

Implementing an integrated nutrition package at large scale in Madagascar: The Essential Nutrition Actions Framework

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Introduction

A number of specific nutrition interventions can reduce young child morbidity, mortality and/or the prevalence of malnutrition. In particular, optimal nutrition of women during pregnancy and lactation, appropriate breast feeding and complementary feeding practices, and control of micronutrient deficiencies can markedly improve children's nutrition and health status and survival. Nevertheless, health systems have generally devoted fewer resources to support nutrition-related interventions when considered in relation to the potential benefits that could be achieved. Likely explanations for this underinvestment in nutrition include a lack of appreciation among health policy makers of the known health impact of nutrition interventions, the perceived complexity these nutrition activities, and uncertainty about how best to deliver them.

To address these shortcomings, several systematic, integrated approaches have been developed to promote key nutrition activities. One such approach, known as the Essential Nutrition Actions (ENA) framework, includes advocacy and technical assistance for policy development, coordination of implementing agencies to harmonize nutrition activities and messages, and identification of potential contact points within existing health system programs and community structures to provide these nutrition services. The ENA framework is the operational system through which an integrated package of nutrition actions can be promoted and managed at all levels. The program components include policy formulation, establishing partnerships for implementation, capacity building, community support, and behavior change communication (BCC).

In this month's Nutrition News for Africa we summarize a recent article which describes the ENA program that was implemented in Madagascar and presents the results of baseline and endline surveys that were conducted to assess the changes in selected nutrition indicators during the first five years of the program.

Methods

The ENA program in Madagascar was initiated in 1997. During the first two years of the program, activities focused on policy development and consensus building among a range of partners, including government agencies and nongovernmental organizations (NGOs). Implementation at the district level commenced in six highland districts with a total population of ~1.4 million inhabitants in the year 2000. The program consisted of policy initiatives to develop appropriate infant and young child feeding guidelines and to ensure adequate supplies of micronutrient supplements and deworming medicines. Training sessions were convened for health workers, NGO staff, members of women's groups, and journalists on how to promote these interventions. To take advantage of all potential health contacts, the service providers were advised to follow specific protocols at each of the following contacts: antenatal, delivery, post-partum and family planning, immunization, growth monitoring and promotion, and sick child visits. During the six years of the program, >2000 health workers, 12,000 community health volunteers, 4500 members of women's groups, 750 NGO staff, and 500 private physicians participated in the training sessions; and nutrition messages were disseminated through

multiple media channels. Training was short-term duration and skills based, primarily imparting practical skills in counseling and negotiation to encourage mothers and family members to adopt of optimal nutritional practices.

Surveys were completed at the start of the program and approximately five and a half years later, using a multi-stage (cluster) sampling method. A total of 1200 to 1760 mothers of children <24 months of age participated in each of the two surveys. Data were collected on key ENA behaviors, using common indicators included in the Demographic and Health Surveys (DHS) and WHO definitions.

Results and conclusions

There were a number of sizeable improvements in nutrition-related household behaviors between the times of the two surveys. For example, timely introduction of breast feeding (within one hour of birth) increased from 33% to 68%, exclusive breast feeding of infants 0-5 months in the previous 24 hours increased from 42% to 70% ($p<0.001$), and the percent of children still breast fed at 20-23 months increased from 43% to 73%. All of these results were highly statistically significant ($p<0.001$). The changes in complementary feeding practices were less dramatic, but these had already conformed more closely to international norms at the start of the program. Likewise, there were minimal changes in feeding practices in relation to illness, but it is not certain if the survey questionnaire clearly distinguished between the caregiver's attempted feeding practices and the child's willingness to eat. There were substantial increases in the percent of children who received deworming medicine in the last six months (from 42% to 82%), and in women who received iron-folate tablets during pregnancy (from 32% to 76%) and vitamin A within eight weeks of delivery (from 17% to 54%).

Interestingly, DHS results for the whole country for the period from 1997 to 2004 showed similar a magnitude of change for the rates of timely introduction of breastfeeding and exclusive breast feeding from 0-5 months. The level of change for continued breast feeding at 20-23 months and vitamin A supplementation was higher in the program areas than for the country as a whole.

NNA Editors' comments*

This paper provides a useful description of the program design and early outcomes related to the ENA approach in one country. The paper demonstrates that sizeable changes can occur in key child feeding practices and micronutrient supplementation activities within a fairly short period of time when these interventions are emphasized in a large scale program. The paper also demonstrates the dilemma in attempting to evaluate large scale programs when national coverage is achieved for some program components and there is no control group available for comparison. In the present example, many of the advocacy, training, and BCC components were carried out nationally, and similar improvements were noted in both the program target areas and non-target areas. Because considerable improvements were observed in both areas, this is likely due to the beneficial impact of the ENA strategy on national policies and capacity strengthening, even outside the initially targeted districts.

An important aspect of the ENA approach is the initial policy formulation and efforts to harmonize nutrition activities across multiple agencies. This set of activities is consistent with the REACH initiative (Renewed Efforts Against Child Hunger), which is currently being promoted by several UN agencies (see the following link for more information on REACH: www.reach-partnership.org). The ENA approach further emphasizes capacity development, social mobilization and BCC activities to support

service delivery at critical time points in the life cycle and coordinated with existing contacts with the health system at both the facility and community levels. A major goal is to reduce the many missed opportunities to deliver nutrition support to women and their children within programs and activities that already exist. This set of activities seems to be capable of producing large changes in household-level nutrition indicators and likely improvements in child health and builds on current programs rather than relying on the creation of new structures.

* These comments have been added by the editorial team and are not part of the cited publication.

Reference

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