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Newsletter of the 'Scaling Up Zinc for Young children with diarrhoea in Bangladesh' (SUZY) Project



EDITORIAL

Dear readers,

Welcome to the sixth issue of SUZY News.

This newsletter is intended to keep interested people informed about the scale up of zinc as a treatment for diarrhoea in addition to ORS for young children in Bangladesh and the research that accompanies and supports this process. This initiative of the Scaling Up Zinc for Young Children with Diarrhoea (SUZY) project of ICDDR,B also keeps you informed about the project activities along with the benefits of zinc treatment among the under-five children with diarrhoea.

Knowledge for Global Lifesaving Solutions

The scaling up activities progressed a lot since the last issue of SUZY News. The ACME Laboratories Limited, the second largest pharmaceutical company in Bangladesh, launched Baby Zinc dispersible tablets on 23 November 2006 and Dhansiri Media Production House, a Bangladeshi advertising company, introduced the Baby Zinc mass media campaign. The promotional tools include television and cinema spots, a radio jingle, press advertising and articles, posters, stickers, billboards, bus branding, folk songs, courtyard meetings and divisional launching.

ICDDR,B is developing and promoting realistic solutions to the major health, population and nutrition problems facing the people of Bangladesh

In the second week of April 2007, the SUZY Technical Interest Group met. Productive suggestions and results

came out of the meeting including giving more emphasis on the use of ORS in the mass media campaign so that people might not have the misconception that zinc is a substitute for ORS. This issue highlights the findings of the continuous surveys on the use of zinc and ORS, which show that ORS administration is not overshadowed by zinc in management of childhood diarrhoea rather the use of ORS increased with the use of zinc for under-five children in Bangladesh.

We successfully conducted the 4th International Zinc Conference in May 2007. This year the theme of the conference was 'Scaling Up Zinc – The Way Forward'. You will find a summary of the conference and a highlight of a presentation on launching zinc in India and Tanzania in this newsletter. For more details on the conference and other presentations please visit our website.

www.icddrb.org/activity/SUZY

The website contains more information on the project, zinc research, news and international zinc conferences.

This issue of SUZY News includes some highlights of the Baby Zinc communications campaign, SUZY training activities, and an example of the SUZY team making research work, in the qualitative results of a study looking at drug promotion in Bangladesh.

I hope you will enjoy reading this issue.

Editor, SUZY News

The SUZY project targets the entire under-five-year-old population of Bangladesh to provide zinc treatment



Launching of zinc in Bangladesh as a treatment with ORS for childhood diarrhoea

In support of scaling up zinc treatment for the management of childhood diarrhoea and making the treatment available across the country, ICDDR,B in collaboration with its production partner, ACME Laboratories Limited, formally launched Baby Zinc dispersible tablets on 23 November 2006. This included the initiation of a mass media campaign developed by Dhansiri Media Production House. ACME Laboratories Limited is leading the provider promotion activities.

ORS and zinc can play a very important role as a lifesaving treatment of childhood diarrhoea

To disseminate the message of using zinc with ORS for treatment of childhood diarrhoea, Dhansiri Media has been conducting a communication campaign that aims to reach all segments of the Bangladeshi population, including health providers, parents, opinion leaders and drug sellers. The promotional tools are quite varied,

including divisional launchings, television, radio and cinema spots, press advertisements, press articles, courtyard meetings, folk songs, posters, billboards, sign boards, and wall paintings.

In addition ACME Laboratories Ltd is conducting promotional activities to reach providers with the zinc treatment message. They conduct scientific seminars, promotion through their marketing representatives, and the training of palli *chikitshak* (village doctors).

The key messages for promotion of Baby Zinc are:

- Zinc in addition to ORS, for any childhood diarrhoea episode
- Zinc treatment can prevent future episodes of diarrhoea, but the zinc treatment must last 10 days.

In each and every communication material the first emphasis is given on the use of zinc in conjunction with ORS. The caretakers have also been advised to ensure continuous feeding of the child.

