



Awareness of the use of zinc in the treatment of diarrhoea in children

SUBMITTED TO

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What is Diarrhoea?

- ▶ Diarrhoea is the passage of loose or watery stools occurring three or more times in a 24-hour period that deviate from a child's normal pattern. Dehydration is the most likely symptom of Diarrhoea.

The Prevalence of diarrhoea

- ▶ Diarrhoea is the third most common cause of death in under-five children, responsible for 13% deaths in this age-group, killing an estimated 3,00,000 children in India each year.
- ▶ Every **5th** child who die of Diarrhoea worldwide is an Indian.
- ▶ Diarrhoea kills more children than AIDS, Malaria & Measles combined.

TYPES OF DIARRHOEA

- ▶ The different types of clinical diarrhoea are:
- ▶ Acute watery diarrhoea
- ▶ Persistent diarrhoea
- ▶ Dysentery
- ▶ Diarrhoea with severe malnutrition

SYMPTOMS

- ▶ bloody stools
- ▶ Dehydration
- ▶ chills
- ▶ fever
- ▶ loss of control of bowel movements
- ▶ nausea or vomiting
- ▶ pain or cramping in abdomen

OBJECTIVE

To study the usage practices of Zinc during diarrhoea in children among Pediatricians of Thane

PROBLEM STATEMENT

- ▶ Zinc is not being prescribed in case of pediatric diarrhoea inspite of its inclusion in the treatment guidelines set by the WHO & UNICEF

LITERATURE REVIEW

- 1) **Topic- Role of Zinc n childhood diarrhoea management: A case of Nepal**
 - ▶ One of the recent strategies made to minimize the diarrhea associated mortality in children involves the use of oral zinc in diarrhea management.
 - ▶ The study concludes that, if Zinc is regularly prescribed during diarrhoea then it will reduce the public health burden in developing countries like Nepal.

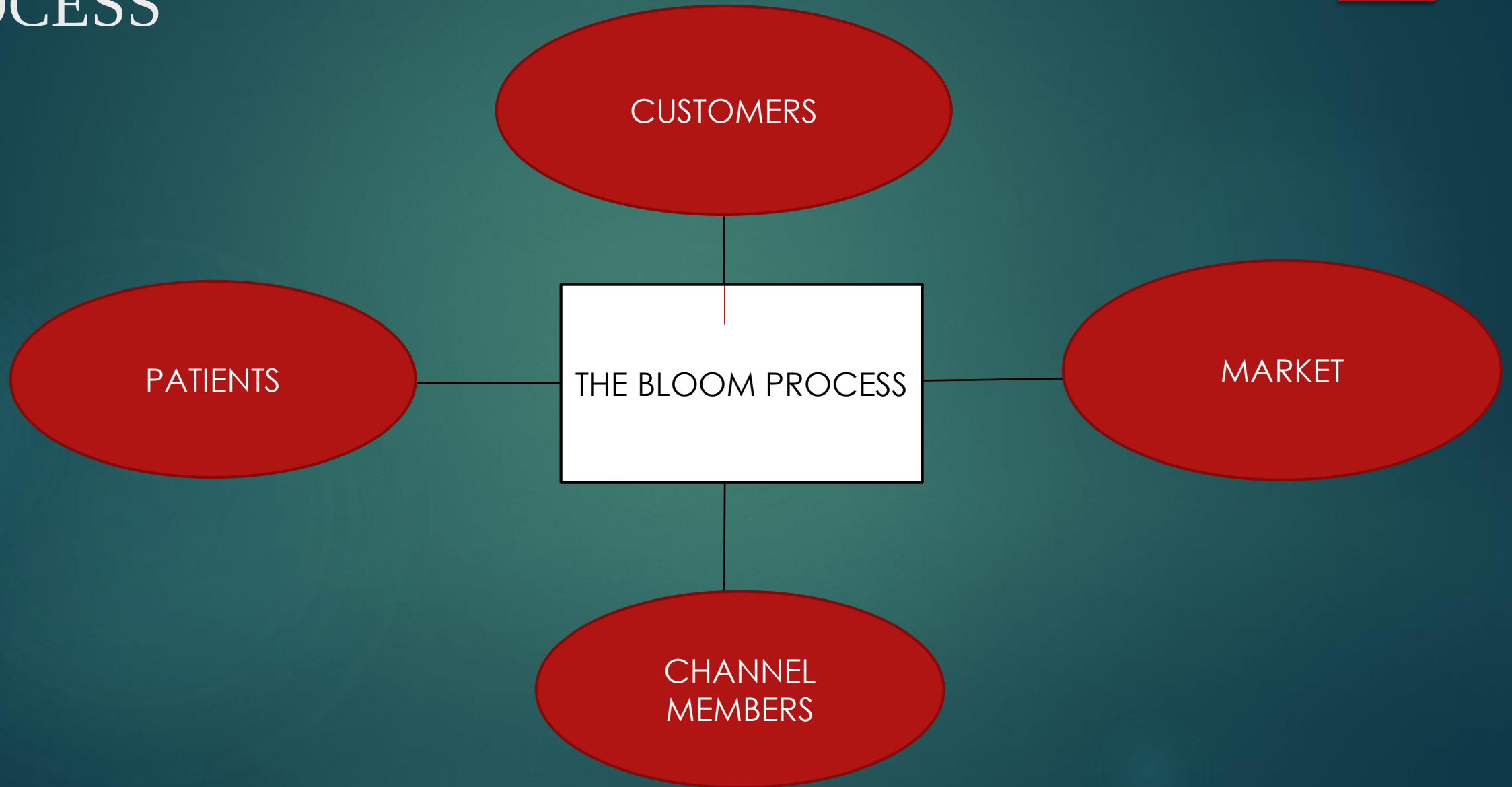
2) Topic- Zinc supplementation in young children: A review of the literature focusing on diarrhoea prevention and treatment

