An Innovative Wellness Onboarding Program for Health Sciences Students: Baseline Findings with Implications for Practice and Future Research

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Conflict of Interest

- Jacqueline Hoying reports no financial interest or potential conflicts of interest
- Bernadette Melnyk has a company, COPE2Thrive, that disseminates the COPE CBT program for children, teens and college age youth
- Caitlin Slevin reports no financial interest or COI
- Colleen McGovern reports no financial interest or COI
- Alice M Teall reports no financial interest or COI



Objectives

- 1. Describe the baseline findings and correlates among physical health, mental health, healthy lifestyle beliefs and healthy lifestyle behaviors in first year health sciences students.
 - 2. Discuss elements of an innovative wellness onboarding program for health sciences students at a large land grant public university in the mid-west region of the United States.
 - 3. Describe implications for clinical practice and future research practice and future research.

Transition into Graduate School Can be a Stressful Time for Many Students





Concerns about Performance, Finances and Life Balance are Common





Background/Significance

- Health sciences colleges prepare students well to deliver high quality care to patients, yet few incorporate wellness and selfcare into their academic programming
- Although there are descriptive studies reporting the high prevalence of mental health problems and unhealthy behaviors as students transition from high school into college, few studies have described the mental health, physical health and healthy lifestyle behaviors of graduate health sciences students
- There also is a paucity of intervention studies in this population to improve their healthy lifestyle behaviors during graduate school

Purpose of the Larger Wellness Onboarding Study

 To determine the feasibility, acceptability and preliminary effects of a wellness onboarding program, including the development of a personalized wellness plan and health coaching by family nurse practitioner students, for first year health sciences students



Methods for the Wellness Onboarding Study

- To determine the feasibility, acceptability and preliminary effects of a wellness onboarding program for first year health sciences students, including the development of a personalized wellness plan and health coaching by family nurse practitioner students
- Data were collected at baseline, the end of the first semester, and the end of the second semester
- Wellness assessments and plans were completed at baseline
- Students received health coaching during the second semester of their programs

Purpose of This Study

Describe the baseline levels of depression, anxiety, stress, healthy lifestyle beliefs, healthy lifestyle behaviors, and Body Mass Index (BMI) of graduate students in health and rehabilitation sciences, dentistry, medicine, nursing, optometry, pharmacy,

and veterinary medicine



Methods

- A descriptive study of the baseline findings from a wellness on-boarding program designed to enhance the health and wellness of graduate health sciences students was conducted
- Data were collected with an on-line personalized wellness assessment and biometric screening during the first four weeks after the start of the initial semester from 92 health sciences students who consented to study participation

Measures

- Patient Health Questionnaire-9 (PHQ-9) for depression
- The Generalized Anxiety Disorder Scale (GAD-7)
- The Brief Inventory of Perceived Stress (BIPS)
- The Healthy Lifestyle Beliefs Scale
- The Healthy Lifestyle Behaviors Scale
- A biometric screen, including BMI, lipid profile, Hemoglobin A1c, and BP

The Sample

- N=93
- Average age 25.4 years old, range = 21-to-51 years
- Male 33%
- Female 67%
- White not of Hispanic origin 83%
- Asian or Pacific Islander 12%
- Black not of Hispanic origin 3%
- Hispanic 2%



Sample Health Science College	Percent of Sample Enrolled
Dentistry	8%
Health and Rehabilitation	12%
Medicine	38%
Nursing	20%
Optometry	3%
Pharmacy	17%
Veterinary Medicine	2%



 At baseline, 25.6% of the graduate students reported elevated symptoms of depression with 4.3% answering positively for suicidal ideation, and 22.6% reported elevated symptoms of anxiety

Results on the PHQ-9

- 40% of students had elevated depressive symptoms at baseline
- 32% had mild depressive symptoms (score of 5-9)
- 3% had moderate depressive symptoms (score of 10-14)
- 2% had moderately severe depressive symptoms (score of 15-19)
- 3% had severe depressive symptoms (score of 20-27)



- 28% of students had elevated anxiety symptoms on the GAD-7 at baseline
- 21% had mild anxiety
- 7% had moderate anxiety
- The average BIPS score was 18 (Range 0-36)

- Average BMI was 25.00 for female participants and 23.79 for male participants
- 25.3 % were classified as overweight and 12.0% as obese
- Healthy Lifestyle Beliefs (Range 5-80) and Behaviors (Range 5-75) average scores were 63.25 and 54.53 respectively

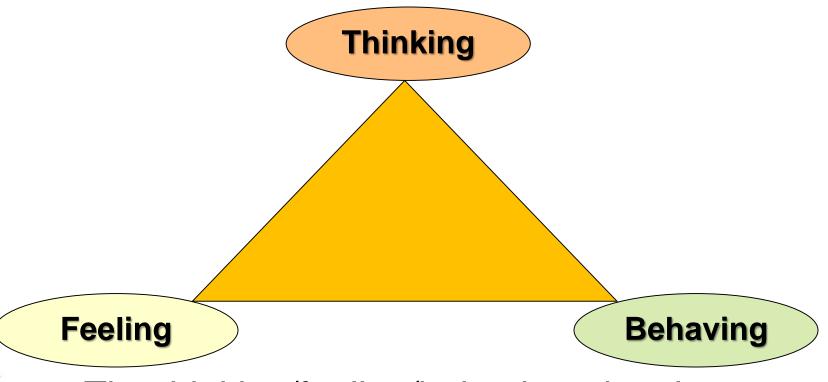
- Other biometric results indicated that 19.3% of the students were at or above 200 mg/dL on total cholesterol
- One participant had a Hemoglobin A1c greater than 5.7%
- Average systolic and diastolic blood pressures were 114 and 70 mmHg respectively.

Conclusions

- Findings support the need to screen entering health sciences students for depression, anxiety, healthy lifestyle beliefs and behaviors along with obtaining BMI and a biometric screen
- Students with elevated depressive and anxiety symptoms need to receive evidence-based interventions, specifically cognitive-behavioral therapy (CBT) based programs

Cognitive Behavioral Therapy

CBT Consists of cognitive restructuring, problem solving and behavioral change



The thinking/feeling/behaving triangle

The ABCs are Taught in CBT

STRESSOR (Activator)



NEGATIVE THOUGHT TO STOP (Belief)

REPLACE THE NEGATIVE WITH A POSITIVE THOUGHT



POSITIVE EMOTION & BEHAVIOR





Homework

An essential component of CBT, allows the individual to put into practice the skills they are learning

Homework reinforces the content and allows practicing of the skills

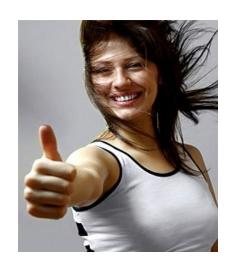


Conclusions

- As the transition into graduate school is stressful, students need to be supported to engage in healthy lifestyle behaviors, which could lead to higher academic success and the prevention of mental and physical health disorders during and following graduate school
- Future studies are needed with this population to further explore these variables and determine their predictors as well as test interventions to improve outcomes

Questions/Discussion





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