

## ORIGINAL RESEARCH

# Culturally tailored support to enhance DASH diet adherence in midlife and older African American women

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## ABSTRACT

**Objective:** This qualitative study examined the cultural food preferences and resources of African American women with self-reported hypertension to guide the development of a culturally tailored Dietary Approaches to Stopping Hypertension (DASH) manual.

**Methods:** Eleven women from a church congregation in the Southwest United States participated in two focus groups. Transcripts were analyzed using content analysis with independent coding and consensus validation.

**Results:** Six themes and four subthemes emerged: (1) providing perspectives on diet among older African American women; (2) understanding awareness and education needs regarding the DASH diet with subthemes of nutrition-skills and literacy-level adaptation; (3) community disparities in access to healthy foods with subthemes of affordability and nutrition and thrifty nutrition; (4) navigating tradition by addressing challenges of southern cooking heritage; (5) exploring the use of diverse home appliances in meal preparation; and (6) enhancing the DASH manual with tailored insights.

**Conclusions:** Findings emphasize the need for culturally tailored, literacy-sensitive, and resource-conscious materials to promote DASH adherence. A tailored manual may reduce structural and cultural barriers, improve dietary practices, and address hypertension disparities among African American women.

**Key Words:** African American women, Culturally tailored intervention, Dietary adherence, DASH diet, Food access, Health disparities, Hypertension, Qualitative research

## 1. INTRODUCTION

Hypertension, defined as blood pressure of  $\geq 130/80$  mm Hg or receiving antihypertensive therapy remains one of the most pressing public health challenges in the United States.<sup>[1]</sup> Among all women, African American women experience the highest prevalence of the disease, with 58.4% affected, which is more than any other racial or ethnic group.<sup>[2]</sup> This dispro-

portionate burden translates into higher rates of cardiovascular complications and mortality. In fact, African American women are nearly twice as likely to die from hypertension-related causes as their White counterparts, which underscore the urgency of addressing this disparity.<sup>[2]</sup> Early-onset hypertension is particularly concerning. In one study, Black women in young adulthood have higher-than-average blood

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pressures, and they are twice as likely to develop hypertension compared to White women.<sup>[3]</sup> This highlights the long-term and often devastating consequences of early, sustained exposure to high blood pressure.

The persistence of these disparities reflects the multifactorial nature of hypertension. Biological predispositions, such as increased salt sensitivity, contribute to elevated risk.<sup>[4]</sup> Psychosocial stressors, including chronic exposure to racial discrimination, caregiving responsibilities, and financial strain, further exacerbate blood pressure elevation.<sup>[5,6]</sup> Social determinants of health, including economic instability, food insecurity, and inadequate access to culturally competent healthcare, create additional barriers to effective prevention and treatment.<sup>[4]</sup> Lifestyle barriers, such as limited dietary education, limited access to healthy food options in neighborhoods, food insecurity, and time constraints that hinder healthy meal preparation, intensify these challenges.<sup>[7]</sup> These factors operate within a broader context of structural inequities in healthcare systems, which limit the reach and effectiveness of evidence-based interventions.<sup>[8]</sup>

Taken together, these data illustrate the magnitude and complexity of the hypertension burden among African American women. The high overall prevalence, steep age-related increases, elevated risk of stroke with early-onset disease, and interplay of biological, psychosocial, and systemic factors make it clear that hypertension in this population is not only a clinical condition but also a multifaceted public health crisis. Addressing this challenge requires targeted attention to the unique risk profiles and life circumstances of African American women to reduce their disparities and improve cardiovascular health outcomes.

This study aims to employ qualitative methods to identify cultural preferences, contextual factors, and resource considerations influencing dietary practices among midlife and older African American women with self-reported hypertension, and to translate these findings into a culturally and resource-tailored Dietary Approaches to Stopping Hypertension (DASH) educational manual. The DASH diet is an evidence-based eating pattern shown to reduce blood pressure and improve cardiovascular health. It emphasizes foods rich in calcium, potassium, and magnesium, such as fruits, vegetables, whole grains, low-fat dairy products, beans, and nuts. The DASH diet also limits foods high in sodium, saturated fat, and added sugars, including processed foods, fried items, and sugary beverages.<sup>[9,10]</sup> This qualitative study is novel. Unlike prior research that has focused on participants' learning and adherence to the DASH diet; the current study emphasizes the importance of a culturally tailored DASH diet for African American women, using their available resources.

A critical barrier is that few studies have incorporated African American women's perspectives to inform the development of a culturally tailored DASH diet manual grounded in their available resources to enhance diet adherence and blood pressure outcomes.

