HEALTH SECTOR ACTIONS TO IMPROVE NUTRITION: CHALLENGES AND OPPORTUNITIES IN SUB-SAHARAN AFRICA

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ABSTRACT

Reducing malnutrition-related maternal and childhood morbidity and mortality in Africa requires a systematic and coordinated strategy. This paper discusses a health sector strategy which includes: i) advocating for action in nutrition at all levels; ii) integration of the essential nutrition actions into six key contact points (antenatal, maternity/delivery, postnatal, well-baby clinics, sick baby clinics and family planning); iii) management of the interventions to ensure client health care needs are met with a high level of quality and at an affordable cost, and iv) measurement of the changes in behaviour and nutrition outcomes. Core to the process is continuous advocacy, at all levels, for increased investment in nutrition and development of human and institutional capacity in order to address malnutrition.

Keywords: nutrition; essential behaviours; quality; health; sub-Saharan Africa

INTRODUCTION

Nearly 50% of all deaths before the age of five in sub-Saharan Africa are directly or indirectly related to malnutrition – with the majority of these deaths being the result of mild and moderate malnutrition (ACC/SCN, 1996). Thus, if child mortality levels are to be reduced, the problem of malnutrition in the first few years of life must be aggressively addressed by all relevant sectors. However, five challenges limit the implementation of the key actions that can improve maternal and child nutrition: i) communities, governments and donor agencies inadequately support and invest in nutrition actions, ii) actions that are proven to positively impact on child and maternal health are poorly integrated within ongoing health services, iii) the poor quality of services provided to clients has limited demand for and continuity of the services, iv) systems to monitor and evaluate services to ensure improved maternal and child nutrition are not continually available, and v) the pace of development of human and institutional capacity is too low to address these challenges.

This paper proposes a process to accelerate the promotion of good nutrition within the health sector in the region. The process is presented in Figure 1 and is based on better practices learned from a few programs and countries in addressing each of the five challenges presented above. This paradigm, however, needs to be tested, proven and refined if necessary, before it is adopted widely.

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Figure 1

Components of the maternal and child nutrition strategy in Africa

- III. Manage to assure quality services are offered
- IV. Measure changes made in nutrition and mortality
- V. Develop capacity in nutrition
- II. Integrate Essential Nutrition Actions into Existing Health Delivery System
- I. Advocate for Action in Nutrition at all levels
I. Advocate for Action in Nutrition at all levels

Nutritionists have not had the capacity to translate technical nutrition data and analyses into terms and arguments that make sense to policymakers and non-nutrition experts at various levels and in different positions. However, lately, substantial ground has been gained in a number of African countries (Kenya, Uganda, Tanzania, Madagascar, Senegal, Ghana, and Ethiopia) in pushing forward nutrition at national and sub-national planning arenas using a computer-based tool, PROFILES2. PROFILES brings together key nutrition actors from various sectors for a two-week training workshop that transfers skills in nutrition policy analysis and advocacy to enable participants to effectively convey key results to selected target groups of decision-makers. The 'costs' of a country's malnutrition situation are quantified in both human terms (e.g. lives lost) and economic terms (e.g. resources or productivity lost), and various nutrition improvement scenarios are examined to estimate the cost-benefit ratios of using nutrition interventions that are proven to reduce nutrition related morbidity and mortality among women and children (AED, 2000).

A strategic advocacy plan is developed, identifying target audiences (governments, donors, media), key messages, and desired outcomes. Depending on the target group and the country context, stakeholders may advocate for specific actions and investments. These include requests for a) increased investment in nutrition by governments, donors and non-governmental organizations, b) creation of line items for nutrition in the national budgets, c) support for reviewing and updating related policies and legislations, and d) increased value for the health and welfare of children by governments and communities.

II. Integrate Essential Nutrition Actions into Existing Health Delivery System

Though many health sector actions can improve nutrition, only a few address the most critical nutrition problems of the most vulnerable in an efficient manner. There is evidence that actions to produce the ten essential nutrition outcomes shown in Figure 2 effectively reduce nutrition related morbidity and mortality among women and children (Huffman, et al. 2001; BASICS, 1999; Sanghvi and Murray, 1997). The combined impact on nutrition of the actions that support these outcomes, is greater and longer lasting than would be achieved by a single action. However, interventions can be phased so as to reflect the preference of communities and caretakers, and the capacity of the health system and communities to implement the activities on their own, with the available resources and within existing constraints.