Prior to launching the Baby Zinc

promotional campaign, the SUZY project completed a great deal of provider promotion among paediatricians and licensed physicians that addressed zinc treatment of childhood diarrhoea generically. Appropriate guidelines and training materials were developed.

Monitoring and Evaluation

Prior to the launch of Baby Zinc and since then the SUZY project has been continuously monitoring the intended and unintended consequences of the zinc treatment of diarrhoea scale up in Bangladesh. This is done through nationally representative surveys in rural, municipal and large city corporation sites. The intended consequences are the use of ORS and zinc for the treatment of diarrhoea in children under five years of age and reduced prescribing of antibiotics. Unintended consequences would be the substitution of zinc for ORS, or the sale of zinc with less than a 10day supply.

The project partners are working very cautiously to make sure that zinc should never be promoted as a substitute for ORS. Monitoring is also important to ensure the quality of product that children are receiving is safe and effective.

In September 2006 a survey was started and continued till November >



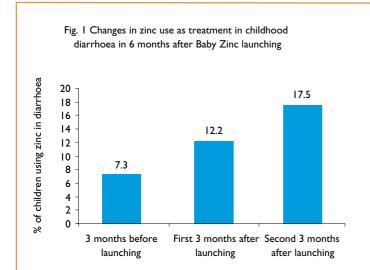
2006 before the launching of the new dispersible tablets. This survey was considered as a pre-launch, baseline survey. Thereafter, post-launch surveys are taking place every three months and will continue until May 2008. Thus far two post-launch surveys have been completed—one from December 2006 to February 2007 and the other from March to May 2007.

are caregivers of a child who has had a diarrhoeal illness of at least two days' duration in the past two weeks.

Analyzing the data, it was found that with the passing of time, the use of zinc as a treatment for childhood diarrhoea has been increasing. Prelaunch, ICDDR,B found that only 7% of caregivers reported to use zinc and in 90% of cases it was syrup, rather than tablets (Figures 1 & 2). But the

first post-launch survey. About 90% of caregivers reported that they continued normal feeding during diarrhoeal episodes of their children.

The data collected in these surveys also show that the zinc scale up campaign is positively affecting the use of ORS. We observed a 6% rise in ORS since the launching of Baby Zinc. As depicted in Figure 4, ORS use is 20% higher among caregivers who used



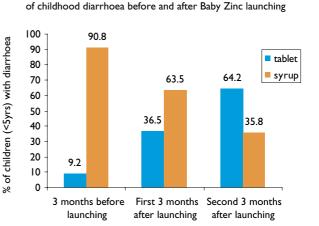


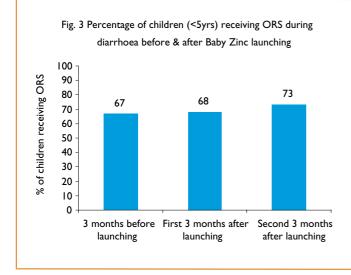
Fig. 2 Changing trends in use of zinc syrup vs tablets for treatment

In these nationally representative, cross-sectional cluster-sample surveys the target population was sub-grouped under three strata: city corporation, district municipality (urban), and rural populations. Dhaka

use of zinc more than doubled to 18% during the second post-launch survey (from March to May, 2007), and the use of syrup decreased significantly. The data of the second post-launch survey also shows that knowledge

zinc compared to those who did not during the diarrhoeal episode of their children. This finding clearly supports the joint promotion of ORS and zinc.

So ORS and zinc can play a very



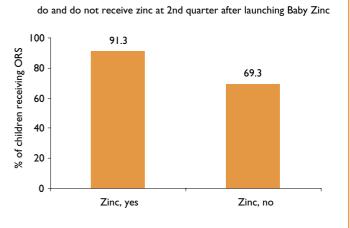


Fig. 4 Percentage of children (<5yrs) receiving ORS among those who

was purposively selected as the city corporation and includes slum and non-slum locations. The respondents about zinc treatment in childhood diarrhoea increased tremendously, almost doubling compared to the important role as a lifesaving treatment of childhood diarrhoea in Bangladesh through successful scaling up

4th International Zinc Conference

Scaling Up Zinc—The Way Forward

The SUZY project held its 4th international conference on scaling up zinc on 6 - 7 May 2007 at ICDDR,B in collaboration with the Directorate General of Health Services, Ministry of Health and Family Welfare (MoHFW), Government of the People's Republic of Bangladesh.

