Background

66% of Hondurans live in poverty and 12% suffer from undernutrition. This disproportionate affects rural inhabitants, with an estimated 48.5% of the rural dry corridor residents suffering from undernutrition. Malnutrition and undernutrition is associated with poor health outcomes, increased mortality rates, starting in children, poor cognitive development, and, ultimately, poor economic outcomes. Multi-dimensional factors contribute to poor nutritional outcomes, including poverty, poor sanitation practices or infrastructure, poor access to health care services, and lack of education. Due to the complexity of this problem, multi-dimensional solutions have been proposed, including the integration of nutrition education into agricultural education.**

Agricultural extension agents are lifelines for rural farming communities, offering knowledge and resources to support agricultural productivity. The pre-existing trend that extension agents have with their beneficiaries yields a natural avenue to promote well-being beyond improved agricultural practices and incomes. Therefore, strengthening the capacity of agents to integrate related disciplines (i.e., nutrition) into agricultural services is of critical interest.

Objective

The purpose of this study was to characterize the nutrition-related knowledge, attitudes, and practices (KAP) and dietary diversity amongst employees of Agricultural Extension Services organizations and their beneficiaries in the Dry Corridor of Honduras.

Methods

The IRB at UIUC approved all protocols with human subjects.

A convenience sample of agricultural extension agents were surveyed in-person, in-home in rural Honduras.

A convenience sample of agricultural extension agents self-selected to complete surveys via online Qualtrics platform or written format.

Surveys included: nutrition KAP [constructs: dietary guidelines, iron deficiency anemia, vitamin A deficiency, water sanitation], household dietary diversity, coping strategies index* and demographic variables.

Data were entered into Microsoft Excel. All data entry was double checked. Statistics were conducted with IBM SPSS Statistics 24. Multiple imputation was used to fill missing data points. KAP surveys were coded in Qualtrics and analyzed using R statistical software. Additional Pearson correlation analysis, and Mann-Whitney U-test were conducted as appropriate.

Evaluation

Characterization of Nutrition Knowledge Attitudes and Practices Among Agricultural Extension Agents and their Beneficiaries in Rural Honduras

Jennifer L. Lotten1, Andie L. Scherer1, Elizabeth M. Soffer1, Kathryn R. Mosiman2, Katharine R. McNamara2, Liz Ramos4, Jeanette M. Andrade5, and Juan E. Andrade1

1Food Science and Human Nutrition & Agricultural and Consumer Economics, University of Illinois, Urbana-Champaign, Urbana, IL
2Environmental and Global Health & 3Institute of Food and Agricultural Sciences Global, University of Florida, Gainesville, FL
4School of Family and Consumer Sciences, Eastern Illinois University, Charleston, IL

Abstract

Average knowledge score by nutrition construct

Results: Knowledge

Average Knowledge Score by Nutrition Construct

Results: Nutritional Awareness

Percent of Population that “Has Heard of Nutrition Construct”

Nutrition constructs include: dietary guidelines, iron deficiency anemia, vitamin A deficiency, water sanitation

Results: Practices

Dietary Diversity

Food groups

Nutrient density

Dietary Diversity

Food groups

Nutrient density

Tobacco and Obesity

Consequences

Benefits of Practices

Costs of Practices

References

Acknowledgments

The authors would like to thank the study participants and the leaders of the Ministry of Social Development, the Regional Secretariat for Social Development of the Ministry of Social Development, the National Agricultural Technicians Association of Honduras, the United Nations, and the Ministry of Social Development for their support and cooperation. The authors did not necessarily reflect the views of USAID or the United States Government.