


Perceptions of Rural African American Adults About the Role of Family in Understanding and Addressing Risk Factors for Cardiovascular Disease

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Abstract

Purpose: African Americans (AAs) in rural south and southeast regions of the United States have among the highest prevalence of cardiovascular disease (CVD) in the country. The purpose of this qualitative, exploratory study is to understand family influences on CVD-related knowledge and health-related behaviors among rural AA adults.

Design: Qualitative descriptive study design using a community-based participatory research approach.

Setting: Two rural North Carolina counties.

Participants: Eligible participants were AA adults (at least 21 years of age), who self-reported either CVD diagnosis or selected CVD risk factor(s) for themselves or for an adult family member (N = 37).

Method: Directed content analysis of semistructured interviews by community and academic partners.

Results: Family health history and familial norms and preferences influenced participants' CVD-related knowledge, beliefs, and health-related behaviors. Participants reported their families were helpful for increasing motivation for and overcoming barriers to healthy behaviors, including hard-to-access community resources and physical challenges. Conversely, and to a lesser extent, participants also reported that family members hindered or had little influence (positive or negative) on their engagement in healthy behaviors.

Conclusion: Family played an important role in helping individuals overcome personal and community-related challenges. Efforts to reduce CVD burden among rural AAs should seek to understand the family-related facilitators, barriers, and processes associated with CVD knowledge and risk-reduction behaviors.

Keywords

African Americans, family, rural health, cardiovascular disease, health education and behavior, community-based participatory research

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Cardiovascular disease (CVD) is the leading cause of death in the United States.¹ Cardiovascular disease disproportionately affects racial/ethnic minority groups, including African Americans (AAs).^{2,3} A positive family history of CVD, a risk factor for future CVD, reflects complex interactions between genes and environments such as community and familial contexts.⁴⁻⁶ These environments influence an individual's risk for obesity, diabetes, tobacco use, and physical inactivity—key factors known to influence CVD risk⁷ that often co-occur and are more prevalent among communities of color.^{8,9} Unfortunately, few evidence-based CVD interventions have been designed specifically for AA adults that acknowledge the unique characteristics of AA communities and families.^{10,11}

Within families, health information is shared, health messages are communicated, and health behaviors are reinforced.¹² Families also create meanings from illness experiences that influence their ability to manage a health condition or alleviate future health risks.¹⁰ African American families are more likely to report female-headed and multigenerational households, hold collectivist orientations, have larger kin networks, report more daily interactions with family members, and give more support to extended family members compared to White American families.^{13,14} All of these characteristics can influence the engagement of AA families in health interventions. Thus, behavioral health interventions targeting AAs should consider contextual influences, especially familial characteristics that affect individual and family engagement in health promoting behaviors.

A closer examination of CVD burden within AA populations highlights important geographic differences. African Americans residing in rural areas of the United States, specifically south and southeast regions of the country, have among the highest CVD prevalence.^{3,15,16} In a recent study examining prevalence of 5 specific health-related behaviors (sleep, body weight, physical activity, alcohol use, and smoking) by urban and rural classifications, adults in rural areas were less likely to meet recommended guidelines for body weight or physical activity than their counterparts in urban areas.¹⁷ This study also found that overall, AAs reported among the lowest prevalence of engaging in at least 4 of 5 behaviors compared to other racial and ethnic groups regardless of their rural or urban status (23.4%), compared to Whites (30.9%), Hispanics (28.4%), American Indians (26.0%), Asian Americans (42.1%), multi-racial Americans (24.5%), and other races (30.7%). Although there were similarities in prevalence among AAs in urban and rural contexts, rates among rural AAs, specifically, were among the lowest observed across racial/ethnic groups (21.1%).¹⁷

Tobacco use influences CVD incidence and mortality¹⁸ and there is no safe level of tobacco consumption.¹⁹ While, overall, cigarette smoking is more prevalent in rural areas compared to urban areas, rates of cigarette smoking are similar among AAs in rural and urban areas¹⁷ and often similar to or lower than White Americans.^{20,21} Non-smoking African American children and adults, however, have higher secondhand smoke exposure than other racial/ethnic groups.²²