## 2. METHODS

### 2.1 Research design

This study used a single-category focus group design to investigate the cultural food preferences and available resources of African American women to assist in the development of a culturally tailored DASH manual. This design focused on a specific type of participant and their perceptions of the phenomenon under study. This allowed the researcher to gather diverse perspectives and access insights that might be missed by other methods.<sup>[11]</sup>

### 2.2 Sample/setting

Convenience sampling was employed to recruit African American women from a single African American church congregation in the Southwest region of the United States. The study targeted participants aged 40 and older with a self-reported diagnosis of hypertension. Individuals who were pregnant, had severe speech impairments, or were profoundly deaf were excluded. A total of 11 participants met the study's inclusion criteria.

### 2.3 Ethical considerations

The study proceeded following approval from the institutional review board, which ensures that research participants are protected from harm. The researcher exercised neither influence nor authority over the participants. The researcher determined that the participants faced minimal risk in taking part in the study.

### 2.4 Establishing trustworthiness

In qualitative research, validity and reliability are assessed through credibility, transferability, dependability, and confirmability. Credibility was enhanced by using bracketing to minimize the influence of the researcher's preconceptions and biases on the data. Credibility was also established through member checking, where participants were invited to provide feedback on the accuracy of the discussions at the end of the focus group sessions. Transferability was ensured by providing rich descriptions of the focus group interviews to evaluate the applicability of the findings to other settings and populations. Dependability was established by maintaining consistency in conducting all focus group sessions and by the researcher strictly adhering to data collection procedures. Finally, confirmability was achieved by the researcher setting

aside all personal biases and focusing solely on the insights provided by the participants.<sup>[12]</sup>

## 2.5 Procedures

The researcher was invited at the end of the sermon to speak to the congregation about the study. A recruitment table was also set up outside the sanctuary to distribute a flyer created by the researcher. The flyer outlined the study's purpose, inclusion criteria, procedures, and the benefits and risks of participation. Interested individuals were asked to complete an information sheet with their contact details. During the initial contact, the researcher provided additional details about participation. A total of 11 women agreed to participate. Selected participants received the focus group schedule at the end of the initial contact. One week before the focus group sessions, the researcher called or texted each participant to confirm the date, time, and location.

Focus group sessions were held in a conference room at the local church, with the participant's assigned pseudonyms to protect their identities. Before the sessions began, the researcher sought permission to audiotape the sessions for transcription purposes and encouraged the participants to ask questions before signing the consent forms. All participants completed the informed consent forms.

Two focus group sessions, each lasting 60 to 90 minutes and consisting of 5 to 6 participants, served as the primary data collection method. After these sessions, the researcher determined that data saturation had been achieved, as no new themes emerged from the analysis. The focus groups' discussions were audiotaped and transcribed verbatim. Each participant received a \$50 Walmart gift card upon completing the sessions.<sup>[13]</sup>

## 2.6 Instruments

Both instruments used in this study, the semi-structured interview guide and the demographic questionnaire, were developed by the researcher specifically for this project. The 12-item interview guide was created following a comprehensive review of the literature on cultural influences and dietary behaviors among African American women with hypertension. The 12-item demographic questionnaire was similarly designed to capture key participant characteristics aligned with the study aims. To establish content validity, a subject-matter expert reviewed both instruments for clarity, relevance, cultural appropriateness, and alignment with the study objectives, leading to minor refinements in item wording and structure. Reliability was addressed through procedural consistency; the same interview guide was used across all focus groups, and the demographic questionnaire

was administered uniformly to all participants. These steps support the validity and reliability of the researchers' developed instruments.<sup>[14–16]</sup>

## 2.7 Data analysis

The audio recordings from the focus group sessions were transcribed verbatim by a professional transcription service for analysis. After transcription, three coders reviewed the transcripts to gain a thorough understanding of the contents' overall meaning, tone, and depth.<sup>[14,17,18]</sup> The data were analyzed using content analysis. Employing a deductive approach, the three coders independently reviewed each transcript, highlighting keywords and phrases and organizing the data into segments.<sup>[19]</sup> After open coding one transcript, the coders reached consensus on preliminary codes. Once all transcripts were coded, they were reviewed for consistency, and labels were assigned to the identified codes. These codes were then grouped into categories and subcategories, with definitions established for each. Finally, the coders assigned final names to the themes and subthemes and provided detailed descriptions of each.<sup>[19,20]</sup>

## 3. RESULTS

Table 1 shows the demographic characteristics and backgrounds of the participants. The average age was 57.36 years (SD  $\approx$  7.82). A total of eight participants (72.72%) had never received any type of low-sodium diet education since being diagnosed with hypertension. Also, four participants (36.36%) had an annual household income of < \$10,000, and six participants (54.54%) were employed full-time. One participant did not disclose their annual household income or the area they lived in.

