Eskenazi Health Hypertension Group Education Program

Problem

Lifestyle factors, including exercise, diet, smoking, and stress, are known to affect health and risk for cardiovascular disease. About 78 million American adults—1 in every 3—have hypertension (defined as blood pressure greater than or equal to 140/90 mmHg or taking antihypertensive medication).[1,2] Lifestyle interventions may contribute to improved hypertension and cardiovascular disease outcomes and are an important resource for linking patients in clinical care environments with community resources using public health strategies.

Project

The Eskenazi Health Hypertension Group Education Program (EHHGEP) is a lifestyle program run by the Indianapolis-based Eskenazi Health system (EH) and is conducted in five Federally Qualified Health Centers within the health system. From 2017 to 2019, the program has served 297 participants.

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Overview

The Eskenazi Health Hypertension Group Education Program (EHHGEP) was developed to engage and educate hypertensive patients in the Eskenazi Health system (EH) and includes three weekly group education sessions with interactive elements to engage participants. Each session lasts 2 hours and includes discussion opportunities and a cooking demonstration. In the first class, a registered dietitian (RD) welcomes the group, conducts the pretest, and describes how sodium affects blood pressure. A registered nurse (RN) then gives an introductory lesson on hypertension. The second class is led by a pharmacist and wellness coach. They discuss the various types of hypertension medications and share tailored exercises and physical activity options that can be done at home. During the third class, an RN outlines the risks and complications of hypertension and provides recommendations on how to reduce sodium in one's diet. At the end of the third class, participants review topics learned, complete a post-test, and graduate. Following completion of the program, participants can opt to sign up for a 30-minute individual follow-up visit with an RD and a pharmacist for a blood pressure and weight check, medication review, follow-up on behavioral goals, and continued education.

Key Characteristics of the EHHGEP

- Three-week group education classes and curriculum
- Use of a multidisciplinary team
- Personalized follow-up provider visit

Intended Participants

The program primarily focuses on African American people with lower income within the EH who have been diagnosed with hypertension. The program was initially implemented at the Forest Manor clinic. It has since expanded to four other clinics in the Indianapolis area. Based on reported data, 96.6% of participants whose blood pressure was known had elevated levels (>120 mmHg/80 mmHg), and the mean age was 59 years old.

Baseline Participant Demographics

Characteristics	No. Participants (%)
Gender	
Male	94 (31.7)
Female	203 (68.4)
Total	**297**
Ethnicity	
Hispanic or Latino	8 (2.7)
Non-Hispanic	284 (97.3)
Total	**292**
Race	
African American	260 (90.0)
White	26 (9.0)
Other	3 (1.0)
Total	**289**

Goals and Expected Outcomes

The goals of the EHHGEP include sustained hypertension control, achievement of personal health goals set by each participant, and improved quality of life among participants. The program also hopes that participants will share the information learned in the program with their community. The program aligns with the philosophy of the health system, using nontraditional health care providers to implement a lifestyle medicine model.

Progress Toward Implementation

Much of the program's progress may be due to adapting this program from a diabetes self-management education and support (DSMES) model, incorporating a multidisciplinary approach, and sustaining stakeholder support and buy-in. The EH's DSMES program models utilize evidence-based practices, program staff and participants observed health improvements. Modifying an already successful program to address hypertension was done to improve hypertension control rates within the health system. The data suggest that stakeholder support contributes to the success of the program, as there is a high level of support from health system leadership. They support the program through funding, nonmonetary resources such as classroom space and pharmacy vouchers, and the inclusion of this program in future strategic planning for the health system. Physicians support EHHGEP through awareness of its effectiveness and referring their patients to participate. Program staff also appear to buy into the program, showing excitement about teaching sessions, and have anecdotally observed successes among individual participants. Lastly, participants themselves are highly engaged and invested in EHHGEP, forming a camaraderie that motivates most to complete the program. As a result, they have a better understanding of hypertension and how to manage it at home. The program empowers them to take ownership of their health.

Reach and Impact

Overall, the EHHGEP demonstrated effectiveness in sustaining hypertension control among participants. Blood pressure control rates increased from 28.4% at baseline to 61.3% by the end of the program. At the 12-month chart review, control rates had increased to 74.5%, a difference of 46.1 percentage points from baseline.

Change in Mean Blood Pressure (BP) Levels from Baseline to 12-Month Chart Review

Change in Mean BP Levels	Baseline Mean (SD), mmHg	12-Month Screening Mean (SD), mmHg	% Change from Baseline
Systolic BP	149.9 (17.7)	131.7 (16.4)	**–12.1**
Diastolic BP	86.6 (11.2)	78.5 (10.3)	**–9.4**

Participants also showed improvements in other metrics as a result of the program. Participants lowered their body mass index (BMI) by 0.3 kg/m^2 by the end of the program and sustained a decreased BMI at 12 months. Additionally, most participants met their goals by the end of the program, with 95.0% achieving their healthy eating goal and 86.5% achieving their activity goal. Participants also increased their health knowledge and confidence significantly.

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This document does not constitute an endorsement of any organization or program by CDC or the federal government, and none should be inferred.

[1] Wall HK, Ritchey MD, Gillespie C, Omura JD, Jamal A, George MG. Vital signs: recent prevalence of key cardiovascular disease risk factors for Million Hearts 2022 — United States, 2011–2016. *MMWR*. 2018;67:983–991.

[2] Fryar CD, Ostchega Y, Hales CM, Zhang G, Kruszon-Moran D. Hypertension Prevalence and Control Among Adults: United States, 2015–2016. National Center for Health Statistics Data Brief, no 289. Hyattsville, MD: National Center for Health Statistics; 2017.