

A young child with dark hair and eyes is looking upwards with a slight smile. In the background, a woman wearing a purple headscarf and a purple garment is looking towards the camera.

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GLOBAL LIFESAVING SOLUTIONS

## EDITORIAL

Dear readers,

Welcome to the fifth issue of SUZY News.

Since 2003 the SUZY project has been facilitating the scaling up of zinc for young children with diarrhoea in Bangladesh, in line with the current WHO/UNICEF diarrhoea management recommendations to use zinc in addition to ORS. This newsletter is intended to keep interested people informed about the scaling up progress and the research that accompanies and supports this process.

### Knowledge for Global Lifesaving Solutions

Since the last issue was published, the final regulatory milestones have been completed through the Bangladesh Drug Administration. This includes registration of the formulation and the brand name 'Baby Zinc', approval for an over-the-counter waiver, and for a mass media marketing campaign. The Bangladesh Pediatrics Association and the Ministry of Health and Family Welfare (MoHFW) now officially endorse zinc treatment in childhood diarrhoea. Most significantly a policy statement has been issued through the secretariat of the MoHFW in line with WHO/UNICEF recommendations.

In terms of the technology transfer, ICDDR,B purchased the patent sublicense from Nutriset and subcontracted with ACME Pharmaceuticals Ltd for the local technology. Nutriset/Rodael experts visited in June 2006, and the equipment and materials for production were approved, pilot production completed, and ACME has successfully completed stability testing. The large-scale production of Baby Zinc will begin in November 2006.

Dhansiri, a Bangladeshi advertising company, is working with ICDDR,B and ACME to develop the mass media campaign. They have successfully created and received approval of the brand logo from the MoHFW, and have prepared a detailed communication plan to launch Baby Zinc to be implemented as soon as production begins. Communication materials will include television commercials, a radio jingle, posters and press advertising.

In the last week of June the SUZY Technical Interest Group met. Recommendations from the government and the NGO sectors concerning introduction of zinc treatment into their delivery system were

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

obtained. Productive suggestions and results came out of the meeting, including collaboration with the Local Government Division of the Ministry of Local Government and Rural Development, inclusion of zinc treatment in the IMCI guidelines, support from the Directorate General of Health Services, National Institute of Population Research and Training, and the Institute of Child and Mother Health to make scaling up effective and sustainable.

We successfully conducted the 3rd International Zinc Conference in April 2006, with participants from India, Pakistan, Indonesia, Cambodia, Nepal, East Timor, Rwanda, Canada, Uganda and USA. Presentations included the adoption of zinc treatment as a national policy in Nepal, Pakistan & Cambodia; zinc treatment in conflict situations; the marketing and distribution plan for Baby Zinc; the mass media communication strategy and research updates. Highlights of the conference will be discussed in this issue. For more details on these and other presentations please visit our website.

[www.icddrb.org/activity/SUZY](http://www.icddrb.org/activity/SUZY)

The regional Zinc Task Force meeting also took place immediately after the conference, discussing recent developments and strategies for zinc treatment in Bangladesh, Nepal, India, Cambodia and Pakistan. The task force is made up of public health representatives from these countries, all sharing an interest in accelerating the adoption of zinc supplements as treatment for childhood diarrhoea, and other representatives and multiple consultants specializing in nutritional supplement manufacturing, social marketing and field training.

