Malnutrition undermines national education efforts in Uganda. Recent surveys have shown that twenty percent of children are underweight (i.e. low weight for age) while 80% and 38% of children are stunted (low height for age) and wasted (low weight for height) respectively among under-five children living in rural areas. Eighty percent of children aged 6-12 y, (i.e. one-fifth of Ugandan population) receive primary education. This presents an opportunity to address poor nutrition and reduce the burden in this age group and the community.

Although the school system is considered a great scenario to promote nutrition in Uganda, studies have shown that the educational interventions often lack proper evaluation. This might be due to the lack of validated tools, for instance to rigorously assess a baseline knowledge among key stakeholders like head teachers and health workers. At schools, most times head teachers are responsible for both designing and implementing nutrition education programs with much input from government officials. For this reason, the aim of this study was to develop a tool that will be used to evaluate nutrition knowledge of head teachers and other key nutrition and health stakeholders in Uganda.

Once validated the tool will allow public health scientists and practitioners to adequately evaluate nutrition knowledge. This will improve the quality of nutrition delivery by our laboratory, and our partners, the Ministry of Health (Improved policy evaluation) and USAID’s Feed the Future Program.

Hypothesis

The modified questionnaire developed by Parmenter and Wardle (1999) is valid and reliable to assess general nutrition knowledge of adults in Uganda.

Validation of General Nutrition Knowledge Questionnaire (GNKQ) for Adults in Uganda

Objective

To examine the relevance of the content in a general nutrition knowledge questionnaire (GNKQ) targeting adult head teachers and health workers in Uganda as the first validation.

Design

Five experts in the fields of health education (1), nutrition (2), agriculture (1) and education (1) reviewed the survey online using Qualtrics. The research protocol was approved by the IRB at UIUC. Reviews were conducted twice, before and after face validation.

Outcome, Measures and Analysis

Clarity of the questions in the survey to the head teachers and health workers was sought. Each question was discussed in the group until all participants agreed on clarity.

Results

• 24 questions were identified as unclear during the survey
• After FGDs, only 5 questions were changed, while the remaining ones were discussed based on their potential answers.

Content validation (Cont.)

The agreement proportions on relevance, clarity, simplicity, and ambiguity of questions ranged from 0.6 to 1.0 in first round. In second round, the range was 0.8 to 1.0.

• Proportion of agreement on recommendations to deletion of questions ranged from 0.6 to 1.0 in first round. In the second round, the range was 0.0 to 0.2. From experts comments, two questions were added in the fortification construct.

Face validation

Assess the level of understanding and interpretation of GNKQ’s questions by target population using focus group discussions (FGDs).

Design

The draft GNKQ was administered to 15 head teachers and seven health workers. They rated each question on level of clarity (Yes or No). They provided reasons for the questions being unclear. Three FGDs were conducted to explore participants’ understanding of the ‘unclear’ questions in addition to those answered wrongly. Questions answered wrongly were included in the FGDs. Each question was discussed to the extent that each participant agreed on its clear interpretation and exploring alternatives. FGDs were recorded using a digital sound recorder. All participant signed consent forms. The FGDs lasted 1.5 to 2 hours. The research protocol was approved by the IRB at UIUC and by the Uganda National Council for Science and Technology.

Outcome, Measures and Analysis

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Results

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References