

The University of San Francisco

## USF Scholarship: a digital repository @ Gleeson Library | Geschke Center

---

Doctor of Nursing Practice (DNP) Projects

Theses, Dissertations, Capstones and Projects

---

Fall 12-2021

### PROVIDING HYPERTENSION EDUCATION TO AFRICAN IMMIGRANTS AT A SOUTHERN CALIFORNIA CONGREGATION DURING THE COVID-19 PANDEMIC

Esther Oshunluyi  
iyabolu@yahoo.com

Follow this and additional works at: <https://repository.usfca.edu/dnp>



Part of the [Nursing Commons](#)

---

#### Recommended Citation

Oshunluyi, Esther, "PROVIDING HYPERTENSION EDUCATION TO AFRICAN IMMIGRANTS AT A SOUTHERN CALIFORNIA CONGREGATION DURING THE COVID-19 PANDEMIC" (2021). *Doctor of Nursing Practice (DNP) Projects*. 215.

<https://repository.usfca.edu/dnp/215>

This Project is brought to you for free and open access by the Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Doctor of Nursing Practice (DNP) Projects by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact [repository@usfca.edu](mailto:repository@usfca.edu).

**Providing Hypertension Education to African Immigrants at a Southern California  
Congregation during the COVID-19 Pandemic**

Esther Oshunluyi, MSN, RN, PHN

University of San Francisco

N749: Qualifying Project

Dr. Francine Serafin-Dickson, DNP, MBA, BSN, CNL

August 1, 2020

**Key Words:** hypertension, education, African Americans, immigrants

Word count:1611

### Abstract

**Objective:** To review methods that could contribute to improved knowledge of hypertension among African immigrants at a California congregation. The difference in the management and outcomes of hypertension between African Americans and Whites is most disparate in cardiovascular disease, with lack of education documented as a major contributor for African Americans (Lackland, 2014) and African immigrants (Turson-Ocran et al., 2020). African Americans differ slightly in culture, health, and migration history from Africans who are 21st century immigrants from Africa (African immigrants); however, there are more similarities than differences between them (Terrazas, 2009). This brief report will describe a Doctor of Nursing Practice project to address lack of hypertension knowledge among African immigrants.

**Design:** This project will utilize a focus group approach; and pre and post survey tools to assess and evaluate knowledge.

**Setting:** A church in Southern California of about 150 congregants.

**Participants:** Twenty adult African immigrants diagnosed with or self-reported hypertension.

**Methods:** As part of African culture, storytelling will be utilized in the delivery of hypertension education. Pre- and post-intervention surveys will be used to assess and evaluate knowledge.

**Results:** Participants will report knowledge and consequences of uncontrolled hypertension before and after the education.

**Conclusion:** Findings may demonstrate the importance of evidence-based hypertension education among African immigrants in a culturally important setting like a church, identify barriers and facilitators of hypertension self-management, and may suggest a need for redesign of hypertension education strategies in African immigrants, such as storytelling which considers the importance of culture in health.

## **Providing Hypertension Education to African Immigrants at a Southern California Congregation during the COVID-19 Pandemic**

### **Introduction**

Hypertension (HTN) is a one of the major risk factors for cardiovascular diseases. The prevalence of HTN in African Americans (AAs) in the United States is among the highest in the world (American Heart Association [AHA], 2017). Reduction in cardiovascular disease (CVD) events has been documented among Americans in general, but the same cannot be said for AAs and other ethnic minorities (Mensah et al., 2017). Approximately 75% of AAs are likely to develop high blood pressure by the age of 55, compared to about 50% of their White counterparts (Thomas et al., 2018).

Although prevalence of cardiovascular disease is slightly lower in African immigrants (AIs), they are still at risk because of lack of health education and access to healthcare (Turson-Ocran et al., 2020). AIs tend to develop high blood pressure earlier in life and develop complications from uncontrolled HTN earlier than Whites and Mexican Americans (Flack et al., 2010). Immigrants from Africa are among the fastest growing groups in the United States, yet they are not as represented in healthcare research and tend to be grouped as AAs or Blacks, minimizing any idea that cultural differences exist (Adekeye et al., 2018). Lack of knowledge about HTN, insurance and primary care provider; and perceived cost of medical treatment, are reported as some of the barriers to healthcare access among African immigrants (AIs) living in the United States (Adekeye et al., 2018).

