Understanding Challenges and Opportunities for Improved Maternal Nutrition



Maternal malnutrition, which includes deficiencies in both energy and micronutrients, affects the majority of women living in resource-poor settings. Poor maternal nutrition not only has negative consequences on a woman's health and affects her chances of surviving pregnancy; it also greatly impacts her child's health.

Pregnancy and lactation are periods of heightened nutritional vulnerability for both the mother and child. The threat of malnutrition begins in the womb and continues throughout the life cycle. A mother who was malnourished as an infant, young child, or adolescent is more likely to enter pregnancy malnourished. Her compromised nutritional status then affects the health and nutrition of her own children. In spite of the central role that the mother plays in the health and well-being of her children, surprisingly little attention has been placed in the health care sector on the nutrition of the mother beyond iron-supplementation and monitoring weight gain during pregnancy.

Recognizing the importance of the mother's impact on the family's well-being and the paucity of information on maternal nutrition, the Infant & Young Child Nutrition (IYCN) Project reviewed data from their existing research and field reports to identify key areas for improved programming on maternal nutrition. This review is based on an examination of available literature reviews, original qualitative research, and formative research from nine IYCN countries: Côte d'Ivoire, Ethiopia, Ghana, Haiti, Kenya, Lesotho, Malawi, Nigeria, and Zambia (see Bibliography).

Health programming realities

From this review, it was clear that while the mother is the key player in most child health interventions, her own nutrition or health status is rarely mentioned in most programming activities. For many women, their first experience with the health care sector occurs when they are pregnant; however, the majority of pregnant women are not counseled on how to improve their own diets and nutrition. A clinician from Zambia accurately reflects on the situation:

"There is completely nothing, there is no support in the community (for mothers) unless you talk to them about their children."

—Health worker, Zambia

Discussions with health care staff, including counselors and clinicians, revealed that there is marginal focus on maternal nutrition. Most staff felt that there was very limited time to interact with the mothers during the health visits. Any time available was spent providing specific details on technical health information, and not on offering counseling or advice on diets. Health staff also mentioned the challenges of conveying health information to women. As noticed by a health worker in Zambia:

"Local women are not always interested in hearing us talk.... they may be more interested in visual materials."

—Health worker, Zambia

Another important observation by a local community leader in Zambia:

"What is given in the clinic is the theoretical part, but there is a need for the practical part."

—Community leader, Zambia

In Ghana, health care professionals were clear about what is necessary to improve care. The following quote is from one of the key informants interviewed:

"...a major concern that we are now realizing is the lack of adequate nutrition counseling to mothers in terms of passing on the right information, and enough follow-up on the mothers. Considerable amount of investment should go into the training of health workers...in order for the correct information to be handed down to the mothers. Health workers must themselves know the right stuff to teach."

—Health professional, Ghana

IYCN's efforts to improve communications of health center staff have emphasized counseling training within its nutrition





education. In Côte d'Ivoire and Zambia, extensive exit interviews with women have provided critical feedback on how to improve the quality of individual and group infant feeding counseling. Practical suggestions along with demonstrations and visual aids facilitate engaged interactions between the health personnel and mothers and are important steps to enhancing women's understanding of key nutritional messages.

Household environment

Despite the lack of focus on maternal nutrition in infant and young child feeding programs, there is a strong understanding at the community level of the link between maternal nutrition and infant and young child feeding and health. The following statements were made by fathers who were asked about infant feeding:

"The mother's own health and wellbeing are important in being able to properly care for her children."

—Father, Haiti

"If a woman is not eating enough, she cannot breastfeed exclusively for six months." —Father, Ethiopia

The belief that women who do not eat enough cannot provide sufficient breastmilk was commonly mentioned in nearly all country reports. This poses a significant barrier to infant feeding recommendations that promote exclusive breastfeeding for six months. In fact, most country reports indicate that mothers begin complementary feeding from 2-4 months of age, in part because the mothers, as well as other family members, believe women cannot produce sufficient milk to support adequate growth of the child. While families are more likely to identify alternative foods for the child, little or no attention is placed on enhancing the woman's food consumption.

Another area of concern for mothers is reproductive health. In Malawi, for example, women may continue breastfeeding through 24 months as a method of preventing another pregnancy. Often, the Lactational Amenorrhea Method is not well understood by mothers or health professionals. Researchers point to the need to integrate family planning and postpartum into early well-child visits to ensure that women are getting the protection they need to adequately space their pregnancies.

The pregnant or lactating woman rarely functions in isolation and is often supported by several family members. In an extensive IYCN review, grandmothers were found to play a leading role in decision-making related to pregnancy and delivery; newborn care and breastfeeding; complementary feeding; and management of child illness. They also serve as the primary care-givers of women and children. Moreover, husbands/fathers play an indirect and supportive role by providing food for the family and resources to finance health care for children and women. As mentioned by a Kenyan father during a focus group discussion:



"I have to look for casual work each day so that I can pay school fees, buy clothes and food for the children. As a man, saying you have children is nothing. Bringing them up is what counts." —Father, Kenya

While men are generally supportive and interested in the woman's health, culturally in these regions, men do not usually participate directly in issues related to their wives or children's health. For example, from the formative assessment conducted in Lesotho, researchers found that while some men may express interest in participating in reproductive health issues, they also seem to be concerned about losing the respect of their peers and community because of involving themselves in "women's issues."

