

# Knowledge and Attitude of Mothers Regarding Oral Rehydration Salt

Abida Sultana, Rizwana Riaz, Riaz Ahmed, Riffat Khurshid

Department of Community Medicine, Rawalpindi Medical College, Rawalpindi.

## Abstract

**Background:** To assess the knowledge, attitude and behaviour of mothers about Oral Rehydration Salt (ORS).

**Methods:** In this cross-sectional descriptive study a total of 320 mothers were enrolled by convenience sampling. Data was collected by means of semi-structured questionnaire. Questionnaire asked information regarding the knowledge of mothers about ORS, its availability in the market, method of preparation, source of information about ORS and the role of ORS in the management of diarrhoea.

**Results:** Of the total 320 mothers, 80% respondents were literate. 61.87% mothers belonged to middle social class and among those 44% seemed to have adequate knowledge pertaining to ORS preparation and its significance in the management of diarrhoea. Only 4.06% mothers did not know about ORS. Information regarding availability of ORS was found to be accurate among 86.87% mothers. Most of the mothers (37.19%) got information about ORS from doctors followed by media (25%) and their mothers (20%).

**Conclusion:** Knowledge about ORS was found to be adequate among educated mothers belonging to middle socioeconomic status. Information pertaining to ORS was mainly imparted by the health care providers.

**Key words:** Oral Rehydration Salt, Expanded Program of Immunization.

## Introduction

Dehydration resulting from diarrhoea is a significant cause of death for young children in developing countries. ORS is a substance available in powdered form that is used by the dehydrated patients after dissolving in water. This remedy is useful to replace fluid and electrolyte loss. Although ORS is effective in preventing and treating dehydration, its use in home treatment is not widespread due to reluctance among mothers to use ORS in cases of acute diarrhoea.<sup>1,2</sup>

Timely management of the children with ORS has substantially declined the mortality and morbidity from acute infectious diarrhea.<sup>3</sup> It is commonly

observed that most of the mothers neither can mix commercially available ORS properly nor are able to realize the significance of giving more fluids during acute diarrhoea to their children.<sup>4</sup>

A study conducted by Ahmed IS et al showed that although mothers were able to define and describe diarrhoea, their awareness about its etiology was low. Majority of them attributed diarrhoea to teething, hot food and salty water.<sup>5</sup> A study among households of rural Bangladesh revealed that mothers' skill of using ORS was significantly associated with having seen a packet of ORS and mothers' education.<sup>6</sup> In a study conducted among mothers in a district of Nepal, majority of respondents were found to be aware of ORS and its usefulness in management of diarrhoea.<sup>7</sup> A similar study among mothers of Rawalpindi and Islamabad concluded that ORS was mostly used by families with higher income.<sup>8</sup>

## Subjects and Methods

A cross-sectional descriptive study was carried out to assess the knowledge and attitude regarding ORS among mothers who attended the EPI cell / Paeds OPD in two teaching hospitals of Rawalpindi Medical College i.e. BBH and HFH during a period of 2 months (April-May 2009). A total of 320 mothers who had children of 6 months to 10 years of age willing to give relevant information were enrolled in this study by convenience sampling while the mothers whose children were below 6 months and above 10 years of age were excluded from the study. In present study, knowledge and attitude of the mothers pertaining to ORS was defined in terms of their awareness about availability and preparation of ORS and its use in the management of diarrheal diseases. Data was collected by means of semi-structured questionnaire. Questionnaire incorporated questions concerning the knowledge about ORS, its availability in the market, method of preparation and source of information about ORS. In addition, mothers were also asked about the role of ORS in the

management of diarrheal diseases.

## Results

Of the total 320 mothers, 301 respondents were housewives while only 19 study subjects were found to be working ladies. In this study, majority of the mothers were educated up to matriculation (Fig 1).

