

Executive Summary

Situational analysis of infant and young child nutrition activities in the Sahel – executive summary

Sara E. Wuehler*, Sonja Y. Hess† and Kenneth H. Brown*†

*Helen Keller International, Africa Regional Office, Dakar-Yoff, Senegal, and †Program in International and Community Nutrition, Department of Nutrition, University of California, Davis, California 95616, USA

Correspondence: Sara E. Wuehler, Helen Keller International, Africa Regional Office, Dakar-Yoff, Senegal.
E-mail: swuehler@hki.org

Background and objectives

Several international agencies and non-governmental organizations joined forces in 2007 to support an initiative to 'Reposition children's right to adequate nutrition in the Sahel'. The overarching goal articulated by these organizations was to achieve optimal feeding of $\geq 80\%$ of children 0–24 months based on relevant and internationally agreed-upon child-feeding indicators. An early activity of the working group for this infant and young child nutrition (IYCN) initiative was to carry out a situational analysis to evaluate IYCN activities being conducted in six Sahelian countries of West and Central Africa, namely, Burkina Faso, Chad, Mali, Mauritania, Niger and Senegal (1–6). The objectives of this analysis were to compile, analyse and interpret available information on infant and child feeding, and the nutrition and health situation of children <2 years of age in the six target countries. This information was used to determine: (i) whether national IYCN policies and activities match international IYCN recommendations; (ii) where IYCN-related activities have been successful, and why; and (iii) how international agencies can assist in filling gaps to speed progress in improving the feeding practices and nutritional status of infants and young children in the region.

Methods

Key informants conducting IYCN-related activities in Burkina Faso, Chad, Mali, Mauritania, Niger and Senegal were interviewed at 143 governmental, non-governmental and United Nations' agencies organizations. More than 600 relevant documents were obtained through these organizations and by internet searches.

These documents describe national policies and strategies, research activities, training materials and curricula, programme guidelines, survey results, and monitoring and evaluation (M&E) reports. The promotional information found in these documents was compared with the following international recommendations summarized by the selected areas of IYCN (see the review chapter in this issue for details (7):

1. Infant and young child feeding practices
 - a. Breastfeeding – introduction of breastfeeding within 1 h of birth, exclusive breastfeeding to 6 months of age and continued breastfeeding to at least 24 months of age;
 - b. Complementary feeding – introduction at six months of age, use of nutrient-dense foods, gradual and appropriate increase of food consistency and meal frequency, responsiveness to feeding cues;
2. Prevention of micronutrient deficiencies:
 - a. Vitamin A – provision of supplements every 6 months for children 6–59 months and to women within 6 weeks post-partum, and promotion of vitamin A-rich foods;
 - b. Zinc – promotion of zinc supplements in the treatment of diarrhoea and of activities to prevent zinc deficiency;
 - c. Anaemia and iron deficiency – promotion of iron-folic acid supplements during pregnancy, iron-rich complementary foods, regular deworming and the use of insecticide-treated bednets in malaria-endemic regions; differentiation of iron-deficiency anaemia from other types of anaemia in areas of high infection rates (particularly malaria) to avoid the risk of providing iron to children without iron deficiency; and
 - d. Iodine – promotion of iodized salt; and

3. Other nutritional support:

- a. Management of acute malnutrition – integrated community- and facility-based screening, diagnosis, prevention and treatment activities;
- b. Prevention of mother-to-child transmission of HIV through feeding practices that are optimal for the infant's health and lowest risk for transmission;
- c. Food security – maintenance of a programme for tracking and responding to food insecurity; and
- d. Hygiene and sanitation – hand washing, promotion of latrines or other appropriate methods of human waste disposal, appropriate food preparation and storage.

Our analyses were restricted to documents that were available from the various organizations conducting IYCN-related activities in each country. Therefore, we acknowledge that there may be additional relevant IYCN activities in these countries that are not included in this review because of the lack of available documentation. We also focused on activities specific to IYCN. Therefore, the scope of HIV, food security and hygiene-related activities may not represent the full extent of related activities in each country.

Results

In most countries, we found well-written national nutrition policies, training materials and programmes that incorporate most of the international recommendations referred to previously. The most frequently neglected international recommendations include: specific complementary feeding recommendations (such as the recommended frequency of meals, gradually increasing the consistency of foods and responsive feeding, and promotion of specific nutrient-dense complementary foods), the use of zinc in the treatment of diarrhoea and the prevention of zinc deficiency, the distinction between iron deficiency anaemia and other causes of anaemia prior to providing iron supplements to treat anaemia among young children, screening for acute malnutrition, the specifics of optimal feeding practices for infants of HIV-positive mothers and the integration of hygienic practices into nutrition guidelines.

