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Recruitment and Entrance of Participants Into a Physical Activity Intervention for Hypertensive African American Women

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Decreasing health disparities between White Americans and racial/ethnic minority populations is a public health priority. An ongoing inability to attract sufficient numbers of African Americans and other people of color to participate in research studies is a major barrier to accomplishing this goal. Participation of racial/ethnic minorities in intervention studies is especially critical to the development of appropriate strategies to promote health among these populations. This article examines the effectiveness of preintervention meetings as well as interactions between African American research team members and potential participants as recruitment strategies. Intersections between recruitment and health promotion are also addressed. **Key words:** *African American women*, *community-based research*, *intervention studies*, *recruitment*

RACIAL/ETHNIC HEALTH DISPARITIES exist across a variety of health issues including hypertension,[1] heart disease,[2] cancer,[3] renal disease,[4] functional limitations,[5] and HIV/AIDS.[6] Elimination of racial/ethnic health disparities is a priority public health goal.[6] Enhanced understanding of the complex factors influencing the health status of African Americans and other populations most effected by health disparities is vital to this endeavor.[7,8] Effective recruitment and entry of participants from these groups is therefore essential to the overall success of research studies aimed at decreasing or eliminating health disparities.

The literature is replete with discussions regarding the challenges of recruiting sufficient numbers of African Americans into research projects focusing on health promotion in relation to diverse health issues including cancer,[3,9] cardiovascular disease,[10,11] renal disease,[12] communication disorders,[13] and physical activity.[14–16] Moreover, Qualls[13] argues that simply recruiting members of underrepresented minorities into studies proportional to their presence in the general population may be inadequate to detect true statistical differences that may exist between dominant and minority populations. Inadequate numbers of participants from underrepresented groups also prohibit researchers from examining within-group differential

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responses to a given intervention.[8,17] Increased attention to factors that support the successful recruitment and entry of African Americans and other underrepresented populations into research is a prerequisite to the development of efficacious health promotion interventions.

Recruitment of participants from underrepresented populations has focused heavily on "getting the word out" by promoting the study in locals and media targeting these populations.[12–14,16] Enlisting the assistance of respected professionals and community leaders in advertising has been an effective strategy. Physicians[11,12,15] and ministers[10,13] serving large minority populations have played particularly prominent roles in the recruitment of African American participants. Establishment of community advisory boards to assist in marketing their study has been effective for some researchers.[3,14] Still others used preintervention group orientations as a recruitment strategy.[14,18] Many recruitment strategies aimed at African Americans and other underrepresented groups provide an opportunity for research team members to interact directly with potential participants. However, detailed information regarding the nature and quality of these interactions is generally not included in research reports.

This article explores intersections between opportunities for building deeper relationships between the target population of sedentary hypertensive African American women and the research team during the recruitment phase of a pilot physical activity study and recruitment outcomes. More specifically it focuses on articulating the impact the preintervention session, protocol specialist, and nurse practitioner had on the recruitment and entry of participants into our study. Preintervention meetings have been used successfully with African American populations as a means of recruitment and decreasing participant attrition.[18,19] The protocol specialist was responsible for recruiting participants and completing in-home data collection throughout the study, while the nurse practitioner was contracted to complete preintervention physical examinations. As a result, they developed unique perspectives about the recruitment and entry process stemming from their respective roles in this project. In conjunction with developing this article they prepared written reflections on their experiences associated with the recruitment and entry of women into the study. Excerpts from their individual written reflections are included in this article. Their perspectives regarding factors influencing their interactions with participants and their thoughts about interconnections between research and health promotion among African American women are highlighted. These reflections are minimally edited to preserve the unique voice of each woman. Researchers interested in conducting community-based intervention studies might find their insights particularly pertinent to the design of effective recruitment strategies. A thorough articulation of the research design and theoretical framework is beyond the scope of this article. Forthcoming articles will provide interested readers a more detailed description. However, a synopsis of the study will be provided as a foundation for examining interaction between research team members and potential participants during the recruitment phase.