The statistics for AIs who reside in southern California is not readily available; however, the following factors are known about the congregation of interest: (a) the majority have some college education; (b) some grandparents living with their adult children are not educated; (c)

lack of education in grandparents plays a significant role in the inability to control their blood pressure; (d) the majority of AIs are religious and go to their places of worship weekly; and (e) AIs love storytelling and incorporate it into their lifestyle in the United States.

A reduction in blood pressure and improvement in lifestyle satisfaction were observed with coaching by faith community nurses because participants felt the coaching was done in an environment of support (Cooper & Zimmerman, 2017). Providing HTN education in an environment the majority of AAs consider safe, like the church, and with the presence of religious leaders whom they trust improves compliance in self-care (Greer & Ostwald, 2015). Storytelling is a culture AAs use to share information and to educate themselves (Bokhour et al., 2016). AIs, like AAs use proverbs and adages during storytelling sessions to describe eating habits, herbs, activities and behaviors that impact health. They also use group prayers to address health issues as part of their belief (Adekeye et al., 2018). Therefore, storytelling could be incorporated into a whole-person health model that will resonate with AIs to change behavior to improve their health. Whole-person health is a person-focused, team-based approach to patient care that takes into consideration the determinants of health, joint-decision making, support system and the patient's experience (Omboni, 2019). The provision of culturally tailored, evidence based HTN education in a church setting using a storytelling approach may be a complimentary method to include in the management of HTN in AIs because of their culture and belief in storytelling (Bokhour et al., 2016).

The purpose of this project is to apply evidence that supports the benefits of providing HTN education to AIs in a congregational setting. Studies have demonstrated HTN education is successful in improving HTN knowledge among AIs, and the church is a comfortable setting to deliver such education where AIs regularly meet (Aycock et al., 2013). The strategies of

educating both AAs and AIs in churches have proven to improve knowledge (Bokhour et al., 2016; Aycock et al., 2013). Improving HTN education among AIs is important given the prevalence of HTN among Blacks in America. The more people know about their disease condition, the better they can care for themselves, live improved quality of life, and reduce their comorbidities.

### **Methods**

The demographics of the population will be identified by providing a questionnaire (see Appendix A), asking the following: age, sex, educational level, if they were born in Africa, when they migrated to the United States, if they self-report or have been diagnosed with HTN, and if they are interested in participating in the project. The project will be implemented at the Fellowship Hall of Christ Apostolic Church in California. The church hall has a capacity of 150; therefore, an estimated 20 participants and four volunteers could sit in the hall while practicing social distancing of six feet apart due to the COVID-19 precautions (Centers for Disease Control and Prevention [CDC], 2020). Masks, hand washing supplies, and hand sanitizer will be provided for participants and volunteers (CDC, 2020).

Providing the presentation on a virtual platform, via zoom will be considered as an alternate option if local or state restrictions for gatherings because of COVID-19 are still in place during the project implementation. Emails of participants will be collected; questionnaires and surveys will be sent via emails if the alternative option would have to be implemented. The focus of the intervention will be adults aged 21 years and older with HTN, born in Africa, and living in California. A virtual meeting via zoom will be held with the leadership and members of the church to discuss the project and to provide opportunities for questions and answers. A letter of support for the project will be obtained from the church leadership.

A pre- and post-knowledge survey, *Check Your High Blood Pressure IQ* by National Heart, Lung, and Blood Institute (NHLBI, 1994) will be provided to assess participants' baseline knowledge and post-education knowledge (see Appendix B). This is a valid and reliable tool which has been used in previous studies with African American samples, which are the most similar population to African immigrants (Scisney-Matlock et al., 2004). Education will be provided using the National Heart, Lung, and Blood Institute's (NHLBI, 2019) *Small Steps to Take Control* tool (see Appendix C), incorporated in a storytelling format.