Inclusion of key household players in ways that acknowledge the cultural realities in each country is critical to support maternal and infant nutrition. This IYCN review provides significant evidence that health program planners should rethink community nutrition interventions to include grandmothers and men in order to make them more culturally relevant and potentially more effective. As mentioned by a community health worker in Kenya:

"Grandmothers were open to learning 'modern' information about health, nutrition, and HIV."

—Community health worker, Kenya

The qualitative research study from Malawi showed that there is a great deal of dietary improvement that can be realized by supporting mothers and families to improve feeding practices. Researchers stated that families are eager for the assistance, and will try to and can do more.

There are still significant challenges for pregnant and lactating mothers in resource-poor settings. For the majority of women, their work load and their diets do not appear to change significantly with pregnancy. As mentioned by a mother in Kenya:

"We hardly have time to rest. Even now I am dozing. I wake up at 5am and my responsibilities are just too much, and most of the time, I have no one to assist me."

-Mother, Kenya



In most cases, husbands were found to be concerned for the woman's welfare, but they noted significant issues. As mentioned by a father during a focus group in Nigeria:

"Sincerely, pregnant women face serious and many challenges; for instance, once it is 4 o' clock, pregnant women find it difficult to access health care because nobody is there to attend to them." —Father, Nigeria

Improving the household environment through the support of key family members, especially the father, can help alleviate some of the difficulties faced by women during this vulnerable period.

The most critical challenge faced by families in these countries is lack of financial resources. Poverty, the inability to access a variety of good quality foods, and limited household resources were all mentioned as primary barriers to nutritional adequacy for the mother. As mentioned by a community health worker in Zambia:

"These women are not able to sustain themselves due to lack of money even though they may have knowledge from us."

—Community health worker, Zambia

While there are no simple solutions to increasing the economic status in these households, health care providers mentioned the need to integrate health programming with economic and agricultural activities. Key recommendations from research in Nigeria point to the creation of broader developmental measures that can address hunger and poverty in communities through the linkage of agriculture, health, and nutrition. Moreover, researchers suggested training in the development of home gardens and seed distribution, as well as offering other household economic-strengthening measures.

"It (the garden) is nice. We can eat vegetables and we can sell them too." —Urban Gardens Participant, Ehiopia

Conclusion

This review highlights the paucity of information and programming targeted specifically at the mother. Maternal nutrition, despite its critical role in the health of the mother and child, has been severely neglected. IYCN has made some important strides in improving maternal

Opportunities for improved maternal nutrition

At the health clinic:

- Targeted, client-specific counseling: Providing information that is directly relevant to an individual mother is more likely to be understood and adopted.
- Counseling in addition to providing facts: Taking a counseling approach is likely to be more effective in conveying key points to women who often prefer practical advice rather than just technical information.
- Integrate nutrition education in other **programs:** In programs such as family planning or home gardens, mothers should learn about the impacts of poor nutrition on the life cycle and ways to prevent malnutrition.
- Linking poverty alleviation programs with nutrition and health: Providing information on local microfinance lenders or agricultural programs, such as home gardening, can enhance a family's potential for improved household dietary resources.
- Facilitate follow-up of positive health behaviors: Linking health clinics with community health workers that follow up at the household level is important for long-term adoption of best practices by the mother.

At the household level:

- Reduced work load: Pregnancy and lactation should be clearly acknowledged as a vulnerable time for the mother and child within the household. Efforts to garner support of key household players to identify ways of reducing a woman's work load are critical.
- Facilitate dietary adequacy (quantity and variety): Often, dietary variety is thought to include expensive foods. Counseling that suggests locally available, high-nutrient foods and recipes should be promoted.
- **Home gardens:** Appropriate home gardening (include all family members) should be promoted as a means of increasing dietary variety and quantity.
- Identify ways to increase income: Expanding the family's capacity to earn additional income and use of funds for the improvement of health of all family members are critical.

- Reduce foods from vendors: Several studies
 point to the potential challenges of consuming food
 from vendors by infants, young children, and women.
 These foods have been linked to increased illnesses
 due to poor sanitary food practices.
- Include key household members in mother's care: By including grandmothers and husbands in the health information loop around maternal and child care, positive health messages can be reinforced and supported at the household level. This includes improved diet as well as appropriate health care seeking.

At the individual level:

- Women's groups: Many women expressed the
 desire to meet with peers to learn more about
 caring for themselves and their children; however,
 few groups were available that focused on nutrition
 and general health. Catalyzing women's groups is
 important for active and engaged learning on key
 health issues.
- Health communications should be context-specific: Generalized messages on nutrition often don't result in measurable behavior change because they may not be clearly relevant to an issue that the mother is currently facing. Health communications should be focused as much as possible to address a woman's (or mother's) current situation.
- Focus on empowerment (facilitating personal agency): Women are empowered through the acquisition of resources, such as education, skills, and money. However, in order to develop long-term success in adapting to ever-changing life circumstances, women need to develop the inner strength to make positive changes. Programs that focus on facilitating personal agency, enhancing people's ability to act on behalf of goals that matter to them, are critical.
- Focus on outcomes and behavior change:
 Knowledge and beliefs are important; however,
 positive health outcomes will be found only through active behavior change. Mothers should be taught to understand their goals and monitor their progress over time.

nutrition programming, by making nutrition information more accessible to mothers through interactive nutrition counseling at the clinic and the community levels; by promoting the engagement of key household members, including grandmothers and fathers as a strong support system; and by promoting home gardens and recipes of local nutrient-rich foods. While the challenges are large, there is a critical need to continue the emphasis on improving maternal nutrition and health in resource-poor settings. The impact would go far beyond the mother, benefitting the child and the overall well-being of the family.

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