



Child Health:

A Focus on Zinc Treatment for Diarrhea



In the past two decades, significant gains have been made in improving child survival rates worldwide, due to effective public health initiatives and improved economic and social performance. Nevertheless, about 6 million children die yearly as a result of common, preventable, and treatable conditions such as pneumonia, diarrhea, malaria, and malnutrition.

AED has been leveraging the private sector to improve child health and wellbeing all over the world for decades. We were among the first to bring about large-scale use of oral rehydration therapy (ORT) to treat diarrhea, a leading cause of childhood death. Since then, AED has continued to implement state-of-the-art child survival programs built on synergistic partnerships across the public and private sectors. AED has applied the approach in programs ranging from the prevention of mother-to-child transmission of HIV, malaria prevention and treatment for mothers and young children, and improved nutrition for infants and young children.

Zinc: A new tool for combating childhood diarrhea

The World Health Organization (WHO) estimates that zinc deficiency in children is widespread, and increases the risk of mortality from diarrhea, pneumonia, and malaria by 13 to 21 percent. Studies have also demonstrated that when used in conjunction with ORT, zinc therapy given for 10 to 14 days

during and after diarrhea reduces the duration and severity of episodes and can have a preventive effect against diarrhea re-occurrence. Evidence also



exists to show that zinc is a cost-effective treatment that reduces the unnecessary use of drugs to treat diarrhea.

Changing diarrhea treatment practices through cross-sector collaboration

Under the USAID-funded Nepal Social Marketing and Franchise Project: AIDS, Reproductive Health, and Child Survival (N-MARC), AED worked with the Ministry of Health, four Nepali zinc manufacturers, and a national nongovernmental organization (NGO), on the design and execution of a campaign to improve the treatment of diarrhea in children under the age of five. By securing multisectoral buy-in

to the campaign, AED ensured broad implementation across the country. The campaign included television, radio, and outdoor advertisements, and community-based programs to promote the combined use of oral rehydration salts (ORS) and zinc for the treatment of uncomplicated diarrhea. The campaign led to higher awareness of the benefits of zinc among health providers and caregivers, increased demand for the product through both the public and private sectors, and improved compliance with the recommended ten-day zinc treatment regimen.

Leveraging the private sector to build a market for zinc

In developing countries, zinc is typically unknown by caregivers and not readily available in pharmacies. The USAID-funded Point-of Use Water Disinfection and Zinc Treatment (POUZ) Project in India, Tanzania, and Indonesia, aimed to grow both the supply and demand sides of the pediatric zinc market.

On the supply side, AED supported efforts by the

pharmaceutical industry to produce zinc for the public sector, while developing branded zinc products for sale in the private sector. In some cases, the project provided matching funds to partially offset the risk for for-profit businesses of launching a brand new consumer product in an untested market. This strategy of “joint risk, joint investment” has enabled the AED Center for Private Sector Health Initiatives (CPSHI) to successfully introduce new products and technologies into the marketplace that are both profitable for business and good for the public health.

To boost demand, AED worked extensively with the public and private health provider communities to change diarrhea-related prescribing practices, and implemented public education campaigns to promote the use of zinc and ORT by caregivers. Because of these interventions:

- Forty pharmaceutical companies (30 in India, 8 in Indonesia and 2 in Tanzania) are now producing, marketing, and in some cases exporting zinc for diarrhea treatment.
- Shelys Pharmaceuticals, a POUZN partner in Tanzania, became the first manufacturer in Africa to produce and market zinc for diarrhea treatment.
- At least one project partner in India and Tanzania has achieved WHO pre-qualification, enabling them to compete for United Nations Children’s Fund (UNICEF)-

led global tenders and other large zinc procurements.

- In India, every \$1 invested by the POUZN project leveraged \$5 of commercial investment in the marketing of pediatric zinc, including provider visits, promotional materials, training, distribution, market research, and public relations. Through this intervention, POUZN India achieved zinc prescription and use rates of 31 percent and 50 percent, respectively.
- Caregivers living in regions in Indonesia where POUZN implemented a targeted mass media and training intervention used zinc at higher rates (27 percent), compared to pre-intervention rates (5 percent).
- Midwives, who received training from the POUZN-supported National Midwives Association in Indonesia, prescribed ORS/zinc at significantly higher rates (58 percent) than their counterparts exposed to the mass media campaign alone (33 percent).
- Thirty-three percent of all certified drug sellers targeted by the POUZN Tanzania Project recommended zinc for the treatment of diarrhea for a child under five years of age.

Creating an enabling environment for zinc uptake through policy changes

Following intense advocacy efforts by AED and the Pediatric Society of Indonesia, the Indonesian government included

zinc treatment for diarrhea in its Integrated Management of Childhood Illness (IMCI) guidelines. AED also intervened with the Indonesian National Agency of Drug and Food Control to allow fast-tracking of zinc



product registration. In Tanzania, AED helped ensure the addition of zinc to the Ministry of Health and Social Welfare’s list of essential drugs, and secured its inclusion into IMCI guidelines. These actions resulted in the subsequent procurement of zinc treatment by the public sector for all public hospitals and health posts. In India, AED advocated for the inclusion of diarrhea treatment in national policy guidelines, and worked with the government, the Indian Academy of Pediatrics, UNICEF and local federations of NGOs to ensure public sector provision of zinc.

The mission of the AED Center for Private Sector Health Initiatives (CPSHI) is to improve the health and well being of people in developing countries—particularly those at the “base of the pyramid”—by facilitating beneficial partnerships between the public and private sectors to provide information, services, and products that are affordable, accessible, and high quality.

CPSHI is part of AED, a nonprofit organization working globally to improve education, health, civil society, and the environment—the foundation of thriving societies. Focusing on the underserved, AED’s worldwide staff of 2,000 implements more than 300 programs serving people in all 50 United States and more than 150 countries. In collaboration with local and national partners, AED fosters sustainable results through practical, comprehensive approaches to social and economic challenges.



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