STUDY OVERVIEW

"Walk the Talk: A Nursing Intervention for Black Women" was concerned with the development and preliminary testing of an intervention to promote walking. This 12-month group intervention used culture-based storytelling, interactive learning, paired walking, and group physical activity as means of enhancing problem-solving skills and social support in relation to walking for cardiovascular health. A pre/post single group design, with a 6-month follow-up, was used for this pilot study. Changes in overall physical activity, walking behavior, problem solving, and social support related to adoption of a walking program were assessed through the triangulation of quantitative and qualitative measures.

Quantitative measures included questionnaires, pedometers, blood pressures, and weights. The opening story and debriefing period of each group meeting were audiotaped and transcribed. These transcripts, along with transcripts from 2 focus groups held at the end of the study, and the journaling completed by women during the sessions serve as the qualitative data for this study. Comments in this article attributed to women participating in the study were drawn from a preliminary narrative analysis of the transcripts. Analysis using a method developed by the principal investigator (PI)[20] is ongoing.

A convenience sample composed of community dwelling sedentary hypertensive African American women 18 years and older living in mid-Missouri was recruited for this study. Sedentary women were defined as those who self-reported engaging in nonwork or nonchore related physical activity no more than 20 minutes a day, 2 days per week. Physical examinations and health histories were required for all potential participants prior to the start of the intervention. A contract with the local health department provided the opportunity for all potential participants to be examined by a family nurse practitioner at no cost to themselves. Women could alternatively choose to have their personal health provider complete the examination and submit a letter verifying that they are eligible for inclusion in this study.

RECRUITMENT GOALS

Recruiting a sufficient number of women and maintaining attrition within the anticipated range was crucial to the success of this pilot study. Study enrollment was restricted because of resource limitations. We aimed to recruit 30 women, with a goal of having 20 women complete the study. Although small, this sample size would provide substantial information about the acceptability of measurement instruments and feasibility of implementing a larger scale study. Recruiting 30 women allowed for a 33% attrition rate. Attrition rates for short-term intervention studies with a physical activity component targeting African American women ranged from 9% to 47% (mean = 21%).[17] The more conservative attrition rate used in this study took into account the longer length of the intervention, 12 months, as opposed to the more standard 8 to 14 weeks. All women who completed the preintervention assessments and attended at least 1 meeting were kept in the study regardless of their ability to attend subsequent meetings or their level of physical activity.

RECRUITMENT PROCEDURE

Three months were allocated to the recruitment and entrance of women into our study. Women were recruited through flyers placed in church bulletins and in strategic areas around the community, through word of mouth, or by referrals from health practitioners. Flyers contained information about the study goals, dates of the preintervention sessions, and how to contact the PI or protocol specialist.

The protocol specialist had primary responsibility for the recruitment and retention of study participants. She was born and raised in the mid-Missouri city where the study was conducted, and is a highly respected member of the local African American community. Her active involvement in the community had earned her the affectionate nickname, "the social worker." Moreover, she had finely honed her communication skills through years of being involved in statewide blood drive campaigns and as the former proprietress of a small business.

The protocol specialist went door to door discussing the study with and building support among African American business owners. This was a prerequisite to many owners allowing a flyer to be hung in their establishment. She also introduced the PI to some business owners and facilitated discussions about the project. An important part of this process was determining how local businesses could be used in a manner that

benefited both the businesses and the study. Facilitation of conversation between the PI and community business owners was important. A history of negative relationships between universities and African American communities compounded by exploitation of these communities by researchers resulted in great wariness.[3,21] Most business owners were surprised when they learned the PI was an African American woman. Many had questions concerning "who her people were, where they were from, and her general involvement in the community." The PI and protocol specialist had worked together on community and church-based projects in the past. This allowed the protocol specialist to honestly testify concerning the PI's prior relationship with the local African American community.

The protocol specialist and PI were also guests on a local radio talk program. Two African American women who are both politically savvy and powerful within the local community hosted this program. As a result, the program is one of the most important sources through which people obtain information about issues and upcoming events pertinent to the African American community. The protocol specialist and PI talked about the importance of physical activity for cardiac health promotion, provided an overview of the study, discussed the upcoming preintervention meetings, and answered questions by callers.