The educational tool addresses HTN, signs and symptoms, risks factors, health behaviors, lifestyle changes, and regular blood pressure monitoring. The education will be provided incorporating African proverbs, adages, and Bible verses about health and healthy behaviors. African culture like special greetings for older participants will be observed before the training begins. Participants will share their health experiences and encourage each other during the training, beginning from the older participants as a mark of respect.

A post-project questionnaire will be provided to evaluate the participants' experience of the project, identify the health issues that are most important to them, and ask them to quantify how they will apply what they learned to their personal health practices (see Appendix D). The demographic and post-project questionnaires will be developed by the student and verified by a doctoral-prepared faith community nurse for content validity. The last four digits of participants' phone numbers will be used as their identification. Participants' identification will be coded to ensure a match to participants who took the demographic, pre-education and post-education surveys. All participants' information will be kept confidential. Participants' responses will be viewed by student, and findings will be shared with the congregation in the final report in an aggregate format to protect the privacy of individual participant.

### **Conclusion**

The purpose of this project is to apply educational tools that will support the benefits of providing HTN education to AIs in congregational settings. The provision of culturally tailored, evidence based HTN education in a church setting using a storytelling approach may be a complimentary method to add to the management of HTN in AIs because of their culture and belief in storytelling. AAs appreciate strong sustainable partnerships between healthcare providers and their community if culturally appropriate communication is utilized (Bokhour et al., 2016). This project will begin to bridge HTN knowledge among AIs. The more people know about their disease condition, the better they can care for themselves, live an improved quality of life, prevent diseases and complications, and reduce their co-morbidities.

A future intervention will include conducting a follow-up survey (may be by phone calls) to know how participants are applying their learning to self-care and the recipients of the education, who have successfully managed their BP to create a forum to share the stories in a cultural tradition.



## References

- Adekeye, O. A., Adesuyi, B. F., & Takon, J. G. (2018). Barriers to healthcare among African immigrants in Georgia, USA. *Journal of Immigrant and Minority Health, 20*(1), 188-193. <https://doi.org/10.1007/s10903-017-0549-9>
- American Heart Association. (2017, July 11). Most black adults have high blood pressure before age 55. *ScienceDaily*. [www.sciencedaily.com/releases/2018/07/180711093140.htm](http://www.sciencedaily.com/releases/2018/07/180711093140.htm)
- Aycock, D. M., Kirkendoll, K. D., & Gordon, P. M. (2013). Hypertension education and screening in African American churches. *Journal of Community Health Nursing, 30*(1), 16-27. <https://doi.org/10.1080/07370016.2013.750197>
- Bokhour, B. G., Fix, G. M., Gordon, H. S., Long, J. A., DeLaughter, K., Orner, M. B., Pope, C., & Houston, T. K. (2016). Can stories influence African-American patients' intentions to change hypertension management behaviors? A randomized control trial. *Patient Education & Counseling, 99*(9), 1482-1488. <https://doi.org/10.1016/j.pec.2016.06.024>
- Center for Disease Control and Prevention. (2020). *Considerations for wearing cloth face coverings: Help slow the spread of COVID-19*. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-guidance.html>
- Cooper, J., & Zimmerman, W. (2017). The effect of a faith community nurse network and public health collaboration on hypertension prevention and control. *Public health nursing (Boston, Mass.)*, *34*(5), 444–453. <https://doi.org/10.1111/phn.12325>
- Flack, J. M., Sica, D. A., Bakris, G., Brown, A. L., Ferdinand, K. C., Grimm, R. H., Hall, W. D., Jones, W. E., Kountz, D. S., Lea, J. P., Nasser, S., Nesbitt, S. D., Saunders, E., Scisney-Matlock, M., & Jamerson, K. A. (2010). Management of high blood pressure in Blacks: An update of the International Society on Hypertension in Blacks consensus statement.

*Hypertension*, 56(5), 780-800.

<https://doi.org/10.1161/HYPERTENSIONAHA.110.152892>

Greer, D. B., & Ostward, S. K. (2015). Improving adherence in African American women with uncontrolled hypertension. *Journal of Cardiovascular Nursing*, 30(4), 311-318.

<https://doi.org/10.1097/jcn.0000000000000152>

Lackland, D. T. (2014). Racial differences in hypertension: Implications for high blood pressure management. *American Journal of the Medical Sciences*, 348(2), 135-138.