This issue of SUZY news also includes some highlights from our training team's 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 is targeting the entire under-five-year-old population of Bangladesh to provide zinc treatment

## 2006 SUZY Conference Highlights

## Zinc Treatment in Conflict-Affected Settings: Chad

Laetitia Uwineza, IRC

International Rescue Committee (IRC) provides zinc treatment on a small scale in various countries around the world, including DR Congo, South Sudan, Rwanda, Chad, Darfur, Pakistan, Tanzania, and Kenya. When the Darfur crisis broke out in early 2003 almost two million people fled from their homes and around 150,000-400,000 deaths occurred. IRC launched programs in Chad in February 2004 with the construction of the Oure Cassoni Camp (funded by UNHCR).

and within a few months extended to community providers, with complicated cases being referred to health centres. A new program phase began in early 2006 with a population census conducted of 29,610 refugees (including 7783 children under 5 years) in three months. They overhauled the information system and conducted a compliance survey. IRC logistic services were provided at two distribution points—community providers and health centres. Eight nurses and three midwives were trained, as were 42 zinc agents who

within a month from approximately 260 to 450 in the health centres and 240 to 270 through the community providers. The compliance with zinc treatment was around 70%.

The major constraints of the IRC program in Chad included security issues (workplace safety and postponed scaling up in other camps), emergency versus sustainability vision, diarrhoea burden in camps (high incidence and periodic outbreaks), and inadequate numbers of nurses trained.

**Lessons learned from this zinc treatment model in a conflict setting include the benefits of piloting on a small scale; zinc treatment is very popular among the health care providers and**



Approximately 30,000 refugees live here, where IRC looks after camp management, water and sanitation, health services, education and protection. The objectives of IRC's Chad program were to increase access to zinc treatment, increase use of ORS, and to help other NGOs to scale up their zinc treatment. Their strategy was to start zinc treatment in the first camp, strengthen the treatment model and later extend the model on the basis of experience and lessons learned to other camps.

The zinc program in Oure Cassoni began in May 2005 in the clinics

provided community education in small groups (to women and teachers). Information, education, and communication materials were also developed for the beneficiaries.

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

The survey results shows that 62% of the population used zinc, 62% used ORS and only 12% used inappropriate antibiotics. Children treated with zinc and ORS increased

**caretakers; community provision works best (easier supply management, follow-up and data gathering, and good coverage and compliance results); and lastly, there is less inappropriate antibiotic use with community treatment.**

Thus, from the pilot program we concluded that zinc treatment should be made available in all refugee and internally displaced persons (IDP) camps and that community treatment increases coverage and decreases inappropriate antibiotic use. ■

2006 SUZY Conference Highlights

# Zinc Treatment in Emergency Settings: Aceh and North Sumatra of Indonesia

Elviyanti Martini, HKI, Indonesia

On 26 December 2004 an earthquake and tsunami in Indonesia caused the loss of 230,000 lives. Relief operations focused on preventing further loss of life among the 800,000 displaced and affected people. Diarrhoea posed a great threat to the displaced population in Aceh and Sumatra, and a health intervention was urgently needed to prevent and treat disease and malnutrition, and to rebuild health infrastructure and manpower capacity.

On a global scale, the addition of zinc treatment to the management of childhood diarrhoea could save 400,000 lives each year

Helen Keller International (HKI) coordinated a response to mitigate the nutritional and health impact of the earthquake and tsunami in Aceh and North Sumatra. This was part of the greater humanitarian response to lower the risk and severity of morbidity, reduce mortality and increase ability to reconstruct and rebuild livelihoods. HKI provided dispersible zinc tablets as an adjunct treatment for diarrhoea and vitamin sprinkles as a nutritional supplement in the tsunami-affected areas. Both preparations are part of HKI's Supplementation with Micronutrients (SUM) initiative. The vitamins and minerals (V&M) were distributed in collaboration with the Indonesian Ministry of Health (MOH), international agencies and INGO/NGO partners to internally displaced persons (IDPs). Trained staff of partner agencies distributed V&M, and conducted monitoring and evaluation (M&E) for SUM to assess coverage, need and impact of V&M among various target groups. Vitamin A capsules, multi-micronutrient sprinkles, iron-fortified soy sauce and zinc tablets were distributed.

Zinc was distributed as an adjunct treatment for the first time in Indonesia to every child suffering from diarrhoea. Until March 2006, more than 1.3 million tablets were distributed to clinics and public health centres. The high prevalence of diarrhoea amongst internally displaced persons and host communities makes zinc provision very important as an adjunct treatment for diarrhoea.