Preintervention session

Interested women contacted the protocol specialist or PI for more information and/or attended a preintervention meeting where they could meet the research team and learn more about key aspects of the study. Participation in the meeting was not mandatory as a condition of the study; however, women were strongly encouraged to attend. We increased the likelihood of attendance by offering the preintervention meeting twice. The sessions were held at 2 different sites that were each under consideration as the primary place for conducting intervention meetings. Both locations were situated within neighborhoods where large numbers of African American women lived. The sites, in walking distance from one another, were well-established venues that hosted numerous African American community events. Both were also on major bus routes. Hosting the preintervention meetings at the different sites allowed us to assess the suitability of each site with respect to conducting group sessions with 10 to 15 women.

Preintervention meetings were 3 hours long and followed the format of the planned intervention sessions. This provided an opportunity for women to experience what it might feel like to participate in a therapeutic group environment. These sessions were divided into 6 sections consistent with the format for intervention group meetings. The components included check-in, introductory story, interactive learning, group physical activity, debriefing, and sharing a light snack. The members of the research team residing in the local community were invited to participate in the preintervention sessions.

Potential study participants and members of the research team introduced themselves during the "check in" period. A self-affirmation activity was followed by each person present briefly sharing what they felt was most important for the group to take into consideration regarding their participation in the meeting. Opportunities to check in are an important way of building community and nurturing one another within African American women's traditions.[22]

A story marked the transition from the check-in to the interactive learning section of the meeting. This story was an adaptation of an African-American folktale that affirmed our culture and articulated the importance of women working together to restore or enhance individual and communal health. The professional storyteller who was a member of the research team told it. She is a longtime member of the community, known for both her storytelling and work as an art teacher at one of the local middle schools. The story

was considered the highlight of the preintervention meeting by many of the participants. Several women expressed delight upon learning that the storyteller would create or adapt stories based in African or African American culture to be shared during the interventions sessions. These stories would be used to encapsulate the major focus of a given session while enhancing problem-solving skills and social support. The significant role storytelling plays as a tool for promoting the health of African American communities is well documented in the literature.[23,24]

The interactive learning section immediately followed the story. During this phase an overview of cardiovascular health promotion and specific information about the pilot project were provided. Many if not most of the women attending the sessions knew that physical activity was good for them. However, most lacked specific information regarding intersections between physical activity, hypertension, obesity, and poor cardiovascular health. Linkages between these factors were explicated prior to sharing specific information about the study. A video developed by the Association of Black Cardiologists entitled *Children should know their grandparents* presented an overview of the serious toll heart disease is taking on the African American community and offered suggestions for cardiac health promotion. The PI presented specific information about the prevalence of sedentary lifestyles, obesity, and hypertension among African American women following the video. Women were then given an opportunity to ask questions and provide feedback about the video. Afterwards the PI shared a summary of each aspect of the study including the purpose of the study, members of the research team, inclusion/exclusion criteria, intake process, preintervention examinations, structure of monthly sessions, home-based walking component, outcome measurements, incentives, and follow-up plans after the pilot was completed. Copies of assessment tools and the consent form were available for women to examine. Time was then allotted for questions concerning the intervention.

Women's responses during the initial preintervention meeting forced the PI to reconsider the episodic participation of non-African American members of the team in study sessions. The efficacy of storytelling as a tool for enhancing problem-solving skill development and social support among women was of great interest to research team members. Some members expressed a desire to periodically participate in the intervention sessions so that they could directly observe women's reactions to the storytelling. Several women appeared uneasy in the first preintervention meeting during the check in and story. Others raised questions privately concerning the presence of a "White man and woman." These reactions were an outgrowth of the study being promoted as a project "for, by, and about African American women." In response, the PI asked the 2 members of the research team who were not African American women to excuse themselves from the rest of the session. The larger research team was later notified about what happened and participation in the second preintervention meeting was limited to members of the research team who were also African American women. The importance of honoring the study sessions as a space for African American women was addressed during a conference call with the research team. One of the European American members of the research team is a recognized expert in the development of physical activity measures. Her current work includes the development of physical activity measurements specifically tailored to the needs of women of color. She shared candid thoughts about conducting research in a manner that affirms and supports women of color individually and collectively. Her insights were crucial to helping the research team to consider important issues related to doing the best possible research in cross-cultural situations. In subsequent months, study participants repeatedly retold the story of the non-African American women researchers being asked to leave the preintervention session. Each time they

emphasized how the honoring of their desire to only have African American women present during the study sessions positively influenced their decision to participate in this project.

