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5 Building on Community Strengths Care in Emergencies and Beyond

The Challenge

Desperate times often call for desperate measures. During famine, drought, or prolonged conflict, one of the most desperate challenges can be to prevent large numbers of children from dying of acute malnutrition. The established way to treat these cases is at therapeutic feeding centers. During the 2003 famine in Ethiopia, UNICEF estimated that 60,000 children needed therapeutic care. Only a third of them were even reached. Access, or *coverage*, is only one of the many challenges.

Therapeutic feeding centers (TFCs) require time to build and staff, rely on sophisticated equipment, and can handle a limited number of cases at a time. Rehabilitation can take 30 days. A family member, usually the mother, stays with the child, creating camp-like conditions ripe for epidemics. Siblings at home are deprived of care and already fragile livelihoods undermined. So this accepted—but desperate—approach to saving young lives can further de-stabilize families that are existing on the brink.

In 2001 a small emergency-response organization, Valid International, showed that rehabilitating children *within the community* can be equally effective and can reach more children, more quickly, and at about one-quarter of the cost of TFCs. Results were published in *the Lancet* and caused a stir in the international emergency community.¹ Bureaucracies do

¹ Steve Collins, Kate Sadler. *Outpatient care for severely malnourished children in emergency relief programmes: a retrospective cohort study*. *The Lancet*. Vol. 360. December 7, 2002.



not change overnight, however. Myriad hurdles lie between publishing early results and transforming the policies and procedures of national and international agencies. AED has taken on the challenge of helping to *mainstream* the sometimes-controversial innovation of Community Therapeutic Care (CTC) approach.

The Elements of Mainstreaming

AED is providing technical oversight and financial support to several groups in order to:

- **Establish the effectiveness** of the CTC approach in different country contexts
- **Strengthen links** to existing health structures (so the approach can be scaled up)
- **Develop protocols**, an operations manual, and conduct training
- **Investigate uses** for the CTC approach in non-emergency contexts
- **Disseminate** best practices and tools

Two different arms of the U.S. Agency for International Development—the Office of Foreign Disaster Assistance and the Global Health Bureau—came to the Academy to provide this help.² This unusual marriage reflects the potential of CTC to link *emergency relief* efforts with *ongoing development* activities whose purpose is to strengthen communities over time.

Establishing Effectiveness in Ethiopia

In practice, CTC can depend very much on the local context. The first challenge was to help demonstrate that the approach can save lives in a range of “real settings.”

The early pilot carried out in Ethiopia out by Valid and its partner, Concern Worldwide (an Irish relief and development organization) focused on just 170 children in a rural district south of the capital, Addis Ababa. Staff from Concern were responsible on the ground. (Government health staff were not involved.)

Most of the children received basic treatment at the local health center and then home rations of Plumpy’nut[®],³ an imported, easily digested, fortified peanut-based paste. A few very sick children were referred to the district hospital.

After 4-5 months of intervention, survival and recovery rates exceeded internationally accepted

Replacing “Desperate Measures” with Community Care

CTC turns an accepted paradigm on its head. Emergency workers *go to the community* to identify the maximum number of malnourished children as quickly as possible, rather than spending crucial time putting up structures and expecting people to relocate for weeks at a time.

Children with severe acute malnutrition but without medical complications are cared for at home from the start. The 10 or 15 percent who have life-threatening medical complications such as infections and anorexia go to stabilization units for treatment, preferably at local health centers. Usually within a few days these children also return home for nutritional rehabilitation.

The key to outpatient rehabilitation is a specially formulated ready-to-use therapeutic food (RUTF). The caregiver picks up a supply every one-two weeks. The RUTF consists of a complete, pre-cooked nutrient-dense paste that is easily digested and acceptable to a malnourished child. It can be eaten right out of the package, and needs no special storage.

Another important element of the CTC approach is counseling for the caregiver about how to feed a sick child. Improved feeding practices will also help keep these children healthy once they have regained strength. Finally, outreach workers follow up regularly to check each child’s progress.

standards for treatment of severely malnourished children. The costs were four times less than center-based therapeutic care.

To establish effectiveness on a larger scale—and with local ownership—AED (through the USAID-funded

² Funding for the work supported by USAID has been provided through the FANTA Project, managed by AED.

³ Plumpy’nut[®] is produced in France and under license in selected locations in sub-Saharan Africa by Nutriset. The product’s formulation is based on F-100 therapeutic milk formulation and contains peanuts (groundnuts), milk powder, sugar, vegetable oil, and a vitamin mineral mix. For more information see: <http://www.plumpynutinthe field.com/>



The key to rehabilitation in the community is a specially formulated, ready-to-use therapeutic food (RUTF).

