Preventing malnutrition of mothers and children in Zambia

Introduction to IYCN in Zambia

For the past three years, the US Agency for International Development’s (USAID) Infant & Young Child Nutrition (IYCN) Project has supported the Ministry of Health and the National Food and Nutrition Commission to strengthen policies, programs, and health systems to improve the nutrition—and thereby prolong the lives—of mothers and their children younger than 2 years of age, including those affected by HIV. IYCN has collaborated with a wide range of partners to support mothers in adopting healthy feeding practices and to ensure a better future for Zambian communities and families.

The project focused on strengthening nutrition interventions within prevention of mother-to-child transmission of HIV programs and child health services and conducting supportive community-based activities. Since 2008, when the project began, health workers and community health volunteers in several districts have developed the skills and knowledge to help mothers improve nutrition for themselves and their babies. Formative research on maternal nutrition and child feeding practices has enabled stakeholders to understand beliefs and behaviors that contribute to poor nutrition. Structures are now in place for assessing the quality and consistency of health worker counseling. Additionally, messages to encourage changes in the way mothers feed their children have been disseminated through mass media.

Context for nutrition programming

Chronic malnutrition places nearly half of Zambian children less than 5 years of age at risk of assuming lifelong physical and cognitive disabilities that compromise academic performance, productivity, and health. Malnutrition and HIV transmission from mothers to their infants is partially tied to unsafe breastfeeding and early childhood feeding practices. These unsafe feeding practices place children at risk of becoming chronically malnourished, and when born to an HIV-infected mother, acquiring HIV. Young children and infants exposed to HIV are especially imperiled, and without proper nutrition, are more susceptible to illness and death.

Although exclusive breastfeeding is recommended during the first six months of life—even among HIV-infected mothers—in Zambia, just less than two-thirds of all infants younger than 6 months are exclusively breastfed. During the critical time of growth between 6 and 23 months of age, just one-third of children consume enough of the right foods.

Formative research conducted by IYCN shows that many mothers stray from exclusive breastfeeding, and instead give their infants water or watery porridge because they believe their babies are thirsty or that they will not be satisfied by their breastmilk. A child looking at its mother while she is eating or drinking convinces some mothers that the baby wants what she has—i.e., additional food or drink. When the babies reach 6 months of age, moth-
IYCN’s initial needs assessment revealed that Zambia’s health system was not prepared to handle the challenge of sensitizing these women and encouraging healthy behavior changes that could support improved infant and young child feeding. Facility-based workers lacked time to provide adequate counseling, and there was a need to strengthen the community-based system for assessing nutritional status, offering counseling, and providing follow-up support for pregnant and lactating mothers.

Project activities and accomplishments

IYCN took a comprehensive approach to addressing nutrition assessment, counseling, and support in Zambia by working with stakeholders at the national, district, provincial, and community levels to assess needs, enhance national policies, build the capacity of health providers, implement behavior change communication strategies, strengthen monitoring and evaluation systems, and identify and share good practices.

Here is a snapshot of the project’s key activities and accomplishments.

Enhanced national tools and guidelines to enable healthier futures

At the national level, the project offered technical support to the Ministry of Health, the National Food and Nutrition Commission, and the Ministry of Agriculture & Cooperatives to build an enabling environment for nutrition programs. This support, which included ongoing technical assistance through working groups, helped to create several essential tools and guidelines, including:

- A community-based growth monitoring promotion package
- Revised nutrition and HIV guidelines
- A local foods recipe book
- A maternal nutrition study
- Informed adoption of the 2010 World Health Organization guidelines on infant feeding and HIV

To facilitate integration of nutrition and agriculture, the project also provided technical assistance to the Ministry of Agriculture & Cooperatives to include nutrition activities in its project plans.

“With IYCN’s support, we have been able to meet our objective of conducting high-quality training workshops for more health workers in our own province.”

—Sydney Kambove, Eastern Province Nutrition Specialist

Built national and local capacity of trainers and providers

Capacity-building at the national and provincial levels was also a key project focus. IYCN supported a six-day training of more than 30 national trainers and built four teams of provincial-level trainers, who in turn trained more than 600 health workers, using the World Health Organization’s integrated course, *Infant and Young Child Feeding Counseling*, which was adapted for the Zambian context. With IYCN’s support, the provincial-level
trainers provided ongoing mentoring of trainees and conducted more than 300 supervision visits. Through databases created with technical support from the project, the Ministry of Health can monitor health worker performance and assess training and supervision activities.

