



## A STUDY OF DIARRHOEA MANAGEMENT AND LITERACY AMONG CHILDREN UNDER FIVE YEARS OF AGE IN RURAL AREAS

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### ABSTRACT

A loose motion is main problem in diarrhoea, disease that increases mortality & morbidity among children < five years of age. WHO estimated for 1998 about 7.1 million deaths by diarrhoea K. Park How to solve this greatest problem. The various aspects of maternal knowledge have assessed. We should determine the child care practice of mothers during diarrheal episode. A cross section method was carried out from April to June 2015. Rural area was chosen by systematic random sampling method and case by C.H.C & Aganwadi. A self designed and self prepared Questionnaire was used as study tool. It was covered childcare practice by mothers about diarrhea. Most of Mothers had poor Knowledge regarding diarrhea because of illiteracy. 100 women were selected, completed the Q. form after their answer. Only 38% mothers were literate. 42% mothers knew about the result of ORS. 50% mothers gave Khicheri. 64% mothers continued breast feeding during diarrhea. 28% mothers knew about the symptoms of diarrhea and dehydration. Study indicated that knowledge and childcare practice of mothers about diarrhoea. Mothers should be educated for the knowledge of prevention and childcare practice during diarrheal episode.

**KEY WORDS:** diarrhoea, literacy, ors, childcare.

### INTRODUCTION

Diarrhoea is a system by a sudden onset of loose or watery stools. "Diarrhoea is defined as the passage of the loose, liquid or watery stools; these liquid stools are usually passed more than three times a day"<sup>[1]</sup>. The WHO/UNICEF defines "acute diarrhoea" as an attack of sudden onset. It usually lasts three to seven days but it may last up to two weeks. Diarrhoea is caused by an infection of the abdominal bowel. "Gastro intestines" is accurate term to describe acute diarrhoea. There are certain bacteria (*e.g.* V. Cholera) which effects intestine<sup>2</sup>. 25% deaths of children under age of five years are due to diarrhoea. So it is very dangerous especially in infant and weak children. Result of many loose motions is dehydration in the body. If dehydration is very severe, it may cause death of infants. So we must give them to drink oral rehydration salts and home available fluids. Diarrhoea is mostly caused by eating dirty and stale food, drinking dirty water, eating with dirty hands, using dirty pots, eating food opened, eating fruits cut opened<sup>[3]</sup>.

#### Types of Diarrhoea

Acute water diarrhoea – acute watery diarrhoea begins all of a sudden with the passage of loose, liquid and watery stools not less than three motions a day. Dysentery – It may be called blood Dysentery. Persistent Diarrhoea or chronic Diarrhoea– if Diarrhoea persists more than fourteen days, it is called persistent Diarrhoea. Dehydration– Diarrhoea leads to loss of water and electrolytes (Sodium, Chloride, Potassium and bicarbonates) from the body<sup>[4]</sup>.

#### Signs of Dehydration

Increasing thirst, the soft spot on a baby gets sunken, Dry tongue and mouth, sunken eyes, decreasing skin turgor, Restlessness/irritability, tears absent, little or no urine, lack of firmness of skin and wrinkled, hoarse voice, breathing fast and panting, if skin is pinched, it stays. Folded for a few seconds, the stomach gets distended especially in a malnourished child, Faints.

**Signs of severe Dehydration** – Lethargic, unconscious, faint, convulsions, floppy, unable to drink.

**Malnutrition** – Malnutrition in diarrhoea occurs due to loss of nutrients.

**Causes of Diarrhoea** – Children who live in slum areas and villages and malnourished, suffer from diarrhoea and die of it for more often than those who are well nourished. Good nutrition is very important in both prevention and treatment of diarrhoea to improve the health condition of patient child. Prevention of diarrhoea depends on good nutrition as well as cleanliness. We should pay attention at the use of latrines, the importance of clean water, and protection of foods from dirt and flies. We should not go latrine in the open fields. Fresh food and fruits should be given to eat to the children.<sup>5</sup>

#### Infections causing diarrhoea

1. **Viruses** – Rota, Astro, Adeno, Calci, Corona Entro and Norwalk group viruses.

2. **Bacteria** – *Campylobacter Jejuni*, *Shigella Escherichia coli*, *Salmonella*, *Vibrio Cholrae* *Vibrio Parahaemolyticus*, *Bacillus Cereus*.

3. **Others**– E. Histolytica, Giardia Intestinalis, Trichyuriasis, Cryptosporidium SPP, Intestinal Worms.<sup>6</sup>

**Environmental factors**

In temperate climates bacterial diarrhoea occur during the warm season whereas viral diarrhoea during the winter. In tropical areas viral diarrhoea occur throughout the year. Bacterial diarrhoea is more prevalent during rainy season temperate climates.