Characteristics of rural areas such as limited access to quality health services,²³ health-care workforce shortages,²⁴ lower socioeconomic status, and strained resources and infrastructure²⁵ also contribute to observed disparities between rural and urban health. Despite these challenges, connectedness within rural communities, built upon long-standing family histories and overlapping social and professional circles, provides a solid foundation for building sustainable partnerships and interventions.^{26,27}

The purpose of this qualitative, exploratory study was to understand how rural AA men and women perceive the role of family in understanding CVD and influencing engagement in behaviors that can reduce CVD risk (eg, healthy diet, physical activity, and smoking cessation). Understanding the family-related facilitators, barriers, and processes associated with CVD knowledge and risk-reduction behaviors can be useful for developing interventions to reduce CVD burden.

Method

This study builds on the work of Project GRACE (Growing, Reaching, Advocating for Change and Empowerment), a long-standing community-academic partnership in Nash and Edgecombe counties in North Carolina. Project GRACE's mission is to mitigate health disparities using the strengths of community-academic collaborations to create culturally relevant interventions that improve the overall health of AAs living in rural communities. Nash and Edgecombe counties were defined as rural based on the US Census Bureau definition, which characterizes rural areas as "all population, housing, and territory not included within an urbanized area or urban cluster."^{28,29} The partnership includes organizations and individuals representing health, political, education, social welfare, economic, and grassroots sectors. The partnership has over a decade of experience designing and testing interventions using a community-based participatory research approach.²⁷

From 2007 to 2011, heart disease and stroke were among the top 5 leading causes of death in Nash and Edgecombe counties and racial disparities in CVD mortality rates were evident.^{30,31} In addition, community-wide surveys, focus groups with underrepresented populations, and key informants and advisory groups from these communities identified CVD as a leading cause of concern. In 2014, Project GRACE began a 5-year intervention study to address CVD. Formative study data were collected to adapt an evidence-based intervention (EBI) designed to lower risk of CVD among AAs in rural areas. Data analysis reported here comes from data collected during this formative phase to investigate family influences on EBI components.³²

Participants and Recruitment

Individuals were recruited from the rural counties of Edgecombe and Nash in North Carolina to participate in semistructured interviews. The interviews were conducted with AA men and women (ages 21 and older) who were (1) residents of Nash

Table 1. Participant Characteristics.^{a,b}

	n	%
Gender		
Male	15	31.9%
Women	32	68.1%
Age group		
21-30 years	5	10.6%
31-45 years	6	12.8%
46-60 years	19	40.4%
61+ years	17	36.2%
Race; ethnicity		
African American or black; non-Hispanic	47	100%
Marital status		
Not married or partnered	23	48.9%
Married	17	36.2%
Widowed	5	10.6%
Living with someone as a couple but not married	2	4.3%
County		
Edgecombe	27	57.4%
Nash	20	42.6%
Length at residence		
Less than 1 Year	6	13
1 year to 5 years	14	3
6 years to 10 years	6	13
11 years to 20 years	6	13
More than 20 years	15	32

^aIn total, 48 interviews were conducted for the parent study; data are missing for 1 participant.

^bThis analysis is based on qualitative data from 37 interviews, excluding 11 interview participants who also participated in focus groups for the parent study or were interviewed as a pair.

or Edgecombe counties and diagnosed with one or more of the CVD risk factors of interest, which included type 2 diabetes, hypertension, obesity, family history of CVD, or prior CVD or (2) a family member of an individual who met the aforementioned criteria. Participants were recruited via convenience and snowball sampling methods, which included recruitment through community forums, existing Project GRACE community partnerships and network connections. Participants received an incentive of \$25 for completing an interview. The study was approved by the Institutional Review Board at the University of North Carolina at Chapel Hill.

