Assess the Knowledge of Women on Zinc Supplementation with ORS in the Management of Diarrhea

Rakhi Patel1* and C. C. Linson1

1Sarvepalli Radhakrishnan University Bhopal (M. P.), India.

Authors’ contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI:10.9734/JPRI/2021/v33i49A33311

Editor(s):
(1) Dr. Asmaa Fathi Moustafa Hamouda, Jazan University, Saudi Arabia.

Reviewers:
(1) Md. Abdul Quddus, Bangladesh Agricultural University, Bangladesh.
(2) AM Hoque, South Africa.
(3) Unyime Israel Eshiet, University of Uyo, Nigeria.

Complete Peer review History: https://www.sdiarticle4.com/review-history/76419

ABSTRACT

The assessment is utilized to evaluate and to get a proper information from the mothers or ladies with regard to the utilization of the zinc supplementation with the Oral rehydration salts for the great approach and to see the future aspects of management of diarrhea. With a purpose of inspecting the study was carried out to investigate the 100 mothers. The survey approach was carried out to gather maximum information regarding the advantages of adding zinc with the ORS in the management of diarrhea. This was carried out through the information poll. The data was analysed and visualised using graphs, tables, and descriptive and inferential statistics. The key findings of the current study indicate that the majority of 63 percent of moms received an average score of 41 to 60 percent, while the lowest score was in the 1% of women who had a very excellent score of 81 to 100 percent. Only 2% of moms received a poor mean knowledge score in the range of 21 to 40%, and not a single mother received a score of less than 0%. The overall mean knowledge score of mothers regarding the benefits of supplementing the zinc with the ORS in the management of diarrhea was 17.24 %. According to the study’s findings, the mother is the most important factor in enhancing the child's health. Mothers are an important element of the health-care sector because they have the power to change a child’s health. She has the potential to make a significant
difference in the family’s overall health. Mothers need to be well-informed so that they can strive to apply various preventative measures to avoid infections like diarrhoea, for the sake of their children's safety. As a result, the nation’s health is dependent on the mother's wisdom. Mother's knowledge of various health-related services needs to be updated and upgraded.

**Keywords:** Knowledge; ORS; zinc supplementation; management; mothers.

### 1. INTRODUCTION

The nation’s future is dependent on the health of its children. The child's first instructor is his or her mother. We must keep the child's health factors under check. A youngster is constantly curious about new things. Diarrhea is a highly frequent illness among young children. The most important tactic that a country's government can employ is to enhance people's health. It is necessary to boost research-related work [1-2]. The government must ensure that the child's health standards are satisfied. The health of children is a major factor in a country’s economic prosperity. The most common disease which every child goes through in their lifetime is diarrhea. Around 2 million kids have the habit and is very prevalent the loose bowels and parchedness consistently [3]. The diarrheal disease effects greatly on the economy of the country. It causes a great and a hefty monetary weight on the well being of the administrators. We must take into consideration the intense cause of diarrheal disease and the various issues related to diarrhea. The management of diarrhea needs to be taken seriously. The utmost care needs to be given to a child during the management of diarrhea. In the recent years, which is overwhelmed by the process of oral rehydration strategy and also the use of zinc supplementation for the management of diarrhea [4]. The overall health coverage needs to be improved. Especially among the overall health parameters of the child. The major public strategy in the improvement of the health of the child needs to be taken into account [5]. Kids are the future of the nation. We need to express that there will be an approach of the state to offer sufficient types of assistance for the health of the child. The overall development of the child needs to be taken into account for the improvement of health parameters. The well being of the child is the most prominent need for the long term of the growth of the nation [6]. There are numerous health related programs which have been executed to reduce the mortality and morbidity among the children.

The major test of the present scenario is to do a proper assessment of the youngsters well being. The local area factors needs to be considered, social qualities and social strategies needs to be implemented [7]. The major dynamic factor of the local area, particularly those belonging to the families is the major thrust in the improvement of the health of the child.

Mother knowledge needs to be taken into consideration. So the overall strategy is impacted by the information received and insights developed about the infection and its proper administration and management. Diarrhea or looseness of the bowel movements is the third major driving reason for the mortality of children in the developing countries like India. Around over 2 million children suffers from diarrhea and bites the dust because of improper bowel movements and lack of proper hydration consistently [8-10]. The diarrheal infections have caused a substantial financial weight among the family members and also on the administration part. Much consideration needs to be done regarding the management of diarrhea and proper administration strategies needs to be framed. One the best strategy is to supplement the zinc with ORS [11]. The supplementation of zinc has played a vital role in the improvement of the diarrheal cases. Zinc is very vital and is basic new treatment modalities in the management of diarrhea. But this needs to be implementing along with ORS for the better efficacy in the management of diarrhea and yield best results [12-14].

### 2. RESEARCH METHODOLOGY

#### 2.1 Research Approach and Research Design

The present study is a descriptive research approach. This was considered appropriate for the present study. Duration of the study: the study was carried out for a period of around one month.