<https://doi.org/10.1097/maj.0000000000000308>

Mensah, G. A., Wei, G. S., Sorlie, P. D., Fine, L. J., Rosenberg, Y., Kaufmann, P. G., Mussolino, M. E., Hsu, L. L., Addou, E., Engelgau, M. M., & Gordon, D. (2017). Decline in cardiovascular mortality: Possible causes and implications. *Circulation Research*, 120(2), 366-380.

<https://doi.org/10.1161/CIRCRESAHA.116.309115>

National Heart, Lung, and Blood Institute. (2019). *Healthy blood pressure for health hearts.*

*Small steps to take control.* <https://www.nhlbi.nih.gov/health-topics/all-publications-and-resources/healthy-blood-pressure-healthy-hearts-small-steps-take>

National Heart, Lung, and Blood Institute. (1994). *Check your high blood pressure IQ.* U.S.

Government Printing Office.

Omboni S. (2019). Connected Health in Hypertension Management. *Frontiers in cardiovascular medicine*, 6, 76. <https://doi.org/10.3389/fcvm.2019.00076>

Scisney-Matlock, M., Makos, G., Saunders, T., Jackson, F., & Steigerwalt, S. (2004).

Comparison of quality-of-hypertension-care indicators for groups treated by physician versus groups treated by physician-nurse team. *Journal of the American Academy of Nurse Practitioners*, 16(1), 17-23. <https://doi.org/10.1111/j.1745-7599.2004.tb00367.x>

Thomas S. J., Booth, J. N., Dai, C., Li, X., Allen, N., Calhoun, D., Carson, A. P., Gidding, S.,

Lewis, C. E., Shikany, J. M., Shimbo, D., Sidney, S., & Muntner, P. (2018). Cumulative incidence of hypertension by 55 years of age in Blacks and Whites: The CARDIA study.

*Journal of the American Heart Association*, 7(14).

<https://doi.org/10.1161/JAHA.117.007988>

Turkson-Ocran, R. N., Nmezi, N. A., Botchway, M. O., Szanton, S. L., Golden, S. H., Cooper, L.

A., & Commodore-Mensah, Y. (2020). Comparison of Cardiovascular Disease Risk

Factors Among African Immigrants and African Americans: An Analysis of the 2010 to 2016 National Health Interview Surveys. *Journal of the American Heart*

*Association*, 9(5), e013220. <https://doi.org/10.1161/JAHA.119.013220>

Appendices

Appendix A. Assessment, Interest, and Demographics Questionnaire

ASSESSMENT, INTEREST AND DEMOGRAPHIC QUESTIONNAIRE  
(This is voluntary)

Please, provide the last number of your phone in the box provided below:

--

CONGREGATIONAL ASSESSMENT					
How long have you been a member of the congregation?	<5 years	5-10 years	11-15 years	16-20 years	>20 year
How often do you attend church per month?	1-2	3-4	5-6	7-8	More than 8
INTEREST					
Would you be interested in participating in this study?	Yes	No	If No. You may not continue with the survey.	Thank you very much for your time.	
DEMOGRAPHY					
Place of birth	Africa	U.S.	Other	Name of Country	
How long have you been in the U.S.?	< 5 years	5-10 years	11-20 years	20 years	
What was your age when you got to the U.S.?	<16 years	17-20 years	21-30 years	31-40 years	>40 years
Age in years	<21	21-40	41-55	55-65	>65
Sex	M	F			
Formal Education	Less than high school diploma	High school diploma	Some college education	Bachelor's degree	Graduate degree

Relationship Status	Married	Partnered	Single	widowed	Other
Occupational Status	Full-Time	Part-Time	Self-employed	Unemployed	Student
When was last physical examination?	<6 months	7-12 months	2-3 years	3-5years	>5 years
Do you have health insurance?	Yes	No			
Family History of Hypertension	Yes	No			
Diagnosis of hypertension	Yes	No			
If we meet physically, would you be willing to have your Blood pressure checked?	Yes	No	B/P		
Self-reported blood pressure	<130/80	130/80 - 140/85	>140/85 - 160/90	>160/90	
Where was last self-reported BP checked?	Home	Doctor's office	Hospital		
When was last self-reported B/P checked?	< 1 week ago	1 - 4 weeks ago	2 - 6 months ago	> 6 months	
What do you consider to be your top health need of the congregation	Hypertension	Diabetes	Stroke	Mental Illness	Cancer
How would you rate your overall health?	Very good	Good	Fair	Bad	Very bad

Survey developed by student and will be reviewed by a doctoral-prepared registered nurse with expertise in faith-community nursing for content validity.