Overall, the sample consisted primarily of older African American women, most of whom were age 56 or older and had completed either a high school education or some college. Many participants reported lower household incomes and lived in suburban areas. More than half were employed, and the majority had not received any previous education on low-sodium dietary practices. These characteristics provide important context for understanding the cultural and resource needs in this population as they relate to the cultural tailoring of the DASH diet.

A total of 11 women completed two focus group discussions. A key finding from both focus groups was the need for a culturally tailored DASH diet manual that meets the specific needs of this population. The women shared their views on what this manual should include, resulting in six main themes and four subthemes:

1) Providing perspectives on diet among older African Amer-

- ican women.
- 2) Understanding awareness and education needs regarding the DASH diet, with subthemes on education and skills for better nutrition, and tailoring materials for different reading levels.
- 3) Community disparities in access to healthy foods, with subthemes on affordability and nutrition, and thrifty nutrition.
- 4) Navigating tradition by addressing challenges of southern cooking heritage.
- 5) Exploring the use of diverse home appliances in meal preparation.
- 6) Enhancing the DASH manual with tailored insights.

**Table 1.** Demographic characteristics

| Characteristics  | N (%)     |
|--|-----------|
| Age  |           |
| 40–55  | 4 (36.36) |
| ≥ 56   | 7 (63.63) |
| Highest level of education                                     |           |
| High school or equivalent                                      | 5 (45.45) |
| Some college   | 5 (45.45) |
| Vocational/technical school                                    | 1 (9.09)  |
| Current marital status   |           |
| Married  | 2 (18.18) |
| Single   | 6 (54.54) |
| Separated  | 2 (18.18) |
| Widowed  | 1 (9.09)  |
| Characteristics  | N (%)     |
| Current household income (\$)                                  |           |
| < \$10K  | 4 (36.36) |
| 100–150K   | 2 (18.18) |
| 20–29K   | 2 (18.18) |
| 30–39K   | 1 (9.09)  |
| 40–49K   | 1 (9.09)  |
| Area you live in   |           |
| Suburban   | 7 (63.63) |
| Urban  | 2 (18.18) |
| Rural  | 1 (9.09)  |
| Primary work status  |           |
| Part-time  | 2 (18.18) |
| Full-time  | 6 (54.54) |
| Other  | 1 (9.09)  |
| Homemaker  | 1 (9.09)  |
| Unemployed   | 1 (9.09)  |
| Received any type of low-sodium diet education since diagnosis |           |
| Yes  | 3 (27.27) |
| No   | 8 (72.72) |

### 3.1 Theme 1: Perspectives on diet among older African American women

The women in the study shared their views on what a healthy diet should include for African American women. They emphasized that a healthy diet should include reducing sodium intake, consuming fruits and vegetables, and incorporating protein and starches.

Participant RA. “Eat more vegetables. Eat more protein.”  
 Participant CA. “I’m trying to cut down on the salt and a lot of sodium. I’m trying to balance out. I love meat. I eat fish, chicken, I eat a lot of pork, which I need to cut down on that too.”  
 Participant C. “I like fresh vegetables. I don’t use canned goods. They’re high in sodium. I don’t use no canned goods unless it’s maybe some yams if I have fresh yams. I use fresh fruit and vegetables. Basically, I eat the same things. Yogurt, bagels. I do tacos, but I do low-sodium taco seasoning. If I make a dressing, I use low-sodium chicken broth.”

### 3.2 Theme 2: Understanding awareness and education needs regarding the DASH diet

This theme addressed participants’ limited knowledge or unfamiliarity with the DASH diet. The women emphasized the need to develop the knowledge and skills necessary to better equip them to follow the DASH diet. Two subthemes that support this theme are: education and skills for better nutrition, and tailoring materials for different reading levels. Participant T. “That was the first time I heard you or heard of the DASH diet.”

Participant CY. “I’ve heard of it, but I’ve never done any kind of research on it.”  
 Participant T. “I would think that looking for foods that we can eat that’s not always highly seasoned with salt and so forth, chicken, greens, cabbage, pork chops, whatever it may be, because that’s the type of food that we do like to eat.”

#### 3.2.1 Subtheme: Education and skills for better nutrition

The women in the study emphasized the importance of gaining knowledge and skills in areas such as reading food labels, understanding the difference between sodium and salt, and using herbs and seasonings as alternatives to salt to enhance flavor. They also highlighted the need to learn how to choose healthier meal options when dining out. The women also expressed the desire to improve their cooking techniques to prepare healthier meals.

