World Vision

For Children. For Change. For Life.

impact

Community Management of Acute Malnutrition

Giving malnourished children a fighting chance

Acute malnutrition, signalled by an appearance of thinness, is also called 'wasting.' Images of lethargic children lying limp in their mothers' arms are becoming all too familiar in the wake of drought, conflict and widespread food shortages. Disrupted food supplies complicated by increased outbreaks of disease and limited access to health care lead to this rapid and dangerous weight loss.

Globally, at least 50 million children were affected by wasting in 2011[1]. Children with severe acute malnutrition are nine times more likely to die than children who are well-nourished[2]. It is one of the biggest public health problems, responsible for approximately one million child deaths each year.

World Vision works with communities to help them recognize, prevent and treat acute malnutrition in both emergency and stable environments. These programs directly support the global Millennium Development Goal (MDG) of decreasing child deaths by two-thirds by 2015.

1. The Lancet, Series on maternal and child nutrition, June 2013 www.thelancet.com/series/maternal-and-child-nutrition
2. Black, et al., Maternal and Child Undernutrition, January 2008 pp. 243–260

World Vision has adopted the community-based management of acute malnutrition (CMAM) approach as one of our core models for addressing child malnutrition. CMAM is an internationally accepted model endorsed by the World Health Organization (WHO) and UNICEF to treat acute malnutrition in children under age five.

The evidence base for CMAM programs was established by 2006 with the publication of an analysis of 21 programs implemented between 2001 and 2005[3]. CMAM was endorsed in a 2007 United Nations Joint Statement and has shown significant impact at relatively low cost. World Vision started CMAM programs in 2006 in Ethiopia, Sudan and Niger and has since expanded to 15 countries. Together with partners like UNICEF, World Vision has advocated for and supported the integration of CMAM in the routine child health care services in these countries.

CMAM programs work with communities to identify, manage and prevent wasting. This encourages community ownership and sustainability.

- World Vision started CMAM programs in 2006 in Ethiopia, Sudan and Niger and has since expanded to 15 countries.
- CMAM programs work with communities to identify, manage and prevent wasting. This encourages community ownership and sustainability.

World Vision's response CMAM

3. Collins, et al., Management of severe acute malnutrition in children, The Lancet, vol. 368, no.9551, 2 December 2006, pp. 1992-2000

Ready-to-use-therapeutic food (RUTF) is a peanut butter paste fortified with milk and milk extracts, vitamins and minerals. It provides the calories, protein, vitamins and minerals malnourished children need to recover. Children who receive RUTF recover from malnutrition in 6-8 weeks.

How does CMAM work?

Community volunteers are trained to regularly screen and monitor all young children so cases of malnutrition can be identified early and treated immediately. This leads to more children being treated, faster rehabilitation and fewer deaths. Malnourished children are assessed and placed into one of three types of treatment.

Supplementary Feeding Program (SFP) targets families of children with moderate wasting but no medical complications. They are provided with take-home food rations such as oil, cereal flour, rice, bulgur, sugar and iodized salt plus routine basic treatment. Other groups with special nutrient requirements, including pregnant women and new mothers are also included.

Outpatient Therapeutic Program (OTP) provides home-based treatment and rehabilitation for children with severe wasting and no medical complications. Approximately 85% of these children can be treated at home without the need for inpatient care at a health facility. This has the advantage of protecting them from exposure to infections and allows mothers to attend to the rest of the family while receiving care for their malnourished child. OTP provides ready-to-use-therapeutic foods (RUTF), routine medical care, food rations for the entire family and careful monitoring of children's progress through regular outpatient clinics.

Stabilisation Centres (SC) receive severely wasted children with serious medical complications. These centres are typically established by local health institutions or medical NGOs to provide specialized, intensive treatment. World Vision works closely with and provides support to these centres. Children receive specialized medical and nutritional care for seven to ten days and are discharged back to the community for follow-up by the OTP as soon as possible. This reduces mortality and is more cost-effective compared to inpatient care.

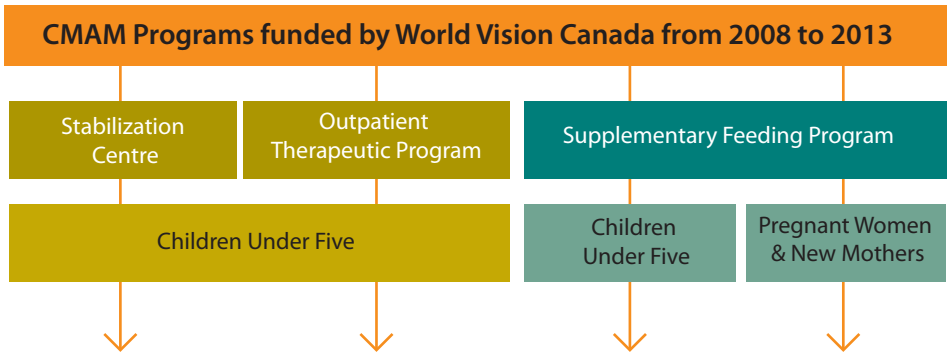
- The average recovery rate of 92% for World Vision Canada's CMAM programs far exceeds the international standard of 75%.
- Approximately 85% of severely wasted children with no medical complications can be successfully treated at home.

Impact/Results

From 2008 to 2013, World Vision Canada implemented CMAM in 20 Area Development Programs (ADPs) in eight countries. One hundred and seven outpatient therapeutic program centres were established as well as supplementary feeding programs and support of stabilization centres. The average recovery rate of 92% far exceeds the SPHERE international standard of at least 75%[4].

