



**“A study to assess the knowledge & attitude about the zinc & its role in management of diarrhoea among the paramedical health workers of selected primary health centre of Karad Taluka.”**

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**ABSTRACT** **Background:** Zinc tablet adopted as part of Indian National Programme for management of diarrhea & made it freely available and accessible round the year in every village, and all health personnel, since 2006. The backbones of the programme are peripheral health workers.

**Methodology:** A non-experimental cross-sectional survey approach was adopted for the present study, 45 paramedical health workers from Kale & Vadgaon village PHC selected as samples by non-probability purposive sampling technique. A predesigned and pretested questionnaire was used to collect the data.

**Results:** Majority 80% subjects having good knowledge, only 7% subjects having excellent knowledge & 13% subjects having poor knowledge. Majority (91.11%) of the respondents were using zinc tablet for treatment of diarrhea with ORS were as 86.67% of the respondents were having good experience of zinc tablet.

**Conclusions:** Lack of awareness and training were the main reason to not to use & also the inadequate supply of zinc tablet during diarrhea. To enhance the management of childhood diarrhea in India, programmatic activities should center on increasing knowledge of ORS and zinc among public and private sector providers through biannual trainings but should also focus on ensuring sustained access to an adequate supply chain.

**KEYWORDS :** Knowledge, Attitude, Zinc tablet, diarrhea

### Introduction

Diarrhoea is one of the leading causes of morbidity and mortality among children especially in under 3 years of age. Diarrhoea kills nearly 650 children below the age of five every day in India<sup>1</sup> thereby making it one of the top ten causes of mortality among infants and children below 5 years of age in India. The replacement of lost Zinc during diarrhoea is important to help the child recover and to keep the child healthy. Zinc deficiency has direct effects on mucosal functions as it disrupts intestinal mucosa, reduces brush border enzymes, increases mucosal permeability and increases intestinal secretion. Zinc in recommended doses, has been established to be well tolerated by children with no side effects. In 2006, Government of India (GOI) introduced zinc as an adjunct to low osmolarity Oral Rehydration Solution (ORS) for more effective management and treatment of diarrhoea as recommended by UNICEF and WHO. Zinc treatment is a simple, inexpensive, and critical new tool for treating diarrheal episodes among children. Numerous trials and studies demonstrate that use of zinc in treatment of diarrhea results in 25 percent reduction in the duration of acute diarrhoea and upto 40 percent reduction in treatment failure or mortality in persistent diarrhoea<sup>2</sup>. Zinc treatment has been shown to decrease the severity of the diarrhea episode by decreasing the number of stools per day, the volume of stools per day, and the number of episodes lasting beyond 7 days<sup>3</sup>. Additionally, zinc supplementation given for 10–14 days also lowers the incidence of diarrhoea in the following 2–3 months<sup>4</sup>.

Although Government has made the combination therapy available through public health system under the National Rural Health Mission (NRHM), a recent survey by UNICEF in 10 cities documented that less than 1 percent of diarrhoea prescriptions included zinc.

Indian National Programme for management of Diarrhoea adopted above policy from 2/11/2006. But at study area some delay was observed in implementing zinc related activity due to limited information, lack of awareness, and may be gap between central policies and grass root level activities. Therefore this paper analyses

the knowledge & attitude about the zinc & its role in management of diarrhea among the paramedical health workers

### STATEMENT:-

A study to assess the knowledge & attitude about the zinc & its role in management of diarrhea among the paramedical health workers of selected primary health centre of Karad Taluka.

### Objective:

1. To assess the knowledge of the paramedical health workers regarding the zinc & its role in management of diarrhea.
2. To assess the attitude of the paramedical health workers regarding the zinc & its role in management of diarrhea.
3. To find out an association between the zinc & its role in management of diarrhea with selected socio-demographic variables.

### Methodology:

A cross-sectional survey was carried out in the Kale & Vadgaon primary health centre of Karad taluka. A predesigned and pretested questionnaire was used to collect the baseline data and to assess the knowledge & attitude about the zinc & its role in management of diarrhea. The samples for the present study consisted of 45 paramedical health workers included multipurpose worker, health worker, ASHA's, & Anganwadi worker, HA, LHV ETC. The sample was chosen from Kale & Vadgaon village primary health centre of Karad Taluka on the basis of availability. Non-probability purposive sampling technique was used. The researcher obtained permission from concern authority. The investigator introduced herself to the subject. After establishing a good rapport with subjects, they were made aware about the aims and objectives of study. Informed written consent was taken from the each subject. The data obtained was compiled & the results were analyzed statistically by using frequency percentage & chi square test.

