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Government of India
Ministry of Health & Family Welfare
Department of Family Welfare
CHILD HEALTH DIVISION

Nirman Bhawan, New Delhi.
Dated the 02nd November 2006.

To

- 1) The Secretary, Department of Health of All States/UTs
- 2) The Secretary, Department of Family Welfare of All States/UTs.
- 3) The Director of Family Welfare of All States/UTs
- ✓4) The Country Representative, UNICEF, Lodi Estate, New Delhi.
- ✓5) The Country Representative, WHO (India), Nirman Bhawan, New Delhi.
- ✓6) The Country Representative, USAID, Chanakyapuri, New Delhi.
- ✓7) The Country Representative, European Union, Chanakyapuri, New Delhi.


Subject: Use of Zinc as an alternate Therapy in the treatment of diarrhea -Regarding -

Sir,

I am directed to say that the Government of India for quite some time has been examining the issues on the policy decisions on the use of Zinc in the management of diarrhea for the Children in the Country, and has also been reconsidering the recommendations of the WHO, UNICEF and Department of Biotechnology, in this aspect. **It has now been decided to administer Zinc in the national programme as an adjunct to ORS in the management of diarrhea in children older than 3 months.** Introduction of Zinc in the Public Health System for diarrhea will go a long way in reducing the infant mortality rate. A Policy Note on the subject is also enclosed herewith. As such, you may kindly take further needful and necessary action in the matter please.

This issue with the approval of Secretary (Health & Family Welfare)

Yours faithfully,


(Smt P Sengupta,
Under Secretary (CH)
Tel No.23063875

Copy also for information to:

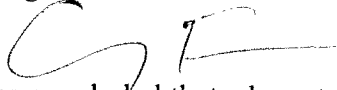
- ✓1. Secretary, Department of Bio Technology, Ministry of Science & Technology, CGO Complex, Lodhi Road, New Delhi.
- ✓2. Secretary, Ministry of Women & Child Development, Shastri Bhawan, New Delhi.
- ✓3. DG, ICMR, Ansari Nagar, Ring Road, New Delhi.
4. Sr. Adviser (Health), Planning Commission, Yojana Bhawan, New Delhi.
- ✓5. Adviser (Nutrition), DGHS, Nirman Bhawan, New Delhi.
6. Secretary, Department of Women & Child Development of All States/UTs.
7. Supply Division/Statistics Division, Ministry of Health & FW
8. IMA, IAP, ANF, BANI, NIPCD, INCLIN, AIMS

**POLICY ON USE OF ZINC IN THE NATIONAL PROGRAMME FOR
MANAGEMENT FOR DIARRHOEA**

- **Zinc (20mg/day for 14 days) is to be used in the national programme as an adjunct to ORS in the management of diarrhoea in children older than 2 months.**
- Zinc is a very safe drug.
- A stable formulation (stable at room temperature for three years) is available.
- It is well accepted by children and mothers.
- Apart from reducing duration and severity of the treated episode of acute diarrhea, zinc treatment in programmatic condition has the potential to decrease hospital admission rates by 15-20%, decrease child mortality by 3-5% and decrease the incidence of subsequent episodes of diarrhoea and possibly pneumonia over ensuing 3 months.
- Zinc addition to ORS for treatment of diarrhea has been shown to substantially reduce use of unwarranted drugs during acute diarrhea. This is likely to help reduce emergence of drug resistant entero bacteria, a major public health problem.
- The critical issues to enable Zinc to be effective are that it must be freely available and accessible round the year in every village and all health personnel, including private practitioners and anganwadi workers, must be included in the network of Zinc distribution. Hence inter sectoral co-ordination with MWCD is essential.
- Communication strategy for creating awareness about Zinc must be in place

MINUTES OF THE MEETING HELD ON 25.1.2006 TO DISCUSS THE ROLE OF ZINC AS AN ADJUNCT TO ORS IN THE TREATMENT OF DIARRHOEA IN RCH II

An expert committee constituted by the Ministry of Health and Family Welfare, met under the chairmanship of Dr. MK Bhan, Secretary, Department of Biotechnology to review the policy of using zinc along with ORS in the case management of diarrhoea.