**Social factors**

Low social economical status and class do not pay attention on sanitation. So among them diarrhoea occur more frequent.<sup>7</sup>

**Symptoms of diarrhoea**

1. Mild – Onset is usually insidious with 2-5 motions which may be loose watery, green offensive and contain mucus and milk curds.
2. Moderate – The number of loose motions are 10 or more and constitutional symptoms like fever, irritability, anorexia and vomiting are usually present.
3. Severe – In the severe loose stools the child passes “too many “liquid motions and severe vomiting to the extent that nothing is retained and the oral intake becomes virtually impracticable.<sup>8</sup>

**Knowledge of the mothers about health of infants**

The mother must pay attention specially at the nails of the children. If the nails increased, nails should be cut at proper time. After every six months a dose of worms should be given to the children. Due to the lack of calcium infants eat the mud. Those children should be given calcium. Mothers should give the infants balanced diet. They should give them fresh) milk, food and water.

**METHODOLOGY**

“A study of diarrhoea management among children under five year of age in rural areas” topic is based on purposive sampling.

**Area of study** – I have selected the village Hodalpur for the study of diarrhoea management among children less than five year of age in rural areas and its management and the programme of government.

**Universe of study**

This study was completed in the mother and their children having age from 0 to 5 years.

**Selection of House Holds**

The limitation of time money and even I am only single investigator so I have included some sample of house of the village Hodalpur. Only one hundred mothers were selected on the basis of purposive sample.

**Pre testing of the schedule**

The study tools schedules were pretested and necessary modifications were made. It was pretested of 25 households in a similar characteristic of population outside the area covered by this study but not included in the sample study. Questions were so arranged as a cause the least possible problem to the interviews to reconstruct the general sequence. Some modifications were made in final schedule.

Observation & interview method, interview procedure were selected for method of Data collection. Statically analysis was done by using ms- excel.

**RESULTS**

**1.Education status of women**

Among the 100 women 62 women are illiterate .There is a great co-relation between education and health. Educated person knows how to maintain good health and how to take government health aid.

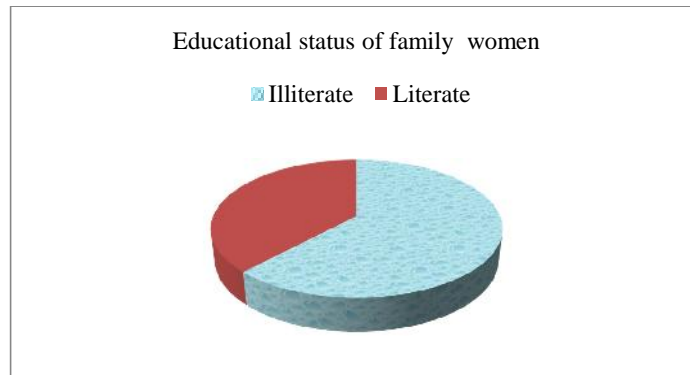


TABLE 2:Feeding practice during diarrhoea

Home available fluids	No	%
Breast feeding Milk	64	64
Bottle feeding	40	40
Khicheri	50	50
Nothing given	15	15
O.R.S.	42	42
Dahi	20	20
Simple water	10	10
Sugar & Salt water	48	48
Glucose	11	11
Electral powder	35	35

Co-relation between practices followed by mothers during diarrhoea by home available fluids is very poor. During diarrhoea mothers gave bottle milk 40%, khicheri 50%,

Dahi 20%, simple water 10%, sugar & salt 48%, glucose 11%, electrical powder 35% and nothing 15%, 64% mothers feed breast milk during diarrhoea episodes.

**TABLE 3:** Showing the sources of ORS from where families get it

Source of Knowledge	No	%
Government Hospital	65	65
Aganwari Worker	08	08
ANM	04	04
ORS are not Distributed	24	24

65 % Mothers knows from where and how they could get ORS. They know the use of ORS. This Knowledge they gained from CHC situated in the village Hodalpur. Only

08% mothers could gain knowledge about ORS from Aganwari worker of the village Hodalpur.

**TABLE 4:** Show the knowledge of mother regarding the recognition of dehydration

Symptoms of dehydration	No	%
Sunken eyes	7	7
Increasing thirst	12	12
Decreasing skin turgor	9	9
Do' nt know	72	72

72% mothers do' nt know about the symptoms of dehydration in village Hodalpur. 7% mothers know sunken eyes. 12% mothers know about increasing thirst

.CHC is situated in this village but village mothers have poor knowledge about the symptoms of dehydration by diarrhoea.

**TABLE 5:** showing the problem of diarrhoea since birth to 5 years old children in rural area

Children suffered from diarrhoea	70
Children not suffered form diarrhoea	30

## DISCUSSION

In a multi centre study of diarrhoea co-ordinate by the national institute of communicable disease in 1985, it was found that fluids were given during diarrhoea to 40-80 % of children it was reported that use of ORT ranged from 14-43% with a medium use of about 20% ( DGHS 1986) [11]. In our study found Out of 100 children 70 are effected by diarrhoea due to summer season. Nandan *et al.*, 1996 reported ORS use rate per thousand children suffering from diarrhoea was 133 in Mathura, 97 in Almora and 61 in Etah district while this rate in the children seeking treatment for diarrhoea was 259 in Mathura, 176 in Almora and 91 in Etah district [4].