FANTA Project) supported a program during the 2003 Ethiopian famine in two districts of South Wollo. The population of 450,000 was dispersed across plains and mountainous areas.

One goal of this program was to build the capacity of district level Ministry of Health staff to carry out a CTC program. Concern Worldwide developed protocols for program admission, treatment, and exit. They also provided technical assistance to the zonal hospital to strengthen its role as a stabilization unit. Ministry staff (rather than NGO relief workers) distributed Plumpy'nut® at local health centers.

Monitoring data after four months showed that CTC could be effective even when dealing with large numbers of children and operating with “normal” staff resources. The program reached an estimated 77.5 percent of cases—almost 30 percent higher than the international standard for care.⁴ After one year, only 8.5 percent of children had dropped out before completing treatment.⁵

Based on these results, and on lessons learned “on the ground” (see box) Valid is now conducting formal and field based training to establish CTC in districts across Ethiopia. The new model utilizes trained volunteers and the government’s own health structure.

Scaling up in Malawi

In Malawi, AED has supported both rural and urban CTC programs to test strategies for scaling up within the regular health delivery system.⁶

Malawi is a chronically food insecure country. The government has set up Nutrition Rehabilitation Units

How Best Practices Take Shape “On the Ground”

Ethiopia

The CTC program in South Wollo sought ways to improve outreach and community mobilization. Caregivers of children with good weight gain were paired with those who were not doing as well so they could share good feeding practices. The program also began to test mother-to-mother approaches and to involve religious leaders and traditional healers to create community awareness. They found that mothers whose children had recovered weight were a powerful outreach force.

These experienced women were also good at locating other at-risk children who appeared “sick and thin.” Whereas the program initially conducted house-to-house visits and took measurements of children to identify the malnourished, this active case seeking was eventually partly replaced by relying on information from key informants—especially these mothers of “graduates.” By creating local health literacy, the program also reduced its own workload.

Malawi

In Malawi as well as Ethiopia, staff found that people often associate the signs of severe malnutrition with spiritually-related causes, rather than with food intake. Traditional healers are an underutilized resource in most nutrition programs. They can be helpful in locating cases, and in increasing community acceptance for therapeutic care.

These and other field-based lessons are playing a crucial role in the scaling up of CTC at the country level.

⁴ International standards have been established by the Sphere Project (launched in 1977 by a group of humanitarian NGOs, the Red Cross and the Red Crescent). The Sphere Minimum Standards in Disaster Response are an attempt to describe the level of disaster assistance to which all people have a right. For treatment of severe malnutrition, sphere standards for coverage (rural) are 50%, for recovery > 75%, for default <15%, and for mortality <10%. See <http://www.sphereproject.org>.

⁵ Golden K. and Khara, T. Three case studies. ENN Special Supplement Series, No. 2, November 2004.

⁶ This program was carried out jointly by Valid International, the University of Washington, and the University of Malawi.

(NRUs) that treat tens of thousands of malnourished children each year. Despite a 30-day protocol, children stay only about two weeks—reflecting the hardship this model places on families.

AED, again through the FANTA Project, supported a rural program carried out with Valid International, comparing traditional treatment of children in NRUs with outpatient rehabilitation and distribution of Plumpy'nut® from the NRUs. Seven sites in Dowa district participated. The urban program was based in a single NRU attached to a central referral hospital with high HIV/AIDS prevalence. As in Ethiopia, a major goal was to transfer the program to the Ministry of Health.

Training began in December of 2002 and outcomes were measured through December 2003. In rural areas, children receiving home-based therapy gained more weight and at greater rates than those receiving standard care in the NRUs. They were also less likely to develop fever or cough than children in the NRUs. Mortality among the CTC children was 50 percent of that among those receiving the standard NRU care.⁷

Several months into the transition to government ownership, mother-to-mother notification became one of the primary means of locating malnourished children. Traditional healers, often the first source of advice for symptoms of severe malnutrition, also began to refer children to CTC care. Dowa district now serves as a demonstration site and training center for scaling up of CTC care in Malawi.

Making the Products Affordable

One of the lynchpins of the CTC approach is the fortified, ready-to-use therapeutic food (RUTF) parents give to their children. The early pilots used a product manufactured in France by the Nutriset company. Plumpy'nut® is packed in a simple foil wrapper and stays fresh for up to two years without refrigeration.

But the cost of producing and transporting Plumpy'nut® is a problem for developing countries. Nutriset has negotiated with various local producers in several countries to produce Plumpy'nut® locally. In Malawi, Nutriset collaborated with a local company, Tambala foods, and more recently with the Peanut Butter Project, to develop a local product with the same formula.