We identified research articles, by PubMed search and through university theses conducted in each of the six countries, but the distribution varied widely (2–70 research studies per country). Few of these studies were directly related to programme development or impact assessments. All countries had conducted some studies to evaluate local barriers to implementing desirable feeding practices, particularly breastfeeding practices, but just two countries conducted evaluations across more than one site or region (Senegal and Mauritania).

The majority of reviewed IYCN-related programmes target high-risk populations of the respective country, but we could only confirm that a few had reached national coverage. Two exceptions are the promotion of breastfeeding and the distribution of vitamin A supplements (VAS) through national campaigns. Niger was the first country in the region to distribute VAS through national campaigns. VAS distribution is now reaching >80% of children 6–59 months through national campaigns in all countries included in this report (8). However, these campaigns are not yet taking place semi-annually in all countries, few women are reached with VAS early post-partum (22–48%) and it is uncertain how many infants are receiving these supplements at 6 months of age.

In the past decade, Senegal and Mali have been conducting nearly annual national campaigns to promote breastfeeding and several other countries have commenced these campaigns more recently. Although substantial increases in breastfeeding have been reported in some of the reviewed countries, Senegal and Mali are the only two countries reaching >30% prevalence of exclusive breastfeeding among infants 0–6 months. Even with these increases, the prevalence is considerably less than what is needed to achieve substantial impacts on infant morbidity and mortality.

National Demographic and Health Surveys (DHS) and/or Multiple Indicator Cluster Surveys (MICS) are conducted in all countries, and some other national nutrition surveys are also scheduled sporadically between rounds of the DHS/MICS. However, few programme-specific evaluations have been conducted, and even fewer of these evaluations assessed baseline and follow-up data in intervention and comparable

non-intervention sites. Among those studies that did include baseline and follow-up surveys, the statistical analyses were inadequate to confirm whether changes in the intervention sites were significantly different from changes in the non-intervention sites. Thus, it is uncertain whether any reported changes were in fact because of the programme activities or other extraneous factors. Further, most M&E activities assessed the logistics of the programme delivery, such as the number of staff trained and the number of participants served, but few assessed the quality of programme components or evaluated whether the programme had a measureable impact on health and nutrition status of the recipients. Therefore, most M&E activities reviewed did not permit identification of effective programme components for expansion nationally or internationally. We also found gaps across countries in available documentation. Some documents were not readily available for review or the programme activities had not been documented.

There has been insufficient or no progress in the region towards the Millennium Development Goal 1.8: to halve underweight among children less than 5 years of age between 1990 and 2015. Mali, Mauritania and Senegal have made the most progress among the countries included in this analysis. Niger and Senegal appear to be on track towards MDG 4.1: to reduce by two-thirds mortality rates among children less than 5 years of age in the same period. Despite this progress, Niger and Senegal are still ranked 13th and 29th globally in high child mortality rates.

In addition to the previously mentioned activities, we also identified national-level collaborative nutrition working groups in Burkina Faso, Mali, Mauritania, Niger and Senegal, with varying levels of participation and meeting frequency. The REACH initiative (Ending Child Hunger and Undernutrition Initiative) was piloted in Mauritania and assisted the government in organizing a multi-sector nutrition coordination unit with support from the office of the Prime Minister. Several key informants and some programme documents also identified gaps in human, institutional and financial resources to carry out nutrition-related activities in these countries.

Although we identified progress in various nutrition-related activities across all countries

included in this situational analysis, Senegal appears to have made the most overall progress towards improving infant and young child nutritional status. Because of inadequate research and programme M&E, we could not confirm the source of this progress. However, Senegal has been host to a combination of critical nutrition activities that likely contributed to the progress identified. Most of these activities were also conducted in various forms in other countries, but not in combination. These activities include the formation and high-level support of a multi-sector national nutrition counsel to coordinate nutrition-related activities in Senegal; implementation of semi-annual VAS campaigns, for which financial responsibilities are being systematically transferred from international donors to national- and district-level budgets; national annual breastfeeding campaigns to support local programmatic activities; and national-level nutrition programmes with educational messages that were reportedly developed based on research of barriers to optimal feeding practices. Finally, these activities were supported by a concerted national strategy to reinforce nutrition activities. Unfortunately, reports of some of these activities were no longer available for review and, as previously mentioned, the programme evaluations did not include the required details to confirm the impact of the programme.

Regional level awareness of and responses to existing nutrition problems are evidenced by such regional activities as the adoption of pertinent nutrition resolutions by the Ordinary Assembly of Health Ministers of the Economic Community of West African States in 2007 (fortification of wheat flour with iron, zinc and B vitamins and cooking oil with vitamin A) and 2009 (promoting key nutrition activities of): (i) capacity building for public health nutrition; (ii) VAS for child survival; (iii) IYCN; and (iv) Integrated Management of Acute Malnutrition, and the establishment of a regional repository of relevant national and international documents. Additional regional-level activities include the promotion of the West Africa Capacity Development Initiative (9) (working to improve and increase local training of nutrition professionals, relevant laboratory facilities and applied research capacity) and implementation of the REACH – Ending

child hunger and undernutrition initiative in at least two countries (supporting and promoting effective multi-sector national collaboration and coordination of nutrition activities, organizing nutrition training for the media, <http://www.reach-partnership.org/home>).

