P159 (continued)

care behaviors included measures such as 10-item diabetes self-efficacy scale, 4-item health distress scale (range: 0-5), 3-item scale for communications with doctors (range: 0-5), and 4-item social role-diabetes interference scale (range: 0-4). Body weight/height (BMI) and waist circumference (WC) were used to characterize weight status. Descriptive results were calculated using IBM SPSS Statistics.

Results: Most (83%) of the participants' BMIs were in overweight/obese category (mean: 27.9 ± 4.7); 80% of participants had high risk WC. Mean HEI score (37.9 ± 13.7), intake of fruits ($1.1 \text{ cups} \pm 1.6/\text{d}$), vegetables ($1.5 \text{ cups} \pm 1.4/\text{d}$), and fiber ($14.9\text{g} \pm 13.8/\text{d}$) were below recommended levels; 80% of participants preferred mostly/exclusively Asian foods at home. Diabetes self-efficacy was moderately high (mean: 7.4 ± 1.9); means for health distress (1.5 ± 1.3) and social role interference (1.7 ± 2.6) scores were moderately low, and communication (with doctors) score was 2.9 ± 1.2 .

Conclusions: These results indicate a need to improve weight status and dietary quality, which are potential risk factors for type 2 diabetes. Future education programming should be tailored to address Asian dietary intake preferences and include strategies to improve health distress, social role interference, and communication with healthcare providers. Results will be used for culturally appropriate curriculum development and implementation for AI.

Funding: New Jersey Department of Health.

Nutrition Education Program Design Implementation and Evaluation

P160 Management of Obesity in Children with Asthma Using Nutrition Video Counseling

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Background: Asthma and obesity in children are major public health concerns. Asthma makes obesity worse and obesity makes asthma worse. We report a pilot program integrating nutrition video counseling with routine office visits.

Objective: To determine if routine office visits plus nutrition video counseling improve body mass index (BMI), asthma, and obesity quality of life scores.

Study Design, Setting, Participants: Obese children ages 7-18 years old with persistent asthma were enrolled into a 6-month program that included 3 visits with a pediatric pulmonologist and a registered dietitian and 4 additional monthly free nutrition video visits using FaceTime, WhatsApp, or Skype. Motivational interviewing guided discussions about why and how to change behaviors such as skipping meals, binge eating, excessive screen time and

physical inactivity. Identifying whole foods, nutrition label reading, mindfulness and goal setting skills were taught. At each office visit, subjects underwent evaluation of anthropometric measures, respiratory and nutritional status, and validated quality-of-life measures for asthma (PAQOL) and obesity (Sizing Me Up [SMU] for 7 to 13 years; IWQOL-Kids for 14 to 18 years).

Measurable Outcome/Analysis: Participants were assessed for BMI, asthma control, and quality of life measures pre-, mid-, and post-intervention.

Results: Twenty-one subjects were enrolled; 14 (67%) completed all visits and procedures. Twelve of the 14 (86%) reported improvement in obesity quality of life scores. Median SMU score improved from 61 (IQR 56, 76) to 76 (IQR 72, 77), $P = .03$. Median IWQOL-Kids score was 95 at baseline, 97 at completion, $P = .20$. Seven of the 14 (50%) had a decrease in BMI; mean BMI decreased from 33.0 to 31.3, which was not significant. There were no significant changes in pulmonary function or PAQOL.

Conclusions: In this small pilot study, the addition of video nutrition counseling to enhance office visits showed promising results and allows for deep discussions on the complexities of behavior change. However, future studies should be longer, combined with other multidisciplinary approaches, and have larger sample sizes.

Funding: Stony Wold-Herbert Fund, Inc.

Nutrition Education Research Methods

P161 Digital Workbooks to Develop and Evidence Learning in a Flipped Nutrition Classroom in Higher Education

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Objective: To evaluate student use and perceptions of a digital workbook in 3 undergraduate nutrition courses taught with a flipped classroom approach (FCA).

Use of Theory or Research: Within the FCA 3 phases of learning are aligned with Bloom's Taxonomy: prepare (self-directed pre-class activities: remember and understand); participate (facilitated in-class activities: apply and analyse) and recap (self-directed post class activities: evaluate and create). While technology can support the delivery of the FCA, there is little evidence for the most effective delivery of FCA learning experiences for nutrition students.

Target Audience: One hundred and sixty-two undergraduate nutrition students at a regional Australian University in Semester 1, 2019.

Course/Curriculum Description: PebblePad digital workbooks were used to deliver 3 FCA courses. Each digital workbook contained weekly workbook tabs with interactive pages based on the FCA phases. Students used the workbook to access and participate in learning experiences during each FCA phase.

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