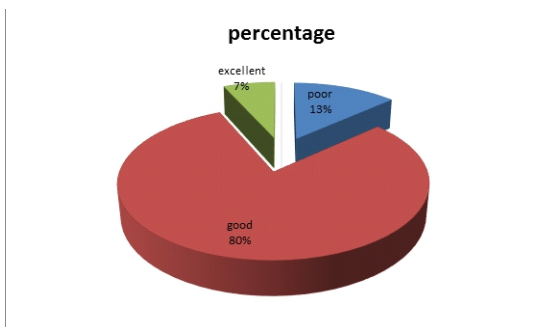
### RESULTS

**Table No. 1-Distribution of subjects according to demographic variable.**

Sr. No.	socio-demographic parameters	Frequency	Percentage
1	<b>Age in years</b>		
	19 - 29	2	4.44
	30 -39	21	46.67
	40 -49	10	22.22
	50 - 59	12	26.67
2	<b>Gender</b>		
	Male	12	26.67
	female	33	73.33
3	<b>Educational status</b>		
	ANM	11	24.44
	GNM	0	0.00
	LHV	5	11.11
	Health Supervisor	0	0.00
	Health Assistant	2	4.44
	MPW	10	22.22
	ASHA	17	37.78
4	<b>Experience In Years</b>		
	1-5	19	42.22
	6-10	6	13.33
	11-15	6	13.33
	16-20	2	4.44
	21-25	8	17.78
	Above 25	4	8.89
9	<b>Training Programme Attended</b>		
	Yes	31	68.89
	No	14	31.11
10	<b>Using zinc tablet for management of diarrhea</b>		
	Yes	41	91.11
	No	4	8.89
11	<b>You have good experience of zinc tablet</b>		
	Yes	39	86.67
	No	6	13.33
12	<b>Knowledge about zinc tablet</b>		
	poor	6	13.33
	good	36	80.00
	Excellent	3	6.67

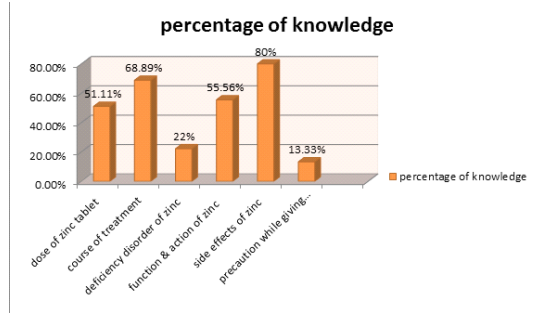
Majority (46.67 %) of the subjects were in the age group of 30-39 years, most (73.33%) of them were female. Majority (37.78%) of the respondents were ASHA having 8th to 10 Std. education. 42.22 % of them were having 1-5 years experience and 68.89% of the respondents were attended Training Programme on zinc tablets information.

**Graph No. 1-Distribution of subjects according to Knowledge regarding zinc & its role in management of diarrhea**



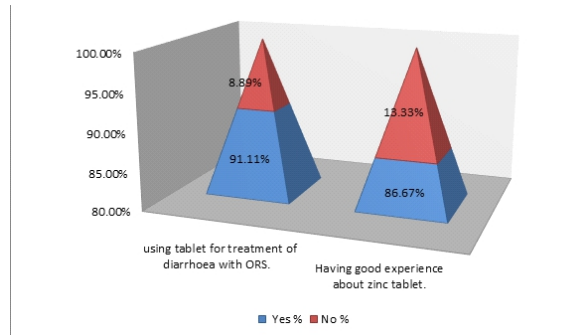
**Graph 1** describes that the knowledge of the subjects. The survey questionnaire included a number of statements about zinc tablet like when it is added in national health programme, what it is, can we use it with ORS, dose, course of treatment, deficiency disorder etc. Majority 80% subjects having good knowledge, only 7% subjects having excellent knowledge & 13% subjects having poor knowledge.

**Graph 1.1: Distribution of subjects is according to Knowledge regarding zinc tablet item wise.**



More than half (51.11%) respondents knowing correctly the dose of zinc tablet for children & infant were as most of the respondents (68.89%) knew about the course of treatment. Only 22% of the respondents were aware about the deficiency disorder of zinc & 55.56% respondents knows the action of the zinc tablet. Majority of the respondents (80%) answered correctly side effects of the zinc tablet were as only 13.33% of the respondents knows about the precautions taken while giving the zinc tablet.

**Graph No. 2-Distribution of subjects according to attitude regarding zinc & its role in management of diarrhea**



**Graph 2** describes that the attitude of the subjects. Majority (91.11%) of the respondents were using zinc tablet for treatment of diarrhea with ORS were as 86.67% of the respondents were having good experience of zinc tablet.

Chi square test is used to find out association between zinc & its role in management of diarrhea with selected demographic variables. There is no any significant association between zinc & its role in management of diarrhea with selected demographic variables.

**CONCLUSIONS:**

Lack of awareness and training were the main reason to not to use & also the inadequate supply of zinc tablet during diarrhea. To enhance the management of childhood diarrhea in India, programmatic activities should center on increasing knowledge of ORS and zinc among public and private sector providers through biannual trainings but should also focus on ensuring sustained access to an adequate supply chain.

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