- ▶ A total of 38 studies were included, which showed that zinc has been shown to be effective in decreasing both prevalence and incidence of diarrhoea, reducing respiratory infections and improving growth in children with impaired nutritional status.

METHODOLOGY

- ▶ **Study Type-** Descriptive
- ▶ **Study Population-** Chemists and Pediatricians
- ▶ **Data Type-** Primary and Secondary
- ▶ **Duration-** 3 months
- ▶ **Sampling Area-** Thane
- ▶ **Sampling Tool-** Questionnaire
- ▶ **Sample Size-** Pediatricians:40
- ▶ **Sampling Technique-** Non Probabilistic Convenience Sampling

THE BLOOM PROCESS



CUSTOMERS

- ▶ The customers of the process are the pediatricians of Thane. A survey was done among the pediatricians.
- The survey was about the treatment prescribed by the doctors to the children suffering from diarrhoea.
- ▶ The questionnaire contained 5 questions which focused on noting what type of treatment is being prescribed by the doctors.

MARKET

The market for zinc medications consist of the following brands and different dosage forms:

- Z & D
- ZINCONIA
- ZN20
- ZN20
- ZINCOLIFE
- ZIORAL
- ZIFRA

CHANNEL MEMBERS

S.NO	BRAND NAME	FORMULATION	COMPANY NAME
1	Zinconia	Syrup	Zuventus
2	Rinifol	Dry Syrup	Elan Pharma
3	Rinifol-Z	Dry Syrup	Elan Pharma
4	Zincogut	Oral Solution	Centaur
5	Zincolife	Syrup	Mankind
6	Weltone Z	Drops	Delcure Lifesciences Limited