The theme of the international conference was 'Scaling Up Zinc—The Way Forward.' The presentations focused on recent research findings in support of scaling up zinc, initiatives taken in different parts of Asia and Africa, challenges in scaling up zinc and the launching of zinc treatment in Bangladesh.

Millennium Development Goal 4 aims at a two-thirds reduction in under-five mortality by 2015

Speakers at the conference, national and international, shared with the participants their experiences with zinc treatment projects undertaken in their respective countries.

Honourable Adviser, Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh Major General (Retd) Dr ASM Matiur Rahman inaugurated the two-day event held at ICDDR,B, with National Professor Dr MR Khan and Director General, Directorate General of Health Services, MoHFW, Bangladesh Dr Md Shahjahan Biswas, gracing the inaugural session as special guests. Former Executive Director of ICDDR, B Professor David A Sack chaired and Director of Health Systems and Infectious Diseases Division and Principal Investigator of SUZY project Dr Charles P Larson delivered the welcome speech.

The participants of the conference included representatives from the MoHFW of Bangladesh, Kenya, Tanzania, India, International Rescue Committee (IRC), Johns Hopkins

School of Public Health (USA), international and national NGOs, research institutes, the Institute for Child and Mother Health and ICDDR.B.

The first plenary session, on recent research findings, was enriched with the results of three studies. The first study was on differential response at the village level to introduction of combination therapy for malaria and zinc for diarrhoea in Sikasso Region, Mali. It discussed the introduction of zinc and artemisinin combination therapy (ACT) in community level in Mali and its effects which were found much greater at community level (village drug kits) than at first level facilities (community health centres). The study also discussed implications for the introduction of zinc for diarrhoea in sub-saharan Africa like the need to plan for some level of continuing promotion of zinc and ORS and promotion will likely be more effective if zinc and ACTs promotion is coordinated.

The second study was on randomized, double-blind controlled community trials to compare the efficacy of a short course (5-day) and

the 10-day course of 20 mg/day of elemental zinc in the management of acute diarrhoea in young children.

The third study titled 'Zinc supplementation in the management of shigellosis in malnourished children in Bangladesh' shows that zinc supplementation along with antibiotic therapy during shigellosis had distinct benefits such as reduced recovery period to half, increased weight gain during hospitalization and reduced diarrhoeal episodes during subsequent follow-up months. The result of this study also proposes that zinc supplementation should be routinely provided to children with shigellosis.

The second plenary session on recent research started with the findings of immune outcomes and clinical outcomes of zinc treatment with and without follow-up supplementation trial and a randomized, double-blind field trial. The next presentation was on the Mainstreaming Nutrition Initiative (MNI), an existing global partnership aimed at developing, promoting and supporting mainstreaming of nutrition at the policy and program level in developing countries with emphasis on mother and child health.

The session ended with the presentation of the results of recent



research on the risk for vomiting or regurgitation in the initiation of zinc treatment for acute childhood diarrhoea: a randomized doubleblind, placebo-controlled trial. The result of this study shows that under-five children with childhood diarrhoea who received zinc were not at increased risk for vomiting and/or regurgitation when compared to those who receiving a placebo.

The second day of the international conference was on scaling up zinc

Zinc treatment can prevent future episodes of diarrhoea, but the zinc treatment must last 10 days

in the community. There were two plenary sessions of the day-'Challenges in Scaling up Zinc' and 'Zinc Promotion and Production.'