**Strengthened linkages between health facilities and communities**

Community health volunteers have been a critical part of IYCN’s strategy to improve the continuum of care for infant and young child feeding from facilities to communities. The project supported the development and testing of a community training package, including a six-day curriculum and job aids, designed to enable volunteers to reinforce messages from health workers and offer quality counseling for mothers in their communities. Nearly 200 trained volunteers have already assisted health workers with critical tasks such as conducting nutritional assessments, home visits, and cooking demonstrations. Through strengthened two-way referral systems, volunteers refer mothers of children who are not growing well to community health centers and hospitals, which, in turn, refer discharged infants and young children to community health volunteers for follow-up.

“Now I conduct cooking demonstrations to teach mothers to mix some of the nutritious local foods to give to the child. We pound meat and add it to the porridge.”

—Lucy, Community health volunteer

**Reached caregivers to encourage improved feeding practices**

IYCN used multiple strategies to address behavioral barriers, including radio, television, individual counseling at health facilities, and an integrated community approach through volunteers. As a result, mothers have gained a wealth of knowledge. According to more than 476 exit interviews conducted by IYCN after health talks and counseling sessions, the majority of mothers said they received beneficial messages about feeding from trained health workers. For example, health workers explained how mothers can exclusively breastfeed for the first six months and how to feed their babies within the context of HIV. Mothers have expressed that one-on-one counseling sessions allow them to ask personal questions, and they frequently learn about different infant and young child feeding topics during health talks.

**Developed an innovative supplementary food for HIV-positive mothers and children**

IYCN led the development of a lipid-based, add-in food supplement made of peanuts and a micronutrient mix. Targeted for use at sites offering prevention of mother-to-child transmission of HIV services, this product will offer HIV-positive pregnant and lactating women and their children aged 6 to 23 months, a nutrient-dense food made with locally available ingredients. The food is ready for production, and the project will share a production manual with stakeholders, including those in other countries, so that they can produce the formula using local ingredients.

**Reaching more caregivers through radio**

IYCN launched a 13-part radio series to reach mothers across Zambia with targeted infant and young child feeding messages in five different languages. The series, which originally aired on a private national radio station, is called *Bushes that Grow are the Future Forest*. It follows Sister Lovens, a health worker, as she travels around the country to hospitals, mothers’ clubs, and markets to encourage families to protect their children from malnutrition. The campaign addresses beliefs about, and barriers to, good feeding practices as identified through IYCN’s formative research. For example, the series addresses HIV-positive mothers’ confusion around conflicting information they have received on feeding. Five other local radio stations have already adapted the series and started airing it to spread the messages to more mothers in the communities that they reach.
Lessons learned

• Taking a comprehensive approach to addressing nutrition assessment, counseling, and support will help ensure a continuum of care and prevent nutritionally vulnerable mothers and children from falling through the cracks.

• Building the capacity of provincial teams as trainers is an efficient and cost-effective way to increase the number of trained infant feeding counselors.

• Community health volunteers can fill a key role in counseling and supporting mothers at health facilities, where health workers are often overwhelmed. When trained, volunteers can provide high-quality infant and young child feeding counseling for mothers.

• Building upon existing resources available in health facilities and communities can ensure government support and sustainability.

Looking ahead

A wide range of partners will continue to build upon IYCN’s experiences, lessons learned, and tools as they aim to reduce the burden of maternal and child malnutrition. The Ministry of Health will continue to roll out activities at the community level, emphasizing community health volunteer trainings in its provincial and district plans. In order to train more volunteers, more trainers will be needed at the national and provincial levels. Tools for monitoring the performance of community activities need to be institutionalized. Health center staff, for example, should be encouraged to routinely assess the quality of community health talks. Finding additional opportunities to integrate infant and young child feeding activities into other health services and community programs is essential. The successful integration of infant feeding into prevention of mother-to-child transmission of HIV programs is particularly crucial to the survival of infants exposed to HIV.

Available resources

• Formative Assessment of Infant and Young Child Feeding Practices at the Community Level in Zambia (2010)

• Zambia Radio Program Scripts: Bushes that Grow are the Future Forest, Feeding Our Children Well for Our Future (2010)


• Infant and Young Child Feeding Counselling: An Integrated Course (2008)

• Recipe Book on Zambian Traditional Foods (2010)

Visit www.iycn.org/Zambia

“I didn’t know that I could use the foods from my garden to make more nutritious meals for my child.”

—Mother in Kabwe