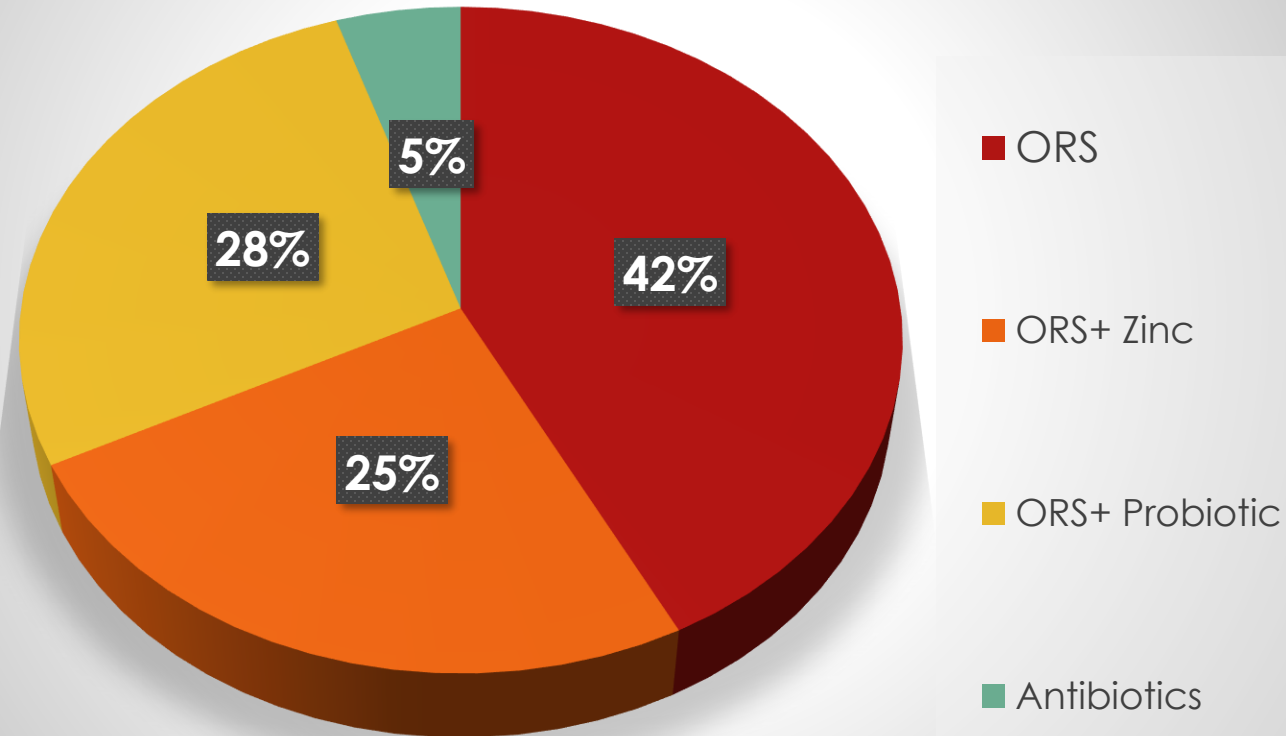
PATIENTS

The different concerns of the mothers for their children suffering from diarrhoea noted were:

- Stomach ache
- ▶ Loss of appetite
- ▶ Low energy
- ▶ Child cannot communicate about the pain
- ▶ Swollen anus which is painful
- ▶ Rashes/irritation on the skin
- ▶ Dehydration
- ▶ The mother has to be always available for the child
- ▶ Maintaining the cleanliness
- ▶ The child does not take medicines during treatment