Between January 2015 and December 2015, a total of 48 (N = 48) interviews were conducted (Table 1). These interview participants were primarily female (68.1%). Approximately, half (48.9%) were single, not married, or partnered. Most (76.6%) were 46 years of age or older. All participants (100%) identified as non-Hispanic ethnicity and AA or black race. Almost one-third (31.9%) reported living at their current place of residence for more than 20 years, 12.8% reported living at their residence for 11 to 20 years, and an additional 12.8% for 6 to 10 years. For the purpose of this study and analysis, our final sample size was 37 interviews (n = 37). Eleven interviews were excluded because the participants participated in focus groups as part of the parent study or were interviewed as a pair. Participants who participated in focus groups as part of the parent study or were

interviewed as part of a pair were demographically similar to those who completed individual interviews analyzed here and met the same inclusion criteria.

Study Design

We utilized a qualitative descriptive study (QDS) design for our semistructured interviews. Qualitative descriptive study aims to understand nuances (eg, who, what, and where) of a phenomena or event and is often used to inform intervention design.³³ Our semistructured interviews included open-ended questions about diet and physical activity, which elicited information about the role of families in health behavior, the desired level of family member involvement in a CVD intervention, recommendations for maximizing family member involvement, and benefits and challenges associated with family member involvement and intervention success. The questions were developed based on data and literature from existing CVD interventions and other formative qualitative work with focus groups being conducted as part of the larger intervention study. Pilot testing of the interviews occurred with a representative sample, and changes were made by the team of academic and community partners to enhance the clarity of the questions and flow of the interview.

The interviews were conducted at a local church. The average interview length was between 45 and 60 minutes. Community members and research assistants conducted the interviews. They were trained on the purpose of the study, objectives of the interviews, interview protocols, and skills for conducting semistructured interviews. We reviewed qualitative data during the data collection process to ensure that themes generated during the interviews reached saturation in each of the 2 communities, that is, to ensure that no new themes were likely to emerge requiring additional recruitment.³⁴⁻³⁶ The interviews were audiotaped and transcribed verbatim for use in the qualitative software package ATLAS.ti, version 6.2.

Data Analysis

A modified directed content analysis approach was used to analyze the interview data. Our approach is characterized as modified directed content analysis because we used a QDS design to inform the interview protocol and utilized the Revised Self- and Family Management Framework³⁷⁻⁴⁰ to inform our coding scheme and qualitative analysis. According to Hsieh and Shannon,⁴¹ a directed content analysis approach is appropriate for analyzing qualitative research when prior research exists, but there are limitations to existing evidence that would benefit from further description and exploration. One goal of this approach can be to conceptually extend an existing theoretical framework.⁴¹ Findings from a directed content analysis can support or provide alternatives to existing frameworks. The Revised Self- and Family Management Framework (Figure 1) explicates biobehavioral moderators (facilitators and barriers), self and family disease management processes, and proximal and distal outcomes related to the management of chronic health conditions; however, to our

