HEALTHY MOTHERS HEALTHY BABIES

Country Profile: Mali

Introduction

Mali, one of the largest countries on the African continent, is also a low-income country that has experienced instability and conflict since 2012. Persistent conflict, rapid population growth, low agricultural production, and climate change have negatively impacted the food security of the country.[1] The impact of which is visible on the maternal and children's nutritional outcomes. Nevertheless, maternal and child nutrition has remained a critical public health priority in Mali. Malian mothers and children are suffering from high rates of malnutrition, including micronutrient deficiencies such as anemia.[2]

The prevalence of anemia among women of reproductive age was reported to be 56.5 %[3] while 62.1% (371,600)[3] Pregnant women are suffering from anemia. In addition, 9.17%[4] of women are underweight. These nutritional deficiencies are reflected in national birth outcome data, indicating a continued need for targeted interventions. Data available from the World Health Organization's Global Health Observatory indicates the prevalence of stillbirths (22.74 % per 1,000 total births)[5] in 2023 and pre-term birth rates were at 6.2 % in 2020.[6] Most devastatingly, infant mortality was at 57.55 per 1,000 live births, which is one of the highest in the world.[7]

Despite longstanding efforts to improve maternal nutrition through iron and folic acid (IFA) supplementation, coverage and adherence remain low. According to national data, only 31.8% [1]of women in Mali consumed IFA tablets for at least 90 days during their most recent pregnancy.[8] Likewise, only approximately 51 %[2] of the women who had given birth in the past two years had at least four antenatal care (ANC visits.[8] Research has shown that Malian pregnant women adhere to prenatal/postpartum micronutrient supplementation regardless of the type of supplement if provided consistently with counselling.[9] Likewise, Multiple Micronutrient Supplements (MMS) have proven to be cost-effective in certain conditions.[10] Thus, transitioning to MMS provides better perinatal health outcomes and is cost-effective. Given these significant advantages, prioritizing a shift from IFA to MMS is essential for improving the health of mothers and their children across Mali.

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[1] Mali Demographic and Health Survey, 2023-2024, Table 9.4, page 205.
[2] Mali Demographic and Health Survey, 2023-2024, page 187.

This country profile presents a concise overview of Mali's status in transitioning from IFA supplementation to MMS for pregnant women. This document aims to inform policymakers, partners, and stakeholders about the current progress, challenges, and opportunities for scaling MMS within maternal nutrition and health strategies.

MMS Policy and Regulatory Status

Mali's current policy and regulatory status for MMS reflects an early transition state, where iron-folic acid (IFA) remains the official national recommendation, but implementation research and advocacy are underway to support MMS adoption.[11]

Implementation Status

Multiple national and international partners are already working on the ground in Mali. A collaboration among Jhpiego, the Malian Ministry of Health, Helen Keller International (HKI), and the Johns Hopkins Bloomberg School of Public Health has completed implementation research. The research was titled "Introduction of Multiple Micronutrient Supplementation to Antenatal Care in Bamako, Mali". The study aimed to understand the key drivers of low coverage, acceptability, and cost-effectiveness, and to develop a strategy to support the transition from IFA to MMS to improve pregnancy outcomes in Mali. [11,12] Two other studies conducted by Helen Keller in collaboration with Vitamin Angel were carried out in the health districts of Bla and Barouéli in the Ségou region, and they examined adherence, perceptions, and strategies for distributing MMS in the community, as well as the cost-effectiveness of MMS compared to IFA.

Partners are testing various strategies to address barriers, including perceptions of medicines, the appearance of MMS tablets, counseling messages, and packaging. A codesign process engaged pregnant women, mothers, midwives, and graphic designers to create a local name, label, and packaging approach, along with a set of counseling messages and images for MMS. By centering the voices and lived experiences of local pregnant women and midwives, they were able to directly turn participant feedback and input into tailored, locally designed, actionable implementation strategies. These strategies were tested through implementation research (IR), and data analysis is ongoing to determine whether the strategies were effective and to identify next steps to more broadly introduce MMS in Mali and disseminate the results of MMS programming through a manuscript.