RESULTS

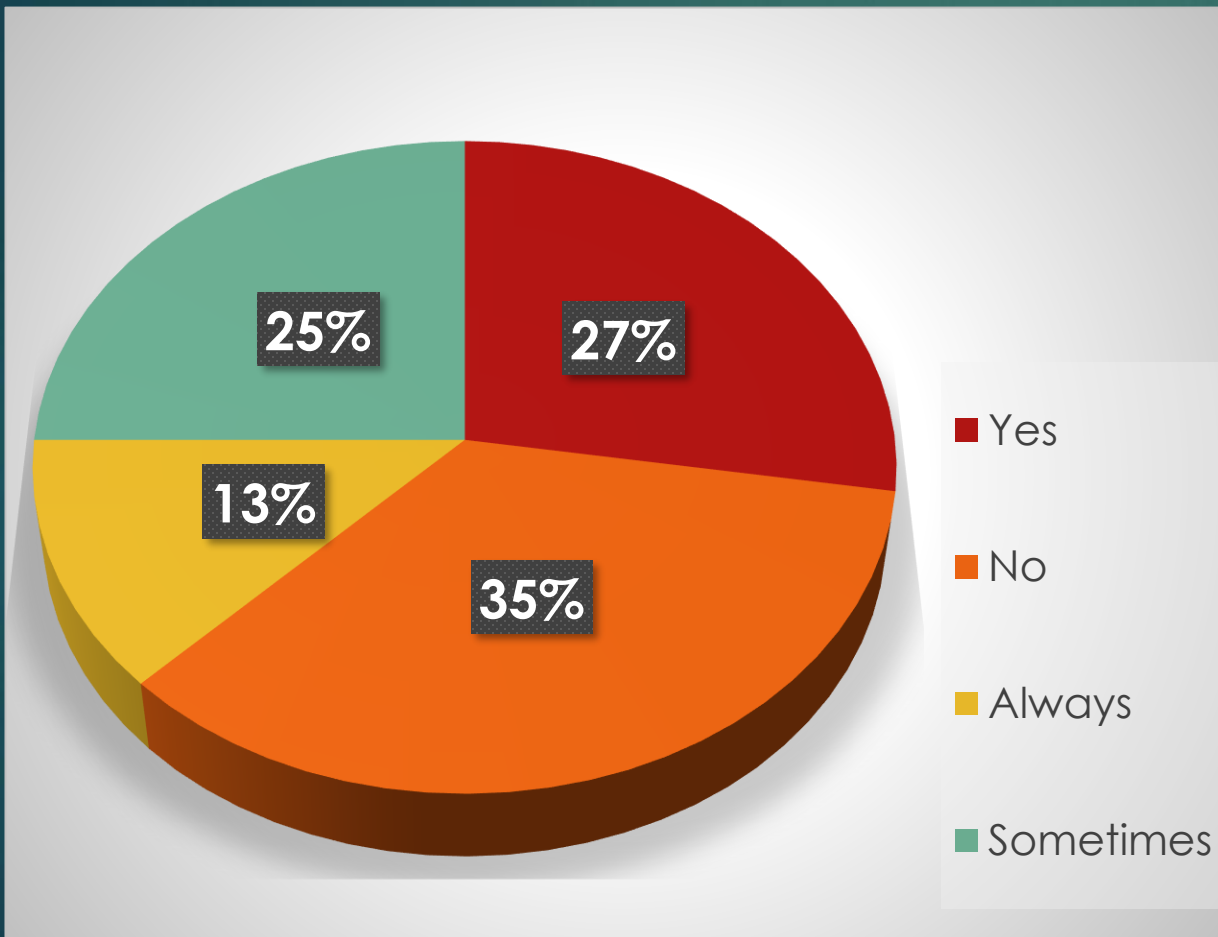
Q1) What is the treatment you prescribe for a child suffering from diarrhoea?



INTERPRETATION:

- The most common preference of medication among the pediatricians of Thane was of ORS followed by ORS combined with Probiotics.
- There was not much inclination of the doctors to prescribe zinc for pediatric diarrhoea.