When the WHO initiated the diarrhoeal disease control programme in 1980, fever more than 1% children were being treated with ORT but picture by and by changed and the percentage of diarrhoea episodes in children under five years of age being treated with ORT rose from 14 % in 1984 to 26% to 37 in 1986 and 87-93 respectively. In UTTAR PRADESH the ORT use rate in 1990 rose upto 36% [6].

Atule Choube in his investigated about diarrhoea during Feb. to May 2014 that 62.1% mothers were in favour to given her children breastmilk as oral liquid during diarrhoeal episode. 26% mothers knew about dehydration. During diarrhoeal 49.9% mothers gave food and 20.4% mothers, fluid. [13]Dabral *et al.* reported (1987) that diarrhoea incidence was 39.39% in infants and 21.73% in preschool children in rural areas of Agra District. Govil *et al.*, 1987 reported that the prevalence rate of diarrhoea in under five children was 15.39%. Gupta *et al.*, 1989 found

that in rural areas of Agra district the incidence of diarrhoea was 19.30% in under five children but in infants it was 35.1% [5].

Singh 1989 reported that the estimated annual rate of illness from diarrhoea disease was about 500/1000 in infants and 200/10000 in preschool children. [3]Kumar *et al.* (1991-92) in rural areas of Agra district found in his study that 77% of under five male children and 76.4% of under five female children suffered from diarrhoea disease during the period of one year. The attack rate of diarrhoea among the male and female children was 1.9 and 2.0 episodes/child/year respectively. [7] A longitudinal study conducted by NICED on operational research on ORT in 1987 showed that given the best facilities the usage was in between 11-12% (NICED, 1988). On the other cluster surveys organised by the Director General health services, Government of India in different rural areas in 1985 revealed that use of ORT varied from 40.7 to 90% during the pre-monsoon episodes of diarrhoea and 36% to 96.3 during the post monsoon diarrhoea attack (D.G.H.S. 1986) [8]Dabral *et al.* (1993) conducted two survey in two district Firozabad and Agra found the two week prevalence of diarrhoea in under five years age of children to be 11.10 and 12.87% respectively. Nandan *et al.*, 1996 conducted a survey in district Mathura, Almora and Etah the two weeks incidence of diarrhoea was 154, 62 and 111/1000 children under five years of age in the district. But in the rural areas this figure was more. These figures were 149, 76 and 74/1000 respectively [10].

MIRA survey of U.P. (1995-96) reported that the percentage of mother who sought treatment outside home

for children suffering from diarrhoea was 51.3% the ORS use rate was 30.1% in the state while in rural U.P. it was 30%. Dabral *et al.* (1993) surveys were conducted in Agra, Firozabad, Mainpuri and Etah districts, it was found the percentage of mother who went on normal feeding of the child during the diarrhoeal episodes as 70.2, 67.6, 67.6 and 73.6% respectively while restricted feed was done in 20.9, 20.8, 17.9 and 18.4% cases respectively [5]Chawla *et al.* Rajeshwari, 1994 reported continuation of normal feeding in 23.5 and 12.1% cases respectively while less was given in 65 and 69.7% cases respectively [9].

Nandan *et al.* (95-96) conducted multi indicator assessment surveys in tree district Almora, Etah and Mathura. He observed that in respective district only in 11.4, 4.5 and 3.2% cases more fluid were given while same amount of fluids were given in 30.5, 12.1 and 13% cases. Continued feeding was observed in 67.7, 81.8 and 87% cases of diarrhoea while feeding was stopped in 31.4, 18.2 and 13% cases respectively. It was also found that treatment of diarrhoea was sought only in 51.4, 9.1, 17.6% cases in respective district. [10]Mira survey of U.P. sate report has shown that 51.3% had been offered increased fluids during diarrhoea and the continued feed rate was 53.6 in the state but it was 48.8% in rural in rural areas of U.P. Taneja *et al.*, 1996 conducted a study in three large clusters of Delhi, reported that 8% mothers had stopped food and fluids to the child during diarrhoeal episode, 10.4% mother gave home remedies, 36.8% mothers visited private doctors and 7.2% visited Government Health facilities to seek treatment for child of diarrhoea [2].

62475 Children <5 years hospitalized for diarrhoea among 500000 children and adults from slums in New Delhi in 2004 [12]. "The median incidence of diarrhoeal was greatest for infants aged 6 to 11 months (5 episodes per child per year but under <5 years was 2.6 episodes per child per year" [14] ORT developed in the late 1960. The ministry of health and family welfare, government of India as well as various NGOs and training institutions have attempted during the past 25 years to provide improved diarrhoea case management services. In recent years it has become evident that inspite of this tremendous effort, practices both among mothers as well as many doctors continue to accord ORT. A low or no status in treatment of diarrhoea. The ORT use rate for the developing world stands 38% and the figure for India is 37% (87-93). Low levels of knowledge, poor feeding practices and baseless cultural taboos contribute to the magnitude of the problem.

## CONCLUSION

Mothers should be educated to pay attention at personal hygiene their self and their children because 70% children suffered without it. We should improve the knowledge of mothers about the symptoms of dehydration and use of home available fluids for children because mothers did not know about it. Awareness about ORS and Making ORS mixture.

## ACKNOWLEDGEMENT

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