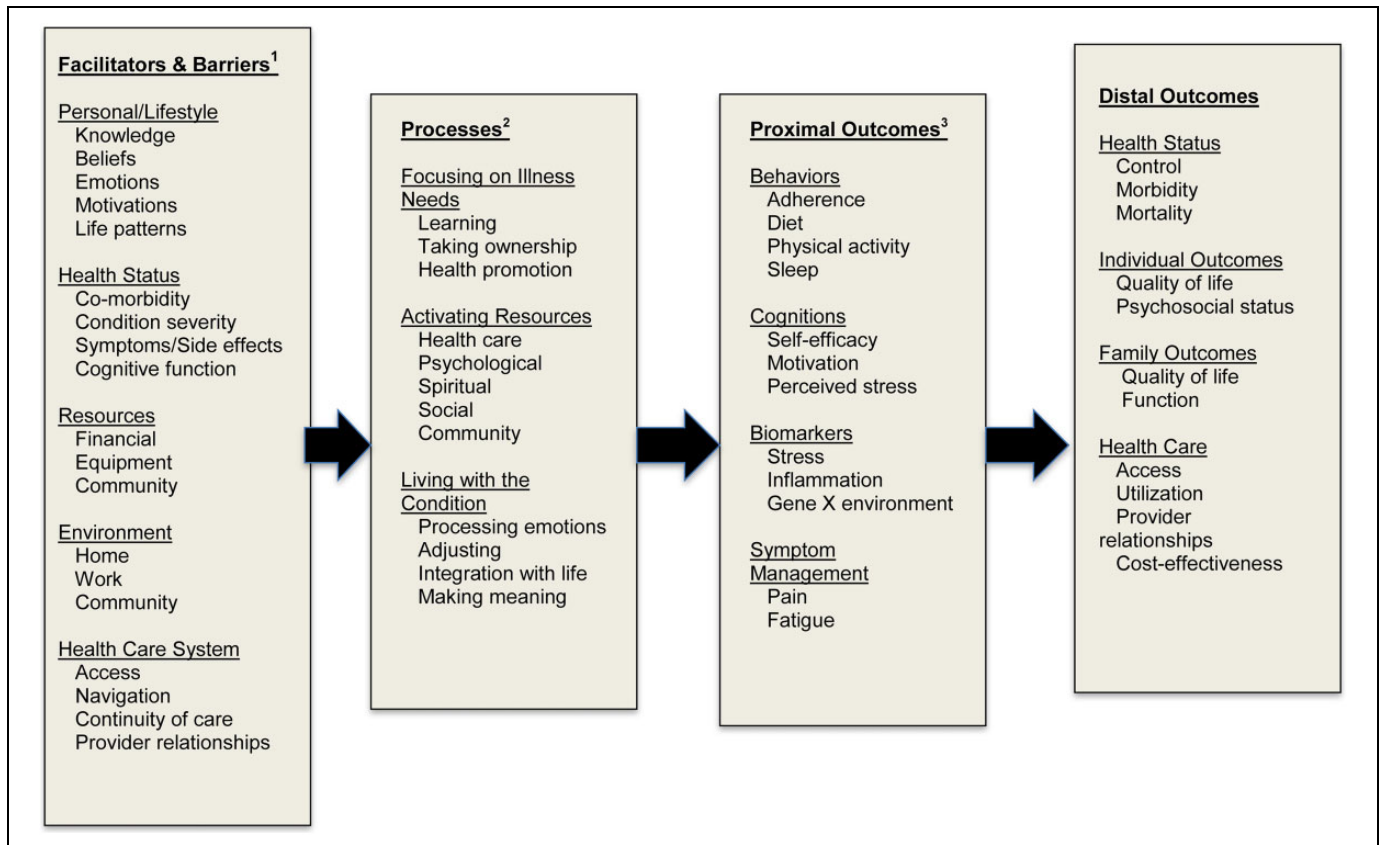


Figure 1. Revised Self- and Family Management Framework.⁴⁰

knowledge, it has not been used in research with rural AAs. In this study, we utilized this framework to guide our qualitative analysis of barriers, facilitators, and processes associated with family influences on CVD risk reduction among rural AAs.

Coding occurred in 3 phases. In phase 1, a lead researcher (T.L.Y.) from the formative study created a codebook which was reviewed, tested, and revised with a small team of researchers. In phase 2, teams of coding pairs consisting of academic and community researchers trained in qualitative analysis read through assigned transcripts to gain familiarity with the material. The teams reviewed the full list of codes, code definitions, guidance material, and example quotes for each of the codes. Next, they worked individually to read the transcripts again, assigning codes to segments of texts that represented distinct participant quotes that conveyed meaning apart from the complete transcript. Lastly, coding pairs met to discuss assigned codes, note discrepancies, and come to a consensus regarding code assignments. Where disagreements occurred, a PhD level researcher (T.L.Y. or K.R.E.) made final decisions. In phase 3, the lead author (K.R.E.) coded the data with additional key concepts related to family-related facilitators, barriers, and processes not captured in previous work.

This analysis is based on coding that occurred in all phases. The authors reviewed the quotes organized under each code, noting emerging patterns and connections across codes. In line

with a directed content analysis approach, we conducted an in-depth textual analysis in relation to the selected theoretical framework and study purpose to identify themes and sub-themes. Quotes provided were selected to reflect the range of perspectives that emerged from the interview data.

Findings

Findings are organized by the concepts identified as facilitators, barriers, or processes in the Revised Self- and Family Management Framework. Family members discussed by participants included adult and school-age children, spouses, and extended family members.

