face-to face interview was employed.

Results: Two hundred mothers/caregivers of U-5 children who presented to the Yerwa PHCC with complaints of AWD in their children or wards were interviewed. Poor hygiene and contaminated food/water were identified as the main cause of AWD. Eighty-five (42.5%) mothers/caregivers reported patronising herbalist side by side with orthodox medical attention for AWD. The indications for seeking health in 90% of the mothers/caregivers were child being weak and non-response to ORS, while 37.5% declined to give reason. Financial constraints and lack of transportation contributed to the barriers of health seeking. Majority of the women had good knowledge of the causes of childhood AWD, but none, knew the course of AWD.

Conclusion: Majority of the mothers had barriers to health seeking despite good knowledge of the causes of AWD and indications for seeking health seeking. Appropriate and proper health education in addition to the adoption and practice of the principles of Primary Health Care and full implementation of National Health Insurance Scheme is therefore recommended.

Key Words: *Diarrhoea, U-5 Children, Perception, Mothers, Maiduguri.*

INTRODUCTION

Diarrhoea is defined as passage of three or more loose watery stools in a 24-hour period. It is also practical to define diarrhoea as an increase in stool frequency or fluidity that is considered abnormal by the caregiver. Acute watery diarrhoea (AWD) refers to diarrhoea that begins acutely or suddenly and lasts for less than 14 days. Most episodes last less than 7 days and involve the passage of frequent loose or watery stools without visible blood.¹

Acute watery diarrhoea (AWD) is commonly associated with complications, such as dehydration, electrolyte imbalance, acute renal failure among others compared to other types of diarrhoea like dysentery and chronic diarrhoea. According to UNICEF/WHO estimate, about 1.3 billion episodes of diarrhoea and 4 million deaths occur each year in under-five (U-5) children world wide.¹ Diarrhoea is one of the leading causes of child death especially in developing countries.^{1,2} High rates of

diarrhoeal associated deaths may be as a result of scarcity of portable water, poor sanitation, and improper utilization of available resources.^{3,4}

Although, Oral rehydration solution (ORS) is known to reduce both the morbidity and mortality associated with AWD, studies from Nigeria and other parts of the world showed lack of proper knowledge about ORS and its usage.^{5,6,7} A major contributor to this may be lack of information or knowledge about diarrhoea, ignorance about appropriate place to seek for medical help and thus lack of correct information on the topic. The WHO definition of home case management for diarrhoea, includes among others; the recognition of danger signs of diarrhoea that requires immediate care and seeking of help from an appropriate health facility.⁸

There is paucity of literature about mothers' health seeking behaviours and Barriers to that in Maiduguri. This study therefore examined mothers' or care givers'

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perception of the causes of AWD and to determine the indications and barriers to health seeking of the mothers during AWD in U-5 children in Maiduguri. The finding is thus expected to add to and update the already existing knowledge on management of diarrhoeal disease in children in Maiduguri with a view to reducing the morbidity and mortality associated with AWD in U-5 children.

MATERIALS AND METHODS

The study was cross-sectional and descriptive. It was carried out in October 2006 at Yerwa Primary Health Care Centre (PHCC) in Maiduguri, Nigeria. Yerwa PHCC is located at the centre of Maiduguri Metropolis, and is one of the oldest health care facilities providing maternal and child health services in Maiduguri.

Quantitative method by the use of face-to face interview with a structured questionnaire was employed. The interview was conducted by one of the authors, and a nurse at the Yerwa PHCC, who was trained and whose proficiency in conducting the interview was verified by a role-play, in Kanuri or Hausa language. The sampling method for the interview was every third mother or caregiver of U-5 child presenting with AWD in the clinic, after obtaining an informed verbal consent. Two hundred mothers/care-givers were of U-5 children with AWD were interviewed. Mothers whose children did not have AWD at the time of the study were not included.

Data obtained was entered into a computer. Analysis was done using statistical package SPSS version 13.0. Results are presented as means and in tables as numbers and percentages.

RESULTS

Two hundred mothers/caregivers of U-5 children who presented to the Yerwa PHCC with complaints of AWD in their children or ward were interviewed. The mean \pm SD age of the mothers/caregivers was 27.3 ± 4.2 years.