After all questions and concerns about the study were addressed women were invited to participate in a short session of physical activity along with the research team. Monthly study sessions included a 40-minute period allocated to a group walk. However, for the preliminary meetings we elected to spend 10 minutes doing the "electric slide." This is a line dance that is a very popular activity at African American gatherings. Group dancing was a fun way to get women up and moving. It also allowed women to participate regardless of whether they came prepared with proper walking attire or shoes.

The preliminary meetings concluded with a short debriefing period followed by an opportunity for women to visit with one another while sharing a light "heart-healthy" snack. Women were asked to share their thoughts about the meeting, suggestions for making the intervention more attractive, or ideas for recruitment. The formal component of the session ended with the distribution of door prizes. Prizes included books, candles, and note cards, all of which were consistent with the types of incentive gifts that would be distributed during the actual study. The PI then pointed out a table bedecked in Afrocentric cloth and objects to participants. Women were encouraged to browse the table, filled with pamphlets covering various health issues of particular relevance to African American women, and take whatever they wanted. Written information about the study, including how to contact the PI and protocol specialist, was also on the table. The session ended with a short prayer followed by the leisurely sharing of a heart-healthy snack.

Women who wanted to participate in the study were invited to talk with members of the research team individually at the conclusion of the preintervention meeting. A brief conversation with each potential participant was conducted to ensure that she met eligibility criteria for the study. Potential participants were given written material to review at their leisure. In-home appointments were scheduled with interested women for the purposes of completing the consent form and baseline data. Letters explaining the study and a physical examination form were given to women to take to their healthcare providers. Women were also given information at this time regarding the scheduling of a preintervention physical examination with the nurse practitioner associated with the study. They were reminded that evaluation by a health provider was a prerequisite to participation in the study. Individual conversations concluded with an opportunity for any remaining questions to be addressed.

Preintervention physical examination

Potential participants completed preintervention physical examinations as prerequisites to entry into the study. Women were given the option of obtaining a screening physical examination from either their personal healthcare provider or an African American nurse practitioner associated with the study. The nurse practitioner was present during the first preintervention meeting. Many of the women expressed surprise and delight when they found out she was an African American woman and lifetime resident of the local community. Women electing to have their examinations done by the nurse practitioner were seen at the local health department where she worked. Supplies necessary to complete examinations and the nurse practitioners salary were covered by the grant supporting the study. This ensured that valuable public resources would not be strained as a result of the health department's willingness to assist in the project.

The protocol specialist played a vital role in making the physical examination a reality for several study participants. Many women were very wary of being seen by a healthcare provider, based on past experiences. Some were afraid of what the examination would involve, while others were afraid of what

they would find out. The process of making an appointment was daunting for a few women and others made and cancelled their appointments on numerous occasions. The protocol specialist served as a liaison between the nurse practitioner and some women. In this capacity, she arranged appointments and transportation. She even accompanied some of the women to their appointment, sitting with them while they waited, and helping them to debrief after the examination was completed. Subsequent conversations in the context of study sessions revealed that having an African American woman conducting the examination was a source of comfort for most. However, they also noted that the process itself still was frightening though to a lesser degree. Many women acknowledged that they would have never gotten the physical examinations, even though they really wanted to be in the study, had it not been for the encouragement and support of the protocol specialist.

Baseline data collection and entry of participants into study

Baseline data collection and entry of participants into the study occurred 1 to 3 months after the preintervention meetings. Some women completed their physical examination before the baseline data visit while others completed the in-home visit before obtaining their physical examination. However, all data collection visits and physical examinations were completed prior to women's participation in the first group session.

The protocol specialist completed baseline data collection in participants' homes. She read the consent form, answered any remaining questions about the study, and obtained written consent for participation from each woman. Baseline information regarding blood pressure, weight, overall physical activity levels, walking, problem solving, social support, and selected demographic factors was collected. Completed physical examination forms were collected at this time from women who had elected to see their personal healthcare provider. The nurse practitioner affiliated with this study returned completed physical examination forms for the women she saw directly to the PI. Women who did not have their physical examinations completed prior to the intake visit were reminded that the evaluation would have to be completed and the form returned to the PI before they could participate in the study. Each participant was given a $10 gratuity at the end of the data collection session. The gratuity was explained as a small token of acknowledgement for the invaluable role each participant played in making the study a success.