CMAM programs have also contributed to saving hundreds of thousands of lives during the Horn of Africa drought response in 2012 in Somalia, Ethiopia, Kenya and Tanzania, as well as the cyclical food crisis in the West African countries of Niger, Mauritania, Mali and Chad.

To treat children with severe and moderate malnutrition, CMAM needs to be an integral part of the national primary health care system. World Vision has been instrumental in influencing the governments of Ethiopia, Kenya, Zambia, Burundi and North and South Sudan to include CMAM in their national health care policies.



Total People Treated	351	17,208	40,829	13,483	71,871
Average Recovery Rate	90%		93%	94%	92%

Case Study

Since 2008, World Vision has partnered with the Ministry of Health and Child Welfare in implementing CMAM in Zimbabwe. Chronic food shortages due to repeated droughts and high prevalence of HIV & AIDS are two of the main causes of malnutrition in this country.

Previously, malnourished children were given high-energy milk in health facilities resulting in overcrowded inpatient treatment centres and high risk of infections. The Ministry of Health and Child Welfare adopted CMAM as the strategy for managing acute malnutrition.

World Vision Zimbabwe uses the existing community structures such as home-based caregivers and village health workers to implement CMAM, ensuring the program is sustainable. Due to local beliefs, people consult traditional healers in the event of illness. In the district of Gwanda, these healers, along with traditional birth attendants, were trained to identify cases of malnutrition and refer children to the local treatment centres.

Before the CMAM program, Bulawayo's Mpilo Central Hospital had an entire building with three floors dedicated to treating the malnourished, but now has only a handful of malnourished patients.

The program's success can be attributed to its community-based nature and use of RUTF which is widely accepted by the local community. With this success, WV Zimbabwe seeks to broaden the scope of CMAM to include strategies to promote appropriate infant and young child feeding.

4. The SPHERE Project is an initiative of a wide range of agencies aimed at improving the quality of humanitarian assistance and accountability.

“My child was between life and death”

Tinoumoune was one of 1.5 million children under age five suffering from malnutrition in drought-prone Niger.

Six years ago, her father was working outside the country to earn money to support the family; her mother and siblings were living with her grandparents when their four-year old son got sick. Despite the family caring for the boy, he died within a few days.

Now, one-year-old Tinoumoune was close to death. She was losing weight but according to custom in rural areas of Niger, her mother treated Tinoumoune with unproven herbal remedies. As she became dehydrated and got physically weaker, the young mother quickly took her to the nearby health center. “My child was between life and death. She was fading away. I had not a droplet of hope,” her mother said.

Tinoumoune was diagnosed with severe acute malnutrition and admitted to the World Vision-supported CMAM program for malnourished children and pregnant and breastfeeding women. “Within two weeks, she had regained weight and became stronger and healthier. I’m very happy. Now she walks and plays with other children,” her mother said with a big smile. The family has been spared the grief of losing a second child.

lessons learned

A number of factors have contributed to World Vision's success in implementing CMAM programs.

- World Vision has worked closely with community-based health systems and the Ministry of Health to train community health workers and volunteers to actively conduct case identification, referral and follow-up.
- World Vision co-ordinated programs and resources with national and international partners; leveraged financial resources with gift-in-kind of essential medicines and RUTF and established linkages with longer-term programs.
- Operational research by World Vision and our partners has led to the integration of behaviour change interventions aimed at improving infant and young child feeding and care with CMAM programs.

Despite CMAM's proven effectiveness in reducing child malnutrition, challenges remain with program implementation.

- Co-ordination between partners and a reliable supply chain for medicine and food is essential to the program's success.
- Community health workers need sufficient training and supervision of CMAM implementation by district health personnel to ensure children receive adequate follow-up during the referral process.
- Unpredictable funding, usually from short-term emergency response grants, leads to high staff turnover when the funding ends.
- Data management was a major challenge as case information was often of poor quality and not accessible to decision makers within a reasonable timeframe. This at times undermined our ability to respond effectively and made it difficult to monitor program quality.

Innovative database enables better program monitoring and quality

World Vision's Nutrition Centre of Expertise (NCoE), hosted by World Vision Canada, has developed an innovative CMAM database to improve program monitoring in all countries compared to international standards[5]. This has resulted in standardized indicators across countries for CMAM programming, feedback to field staff to improve quality of implementation, more accurate data and a better ability to predict future trends to allocate resources and prepare for seasonal droughts.

5. The NCoE is a team of internationally recognized nutrition experts who provide leadership for technical excellence in nutrition programming and advocacy for World Vision.

looking ahead

From its initial use in emergencies, CMAM has increasingly been integrated into community development programs and the national primary health care systems. World Vision's long-term presence in communities positions us to advocate for national policies to help governments accelerate and sustain scale-up, build capacities and integrate CMAM into other health and nutrition programs. A reliable funding mechanism is needed to ensure programs continue beyond the emergency stage.

World Vision Canada is developing a mobile phone-based application enabling community health workers to more easily track malnourished children and provide better care from the home to the health center. This means that a child's health information will be collected accurately and transferred via mobile application between multiple services. This reliable patient record will follow the child through the program, prompting health workers to ensure they accurately follow treatment protocol and complete follow-up visits when necessary. In addition, improved data management will give decision makers the information they need to plan, procure resources and respond to acute and chronic situations.

World Vision Canada, Evidence and Impact Unit
www.worldvision.ca

World Vision

For Children. For Change. For Life.