O50 (continued)

designed half their plate with vegetables using the healthy plate model increased from 12% to 76.4%. A significant increase in dietary diversity was also documented ($Z = -3.058$, $p < .002$).

Conclusions and Implications: Nutrition education was shown to be an effective approach for reducing geophagic practices in rural Kenya and improving overall dietary intake.

Practical Importance: This pilot intervention showed that it is imperative to identify women at risk and provide nutrition education to combat this disordered eating.

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O51 Assessing the Self-Efficacy and Barriers of Nutrition Counselors in Providing Nutrition Education in Cameroon, Africa

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Objective: To qualitatively assess the self-efficacy and perceived barriers of nutrition counselors after a 6-week training course.

Study Design, Setting, Participants: Most counseling in sub-Saharan Africa is conducted by mid-level nurses or community volunteers, and little is done to develop capacity for nutrition at the professional, organizational, or systemic levels. Since 2007, the Cameroon Baptist Convention Health Services (CBCHS) Nutrition Improvement Program has trained and integrated nutrition counselors into prevention of mother-to-child transmission of HIV programs, infant welfare clinics, and antenatal clinics to improve infant and young child feeding practices. At the beginning, middle, and end of the six-week training, nutrition counselors were asked to journal about their perceived barriers and self-efficacy to provide nutrition counseling. Thirty-nine nutrition counselors (1 male, 38 females) enrolled in a training at CBCHS.

Outcome Measures and Analysis: Using qualitative inductive content analysis, journals were coded, categorized for themes regarding perceived barriers and self-efficacy, and checked for inter-consistency.

Results: Nutrition counselors stated that role-playing, learning songs and dramas about young child feeding, and group discussions improved their self-efficacy. The perceived barriers included finances, concerns about communicating with clients, lack of cooperation with other health care providers, and transportation.

Conclusions and Implications: Training a cadre of nutrition counselors is one approach towards increasing

human resources to implement nutrition interventions. Trainings should include active teaching methods such as role-playing, dramas, songs and reflective journaling while attending to barriers such as transportation, interpersonal communication, and finances.

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O52 Factors Associated with Stunting Among 0-23 Months-Old Children in Rural Bangladesh

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Objective: To examine associations between household food insecurity and nutritional status of 0-23 month's old children.

Study Design, Setting, Participants: A total of 400 low income rural households from 16 villages from Kuri-gram District, Bangladesh, participated this cross-sectional study.

Outcome Measures and Analysis: Household food security and the associated coping strategies, nutritional status and children feeding practices were assessed. Chi-square test and logistic regression were performed to determine the factors associated with food insecurity and stunting.

Results: Approximately, 70% of the households were categorized as food insecure. Common coping strategies included: eating low quality food (53.9%), eating less items of foods (51.4%), and borrowing foods from neighbors or family (51.9%). Father's with college level education and per capita monthly income greater than \$37.5 and / or more earning members in the households were preventive of food insecurity. Prevalence of stunting was significantly high among severely food insecure households (46.2%) as compared to food secure households (28.6 %) ($p = 0.003$). In addition, severe food insecurity significantly affected stunting in children aged 12-23 months (OR 2.87 CI, 1.47-5.62; $P = 0.002$), while low birth weight (LBW) significantly affected stunting in under 6 months' infants ($p = 0.009$). However, minimum dietary diversity and exclusive breastfeeding were not associated with stunting in this population.

Conclusions and Implications: Low birth weight and severe food insecurity significantly affected stunting in children in the study area. Therefore, establishment of safety nets during pregnancy as well as long term interventions that would increase availability and accessibility of foods are recommended in an effort to reduce stunting in low income rural households.

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