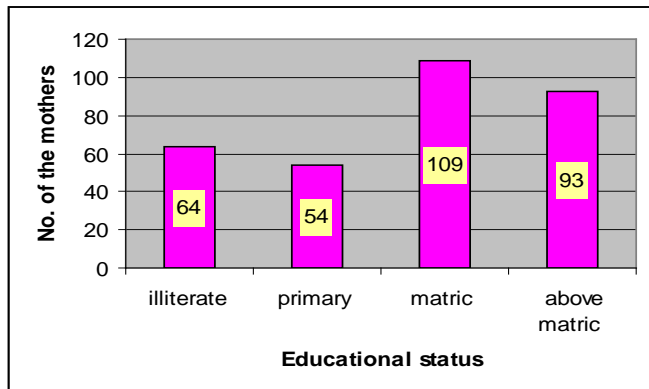


Fig 1: Educational status of the mothers

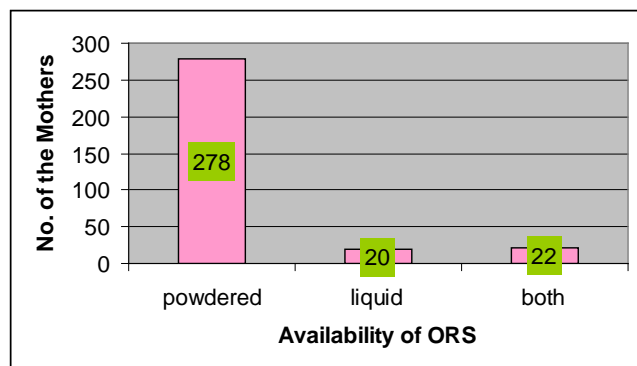


Fig 2: Knowledge of the mothers pertaining to the availability of ORS in market

In current study, most of the respondents (198) belonged to middle social class while 112 and 10 mothers were found to be of lower and upper socio-economic status respectively. In this study, maximum number of mothers seemed to be aware of the fact that ORS is commercially available (Fig 2).

Of the 320 study participants, 243 mothers knew that ORS is used to fulfil the deficiency of water in diarrheal diseases while 64 respondents said that ORS is used to fulfil the deficiency of both water and salt in diarrheal diseases. On the other hand, 13 mothers did not know about ORS ( Fig 3):

In present study, 298 mothers admitted the

significance of ORS in the management of diarrheal diseases among children while only 22 respondents denied the usefulness of ORS in treating diarrhea. Most of the mothers (119) were advised by the doctor to use ORS in diarrheal diseases (Fig 4).

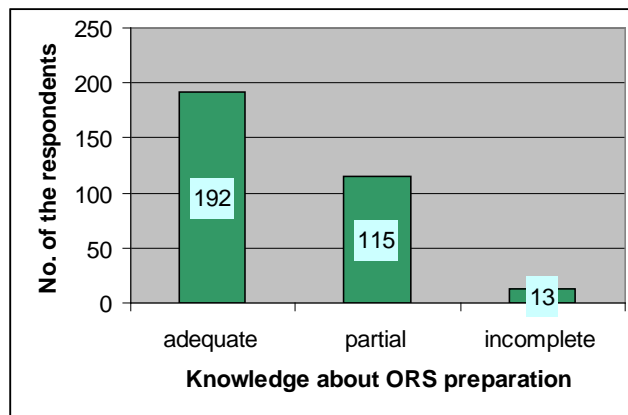


Fig 3: Knowledge about preparation of ORS

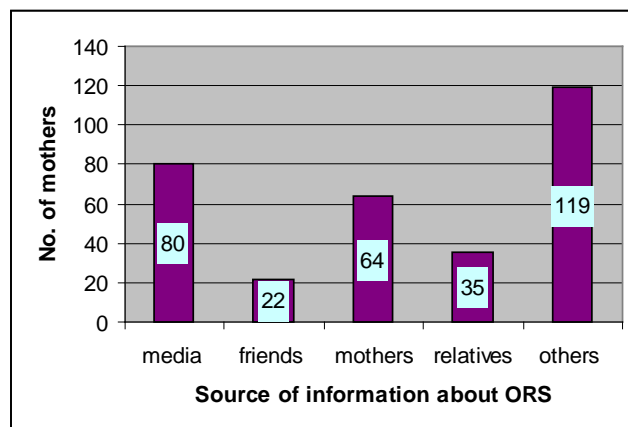


Fig 4: Source of information about ORS

## Discussion

Despite the fact that availability of ORS can substantially reduce the mortality and morbidity resulting from diarrhoea, poor knowledge pertaining to diarrhoea and its management has posed the third world countries with diarrhoea associated deaths and ill health among children. <sup>9</sup>

In present study, although 80% of the mothers were educated, yet 60% mothers were found to have adequate knowledge regarding the method of ORS preparation where as the same information was observed to be partial and incomplete among 35.94% and 4.06% respondents. However, literacy rate showed

positive association with adequacy of ORS knowledge ( $p < 0.001$ ). In fact, people in our society usually follow their forefathers and adopt domestic remedies due to poor economy to resolve their health problems. Even some of the educated people do the same thing.

In current study, 95.94% mothers knew the advantage of using ORS in diarrheal diseases while 4.06% mothers were completely unaware of the implication of using ORS. Moreover, most of the respondents (37.19%) came to know about ORS on contact with doctors. Similarly results of a KAP study carried out among mothers whose children presented with diarrhoea showed that 75.8% mothers got information pertaining to ORS mainly from doctors. Moreover, despite of being illiterate most of the mothers were aware of ORS use and among those 47.01% were wrongly preparing it.<sup>10</sup>

In present study, 61.87% mothers were belonging from middle social class and among those 44% seemed to have adequate understanding regarding ORS preparation. In a similar study by Ibrahim MM et al, it was suggested that ORS was mainly used by the mothers who were capable of allocating their time to health care.<sup>11</sup> A case control study among care givers of Jamaica focused on the need to accentuate the educational level of the people so that care givers are authorized to protect the children from diarrhea.<sup>12</sup>

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