

A Study of Knowledge, Attitude and Practice of Rural and Tribal Mothers in the Prevention and Management of Diarrhoea in Children Less Than Five Years Attending Rural and Tribal PHCS in and Around Kakinada

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Abstract

Original Research Article

Diarrhoea is usually a symptom of an infection in the intestinal tract, which can be caused by a variety of bacterial, Viral and parasitic organisms. Of these viral etiology is most common in less than 5 age group. Infection is spread through contaminated food or drinking water, or from person to person as a result of poor hygiene. Total 376 mothers were interviewed of them 278 are rural 98 are tribal. Most common cause for diarrhea according to mothers is unhygienic food (49.5%). Regular hand washing during diarrhea is done by 85.4%. Breast feeding is continued only by 55% of mothers. There is widespread belief that antibiotics can cure diarrhea. 78% had this belief. Knowledge of using ORS with in 24hrs of preparation is 14.4% among the study population. Diminished activity is seen as a danger sign by 89.5%, while decreased urine output is seen as a danger sign by only 3.5%. Knowledge to give more fluids during diarrhea is 28% of study population while in practice it is only 14.5%. Knowledge to continue routine food is present in 29% of study population while in practice it is only 19.5%. Lethargy is the most common reason for physician consultation 59%. Tribal mothers have more belief in faith healers (43.6%). Clear and consistent messages should be used by all health care providers and necessary demonstration should be done in aspects like reconstitution of ORS, early identification of danger signs of dehydration. So, appropriate educational and training materials need to be prepared to transmit and disseminate the messages to empower the mothers and other family members.

Key words: Diarrhea, Knowledge, ORS, Danger signs.

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INTRODUCTION

Diarrhoea is defined as the passage of three or more loose or liquid stools per day, or more frequent passage than is normal for the individual. Diarrhoea disease is the second leading cause of death in children under five years of age, and is responsible for killing around 525,000 children every year.

Mothers of under five children play a vital role as the primary caretakers and they are the most important persons involved in feeding the children, nursing them when they are sick and maintaining a hygienic environment in and around the house.

Their level of knowledge regarding communicable diseases, infections, child nutrition, and personal hygiene is crucial to their corresponding practices which will have direct or indirect impact on their child's health.

In low-income countries, children under three years of age experience on an average three episodes of diarrhoea per year. Each episode deprives the child of the nutrition necessary for growth. As a result, diarrhoea is a major cause of malnutrition.

Patients and methods**STUDY DESIGN**

Hospital based cross sectional observational study

PLACE OF STUDY2 RURAL PHCs (RYALI, PEDHAPALLA)
2 TRIBAL PHCs (BODDULURU, ADDATEGALA)**PERIOD OF STUDY**

One year, January 2016 to December 2016.

INCLUSION CRITERIA

Mothers having children less than 5 years of age attending OPDs of above two rural and tribal PHCs

METHOD

Data was collected using a predesigned Questionnaire regarding socio demographic profile, knowledge, attitude and practices followed by mothers in management of childhood diarrhea.

OBSERVATIONS AND RESULTS**Table-1: Most common cause of diarrhoea**

Cause	Literate(R)237	Literate(T)43	Illiterate(R)41	Illiterate(T)55
Contaminated water	55(23%)	9(21%)	4(10%)	5(9%)
Unhygienic food	123(52%)	24(56%)	27(66%)	12(22%)
Unhygienic conditions around house	34(14%)	9(21%)	5(12%)	1(2%)
Others (evil eye, teething, etc)	25(11%)	1(02%)	5(12%)	37(67%)

Table-2: Literacy of mothers and their knowledge about common practices during diarrhea

	Literate(R) 237	Literate(T) 43	Illiterate(R) 41	Illiterate(T) 55
Continuing breast feeding	163(69%)	26(61%)	10(24%)	10(18%)
Hand washing	230(97%)	33(76%)	34(82%)	24(43%)
Awareness salt and water solution	140(59%)	25(59%)	18(41%)	11(20%)
Belief of role of antibiotics during diarrhea	209(88%)	40(93%)	32(78%)	13(23%)
Routine food during diarrhea	102(43%)	14(33%)	8(19%)	4(8%)
Usage of HAF	90(38%)	18(42%)	03(07%)	22(40%)

Table-3: Knowledge of mothers about ORS

	Literate(R)	Literate(T)	Illiterate(R)	Illiterate(T)
Awareness about ORS	194(84%)	27(63%)	30(73%)	13(24%)
Correct way of preparation of ORS	158(67%)	11(26%)	23(55%)	5(9%)
Knowledge of using ORS with in 24 hrs	49(21%)	4(9%)	1(2%)	0
Belief on HAF to be better than ORS	162(68%)	10(23%)	04(10%)	03(06%)

Table-4: Knowledge about danger signs

	Literate and Illiterate(R)	Literate and illiterate(T)
Diminished activity	256(92%)	85(87%)
Sunken eyes	165(60%)	35(36%)
Excessive thirst	98(35%)	28(29%)
Decreased urine output	2(07%)	00

Table-5: Knowledge vs Practices during diarrhea

	Knowledge(R)	Practice(R)	Knowledge(T)	Practice(T)
ORS preparation	224(81%)	145(52%)	40(40%)	4(4%)
More fluids during diarrhea	93(33%)	64(23%)	23(23%)	6(6%)
Hand washing	264(95%)	214(77%)	57(58%)	54(54%)
Breast feeding	172(62%)	158(56%)	37(37%)	17(17%)
Routine food	110(40%)	78(28%)	18(18%)	11(11%)

