Oral rehydration therapy is a simple treatment for dehydration associated with diarrhoea. It consists of salts and sugar in water and is taken orally. It is used all over the world and saves millions of lives, especially infants. According to current WHO/UNICEF guidelines, ORS should begin at home at the first sign of diarrhoea to prevent dehydration. Feeding should be continued at all times during the episode of diarrhoea. The home-available fluids (HAF) and sugar salt solution (SSS) should contain proper proportions of sugar and salts. Salts compensate for hyponateremia and hypokalemia and sugar increases salt absorption through SGLT1 transporter. WHO/UNICEF ORS is available in all regions in pre-measured sachets and is ready to be mixed in 1 liter of water. In 1996 UNICEF distributed 500 million such sachets in 60 developing countries. HAF’s can be used as first remedial measures. SSS can be prepared by adding one level teaspoon full of common salt, 8 teaspoonful of sugar, and 4 ounces of orange juice (optional) in 1 liter of potable water.

In 2003, WHO and UNICEF gave guidelines for Low Osmolarity ORS, which is available for commercial use and was updated in 2006. It’s total Osmolarity is 245 mmol/L.
The benefits of reduced osmolarity ORS are: reducing stool volume by 25%, reducing vomiting by nearly 30% and reducing need for IV fluid therapy by 33%. During diarrhoea attack, majority of mothers (58%) opined to consult a health personnel, one fourth (22.2%) wanted to start ORS and only small fraction (9.1%) believed in 'wait and watch policy' for self recovery (Table 2).

Regarding reasons of giving ORS to their children during diarrhoeal episode, 59 percent mothers were using it because it was cheap, easily available and prevented dehydration, while 41% mothers could not give any reason (Table 3).

In this study, only 26.88 percent mothers expressed their satisfaction on being prescribed only ORS, while 73.12 had faith in medicines and ORS in combination (Table 4).

Regarding methods of preparation of SSS and ORS, only 12.54% and 22.93% mothers could prepare them correctly, respectively (Table 5,6). Only 24.1% mothers knew that freshly prepared ORS was fit for consumption within 24 hours only. Feeds were withheld by 155 (27.7%) mothers during diarrhoeal episode, while 403 (72.3%) continued feeding (Figure 2).

TABLE 2. Mother’s first reaction (Response) during child’s diarrhoeal episode

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Practice regarding diarrhoeal episode</th>
<th>Distribution of Mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Waited for self recovery</td>
<td>51</td>
</tr>
<tr>
<td>2.</td>
<td>Started ORS</td>
<td>124</td>
</tr>
<tr>
<td>3.</td>
<td>Gave plenty of fluids</td>
<td>59</td>
</tr>
<tr>
<td>4.</td>
<td>Consulted health personnel</td>
<td>324</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>558</td>
</tr>
</tbody>
</table>

Regarding methods of preparation of SSS and ORS, only 12.54% and 22.93% mothers could prepare them correctly, respectively (Table 5,6). Only 24.1% mothers new that freshly prepared ORS was fit for consumption within 24 hours only (Figure 1). Feeds were withheld by 155 (27.7%) mothers during diarrhoeal episode, while 403 (72.3%) continued feeding (Figure 2).
Discussion

Awareness of ORS among the study group was 74.4% and 25.6% were ignorant of the same. This lack of awareness among one fourth of the target mothers could be due to their illiteracy or lack of health campaigns. In a study by Bhan MK et al., 86.2% of mothers were aware of ORS and 38.7% had already used it during diarrhea. So, our results agree with the author. Banakappa DG et al. in their study observed that only 25% mothers were in favour of starting ORS.

Three hundred twenty nine (59%) mothers were using ORS, because it was cheap, easily available and prevented dehydration, while 41% mothers could not give any reason (Table 3). In this study, only 26.88% mothers used exclusive ORS while 73.12% wanted ORS and medicines together (Table 4). UNICEF reports on the “state of world children” gave 25 percent utilization rate of ORS. Kumar V et al. showed that 57.8% mothers were satisfied regarding ORS and remaining 42.2%, had faith in medicines. Our study results agree with UNICEF, but not with the latter.

We found, only 12.54% and 22.33% mothers could prepare SSS and ORS correctly (Table 5). In one study it was observed that only few mothers could prepare ORS correctly. Gopal Das et al. also revealed similar results. Victoria CG et al. revealed that correct knowledge of preparation of SSS by pinch method was only 16.6% and WHO-ORS only 41%. In the present study only 24.1% mothers knew that freshly prepared ORS was fit for consumption within 24 hours only (Figure 1).

We found that feeds were withheld by 155 (27.8%) mothers during diarrhoeal episode of their children, while 558 (72.2%) continued feeding (Figure 2). Green et al. in their study observed restriction of food items by 75% mothers. Our study results do not agree with the author.

We conclude, that after extensive endeavors of the study, covering the entire vista of the problem of relationship of dehydration, diarrhoea and mortality, a consensus has developed to liberal use of ORS rather than undue and unwarranted antibiotics.
References


11. New formulation of Oral Rehydration Salts (ORS) with reduced os" UNICEF: 1molarity".


