

Healthy Mothers Healthy Babies Consortium

Addressing micronutrient deficiencies amongst women and girls in humanitarian or emergency contexts

March 2023

Summary

- Chronic food insecurity leads to micronutrient malnutrition in women and their babies which in humanitarian contexts is further exacerbated as antenatal, postnatal, and obstetric care services are disrupted.
 - The disproportionate impact of humanitarian crises on women and girls has potential consequences for future generations.
 - Monitoring the nutrition status of women and girls is critical to inform and guide targeted nutrition interventions in both development and humanitarian contexts.
 - Agencies working in humanitarian settings need clear, harmonized policies and guidelines for women and girls regarding micronutrient interventions.
 - National policies, guidelines, and protocols for nutrition programming in humanitarian contexts should be evidence-based, aligned with regional and globally recognized policies, and incorporate monitoring and evaluation aspects to allow for their periodic revision.
 - Critical interventions to address micronutrient deficiencies (MND) of women and girls such as multiple micronutrient supplementation (MMS) should be made available and added to the package of health and social protection systems; and MMS should be added to national essential medicines lists.
 - To effectively address MNDs in humanitarian emergencies, global stakeholders and national governments should improve micronutrient data collection, develop and strengthen national protocols/guidelines, and increase coordination and funding for MMS programming in humanitarian contexts.
- i** Humanitarian context: a setting where a singular event or series of events (such as an armed conflict, natural hazard or disaster, epidemic or famine) has threatened the health, safety, or wellbeing of a large group of people.



Micronutrients – vitamins and minerals required by the body in small amounts – **are critical** for proper health and development.

Guidance on micronutrient deficiencies in women

Micronutrients – vitamins and minerals required by the body in small amounts – are critical for proper health and development. Micronutrient deficiencies (MNDs) occur when people have limited or no access to micronutrient-rich foods such as fruits, vegetables, animal products, and fortified food.

The global burden of MNDs is staggering, affecting 2 in 3 women of reproductive age worldwide. In some regions, like South Asia and Sub-Saharan Africa, 9 in 10 women have MNDs.¹ When experienced in pregnancy, MNDs limit cognitive and physical development of babies and increase risk of morbidity and mortality for both mothers and babies.

To support maternal and child nutrition, the World Health Organization (WHO) recommends that antenatal care include iron and folic acid (IFA) supplements or multiple micronutrient supplementation (MMS)ⁱⁱ which provides 15 minerals and vitamins for pregnant women that enhance maternal nutrition and reduce the risk of adverse birth outcomes. Compared to IFA, MMSⁱⁱⁱ is cost-effective and has significant benefits for health outcomes during pregnancy such as stillbirth, low birth weight, and small for gestational age.²

Globally, women and girls account for 60% of chronically food-insecure people and are more likely to live in poor sanitary conditions, experience hunger, and have less access to humanitarian and social protection aid. Chronic food insecurity leads to malnutrition for the women and their babies³ which is exacerbated in humanitarian contexts as antenatal, postnatal, and obstetric care services are disrupted.

While existing WHO policy recommends MMS for use in humanitarian settings, findings from a recent 'state of play' stakeholder consultation⁴ and corresponding roundtable discussion highlighted that there are serious gaps in policy and programming for women and girls in humanitarian contexts. More detailed policy and programming guidance is necessary on the use of MMS amongst adolescent girls and nonpregnant women in humanitarian contexts.

- ii World Health Organization, *WHO antenatal care recommendations for a positive pregnancy experience: Nutritional interventions update: Multiple micronutrient supplements during pregnancy* (Geneva, 2020). WHO currently only recommend MMS as part of routine ANC within the context of rigorous research. However, a joint UN statement from 2007 recommends the use of MMS within humanitarian settings.
- iii MMS refers to the United Nations International Multiple Micronutrient Antenatal Preparation (UNIMMAP), which is designed to help meet the micronutrient demands of pregnancy and prevent micronutrient deficiencies. It is a multiple micronutrient tablet that contains vitamin A (retinol, 800 µg), vitamin D (200 IU), vitamin E (10 mg), vitamin C (70 mg), vitamin B1 (1.4 mg), vitamin B2 (1.4 mg), niacin (18 mg), vitamin B6 (1.9 mg), folic acid (400 µg), vitamin B12 (2.6 µg), copper (2 mg), iodine (150 µg), iron (30 mg), selenium (65 µg), and zinc (15 mg).