Participant D. “That’s because the only way I know how to season my food is by seasoning salt. I just wrote down what the young lady said. They’re seasoning with Accent, so I can get some at the store instead of the stuff I use. That would be great to put seasonings in there to substitute all the sodium

seasonings that we use.”

Participant CY. “Spices again, learning and being introduced to more of the variety of spices that’s out there that you can flavor food because that’s what we look for, really. We want flavor. We want flavor.”

Participant CA. “Mother’s Day and Father’s Day, they go out to eat, or they want to go to the restaurant. When we go to the restaurants, they’re cooking with a lot of sodium and a lot of things. Those are holidays also that can contribute. How many can we buy down here?”

### 3.2.2 Subtheme: Tailoring materials for different reading levels

The women highlighted the importance of designing the DASH diet manual to accommodate varying reading levels. They also suggested that including pictures in the manual would help them better understand how to eat healthily.

Participant CA. “People that can’t read, visuals is what’s best. When it comes to pictures, if you got a fish plus a wheat piece of bread equals a fish sandwich. Visuals will work for the people that can’t read.”

Participant CY. “Because even an adult would learn from a book easier written for a child if their reading level is not 12th grade to college. I think for our community making the book, I’d rather read a book that’s addressed to a 5th grader and get some understanding than a book written for 12th or second year of college that I’m wondering, Okay, what is this word? I got to read it five times to comprehend it.”

### 3.3 Theme 3: Community disparities in access to healthy foods

Participants highlighted disparities in their communities regarding access to healthy food. While resources like food banks, community centers, and churches that provide free food help reduce food insecurity, the availability of healthy options is inconsistent. Often, these donations consist of canned goods or boxed meals, which are unsuitable for women with hypertension. Local grocery stores often carry products high in sodium, fat, and sugar. As a result, those seeking healthier alternatives are forced to travel long distances, which is often inconvenient. Two subthemes emerged from this discussion: affordability and nutrition, and thrifty nutrition.

Participant D. “Whenever I’m at the food bank, they let you pick what you want, but a lot of it is canned goods and then boxes and bags. Then here it’s boxes and bags so it’s high in sodium. It’s got preservatives and everything in it.”

Participant D. “They got a community center where you go in there, and they do give you frozen meat and stuff like

venison, chicken, hamburger. They rarely have vegetables. When they do have them, they give them to you abundantly. They let you get enough and they give you a lot of box food. That’s the only thing I don’t like about it. Then with Loaves and Fishes, they do the same thing. They give you a big old nasty chicken that you can’t eat. The meat is bruised and they give you a lot of boxed foods.”

Participant V. “You go on walking in Park Street Market, and you ain’t going to find nothing in there but pigtail, hog head, cheese, this and that. Like she said, it’s the inner city and the low-income area. That’s where it’s not no low sodium. Period.”

Participant CA. “Where you shop in your community? In my community because I stay on the west side, I have Hardings, I got Walmart, I got Meijer, I got the other organic stores, they are available. Then in the community, at times they do give away the fresh fruits and the vegetables and things like that. You just got to know where to go get it, but most of the time, it’s in another community that they give it away, more or less on the lower-class communities.”

#### 3.3.1 Subtheme: Affordability and nutrition

Women seek affordable, accessible food options in their neighborhoods. They also want to learn health strategies and practical tips for maintaining a healthy diet when access to nutritious food is limited or unavailable in their communities.

Participant RAK. “If you can’t just find that kind of healthy food, you consider how can you cook it? If I got this and I can’t find this, how can I cook this meat or this certain food that will apply to my sodium to keep it down? I had to find different ways. If I had to bake it, boil it, whatever it takes to get that protein down or that sodium down.”

Participant GL. “In order to eat salt-free, you got to cook it yourself.”

#### 3.3.2 Subtheme: Thrifty nutrition

Participants emphasized the need for strategies and practical tips on purchasing food and other cost-effective approaches to healthy eating while staying within their food budget.

Participant CA. “You’re going to have to go out of your way sometime to go to a store. I think we have to look up sales. I don’t think we’re the only ones doing it as Black women. Nowadays, I believe everybody is looking for sales because everything’s so high, and you might have to go out of your area just to get something. You have to do some research. Who has the sales? I’ve used coupons, and I’ve heard of coupon clippers, but you might have to use the tools that’s available, look and see what the sales are. Use your coupons.

I do use coupons. I wish I can use them more because they do help. Coupons do help.”