To-date, several countries in sub-Saharan Africa (Madagascar, Senegal, Ghana, Zambia) have adopted the nutrition essentials strategy to varying degrees. Apart from quality management, monitoring and evaluation for effective implementation, and capacity development—which will be addressed in the next sections of this paper—the process involves:

a) Reviewing and updating related policies and protocols in order to integrate the essential nutrition actions. The policies that need updating have included the Integrated Management of Childhood Illness guidelines, HIV/AIDS policy, the Antenatal Care (and the Reproductive Health) Package, the Food/Agriculture Policy, and the Education Policy. In addition, a forum for key nutrition stakeholders to share their experiences, and to harmonise messages, IEC materials and training manuals is central to the success and sustainability of the nutrition essentials.

b) Integrating the nutrition actions into ongoing interventions in the health delivery system for effectiveness and sustainability. This is done through the most appropriate contact points, particularly within child and reproductive health services, e.g., antenatal contact; delivery and immediate post-partum contact; postnatal contact; well-child and immunization contacts; sick-child contact; and family planning contact. The ultimate goal of using the contact approach is to deliver the most appropriate nutrition support for maternal and child nutrition (Figure 3) at the most appropriate time to achieve improved nutrition behaviours.
**Figure 3**

*Actions to produce the essential nutrition outcomes during health sector contact points*

**Antenatal Contact**
- Assess and counsel on increased energy intake varied diet and reduced workload
- Provide iron/folic acid or multiple micronutrient supplements
- Screen and refer treat severe anaemia
- Provide anti-malarials in endemic areas
- Provide anthelmintics in endemic areas
- Counsel for preparation of immediate and exclusive breastfeeding including information on HIV and breastfeeding in areas with high HIV prevalence
- Discuss different family planning options including lactational amenorrhoea method (LAM)
- Counsel on the use of iodized salt for all family members

**Delivery/Post-Partum Contact**
- Assess and counsel on increased energy intake varied diet and reduced workload throughout lactation.
- Provide iron/folic acid or multiple micronutrient supplement to mothers
- Provide breastfeeding assistance and counseling, including information on HIV and breastfeeding in areas with high HIV prevalence
- Provide one dose of vitamin A to all postpartum mothers
- Discuss different family planning options, including lactational amenorrhoea method (LAM)
- Counsel on the use of iodized salt for all family members

**Postnatal Contact**
- Reinforce increased energy intake varied diet and reduced workload for lactating mothers
- Continue providing iron/folic acid or multiple micronutrient supplements to mothers according to protocol
- Assess exclusive breastfeeding teach mothers to prevent and manage difficulties for areas with high HIV prevalence provide support for infant feeding of choice
- Check and complete mother's vitamin A supplementation (if within 8 weeks after delivery)
- Discuss different family planning options including lactational amenorrhoea method (LAM)
- Reinforce the use of iodized salt for all family members

**Well-Baby Contact (Immunization, Growth Monitoring)**
- Reinforce increased energy intake varied diet and reduced workload for lactating mothers
- Screen child for severe malnutrition and mother and child for anaemia and refer or treat
- Assess classify and counsel on infant feeding and/or child feeding (exclusive breastfeeding to about 6 months and complementary feeding accompanying breastfeeding starting at about 6 months) for areas with high HIV prevalence support mother's choice of infant feeding
- Check and complete infant's vitamin A supplementation protocols
- Check and complete mother's vitamin A supplementation (if within a weeks after delivery)
- Discuss different family planning options including lactational amenorrhoea method (LAM)
- Reinforce the use of iodized salt for all family members

**Sick Baby Contact**
- Assess and counsel on breastfeeding and adequate complementary feeding during illness using locally adapted IMCI recommendations
- Encourage increased breastfeeding and other foods after illness for recuperation
- Give micronutrient supplements according to IMCI, IVACG and INACG protocols
- Check and complete vitamin A supplementation protocols
- Screen for severe malnutrition and anaemia and refer/treat
- Reinforce the use of iodized salt for all family members

**Family Planning Contact**
- Counsel on different family planning options, including lactational amenorrhoea method (LAM)
- Reinforce increased energy intake, varied diet and reduced workload for lactating women
III. Assure quality nutrition services are offered
Lessons indicate that poor quality health care services are a major threat to the effectiveness of nutrition interventions, especially within the public sectors. Lack of commitment to quality by both the management and the service providers has denied clients their right to quality services. However, “better practices” assessments in the region indicate that quality nutrition services would require commitment at relevant levels to:

a) Having enough staff with the knowledge and skills to undertake nutrition services. Such capacity-building efforts are best planned and carried out at the district level using training methods such as on-the-job training during supervision or through field/exchange visits. In Madagascar, LINKAGES and its partners are helping the MoH reduce training problems caused by high turnover or transfers of staff through continuing education using “self-assisted learning techniques” linked to a health or nutrition training institution.

b) Communicating nutrition standards and job expectations. This has involved communicating clear job descriptions, standards and guidelines. In Madagascar and parts of Kenya, job aids designed for health workers have played a major role to ensure nutrition actions are implemented in a consistent manner at each relevant contact.