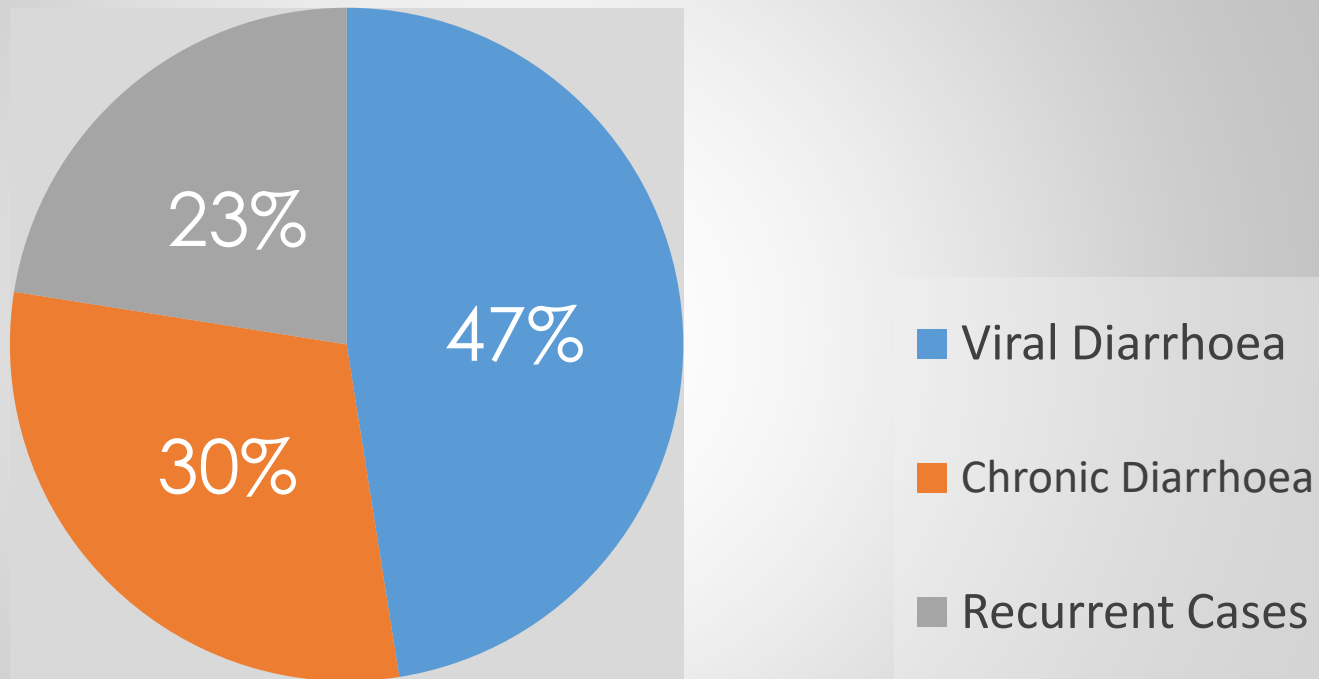
Q2)Have you ever prescribed zinc in your treatment?



INTERPRETATION:

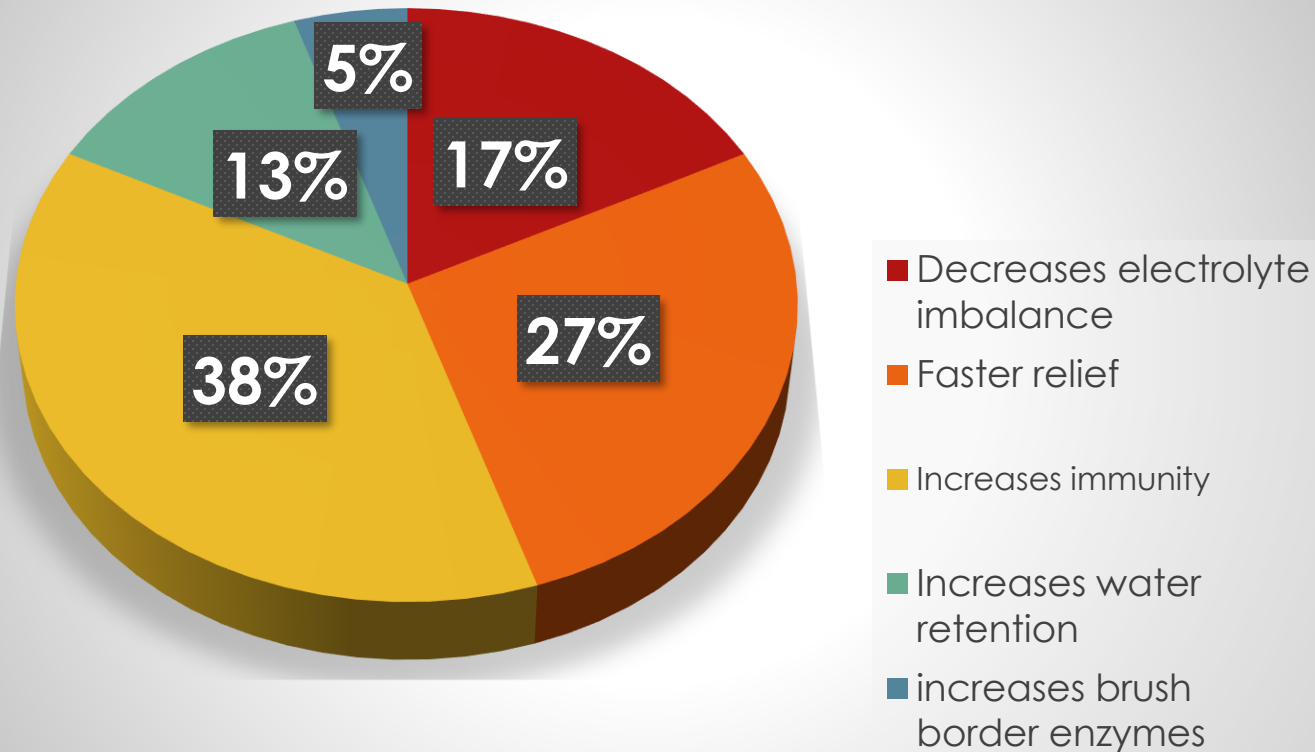
- There was a maximum account of the Pediatricians not prescribing zinc in the case of pediatric diarrhoea
- The Percentage of doctors prescribing zinc and diarrhoea was only 27%
- The graph shows that Zinc has not been added in the treatment regime of pediatric diarrhoea by the doctors.

Q3) When do you prescribe Zinc?