Appendix B. Pre- and Post-Knowledge Survey

Hypertension Knowledge Survey

		True	False
1	There is nothing you can do to prevent HBP.		
2	If your mother or father has HBP, you'll get it.		
3	Young adults don't get HBP.		
4	HBP has no symptoms.		
5	Stress causes HBP.		
6	HBP is not life threatening.		
7	BP is high when it is over 140/90 mmHg.		
8	If you are overweight, you are 2 to 6 times more likely to develop HBP.		
9	You have to vigorously exercise every day to improve your BP and health.		
10	Americans eat 2 to 3 times more salt and sodium than they need.		
11	Drinking alcohol lowers BP.		
12	HBP has no cure.		

Note: BP – blood pressure, HBP – high blood pressure, HTN – hypertension, n/a – not applicable

Reference:

National Institutes of Health National Heart, Lung, and Blood Institute. (1994). *Check your high blood pressure IQ*. U.S. Government Printing Office.

Please, provide the last number of your phone in the box provided below:

Appendix C. Education Tools

Healthy Blood Pressure for Healthy Hearts

# Small Steps To Take Control

Every time your heart beats, it pumps blood through vessels, called arteries, to the rest of your body. Your blood pressure is how hard your blood pushes against the walls of the arteries. If your blood flows at higher than normal pressures, you may have high blood pressure, also known as hypertension.

High blood pressure is a major risk factor for heart disease, which is the leading cause of death in the United States. Millions of Americans have high blood pressure, but many people who have it don't know it. That's why it is important to have your blood pressure checked at least once a year.

**High blood pressure is a "silent killer."**

It doesn't usually cause symptoms, but it can damage your body over time.

- If your blood pressure stays higher than 130/80 mm Hg for a period of time, it can cause serious health problems such as:
  - Heart disease
  - Stroke
  - Kidney disease
  - Dementia
- The only way to know whether you have high blood pressure is to have your blood pressure measured—a process that is simple and painless.
- If you find out you have high blood pressure, a health care professional can tell you how to prevent serious complications, including disability and premature death.

**Some things put us at greater risk for high blood pressure.**

- Age:** Blood pressure tends to get higher as we get older. But it can affect many of us when we're younger too.
- Genes:** High blood pressure often runs in families.
- Sex:** Before age 60, more men than women have high blood pressure. After age 60, more women than men have it.
- Race or ethnicity:** While anyone can have high blood pressure, African Americans tend to get it at a younger age. Among Hispanic adults, people of Cuban, Puerto Rican, and Dominican backgrounds are at higher risk.
- Lifestyle habits:** Eating too much salt, drinking too much alcohol, being obese, smoking, and not getting enough exercise can raise our blood pressure.

**What steps can you take to lower your blood pressure?**

**Set targets**

**Take control**

**Work together**

Work with your doctor to set blood pressure numbers that are healthy for you. Use our worksheet at [nhlbi.nih.gov/hypertension](http://nhlbi.nih.gov/hypertension) to track your progress.


Make lifestyle changes such as eating healthy, staying active, and watching your weight. If you smoke, quitting can help prevent heart disease and other complications of high blood pressure.

Studies show that if you engage in heart healthy activities with people at home, at work, in your community, or online, you have a better chance of staying motivated.


[www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)


**Taking the first step toward a healthy blood pressure.**


**Making lifestyle changes now** can help keep your blood pressure in a healthy range—whether you have high blood pressure or you're trying to prevent it. You don't have to make big changes all at once. Small steps can get you where you want to go. Here are some ideas to start. If you have elevated blood pressure and your doctor prescribes medications, make sure to take them as directed.