The topics discussed in the session on challenges of scaling up were the efficacy and safety of zinc therapy in different childhood illnesses in Bangladesh, the role of the private sector in zinc supply and demand in light with the Point of Use Water Disinfection and Zinc Treatment (POUZN) project experience in India and Tanzania, the public sector rollout of zinc treatment in Bangladesh through its Integrated Management of Childhood Illness (IMCI) programme and the IRC experience in scaling up zinc treatment in conflict-affected settings.

The final plenary session of the conference titled 'Zinc Promotion and Production' was enriched with the presentations on the manufacturing, marketing & distribution of Baby Zinc in Bangladesh; launching the Baby Zinc communication campaign at national level: best practices and lessons learned; willingness-to-pay for zinc treatment of childhood diarrhoea in a rural population of Bangladesh and the experience of the SUZY team on orientation and training of healthcare providers.

Around 250 health professionals from public, private and NGO sectors attended the conference and interacted enthusiastically with the participants with their experiences

Zinc treatment for childhood diarrhoea: POUZN Public-Private Partnerships in India and Tanzania

Camille Saadé

The Point of Use Water Disinfection and Zinc Treatment (POUZN) project is a USAID-funded project being implemented in India, Tanzania, and most recently in Indonesia designed to prevent diarrhoea by introducing point-of-use water disinfection, and to reduce the severity and length of diarrhoeal episodes with zinc treatment and oral rehydration therapy (ORT).

INDIA

More than 500,000 children die annually from diarrhoeal disease in India. Usually mothers treat their diarrhoea-infected children with home remedies or take them to unlicensed providers. Caregivers generally take their children to a qualified physician only when home remedies and unlicensed providers fail

In India the private sector accounts for over 75% of all health expenditure, including 67% of all hospitals, 63% of all dispensaries and 78% of all doctors. The pharmaceutical industry has excellent manufacturing, distribution and marketing. The Indian Academy of Pediatrics (IAP) endorsed the WHO/UNICEF recommendations of zinc treatment for childhood diarrhoea and has encouraged the industry to prepare 20mg zinc as the only formulation for diarrhoea. The IAP has conducted training on rational

diarrhoea management-using ORT, zinc treatment and continued feeding, including breastfeeding.

The Indian government included zinc in the national diarrhoea treatment guidelines in November 2006 and approved zinc as an over-the-counter treatment for diarrhoea in March 2007.

POUZN acts as a catalyst to involve the public, private and NGO sectors to better reach the community. The private sector reaches pharmacists, private practitioners and retailers, while the public sector reaches public health workers through the public health system. The NGO sector reaches mothers, families, communities and households directly. As zinc is a medicine for the treatment of diarrhoea, the support of the health workers and health professionals is critical in reaching caregivers.

POUZN engages the commercial and public sectors to make zinc widely available at an affordable price. POUZN's activities include: accelerating the registration process (preferably as an over-the-counter treatment); developing partnerships with local pharmaceutical firms to build distribution networks that reach at-risk populations; engaging NGOs in delivering the products to at-risk populations; and conducting large-scale public education campaigns.





Zinc tablet and syrup produced by Indian drug manufacturer Dr Reddy's

With an initial investment of US\$150,000 by USAID, the project has leveraged more than \$1.2 million from six drug companies (Dr. Reddy's, Zuventus, Emcure, Wallace, Indamedica and USV) for the development, marketing, and distribution of new formulated zinc tablets and syrups to control childhood diarrhoea.

Through public-private partnerships, POUZN works with Indian drug manufacturers to create demand for zinc, along with accurate public health messages and treatment information. More than 1,200 medical representatives from the partner companies have been trained.

The project also created a team of state-based "Zinc Champions", in collaboration with Emcure and

TANZANIA

The public sector is very important in Tanzania, making up 45% of all health expenditure and 70% of total ORS distribution. The country has only 350 pharmacies and nearly 4000 type II drug outlets, which are certified only to sell specific drugs, from which an estimated 50–70% of the population seek medical advice.