Table-6: Preferred place of medical help

	Rural(278)	Tribal(98)
ASHA/ANM	25(09%)	23(23%)
Physician	61(22%)	10(10%)
Pharmacy	98(35%)	7(7.1%)
RMP	89(32%)	16(16.3%)
Faith healers	5(02%)	42(43.6%)

Table-7: Reasons for physician consultation

	Rural	Tribal
More than 3 stools per day	17(06%)	01(1.4%)
Vomiting	30(11%)	9(9.6%)
Poor feeding	81(29%)	16(16.3%)
Lethargy	150(54%)	72(72.7%)

DISCUSSION

In this present study 376 mothers were interviewed in two tribal and rural PHCs. Of them 278 rural mothers and 98 tribal mothers

Knowledge about the cause of diarrhea

Unhygienic food is considered as the main cause by 54% of rural mothers and 37% of tribal mothers (Table 1) which is higher in this present study than study conducted by V. prasanna *et al.* (29%)[3] Kaur *et al.* (23%)[5] Manijeh *et al.* [9](7%).

Practice of breast feeding during diarrhea: Rural mothers (57%), Tribal mothers (17%) practiced breast feeding during diarrhoea (Table 2). This is low compared to A. Kaur *et al.* (85.5%) [5], Salman shah *et al.* (70%)[7] Meenakshi *et al.* (87%)[6]. Harmeet singh *et al.* (42.4%) [1]. This might be due to low literacy rates. Literacy rates also influenced breast feeding during diarrhea.

Practice of restriction of food and fluids during diarrhea: In these present study 90% Of tribal mothers and 76% of rural mothers restricted fluids.

70% of rural and 88% of tribal mothers restricted (Table 2) food during diarrhea. V.prasanna *et al.*[3](fluid 11%,food 17%), Kaur *et al.* [5] (fluid4%, food35%). These far high percentages in this study might be due to low literacy and poor knowledge.

Usage of antibiotics during diarrhea

In this present study 97% of rural mothers and 88% of tribal mothers used antibiotics during diarrhoea episodes (Table 2). Yasmmeen *et al.* [10](30%), Ritu gupta *et al.* [12](36%), MK sudarshan *et al.* [4](22%), reported moderate usage of antibiotics. This might be due to apprehensive behaviour, poor knowledge and easy availability of antibiotics over the counter.

Knowledge regarding awareness about ORS

81% among rural mothers and 41% among tribal mothers are aware about ORS (Table 3). V. prasanna *et al.* (73%) [3] SK Rasaina *et al.* [8] (69%), Kadem *et al.* (89%) [11] Have expressed similar results among rural population. The wide variation in rural and

tribal population in knowledge maybe due to cultural and traditional beliefs and low literacy rate. Illiterate tribal mothers thought that evil eye, teething, mother diet as cause for diarrhea.

Knowledge regarding ORS preparation

The is no much difference between literacy levels and knowledge about ORS (Table 3) (rural 81% tribal 41%) but significant differences in practice of correct method of preparation (rural 65% tribal 16%). Study done by sha *et al.* [7] also expressed similar results (46% awareness and 28.9% knowledge)

Knowledge regarding use of ORS within 24 hrs

Only 18% of rural mothers and 4% of tribal mothers are aware that ORS preparation has to be used within 24 hrs. (Table 3) There is significant difference of literacy levels of mothers and their knowledge about reconstituted ORS, which is similar to study of SK Rasania *et al.* [8].

Knowledge about danger signs

92% of rural mothers and 87% of tribal mothers regarded diminished activity as a danger sign (Table 4). Yasmmeen *et al.* also reported similar findings (71%) [10] Very few rural mothers considered decreased urine output as a danger sign. Similar findings are seen in studies of Yasmmeen *et al.* [10] Harmeet singh *et al.* [1], Kaur *et al.* [5].

Practices in prevention of diarrhoea

Among rural mothers 95% practiced hand washing/personal hygiene, while 94% practiced boiling of water (Table 5). In tribal population it is 74% and 85% respectively. Amit kumar *et al.* [2] reported 38.7% and 83.9%, Meenakshi *et al.* [6] 78.6%, and 18.6%.

Preferred choice of medical help by mothers

Rural mothers (45%) consulted health faculty (ANM, ASHA, Physician), only 15% of tribal mothers consulted health faculty. 43% of tribal mothers took help of faith healers (Table 6). Harmeet singh *et al.* [1] reported 39.6% of health faculty consultation, while prasanna *et al.* [3] reported 77%. This might be due to the study population is far away from town/city and due to traditional tribal beliefs.

Reason for consulting physician/pediatrician

	Present study	V Prasanna <i>et al.</i> [16]	Shah <i>et al.</i> [22]
1 st day/2-3 episodes	Rural 6% Tribal 1%	87% ----	51.5% -----
Vomiting occurs/poor feeding	Rural 40% Tribal 25%	2% ----	18.8% -----
Lethargic/dehydrated	Rural 54% Tribal 74%	3% ----	22% ---

Studies done by V Prasanna *et al.* [3], Shah *et al.* [7] reported better results with regard to mother's attitude in consulting physician. This might be due urban sample of those studies with more accessibility to qualified doctors and better literacy levels (Table 7).

CONCLUSIONS

- There was wide gap in knowledge, attitude and practices among both tribal and rural mothers in management of childhood diarrhoea, which should be addressed by physician's instructions to mothers about the disease and proper diet of children.
- Conducting disease awareness programs for mothers in tribal and rural areas could be very useful in proper management of childhood diarrhoea.
- Demonstration of correct preparation of ORS should be inbuilt in regular counseling sessions of mothers whenever they come in contact with health service provider.
- The study identified that despite the technological revolution in case of diarrhoea management, information dissemination at grass root level is lacking. Hence it should be focused at three levels i, e household level, community level; clinic or hospital level for improving knowledge level of target audience.

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