

Nutritional intervention in Mozambique: Policies and progress?

This is a summary of the following paper¹: *Cinquenta A, Abdul-Karim S, Tenente Frio E et al. (2023) Progress in the fight against malnutrition in Mozambique: A review of policies, action plans, and nutritional interventions. Research Society and Development, 12, 12, e107121244053. <https://rsdjournal.org/index.php/rsd/article/view/44053/35343>*



Malnutrition monitoring in Cabo Delgado, Mozambique

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Despite numerous interventions over the years, Mozambique is still grappling with persistent chronic malnutrition, with 37% of children aged under 5 years in the country being stunted. This exploratory study considered Demographic and Health Surveys (DHS), Family Budget Surveys (FBS), Standardized Monitoring and Assessment of Relief and Transition (SMART) Surveys, Integrated Classification of Food Security Phase (IPC), Economic and Social Plans (PES), and FAO Database (FAOSTAT) – as well as other more specific survey data pertinent to the country – to determine how malnutrition rates were affected by various policies that were implemented concurrently.

This is a crude analysis which can only provide a high-level summary of the situation in Mozambique. Heterogeneity (of different surveys) remains a key challenge, as it is not appropriate to compare exact figures from different surveys, using different methods, across multiple years. Nevertheless, when comparing the same surveys across different time points, it is clear that little impact has been achieved, for stunting and wasting, despite the implementation of several initiatives: PARPA (2001–

2005, 2006–2009), ESAN II (2008–2015), and PAMRDC (2010–2020). Both stunting and wasting prevalence have remained broadly stable between 2003 and 2023, with minor oscillations. Wasting prevalence did fall from 11% in 1997 to 4% in 2003 (DHS) – the only notable change during the study period.

As is seen in many countries, stunting rates vary dramatically by region (from 46.7% in Nampula and 45% in Cabo Delgado to 8.1% in Maputo province, in 2021), which in turn reflects an urban–rural disparity. Notably, illiteracy rates were higher in the northern, high-burden provinces (up to 61.1% in Cabo Delgado). Access to drinking water mirrored this trend, with 80% of families reporting access in the south, compared to less than 50% in the north and under 70% in the centre. More generally, the authors highlight the role of hidden debt, armed conflict, COVID-19, cyclones, and poor monitoring and reporting data, citing these as barriers to adequate nutrition. This led the authors to recommend the following policy steps:

Such policy focuses have achieved success in other countries and the authors are optimistic in their conclusion that ‘the country remains

on course to reverse the situation’. However, it remains to be seen how Mozambique can find a way to implement each of these suggestions when facing such a variety of development challenges. Reducing the urban–rural divide, focusing on higher-burden regions, may be an appropriate place to start.

“Ensure an equitable distribution of resources to all provinces and between rural and urban areas, control the situation of peace and stability throughout the national territory, invest in agricultural technology policies, increase the number of hospitals with a focus on rural areas, establish strengthening policies on climate change and, finally, to bet on a robust and realistic monitoring and evaluation system for the public policies created.”

¹ This paper was originally published in Portuguese and minor linguistic errors may be seen in the original translated text.

Relationship of maternal short stature with coexisting forms of malnutrition in Pakistan

This is a summary of the following paper: *Khaliq A, Nambiar S, Miller D et al (2024) Assessing the relationship of maternal short stature with coexisting forms of malnutrition among neonates, infants, and young children of Pakistan. Food Science & Nutrition.*

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‘Co-existing forms of malnutrition’ (CFM) involves a combination of two or more malnutrition indicators in an individual and is associated with a fourfold higher risk of mortality in children. Additionally, a child’s nutritional status is significantly influenced by various maternal factors, with maternal height being a key predictor of offspring growth. This study explores the association between maternal short stature and CFM among mother–child dyads in Pakistan. Using Pakistan Demographic Health Survey data from 2012–2013 and 2017–2018, a panel cross-sectional analysis was conducted on 6,194 mother–child dyads aged 15–49 years and 0–59 months, respectively.

Maternal overweight and obesity increased by over 10% between the two survey periods, while prevalence of CFM among mothers remained below 5%. In children, CFM prevalence decreased from 30.7% to 20.7% across the sur-

vey periods. Coexisting underweight and stunting were consistently the most prevalent type of CFM. The presence of CFM in the mother–child dyad was 1.1% in 2012–13 and decreased to 0.5% in 2017–18.

Two maternal height categories were defined: Short stature (<145cm) and normal stature (≥145cm). The study reveals a significant association between short maternal stature and various forms of child undernutrition, including coexisting undernutrition. It found at least twofold higher odds of stunting, underweight, and various coexisting forms of undernutrition in children of short-statured mothers compared to those of normal stature ($p < 0.041$). However, no association was observed with wasting, overweight/obesity, and coexisting stunting and overweight/obesity.

The 2017–2018 survey reported a higher prevalence of coexisting underweight with wasting compared to the 2012–2013 survey.

Maternal employment and caesarean section significantly reduced the odds of coexisting underweight with wasting, while an increase in family size raised the odds of coexisting underweight with both wasting and stunting (by 1.07). Between the 2 survey years, the odds of stunting with overweight/obesity significantly decreased to 0.28 in 2017–2018.

Despite national coverage and representative sample sizes in each demographic health survey, this study has limitations impacting internal validity. The cross-sectional design hinders establishing causation between maternal and child malnutrition. Missing data on variables like birthweight, birth size, and maternal health interventions further hinder a comprehensive assessment. Nutritional status relied solely on anthropometry, lacking biochemical tests, physical examinations, and dietary investigations. Anthropometric data had measurement errors and exclusions, impacting the study’s representativeness. Acknowledging these limitations is crucial when interpreting these findings.

The study does however affirm the heightened vulnerability of children born to short stature mothers to various forms of undernutrition. Further exploration of the relationship between maternal health, infant feeding, and child undernutrition, including coexisting forms of undernutrition, is needed to identify effective strategies for interrupting the intergenerational transmission of malnutrition and CFM in children.