Overall, in terms of implementation research, studies on barriers & enablers to MMS acceptability (social norms, product attributes, etc.), uptake & adherence, and the exploration of MMS delivery platforms and health care workers' perceptions of MMS have been completed in Mali. Likewise, implementation research is applying strategies to achieve the outcomes by:

- Developing and prototyping delivery strategies (e.g., SBCC strategies);
- Developing & strengthening delivery platforms (e.g., training health workers).
- Implementing outcome evaluation (acceptability, feasibility, sustainability, etc.).
- Engaging community health workers and midwives in MMS promotion.[11]

Key Program Actors and Partners

Multiple national and international partners are working to implement and scale up MMS in Mali. To create a synergy of action and effectively advocate for the adoption of MMS in Mali, a technical MMS committee has been established, composed of health professionals, government departments involved in nutrition and reproductive health, civil society actors (Pediatric Society, Society of Gynecologists, Midwives' Society, Federation of Community Health Associations), and international NGOs (Helen Keller International, UNICEF, World Vision, Jhpiego, etc.).The list is provided in Table 1 below.

Table *1:* List of national and international partners working in Mali to implement and scale up MMS.

National partners	International Partners
Center for Vaccine Development in Mali (CVD-Mali)	Helen Keller International
Mali Ministry of Health	Jhpiego
Malian Association of Pediatricians	Johns Hopkins Bloomberg School of Public Health (BSPH)
Malian Society of Gynecology and Obstetrics	Word Vision
Malian Association of Midwives	UNICEF
National Federation of Community Health Associations	

Monitoring, Evaluation, and Research

SAL's special report on MMS stated that it is necessary to use culturally appropriate terms, such as "vitamins" and "medicines," along with appropriate counseling approaches and messages. Research also showed that MMS should be introduced as a new product, and the rationale for its inclusion in ANC systems as a free product should be explained to the target groups.[14] As part of implementing the MMS and Transforming Lives through Nutrition projects, and based on findings from a JHPIEGO study, important tools have been updated or developed for collecting MMS data. These tools are integrated into the DHIS2 integrated management system.

From 2023 to 2026, three formative studies were conducted in Mali to address distribution strategies, adherence, acceptability, and the cost-effectiveness of MMS compared with IFA.

Challenges and Next Steps

The key challenges in Mali are the introduction of MMS programming. SAL reported that learning from various formative research projects was being tested through implementation research, and the results of these tests will be used to adapt the strategies for MMS implementation. The results will also be disseminated via manuscripts. Overall, the results will be ultimately used and adapted to promote MMS adherence in Mali.[11]

MMS Tools and Resources

1. **Costing and Economic Analysis Tools**

These resources guide policymakers and health program managers considering a transition from Iron-Folic Acid Supplementation (IFAS) to Multiple Micronutrient Supplements (MMS). They offer practical tools and costing aids to support effective decision-making and planning.

a) Results for Development. "Multiple Micronutrient Supplements (MMS) Introduction and Scale-up Roadmap Costing Tool."
b) Cost-effectiveness of antenatal multiple micronutrients and balanced energy protein supplementation compared to iron and folic acid supplementation in India, Pakistan, Mali and Tanzania: A dynamic microsimulation study

2. **Situation and Policy Analyses and formative research**

a) Acceptability of multiple micronutrient supplements by pregnant and lactating women in Mali
b) Co-designing in Mali: A formative approach to optimizing uptake and adherence of multiple micronutrient supplements by pregnant women
c) Qualitative evaluation of a package of implementation strategies codesigned to support the introduction of multiple micronutrient supplementation (MMS) for pregnant women in Bamako, Mali

3. Other resources on MMS

a) Knowledge Byte 20: Implementation Research on Multiple Micronutrient Supplementation (MMS) in Mali
b) Rapport d'étude: Evaluation de l'impact de la distribution communautaire de Multiples Micro Nutriments (MMN) chez les femmes enceintes dans le district sanitaire de Bla en 2023
c) Rapport d'étude: Exploration qualitative de type Human Centered Design des perceptions, motivations et barrières à l'utilisation des multiples micro-nutriments chez les femmes enceintes des districts sanitaires de Bla et de Barouéli, région de Ségou

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The information and country-level data provided herein were received from our partners as of 2025 and are shared with permission for public dissemination. This profile will be updated periodically. If you have updates or additional information to share, please fill out this feedback form. For questions, contact us at HMHB@micronutrientforum.org.

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