Facilitators and Barriers: Personal/Lifestyle Factors

Theme 1. Family health history influenced participants' CVD-related knowledge, beliefs, emotions, and behaviors. Participants' discussion included the role of genetics and family history in disease risk and family members who had died from heart-related issues or were currently managing heart-related conditions. Heart disease was described as something that could "run in families" and be passed down through generations. Participants expressed a desire to avoid the heart-related problems of their family members. Participants also expressed worry and concern while discussing their family history of heart problems. For example:

I do a lot of worrying because of the fact that my mama passed and it's so much of sickness in my family like congestive heart failure; that's what my dad had. Two of my brothers died from it. And sometimes when I get to hurting in my chest and I just pray to the Lord, ask Him, "Please remove it and not let me worry about it."

Some participants were uncertain about the cause of heart problems in their families. There was also shock regarding CVD-related mortality among family members. One participant discussed a very recent death of a family member:

We just lost a family member the day before yesterday, and they said [the cause was a] heart attack. I'm like, "This is a young guy," you know? I'm like—and the family is just, "What?" you know? I mean this fellow was ushering (in church) Sunday, and then on Monday, he dead. You know what I'm saying?

It is also interesting to note that in the 2 quotations included above and other places in our data, spirituality and religiosity were identified as mechanisms individuals used to cope and/or make meaning of challenging health circumstances.

Theme 2. Participants varied in adherence to familial norms and preferences about diet and physical activity. Adherence to familial norms about diet and physical activity was varied. Participants noted that information and knowledge transmitted through behavioral patterns established during childhood may be deeply ingrained and difficult to unlearn. This notion was highlighted in the discussion about diet. Eating habits learned during childhood—sometimes referred to as the “old-fashioned” way of eating—continued to influence their habits as adults. There was the perception, however, that some of the dietary habits learned in childhood were not healthy for participants or their children. Some participants discussed changes in their knowledge and beliefs about diet and physical activity as they aged to align with what they believed was a healthier lifestyle.

Particularly as it relates to food served during family gatherings or special occasions (eg, holidays), participants discussed a number of foods family members preferred and/or expected to be served. Commonly mentioned foods included macaroni and cheese, ham, cornbread, yams, fried chicken, turkey, greens, barbecued meats, stuffing, and desserts such as pies. Participants described many of these foods as unhealthy. Some participants described limiting their consumption of these foods to special occasions and making conscious decisions to limit their portion sizes during gatherings where these foods were served. Conversely, others described increased consumption of these foods during family gatherings and the benefit of having leftovers from large family gatherings for future meals. Participants responsible for cooking these foods remarked on their efforts to prepare foods in the expected manner. One participant discussed cooking collard greens with meat in it because that is the way her family likes it, but acknowledged that she only does so on Thanksgiving and Christmas holidays. She stated:

They want me to do it more often, but no, I don't, because of what I put in it, you know, and it's just good. It's good, it's good.

Thus, among participants, efforts to limit preferred and common foods were both individual and family focused in nature.

Facilitators and Barriers: Health Status

Theme 3. Family increased motivation for physical activity despite health challenges. The severity, symptoms, and side effects of health problems affected participant physical activity engagement. Barriers to exercise included pain, swelling in extremities, artificial limbs, and functional limitations in participants associated with older age. For a number of participants, however, family members provided increased motivation for or engagement in physical activity in spite of these challenges. One participant noted that exercise was important to her, but chronic leg problems made it difficult for her to be as active as she desired. Exercising with a family member (niece) was helpful:

Walking, stretching, I'm hyperactive with my niece; she's on a jump-rope team so I jump rope with her on occasions... We stretch but other than that, that's basically what my exercise consists of.

While some participants expressed that they were not reaching desired or recommended levels of physical activity, they noted that family and support for and shared engagement with exercise was helpful for increasing their activity levels.

