

Poster Session: Wellness and Public Health

Assessment of Cardiovascular Risk in First-Semester College Students

Author(s): A. Crum¹, C. Flanders², R. Wheaton², A. Morgan², J. Kiss², M. Ludy²;
¹ProMedica Health System, ²Bowling Green State University

Learning Outcome: Describe the prevalence of cardiovascular disease risk factors in first-semester college students.

Background: Concern about cardiovascular disease (CVD), specifically hypertension and hyperlipidemia, is limited among college students. This study's purpose was to evaluate the prevalence of CVD risk factors in first-semester college students.

Methods: College students (n=47, 83.0% female, 84.8% Caucasian, age 18.3±0.5 years, GPA 3.2±0.8) completed health-related assessments as part of a first-semester seminar course; none were previously treated for hypertension or had diabetes, while one smoked. Assessments occurred at the end of the fall semester. Body mass index (BMI), blood pressure (BP), total cholesterol (TC), and high-density lipoprotein cholesterol (HDL-C) were assessed.

Results: Mean BMI was 25.1±5.2 kg/m²; 19.1% and 21.3% of students were identified as overweight (25.0-29.9 kg/m²) and obese (≥30.0 kg/m²), respectively. Mean systolic BP (SBP) and diastolic BP (DBP) values were 122.2±13.2 and 81.3±13.0 mmHg, respectively; 14.9% and 48.9% of students had values in the elevated (SBP 120-129 mmHg and DBP <80 mmHg) and hypertensive (SBP ≥130 mmHg and/or DBP ≥80 mmHg) ranges. Mean TC was 175.3±30.3 mg/dL; 29.8% and 23.4% of students had borderline (170-199 mg/dL) and abnormal (≥200 mg/dL) levels, respectively. Mean HDL-C was 55.6±17.2 mg/dL; 12.8% and 21.3% of students had borderline (40-45 mg/dL) and abnormal (<40 mg/dL) levels, respectively.

Conclusions: These data suggest that a substantial proportion of first-semester college students are at risk for future development of CVD. Exploration of future educational interventions with the college student population to improve BMI, BP, TC, and HDL-C is warranted.

Funding source: Ohio Department of Higher Education's Transforming Campus Climate Grant; Bowling Green State University Center for Undergraduate Research and Scholarship Grant

Promoting Healthy Drinks: A Digital Marketing Campaign to Reach SNAP Households Using Geo-Fencing

Author(s): C. Treftz, M. Wahrenburg, J. Benedict; University of Nevada Reno

Learning Outcome: Upon completion, participants will be able to define geo-fencing and describe how it may be used to reach low-income households using social media.

Sugar-sweetened beverages (SSB) contributes significantly to children's caloric intake, and are associated with negative health outcomes. Previous research suggests nutrition interventions targeting the parent, the "gate-keeper" of food and drink choices, may be an effective method for reducing SSB intake among children. Emerging evidence suggests low-income households may use Facebook for nutrition information. Thus, the objectives of the Rethink Your Drink Nevada (RYD) digital marketing campaign were to increase parents' awareness of SSB and promote healthy drink choices among SNAP households with young school-age children in Northern and rural Nevada. A series of 8 images were developed and posted on Facebook; one image per week, for 8 weeks during the summer months. Geo-fencing was used to target SNAP households through the Facebook Ad Manager using the following parameters: 1) zip codes in one urban county and three rural counties identified as part of the low-income census tract, 2) Women, Infant, and Children (WIC) offices and Welfare offices in the targeted counties, 3) Facebook interests of motherhood, fatherhood, parenting, or children, and 4) Adults age 18-55 years-old. Based on Facebook metrics, the campaign reached 937,170 people and RYD Facebook page followers increased from 230 to 432. Survey results from a random sample of SNAP households in the targeted counties (n=112) revealed 31% recalled seeing the Facebook advertisements. Results indicate digital marketing through Facebook may be an effective method to disseminate nutrition information to SNAP participants. Future research will aim to measure Facebook likes, reactions, and shares using different advertisement themes.

Funding source: USDA-SNAP in cooperation with the Nevada Division of Welfare and Supportive Services.

Nutrition-related Messages Shared Among the Online Transgender Community: A Netnography of YouTube Vloggers

Author(s): W. Linsenmeyer¹, H. Schier²; ¹Saint Louis University, ²NHS Diabetes Prevention Program

Learning Outcome: Upon completion, participants will be able to describe three of the most common nutrition-related messages shared among the online transgender community via YouTube.

Background: Minimal scientific evidence exists to identify the diet and nutrition-related considerations of transgender individuals. Social media is a highly utilized informal learning environment for the transgender community. The objective of this study was to describe the food and nutrition messages shared among the transgender community using video blogs (vlogs) on the platform YouTube.

Methods: This netnography employed a YouTube search to identify relevant vlogs using the terms "transgender" AND "diet" OR "nutrition." Inclusion and exclusion criteria were applied. The resulting 30 vlogs were analyzed by both members of the research team using the constant comparative method until consensus was reached.

Results: Of the 30 vlogs, the mean number of views was 11,758 and the range was 114-86,477 views. The mean duration was 10:24 minutes and the range was 4:13-24:51 minutes. Six major themes emerged from the analysis: functions of diet and exercise; diet and exercise philosophies; "How to" videos; advice for success; using dietary supplements; effects of hormone therapy. Each major subtheme was supported by between two and nine sub-themes; illustrative quotes were documented verbatim.

Conclusion: YouTube is a popular platform for sharing nutrition-related messages among the transgender community. The emergent themes suggest the transgender community's greatest areas of interest on nutrition-related topics. There is a persistent need for scientific research on the diet and nutrition-related considerations of the transgender population.

Funding source: None

Women, Infants, and Children (WIC) Participants' Intention to Use WIC Farmers' Market Coupons in Illinois

Author(s): J. Madson¹, S. Arendt²; ¹University of Illinois, Urbana-Champaign, ²Iowa State University

Learning Outcome: Participants will be able to identify barriers and motivations for WIC participants use of farmers' market coupons.

Farmers' markets are one venue for WIC participants to purchase fresh fruits and vegetables. WIC farmers' market coupons are available to help promote the purchase and consumption of fruits and vegetables from local farmers' markets. Therefore, this study explored the use of the theory of planned behavior (TPB) as a theoretical model to examine attitude, behavior control, and subjective norm as a predication of intention to use WIC farmers' market coupons by WIC participants. A questionnaire was developed, pilot tested, and then distributed through WIC clinics in three Illinois counties. Data analysis was conducted on 333 usable questionnaires. Of the participants, 58.3% indicated they received WIC farmers' market benefits in 2017 and 76.1% indicated they would use WIC farmers' market benefits in 2018 if they received them. Cronbach's alpha was used to estimate reliability and were as follows: attitude ($\alpha = 0.81$), perceived behavioral control ($\alpha = 0.87$), intention ($\alpha = 0.76$), and subjective norm ($\alpha = 0.87$), respectively. Regression analysis indicated attitude [t (328) = 17.007, p < .001], subjective norm [t (328) = 4.985, p < .001], and behavior control [t (328) = 6.064, p < .001] statistically significantly predicted intention to use WIC farmers' market coupons. The results of this study provide specific information on factors that influence WIC participants' intentions to use WIC farmers' market coupons and suggest education materials should target participants' attitude, behavior control, and subjective norm to increase the participants' intention to use WIC farmers' market coupons.

Funding source: None