## COMMENTARY

## Accelerating progress in micronutrient deficiencies in Mozambique: A Ministry of Health perspective

In Mozambique, one in every two children is stunted (MISAU, INE, & ICFI, 2013). This means that the future productive and intellectual capacity of half of Mozambicans may be less than optimal—essentially greatly reducing the country's chance to develop human capital and break the cycle of poverty.

Adequate nutrition, beginning in a mother's womb, is the foundation to ensure good physical and mental development and long-term health for every individual. A series of papers outlining key interventions to address maternal and child undernutrition in The Lancet in 2008 and subsequently in 2013 showed that undernutrition contributes to an estimated 45% of deaths in children under the age of 5 years (Horton, 2008; Horton, 2013). This finding ignited a renewed focus around maternal and child nutrition in the global development agenda through the following commitments: (a) Sustainable Development Goal (SDG) number two set forth the goal of ending hunger by 2030 (United Nations General Assembly, 2015); (b) a roadmap to achieve the SDGs was set forward in The Global Strategy for Women's, Children's and Adolescents' Health, 2016-2030 (United Nations, 2015); (c) an action plan for achieving a set of targets by 2025 for reducing nutrition conditions that are responsible for a large burden of nutrition-related morbidity and mortality in women and children that complement SDG2 is presented in the Comprehensive Implementation Plan on Maternal, Infant, and Young Child Nutrition (WHO, 2014).

The Government of Mozambique has recognized stunting as a development issue and demonstrated its commitment to reducing stunting from 44% in 2010 to 20% by 2020 by approving the Multisectoral Plan for Chronic Malnutrition Reduction in Mozambique 2011–2014 (Government of the Republic of Mozambique, 2010). The plan includes several interventions to be implemented by different government sectors to reduce the prevalence of micronutrient deficiencies among preschool age children (e.g., micronutrient supplementation and food fortification), which is a serious public health problem. Data reveal that 69% of Mozambican children 6–59 months are deficient in Vitamin A (MISAU, 2006), and 63.8% of children in this age range are affected by anaemia (MISAU, INE, & ICFI, 2015).

Over the past two decades, addressing micronutrient deficiencies in children under 5 years of age as well as women of reproductive age (15–49 years) has been a top priority of the health sector in Mozambique. Now is the time to assess the progress made to date

and the challenges in integrating Vitamin A and iron deficiency reduction efforts in health programmes, in order to determine the future direction of these interventions. Moreover, as complementary multisectoral interventions, such as food biofortification and industrial food fortification, are rolled out in the country through non-health government sectors, consideration must be given to how to best coordinate efforts and invest the country's scarce resources only where needed.

The case study Rethinking strategies to address micronutrient deficiencies in children under 5: Considerations for integrated nutrition-health programming in Mozambique (Picolo et al., 2019) presents the progress to date, challenges, and lessons learned from the implementation of micronutrient deficiency reduction interventions integrated in health services. These include Vitamin A supplementation as a measure to prevent Vitamin A deficiency as well as home fortification with multi-micronutrient powders (MNPs) to prevent iron-deficiency anaemia in preschool age children in Mozambique. Furthermore, the case study provides recommendations for the future of these interventions, which the Department of Nutrition of the Ministry of Health (MOH) fully supports to implement through 2020. The MOH supports the following four key recommendations:

- 1. Develop a micronutrient deficiency learning agenda, provide technical guidance for its implementation, and advocate for financial resources for roll out. This will aid in filling the gap in current data around the prevalence of Vitamin A deficiency among children 6–59 months of age, as the last nationally representative survey on Vitamin A deficiency was conducted in 2002. Additionally, it will serve to provide direction around costs, cost-effectiveness, feasibility, and acceptability of Vitamin A supplementation and point-of-use fortification interventions, as applicable.
- Strengthen coordination of the Nutrition team with the Child Health and Immunization teams within the Ministry of Health to provide unified guidance and tools to frontline workers who implement, monitor, and evaluate Vitamin A supplementation and point-of-use fortification efforts with MNPs, integrated in routine child health and immunization services.
- Revitalize the MNP Task Force to address the core issues affecting the feasibility and sustainability of MNPs in the country; finalize and approve the MNP Strategy, taking into account

