Guideline for Control of childhood diarrhoea through scaling-up zinc and ORS

The National Rural Health Mission and Millennium Development Goals aim towards reduction of child mortality in the country. 11% deaths among Under Five Mortality in the country occur due to Diarrhoea, to which around 2 lakh children each year are lost. Diarrhoea is an easily preventable and treatable cause of childhood illness contributing towards child mortality. Diarrhoeal diseases also contribute to malnutrition in children and leads to life-threatening conditions like more episodes of diarrhoea, Respiratory infections, measles, malaria and so on.

Two advances in managing diarrhoeal diseases – Treatment of dehydration with the use of low osmolality oral rehydration salts (ORS) as well as use of Zinc and breastfeeding and continued feeding leads to faster recovery from diarrhoeal illness and can drastically reduce the number of diarrhoeal deaths along with reduction in the duration and severity of diarrhoeal episodes.

While the management of diarrhoea seemingly appears to be simple, the challenge has been non-adherence to the treatment protocols both by public and private health service providers and availability of essential commodities like ORS and Zinc at all levels of public health system.

All CMOs are requested to organise half to one day of orientation training on ORS-Zinc for all health staff for orientation on zinc administration and refresher on diarrhoea management protocols. The districts may utilise monthly PHC meetings for the same. MOH and Pediatrician at the District/CHC hospital should be involved in this refresher course to all the Health educators and workers/ ANM/ AWW. The attached guidelines should be the basis for this course. The attached guidelines have been introduced for combined use of ORS and Zinc in diarrhoeal cases in children Under Five Years of age as Oral Rehydration Salts (ORS) and Zinc, can avert nearly 90 per cent of Under Five Diarrhoeal deaths.

CMOs are also directed to see to it that sufficient stock of ORS and Zinc tablets are available at every health facility as well as with health worker, for timely supply to each patient with diarrheal illness.

CMOs are directed to continuously monitor & evaluate the diarrhea control programme as given below:

(i) Monthly Progress reporting
Monthly progress reports should be prepared and compiled at all levels on the reporting formats designed to track treated childhood diarrhoea cases, provision of treatment with zinc and ORS and stock status. These reports are to be prepared at village level by FHW and further compiled at HSC, PHC, district and state level.

(ii) Periodic visits to the CHC/PHC/SC/AWW/ASHA
District, block, PHC level officials should monitor provision of Zinc and ORS to children with diarrhoea during monitoring field visits to the PHCs, SCs, AWW, and ASHA. Joint visits may be planned by the health and WCD officials from the district/block/sector levels.
(iii) Home visits to children with diarrhoea treated by the health worker
District/Block/PHC Medical Officers/Supervisors can identify few children treated for
diarrhoea in previous 2 weeks from the records/information given by the health worker
and visit them at home to assess caregivers’ knowledge on following aspects:

- Does the family know which home available fluids to give, how to prepare ORS?
- Are they giving ORS and Zinc tablets as per recommendations?
- Do they understand the benefits of giving Zinc for 14 days?

**Entry in HMIS is to be ensured each month.**
Indicators that can be tracked with the help of monthly reports

Following are the main areas of diarrhoea program that need to be monitored and
reviewed on regular basis to track program progress and take corrective measures if
required:

1. **Treatment of cases**
   - No. of children (< 5 years) treated for diarrhoea
   - No. (%) of children treated with *both* Zinc and ORS
   - No. (%) of children with diarrhoea treated with *only* ORS

2. **Supplies of Zinc and ORS**
   - Balance stock of ORS and Zinc available at various levels-District/Blocks.
   - No. of facilities/ functionaries reporting stock-out of Zinc and ORS per block.

3. **Deaths due to diarrhea**
   - No. of deaths due to diarrhoea in 0-5 years/6-14 years with Male/Female.

An **integrated IEC/BCC Campaign** should also be incorporated. Campaign for
IEC/BCC activities for propagation of Zinc and ORS scale up requires a mix of all three
types of mediums:

1. Mass media (TV/Radio)
2. Mid media (posters, wall paintings/street plays etc.)
3. Outreach Inter Personnel Communication by ANM/ASHA (home demonstrations,
   VHND demonstrations)
Key Action Messages to be given to the masses:

1. Increase awareness of mothers and caregivers of children under five years of age through households demonstration of ORS and Zn use in diarrhoea by community workers (ASHA/AWW/ANM/NGO workers/SHGs/PRIs) should be undertaken
2. Role of diarrhoea in onset of malnutrition and cause of deaths in children
3. Give extra fluids during diarrhoea
4. Give ORS to all children with Diarrhoea
5. Continue feeding, including breast feeding in those children who are being breast fed
6. Give Zinc for 14 days, even if diarrhoea stops
7. Use clean drinking water
8. Make a habit of regular hand washing with soap
9. Giving children ORS and Zinc during diarrheal illness is a safe treatment which makes the child stronger
10. Zinc decreases the chances of second episode of diarrhoea in another 2-3 months
11. Danger signs of diarrhoea should be told to caregiver and when to return to health centre, if child is not responding to ORS and Zinc at home.

Role of Zinc in management of diarrheal diseases among children:

1. Are more playful during the illness
2. Recover faster
3. Have reduced amount of diarrhoeal stools.
4. Have lesser chances of diarrhoea lasting for >7 days
5. Have lesser chances of being hospitalized
6. Are less frequently given unnecessary oral and injectable drugs; and cost of care is reduced
7. Have lesser chances of getting diarrhoea and pneumonia over the next 2–3 months
8. Have substantially increased use of ORS when Zinc and ORS are promoted together, as compared to ORS alone
9. According to estimates, Zinc for the treatment of diarrhoea will reduce diarrhoea mortality and hospitalization by 23%, prolonged diarrhoea (diarrhoea lasting > 7 days) by 33% and prevalence of diarrhoea following the treated episode by 19%.

Zinc administration as per age of child:

a) Children from 2-6 months:
Children aged between 2-6 months should be given 10 mg of elemental zinc per day for a total period of 14 days from the day of onset of diarrhoea. A tablet of zinc contains 20 mg of elemental zinc. Therefore half tablet should be given to the children in this age group. Zinc when supplied in the form of dispersible tablets, easily dissolves in breast milk or water. Therefore, in infants below 6 months of age, the tablet should be given by dissolving in breast milk and in infants above 6 months of age, it should be given by dissolving in breast milk or water.

b) Children above 6 months:
One full tablet should be given to all children with diarrhoea above 6 months of age. It should start from the day of onset of diarrhoea and continued for a total period of 14 days.