**Why should I change?**

 **Eat Healthy Foods**  
A diet **low in sodium and saturated fat**—like the DASH eating plan—can lower your blood pressure as effectively as medicines.

 **Move More**  
**Get at least 2½ hours of physical activity a week** to help lower and control blood pressure. That's just 30 minutes a day, 5 days a week.

 **Aim for a Healthy Weight**  
**Losing just 3 to 5 percent of your weight** can improve your blood pressure. If you weigh 200 lbs., that's a weight loss of 6 to 10 lbs.


 **Manage Stress**  
**Stress can contribute** to high blood pressure and other heart risks. If it goes on for a long time, it can make your body store more fat.

 **Stop Smoking**  
The **chemicals in tobacco smoke** can harm your heart and blood vessels. Quitting is hard. But many people have done it, and you can, too.


**How can I change?**

- Add **one fruit or vegetable** to every meal.
- If you get fast food, ask for a **salad instead of fries**.
- Give **Meatless Monday** a try.
- Commit to **one salt-free day a week**. Use herbs for flavor instead.
- Invite a colleague for **regular walks or an exercise class**.
- Give the elevator a day off and **take the stairs**.
- Take a break to **play outside** with your kids.
- March in place** during commercial breaks while watching television with your family.
- Join a **weight loss program** with a buddy.
- Sign "social support" agreements with** three family members or friends.
- Practice **mindful meditation** for 10 minutes a day.
- Share a **funny video, joke, or inspirational quote** with a friend.
- Talk with your doctor** if you have trouble managing stress on your own.
- Visit **Smokefree.gov** or **BeTobaccoFree.hhs.gov** to connect with others trying to quit.
- Sign up for a **support group** at work or your local clinic.
- Join a **sewing, knitting, or woodworking group** to keep your hands busy when you get urges.

**Take control of your blood pressure today! Learn more at [www.nhlbi.nih.gov/hypertension](http://www.nhlbi.nih.gov/hypertension)**



**NIH** National Heart, Lung, and Blood Institute



[www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)

National Heart, Lung and Blood Institute. (2019). *Small steps to take control*.  
<https://www.nhlbi.nih.gov/health-topics/all-publications-and-resources/healthy-blood-pressure-healthy-hearts-small-steps-take>



# 130 is too high. Do you know where you stand?



Join our Blood Pressure Check Challenge!

#CheckIt



130

[heart.org/bplevels](http://heart.org/bplevels)

Blood Pressure Category	Systolic mm Hg (Upper number)		Diastolic mm Hg (Lower number)
Normal	Less than 120	and	Less than 80
Elevated	120 – 129	and	Less than 80
High Blood Pressure (Hypertension) Stage 1	130 – 139	or	80 – 89
High Blood Pressure (Hypertension) Stage 2	140 or higher	or	90 or higher
Hypertensive Crisis (Consult your doctor immediately)	Higher than 180	and/or	Higher than 120

Appendix D. Post-Project Survey

POST-PROJECT QUESTIONNAIRE  
(This is voluntary)

Please, provide the last number of your phone in the box provided below:

Choose an option that best describes you	Minister	Head of department	Member	Guest	
How satisfied were you with your experience today?	Very satisfied	Satisfied	Somewhat satisfied	Not satisfied	
What do you consider to be your top health need?	Access to healthcare	Cost	Time	Other	
Which area would you like more education?	Diabetes	Arthritis	Anxiety & Depression	other	
As a result of this education, what is the first habit that affects your health that you would like to change?	Eating healthy	Staying active	Quit smoking	Aim for a healthy weight	Get social support
How long do you think you can keep working on the new habit?	1 week	1 month	3 months	6 months	
Which support(s) would help you maintain the new health habit?	Information	Group session	Prayers	Financial	
Will you be able to get the support(s) that would help you maintain the new health habit?					
Which spiritual activities would you need to help you maintain the health habit you are working on?	Prayers	Meditation	Group sessions	Other	

Which resources would you need to improve your health?					
--	--	--	--	--	--

Survey developed by student and will be reviewed by a doctoral-prepared registered nurse with expertise in faith-community nursing for content validity.