Participant T. “Actually, if this program helped us garden, to produce their own gardens. Yes, learn how to garden. That’s the only way you’re going to know.”

### 3.4 Theme 4: Navigating tradition by addressing challenges of Southern cooking heritage

Participants discussed the challenges of adopting a low-sodium diet due to their Southern heritage and traditional Southern cooking. They noted that Southern cuisine is often prepared with higher amounts of fat, sodium, calories, and carbohydrates, making it less healthy. They explained that this style of cooking originated from a need for “survival,” leading to the preparation of foods that were not nutritious. These cultural practices have been passed down through generations, and Southern cooking remains especially prominent in their households during family holidays.

Participant B. “From our culture, from our heritage, we came from a heritage of we had survival, so the food that we did have, we had to make it work, and we’re just now getting the luxury of being able to look at health-wise now, but a lot of us are still not able to have that luxury of the healthy food, I should say.”

Participant V. “It’s that chitlins, hog maw, ham. Can I explain something? I don’t know if it’s on the record or off the record. Having had blood pressure since I was 16, and that right there don’t...Well, how can I put it? I was eating greens and all that back then when I was young. Now I don’t get a minute for that kind of stuff as far as eating greens.”

Participant CY. “The more the merrier. Really, with the study, not just on our daily basis of our food intake, but during celebration times, how can we still enjoy those cultural times, but in a way that we are, from generation to generation, setting a new way of living where we can enjoy again those fellowships and those times together but in a healthier way where we can live to enjoy them and not be stricken with all the other things that come along with, say, health issues?”

### 3.5 Theme 5: Exploring home appliance diversity in meal preparation

The women in the study mentioned a range of home appliances they use for meal preparation, such as nonstick pans, crockpots, electric griddles, baking pans, and frying pans. During the focus group sessions, they suggested including these appliances in the DASH manual to support meal preparation.

Participant CY. “Crock pot friendly.”

Participant G. “An air fryer.”

Participant CA. “Like a griddle. Yes, a griddle that I can put things on. I bake. I use nonstick skillet if I put something in skillet because I like to make, I don’t do a lot of frying foods, every once in a while. I haven’t fried chicken in a while, but I’ll put it in the oven or I’ll be using my crock pot.”

### 3.6 Theme 6: Enhancing the DASH manual with tailored insights

Participants in the study emphasized the importance of addressing diverse food preferences and intolerances in the DASH manual. They suggested including options for vegetarians and lactose-intolerant individuals, as well as recipes that use turkey instead of pork or beef.

Participant T. “My diet, I have to stay away from milk products. I can’t do dairy. That’s one of my biggest downfalls, is I can’t eat everything that...Especially when you go out to eat or whatever, you start to be specific.”

Participant RO. “I would say vegetarian is excellent and even encouraging because sometimes we feel like we just can’t eat without meat. The book needs to encourage you and give you alternatives of what you can eat instead, like tofu or whatever, instead of actual eating meat, particularly the high-fat items that we love.”

## 4. DISCUSSION

The purpose of this study was to use qualitative methods to explore the cultural preferences, contextual factors, and resource-related considerations that shape dietary practices among midlife and older African American women with self-reported hypertension, and apply these insights to guide the development of a culturally and resource-tailored DASH education manual.

Findings from the focus group revealed six themes and four subthemes that highlight the unique barriers and facilitators influencing DASH adherence within this population. These results extend prior research on dietary interventions by emphasizing the importance of integrating cultural traditions, socio-economic realities, and literacy levels into education materials.<sup>[21]</sup>

Consistent with previous research, participants expressed strong connections to traditional Southern cooking practices, which often involve foods high in sodium, fat, and calories.<sup>[22]</sup> These cultural traditions serve both as a source of identity and as a barrier to adherence to the DASH diet. While women acknowledged the health risks associated with these practices, they emphasized the need for modifications that preserve cultural relevance while reducing sodium and unhealthy fats. This tension underscores the need for dietary interventions that respect cultural heritage rather than

attempting to replace it, an approach aligned with culturally sensitive models of health promotion.<sup>[22,23]</sup>

A key theme in this study was the lack of awareness of the DASH diet and limited skills for implementing it. Most participants had never received formal education about sodium reduction, and many were unfamiliar with strategies such as reading food labels or substituting herbs and spices for salt. These findings highlight an important gap in current health education efforts, echoing literature that shows African American women often receive less culturally relevant nutrition education.<sup>[24]</sup> Developing materials that incorporate simple language, visuals, and practical cooking demonstrations may help bridge this gap.<sup>[25,26]</sup>

