

Satisfaction with daily life, BMI, perception of weight, and nutritional intake in undergraduate nursing students

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Disclosure Statement and Learner Objectives

- The authors of this presentation have nothing to disclose related to sponsorship or conflict of interest.
- Learner Objectives
 - Recognize the concern of sub-optimal health in nurses and nursing students.
 - Understand the importance of a nurse having a healthy BMI and satisfaction with daily life.
 - Recall two drinks that were related to decreased quality of life in this study.
 - Explore ways to improve satisfaction with daily life in nursing students

Background

- A systematic review reflects that current nurses have higher rates of depression, compassion fatigue, and burn-out; exhibit less-healthy lifestyle behaviors and work-life balance; and are at higher risk of suicide than the general population (Priano, Hong, & Chen, 2018).
- Practicing nurses often have sub-optimal physical and mental health compared to physicians and the public in general (Melnyk et al., 2018; Schooley, Hikmet, Tarcin, & Yorgancioglu, 2016).

Background

- It is critical for nursing students to form a healthy foundation of self-care before beginning the profession of nursing (Mellor, Gregoric, & Gillham, 2017).
- There are limited U. S. studies that focus on nursing students' physical and mental health, and overall satisfaction with daily life (Ashcraft & Gatto, 2015; Nevins & Sherman, 2016).

Study Purpose & Research Questions

- Examine associations between nursing student satisfaction with daily life, self-weight perception, BMI, and intake of 18 commonly consumed foods and beverages over the previous 30 days.
- Does satisfaction with daily life affect variation in BMI in undergraduate nursing students?
- Does undergraduate nursing student satisfaction with daily life affect variation in intake of 18 commonly consumed food and beverages?

Methods

- Cross-sectional, correlational study of N=215 undergraduate nursing students using a self-report online-survey via Qualtrics
- Measures included BMI (self-report height and weight), Satisfaction with Daily Life, the perception of current weight, attempts to lose weight, healthy eating, and nutritional intake behaviors in the previous 30 days
- Institutional Review Board Approval – Fall 2017

Measures

- **Satisfaction with daily life** – $\alpha = .92$
 - *The BUCS: Live Well Survey (BUCS: Live Well)* (Lee, 2013)
- **Self-weight perceptions** – underweight, slightly underweight, about the right weight, slightly overweight or very overweight.
- **Body Mass Index** – self-reported height and weight
- **Nutritional intake** – 18 commonly consumed foods and beverages

Analysis Plan

- Descriptive analysis
- Correlations and multiple regression
- Logistic regression for categorical variables
- Structural equation modeling path analysis –
nutritional foods and beverages
Weighted Least Squares Estimator with Means and Variance adjustments was used.

Results

- **Demographics** – 92% female, 71.6% Caucasian, 54.3% lived on campus, 59.4% on campus meal plan, 62.6% did not work, 68% freshmen, 1.3% sophomores, 11.6% juniors, 19% seniors, Ages 18 to 50 years
- 52.8% normal weight, 20.8% overweight, 21.9% obese, 2.2% extremely obese
- 54 students did not report BMI

Results

- One unit increase in satisfaction of daily life was associated with a modest (36%) decrease in the odds of being overweight/obese.
- Higher satisfaction with daily life was associated with lower odds of actively trying to lose weight.
- Higher levels of satisfaction with daily life were modestly associated with lower consumption of energy drinks ($B = .20, SE = .07, \beta = .19, p = .006$) and alcohol ($B = .21, SE = .07, \beta = .20, p = .003$).

Results

- After controlling for race and gender, the Logistic Regression model was significant, $X^2(6) = 27.96, p < .001$, accounting for approximately 14% (Nagelkerke pseudo r^2) of the variation in self-weight perception classification.
- One unit increase in satisfaction with daily life was associated with a 106% increase in the odds of being “about the right weight” and 89% increase in odds of being in the underweight category.

Discussion

- **Prevalence of obesity in the U.S.** from 2011 to 2014 was approximately 36.5% (Ogden, Carroll, Fryar, & Flegal, 2015).
- **Currently in the State of Alabama** – Obesity rate for adults 18 to 25 is 22.6%, the rate increases to 38.2% for ages 26 to 44, and increases to 42.1% for ages 45 to 64 (Trust for America's Health, 2017).
- **Current study found 44.9%** of pre-nursing and undergraduate nursing students had BMI's indicating overweight, obese, or extremely obese.

Discussion

- Obesity in practicing nurses can affect their own health status and their ability to care for others (Melnyk et al.,2018).
- Preventing weight gain during nursing school could decrease the risk of obesity in these future nurses (Malhotra, Ostbye, Rile, & Finkelstein, 2013).

Discussion

- Results revealed that nursing students with lower BMI have higher satisfaction with daily life scores.
- RQ1 revealed that nursing students who perceived they are in the “about right” category or the “underweight” category compared to the overweight category have greater odds of being more satisfied with life
- RQ2 revealed that nursing students who drink less alcohol and energy drinks have higher satisfaction with daily life

Limitations

- The population of pre-nursing and nursing students were from only one university setting in the southern U.S
- The majority of participants were in the “pre-nursing” program (68.1%) and may have skewed the findings.
- Data collected was all self-report

Conclusions

- Students may enter college at the age of 18 or 19 with a BMI in the normal range, but often leave in the overweight or obese range, putting them at risk for health problems (Yahia et al., 2017).
- It is important to help students improve their habits.
- These changes must be incorporated into the environment of nursing school.

Future Directions

- Create a Culture of Wellness in our nursing school
- Develop and intervention to assist students to incorporate self-care to improve their physical and mental health
- Currently applying for grants to develop an mHealth app specifically for our students with hopes of translating this program to other nursing schools.

Questions

- References available upon request
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