Provision of zinc as adjunct treatment of diarrhoea was not yet MOH policy in Indonesia. Communicable Disease Control and Environmental Health/Ministry of Health and HKI held an expert meeting in April 2005 to review the evidence for zinc as an appropriate adjunct treatment of diarrhoea, and to discuss the provision of zinc tablets to children suffering from diarrhoea in tsunami-affected areas. The group's conclusions supported the use of zinc. Other considerations included the administration being practical under field conditions, with trained



health workers providing zinc to parents/caretakers for administration at home. Many health workers are aware of ORS for treatment of diarrhoea but not zinc, hence awareness-raising was needed for the community and health workers. Monitoring and evaluation of zinc distribution was needed to assess coverage and impact of zinc. The expert group recommended endorsement of the implementation in tsunami-affected areas, to continue the development of guidelines, as well as education and promotional materials, and the formation of a working group to carry out operational research on the benefits ▶





and effects of zinc, and for inclusion in the nationwide health policy.

From January 2005 to March 2006, as many as 7500 government health/nutrition/NGO staff, 120 HKI field staff and 13 international NGOs and 17 local NGOs worked on socialization, training and distribution. As zinc and sprinkles were new to the population their distribution required introduction and education, which is not commonly required for food aid distribution. Promotional and training materials such as posters, leaflets, cards, banners, feeding schedules, and cooking/feeding demonstration guidelines, were

developed by HKI and MOH in Bahasa Indonesia and were distributed for free.

**Zinc treatment could save the lives of 30,000 to 75,000 children per year in Bangladesh alone**

Monitoring and evaluation is needed to ensure optimal program implementation and outcomes. The monitoring and evaluation for the SUM initiative showed low coverage of zinc as an adjunct treatment of diarrhoea. Clearly ways to improve zinc coverage in emergency settings need to be found. Unfortunately, the operations research was not able to look at any preventative effects of zinc with respect to recent episodes

of diarrhoea within the scope of this program.

Key issues identified for the use of zinc in emergency responses and transition periods are: swiftness of program implementation is determined by availability of zinc tablets; preparations like zinc which are new to the population and health staff need to be introduced with adequate information materials and training; not all diarrhoeal cases seek treatment in clinics/health centres where zinc is available; and coverage might increase if health volunteers were allowed to distribute zinc (together with ORS), thus making it more accessible. Decisions on who can distribute zinc tablets are needed. ■

## making research work

# Understanding how drugs are promoted in Bangladesh: observing interactions between medical representatives and healthcare providers

Nazneen Akhtar, Social and Behavioural Sciences Unit, ICDDR,B

Promotion of dispersible zinc tablets among providers in Bangladesh will be tailored to reach different target groups, beginning with licensed allopaths, lower-level trained health providers and then unlicensed providers who service the large majority of the poor.

Care for children with diarrhoea in Bangladesh is most frequently sought from the private sector, and in particular, unregulated village doctors or drug sellers who are not licensed. Seeking care is primarily driven by the perception that the child requires drug treatment, and drugs are most commonly promoted to these healthcare providers through one-on-one interactions with pharmaceutical representatives commonly called 'medical representatives'.

The SUZY project has been carrying out research to understand in more detail the nature of this drug promotion, and to identify relevant aspects of the provider-representative relationship that could be useful for the effective scaling up of zinc treatment in young children with diarrhoea. This will assist us in developing the most appropriate and culturally relevant communication messages.

The following descriptions come from an observation study of interactions between medical representatives (MR) and health providers (HP) carried out between January and March 2005 in urban and rural sites in Bangladesh.

**A medical representative and a non-licensed village doctor at a rural research site...** Seeing the MR arriving on the motorbike the village doctor walks to him, and welcomes

him inside while shaking hands. He says, "bhai [brother], you are like a family member to me". The MR agrees in response, and indicates that he will visit the provider's family. The doctor offers a seat and "please come have tea".

