Title:
Findings from the Building Healthy Academic Communities Million Hearts® Challenge Program

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Session Title:
Enhancing Health/Wellness of Students, Faculty, and Staff in Academic Settings: Evidence-Based Strategies for Success

Slot:
F 17: Friday, 28 July 2017: 2:30 PM-3:45 PM
Scheduled Time:
3:10 PM

Keywords:
ABCS, Heart and Million Hearts

References:


Abstract Summary:
Cardiovascular disease (CV) is the leading cause of death for men and women in the U.S. The Million Hearts initiative emphasizes evidence-based interventions and education to increase healthy lifestyles to reduce morbidity and mortality. This study investigates the relationships of online, educational modules on participant health outcomes, behaviors and stress.

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<tr>
<td>1) The learner will describe the national Million Hearts initiative key intervention components.</td>
<td>a. The background and purpose of the Million Hearts initiative will be described. b. The intervention components, ABCS, will be described.</td>
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</table>
2) The learner will understand and describe the BHAC and OSU Million Hearts Challenge program components

a. The purpose of the BHAC initiative will be described.
b. The OSU wellness program components will be described.
c. The MH educational modules as a part of both the BHAC and OSU Challenge Program will be described and 1-2 examples of module content will be shared with the audience.
d. The methods of program dissemination will be described.

3) The learner will understand the relationships among stress and key health outcomes.

a. The following descriptive data of participants will be shared: participant demographics (age, race, gender); participant health status (BMI, diagnosis of chronic condition, perceived stress level); and healthy behaviors (amount of physical activity, consumption of fruits/vegetables).
b. The following relational data of participants will be shared: perceived level of stress correlated with demographics, health status, and healthy behaviors.

Abstract Text:

**Purpose:** Cardiovascular disease (CV) is the leading cause of death for both men and women in the United States. The Million Hearts initiative emphasizes consistent, evidence-based interventions and education to increase public awareness of preventive lifestyle modifications to reduce CV morbidity and mortality by focusing on the “ABCS” of care. “A” is for aspirin therapy, “B” is for blood pressure control, “C” is for cholesterol management and “S” is for smoking cessation. Targeting management via the ABCS has been shown to prevent more deaths than other clinical preventive services.

**Methods:** A prospective study design was used to examine trends and correlations among the data. Institutional and individual members of the National Consortium for Building Healthy Academic Communities (BHAC) were asked to participate in the program. Participants from those academic institutions were able to access the free, online program via the e-learning website of a college of nursing housed within a large public land grant University in the mid-west region of the United States. Participants who opted to enroll in the BHAC Million Hearts program joined an online educational program that consisted of the following: 1) an overview of the national Million Hearts initiative; 2) understanding their biometric numbers; 3) improving CV health through healthy lifestyle behavioral changes and 4) managing stress through stress reduction techniques. An anonymous 12-item survey was developed and administered to all participants after they completed the education content.

**Results:** Analysis was completed for the BHAC Consortium as a whole, and for results at the host institution for BHAC, a majority of the participants were female (81%), between the ages of 20-29 (60%), white (65%), and a spouse/same-sex domestic partner of a faculty/staff member (61%). A majority were non-smoking (85%), ate 2-3 servings of fruits/vegetables per day (47%) and exercised less than 75 minutes per week (32%). 72% responded with no diagnosis of a chronic condition, had a normal body mass index (50%) and scored a 5-8 on the perceived stress scale (40%). High level of stress was significantly correlated with race (p=.02), participants diagnosed with at least one chronic condition (p<.0001), a BMI of 25-29.9 (p=.04), and those that ate 0-1 servings of fruit/vegetables per day (p=.0002). For the sub-category of the host institution, a majority of the participants were female (74%), between the
ages of 30-39 (30%), white (83%), and a staff member (62%). A majority were non-smoking (90%), ate 3-4 servings of fruits/vegetables per day (43%) and exercised less than 75 minutes per week (32%). 68% responded with no diagnosis of a chronic condition, had a normal body mass index (38%) and scored a 0-4 on the perceived stress scale (39%). High level of stress was significantly correlated with being a smoker (p=.05), participants diagnosed with at least one chronic condition (p<.001), and a BMI of over 30 (p=.05).

**Conclusion:** The Million Hearts national initiative, as outlined by the intervention components "ABCS" can be a successful method for educating and encouraging populations to adopt healthy lifestyle behaviors. Elevated perceived levels of stress are often observed with the diagnosis of a chronic condition. Reducing stress and managing chronic condition(s) through behavior change is an ideal way to improve population health.