

Improving the Health of Populations Through an Academic-Community Partnership

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Introduction

- Heart disease (HD) is the **#1 killer in North America among both men and women.**
- HD is the leading cause of health disparity - low income individuals are more likely to suffer from high blood pressure, high cholesterol, heart attack, and stroke.
- 1 in 3 U.S. adults (about 75 million people)** have high blood pressure. Only about half (54%) of these people have their high blood pressure under control.
- African Americans and Hispanics are more likely to die following a stroke than whites.
- African Americans have the highest rate of high blood pressure and develop high blood pressure earlier in life.
- In Western New York (WNY, USA) a significant disparity of cardiovascular disease and stroke exists in the African-American versus white community.

Academic-Community Partnership formed Health Coalition

- Interprofessional Million Hearts Screening Initiative implemented.
- Coalition members:
 - University at Buffalo Schools of Nursing (SON), Exercise and Nutrition Science, Pharmacy and Medicine
 - Millennium Collaborative Care (Delivery System Reform Incentive Program)
 - Greater Buffalo United Ministries
 - Multicultural Nursing Student Association (SON)
- Aim:** "to improve health behaviors and outcomes of a targeted underserved, and disparate population in the Greater Buffalo and WNY region"
- Goal:** "empower the community to achieve the highest level of health and wellness through engagement with the community, healthcare professionals and community service organizations"
- Million Hearts® Initiative Goals:
 - To **prevent** 1 million heart attacks and strokes by 2017
 - To **prioritize** community health, optimization of care, and health outcomes by 2022
 - To **empower** and educate Americans to make healthy choices
 - To **target** by focusing on the "ABCs" of heart health

Methods

- Million Hearts® curriculum was integrated into Health Promotion Courses in the SON, as well as courses in the Exercise and Nutrition Science, Pharmacy and Medical Schools.
- Students received instruction on cultural sensitivity and guidelines for working with diverse populations in the community.
- Screenings included height, weight, BMI, B/P, history of smoking, history of blood pressure medication, knowledge of cholesterol level, insurance status, current primary care provider, stress, and a patient activation measure (PAM).
- Nursing faculty provided onsite screening supervision and assisted with screening evaluation and healthcare referral for primary care follow-up and obtaining insurance.
- Parish nurses, pastors, and a community event representative provided follow-up with individuals after the screening event.
- Health Education and Health Promotion Interventions
 - Nursing and Exercise Science students:
 - Conducted screenings
 - Provided health education on exercise, stress management, and smoking cessation
 - Nutrition Science students:
 - Provided general and targeted nutrition counseling to promote heart health and weight management
 - Pharmacy students:
 - Provided guidance and education on currently prescribed medications
 - Medical students:
 - Provided heart health education



Results - Quantitative

- Million Hearts® screenings conducted at 16 different community locations including churches, charter schools, and community events, with one event sponsored by the University at Buffalo and one event sponsored by the American Diabetes Association
- Over 350 community members screened
- Majority female
- Systolic blood pressure:

Class	Range	Percent
Normotensive	SBP <120	21.88%
Pre-hypertensive	SBP 120-139	48.21%
HTN Stage I	SBP 140-159	24.10%
HTN Stage II	SBP >160	5.8%
- Mean systolic 134.13, mean diastolic 80.78
- >80% were overweight or obese
- 42.3% low or no stress

Results - Qualitative

- Focus groups were conducted with coalition and student partners
- Coalition members viewed the partnered initiative a success
 - Events modeled positive health care interactions and empowered participants
 - Events harnessed the power of many disciplines and provided a "unique and synergistic inter-professional collaboration"
 - Events provided an opportunity for providers to address social determinants of health at the local community level
- Students viewed the partnered initiative a success
 - Provided opportunity to increase local community awareness of cardiovascular disease and heart health promotion
 - Increased therapeutic communication, interviewing, screening, and health education knowledge and skill set with a diverse, underserved population
 - Gained increased comfort in addressing sensitive issues such as depression, stress, weight and smoking

Community Impact

- Millennium Collaborative Care and Partners received P2 of Western New York's "Spotlight on Population Health (SOPHI) Award for Chronic Disease Management" (2016)
- Extensive media coverage promoting heart health awareness and need for screening