Participants also described the structural changes of adhering to the DASH diet, including food deserts, reliance on food pantries, and the high cost of fresh produce. Many noted that healthier options were either unavailable or unaffordable in their neighborhoods, requiring travel outside their communities. This finding is consistent with broader evidence linking food insecurity and neighborhood disparities to poor dietary adherence.<sup>[27]</sup> Addressing these barriers will require both individual-level strategies (e.g., teaching thrifty shopping and meal preparation skills) and systemic approaches (e.g., improving food environments, subsidizing fresh produce, and supporting community gardens).<sup>[28,29]</sup>

Despite the barriers, participants identified strategies and resources that could facilitate DASH adherence. These included using diverse cooking appliances, such as crockpots, air fryers, and nonstick pans, which allow for healthier meal preparation. Participants also expressed interest in recipes adapted for dietary restrictions, such as lactose intolerance and vegetarian preferences. These insights reinforce the need for flexible, practical tools that reflect the lived experiences and resource constraints of African American women with hypertension.<sup>[7]</sup>

#### 4.1 Implications for practice and research

The findings of this study suggest several practical applications. Nurse educators and clinicians should integrate cultural tailoring into dietary counseling by providing recipes, substitutions, and meal-preparation strategies that align with African American food traditions.<sup>[22]</sup> Visual aids and materials written at multiple literacy levels should be prioritized to enhance accessibility.<sup>[25,26]</sup> At the community level, partnerships with churches and local organizations may increase the reach and acceptability of DASH-related education.<sup>[23]</sup>

Future nursing research should focus on designing and evaluating a DASH manual that incorporates the themes identified in this study. The manual should include culturally appro-

priate recipes, practical cooking tips, food substitutions, and visual guides for individuals with different literacy levels. Additional studies should explore how a culturally tailored DASH manual impacts adherence, dietary behaviors, and blood pressure control among African American women. Longitudinal studies could examine sustained adherence and health outcomes over time.

Nurse educators and community organizations should develop workshops and peer-led programs to educate African American women on sodium-reduction strategies, healthier cooking methods, and reading food labels. These initiatives should be accessible through churches, community centers, and local health clinics. Policymakers and public health officials should address food insecurity and disparities in food availability by promoting healthier food options in low-income communities. Strategies may include subsidizing fresh produce, partnering with grocery stores, and expanding urban gardening initiatives.

Future efforts should consider using mobile applications, social media, and culturally relevant digital content to provide DASH diet education and support. Videos, cooking demonstrations, and interactive tools could enhance engagement and learning. Further nursing research should examine the role of peer support networks in improving DASH diet adherence. Dyadic or group-based support models could provide motivation, accountability, and shared learning experiences.

By addressing these research and educational gaps, health professionals and researchers can enhance dietary interventions to improve blood pressure control among African American women, ultimately reducing health disparities and improving overall cardiovascular health.

#### 4.2 Limitations and strengths

This study is not without limitations. The sample was drawn from a single church congregation in the Southwest United States, which may limit the transferability of findings to other settings. The small sample size, though appropriate for qualitative research, restricts generalizability.<sup>[14]</sup> As participants self-reported their hypertension diagnosis, clinical confirmation was not obtained. Despite these limitations, the study offers important insights into the unique challenges and facilitators of DASH adherence among African American women.

Several strengths enhance the value of this work. First, the study highlights the voices and lived experiences of African American women, a population disproportionately affected by hypertension but often underrepresented in research. Second, the use of a qualitative design provided rich, nuanced insights into the personal, social, and environmental factors

that influence DASH diet adherence, which cannot be easily captured through quantitative methods alone. Third, partnering with a church setting facilitated trust and engagement, increasing the authenticity and depth of responses. Finally, these findings contribute to a growing body of evidence on community-based strategies, offering practical implications for future interventions to improve dietary behaviors and blood pressure control in similar populations.

## 5. CONCLUSION

African American women continue to experience the highest burden of hypertension in the United States, with an estimated 58.4 percent affected, which is more than any other racial or ethnic group.<sup>[2]</sup> This disproportionate prevalence underscores the urgency of developing culturally meaningful strategies to support heart-healthy eating patterns in this population. Findings from this study demonstrate the need for a culturally tailored DASH manual that reflects the food preferences, cultural traditions, and resource realities of midlife and older African American women with hypertension.