The representative sits, opens his bag and brings out the first product, and the village doctor immediately indicates that he prescribes this medicine. The MR thanks him for this, and continues his drug promotion, taking some time to introduce the new product he came to promote today. After drinking the tea, the MR continues to describe a variety of products, briefly going through each individually. He often draws a diagram to explain the biomedical process and function of the drug and gives the practitioner literature on each product. After describing the products in hand MR reminds him of the two drugs that have been on the market for a long time. He requests the provider to keep in mind these two when prescribing. When finished, he leaves samples of all the drugs as well as some small promotional gifts, and as the village doctor accompanies the MR to the road, he says, "bhai, don't worry—you come regularly and I always prescribe your drugs", after which he shakes hands with the representative. The visit lasts twenty minutes.

**An interaction between a medical representative and a licensed MBBS doctor in an urban site...** After an hour's wait in the large diagnostic centre the medical representative finally enters the physician's room. He greets the physician with 'salam' and immediately asks about his health. The physician nods his head and responds curtly.

While still standing the MR places some medicines on the physician's table, which the doctor simply places in his desk drawer without inspection or acknowledgement. The representative brings out his first new drug to promote and begins to describe the product. As he talks a patient enters and the physician cuts him off, asking firmly, "Is there anything else?". Quickly the MR mentions five more drugs, beginning and ending each sentence with 'sir', and simultaneously offering literature about these products. He adds, "Sir, please prescribe our drugs, sir." Avoiding eye contact the doctor nods. The medical representative leaves some small gift items and drug samples and, thanking the doctor, seeks permission to leave. The visit lasts only eight minutes.

Zinc therapy reduces the duration of diarrhoea, lessens the chance it will become chronic, and lowers the overall deaths by 50%

**Lessons learned...** These interactions are representative of many observed and indicate that medical representatives play an important role in transmitting health and drug-related information to different health providers in Bangladesh. In drug promotion much emphasis is placed upon a high frequency of contacts with providers, as this contributes in establishing relationships and ensuring success of the intended drug promotion. The approach the MR maintains here is to develop a professional and personal relationship with healthcare providers. We can see different strategies and relationships are employed in interactions with different providers. For non-licensed providers, the MR provides detailed information, citing examples, emphasizing new products and provides literature with simplified versions in Bangla. For licensed providers, MR shares critical information in a very concise way, emphasising new products. He provides literature in the form of drug inserts and acknowledges the provider's superior knowledge. ■

## SUZY's Training Team Goes to the Field

Public sector health service providers are at the frontline of treating diarrhoea in Bangladesh. As such they offer a critical platform for the scaling up process, and without whose co-operation the SUZY project could not succeed.

**How can we best encourage consistent use of zinc in the treatment of diarrhoea in the public sector? How can we begin developing effective partnerships to assist in the scaling up of zinc?**

Following some consultative workshops held with the Bangladesh Pediatric Association to answer these questions and to investigate further ways to successfully scale up zinc treatment nationwide, the SUZY training team sought dialogue with the Integrated Management of Childhood Illnesses (IMCI) program of the Directorate General of Health Services. Dr ZA Motin-Al-Helal, Deputy Program Manager, Control of Diarrhoeal Disease and Desk Officer and Dr Altaf Hossain, Medical Officer, both of IMCI, suggested the training team visit some of the districts where IMCI implement their program:

district hospitals in Sirajgonj, Mymensingh, Brahmanbaria and Narshindi, all located in the north and eastern parts of Bangladesh. The aim of these visits was to inform and sensitize the government health practitioners working in clinics or hospitals at the district level of the revised diarrhoea treatment guidelines recommended by WHO and UNICEF. In addition, the team sought suggestions from the health professionals about channelling this information down to the grassroots-level health service providers and how best to encourage the coherent use of zinc treatment in diarrhoea.

