IMPROVING THE PREVALENCE ESTIMATES OF ZINC DEFICIENCY AND VITAMIN A DEFICIENCY IN MALAWI: A RE-ANALYSIS OF THE 2015-16 MICRONUTRIENT SURVEY (MNS) DATA

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UNDERSTANDING MICRONUTRIENT SURVEYS

• Periodic studies designed to give a cross-sectional view of the micronutrient status estimates of a country
• Blood serum was used to assess zinc, vitamin A status, and inflammation in the Malawi MNS
• Results were reported without adjusting for inflammation or using appropriate cut-off marks
METHODS AND FINDINGS

Zinc
- Inflammation adjustment was done using Biomarkers Reflecting Inflammation and Nutritional Determinants of Anemia (BRINDA)
- Reduction of national prevalence from 62% to 52%

Vitamin A
- Cut-off for vitamin A deficiency was revised to 0.7 μmol/L, VAD in pre-school children increased from 4% to 24%
- Inflammation adjustment using BRINDA decreased the prevalence to 10%
Improved estimation methods are necessary when reporting MNS results and should be adopted as a standard.