

20 May 2021

The Secretary of the Expert Committee, Dr Benedikt Huttner
The WHO Expert Committee on the Selection and Use of Essential Medicines
Department of Essential Medicines and Health Products
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## Dear Dr Huttner.

On behalf of the International Zinc Nutrition Consultative Group (IZiNCG) Steering Committee, I submit this letter of support in favour of adding Multiple Micronutrient Supplements (MMS) for pregnant women as an item on the WHO List of Essential Medicines.

IZiNCG is committed to expanding access to MMS, which contains zinc, typically in the amount of 15mg per day. IZiNCG's primary objectives are to promote and assist efforts to reduce zinc deficiency globally through interpretation of nutrition science, dissemination of information, and provision of technical assistance to national governments and international agencies. We focus on the identification and prevention of zinc deficiency in the most vulnerable populations in low-income countries: infants, young children, and pregnant and lactating women because of their elevated requirements for this essential nutrient. As demonstrated by the evidence in this application, MMS could have a substantial positive impact on the zinc status of pregnant women and lead to improved birth outcomes compared with iron-folic acid supplements alone.

Although nationally representative data are limited (1), currently available estimates suggest that zinc deficiency is a major public health problem among women of reproductive age in several low- and middle-income countries (LMICs). In seventeen of the eighteen LMICS with available data, the proportion of women of reproductive age with low plasma/serum zinc concentrations exceeds 20%, a threshold used to indicate a public health problem (2). In approximately half of the 18 countries, the prevalence exceeds 50%.

Preterm birth, defined as birth before 37 weeks gestation, remains the leading cause of child mortality worldwide (3). In 2015, more than one million of the 5.9 million global child deaths were attributable to preterm birth complications. A recent analysis estimated that 10.6% of all infants were born preterm in 2014, a rate that has remained virtually unchanged since 2000 (4). Moreover, 81.1% of all preterm births occurred in Asia and sub-Saharan Africa. Two systematic reviews published in 2012 and 2015 demonstrated that preventive zinc supplementation during pregnancy significantly reduced the risk of preterm birth by 14% (5, 6). Data modelling has shown that in 2011, 144,200 deaths among children under 5 years of age were attributable to preterm births in zinc-depleted mothers (7).

Systematic reviews of MMS research conducted over the past 20 years provide ample evidence that MMS is more effective than iron-folic acid supplements for preventing adverse birth outcomes, such as preterm birth, while offering similar reductions in maternal anaemia. The research is summarised in more detail in the application itself, but briefly, a 2017 individual patient data meta-analysis of 16 trials reported that MMS reduced the risk of preterm birth by 8% (RR: 0.92; 95% CI: 0.88-0.95) in comparison to IFA supplements (8). MMS also had a greater effect on preterm births among underweight pregnant women (RR: 0.84; 95% CI: 0.78-0.91). Regarding other adverse birth outcomes, a 2019 Cochrane review found that United Nations Multiple Micronutrient Antenatal Preparation (UNIMMAP)-MMS reduced the risks of low birthweight and being born small for gestational age by 13% and 9%, respectively (9).



In summary, deficiencies in multiple micronutrients, including zinc, are common among women of reproductive age in LMICs. MMS will help women meet the increased requirements of a wide range of micronutrients needed to promote maternal health and wellbeing during pregnancy and improve infant survival simultaneously. It is worth noting that MMS is a standard component of antenatal care in most high-income countries. Given that the evidence shows greater benefits of MMS on adverse birth outcomes for children born to underweight and anaemic women, the international community should urgently work to make MMS available to the most vulnerable women.

The WHO EML is a highly influential normative standard that offers critical guidance for countries to adapt their individual national EMLs and prioritize expenditures, procurement and supply, and training of healthcare providers. Such alignment stands to foster a more enabling environment for the use of MMS at a national level, ultimately helping to improve access and health equity, lowering the cost of long-term health care to families and communities, and saving and improving lives. We respectfully urge the committee to consider the additional lives that could be saved and improved with expanded access to MMS. We fully support the inclusion of MMS in the EML.

Yours sincerely,

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Professor Nancy Krebs, Professor Robert Black, Professor Ken Brown, Dr Mari Manger, and Mr Fred Grant



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