

Georgia Southern University

Digital Commons@Georgia Southern

Department of Health Policy and Community
Health Faculty Publications

Department of Health Policy and Community
Health

6-2022

Factors Associated With the Nutritional Status of Infants and Young Children From Rural Honduras

Ana M. Palacios

Mario Keko

Aishat Adewoye

Haresh Rochani

Asli Aslan

See next page for additional authors

Follow this and additional works at: <https://digitalcommons.georgiasouthern.edu/hpmb-facpubs>



Part of the [Community Health Commons](#), [Community Health and Preventive Medicine Commons](#), and the [Health Policy Commons](#)

This article is brought to you for free and open access by the Department of Health Policy and Community Health at Digital Commons@Georgia Southern. It has been accepted for inclusion in Department of Health Policy and Community Health Faculty Publications by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.

Authors

Ana M. Palacios, Mario Keko, Aishat Adewoye, Haresh Rochani, Asli Aslan, Dziyana Nazaruk, Ana Gisela Ramos, Weston L. Oliver, and Laura Manship

Factors Associated With the Nutritional Status of Infants and Young Children From Rural Honduras

Ana Palacios,¹ Mario Keko,¹ Aishat Adewoye,¹ Haresh Rochani,¹ Asli Aslan,¹ Dziyana Nazaruk,¹ Ana Gisela Ramos,² Weston Oliver,¹ and Laura Manship³

¹Georgia Southern University; ²Hombro a Hombro; and ³Shoulder to Shoulder Inc

Objectives: Malnutrition is a major public health problem in children. Undernutrition and excessive weight at young ages are associated with life-long consequences. The main objective of this study was to characterize the sociodemographic and food insecurity factors associated with the nutritional status of rural children ages 6 to 24 months living in 27 rural communities in Intibucá, Honduras.

Methods: This secondary analysis of baseline data included a total of 402 children ages 6 to 24 months who were recruited to participate in a cluster-non-randomized trial of a community-based nutrition intervention. Data were collected in January 2021 through a survey that assessed food insecurity and dietary diversity, and measurement of weight and length by community health workers. The associations between explanatory variables (sociodemographic and food insecurity factors) and binary outcomes including stunting (length-for-age

z-score < -2); underweight (weight-for-age z-score < -2); overweight (weight-for-length > 2); and wasting (weight-for-length < -2), were explored using generalized linear mixed models with community cluster as a random effect.

Results: Participant's mean age was of 15.54 ± 5.63 months. The prevalence of stunting, underweight, overweight, and wasting were 18.41%, 4.49%, 6.00%, and 1.00%, respectively. The 74.8% of households reported being food insecure. The odds of being stunted decreased by 15% in children with more diverse diets [AOR = 0.85; 95% CI (0.73–0.98)]; females had 71% lower odds of being underweight [AOR = 0.29; 95% CI (0.09–0.93)]. More time breastfeeding was associated with 10% lower odds of being overweight [AOR = 0.90; 95% CI (0.84–0.97)]. No factors were associated with wasting.

Conclusions: Continued breastfeeding up to two years of age may be beneficial to avoid excessive weight in young children from rural areas in Honduras. Increased dietary diversity may help prevent stunting in the region. A community-based implementation research study is undergoing. This intervention includes the provision of vouchers to mothers of 6 to 24 month-old children. Vouchers are exchanged for locally produced eggs intended to be offered to the child daily. Further research characterizing complementary feeding practices and child gender in rural Honduras is needed.

Funding Sources: This study is funded by Shoulder to Shoulder Inc.