

CARE SEEKING PRACTICES ON DIARRHOEA IN A RURAL COMMUNITY IN NIGERIA

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Although diarrhoea is a preventable disease, it still remains a major cause of morbidity and mortality among Nigeria children. A Nigerian child under age of five has an average of 4.3 diarrhoea episodes each year. This translates to 70 million episodes of diarrhoea in children under five, based on the 1991 census. With case fatality rate of 0.4% (1), Nigeria records 300,000 diarrhoea related deaths each year in children under five years of age. This community survey was conducted in the south west of Irepodun Local Government Area of Kwara state, Nigeria, to enable us determine care-seeking and diarrhoea management practices in a typical rural setting. Four thousand and sixty one (4,061) children under five year of age from nine villages were studied using the standard WHO questionnaire on diarrhoea case management and morbidity. The survey focused mainly on children who had diarrhoea in the 24-hour period prior to the study. Of the 4061 children who were 5 years or below, 876 (21.6%) had diarrhoea two weeks prior to the study. There were 207 children (5.1%) who had diarrhoea within 24 hours prior to the study. The rate of use of salt sugar solution (SSS) was 16%, while that of oral rehydration salt (ORS) was 6%. Seventy three percent of mothers interviewed did nothing for the treatment of diarrhoea, nor understood what to do. 16% used various drugs. 69% of the health facilities in these rural districts used antibiotics as their first line anti-diarrhoea treatment. Health education on Oral rehydration therapy (ORT) needs to be intensified at the grassroot level.

Key words: Diarrhoea, Children, Care, Rural

INTRODUCTION

The word "diarrhoea" originates from the Greek terms *dia*

(through) and *rhein* (to flow) (2). Diarrhoea is one of the leading causes of death among children in

the resource-poor countries including Nigeria. Nigeria records about 300,000 diarrhoea related deaths annually among children aged five years and below. Its effect on the social and economic life of the family is immense. Most of the diarrhoea deaths result from dehydration, from excessive loss of water, salt and electrolytes from the body. It has been observed that, malnourished and low birth weight babies (LBW) are more vulnerable to diarrhoea diseases than infants weighing 2500 grams or more at birth. Although malnourished and well-nourished children have equal numbers of diarrhoeal episodes, these episodes are more severe or prolonged in the malnourished children (3). Similarly, children with LBW or malnutrition are also at higher risk of becoming dehydrated during a diarrhoea episode than children with normal birth weight. One possible explanation for this increase severity is that infections in the proportionally greater intestinal surface area of infants and children result in larger stool losses per kilogram of body weight (4).

Diarrhoea is a clinical syndrome of diverse etiology associated

with frequent passage of loose watery stools, vomiting and fever (5). It could be a symptom of infection by many different bacterial, viral and parasitic agents. Essentially, diarrhoea occurs when one or more of the following are present: abnormal increase in daily stool weight or increase in stool fluidity or increase in stool frequency. Diarrhoea is often accompanied by urgency, perianal discomfort, incontinence or a combination of all three (1). Diarrhoea can also occur in association with other infectious diseases such as malaria and measles. Approximately 70-80% of the vast number of sporadic diarrhoea episodes in people reporting at health centre in resource-poor countries can be diagnosed by aetiology. However, very few laboratories can identify all the newly described pathogens.

From a practical stand point, diarrhoeal diseases can be divided into six clinical presentations: simple diarrhoea, managed by oral dehydration with solution containing water, glucose and electrolytes, with specific aetiological agent unimportant in management; bloody diarrhoea or dysentery caused by organisms such as *Shigella*, *Escher-*

ichia coli 0157:H7 and certain other organisms; persistent diarrhoea that last at least 14 days; severe acute diarrhoea as seen in cholera; minimal diarrhoea associated with vomiting, typical of some viral gastroenteritis and illness from the toxin such as *Staphylococcus aureus*, *Bacillus cereus* or *Clostridium perfringens* and hemorrhagic colitis with watery diarrhoea containing gross blood but with no fever or faecal leukocytes. Multiple episodes of diarrhoea can weaken children's resistance and increase susceptibility to other illnesses leading to death. One reason for continued mortality due to diarrhoea is lack of proper information and knowledge regarding the disease aetiology. Lack of proper information leads to false beliefs and myths and by extension faulty care-seeking practices. This study focused on simple diarrhoea managed by ORT and the care-seeking practices of mothers of children with diarrhoea in these communities.

METHODOLOGY

The survey was done using the WHO standard questionnaire

on diarrhoea case management and morbidity (WHO/CDD: SER 86.2 Rev.1). The study involved 9 rural communities in the South-West of Irepodun Local Government Area of Kwara State of Nigeria. Four thousand and sixty-one (4,061) children under five years of age were surveyed in nine villages in a rural community in Nigeria. Information was collected by interviewing mothers of these children who had diarrhoea 2 weeks and 24 hours prior to the survey. Children under five years were identified using a cluster sampling method. Households were chosen randomly using a chance selection. The interviewers went from house to house and identified the children who had diarrhoea, two weeks and 24 hours before the date of interview. Standard questions asked include; the amount of food given during episodes of diarrhoea, the signs and symptoms that would prompt them to seek help from a health worker, and the use of drugs in treatment before seeking help. The questions were asked in the local languages. The interviewers also watched mothers prepare ORS and home fluids.