USAID asked the Academy to work with Valid to test the locally-produced product in Malawi and also to create various locally-produced formulations for



RUTF being produced with local products in Malawi.

RUTF that do not use either peanuts or imported milk powder.⁸ AED and Valid worked with Oxford Brookes University in England to conduct tests on the Malawi RUTF. The university confirmed the product's nutritional content, quality, and safety—allowing local production to be scaled up. They also tested 143 new formulations and identified three different chickpea-sesame based products that meet palatability, nutritional and shelf life criteria.

AED also helped the Peanut Butter Project obtain U.S. Government Global Development Alliance funds to set up production of Plumpy'nut® in cooperation with Nutriset.

Local manufacture of RUTF in Malawi has reduced the cost of the product by about half. It will also allow for valuable links between CTC and local agriculture and micro enterprise projects.

Using Relief as a Platform for Development

The CTC approach holds tremendous promise as an entry point for other interventions. Food aid is often welcomed by the community and can provide credibility to both public health and food security efforts.

⁷ *Ibid.* and Valid International. *Malawi comparison study, Community Therapeutic Care (CTC) monitoring effectiveness component.* February 2003.

⁸ *Milk powder is expensive. Substitutes for peanuts were sought due their limited supply as well as their susceptibility to aflatoxins, which can seriously harm and kill an immunologically compromised malnourished child. Poorly stored and damp peanuts can result in mold growth that causes aflatoxin to proliferate.*

Patients who may not accept other forms of palliative care, for fear of broadcasting their HIV status, may accept food since it typically carries less stigma.

AED is participating in two studies looking at the role that RUTF can play in improving the lives of people living with HIV/AIDS. RUTF is easy-to-digest, tastes good, and is tolerated by those with little appetite (including children). Furthermore, patients who may not accept other forms of palliative care, for fear of broadcasting their HIV status, may accept food since it typically carries less stigma.

In Malawi, AED is working with Valid to analyze the clinical records of the CTC program beneficiaries to see how effective the program has been in reversing severe malnutrition among both HIV-infected and orphaned children.⁹ The study is also looking at the feasibility of adapting CTC as a platform for community-based care of people living with HIV/AIDS.

Another study in Malawi is looking at how ready-to-use food (or RTUF)¹⁰ can improve the nutrition of both HIV-infected mothers and their infants.¹¹ Mothers receive locally produced fortified RTUF needed during lactation. Infants receive RTUF once they are no longer breastfed, usually at six months of age. In resource-poor settings, infants who are not breastfed cannot get the nutrients they need from local foods alone. Appropriate feeding strategies are badly needed to help infants whose HIV-infected mothers stop breastfeeding early in order to prevent mother-to-child transmission. RTUF may help fill this gap. (See also Chapter 1 on PMTCT.)

Standardizing Protocols, Disseminating Experience

Academic papers can convince donors, governments, and NGOs a new approach is effective. But moving ahead requires face-to-face discussions, even debates, and practical tools.

In October 2003, the first international meeting on CTC was held in Dublin, giving 70 key players in the management of severe acute malnutrition their first chance to clarify implementation details and identify gaps in knowledge. AED and Concern supported the workshop, and AED supported the publication of these insights through a special Supplement produced by the Emergency Nutrition Network (ENN). Two years later, AED co-sponsored a second state-of-the-art workshop in Washington, DC, focusing on issues of integration, scaling up, and mechanisms to ensure the quality of CTC programming as the approach is embraced by more and more groups.

Establishing protocols is a critical part of this quality control. Key procedures were formally documented as part of the Ethiopia and Malawi programs. In addition, AED has provided oversight to the development of a comprehensive manual for ministries, NGOs, and others on steps for implementing a CTC program. The manual, being drafted by Valid International together with Concern Worldwide, is expected to be completed in the spring of 2006. These practical tools will help expand CTC to new partners and to additional countries.

Finally, the World Health Organization is now developing normative guidelines for the application of CTC and home-based care to severe acute malnutrition, with the help of AED and the experiences of researchers and practitioners. Acceptance by this international body is arguably the most important requirement and also predictor that CTC will now become a “mainstream” approach to treating acute malnutrition.

In the years to come this important approach will help not only relief agencies but local health workers and volunteers provide community-based solutions to some of the “desperate” challenges they confront every day.■

⁹ The study is supported by USAID through funding to AED's FANTA and SARA Projects.

¹⁰ Ready-to-use food (RTUF) has a different formulation than RUTF (which is designed for therapeutic use).

¹¹ AED is providing the nutrition team investigator to the Breastfeeding Antiretroviral and Nutrition (BAN) study, which is being conducted by the University of North Carolina with funding from the U.S. Centers for Disease Control and Prevention.