The UHFPO (sub-district medical health officer) acts as the focal point for health service-related issues at the upazila level. Nearly all the UHFPOs from the four districts attended the meetings. They had knowledge about zinc syrup—which they normally prescribed to increase appetite—but not about dispersible zinc tablets.

In all four sites the most common queries were:

- **How does zinc work?**
- **How does zinc work in treating young children with diarrhoea?**
- **Is it possible or preferable to administer only the amount of zinc deficient in the patient's body?**
- **What are the side effects of zinc treatment?**

- **Why don't we add zinc to ORS?**
- **Will the poor be able to afford the added cost?**
- **When would the health facilities receive supplies of dispersible zinc tablets?**

The training team addressed all their queries based on the evidence. All participants were eager to know more about the production and maintenance of a regular supply of the dispersible zinc tablets. After outlining the Nutriset-ACME Laboratories technology transfer and the initial free provision of tablets to the health service providers through government health services, it was suggested that the district level (civil surgeons) and sub-district level health officers be involved in developing sustainable purchase and distribution plans. Consulting the government health providers about the most effective way to organise training for uniform dissemination between healthcare providers and grassroots level, a cascade effect was suggested where the SUZY team will train the trainers to transfer skills and information to one after another, all the way to the grassroots level.

This dialogue with key stakeholders in the public sector provided useful feedback for consideration in the coming months as the SUZY team accelerates towards launching the nationwide scale up. ■





## Partners in Progress

Christa L Fischer Walker; Johns Hopkins Bloomberg School of Public Health

The Zinc Task Force (ZTF) was formed in November 2005 to provide catalytic mechanisms to accelerate the adoption of zinc for diarrhoea management in low-income countries according to the joint UNICEF/WHO guidelines. The ZTF is a partnership between Johns Hopkins Bloomberg School of Public Health, UNICEF, United States Agency for International Development, and the World Health Organization (WHO), and is supported with generous funding from the Bill and Melinda Gates Foundation.

**The success of zinc as a lifesaving treatment for childhood diarrhoea on a global scale depends on several factors. The ZTF has prioritized global advocacy at political level, technical support for developing country rollout strategies, and the local production of quality zinc products.**

During its initial planning year the ZTF has successfully coordinated activities to provide technical assistance to UNICEF-qualified

manufacturers under current Good Manufacturing Practices policy for the production of quality zinc products and in May 2006, Nutriset-Rodaël was approved as the first UNICEF-qualified zinc supplier. The task force also ensured continued support to manufacturers seeking assistance for both improved product and manufacturing processes. The ZTF organised two regional advocacy workshops in 2006. The first was carried out in collaboration with ICDDR,B, and took place following the 3rd International Conference of the Scaling Up Zinc for Young children (SUZY) project in April 2006. Policy issues for national scaling up zinc programs as well as social marketing concerns have been discussed with government representatives from seven south/south-east Asian countries and Uganda. The second workshop was held in Antigua, Guatemala in May 2006 involving fourteen Latin American and Caribbean countries. This event was intended as a call for action to Ministries of Health and healthcare implementers to accelerate the implementation of zinc interventions in their respective countries, delivered with a set of tools

and resources to enable the process, from producing policy statements to evaluating impact. Additional workshops are being planned for the east and west African regions. The workshops give invited participants from government ministries and partner organizations an opportunity to gain a better understanding of the scientific evidence supporting zinc and low-osmolarity ORS for diarrhoea management and provide a forum for discussing program roll-out strategies.

**How many child deaths can we prevent this year?**

In addition to these activities during this initial planning year, the ZTF is developing a comprehensive plan that integrates partner organization activities and defines a clear strategy for global and local manufacturing, continued global advocacy, country roll-out, and monitoring and evaluation. With additional support the ZTF will continue to accelerate zinc for diarrhoea management supporting the needs of partner organizations and Ministries of Health around the world. ■

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