



ORT Use Rate among Children in the First Three Years of Life in a Rural Area

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ABSTRACT

AIM

To determine the ORT use rate among children in the first three years of life in a rural area

METHODOLOGY

195 children in the first three years of life residing in the rural area were selected by simple random sampling technique and obtained informed consent from the respondent. ORT is defined as any children who received some form of fluid therapy as home available fluids (HAF) and oral rehydration salt solution (ORS) during diarrhea.

RESULTS

The ORT use rate among children in the first three years of life was found to be 65%. Among males was 57.1% and females 63.6%. The difference in ORT Use rate was not statistically Significant.

CONCLUSION:

Oral rehydration therapy is safely & successfully used for treating diarrhea to reduce mortality.

KEYWORDS : HAF, Diarrhoea, ORS

INTRODUCTION

Diarrheal disease is predominantly a problem among children in the first 3 years of life¹. Moderate to severe diarrhea accounts for nearly 25-30% of the total admissions in this age group. The mortality rates due to diarrhea can be significantly reduced by the Home available fluids (HAF) and oral Rehydration salt solution (ORS) and by continued feeding². Global usage of ORS has been lower in many developing countries. Several reasons underlie this disappointing rate of ORS usage in the community. The perception of ORS a 'non drug' has also led to inadequate prescription and usage³. In view of this, ORT use Rate among children in the first three years of life was taken up in a rural area.

MATERIALS & METHODS

This study was done in a rural area of kancheepuram district and study period was between 01.01.2012 to 31.05.2013. Children in the first three years of life residing in the rural area were selected by simple random sampling technique. The minimum sample size required for the study was calculated by using 15% of prevalence of acute diarrhea among children in the first three years of life with an alpha error of 5% and absolute precision 5%. It was found to be 195 children. A brief introduction was given to the parents of selected children regarding the study purposes and the informed consent was obtained orally. Details of information regarding the study were collected by the questionnaire. Oral Rehydration Therapy (ORT) use rate is defined as any children who received some form of fluid therapy as home available fluids (HAF) and oral rehydration salt solution (ORS) during diarrhea. The data entry was made with SPSS Software.

Percentages and p values were calculated for ORT use rate

RESULTS

195 children in the first three years of life were selected randomly by simple random sampling technique. Among the selected children 50.8% were males and 49.2 % were females. Majority of the children were belong to the age group 25 to 30 months and followed by 13 to 18 months. Details given in Table No:1

ORT USE RATE AND DIARRHEA

The Prevalence of diarrhea among the selected children was found to be 12.8% (25). Children in the age group 13-24 months had highest proportion of diarrhea to be extent of 15.8% (10) followed by children

in the age group 0-12 months to the extent of 11.86% (7). Children in the age group of 24-36 months had the least proportion of diarrhea to the extent of 10.9% (8). The no of children who received some form of fluid therapy as HAF/ORS during diarrhea was 15 with an ORT use rate 60%. The ORT use rate among children the first year of life is 57.1%. Similarly the ORT use rate for children in the second and third year of life was 60% and 62.5%. The ORT use rate among males was 57.1% and in females was found to be 63.6%. The difference in ORT use rate was not statistically significant for age and sex of children

HAF & ORS

The most preferred HAF was rice kanji water followed by weak tea. The other preferred HAF were lemon juice, Butter milk, Tender coconut etc. The least preferred HAF found in the study was arrow root powder. Details given in Table No.3. The mean no of ORS packets used per day was one. Regarding the diet during diarrhea most of the children received rice kanji. Idly, milk, biscuits etc.

The ORT use rate was high among children in the age group 24-36 months & the ORT use rate was low in the age group 0-12 months. The ORT use rate among children was increasing from first year of life to third year of life, but the difference is not statistically significant ($p > 0.05$).

DISCUSSION.

Oral rehydration therapy can be safely and successfully used in treating diarrhea in all age groups and in all countries. The aim of oral fluid therapy is to prevent dehydration and reduce mortality. Oral fluid therapy in the form of HAF/ORS enhances the intestinal absorption of salt & water and is capable of correcting the electrolyte deficit⁴. The introduction of oral rehydration therapy has not only reduced the cost of treatment but also made treatment of patients in their own homes⁵. The use of HAF/ORS is inexpensive and easily available⁷. The development of oral rehydration therapy is a major breakthrough in the fight against diarrheal diseases⁸.

In the present study the ORT use rate among children in the first three years of life was found to be 60%. The ORT use rate in Tamil Nadu in the year 1991 was 27.1% & in the year 1995 the ORT use rate was 23.1%⁹. The ORT use rate was increased by 45.4% by the year 1998-1999. The present study showing a great improvement in the use of ORT. The ORT

use rate among males was 60% and females it was found to be 63.6%. The difference of ORT use Rate among males & females were not statistically significant .The increase in ORT use Rate is mainly by the increase awareness on diarrhea and good standard of living.

KEY MESSAGE:

Oral rehydration therapy in the form of HAF/ ORS is a simple measure among children in the first three years of life to treat diarrhea.

TABLE-I
AGE AND SEX DISTRIBUTION OF CHILDREN

Age in months	Male		Female		Total
	n	%	n	%	
0-6	14	7.2	15	7.7	29
7-12	14	7.2	16	8.2	30
13-18	19	9.7	17	8.7	36
19-24	14	7.2	13	6.7	27
25-30	20	10.3	18	9.2	38
31-36	18	9.2	17	8.7	35
Total	99	50.8	96	49.2	195

Table -II
ORT use rate by age and sex

AGE IN MONTHS	ORT USE RATE	ORT USE RATE	
		MALE	FEMALE
0-12	57.2%	57.1%	63.6%
13-24	60%		
25-36	62.5%		

Table -III
Type of HAF used during diarrhea

HAF	%
Rice kanji water	80.0
Weak tea	66.7
Tender coconut	46.7
Lemon juice	40.0
Butter milk	33.3
Dhal water	20.0
Arrow not kanji	13.3

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