

Study on Use of Oral Rehydration Salt (ORS) during Diarrhoea among the People of Two Unions of Jamalpur District

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Abstract

A total of 210 diarrhoeal patients were interviewed in this study conducted in two unions of Dewangonj Thana, Jamalpur district during the period from 2nd October, 1997 to 10th May 1998. Among them 66 (31.4%) had diarrhoeal attacks more than five times in previous one year and 53 (25.2%) had diarrhoeal attacks more than four times. Out of 210 diarrhoeal patients 190 (90.5%) used oral rehydration saline (ORS). Amongst them 88.1% had knowledge about preparation of ORS at home. About 81% patients had acute watery diarrhoea.

Key Words : Diarrhoea, ORS.

Introduction

Diarrhoeal diseases continue to be one of the leading causes of illness and death among children in developing world today, where an estimated 1.3 thousand million episodes and 4 million deaths occur each year in under five children¹. Where episodes are frequent, young children may spend more than 15% of their days with diarrhoea². About 80% death due to diarrhoea occurs in first two years of life³. According to WHO report there were about 460 million episodes of diarrhoea in about 470 million children aged less than 5 years in Africa, Asia, and Latin America⁴.

In Bangladesh, diarrhoeal diseases are a common health problem. Inadequacy of safe drinking water supply and insanitation predisposes to infection, infection to malnutrition and malnutrition to infection, these factors act as a vicious circle⁵. In Bangladesh, it is said that diarrhoeal diseases account for 26% of all under five death⁶.

Since 1949 scientists recommended a solution of salts and glucose in water as an orally administered treatment for diarrhoea⁷. In 1953, ORS was successfully used to treat cholera in an epidemic in Calcutta, India⁸; but it was not until 1964 that some more interest was shown. Since 1968, the Cholera Research Laboratory (CRL) which subsequently became the International Centre for Diarrhoeal Diseases Research, Bangladesh (ICDDR, B) has carried out many trials as well as field research to test different formulae for ORS⁹. These trials have improved ORS with emphasis on its practical uses and benefits as an oral treatment. This is so simple and easy that all field workers can manage diarrhoea easily if adequately trained. Unfortunately this has not achieved much success in our country despite relentless efforts from all quarters.

This study was undertaken to determine the status of diarrhoeal diseases in last one year in the study area and use of ORS during the attacks. Our specific objectives were to find out total number of diarrhoeal patient within last one year, rate of correct use of ORS during attacks, knowledge of ORS preparation and to find out age relation, socio-economic relationship with diarrhoea, etc.

Materials and Methods

It was a descriptive and cross sectional type of study conducted on the people of Dewangonj and Chukaibari Union of Dewangonj Thana under Jamalpur District from 2nd October, 1997 to 10th may, 1998. A questionnaire (Interviewer administer type) was developed by the researchers for this study according to the objectives of study. The data was collected from diarrhoeal patients of all ages available in the study area by the interviewers going from door to door. In case of under five children data was collected by interviewing parents or caretaker. After completion of data collection, all the data were analyzed manually by using simple statistics.

Results

Table-1 shows the sex distribution of the patients. Out of two hundred and ten, 74 patients (35.2%) were male and 136 patients (64.8%) were female.

Table 1. Distribution of patients by their sex

Sex	Number of Patients	Percentages
Male	74	35.2%
Female	136	64.8%
Total	210	100.0%

Regarding age distribution, number of patients below two years of age were 46 (21.9%) and above two years of age were 164 (78.1%) (Table -2).

Table 2. Distribution of patients by their age

Age (In years)	Number of patients	Percentages
0-2	46	21.9%
>2	164	78.1%
Total	210	100.0%

One hundred and seventy one (81.4%) patients suffered from acute watery diarrhoea, 25 (11.9%) patients from persistent diarrhoea and 14 (6.7%) from bloody diarrhoea (Table -3.)

Table 3. Distribution of patients according to their type of diarrhoea

Type of diarrhoea	Number of Patients	Percentages
Acute Watery	171	81.4%
Persistent diarrhoea	25	11.9%
Bloody diarrhoea	14	6.7%
Total	210	100.0%

Table-4 shows us age rate of ORS 190 (90.5%) patients had ORS and 20 (9.5%) patients did not.

Table 4. Distribution of the patients according to use of ORS

ORS use	Number of patients	Percentages
Yes	190	90.5%
No	20	9.5%
Total	210	100.0%

Among the ORS users 185 (88.1%) parents had knowledge about home made ORS and 25 (11.9%) parents did not have knowledge about home made ORS (Table-5).

Table 5. Number of attendants having knowledge about home made ORS

Knowledge about home made ORS	Number of patients	Percentages
Yes	185	88.1%
No	25	11.9%
Total	210	100.0%

Discussion

The current ORS use rate according to National Control for Diarrhoeal Disease (CDD) programme is 61%⁵. The target is to achieve 80%. In this study, ORS use rate is much higher (90.5%) when it is compared with Afghanistan study and Brazilian study where only 39.8% and 24.3% received oral rehydration respectively ^{7,10}.

Another study, in Bali, Indonesia, home treatment of acute watery diarrhoea revealed that 68% of the mothers reported giving ORS to their children with diarrhoea ¹¹. This apparently high rate of use of ORS can be better explained by activities of various Government and Non –government organizations in the study area and mass media also played a very important role.

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