A Pivotal Moment in Addressing Malnutrition During Pregnancy

Despite marked progress in reducing global poverty in the past few decades, an insidious, hidden hunger remains: 1 in 2 preschool-aged children (56%) and 2 in 3 women of reproductive age (69%) worldwide have at least one micronutrient deficiency; and 57% of preschool-aged children and 74% of non-pregnant women of reproductive age are deficient in one or more of the three "core" micronutrients (iron, zinc, and vitamin A for preschool-aged children, and iron, zinc, and folate for non-pregnant women of reproductive age).[1] In pregnant women in low- and middle-income countries (LMIC), that prevalence is likely to be even higher.[2] Consequences of these deficiencies are far-reaching, including preterm birth, stillbirth or neonatal death, impaired fetal growth, and a host of other impairments affecting the health of the mother and baby.

Multiple micronutrient supplements (MMS) taken during pregnancy provide a variety of vitamins and minerals to reduce the dietary gaps often present in LMIC and the increased nutrient needs of pregnancy. Crucially, MMS provide benefits far beyond those of traditional iron and folic acid supplements (IFA) — prompting the World Health Organization to add the UNIMMAP (United Nations International Multiple Micronutrient Antenatal Preparation) MMS formulation to its Essential Medicines List (EML) in 2021.[3]

The compilation of research, case studies, and resources in the ***Sight and Life Special Report, Focusing on Multiple Micronutrient Supplements in Pregnancy: Second Edition*** puts forth a compelling case that maintaining the status quo of IFA supplementation is no longer possible when so many stand to benefit from MMS, and demonstrates the benefits and process of switching to MMS.

In 19 trials with 141,447 women over more than 20 years, MMS has consistently outperformed IFA in risk reductions for low birth weight, small for gestational age, and other adverse birth outcomes.[4]

As detailed in the report, this is because MMS is one of the most effective, safe, affordable, and cost-effective antenatal care interventions available. MMS has been proven superior to IFA in health outcomes for women and babies. It has a similar impact as IFA in preventing anemia in women, but it has been shown to be more effective in preventing babies from being born too early and too small. Studies have indicated that the micronutrients contained in MMS such as iodine, folate, zinc, and vitamin B6 play an important role in fetal brain development.[5] The formula provides important nutritional benefits to the mother as well.[6] Additionally, there is no evidence of harm or adverse effects related to the additional vitamins and minerals MMS contains.

We have the evidence we need to support the case for the introduction and scale-up of MMS into emergency settings and LMIC health systems. MMS yield greater health outcomes for mothers and babies, with cascading, downstream effects – and it is cost-effective and affordable. It is estimated that scaling MMS globally would result in:

- 5 million additional school years gained[7]
- $18 billion USD in lifetime earnings gained every 5 years[7]
- Every dollar invested in MMS yielding $32 USD in returns (according to the *Thrive Model* from Harvard T.H. Chan School of Public Health)

According to Nutrition International's MMS Cost-Benefit Tool, switching from IFA to MMS in 13 priority geographies would prevent 104,000 child deaths.[8]

With benefits like these, *we can't afford not to invest in MMS*.

UNIMMAP MMS is on the cusp of becoming the standard of care for pregnant women globally. Many countries have already taken steps to move in this direction. More than 20 countries across Asia, Africa, and Latin America are in various phases of introducing MMS to understand how to deliver MMS to pregnant women within their own unique contexts. We are at a critical juncture for maternal nutrition.

Only 5% of women today who could benefit from MMS are receiving it.[8]

To support rising demand, there is an urgent need to address critical questions of MMS manufacturing capacity, product supply availability, national procurement, and standardization of the MMS product specification. There is also a need for increased resources from donor and country governments as well as private funders to finance the transition from IFA to MMS. Unless action is taken, demand for MMS is projected to outpace supply beginning in 2024, and by 2030, only 13% of the 228 million women who become pregnant every year in LMIC will have access to this essential intervention.[9]

The second edition of *Sight and Life's MMS Special Report* highlights country case studies of MMS adoption, which incorporate formative research findings to identify effective strategies to improve MMS service delivery and secure MMS product supplies. Implementation research findings from Pakistan, Tanzania, Indonesia, Haiti, and several other countries are shaping our understanding of the best practices for MMS introduction, scaling, and securing product supplies. These experiences offer national governments lessons learned on how to get started and provide insights on identifying enablers and barriers to effective introduction, developing local MMS marketing and messaging strategies, scaling the manufacturing and distribution of MMS, and more. Other papers detail how to synchronize and standardize MMS product supply, provide templates for the application of implementation science (including implementation research) to MMS introduction, guide advocacy actions for global multisectoral partnerships to advance MMS, and share actionable tools like the PATH Asset Tracker Database and Supply Context Assessment Tool that equip national governments with the resources they need for all facets of MMS implementation.

In short, it is a clarion call for collective action for what is needed to successfully bring MMS into antenatal care services globally.

When mothers and babies thrive, the positive impact ripples across society. Conversely, malnourished women and their babies become trapped in a perpetual cycle of poor pregnancy outcomes, poor educational attainment, lower lifetime earnings and lower national GDP. There is a great deal of work to be done, but with the continued support and partnership from national governments and a global community of development partners and funders, there is a clear path forward to integrate UNIMMAP MMS into antenatal care services as a new standard of care worldwide for maternal nutrition.

References:

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THE REPORT'S CONCLUDING CALL TO ACTION STATES:

after more than 20 years of evidence generation on the benefits of UNIMMAP MMS, it is time to act. It is time to set out a global agenda to focus on maternal nutrition and ensure that women everywhere have the nutrition and health care they need during pregnancy.

Use the QR code to download the report