Facilitators and Barriers: Resources and Environment

Theme 4. Family members helped participants overcome challenges experienced accessing resources that influence diet and physical activity in their community. Connections were made between living in a rural community setting, having limited financial resources, and reliance on family. For example, in describing dietary habits of the past, participants noted that being raised with family in a rural, farm setting, with little access to transportation, made for a healthier diet. Some participants also mentioned, however, that in the present day, living in a rural setting made it harder to access fresh produce. One participant shared that it was difficult for her to travel to a farmer's market for fresh produce, despite a voucher to purchase the goods. This voucher was likely important to the participant, who also felt that eating healthy was too expensive. Instead, she received produce from her brother's garden. Participants also discussed family support in identifying places where fresh produce was available and avoiding places where fresh produce choices were limited. Although participants were aware of resources to assist with physical activity (eg, parks), their ability to access and utilize those resources was often dependent upon family members. For example, a participant noted that she would utilize the local park to play with her

granddaughter, but would only do so if her granddaughter accompanied her. Another participant remarked that while her children and grandchildren encouraged her to walk, they do not like her to do so alone because of safety concerns.

Theme 5. Family members helped and hindered participant's diet, physical activity, and smoking behaviors at home. The home environment was also an important context in relation to family influences on CVD risk behaviors. Participants gave examples of family home characteristics that influenced their diet, physical activity, and smoking behaviors. This included family members shopping for groceries for home-cooked meals (which sometimes involved limiting the purchase of unhealthy items) and meal preparation. Barriers to physical activity in the home environment included health concerns that limited participation in family exercise activities (eg, bike rides) and childcare demands, particularly if the individual was not aware of exercises they could do at home (eg, when childcare duties or physical limitations prevented them from exercising outside of the home). With regard to smoking, the smoking behaviors of others in the home were a barrier to smoking cessation. For example, one participant remarked that trying to quit smoking can be difficult when family members continue to smoke, stating:

I try to quit smoking, but everyone that I'm around [is smoking], it's like a chain reaction.

Conversely, another participant noted he smoked less than he would otherwise because his wife did not allow him to smoke in the house.

Processes: Activating Social Resources

Theme 6. Families played an important role in health promotion activities. Overwhelmingly, participants discussed having support from family to engage in behaviors that would promote their health. Participants described receiving encouragement or inspiration from family members regarding physical activity, smoking cessation, and eating a healthy diet. A wide range of family members filled this role, including parents, siblings, spouses, and adult children. Participants discussed working with family members to make changes in health habits, with varying levels of success. For example, one woman shared:

"...we all want to lose weight," so we all started this diet together... they would say, "Mama, let's start this diet," right? Of course, I was the one that ended up going through and through with it... (laughs)—but they were supportive in the beginning.

Intergenerational linkages (eg, parent/child, grandparent/grandchild) were tied to motivation for both healthier diets and physical activity engagement. This included parents/grandparents influencing the health behaviors of children as well as children influencing the health behaviors of parents/grandparents, often through modeling positive behaviors and effective behavior change. For example, one participant mentioned that

her sons have told her that they want to lose weight, and she tries to instruct them on how to do so by telling them what has worked for her:

They'll just say, "Aw, she's crazy. What's wrong with her? She wants me to give up my food?" But then they'll watch it—if it worked for me, and they see me doing it, then they'll try it, and it'll work for them.

A number of parents and grandparents discussed the physical activity they engaged in because of their care for children or grandchildren. Participants also discussed enjoying exercising with family members, and even doing so despite health challenges, discussing the support for physical activity as mutually beneficial.

Theme 7. Some participants reported a lack of family support for health and/or negative family influences on their health.

Some participants shared experiences with family members that they perceived as unsupportive of their health or health behaviors. One reason for a perceived lack of family support was problematic interactions with family members (eg, smoking around someone interested in smoking cessation, encouraging consumption of foods participants viewed as unhealthy). One participant described having to navigate challenging discussions when he did not receive the type of support desired. The participant discussed having a mother who was supportive of attempts to eat healthier, at times saying "Put [the unhealthy food] down. You don't need it" while other family members would tempt him with food, saying "Come on you know, it ain't gonna kill you."

Some participants remarked that there was a lack of family influence on their health behaviors (positive or negative). In some instances, support was not desired or not available. Others mentioned that they wanted to do things on their own:

No, I never had to ask for support for a lifestyle change. Tragedy always came to my life to make me change. In some ways you had to hit the brick wall first. You say, oh my God, I wouldn't want to go through this anymore either. So I changed then. But... you know, hard head, you know... But that's how—and I'm making change.

