

# The Impact of Million Hearts® Screening and Education in Ohio Adolescents



THE OHIO STATE UNIVERSITY  
COLLEGE OF NURSING

Megan Amaya, PhD, CHES; Kate Gawlik, DNP, RN, CNP, ANP-BC, FNP-BC; Bernadette Melnyk, PhD, RN, CPNP/PMH

## Introduction/Background

- Many **lifestyle behaviors** that contribute to or reduce risk for chronic disease and disability in adulthood are developed in adolescence.<sup>1</sup>
- The **Ohio Adolescent Health Partnership**, in collaboration with the **Ohio Department of Health and Child Health Program** identified behavioral health, physical activity and nutrition as key areas for their 2013-2020 strategic plan to improve adolescent health.<sup>2</sup>
- **Million Hearts®** is a national initiative from the Department of Health and Human Services, that promotes the ABCS(s). The ABCS(s) are evidence-based strategies that have been shown to reduce the risk of cardiovascular disease by 80%. The components of the **Million Hearts® ABCS(s)** are: appropriate aspirin therapy, blood pressure control, cholesterol management, smoking cessation and stress reduction\*. In addition, the importance of self-care through healthy eating and physical activity is emphasized.<sup>3</sup>

## Aims/Purpose

The purpose of the Wellness on Wheels project is to screen and educate Ohio adolescents on the ABCS(s) of the Million Hearts® initiative and emphasize the importance of self-care through healthy eating, physical activity and stress reduction.

## Methods

Interprofessional teams comprised of faculty and students from Ohio State's health sciences colleges participated in one day bus tours across the state to educate Ohio schools on the Million Hearts® initiative and provide resources for heart healthy living.  
Sample: Adolescents enrolled from a suburban and a rural high school (n=77 and 118, respectively)  
Parental permission and individual consent were required. De-identified data were collected.

## Measurement

- Measures: screenings were conducted on-site in a confidential setting.
  - Demographics
    - Low income, public school
      - 58 F, 19 M, 5 N/A
      - Average Age 14.67
    - Middle income, private school
      - 65 F, 53 M, 2 N/A
      - Average Age 14.71
  - Height, Weight, Body Mass Index
  - Blood pressure
  - Generalized Anxiety Scale (GAD-7)
  - Patient Health Questionnaire for Adolescents (PHQ-A) for ages 11-17

## Results/Findings

### Generalized Anxiety Disorder Scale (GAD-7)

**Scoring: 5-mild, 10-moderate, 15+ - severe**

- Public, average 7.8
- Private, average 5.6

### Personal Health Questionnaire (PHQ-A)

**Scoring: 5-9-mild, 10-14-moderate, 15-19 moderate severe, 20-27 severe**

- Public, average 7.7
- Private, average 5.2

## Conclusions

The Wellness on Wheels event, focused on the ABCS(s) and the importance of self-care, is a useful strategy to provide valuable health information not only to adolescents but their caretakers, in hopes of reducing the risk of chronic illness in adulthood. In addition, community partnerships are critically important to improving adolescent health and wellness.

## References

- 1 National Research Council and Institute of Medicine. (2009c). Adolescent health services: Missing opportunities. Committee on Adolescent Health Care Services and Models of Care for Treatment, Prevention and Healthy Development. R.S., Lawrence, J. Appleton Gootman, and L.J. Sim, Editors. Board on Children, Youth and Families. Division of Behavioral and Social Sciences and Education. Washington DC: The National Academies Press.
- 2 Ohio Adolescent Health Partnership Strategic Plan 2013-2020. Retrieved May 2017. [http://www.ohioadolescenthealth.org/uploads/3/1/1/9/31199847/ohio\\_adolescent\\_health\\_partnership\\_-\\_strategic\\_plan\\_2013-2020.pdf](http://www.ohioadolescenthealth.org/uploads/3/1/1/9/31199847/ohio_adolescent_health_partnership_-_strategic_plan_2013-2020.pdf)
- 3 <https://millionhearts.hhs.gov/index.html> Retrieved May 2017.



\*added by The Ohio State University