The perceived causes of AWD included poor

Table 1: Perceived causes of AWD among mothers of U-5 children with AWD

Perceived causes	Number of mothers	Percentage
Poor hygiene	85	42.5
Contaminated food/water	50	25
Infection	30	15
Do not know	15	7.5
Maternal ignorance	10	5
Artificial feed	5	2.5
Bottle feeding	5	2.5
God's will	0	0
Over breast feeding	0	0
Total	200	100

Table 2: Indications, barriers and patterns of barrier to health seeking of mothers of U-5 children with AWD.

	Number	Percentage
Indications for seeking med help		
Non response to ORS	95	47.5
Weakness/deterioration	85	42.5
Diarrhoea lasting \geq 1 week	15	7.5
No response to medicine	5	2.5
Total	200	100
Pattern of Barriers		
Always	10	5.0
Sometimes	105	52.5
Rarely	20	10.0
Never	65	32.5
Total	200	100
Reasons for Barrier		
Declined to give reason	75	37.5
No barrier	65	32.5
Financial constraints	35	17.5
Lack of transportation	15	7.5
Communication gap	10	5.0
Total	200	100

hygiene (42.5%) and contaminated food/water (25%) among others as shown in table 1. None of the mothers/caregivers knew the course (natural history) of AWD. The maternal health seeing behaviour of AWD in U-5 children revealed that, all, but 10 mothers/caregivers claim to seek medical help, first from near by health facility. The other 10 mothers/caregivers first sought for help from chemist/patent medicine stores. However, eighty-five (42.5%) mothers/caregivers reported patronising herbalist side by side with medical attention for AWD especially if the diarrhoea persisted, while the remaining 115 (57.5%) mothers/caregivers denied patronising herbalists no matter how long the diarrhoea lasted. Table 2 shows the indications for seeking medical help, barriers and patterns of barriers to seeking medical help of the mothers/caregivers for diarrhoeal disease in their children. The majority of the mothers/caregivers indications for seeking help are child being weak and non-response to ORS (90%).

DISCUSSIONS

In this study, majority of the mothers 165 (82.5%) correctly indicated the possible causes of childhood AWD, such as poor hygiene, contaminated food or water and infection. However, causes such as "over breast feeding", "God's will", mentioned in other studies were not mentioned in this study.^{9,10} There is therefore a good understanding by the mothers/caregivers of the possible causes of AWD in children. This may be due to possible increased awareness and improved health education of the mothers/caregivers as regards diarrhoeal disease. The fact that none of the mothers/caregivers knew the correct course of AWD suggests that gaps still exist in the knowledge of mothers about AWD. Health care providers probably never

communicated this information to them; otherwise, at least some would have known the course.

Indications for seeking medical attention such as non response to ORS therapy and child being weak or deterioration in the clinical state of the child were the main indications mentioned and that means; the mothers had good knowledge of when to seek medical attention during AWD. None of the respondent mentioned dehydration or fluid loss as an indication for seeking medical attention, although child being weak or deterioration in the clinical state of the child could mean dehydration. This further buttress the point raised earlier, that, rather than educating the public and health staff in the process of dehydration and practice of rehydration, the WHO programme on control of diarrhoeal disease (CDD) has only emphasized the use and popularization of ORS.^{10,11}

Reasons for barrier to seeking medical attention such as financial constraints, lack of transportation and communication gap accounted for 14.5%, 7.5% and 5% respectively. These social disadvantages are not only associated with barriers to health seeking, but also known to significantly increase morbidity and duration of hospital stay.¹² These barriers may be reduced if the principles of Primary Health Care (PHC) are strengthened. This includes the provision of health care facility within 30 minutes walk

or in every 5-kilometre distance. The National Health Insurance Scheme (NHIS) may also reduce some of these barriers, even though it is yet to cover the majority of Nigerians as at now.

Seventy-five mothers/caregivers (37.5%) despite having barriers to health seeking did not disclose reasons for their barrier. This leaves a big gap as to what the barrier could be in those cases. This gap may be minimised if the study were Focus Group Discussion (FGD), where people of like minds, sex and age group would be involved in thematic discussions.

It is therefore recommended that proper health education be given to all mothers/caregivers and women of childbearing potential at schools, antenatal care, mosques and churches about AWD and other health condition. The health care providers also need to be trained and re-trained especially those at the PHCC level, for them to give correct message to the mothers. This, in addition to the adoption and practice of the principles of PHC and full implementation of NHIS will go a long way in reducing some of these barriers and thus diarrhoeal associated morbidity and mortality. Improving socio-economic status of the people and women empowerment are vital in the reduction of diarrhoea associated U-5 morbidity and mortality.

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