Thus for some, the decision not to request support was reflective of a desire to take ownership of their own health and health behaviors.

Themes and Revised Self- and Family Management Framework

Five of 7 themes were consistent with the framework's conceptualization of facilitators and barriers. These themes highlight facilitators and barriers to CVD risk reduction that include personal/lifestyle factors (theme 1), health status (theme 3), the community environment (theme 4), the home environment (theme 5) and the activation of social resources to positively influence engagement in CVD risk reduction behaviors (theme

6). In addition, 2 themes not fully captured in the existing framework emerged as important in our population concerning CVD risk reduction: facilitators and barriers resulting from family norms and preferences (theme 2) and the process of managing negative or unavailable social resources (theme 7).

Discussion

This study examined the role of family in influencing CVD-related knowledge and health behaviors among rural AA men and women. Our data analysis identified 7 key themes. Family health history and familial norms and preferences influenced participants' CVD-related knowledge, beliefs, and behaviors and played an important role in health-promoting activities. African American adults reported that their families were helpful for increasing motivation for and overcoming barriers to healthy behaviors, including accessing community resources. Conversely, AA adults in this study also reported that family members at times hindered their ability to engage in behaviors through unsupportive communication or modeling poor health behaviors. Others reported that family had little influence on their health behaviors. Overall, this study adds to the literature by examining familial factors that influenced CVD risk and risk reduction behaviors in a rural AA adult population, a population disproportionately burdened by CVD.

Rural health has been described as a dimension of health disparities, which is often overlooked.⁴² It was reported that family members took steps to support healthy behaviors among participants and overcome barriers associated with the rural communities in our study. For example, transportation, a noted concern in rural settings,^{43,44} was a barrier to accessing healthier food choices in these rural communities. Family members helped study participants access healthy, affordable foods where transportation-related barriers existed. Rural communities may also experience significant barriers to physical activity, including poor access to fitness facilities, lack of sidewalks, unsafe neighborhoods, and high crime rates.⁴⁴ Intergenerational support for physical activity (eg, encouragement, pair/group activities) was a key facilitator of physical activity, even in the face of physical ailments and environmental challenges (eg, safety concerns). Although no participant discussed the influence of tobacco marketing, evidence suggests AA⁴⁵ and low-income communities⁴⁶ are heavily targeted by the tobacco industry, influencing smoking prevalence among this population. In the area of tobacco use, we found evidence of family members restricting tobacco use in certain areas of the home environment. Our findings suggest that consideration of intra-generational and intergenerational support and mutual support could be helpful additions to The Revised Self- and Family Management Framework's conceptualization of facilitators and barriers, particularly when applying the model to rural AA adults.

More attention should also be given to familial norms and preferences when seeking to understand individual health behavior when working with this population. Gruber and colleagues¹² describe the role of family culture, traditions, and

intrafamilial support in reinforcing behavioral choices and habits. For example, in certain cultures, particularly AA communities, food represents an ethnic identity. Thus, food choices are influenced by familial and cultural norms and can play an important role in health promotion targeting dietary changes. This was evident in our study wherein participants discussed the role of their family members in supporting dietary changes to lose weight as well as challenges with managing dietary intake given norms around food preparation and availability. Health behavior interventions that target the family (vs individuals) may be more effective due to the collective impact and interplay among family members.⁴⁷

Despite the noted benefits of familial support for healthy behaviors, it is also important to recognize challenges associated with engaging in health behaviors in a familial context, specifically family influences on health that may be perceived as negative or neutral. Some participants reported challenges with engaging in healthy eating or smoking cessation because of the diet and smoking behaviors of members of their family who at times encouraged them to continue behaviors known to increase CVD risk (eg, unhealthy diet, smoking). Research on the consequences of negative social interactions and health support the idea that it can be useful to help individuals navigate and manage interactions that may have negative consequences on their health, while also helping them to maintain valued social relationships.