The Tanzanian government recently changed diarrhoea guidelines and added zinc to the essential medicines list. The public sector has begun to consider how to roll out zinc treatment to health posts. The Paediatricians Association of Tanzania (PAT) has also been an important ally in advocating for the use of zinc treatment.



leading Indian paediatricians, who have promoted zinc treatment to their colleagues and other health professionals.

POUZN also collaborates with commercial partners on a campaign to reach rural medical providers (RMPs), who are often primary providers for children with diarrhoea, yet are almost never reached by either the public or private sectors. The campaign will test new models of reaching RMPs in seven districts of Uttar Pradesh. If successful, the campaign will be delivered at-scale across India.

In just one year sales jumped from 19,000 doses to more than 1.2 million. Annual sales are expected to rise to 2.2 million treatment courses by mid-2007.

The POUZN project helped introduce the first African zinc treatment in Tanzania through its partner Shelys Pharmaceuticals, who launched zinc in April 2007 to the medical profession.

The drug is now available in the market at a price of 400-500 TZS (US\$0.30-0.37) per course. Shelys' medical representatives regularly interact with health providers in both the public and private sectors and organize group meetings with public sector health providers.

POUZN is currently coordinating the introduction of zinc treatment with the Tanzania Zinc Task Force and collaborating with public health personnel on a pilot introduction to be followed by nationwide rollout

Camille Saadé, Director of POUZN Project, presented this topic at the 4th international zinc conference

Baby Zinc Communication Campaign

Reaching people in remote areas through courtyard meetings and folk songs

Shafia is a middle-aged woman living in a remote village 'Karpasha' in the *haor* area of Kishoreganj in Bangladesh. During the rainy season, in areas like this, the only method of communication is by boat and in dry season there is no option other than walking. Shafia has two daughters-nine-year-old Pakhee and three-year-old Shapla; she had a 4-year old son who died few months ago from diarrhoea. She works as a maid and can only afford a hand-tomouth existence for her three family members. Like other parents of rural Bangladesh, she has no education and little understanding of keeping a hygienic environment for her children. As a result, little Shapla frequently suffers from diarrhoeal illness like her late brother. Whenever she falls sick, Shafia brings ORS from the neighbouring village, but she is worried about her daughter's frequent susceptibility to diarrhoea. Shafia has also previously taken her to the village doctor but received no benefit from the treatment: after a few weeks, her daughter again fell sick.

One Friday Shafia heard that the union parishad [union council] chairman had called all the women of Karpasha to gather in his courtyard. Three young men had come to talk to them, and Shafia along with around 30 other ladies, their kids and a few men, sat in a semi-circle in the chairman's compound. The men had come with messages from the cholera hospital in Dhaka about the treatment of diarrhoea. Upon being asked how they take care of their children during diarrhoea, Shafia and the other participants replied that they give ORS and other fluids



such as sherbet, green coconut water, starch of boiled rice and 'chirar paani'.

The young man spoke of a new treatment for diarrhoea, to be used alongside ORS. Although ORS is very essential during diarrhoea as it rehydrates the body, it doesn't actually stop the frequent loose stools. There is a new medicine in Bangladesh called 'Baby Zinc', so when a child becomes sick with any type of diarrhoea, they should be treated with both ORS and zinc.

He showed them pictures of how to take care of a child from six months to five years with diarrhoea, and a strip of ten 'Baby Zinc' tablets. Most importantly, the parents learned that the tablet not only treats the disease, but also provides the child immunity against future episodes of diarrhoea for three months. Shafia heaved a sigh of relief that she had at last found a medicine for Shapla, but she was a little confused about how to give this tablet to such a young girl. The young man demonstrated by taking a teaspoon, putting the tablet in it and then adding few drops of water. Within half a minute, the tablet dissolved and was ready to be fed to the child.

All the parents of Karpasha village whose children suffer from frequent diarrhoea become very pleased to know about this new treatment, and happily agreed to disseminate this message to people of other villages.