National experiences with MMS in humanitarian settings

Stakeholders highlighted context specific responses to address MND in humanitarian settings. For example, the United Nations Relief and Works Agency for Palestine Refugees in the Near East is targeting 15,000 women to be reached with MMS, and anticipates extension of this program to several clinics throughout the middle east to service refugee populations. In Madagascar, integrated national programs that supported the nutrition status of women and adolescent girls were extended to humanitarian responses. Implementers leveraged community-based supply chains and deployed mobile clinics to scale up MMS distribution. In contrast, in Yemen, where MMS programs in humanitarian contexts had not been implemented, partners emphasized the need to commence research, increase MMS supply, stabilize logistics distribution, and raise awareness. And finally, in Pakistan, MMS supplies are being distributed by the military in large areas of the nation that are flooded; and in Sri Lanka, MMS is being deployed for emergency use brought on by the disruption of the health services of the nation related to the debt crisis. Each of these situations represents distinctly different humanitarian settings that could benefit from more robust policy and programming guidance.

Policy recommendations

A recent UNICEF report⁵ stated that the global nutrition crisis in adolescent girls and women has been vastly overlooked and recommended specific actions for resolving the crisis. For example, the report recommends free access to MMS, particularly for the most nutritionally vulnerable women and girls living in humanitarian settings. Thus, to effectively address MNDs in humanitarian contexts, global stakeholders and national governments should implement the following:

A recent UNICEF report states that the global nutrition crisis in adolescent girls and women has been **vastly overlooked** and recommend specific actions for resolving the crisis.

Undernourished and overlooked: A global nutrition crisis in adolescent girls and women

1 Include MMS in the National Essential Medicines List (NEML)

A National Essential Medicines List (NEML) is a list of medications that are deemed essential for addressing the healthcare needs of a particular population based on the prevalence of specific health conditions, disease burden, and available resources. The NEML typically includes medications that are considered safe, effective, and cost-effective and that meet the priority healthcare needs of the population. The NEML aims to help countries prioritize their needs for essential medicines and allocate resources accordingly. It is a valuable resource for governments, health professionals, and patients as it is used as a guide for procuring medicines by governments and international organizations. The NEML helps to ensure that medicines are available to those who need them, affordable, and of good quality. Governments should include MMS in the national drug formulary/EML to enable or promote local procurement of MMS and the subsequent provision of the same to women in humanitarian contexts.

2 Improve the availability of micronutrient status data in both development and humanitarian settings

Policy and program development must be evidence-based. Countries should update their national nutrition protocols to include MMS based on studies that identify cost-effective approaches, the acceptability of MMS, and micronutrient surveys to define the needs of the target population in both development and humanitarian settings.

The lack of evidence and indicators to guide action in humanitarian contexts seriously hinders progress. While data collection is challenging in humanitarian settings, efforts must be made to ensure reliable and disaggregated data availability so that program implementers can plan actions, monitor progress using indicators, and advocate for funding and policy actions to reduce MNDs among women and girls.

There are limited indicators of adolescent nutrition in humanitarian settings, and thresholds for detecting MNDs among women in these contexts have not been identified. Mid-upper-arm circumference (MUAC) is often the only undernutrition indicator collected in humanitarian settings, but even then, thresholds to trigger supplementary feeding and indicators for adverse maternal outcomes are not well defined.

Current guidelines on assessing micronutrient deficiencies in emergencies have limited feasibility in the field.⁶ To adequately plan micronutrient interventions for women and adolescents in humanitarian settings, it is vital to collect data. The following are some recommendations to generate evidence on decision-making in emergencies:

- 1 Integrate data on women and adolescent girls into Standardized Monitoring and Assessment of Relief and Transitions (SMART) surveys and integrate indicators of Minimum Dietary Diversity for Women (MDDW) into surveys on food security and micronutrient status.
- 2 Advocate for the funding of these surveys.
- 3 Analyze the barriers to women's and girls' access to nutritious food and identify and model context-specific interventions.
- 4 Conduct regular follow-ups of pregnant and lactating women's nutrition status and treatment.
- 5 When large-scale data collection is impossible, add nutrition indicators for women and girls into existing small-scale surveys.

3 Develop, revise, or update national guidelines and protocols

WHO global technical advisory groups, followed by corresponding regional and national entities, should create regularly updated guidelines on macro- and micronutrient interventions and scale up key nutrition indicators across the life cycle for development and humanitarian contexts, keeping in mind life cycle stages where there is limited information (preconception and postnatal stages).

Governments should incorporate the joint United Nations (UN) recommendations on using MMS for undernourished populations in humanitarian settings within existing antenatal care guidelines. This should be accompanied by a supportive policy-enabling environment that integrates nutrition actions for women and girls into national policies, including antenatal care with MMS.

4 Strengthen coordination, operationalization, and funding

In humanitarian settings, there is limited response capacity from the government and implementing partners, a lack of coordination across stakeholders, limited guidance on managing maternal health and nutrition, and a limited budget allocated for comprehensive humanitarian responses. To prevent this, there are various policy recommendations proposed:

- Practitioners should strengthen nutrition interventions as part of maternal antenatal and postnatal care, including MMS and nutrition counseling.
- Governments, UN agencies, and NGOs should facilitate the coordination of health, nutrition, food, and social protection systems to ensure that women and girls have access to essential micronutrients through nutrient-rich foods or supplementation with MMS.
- Governments, UN agencies, and NGOs should advocate for adequate funding for women's nutrition in humanitarian contexts, including funding nutrition surveys that include more comprehensive nutrition indicators, including micronutrient indicators, for women and girls.