For some participants, family support was either unavailable or inconsequential for their health behaviors, while other participants wanted to pursue health-related behaviors on their own. This brings to attention the usefulness of considering desired versus nondesired social support and available versus nonavailable social support. Different approaches may be necessary for individuals who desire more support compared to individuals who are satisfied with their level of support. Moreover, individuals may perceive the support they receive in ways that are different from what was intended (eg, helpful or harmful). Individuals may also perceive support as nonexistent when support efforts are not recognized. Hence, strategies to enhance communication around social support needs may facilitate health-promoting behaviors. Identifying and managing social resources, as well as differences in perceptions of received and provided support, could also be useful additions to the Revised Self-and Family Management Framework. Given the complexity of family dynamics, family interventions that consider and address relational and social factors, in addition to psychoeducational components, could increase the applicability of this work.⁴⁸

Lastly, we cannot understate the importance of understanding AA family support and health behaviors in context. The environments wherein AAs live, work, and play often have a significant influence on their health and health behaviors.⁴⁹ Efforts to improve the health of AA individuals and families will require interventions at multiple levels that have the capacity to elicit positive change. Given the importance of healthy eating, physical activity, and tobacco cessation for CVD risk reduction and the risk for and management of other chronic

health conditions, considering how family members can assist participants in overcoming these barriers in conjunction with broader, community, and system level efforts is recommended.

Limitations

In this qualitative study, we aimed to provide an exploration of the lived experiences of rural AA adults and the individual and family influences on CVD risk reduction in this context. As such, readers should be cautious in extending these findings to other populations. In addition, while we applied the Revised Self- and Family Management Framework to the analysis of these data, the interview guide was developed as a part of a broader formative research process and did not have specific questions tied to this framework. We have extended the application of this framework to understanding how to target health risks and behaviors of family members already working together to manage illnesses. Finally, we recognize the possibility of social desirability in responses, such that respondents may be more likely to share positive aspects of family involvement in this context. However, we took several measures to increase internal and external validity of the responses: using community and academic interviewers, imbedding questions regarding the family role among other questions, using questions from prior studies when available, and using a theoretical framework as part of our analyses.

Conclusion

Addressing the disproportionate burden of CVD among rural AA adults requires increased attention to the role of families. Family norms and preferences associated with health behavior and disease management, underlying mechanisms of family interactions (eg, communication and collaboration), and strategies for managing negative interactions are important family-related health processes that would be useful to target in interventions addressing CVD risk factors. Increasing family engagement in supportive behaviors that reduce CVD risk, particularly, where individuals may perceive support as nonexistent or where the efforts of support providers go unrecognized, would also be beneficial. Moreover, understanding family processes in context will require specific attention to aspects of the rural context that facilitate or constrain engagement in health-promoting behaviors such as a healthy diet, physical activity, and smoking cessation. Future research should give attention to the role of multilevel interventions for helping rural AA families access and utilize resources that can decrease their CVD risk.

Acknowledgments

The authors would like to acknowledge the Project GRACE Steering Committee & Consortium and the individuals and families from Edgecombe & Nash counties in North Carolina who contributed their energy and insights to this work.

SO WHAT?

What is already known about this topic?

We know that there are many ways that family members influence engagement in health behaviors that are critical for reducing CVD (eg, diet, physical activity, and tobacco use).

What does this article add?

African American rural families played an important role in helping adult family members overcome individual and context-specific barriers to engaging in healthy behaviors. Intergenerational linkages (eg, parent/child, grandparent/grandchild) were tied to motivation for both healthier diets and physical activity engagement. The Revised Self- and Family Management Framework may be useful for understanding the relationship between individual and family-level factors that influence CVD risk.

What are the implications for health promotion practice or research?

Interventions to decrease CVD risk should consider family norms and preferences, as it relates to health behavior and disease management (eg, communication and collaboration) and consequences of negative interactions. In addition, understanding the role of families in responding to rural contextual factors that help or hinder healthy behaviors will be useful for family-engaged promotion, practice, and research.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The preparation of this manuscript by the first author was supported by the Cancer Health Disparities Training Program (2T32CA128582-06) and Center for Health Equity Research at the University of North Carolina. Support for this study comes grants from the National Heart, Lung and Blood Institute (1R01HL120690-01, 2K24HL105493-06 Corbie-Smith).

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