One month later Shapla fell sick by diarrhoea again but this time her mother gave her both ORS and the Baby Zinc tablets, and she was cured in four days. Although Shafia stopped giving her ORS when the diarrhoea stopped, she continued giving one Baby Zinc tablet every morning for a further six days, as she had learned

Zinc is not a substitute for ORS. Zinc should be given in conjunction with ORS.

in the courtyard meeting. For the next two months Shafia found that Shapla was not getting diarrhoea and released a deep sigh—if she had known about this medicine earlier, she might have saved her son's life!

The SUZY project and its scaling up partners, The ACME Laboratories Limited and Dhansiri Media Production House, know that to succeed in nationwide scaling up, people all over Bangladesh have to be reached, and for this, only television and radio spots, press articles or billboards are not sufficient. In a country where the majority of the population is rural, it is critical to address the people in remote areas in the communications campaigns, about the efficacy of zinc sulphate in conjunction with ORS in treating

childhood diarrhoea. Group activities like courtyard meetings and traditional folk songs share the knowledge and motivate the lowincome and high-risk communities where there is no access to television or newspapers, nor even to electricity; the courtyard meetings and folk songs are held in the hard-to-reach areas of the country and those where the prevalence of diarrhoea is very high. These group activities are popular because the participants can interact directly, can ask questions and clarify their beliefs about treating diarrhoea.

The local elites, opinion leaders, school teachers, religious leaders and dispensary owners in the communities attended the meetings and discussed issues with the parents. Although it is common for local elites and religious leaders in conservative areas to prevent women from mobilizing, they became more supportive upon learning that these initiatives are being taken to save children's lives.

The SUZY project organized 400 courtyard meetings in 22 districts all over Bangladesh from Sherpur to Tangail, from Shariatpur to Cox's Bazar. During this period, a total of two hundred folk song shows were staged in 46 upazilas of 11 districts, which were greatly enjoyed by the local communities

Orientation & information sharing on zinc treatment with the mid-level health managers of the public health sector in Bangladesh

In early May, the civil surgeon of a diarrhoea-prone district of Bangladesh, observed that the number of diarrhoeal patients had been rising in the government hospitals, of which child patients numbers approximately doubled the adults. As the focal point for public sector health services in his district, he was wondering how better to address this issue for children. He had heard about the new treatment of childhood diarrhoea with ORS and zinc and recently received a supply of Baby Zinc dispersible tablets to distribute to the government health facilities of his district to treat underfive year olds free of cost. Although happy to find a new strategy for children, combining ORS and zinc, he felt he needed further training on this newly introduced treatment in Bangladesh. He still had a few queries, such as whether to prescribe only Baby Zinc tablets for childhood diarrhoea or could other forms of zinc sulphate, like syrup, be used? Would a 10-day course be long enough? Would there be any side effects or contraindications? Does zinc work for patients older than five years?

He soon received a joint invitation from the Integrated Management of Childhood Illness (IMCI) programme of the Directorate General of Health

Zinc for the treatment of diarrhoea, in addition to ORS, for any childhood diarrhoea episode

Services (DGHS) and the SUZY project to attend an orientation and information sharing session to be held in ICDDR,B, Dhaka. It was a half-day session for mid-level healthcare managers of the public health sector on zinc treatment for young children with diarrhoea in Bangladesh. Like other districts, all the Upazila Health & Family Planning Officers (UH&FPOs) of

his district who act as the focal points at the sub-district level were also included as participants in the orientation programme, as were the six divisional directors. The civil surgeon finally had an opportunity to have his questions answered and where he could discuss the treatment of childhood diarrhoea with other public sector health managers in an open forum.

In Bangladesh, there are 464 UH&FPOs, 64 civil surgeons and 6 divisional directors in the public health sector. The programme was conducted over nine days between May 31 and June 13, 2007 to include all the public health sector health managers in different sessions.

The Director General of DGHS inaugurated the nine-day programme. From the same department, the director of primary health care and line director, essential services delivery, programme manager of child health and programme manager of IMCI were present in various sessions to discuss important issues with participants.