Protocol specialist's perspective on the recruitment and entry process

It is critical that you must have love and compassion for the needs of others, the whole armor of God to be equipped to deal with the many challenges that you will be faced with throughout the entire study. Building a strong foundation of trust, friendship, that "sistahgirl" relationship that we cultivate one with the other, are some of the key elements that are very important and sets the tone for the duration of the study. We must have that willing spirit to go that extra mile and stay flexible when situations arise that no one has control of but God, and to assure the women of your understanding, and that *they* are important not a study only.

The importance of keeping a good open positive mind as well as attitude and never losing the focus in spite of all the changes and challenges that take place throughout the study, and the good that we hope to inspire in the end results. To be aware of that the challenges and frustrations in our own personal lives come too often also, and that human element tries to place that element of doubt and fear that tells you to quit. But that grace and mercy of that spiritual side tells you that 'the battle is not yours it's the Lord's, and move as the spirit gives utterance, and know that God will supply all our needs.' And to know that it is our time as black people to do the work that is needed to help bring about that positive change in the lives of our people. We must stay motivated to keep the women motivated enough to want to stay in the study. Although we are very aware of what we want to get from the study it is very important not to become too routine or boring like home.

The awareness that nothing is set in stone, everyday circumstances, never ending schedules and appointments, the women even finding time to sign the consent form, and what it takes to allow time to get their health physicals done are just some of the many challenges that are faced with the busy lives of the women. Transportation is a factor that we must take in consideration also, because there are those women who may not drive and those that do drive that may not have a car and it too is a challenge that we must step up to the plate to get the work that is needed done.

When we are welcomed into the homes of the women, we must take into consideration that the living conditions are not the same for all. How we respond will reflect how the women respond, after all, we are invited and welcomed in and not everyone is extended that invitation. Be prepared to adjust to the settings when you arrive, because you could be in the midst of a number of family and friends, and audience that pays attention to your performance and the spotlight is on you. To stay sensitive to the conversations and body language of the women is important to notice and know when to back off and give the women their time and space that they may need for self. And hopefully we can recognize the warning signals that it is time to get out of the sistah's face. [Smile!!]

We are entrusted with so much information to the point that, you are not quite sure if you have broken that trust when you share that info with the PI for what you think is hopefully for the good of the study. The human element raises it's ugly head, and causes one to wonder, 'am I doing the right thing?' Go, 'here am I God, send me,' and always do your best, that is all you can do. God will do the rest. Know that how well the PI and the recruiter relate one to the other in every aspect is a major component to the outcome of the study, and those two must stay open and honest with one another to benefit the study as well.

Nurse practitioner's perspective regarding completion of physical examinations

I was thrilled to have the opportunity to be a part of the Walk the Talk research project. Initially, I was grateful that research of this type was being conducted. I was then honored to be able to participate. Historically, our society and medical community has not placed equal value on the unique health issues of women and people of color. This project was an opportunity to value, and address the unique health needs of African-American women.

My employer, the Columbia/Boone County Health Department, was particularly supportive of this program. They provided space and use of equipment for the preintervention physical exams. Two on-site physicians were available for consult and/or referral. Both physicians as well as staff were made aware of the project and encouraged clients to participate in the study.

As I visited with the women for their preintervention exams, I felt a personal and professional connection. Many of the women were people that I knew from church, school, work or social settings. If I didn't know them personally, it didn't take long to discover relationships such as their children were my classmates or their brother was my mechanic. My professional work is focused on health and wellness. I have a special interest in health disparities in people of color. This project was a unique opportunity to directly address the health and wellness of women with whom I share a common experience. I could identify with these women and therefore provide culturally competent care.

Through my interactions with the women of *Walk the Talk*, many positive health behavior outcomes resulted. Several women became more aware of their blood pressure and other chronic conditions that needed medical attention. Some were referred to their private healthcare providers or set up with appointments at the Columbia/Boone County Health Department. Several had blood pressure levels elevated to the point that they were referred to the Emergency Department. Personal follow up was provided. Appointments were also made for preventive care that had gone unattended such as; annual well women exams, pap smears, breast exams, lab tests and health screening. Lifestyle issues such as smoking, diet, and exercise were addressed in a culturally appropriate manner.