RESULTS

Demographic figures showed 4061 children under age of five years in the 9 villages surveyed. Of this, 876 (21.6%) reportedly had diarrhoea two weeks before the study. There were 207 children who had diarrhoea in the 24 hours prior to the study, giving a point prevalence of 5.1%. The rate of use of SSS was 16% while ORS was 6.7%. The incidence rate of diarrhoea per child was 4.3%. A large proportion (73%) of mothers interviewed did nothing for the treatment of diarrhoea disease because they conceived that it was a normal growth process that must take place, and needed no type of treatment. 16% sought non-SSS treatment by using drugs such as Kaolin, Morphine and Nalidixic acid purchased from local pharmacy shops. Eight hundred and fifty-three (21%) of the mothers, in addition, gave rice-based drinks and or corn-based drinks to their children. Only 1,746 (43%) of the mothers continued to feed sick children normally while 36% increased the amount of fluid during the episode.

Among the 1,879 mothers who were still breast-feeding before the diarrhoeal episodes, 1,538

(82%) continued to breast feed their babies while 341 (18%) stopped breast-feeding. Further findings showed 69% of the health facilities in the surveyed communities offered antibiotics as first line anti diarrhoeal treatment. 18 (2%) of the 876 children who had diarrhoea two weeks before the study died.

DISCUSSIONS

As a matter of fact, the use of ORT should be started early at the onset of the disease. In the acute stage, the patient is encouraged to drink freely and to take bland semi-solid and oral rehydration therapy (ORT) should be started early (6).

Mortality from diarrhoea in infants and children could be greatly reduced if ORT is correctly used and often for enough period. The incidence rate of 4.3% reported in this study compares favourably with findings elsewhere in the country (1), but the 2% fatality within two weeks in the nine villages studied is five times higher than the national average of 0.4%. That 73% of mothers did nothing to control or prevent diarrhoea in their children indicates a high level

of unawareness and call for intensive diarrhoea education and ORT use within the communities.

Most cases of acute diarrhoea, if handled properly and early enough at home will not even require treatment with ORS (7). Home management should be based on giving extra amount of safe fluids together with continued feeding with the child's normal diet. That mother stopped feeding their children with diarrhoea on the premise that "if they eat nothing they stool nothing" shows another mythical misconception that needs to be urgently corrected. However, chronic diarrhoea in young children poses special management problems because large fluid and electrolytes losses are tolerated poorly (1).

The choice of home fluid depends on local circumstances. In some of the communities studied, SSS has been used successfully, but in other, there have been problems with dangerous and ineffective solution caused by incorrect mixing. In some of the communities, the use of cereal-salt solution has been advantageous. Those made from rice and or corns have been comparatively cheap, handy,

and culturally acceptable. They were also more likely to be given in the illness. However, the finding that some mothers merely diluted the child's usual foods (pap) to make fluids is wrong. Homemade cereal based ORT solution should not be confused with food. Furthermore, home-made food-salt solution are likely to promote sodium absorption more effectively than sugar-salt solution because they contain more of the carrier molecules (glucose and amino acids derived from starch and protein) necessary for water and salt absorption in the gut. This means that food-salt solution may decrease stool out-put and reduce loss of salt and water.

About 60% of the mothers who reportedly gave SSS were able to prepare it correctly. The commonest errors in preparation were those of over concentration. A lot of drugs have been inappropriately used in treating diarrhoea diseases. Thus, a thorough inventory of medication is essential to the accurate diagnosis of induced diarrhoea. Cardiotonic agents, such as digitalis, and cardioregulatory drugs, such as quinidine, are particular offenders (8). The use of in-

jections and antibiotics in the treatment of diarrhoea was common in these communities. Sometimes, as much as four different drugs had been used, the commonest being kaolin, ampicillin, nalidixic acid and chloramphenicol. World Health Organization has continued to emphasize the dangers of the unnecessary or careless use of drugs in the treatment of acute diarrhoea in children. Compared to the ORS, these drugs are expensive, dangerous and useless (9). Poor families spend more money they cannot afford to do harm rather than good to their children. Considering the frequency of presentation, it has been noted that acute transient diarrhoea disease, apparently of infectious origin, is an extremely commonly encountered entity in both the infants and the adults (10).

RECOMMENDATION

Health education regarding diarrhoea diseases and the use of ORT need to be intensified to create lasting awareness among mothers. Emphasis should be on the importance of cheap simple ORT as the first remedy (and often the only remedy required) for acute diar-

rhoea. The crucial information must become common thinking at all levels of all societies and be backed up by all health providers, including local drug peddlers and herbalists.

Above all, further research is necessary in the areas of the significance thinking and thus about diarrhoea. The hygiene component of diarrhoea disease, control and prevention should also be stressed among the communities and society at large. This is important because people are likely to have fewer diarrhoea episodes if they have access to clean drinking water and good sanitation facilities. If however, hygiene behaviour including hand washing is poor, the health benefits resulting from provision of improved sanitation and water supplies will be limited. Clean drinking water and better sanitation typically reduce diarrhoea incidence by only 25%(11).

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