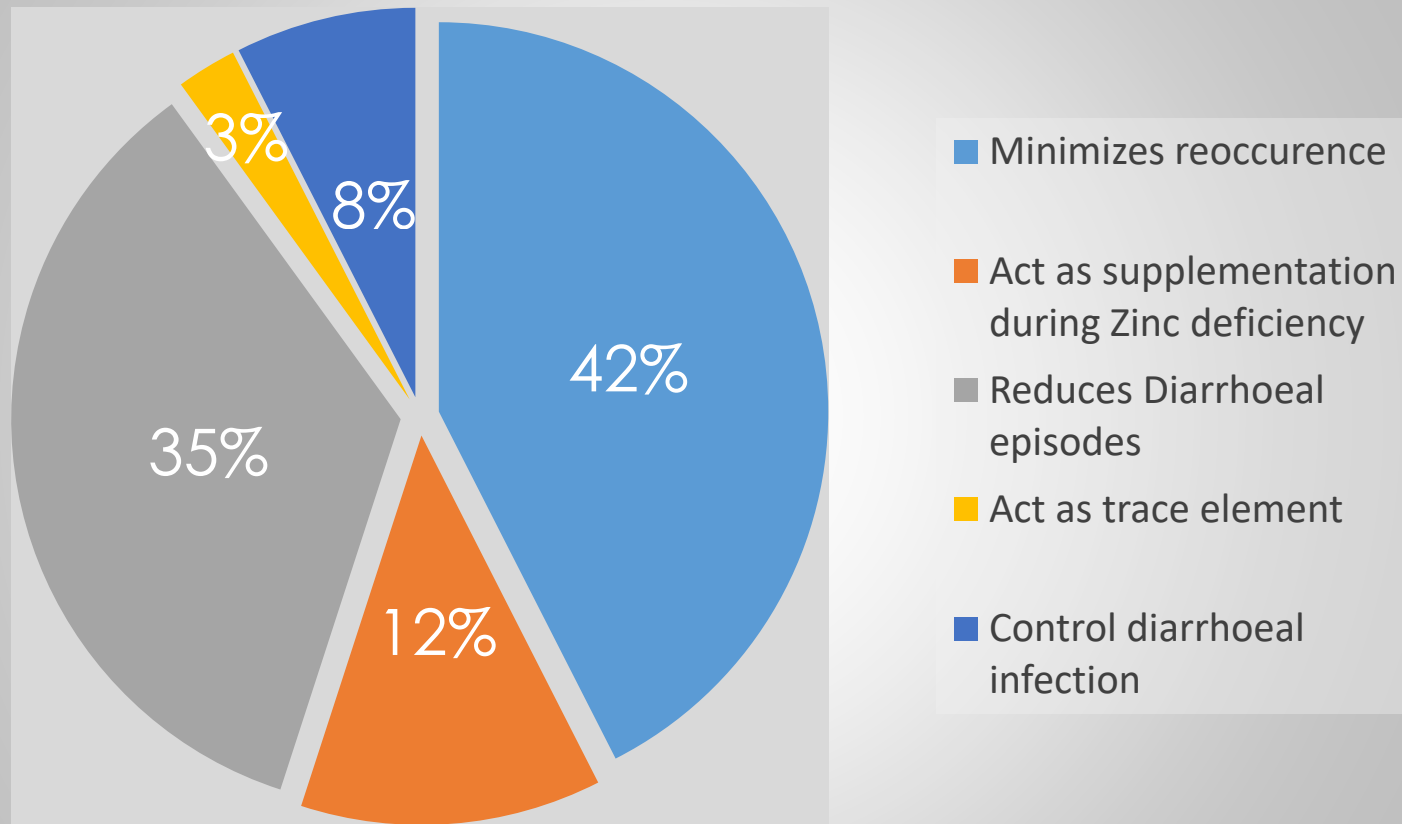
INTERPRETATION:
The prescribers of zinc in diarrhoea tend to prescribe zinc in cases of viral diarrhoea in children the most followed by recurrent cases.

Q4) What are the roles/benefits of zinc in diarrhoea?



INTERPRETATION: The benefits of zinc were recorded and it was found that the doctors who prescribe zinc in paediatric diarrhoea know about the different roles of zinc mainly as an immunity enhancer and for faster relief in diarrhoea among children.

Q5) What clinical outcomes of zinc have you observed in your practice?



INTERPRETATION:
The clinical outcomes of zinc in case of pediatric diarrhoea were noted which shows that Zinc has proved to be efficient in controlling diarrhoeal infection and reducing the frequency of diarrhoeal episodes.

CONCLUSION

- There is a set guideline by the WHO & UNICEF for the treatment of diarrhoea which includes ORS+Zinc, inspite of which there is a lesser knowledge and lesser usage of zinc as a treatment in diarrhoea.
- ▶ There is a need for awareness of benefits of zinc among the patients as well as the prescribers.
- ▶ The benefits of zinc and ORS combined together must be presented so that there is acquaintance with the fact that by adding zinc, ORS proves to give a faster recovery.
- ▶ The traditional use of only ORS as a treatment in diarrhoea has become a barrier in knowing more about the different benefits of zinc for treating diarrhoea thus, less number of prescribers were inclined towards prescribing zinc for pediatric diarrhoea.