Experience from the Field
Ensuring Effective Implementation of MMS for Pregnant Women in Haiti

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Key messages

- The Haitian Ministry of Public Health and Population (MSPP), Vitamin Angels, Johns Hopkins Bloomberg School of Public Health (JHSPH) and the Haitian Health Foundation (HHF) are conducting implementation research to inform the introduction and scale-up of a multiple micronutrient supplementation (MMS) program in Haiti.
- The implementation research includes the following aims:
  - Develop and field-test social and behavior change communication (SBCC) strategies and tools intended to support the uptake of and adherence to MMS among pregnant women.
  - Field-test the provision of MMS, including the distribution platform, supply chain and cost.
  - Identify and implement a methodology to evaluate MMS acceptance, coverage and adherence among pregnant women.

Introduction

Micronutrient deficiencies during pregnancy remain a public health problem in low- and middle-income countries. The current standard of care to address these deficiencies is the provision of iron and folic acid (IFA). However, evidence has found that a daily MMS (containing IFA, as well as 13 other micronutrients) during pregnancy improves women’s health and pregnancy outcomes over and above the effects from IFA alone.

While the World Health Organization (WHO) does not recommend MMS use in place of IFA in its 2016 Antenatal Care Guidelines, it states that where nutritional deficiencies are prevalent, governments might use their discretion to explore the use of MMS in their national programs. Following issuance of WHO’s 2016 Antenatal Care Guidelines, the New York Academy of Sciences (with sponsorship from the Bill & Melinda Gates Foundation) convened an MMS Task Force to address concerns about MMS use identified by WHO. To do this, the MMS Task Force was charged with conducting follow-on analyses of existing efficacy trial data that were not available at the time of the development of WHO’s guidelines, and to develop operational guidance to assist national health officials to gauge when to explore the introduction of MMS.

“Following issuance of WHO’s Antenatal Care Guidelines, an MMS Task Force and its successor group, the MMS technical advisory group (MMS TAG), were convened by the New York Academy of Sciences to complete follow-on analyses of datasets from MMS efficacy trials and to provide operational guidance to help public health officials gauge when to begin to explore MMS use in public health nutrition programs”

Based on this guidance, the Haitian MSPP, Vitamin Angels, JHSPH and the HHF decided to begin exploring national MMS use and are conducting implementation research to inform MMS pro-
Ensuring Effective Implementation of Multiple Micronutrient Supplementation for Pregnant Women in Haiti

1. Develop and field-test SBCC strategies and tools intended to support the uptake of and adherence to MMS among pregnant women.
2. Field-test the provision of MMS, including the distribution platform, supply chain and cost.
3. Identify and implement a methodology to evaluate MMS acceptance, coverage and adherence among pregnant women.

**Aim 1: Develop and field-test SBCC strategies and tools**

A key finding of the technical advisory group was that IFA supplementation programs for pregnant women have struggled to ensure high coverage and adherence to the daily supplementation regimen. Establishing and maintaining the daily use of the supplement can be challenging.

Based on this finding, we sought guidance from *Sight and Life* and utilized their Behavior Change Communication webinar series. This webinar provided an eight-step process for developing, implementing and evaluating new behavior change strategies and tools (Figure 1).

Starting with Step 1 of *Sight and Life*’s process, Vitamin Angels and MSPP hosted a workshop in Haiti in September 2018.

**Box 1: Role of partners**

- **Haitian Ministry of Public Health and Population (MSPP):** study investigators, scientific oversight and implementation of MMS within the government’s antenatal care platform
- **Vitamin Angels:** study investigators, technical assistance and provision of MMS
- **Haitian Health Foundation (HHF):** implementation of MMS within hard-to-reach areas
- **Johns Hopkins Bloomberg School of Public Health (JHSPH):** study investigators, scientific oversight and ethical review

**Figure 1: Sight and Life’s ‘Process that culminates in a strategy to change behaviors’**

Credit: Sight and Life
with key government stakeholders from all geographic departments in Haiti.

During **Step 2**, a desk review identified the constraints, barriers and enablers of the daily adherence to supplementation during pregnancy, and considered other SBCC programs that have been tried to instill these behaviors. This information provided a foundation for the development of our formative (client) research, including highlighting the respondent groups of interest, the themes and topics to explore, and the assumptions to test.

During **Step 3**, formative research was conducted to understand our audience, the barriers and enablers in relation to seeking antenatal care and to MMS uptake and adherence, and the channels through which SBCC could be delivered. Ethical approval for this research was obtained from the JHSPH Institutional Review Board and the Haiti Ethics Board.

In October 2019, investigators held a 2-day workshop with project investigators to review formative research findings and discuss the subsequent processes and steps needed to develop and test an MMS intervention.

**Aim 2: Field-test the provision of MMS**

To field-test the provision of MMS, including the distribution platform, supply chain and cost, we selected five communes within the Grand’Anse department in Haiti. This department was identified as an underserved area that has high rates of anemia, an existing antenatal delivery platform and experience distributing IFA supplements. The department is located in the south of Haiti and has the second highest rates of anemia among women of reproductive age in the country (54.9 percent) despite the presence of high antenatal care coverage (90.3 percent). The MMS will be distributed to all pregnant women (n = 6,000) in the five communes (third administrative level) through both MSPP and HHF. MSPP will be responsible for the distribution of MMS through existing health facilities, and HHF will be responsible for the distribution of MMS to hard-to-reach populations not served by the government. The implementation period covers June 2020 to December 2020.

**Aim 3: Identify and implement a monitoring and evaluation methodology**

The objective of this aim is to identify and evaluate a methodology to assess MMS acceptance, coverage and adherence (both before and after implementation of the project), and to measure fidelity (i.e., if the program is delivered as intended) during the implementation period. Based on monitoring results, implementation challenges will be identified and real-time course corrections will be made to improve program delivery.

**Summary and next steps**

In summary, the overall objectives of this project are to:

1. Develop and field-test SBCC strategies and tools intended to support the uptake of and adherence to MMS among pregnant women;
2. Field-test the provision of MMS, including the distribution platform, supply chain and cost; and
3. Identify and implement a methodology to evaluate acceptance, coverage and adherence of MMS among pregnant women.

To date, findings from the desk review and the formative research have provided actionable insights that are being used to develop the SBCC strategy, with the support of a creative design agency in Haiti. Next steps include field-testing the provision of MMS within the context of a comprehensive SBCC and monitoring and evaluation strategy. Both before and after the initiation of the project, a coverage survey will be conducted within the Grand’Anse department to assess changes in MMS acceptance, coverage and adherence among pregnant women.

"The project in Haiti has highlighted the importance and value of multisectoral partnerships to leverage expertise and collectively advance MMS"

The implementation research project in Haiti has highlighted the importance and value of multisectoral partnerships to leverage expertise and collectively advance MMS. These collaborations...
have also allowed for increased coordination among government and NGO sectors (e.g., using a blended approach), read more about this on pages 37–41 of this Special Report, to expand coverage, ensure effective and efficient programs, and work towards ensuring long-term program sustainability.

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**Disclosure Statement**

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**References**


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