The reward of my participation in this project was seeing the attention to black women's overall health of mind, body and spirit. I saw women walking, supporting each other and taking care of their health. I received a thank-you note from one woman who said how unusual and wonderful it was to sit across from a healthcare professional of the same gender and race. Some women

continued to call me for various health questions or appointments after the preintervention physicals were completed. I truly believe that the design of this program having black women address the health of other black women was key to its success.

OUTCOMES OF RECRUITMENT AND ENTRY PROCESS

Thirty-eight women expressed interest in the project by contacting the protocol specialist or PI and/or attending one of the preintervention sessions. Twenty-five women completed physical examinations required for participation in this study. Fifteen women (60%) chose to see the nurse practitioner and 10 women (40%) went to their private healthcare providers. Ease at getting an appointment and desire to be evaluated by an African American woman were the reasons most often cited by women choosing to have their physical examinations completed by the nurse practitioner. Several women noted that this study provided them with their first opportunity to sit across from an African American woman who was able to share with them information about their bodies and health. Nineteen women initially met the criteria for inclusion, obtained health clearance to participate, and were entered into the study. Four women examined by the nurse practitioner needed to see a physician for follow-up prior to being allowed to participate in the study. Two of these women were examined by their primary physicians and given clearance to participate. The other 2 women refused to see their physician and were excluded from the project. Two additional women completed physical examinations but did not respond to the protocol specialist's attempts to schedule an appointment for preliminary data collection. Twenty-one of the 38 women who expressed interest in the study completed all requirements and were enrolled. Limited human resources did not permit us to follow-up with the additional 17 women who initially expressed interest in the study but did not continue the process through to enrollment.

Efficiency of preintervention sessions as a recruitment tool

The preintervention sessions were an important recruitment tool (see Fig 1). Dividing the number of women who were successfully entered into the study ($n = 21$) by the total number of women who expressed interest in the study ($n = 38$) resulted in an overall recruitment efficiency ratio of 55%. Over twice as many women who attended a preintervention session entered the study as compared to those who expressed interest but did not attend a session. Twenty-one of the 38 women who expressed interest in the study attended one of the preintervention sessions and 17 did not. Fifteen of the 21 women (71%) attending a session were entered into the study, as compared to only 6 of the 17 women (35%) who expressed interest but did not attend a meeting. Two additional women who participated in the preintervention meeting expressed interest in the study but were not eligible because they did not have hypertension. Women attending the preintervention sessions comprised 71% of the total enrollees while women not attending either session accounted for 29% of enrolled participants.

Efficacy of enrollment process

Recruitment of interested participants into our study proceeded quickly. In contrast, completing the physical examinations and initial data collection proved to be more challenging than we had anticipated. This was a result of scheduling difficulties on the part of potential participants, as well as unforeseen personal matters that required the protocol assistant and later the nurse practitioner to take time off from work. Potential participants were recruited within 2 months of the study being announced. However, physical examinations and initial data collection visits for all participants were not completed until 3 months after the preintervention sessions. This delayed the start of the intervention because we had to wait until all the participants were ready to attend a group session. Consequently some women experienced a 5-month