The themes identified through this qualitative inquiry highlight several components essential to effective education, including reducing sodium intake while preserving culturally relevant flavors, increasing awareness of the DASH diet, and providing practical guidance, such as cooking demonstrations, visual tools, and step-by-step meal preparation strategies suited to varying literacy levels. Participants also emphasized the impact of structural barriers, including food affordability, availability, and neighborhood food resources, on their ability to adopt healthier eating patterns. These insights underscore the importance of designing interventions that acknowledge community-level disparities and incorporate realistic solutions, such as cost-saving tips, support for navigating food environments, and culturally adapted alternatives to traditional Southern dishes, which are often high in sodium and unhealthy fats.

Overall, this study reinforces that dietary intervention for African American women with hypertension must be grounded in cultural understanding and informed by the lived experiences of the women they aim to serve. Incorporating culturally tailored content, practical strategies and resource-sensitive recommendations into DASH education may enhance engagement, improve accessibility, and support more equitable opportunities for blood pressure control in this high-risk population.

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## AUTHORS CONTRIBUTIONS

The authors did not contribute equally to this study. Dr. Angela Groves made the primary contributions to the conception and design of the study, data collection, data analysis, and the drafting and revision of the manuscript. Yasir Mehmood contributed to data coding and theme development and assisted with drafting the introduction. Candace E. M. Ryan contributed to data coding and theme development. All authors read and approved the final manuscript.

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## CONFLICTS OF INTEREST DISCLOSURE

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## INFORMED CONSENT

Obtained.

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The Publication Ethics Committee of the Association for Health Sciences and Education. The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

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## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

## DATA SHARING STATEMENT

No additional data are available.

