

Diarrhea Management in Some Jhuggi Clusters of Delhi

D.K. Taneja
Panna Lal
C.S. Aggarwal
A. Bansal
V. Gogia

Oral rehydration therapy (ORT) is the basis of the Diarrheal Diseases Control Programme in India. It aims at reduction in 70% diarrhea deaths among the under-fives(1). It is felt that the continuing high mortality due to diarrhea is to a large extent because of low ORT use, lack of knowledge for correct preparation of oral rehydration solution (ORS), traditional misbeliefs and practices among mothers(2). Antimicrobial agents have only a limited role and anti-diarrheals have no role in the treatment of acute diarrhea(3), yet due to deficient clinical training of doctors and expectation of mothers there is tendency to lay stress on drugs than oral rehydration(4,5).

The present study was undertaken to obtain information on the action taken at home and health facility, in case of acute diarrhea and assesses the knowledge of the households in preparation of ORS and sugar salt solution

From the Department of Preventive and Social Medicine, Maulana Azad Medical College, New Delhi 110 002.

Reprint requests: Dr. D.K. Taneja, Associate Professor, Department of Preventive and Social Medicine, Maulana Azad Medical College, New Delhi 110 002.

Received for publication: May 9, 1994;

Accepted: April 17, 1995

Subjects and Methods

The study was conducted in three large J.J. clusters, viz., Sanjay Amar Colony, Hathi Park, and Jai Prakash Colony situated in the vicinity of Maulana Azad Medical College, New Delhi. A total of 6285 persons residing in 1090 households were studied. A responsible person, mostly a housewife, present in the household at the time of visit, was interviewed by the interns with the help of pre-structured and pre-tested questionnaire. Enquiry was made on occurrence of diarrhea in the household in previous two weeks. In households where a case of diarrhea had occurred, detailed information was obtained regarding action taken by the household and nature of treatment given by private/government health agencies. Respondents were also asked to show the preparation of sugar salt solution and ORS using household measures.

Results

Amongst 6285 persons surveyed, 183 (2.9%) had diarrhea in the previous two weeks. Majority were under-fives (68.3%). Blood in the stool was associated in 24 (13.1%) cases. *Table I* shows the first action taken by the households when diarrhea occurred. One-fourth received ORT as ORS solution (3.3%), sugar salt solution (10.4%), dal water (5.5%) or shikanji (5.5%). There was no significant difference in management between under and over-fives ($p > 0.05$).

The correct preparation of sugar salt solution by using finger pinch, scoop or spoon and glasses was known to 36.6% households. However, only 11.5% households could measure correctly the water required to prepare one litre of ORS. The first action was often delayed up to the second (13.1%) or third day (18.0%).

During the course of diarrhea, as first action or subsequently 102 (55.7%) cases were taken to private practitioners and 13 (7.1%) to a government health facility. The pattern of treatment provided by them is shown in *Table II*. All cases of dehydration were given ORT or intravenous fluids. However, to prevent dehydration, home available fluids (HAF) e.g., *dal* water, shikanji, lassi or sugar salt solution were advised by government health facilities in 20.0% and private practitioners in 15.7% cases only.

Discussion

The continued poor use of ORT(2,6) calls for a fresh look at its implementation. The preferences for the private practitioners even though government health facilities were nearby, in this and other studies(6) emphasize the need for their involvement in the programme. Use of ORT to prevent dehydration needs more emphasis as this

was often not advised. The excessive use of drugs including antimicrobials and anti diarrheals by private practitioners(81.4%) and government health facilities (61.5%), even though antimicrobials were indicated only in the 13.1% cases of dysentery, is alarming. The misuse of drugs leads to adverse reactions, resistant organisms, and increase in the cost of treatment. It also delays the initiation of appropriate treatment and complicates the condition of the patients.

Our results emphasize the need for frequent re-orientation training of private practitioners and in-service doctors on appropriate case management and rational use of drugs in acute diarrhea. The families also need to be informed and demonstrated the correct preparation and use of ORT for prevention and treatment of diarrhea and restriction on the use of drugs.

TABLE-I First action taken by Households in Diarrhea

Action taken *	≤5 Years (n=125)	> 5 Years (n=58)	Total (n=183)
Home available fluids/ ORS	33 (26.4)	12 (20.6)	45 (24.6)
Stopped food/ fluids	10 (8.0)	4 (6.8)	14 (7.6)
Household remedies	13 (10.4)	11 (18.9)	24 (13.1)
Visited private doctor	46 (36.8)	29 (50.0)	75 (40.9)
Visited government health facility	9 (7.2)	0 (0.0)	9 (4.9)

In 14 (11.2%) under-fives and 2 (3.4%) over-fives no action was taken when diarrhea occurred. Figures in parenthesis indicate percentages.

TABLE-II-Treatment Received From Health Agencies

Treatment *	Private practitioner (n=102)	Govt. health facility (n=13)	Total (n=115)
Drug	83 (81.4)	8 (61.5)	91 (79.1)
ORS/ Home available fluids	28 (27.4)	8 (61.5)	36 (31.3)
Intravenous fluids	1 (0.9)	1 (7.7)	2 (1.7)

*Responses not mutually exclusive

Figures in parenthesis indicate percentages

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