#### 2.2 Study Setting

The present study was conducted in the rural community of Hosangabad which comes under the Subash Nagar primary health centre.
2.3 Variables

The socio demographic variables which were included in the present study were age, type of family, educational status, religion, previous knowledge in the management of diarrhea.

Sample: 100 mothers residing in the Subash Nagar Primary health centre of Hosanghabad.

Sampling techniques: The purposive sampling was used in the present study.

2.4 Inclusion Criteria

- Mothers who are
- Housewives
- Willing to participate in the study.
- Available during the period of data collection

2.5 Study Design and Sampling Technique

Socio demographic Performa and a structured knowledge questionnaire.

3 RESULTS

The preceding table 1 clearly shows that the majority of the research participants (38%) were between the ages of 26 and 40. The majority of the moms, 81 percent, were living in a combined household. 78 percent of the moms lacked a high school diploma. The Hindu faith was represented by 88 percent of the research participants. 78 percent of the moms had previous experience with diarrhoea management.

| S. No | Variables                          | Number | %   |
|-------|------------------------------------|--------|-----|
| 1     | Age (in years)                     |        |     |
|       | 20- 25                             | 32     | 32  |
|       | 26-30                              | 38     | 38  |
|       | 31- 35                             | 15     | 15  |
|       | 36-40                              | 15     | 15  |
| 2     | Type of family                     |        |     |
|       | Nuclear                            | 19     | 19  |
|       | Joint                              | 81     | 81  |
| 3     | Educational status                 |        |     |
|       | No formal education                | 78     | 78  |
|       | Primary education                  | 15     | 15  |
|       | Secondary                          | 3      | 3   |
|       | Higher secondary                   | 2      | 2   |
|       | Graduate                           | 2      | 2   |
| 4     | Religion                           |        |     |
|       | Hindu                              | 88     | 88  |
|       | Muslim                             | 12     | 12  |
| 5     | Previous knowledge regarding the management of diarrhea | | |
|       | Yes                                | 78     | 78  |
|       | No                                 | 22     | 22  |

Table 2. Distribution of mothers based on the levels of knowledge

| S. No | Level of knowledge                  | Number | %  | Mean | SD  |
|-------|-------------------------------------|--------|----|------|-----|
| 1     | Very poor (0-20%)/(score 0-6)       | 0      | 0  | 17.24| 2.73|
| 2     | Poor 21 to 40% (score 7-12)         | 2      | 2  |      |     |
| 3     | Average 41-60% (score 13 to 18)     | 63     | 63 |      |     |
| 4     | Good 61-80% (score 19-24)           | 34     | 34 |      |     |
| 5     | Very good 81-100 (score 25-30)      | 1      | 1  |      |     |

Maximum score 20 and minimum score 0
Table 2 shows that 63 percent of mothers had medium knowledge, 34 percent had good knowledge, and just 1 percent had very good awareness on zinc supplementation with ORS in the management of diarrhoea.

4. DISCUSSION

The findings of the present study reveal that the overall knowledge was average among the mothers in the management of diarrhoea. There was no significant association between socio demographic characteristics and the knowledge score. Between those who gave zinc and those who did not, there is no significant difference in father's educational status (p=0.1) or mother's work status (p=0.06). All children brought to a health facility with diarrhoea are given free dispersible oral zinc pills in the study area. As a result, regardless of the father's educational position, the child will receive oral zinc if he or she is taken to a health facility for treatment. Similarly, regardless of the mother's employment position, the child will receive oral zinc in the health institution. There is no significant difference in zinc utilisation between moms who gave ORS to their diarrhoea-affected children and those who did not. This is remarkable because ORS and zinc are administered together in the standard treatment of diarrhoea in children. As a result, it's likely that individuals who gave ORS were also more inclined to give zinc. This could be due to zinc's better palatability when compared to ORS solution. Because the children may have refused to take the ORS solution, the mothers have stopped giving it to them. On the other hand, some mothers still believe that children with diarrhoea should be given 'drugs' (tablets of syrups) rather than ORS solution. Because zinc is a pill, it is considered a 'drug' by these mothers (but not ORS solution). Zinc is given to children who have diarrhoea. The mothers was not associated with presence of vomiting or fever (axillary temperature 37.5 °C and above) in the children. In the presence of vomiting or fever, other medications are usually given to these young children to treat common illnesses such as malaria. In this situation, zinc may wrongly be omitted even though there is diarrhoea.

5. CONCLUSION

Zinc knowledge and usage by moms of children with diarrhoea were modest in the research. The high prevalence of oral zinc delivery to children with diarrhoea was linked to the mothers' education and location in metropolitan regions. The research population's acceptance and use of zinc may be improved through public education via electronic and social media. Education for girls may have a long-term favourable influence on zinc usage in this population.

6. RECOMMENDATIONS

- Similar study can be done with large sample size.
- Teaching strategies can be implemented in the improvement of knowledge of mothers.
- Comparative study can also be done with various strategies.

CONSENT AND ETHICAL APPROVAL

Prior permission and ethical clearance from the institute was taken before the study. Proper consent was also taken from the study participants.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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Peer-review history:
The peer review history for this paper can be accessed here: https://www.sdiarticle4.com/review-history/76419