The committee concluded that adequate evidence was available that zinc supplementation reduced the duration and severity of diarrhoea. ORS remains an essential component of the management of childhood diarrhoea. Also, the IAP, WHO and the current committee at an earlier meeting, have already endorsed the use of zinc along with ORS in the management of acute diarrhoea.

The group reviewed the disadvantages of using zinc fortified ORS namely not being able to standardize zinc intake, because of variable amounts of ORS consumed by children. Giving zinc separately with ORS rather than in the same formulation has the potential to replace other drugs including antibiotics commonly prescribed during diarrhoea. Zinc in recommended doses, has been established to be well tolerated by children with no side effects. Additionally, the window between the therapeutic and toxic dose of zinc is large.

The committee discussed issues pertaining to zinc supplies in the RCH II. Various salts of zinc such as sulphate and gluconate are available. While all are well accepted by children the Department of Biotechnology has already taken up the initiative using their own budget, for facilitating manufacturing of dispersible zinc tablets using sulphate. This effort is being made along with assistance from the World Health Organization, Geneva. The WHO will also assist DBT in assessing whether formulations made in India meet the required specifications.

The committee made the following recommendations:

- The committee recommended use of 20 mg of zinc sulphate dispersible tablets for use in childhood diarrhoea for program purposes
- Children aged 2 months to 6 months to be advised $\frac{1}{2}$ tablet per day dissolved in breast milk. Those older than 6 months will be advised 1 tablet a day dissolved in breast milk or water.
- The tablets will be advised for 14 days beginning from the day the child sought care.

- The committee recommended that all cases of diarrhoea should receive zinc in addition to ORS. Currently approximately 20% of diarrhoeal episodes are treated by the public health system. The zinc requirements are therefore calculated on this basis. The detailed calculations of requirements are annexed and may be used by the government.
- Availability of zinc tablets should be ensured in all parts of the country including the most remote areas.
- Since zinc in recommended doses is very safe, the committee recommends that the government make it an OTC formulation on the same pattern as ORS. To maximize the impact of this program, the committee recommends that both zinc and ORS be made available at the Anganwadi centre itself. This would ensure early initiation of treatment and also reduce the family's expenditure on unwarranted drugs.
- Zinc fortified ORS is not recommended.
- Communication: To achieve these goals, an effective communication strategy is required. Activities are required to popularise this intervention with the population, and health care providers including private practitioners.
- It is recommended that all professional bodies and institutions be engaged to promote the use of zinc along with ORS in the treatment of diarrhoea in children.
- Training: Since this is a new intervention, health care providers, particularly ANMs, Anganwadi workers will need orientation in the use of zinc. Practical and field tested materials have been developed and used in district Faridabad, by the Society for Applied Studies, where introduction of zinc in the case management of diarrhoea was pilot tested. In areas implementing IMNCI this may be incorporated into the IMNCI program.
- As for all new interventions, it is important that this program be monitored, and supported by operational research.

ANNEXURE 1. REQUIREMENTS FOR TABLETS

Total underfive population*	11,04,47,000 children
Diarrhoea incidence**	1.7 episodes/child/year
Total diarrhoeal episodes per year	18,77,59,900 episodes
20% episodes treated by government facilities	Approximately 4 crores
Zinc tablets required (14 day course)	Approximately 53 crores
Cost estimates: As per information available at present a tablet would be available at 50 paise to 75 paise	

*Based on information provided by the Chief, Directorate of Statistics, Ministry of Health and Family Welfare.

**Data from "Burden of diarrhoeal diseases in India", National Institute of Cholera and Enteric Diseases (Kolkata)