c) Providing institutional support through creating nutrition leadership at national and sub-national levels, but also providing facilitative supervision, support systems like logistics, maintenance, and the development of policies and guidelines.

d) Providing basic facilities, supplies and equipment, including timely supply of adequate micronutrient supplements, IEC materials, scales, recording materials, and supervisory and monitoring tools, and in the repairs and maintenance of the equipment (such as the weighing scales). Efforts have been made in Uganda and Zimbabwe to include most nutrition supplies in the routine health supply system(s) to reduce continual reliance on UNICEF and other donors.

e) Motivating health service providers to promote quality and intimate relationship between the provider and the client. Examples have included flexibility in working conditions, praise and recognition (e.g., the golden star for the family planning program in Egypt), generous benefits, vacation time, and access to training opportunities.

f) Building community demand for quality by clients being able to recognise quality services (e.g., through use of a Logo as has been done for iodised salt). Community animation, radio/TV spots, child-to-parent and mother-to-mother approaches have successfully been used to raise awareness, and apply social marketing techniques for promoting the nutrition essential behaviours.

IV. Measure changes being made in nutrition and mortality
Monitoring is needed to assess the impact of the support actions on the nutrition essential behaviours and nutritional status. Monitoring should be well thought-out during the planning process and considered in routine data collection (like the child and maternal cards) and use of supervisory tools. Stakeholder involvement in monitoring and use of the findings for decision-making is paramount. The use of facility- level data and team supervision at the lowest effective unit (facility), where possible, should be the fashion. Moreover, self-assessments and supervision at provider/clinic level and the use of simple methodologies that combine supervision and quality monitoring are being promoted. Such methods include the Client-Oriented and Provider-Efficiency (COPE) (Brandley, 1998) and the Lot Quality Assessment Sampling (LQAS) models.

V. Capacity development in nutrition
For this strategy to be a reality there has to be commitment by governments to develop human capacity in:

a) Developing nutrition leadership; b) improving coordination and integration; c) stronger and wider networking.

a) Developing nutrition leadership: More ground is being gained in developing professionals to take leadership in nutrition at the various levels. Appropriate actions include: reviewing and updating existing nutrition curricula in medical and paramedical schools, to include current issues in nutrition such as Nutrition and HIV/AIDS, Nutrition and IMCI, and micronutrients (being done in Uganda); in-service training are to build capacity in quality assurance, performance improvement, and policy analysis and advocacy (being done by the Regional Centre for Quality of Health Care in Uganda) and self-assisted learning methodologies being used to update skills and knowledge of staff already out of school (being done in Madagascar).

b) Improving coordination and integration: While countries have programs that address nutrition, these are, in most cases, poorly coordinated and tend to remain stand-alone activities. Coordination is needed to define key policies and priority intervention areas. Under the leadership of the Madagascar MOH, key nutrition messages have been harmonized and, training modules and protocols have been standardized. The main challenge is to identify an effective system mandated to coordinate nutrition activities in the country. Many times the Ministries of Health or Agriculture have guided nutrition. In countries like Kenya, a unit of the Ministry of Planning and Finance does the coordination. Coordination has also been through (semi) autonomous institutions like the Tanzania Food and Nutrition Centre in Tanzania and, until
recently, the Ethiopia Nutrition Institute in Ethiopia. In Uganda and Zambia multisectoral councils mandated by Parliament do coordination. The effectiveness of the various approaches has not been documented.

c) **Stronger and wider networking:** This calls for the creation of forums through which nutrition stakeholders can meet and exchange “better practices” in nutrition policy and programming. To address this need, Kenya, Uganda and Tanzania, with the help of the LINKAGES project, have started Nutrition Coalition Groups, which bring together key nutrition stakeholders from government, academia, donors and non-governmental organizations. The groups are meeting regularly to discuss relevant, timely issues and to plan nutrition advocacy activities. Through meetings with thematic agendas nutrition stakeholders exchange “better practices” in program implementation and materials/tools.

**CONCLUSION**

In summary, if sub-Saharan Africa is to reduce the high rates of morbidity and mortality among women and young children, conscious efforts should be made. This paper has proposed a coordinated, strategic and systematic approach for the health sector to operationalise this. The approach is composed of: i) advocating for action in nutrition at all levels; ii) integrating the essential nutrition actions into key contact points; iii) quality managing the interventions, iv) measuring changes in behaviour and nutrition outcomes; and v) developing human and institutional capacity to address malnutrition at all levels.

**REFERENCES**


**FURTHER READINGS**


RCQHC/LINKAGES, 2000. Job Aids for health sector nutrition service providers, Regional Centre for Quality of Health Care, Makerere University, Kampala, Uganda.