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## REFERENCES

- [1] Jones DW, Ferdinand KC, Taler SJ, et al. 2025 AHA/ACC/AANP/AAPA/ABC/ACCP/ACPM/AGS/AMA/ASPC/NMA/PCNA/SGIM Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. Hypertension [Internet]. 2025. Available from: <https://www.ahajournals.org/doi/10.1161/HYP.000000000000249>
- [2] Tsao CW, Aday AW, Almarzooq ZI, et al. Heart Disease and Stroke Statistics—2023 Update: A Report From the American Heart Association. *Circulation* [Internet]. 2023 Feb 21; 147(8). <https://doi.org/10.1161/CIR.0000000000001137>
- [3] Hines AL, Zare H, Thorpe RJ. Racial Disparities in Hypertension Among Young, Black and White Women. *J Gen Intern Med* [Internet]. 2022 June; 37(8): 2123–5. PMID:34472018 <https://doi.org/10.1007/s11606-021-07073-0>
- [4] Abrahamowicz AA, Ebinger J, Whelton SP, et al. Racial and Ethnic Disparities in Hypertension: Barriers and Opportunities to Improve Blood Pressure Control. *Curr Cardiol Rep* [Internet]. 2023 Jan; 25(1): 17–27. PMID:36622491 <https://doi.org/10.1007/s11886-022-01826-x>
- [5] Jones HJ, Sternberg RM, Janson SL, et al. A Qualitative Understanding of Midlife Sources of Stress and Support in African-American Women. *J Natl Black Nurses Assoc*. 2018; 27(1): 24–30.
- [6] Kalinowski J, Kaur K, Newsome-Garcia V, et al. Stress interventions and hypertension in Black women. *Womens Health*. 2021; 17: 1–14. PMID:34254559 <https://doi.org/10.1177/174550652111009751>
- [7] Groves A, Gipson-Jones T, Montgomery AJ, et al. Low-Sodium Dietary Perceptions and Experiences of African American women with Hypertension. *J Natl Black Nurses Assoc*. 2020 July; 31(1): 47–52.
- [8] Okoro ON, Hillman LA, Cernasev A. Intersectional invisibility experiences of low-income African-American women in health-care encounters. *Ethn Health* [Internet]. 2022 Aug 18; 27(6): 1290–309. PMID:33734922 <https://doi.org/10.1080/13557858.2021.1899138>
- [9] U.S Department of Health and Human Services; National Institutes of Health; National Heart, Lung and Blood Institute. Your Guide to Lowering Your Blood Pressure with DASH. 2006; 1–55.
- [10] Wright KD, Klatt MD, Adams IR, et al. Mindfulness in Motion and Dietary Approaches to Stop Hypertension (DASH) in Hypertensive African Americans. *J Am Geriatr Soc* [Internet]. 2021 Mar; 69(3): 773–8. PMID:33227157 <https://doi.org/10.1111/jgs.16947>
- [11] Krueger RA, Casey MA. Focus groups: A practical guide for applied research. 5th ed. Thousand Oaks, California: Sage Publications; 2015.
- [12] Tracy SJ. Qualitative research methods. United Kingdom: Wiley-Blackwell; 2013.
- [13] Liamputtong P. Focus group methodology: Principle and practice. Thousand Oaks, California: Sage Publications; 2011. <https://doi.org/10.4135/9781473957657>
- [14] Creswell JW, Creswell JD. Research design: Qualitative, quantitative, and mixed methods approaches. 5th ed. Thousand Oaks, California: Sage Publications; 2018.
- [15] Merriam SB. Qualitative research: A guide to design and implementation. San Francisco, CA: John Wiley & Sons; 2009.
- [16] Thomas E, Magilvy JK. Qualitative rigor or research validity in qualitative research. *J Spec Pediatr Nurs*. 2011; 16(2): 151–5. PMID:21439005 <https://doi.org/10.1111/j.1744-6155.2011.00283.x>
- [17] Denzin NK, Lincoln YS. The Sage handbook of qualitative research. 3rd ed. Thousand Oaks, California: Sage Publications; 2005. 1210 p.
- [18] Liamputtong P. Focus group methodology: principles and practice. London: SAGE Publications; 2011. <https://doi.org/10.4135/9781473957657>
- [19] Elo S, Kyngäs H. The qualitative content analysis process. *J Adv Nurs* [Internet]. 2008 Apr [cited 2015 Aug 10]; 62(1): 107–15. PMID:18352969 <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- [20] Vaismoradi M, Turunen H, Bondas T. Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study: Qualitative descriptive study. *Nurs Health Sci* [Internet]. 2013 Sept [cited 2015 Aug 10]; 15(3): 398–405. PMID:23480423 <https://doi.org/10.1111/nhs.12048>
- [21] Peek ME, Harmon SA, Scott SJ, et al. Culturally tailoring patient education and communication skills training to empower African-Americans with diabetes. *Transl Behav Med* [Internet]. 2012 Sept; 2(3): 296–308. PMID:24073128 <https://doi.org/10.1007/s13142-012-0125-8>
- [22] Winham DM, Knoblauch ST, Heer MM, Thompson SV, Der Ananian C. African-American Views of Food Choices and Use of Traditional Foods. *Am J Health Behav* [Internet]. 2020 Nov 1; 44(6): 848–63. PMID:33081881 <https://doi.org/10.5993/AJHB.44.6.9>
- [23] Baker EA, Barnidge EK, Schootman M, et al. Adaptation of a Modified DASH Diet to a Rural African American Community Setting. *Am J Prev Med* [Internet]. 2016 Dec [cited 2025 Sept 16]; 51(6): 967–74. PMID:27633485 <https://doi.org/10.1016/j.amepre.2016.07.014>
- [24] Ibe CA, Haywood DR, Creighton C, et al. Study protocol of a randomized controlled trial evaluating the Prime Time Sister Circles (PTSC) program's impact on hypertension among midlife African American women. *BMC Public Health* [Internet]. 2021 Dec; 21(1): 610. PMID:33781228 <https://doi.org/10.1186/s12889-021-10459-8>
- [25] Farmer N, Powell-Wiley TM, Middleton KR, et al. A community feasibility study of a cooking behavior intervention in African-American adults at risk for cardiovascular disease: DC COOKS (DC Community Organizing for Optimal culinary Knowledge Study) with Heart. *Pilot Feasibility Stud* [Internet]. 2020 Dec; 6(1): 158. PMID:33088581 <https://doi.org/10.1186/s40814-020-00697-9>
- [26] Joo JY, Liu MF. Effectiveness of Culturally Tailored Interventions for Chronic Illnesses among Ethnic Minorities. *West J Nurs Res* [Internet]. 2021 Jan; 43(1): 73–84. PMID:32400300 <https://doi.org/10.1177/0193945920918334>
- [27] Odoms-Young A, Brown AGM, Agurs-Collins T, et al. Food Insecurity, Neighborhood Food Environment, and Health Disparities: State of the Science, Research Gaps and Opportunities. *Am J Clin Nutr* [Internet]. 2024 Mar; 119(3): 850–61. PMID:38160801 <https://doi.org/10.1016/j.ajcnut.2023.12.019>
- [28] Lofton S, Kersten M, Lubimbi N, et al. How community capacity building in urban agriculture can improve food access in predominantly Black communities. *J Community Pract* [Internet]. 2022 Oct 2; 30(4): 395–417. <https://doi.org/10.1080/10705422.2022.2138667>
- [29] Sharpe PA, Liese AD, Bell BA, et al. Household food security and use of community food sources and food assistance programs among food shoppers in neighborhoods of low income and low food access. *J Hunger Environ Nutr* [Internet]. 2018 Oct 2; 13(4): 482–96. PMID:30854155 <https://doi.org/10.1080/19320248.2017.1364188>