The civil surgeon and his colleagues found the sessions very useful as they comprised an overview and updates of the scale up activities of zinc treatment in Bangladesh, detailed information on its use in childhood

Program Manager IMCI, DGHS, Dr Altaf Hossain (from right); Principal Investigator of the SUZY project and the Director of Health Systems & Infectious Diseases Division of ICDDR,B Dr Charles P Larson; Director of Primary Health Care & Line Director, Essential Services Delivery Dr Shukuruddin Mridha; and Program Manager, Child Health Dr Abdul Quader are seen at the orientation session for DDs, CSs and UH&FPOs on zinc treatment for childhood diarrhoea.



diarrhoea and also the public sector initiative on management of diarrhoea among under-five children.

Like other participants he was given a folder containing the SUZY newsletter, frequently asked questions, guidebooks on the use of zinc treatment in childhood diarrhoea, the MoHFW recommendation letter for adopting zinc treatment, a compact disc with the Baby Zinc television commercials and two video docu-dramas, information sheets, the article "Effect of zinc supplementation started during diarrhoea on morbidity and



SUZY traning material

mortality in Bangladeshi children: community randomized trial" and a copy of the WHO/UNICEF joint recommendation to adopt zinc treatment in childhood diarrhoea.

The liveliest part of the session was the open discussion where the participants were able to ask their questions and interact. The civil surgeon found his colleagues coming up with many questions related to use of zinc in diarrhoea, distribution to the public health facilities, and the side effects of zinc. They also

shared their thoughts on this type of treatment for childhood diarrhoea. The SUZY project Head Dr Charles P Larson and Programme Manager of IMCI Dr Altaf Hossain responded to the queries during the open discussion, and Mr Rafiqul Islam, director (Marketing & Sales) of ACME Laboratories Limited—the Baby Zinc manufacturer in the country—was also present in some sessions to answer questions.

The most frequent queries were:

- Why Essential Drug Company Limited was not chosen for production and supply of Baby Zinc?
- In the Baby Zinc TV commercials, the need for ORS is not highlighted. Would it be possible to put more emphasis on ORS in future campaigns?
- Is it possible to fortify zinc with ORS?
- Does zinc work in adult diarrhoea?
- Can zinc be used as preventive medication for diarrhoea?
- What would be the dose for adverse affect of zinc?
- How much time does it take for zinc to be absorbed in the intestine?
- Is it possible to reduce the length of the full course? Will a five-day course work equally to a 10-day course?
- What are the side effects of zinc? How can they be overcome?
- What is phytate?

There were a few more concerns raised in different sessions, such as

- Is it possible to provide dispersible tablets in an airtight bottle instead of blister pack?
- What should be done if a diarrhoea patient is released after three days of hospitalization?

- Should the patient be given the remaining seven tablets to complete the full course?
- Is it possible to increase zinc in our regular food by adding zinc fertilizer in the soil?
- There are different types of zinc like zinc sulphate, zinc acetate, zinc phosphate - why is zinc sulphate in particular recommended in the treatment of diarrhoea? Is it more cost effective than the other types of zinc?
- What is the importance of zinc in the human body? Which foods are zinc-enriched?

The civil surgeon was satisfied after attending the orientation session along with the UH&FPOs of his district. They came to take part in the session with much enthusiasm ignoring heavy rainfall, and found health managers from all over the country participating in sessions despite the bad weather.

At the end of the session, one of the UH&FPOs wrote a poem on zinc treatment in diarrhoea:

Cring Cring Baby Zinc

Cring cring Baby Zinc
For diarrhoea in babies
Nothing to worry much
We have zinc as such
ORS and zinc together
Fights off diarrhoea far
Leaving the agony behind
The baby is back with smile
To prevent diarrhoea and treat
Remember both ORS and zinc.
(Translated)

Dr Shiddeshwar Majumder UH&FPO, Kotwalipara, Gopalganj

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