5 Adopt a gender and nutrition lens to health and social protection programs

Women are more susceptible to malnutrition and suffer disproportionately from it. Gender equality, zero hunger, and healthy lives and well-being for all are three of the Sustainable Development Goals (SDGs) that underpin National Development. Adopting a gender and nutrition lens will serve to effectively mainstream women into nutrition-related decision-making as equal beneficiaries of nutrition actions.

Women and girls **make up 60%** of those around the globe with chronic malnutrition.

Policy recommendations to prevent and treat MND among women and girls in humanitarian settings



Summary of the policy recommendations

- 1 Include multiple micronutrient supplements (MMS) into national drug formularies and essential medicines lists (EML) and ensure that MMS is routinely available in humanitarian contexts.
- 2 Improve the availability of micronutrient status data in both development, and humanitarian settings, including anthropometric and dietary diversity indicators for women and girls in SMART surveys to inform the implementation of targeted nutrition interventions such as MMS.
- 3 Develop, revise, or update national antenatal care guidelines and protocols for girls and women, and national nutrition policies and guidelines, benchmarked on international guidelines especially World Health Organization (WHO) guidance to include MMS.
- 4 Strengthen coordination, operationalization, and funding: Increase investments, including ready-to-be-deployed financing and product, and coordination of stakeholders to scale up nutrition programs targeting the specific needs of women and girls in humanitarian contexts.
- 5 Adopt a gender and nutrition lens to health and social protection programs in humanitarian contexts and ensure that these programs target the micronutrient needs of women and girls.

Moving forward

Micronutrients are foundational for the health and well-being of women and girls and of their children. Neglecting women's nutrition in humanitarian settings can have serious life-long consequences for their children and generations to come. The world is experiencing expanding and protracted crises with unprecedented numbers of women and children needing urgent or longer-term humanitarian support.

We call upon governments and other nutrition partners to invest in women's and girls' nutrition throughout the life cycle to ensure availability and accessibility to MMS through which we can protect women and girls from micronutrient deficiencies in vulnerable contexts.

Micronutrients are **foundational** for the **health and well-being** of women and girls and of their children.

The HMHB Consortium, hosted by the Micronutrient Forum, promotes evidence-based interventions to improve women's and children's nutrition and health outcomes. It brings together stakeholders to collaborate and share knowledge, advocate for investment in health and nutrition programs, and support evidence-based policies aiming to help achieve the UN's Sustainable Development Goals.

This policy brief summarizes the roundtable dialogue organized by the Emergency Nutrition Network (ENN) and co-hosted by HMHB and UNICEF on the use of multiple micronutrient supplementation to improve the micronutrient status of women and girls in humanitarian or emergency contexts. The Round Table Dialogue was funded by HMHB, Irish Aid and UNICEF.

The work of HMHB is generously supported by Kirk Humanitarian, Children's Investment Fund Foundation (CIFF), and the Vitamin Angels.

References

- 1 Stevens GA, Beal T, Mbuya MNN, Luo H, Neufeld LM. Micronutrient deficiencies among preschool-aged children and women of reproductive age worldwide: a pooled analysis of individual-level data from population-representative surveys. *Lancet Glob Health*. 2022;10(11):e1590-e9. [https://doi.org/10.1016/S2214-109X\(22\)00367-9](https://doi.org/10.1016/S2214-109X(22)00367-9)
- 2 Keats EC, Haider BA, Tam E, Bhutta ZA. Multiple-micronutrient supplementation for women during pregnancy. *Cochrane Database Syst Rev*. 2019;3(3):Cd004905. <https://doi.org/10.1002/14651858.CD004905.pub6>
- 3 Global Humanitarian Overview 2022. New York: United Nations Office for the Coordination of Humanitarian Affairs (OCHA); 2021. Available from: <https://2022.gho.unocha.org/>
- 4 Lelijveld N, Brennan E, Wrottesley SV, Akwanyi B, James PT. Nutrition of women and adolescent girls in humanitarian contexts: Current state of play 2022 11/08/2022 00:00:00. Available from: <https://www.enonline.net/humanitarian/nutritionforwomen>
- 5 United Nations Children's Fund (UNICEF). Undernourished and Overlooked: A Global Nutrition Crisis in Adolescent Girls and Women. UNICEF Child Nutrition Report Series, 2022. UNICEF, New York, 2023. <https://www.unicef.org/reports/undernourished-overlooked-nutrition-crisis>
- 6 Seal A, Prudhon C. Assessing micronutrient deficiencies in emergencies. Current practice & future directions. (Geneva: United Nations System Standing Committee on Nutrition, 2007). <https://www.enonline.net/attachments/893/micronutrientssup.pdf>