HOW TO REACH AN ADDITIONAL 2 MILLION PREGNANT WOMEN PER YEAR WITH IRON AND FOLIC ACID SUPPLEMENTS: EVIDENCE-INFORMED PROGRAM DESIGN

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ABSTRACT

Due to poor program success, iron and folic acid supplementation (IFAS) programs for pregnant women are often neglected. Following program improvements in IFAS coverage and adherence, the Micronutrient Initiative (MI) aimed to identify key program activities from policy to behaviour change initiatives (BCI) that led to program success.

MI worked with regional and national governments and partners (2011-2015) in Kenya, Nigeria, Ethiopia, Senegal, Nepal, Bangladesh, Indonesia, and Afghanistan to improve coverage and adherence of IFAS. Support was prioritized according to the potential to strengthen the enabling environment; IFAS provision; and demand, including consumption. Changes in women’s and health workers’ knowledge and practices, policies, supply and quality of IFAS, coverage and adherence of IFAS were monitored and evaluated with pre- and post-surveys. Following a mapping of program support, key program activities linked with improved outputs were identified, and a model to communicate this approach for IFAS programming was developed.

Six out of eight countries aligned their IFAS policies and formulations with WHO guidelines. Across the eight countries, health worker’s knowledge and skills to effectively counsel women, and forecast and monitor IFAS stocks, improved following intensive training and the implementation of comprehensive BCI plans. An additional TM pregnant women received any IFAS, and 2M women reported consuming at least 90 IFAS. An adapted World Health Organization’s logic model incorporating the key program activities linked to improved IFAS coverage and adherence was designed for future program planning and advocacy.

Investing in and committing to a comprehensive IFAS program approach enables governments to increase program outputs of coverage and adherence to IFA supplements.

BACKGROUND

• Anaemia during pregnancy has been associated with maternal morbidity and mortality.
• The 65th World Health Assembly (2014) called for a 50% reduction in anaemia in women of reproductive age by 20251.
• Due to poor program success, IFAS supplementation programs targeting pregnant women are often undervalued.
• The Government of Canada provided funding that allowed MI to work with regional and national governments and partners in the period of 2011-2015 in eight high-burden anaemia countries: Afghanistan, Bangladesh, Indonesia and Nepal, Ethiopia, Kenya, Nigeria and Senegal.
• The aim was to improve coverage and adherence for IFAS in pregnant women.
• The 2011 WHO/CDC logic model for micronutrient interventions in public health is a useful and adaptable tool that depicts program theory and plausible relationships between inputs and outcomes.

OBJECTIVE

Following impressive program improvements in IFAS coverage and adherence, MI aimed to identify and map key program activities from policy to behaviour change initiatives (BCI) that led to program success.

METHODS

Inputs
• MI formed partnerships with regional and national governments and implementation partners.
• MI provided technical expertise and financial resources.

Activities
• Policy: MI worked with regional and national governments to advocate for local and national policies affecting IFAS in pregnancy programs to align with best practice and global recommendations.2
• Product and supply: MI supported countries in acquisition and procurement of IFAS in its optimal form and dose (combined IFA tablet with 30-60mg of elemental iron and 400µg of folic acid) where necessary, as well as the strengthening of ANC services so the recommended duration of IFAS (as early as possible and daily throughout pregnancy) could be followed.
• Monitoring stocks: Training on appropriate methodologies for forecasting and allocating supply was completed. MI supported quality and stock-monitoring checks throughout the programs.
• Delivery: Community health workers (CHWs) were trained on all components of IFAS program delivery.
• BCI: Differing strategies across countries aimed to identify and address barriers to IFA supplement access (demand creation among pregnant women and appropriate provision and counselling by providers) and consumption.

Logic Model
• MI mapped program activities according to WHO/CDC logic model for micronutrient interventions in public health and created an adaptation specifically tailored for IFAS programs in pregnancy (see Figure 1).

RESULTS

• By 2015, at least 80% of women surveyed in three countries were able to describe at least one benefit and one way to manage side-effects of daily IFA: Indonesia: 81%; Ethiopia: 79%; and Senegal: 92%.
• After five years of MI support in selected areas of the eight high burden countries, an additional TM pregnant women received any IFA; and 2M women reported consuming at least 90 IFAS (see Figures 2 & 3).
• Countries’ monitoring and evaluation systems were strengthened with the provision of financial and technical resources in routine data collection systems and additional surveys.
• The mapping of activities led to a program approach demonstrated through an adaptation of WHO/CDC’s logic model (see Figure 1).

CONCLUSIONS

These results further validate WHO/CDC’s logic model for micronutrient interventions in public health, presented here as an adaptation for IFA supplementation in pregnancy.

Major investments are required to build the enabling environment necessary for programmatic success. The implementation activities discussed showed that with a comprehensive approach to aspects of the enabling environment, such as procurement and adequate supply management, as well as a context-tailored behaviour change communication strategy, it is possible to make meaningful change in coverage and adherence to IFA supplementation among pregnant women. These noteworthy results offer both exciting promise and a validated structure to the continued work necessary to halve anaemia in women of reproductive age by 2025.

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