



## First Action Management of Acute Diarrhoea in Children by Rural Mothers

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### Abstract

Out of 2120 children with acute diarrhoea surveyed, majority (80%) were less than 5 years of age with males having definite predominance (60%). Home available fluids and ORS were applied as first action by 15.9% mothers, while in 7.8% children feeding/fluids were stopped. Household remedies were applied in 8.6% cases. Private practitioners and government health agencies were consulted by 47.3% and 20.4% mothers respectively. To conclude, ORS/home available fluids are inadequately used by rural mothers and they give preference to private practitioners as compared to government health agencies.

### Key Words

Diarrhoea, Oral rehydration solution.

### Introduction

Diarrhoeal diseases are one of the leading causes of morbidity and mortality in children worldwide (1). Oral rehydration therapy (ORT) is the basis of the Diarrhoeal Diseases Control Programme in India. It aims at reduction in 70% diarrhoea deaths among the under fives (2). It is felt that the continuing high mortality due to diarrhoea 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 especially those living in rural areas (3). Antimicrobial agents have only a limited role and anti-diarrhoeals have no role in the treatment of acute diarrhoea (4). Due to deficient clinical training of doctors and expectation of mothers there is tendency to lay stress on drugs than oral rehydration (5). The present study was undertaken to obtain information on the action taken in management of acute diarrhoea by rural mothers.

### Material and Methods

The study was conducted at Community Health Centre, Hiranagar in Kathua district of J&K State from March 1999 to September 1999. A total of 2120 children were surveyed. Mothers were interviewed with the help of pre-structured questionnaire. Enquiry was made on occurrence of episode of diarrhoea in previous two weeks. Detailed information was obtained regarding action taken by mother and nature of treatment given by private/government health agencies. Mothers were also asked to show the preparation and administration of ORS.

### Results

Amongst 2120 children surveyed, majority were under-fives (80%), with males having definite predominance (60%). Blood in the stool was associated in 154 (7.3%) cases. **Table 1** shows the first action taken by mothers when diarrhoea occurred. Three hundred and

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thirty-four (15.9%) mothers adopted home available fluids (HAF) and ORS as first action. Readymade ORS, sugar salt solution, Lassi or Shikkanji were used by mothers. Feeds including breast-feeds and fluids were stopped by 164 (7.8%) mothers. Household remedies such as rice gruel, application of crushed leaves over anterior fontanelle, ajwain, jeera, sonf, onion juice and certain superstitious beliefs like applying threads on upperarm and burning of chillies were adopted by 179 (8.6%) mothers. The private practitioners were consulted by 991 (47.3%) mothers while 426 (20.4%) children were taken to government health agencies.

The correct preparation of sugar salt solution by using finger pinch, scoop or spoon were known to 44 (5.6%) mothers while 106 (13.2%) mothers only knew correct preparation and administration of readymade ORS.

Six hundred and seventy-seven mothers who had adopted initial three actions subsequently took their children to health agencies on second day (22.4% mothers) or third day (47.6% mothers). The pattern of treatment provided by health agencies is shown in **Table II**.

**Table I**

**First action taken by mothers in acute diarrhoea in children with different age groups.**

Action taken*	< 1 yr. n=1020	1-5 yr. n=660	> 5 yr. n=424	Total n=2094
Home available fluids/ORS	135(13.2)	90 (13.9)	109(25.7)	334(15.9)
Stopped food/fluids	89 (8.7)	44 (6.8)	31 (7.3)	164 (7.8)
Household remedies	68 (6.6)	52 (8.0)	59 (13.7)	179 (8.6)
Visited Govt. health agency	223(21.8)	114(17.8)	89(21.0)	426(20.4)
Visited private practitioner	505(49.8)	350(52.3)	136(32.3)	991(47.3)

\* In 26 (1.2%) no action was taken when diarrhoea occurred. Figures in parenthesis indicate percentages.

**Table II**

**Treatment given by health agencies**

Treatment	Private practitioner n = 991	Govt. health agency n = 426	Total n = 1417
Drugs	912 (92)	260 (61)	1172 (82.7)
ORS/Home available fluids	267 (27)	302 (71)	569 (40.1)
Intravenous fluids	9 (0.9)	73 (17.2)	82 (5.7)

Figures in parenthesis indicate percentages.

**Discussion**

The continued poor use of ORT calls for a fresh look at its implementation (6). The preferences for the private practitioners even though government health facilities were nearby, in this and other studies emphasize the need for their involvement in the programme (6-8).

To prevent dehydration, use of ORT needs more emphasis as this was often not advised. The excessive use of drugs including antimicrobials and antidiarrhoeals by private practitioners (92%) and government health facilities (61%) is alarming. ORS/home available fluids were advised to 27% and 71% children by private practitioners and government health agencies respectively.

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 children.

The 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 diarrhoea. The mothers also need to be informed and demonstrated the correct preparation and use of ORT for prevention and treatment of diarrhoea and restriction on the use of drugs. It is often suggested

that television spots are an effective way to popularise the standardised instructions on home made ORS. Community lectures and street plays can also be effective measures for eradicating deleterious misbeliefs and popularising ORS in management of acute diarrhoea at home.

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