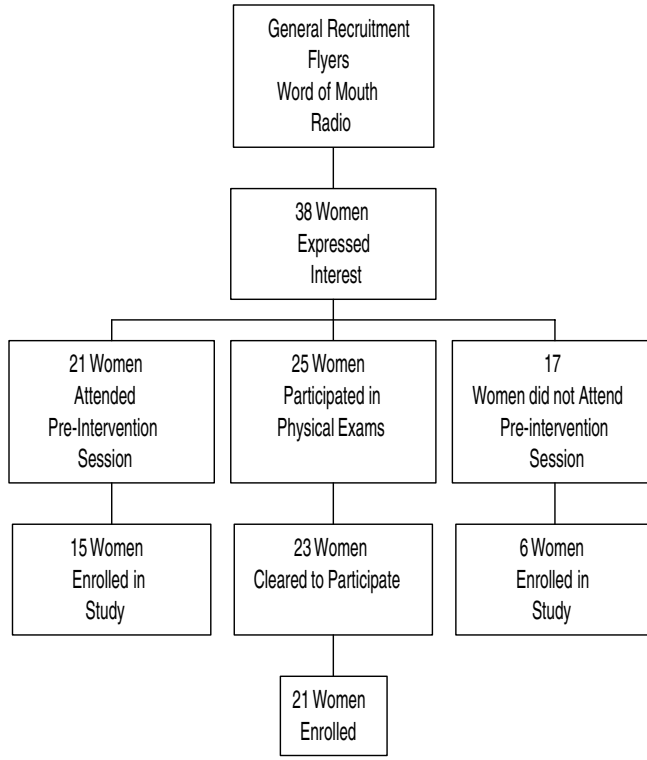

Figure 1. Recruitment and entry outcomes.

lag between expressing interest in the study and the initial intervention session. Moreover, because this was a sequenced group intervention admission to the study was closed after the sessions had begun. Thus, with 21 participants enrolled we had little room for attrition over the course of the study.

Preintervention sessions as a means of evaluating potential intervention sites

Preintervention sessions provided an excellent opportunity for the research team to assess the appropriateness of intervention sites and the impact the presence of the research team had on participation. A predominantly African American church and a community center owned by the local Parks and Recreation department were used to conduct the preintervention sessions. The church was situated near banks and small businesses, while the community center was adjacent to a more residential area. The pastor of the church was extremely supportive of the study and expressed a willingness to work with the project staff to ensure its success. One of the most influential members of the local African American community supervised the community center. This same woman also served as cohost of the radio program discussed previously. She attended the preintervention session that was held at the center even though she was not eligible to participate in the study. Her endorsement of our intervention project on the air and public support for the study was key to attracting the participation of some women.

Women were familiar with both sites and expressed no discomfort related to the locations. However, the women did express a distinct preference for the size and layout of the church. The fellowship hall of the church was large and allowed women to spread out. A kitchen inside the hall provided opportunities

for women to get a drink or food without missing what was being said. The meeting room in the community center was filled with Afrocentric pictures and books, which the women appreciated. However, the small meeting room and separate kitchen both felt cramped when occupied by more than 6 to 7 people.

The church site was selected as the primary location of the group sessions based on feedback from potential participants and our own observations. However, during the 12-month intervention the community center provided an alternative meeting site on 2 occasions when other events were scheduled at the church. Some participants noted that having sessions at the center provided them an opportunity to walk through a different neighborhood, which they thought was a positive aspect of the study. The preintervention meetings were an effective way of gaining information that allowed us to select a primary site for subsequent sessions.

DISCUSSION

Effective recruitment of African American women and other racial/ethnic minorities into research studies is critical to eliminating health disparities. Despite increased emphasis on inclusion of minority populations in federally funded research projects,[7,8] representative participation of these groups in studies remains inadequate.[3,9,12,13,21] Moreover, the majority of physical activity intervention studies that include substantial numbers of minority participants are conducted in urban settings where large numbers of this group reside.[14–16] Insights regarding the recruitment of African American women into our physical activity intervention may therefore be particularly important to the development of health promotion research aimed at underrepresented populations residing outside urban settings.

Success of our pilot project hinged on the ability to recruit and enter a sufficient number of participants prior to the beginning of the first session. African Americans comprise approximately 10% of the 90,000 people living in the county where the study was conducted. On the basis of the estimated 36.6% prevalence of hypertension among African American women,[2] we calculated that approximately 1318 women were available to participate in our study. Researchers in cities with much larger concentrations of African American women have employed multiphased recruitment strategies over periods of times extending beyond 1 year in order to attract sufficient participants for physical activity intervention studies.[14–16] Although less than our enrollment goal of 30 women, our ability to recruit and enter 21 women over 5 months represents a significantly positive outcome for this pilot project. It is consistent with the 4 to 8 women per month participant entry rate obtained in the physical activity intervention of Wilbur et al[16] that targeted African American and Caucasian women living in Chicago.

Procedures used to recruit and enter women into this study were critical to the overall success of this pilot study. Interactions between research team members and potential participants during the preintervention meetings, physical examinations, or data collection visits provided affirmation, support, and modeled new possibilities for African American women to actively engage in individual and group health promotion. The protocol specialist and nurse practitioner played critical roles in facilitating women's involvement.

