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SUPPLEMENT

Recent advances in *Moringa oleifera* supplementation for maternal anemia and infant nutrition: A systematic review

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Abstract

Background: *Moringa oleifera* (MO) is a plant-based food source that lasts during certain seasons, and some societies still consider it to be known as superfood. The use of MO has been linked up to its inconsistency and advances as a supplementation in resolving maternal anemia and stunted infants.
Objectives: This study aims to synthesize an updated efficacy and safety aspect of MO supplementation in pregnant women and infants.
Methods: A comprehensive literature search with boolean operators was conducted across multiple databases (PubMed, Wiley, Sage, Scholar, Cochrane) and filtered using PRISMA Protocol, with total screening for 121 studies, resulting in 13 included studies that tested for risk of bias using RevMan 5.4. Data extraction focused on MO serving type, frequency, duration, and adverse events.
Results: 11 out of 13 studies show a significant effect of MO in treating maternal anemia and stunted infants. The average effective time of MO administration ranges between >2 months and >4 months in pregnant women & infants with biscuit, leaf extract, and leaf soup serving type. The ineffectiveness of interventions occurs due to medical complications and demographic patterns while morbidity rates are influenced by sample immunity and MO content such as tannins and amino acids.
Conclusion: Variety serving type, frequency, and duration of MO supplementation is proven to be effective in resolving maternal anemia and infant nutrition problems which nevertheless still potentially cause side effects, likely digestive and respiratory symptoms.

Keywords: *Moringa oleifera*, pregnant women, infants, anemia, birth weight

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