Malamulo Adventist Hospital and Loma Linda University School of Public Health:
A Global-Local Collaboration addressing Malnutrition

<u>Abstract</u>

Food insecurity is a prevalent global health issue disproportionately affecting low resource countries. Malamulo Adventist Hospital (MAH) is a community hospital in Helemani, Malawi that provides nutrition care for challenges including nutrition education, food insecurity, and malnutrition. In partnership with Loma Linda University School of Public Health (LLUSPH), students and faculty travelled to MAH to partner with hospital staff to evaluate the nutritional status of children under 15 in the catchment area of MAH and provide recommendations to increase program effectiveness and sustainability.

The field team collected data in August 2021 from 35 villages including weight, height, MUAC, and nutritional oedema. Data was recorded on a collection tool adapted from the Nutrition Rehabilitation Unit register and analyzed via SPSS. LLUSPH also conducted a literature review, partner interviews, and ArcGIS mapping.

From August 5-16, 2021, 1,546 records, both new and historical, were collected. From January 2019 to August 2021, 46% of children assessed had normal nutritional status while 54% were moderate or severely malnourished. Children assessed at MAH were primarily coming from a five-mile radius. The village of Nkunda had the highest proportion of moderate malnutrition status (~40%), while Chalingana had the highest proportion of severe (~60%). The dry season was characterized by higher rates of normal nutrition status (54.4%). During wet season, over 70% of children assessed were moderately or severely malnourished. Season was a significant indicator of nutrition status as food supply is dependent on rainfall and harvest yield, both of which are subject to the global risk associated with ongoing climate change.

Nutritional status for children under 15 was found to be most influenced by season and village. Past this pilot partnership, LLUSPH will continue to partner with MAH to address malnutrition including the influence of climate change, safe water availability, and other community health issues.

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