Conclusions

The activities reported in identified documents clearly demonstrate that governmental and non-governmental agencies are working to improve the nutritional situation for infants and young children in the region. Existing national nutrition policies have established a good foundation for implementing appropriate IYCN-related activities in the six Sahelian countries included in this situational analysis. However, limited programme coverage and often inadequate M&E hinder identification of effective programmes for expansion nationally and internationally.

The findings of these situational analyses highlight the need to: (i) continue support and expansion of effective IYCN activities, in addition to expansion of the promotion of exclusive breastfeeding up to 6 months of age and VAS; (ii) improve M&E and utilize findings to guide programme design; (iii) improve collaboration among scientists, educators and programme developers to ensure that scientific efforts are guided by programme needs and training materials and programmes are evidence based; (iv) ensure that documentation on nutrition training, programmes and evaluations is readily available nationally, and where appropriate, internationally; (v) support effective supervision and training of health workers at all levels and in adequate numbers to carry out these activities; and (vi) continue collaborative efforts of national and international agencies towards repositioning children's right to adequate nutrition.

Funding agencies

Financial support to initiate and carry out the situational analyses was provided by the founding agencies and organizations of the IYCN initiative, in alphabetical order: the Food and Agriculture Organization of the United Nations, Helen Keller Interna-

tional, Micronutrient Initiative, Save the Children, the World Food Programme of the United Nations, the United Nations Children's Fund and the World Health Organization.

Acknowledgements

Completion of this analysis required assistance from government officials, nutrition focal points and other representatives working in infant and young child feeding and related areas. The agencies that provided information for the completion of these analyses are listed in each of the country reports to follow in this issue. We are sincerely grateful for their assistance.

Table of contents

Executive summary

Review of key internationally recommended infant and young child nutrition practices to accelerate efforts to improve nutritional and health status of infants and young children in the Sahel region of Sub-Saharan Africa

Situational analysis of infant and young child nutrition policies and programmatic activities in Burkina Faso

Situational analysis of infant and young child nutrition policies and programmatic activities in Chad

Situational analysis of infant and young child nutrition policies and programmatic activities in Mali

Situational analysis of infant and young child nutrition policies and programmatic activities in the Islamic Republic of Mauritania

Situational analysis of infant and young child nutrition policies and programmatic activities in Niger

Situational analysis of infant and young child nutrition policies and programmatic activities in Senegal

The way forward: repositioning children's right to adequate nutrition in the Sahel

References

1. Wuehler S.E. & Ouedraogo A.W. (2011) Situational analysis of infant and young child nutrition policies and programmatic activities in Burkina Faso. *Maternal & Child Nutrition* 7 (Suppl. 1).

2. Wuehler S.E. & Djasndibye N. (2011) Situational analysis of infant and young child nutrition policies and programmatic activities in Chad. *Maternal & Child Nutrition* **7** (Suppl. 1).
3. Wuehler S.E. & Coulibaly M. (2011) Situational analysis of infant and young child nutrition policies and programmatic activities in Mali. *Maternal & Child Nutrition* **7** (Suppl. 1).
4. Wuehler S.E. & Ould Dehah C.M.E.H. (2011) Situational analysis of infant and young child nutrition policies and programmatic activities in the Islamic Republic of Mauritania. *Maternal & Child Nutrition* **7** (Suppl. 1).
5. Wuehler S.E. & Biga Hassoumi A. (2011) Situational analysis of infant and young child nutrition policies and programmatic activities in Niger. *Maternal & Child Nutrition* **7** (Suppl. 1).
6. Wuehler S.E. & Ly Wane C.T. (2011) Situational analysis of infant and young child nutrition policies and programmatic activities in Senegal. *Maternal & Child Nutrition* **7** (Suppl. 1).
7. Wuehler S.E., Hess S.Y. & Brown K.H. (2011) Accelerating improvements in nutritional and health status of young children in the Sahel region of Sub-Saharan Africa: review of international guidelines on infant and young child feeding and nutrition. *Maternal & Child Nutrition* **7** (Suppl. 1).
8. United Nations Children's Fund (UNICEF) (2009) *UNICEF Humanitarian Action Report Mid-Year Review 2009*.
9. Brown K.H., McLachlan M., Cardoso P., Tchibindat F. & Baker S.K. (2010) Strengthening public health nutrition research and training capacities in West Africa: report of a planning workshop convened in Dakar, Senegal, 26–28 March 2009. *Journal of Global Public Health* **5** (Suppl. 1), S1–S19.