- lessons learned from implementation to date; and routinely assess the formulation needs of MNPs used in the country to meet recommended daily intakes of target groups.
- 4. Advocate with the Government of Mozambique at the level of the Minister of Health and the Executive Secretary of the Technical Secretariat of Food and Nutrition Security within the Ministry of Agriculture for the development of a cohesive national strategy for the prevention and control of micronutrient malnutrition. Advocacy efforts should also focus on improving coordination of micronutrient reduction interventions and planning for equitable and sustainable coverage of at-risk populations.

Giving all children in this country the chance to reach their full potential and contribute to making Mozambique free of preventable micronutrient deficiencies can be possible with the support of key stakeholders. Various Government Ministries, including Health; Education and Human Development; Gender, Children, and Social Action; Agriculture and Food Security; Public Works, Housing, and Water Resources; Industry and Commerce; and the private sector, civil society, and donor agencies in coordinated efforts can aid with reaching this goal.

Marla Amaro

Department of Nutrition, Ministry of Health, Government of the Republic of Mozambique, Maputo, Mozambique

## Correspondence

Dr. Marla Amaro, Head of the Department of Nutrition, Ministry of Health, Government of the Republic of Mozambique, 1008 Eduardo Mondlane Ave, Maputo, Mozambique.

Email: marlaamaro80@gmail.com

## **REFERENCES**

- Government of the Republic of Mozambique (2010). In Government of the Republic of Mozambique (Ed.), Multisectorial plan for chronic malnutrition reduction in Mozambique 2011–2014 (2020). Maputo, Mozambique.
- Horton, R. (Ed.) (2008). Maternal and child undernutrition (series). 371(9608. New York. NY: The Lancet.
- Horton, R. (Ed.) (2013). Maternal and child nutrition (series). 382 (9890). New York, NY: The Lancet.
- Ministerio da Saúde [MISAU] (2006). National survey on Vitamin A deficiency, anemia and malaria in children 6-59 months and their mothers (December 2001-February 2002). Maputo, Mozambique: MISAU Nutrition Division & Instituto Nacional de Estadística.
- MISAU, INE, & ICFI (2015). Mozambique immunization, malaria, and HIV/ AIDS indicators survey 2015. Maputo, Mozambique & Rockville, MD: National Institute of Health (Mozambique), INE, & ICFI.
- MISAU, Instituto Nacional de Estadística [INE], & ICF International [ICFI] (2013). Mozambique Demographic and Health Survey 2011. Calverton, MD: MISAU, INE, & ICFI.
- Picolo, M., Barros, I., Joyeux, M., Gottwalt, A., Possolo, E., Sigauque, B., & Kavle, J. A. (2019). Rethinking strategies to address micronutrient deficiencies in children under 5: Considerations for integrated nutrition-health programming in Mozambique. *Maternal & Child Nutrition*. in press
- United Nations (2015). The Global Strategy for Women's, Children's and Adolescents' Health (2016–2030). New York, NY: United Nations.
- United Nations General Assembly [UNGA] (2015). Transforming our world:
  The 2030 Agenda For Sustainable Development (UNGA A/70/L.1).
  New York, NY: UNGA.
- World Health Organization [WHO] (2014). Comprehensive implementation plan on maternal, infant and young child nutrition. Geneva, Switzerland: WHO.

**How to cite this article:** Amaro M. Accelerating progress in micronutrient deficiencies in Mozambique: A Ministry of Health perspective. *Matern Child Nutr.* 2019;15(S1):e12707. https://doi.org/10.1111/mcn.12707