Introduction

- Hypertension is a significant public health concern.
- An estimated 1.13 billion people worldwide have hypertension (World Health Organization, 2019).
- People of African descent are disproportionately impacted by hypertension, compared with other racial and ethnic groups (Muntnen, 2017).
- Lack of education- barriers that high-risk West Africans face to controlling their blood pressure.
- Hypertension educational programs among high-risk population is essential to managing blood pressure.

Background and Significance

- People of African descent are at a greater risk of non-fatal stroke, fatal stroke, cardiovascular disease death and end-stage kidney disease (Lackland, 2015).
- The mortality rate is 4 to 5 times greater in people of African descent compared to their white counterparts (Lackland, 2015).
- Studies have shown that hypertension is poorly managed among blacks due to limited access to medical care, cost of treatment, and educational deficits (Still, Ferdinand, Ogedegbe & Wright, 2015).

Aims

- Improve blood pressure control in West African immigrants.
- Increase hypertension knowledge.
- Increase adherence to lifestyle modification and anti-hypertensive medications.

Methodology

- **Design:** A Quasi experimental using pre and post test.
- **Setting:** West African church in central NJ.
- **Participants:** Male or female West African immigrants between the ages of 21-85 who self-reported to have a preexisting diagnosis of HTN.
- **Sample Size:** 14 participants met inclusion criteria and signed consent.

Interventions:

**Phase I:**
- Week 1.
  - Recruitment-pre-study blood pressure collected, demographic questionnaires.
- Week 2.
  - Pre-intervention blood pressure recorded twice a day.
  - Pre-intervention diet recorded daily.
- Hypertension knowledge and lifestyle modification (HELM) pretest and Hill-Bone Medication adherence pretest.

**Phase II:**
- Week 3.
  - 45 minutes HTN education presentation via zoom introduction to the toolkit.
  - Proper education of measuring blood pressure-one to one session- teach back.

**Phase III:**
- Week 4, 5, 6.
  - Post intervention blood pressure recorded twice a day.
  - Weekly follow up phone calls- additional support, adherence to lifestyle modification and medication adherence reinforce.
- Week 6: hypertension knowledge and lifestyle modification, and medication adherence post test administered.

Components of the toolkit:

- Blood pressure monitor.
- 30 minutes West African gospel praise workout video.
- Glancer adult portion control plate.
- Blood pressure educational materials.

Outcome measures:

- OMRON Blood pressure monitor.
- HELM scale to assess hypertension knowledge and lifestyle management.
- Hill-Bone scale to assess medication adherence.

Data Analysis

- Descriptive statistics was used to describe the sample size using frequencies and percentages.
- The non-parametric Wilcoxon signed rank sum test was performed for pre- and post-intervention differences of three outcomes: hypertension knowledge/lifestyle questionnaire score, the medication adherence questionnaire score, and blood pressure measurements.

Results

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References


Discussions

- Implications for clinical Practice:
  - Recommend home blood pressure monitoring as part of a multifaceted approach to manage hypertension in all primary care settings.
  - Introduce weekly follow-up calls after office visits to reinforce hypertension knowledge, medication adherence, and healthy lifestyle habits.
  - Individualize patient care plan to fit cultural needs.

- Implications for Health Care Policy:
  - Hypertension awareness seminar nationwide targeting high risk population.

- Implications for Quality and Safety:
  - Education lowers risk of cardiovascular mortality and morbidity.
  - Improve patient outcomes.

- Economic Implications:
  - Controlled blood pressure can lower the nation's financial burden.

Using a Culturally Sensitive Lifestyle Modification Toolkit To Manage Hypertension Among West African Immigrants

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