Preintervention meetings were particularly effective for recruitment. Our understanding of potential participants' lives was greatly enhanced through information women shared during the preintervention meetings, and conversations with the protocol specialist or nurse practitioner. The check-in, interactive learning, and debriefing components of the preintervention meetings allowed us to develop a better idea of women's perspectives on the study. Women openly discussed their excitement and concerns regarding participation in our research project. They also spoke

about barriers to participation and perceived benefits of participation. The interactive nature of our intervention and emphasis on collaborative problem solving rooted in African American culture and women's daily lives were especially attractive to participants in the preintervention meetings.

Visualizing new models of interaction was equally important for research team members and potential participants. Three African American research team members were lifelong residents of the community and another had lived there for more than 20 years. Potential participants viewed the presence of 4 long-term residents of the African American women on our research team extremely favorably.[3] However, historical social class divisions resulted in them being viewed as representing 3 distinct subpopulations of the local African American community. Subpopulations included working-class nonprofessionals, middle-class professionals, and academics. Historical and contemporary examples regarding the active participation of African American health professionals and academics in the exploitation and abuse of vulnerable members of the community resulted in animosity and distrust among the subgroups.[21,25,26] A lack of interaction among the diverse groups further exaggerated the problem. Building trust among women representing various components of the community and modeling ways to work collaboratively toward our collective health was integral to the success of the study.

The story shared by the professional storyteller during the preintervention meetings set the stage for development of a collaborative relationship among the participants and research team members. Storytelling is widely recognized as a means of building relationships while imparting valuable information.[20] Stories shared by members of the research team regarding our own experiences with hypertension and physical activity further emphasized that the pilot study would be just as much a learning experience for us as it was for participants. The protocol specialist and nurse practitioner continued to engage in storytelling with potential participants during the initial data collection period and physical examinations. Honestly sharing the challenges we faced and expertise we brought to the project provided a foundation for building collaborative relationships between participants and research team members. This enabled us to move beyond hierarchal and scripted relationships based on our respective roles as researchers, clinicians, or participants.[27] Instead we were freed to struggle as comrades equally invested in staying alive long enough to figure out what we really needed to achieve health for our families, our communities, and ourselves.

Our first preintervention meeting provided an opportunity for us to turn an awkward situation into a growth and trust-building experience. The discomfort of potential participants with the presence of non-African American women forced us to address issues related to conducting cross-cultural research head-on at the beginning of our study. The Caucasian members of our research team were much more seasoned scholars with national and international reputations. Instead of insisting on their rights to be part of intervention sessions, they prioritized participants' needs/desires over their personal research agendas. Working through this situation provided a foundation for future open discussion among research team members. A willingness of senior scholars to follow the lead of emerging scholars is important to expanding the cadre of competent African American scholars. Increasing the numbers of scholars from racial/ethnic populations is a critical component of decreasing health disparities.[7,8] Taking the concerns of potential participants seriously also signaled that we were interested in working with the community rather than exploiting it for our own gains.[21] Being viewed within the community as a trustworthy and concerned group of researchers could only help our recruitment efforts.

The preintervention meetings were also an optimum health promotion opportunity. We understood that many of the women might choose not to participate in our study or

be ineligible. However, their participation in preintervention sessions indicated that each of them had some vested interest in improving their health. Providing information about cardiac health promotion could help them in this endeavor. The video and statistics were overwhelmingly well received. Women noted that presenting information in this manner helped them to better understand the critical need for taking an active role in reducing their cardiovascular health risks. Sharing this information also created a wonderful context for talking about the pilot study.[3] More importantly, it allowed us to provide important health promotion information to one of the most at-risk populations for cardiac disease.

Participants in the preintervention sessions had opportunities to meet members of the research team, learn more about cardiovascular health promotion, experience what a typical intervention session would entail, examine the measurement tools, and ask questions or offer suggestions for further improvement of the intervention. Educating the target population about prevention and detection of health issues,[3] opportunities to examine tools,[14]and experience typical components of the intervention[28] have all been found to be effective recruitment strategies. Incorporation of these strategies into the preintervention session may account for their success of as a recruitment tool. The prominent involvement of respected community members in the research project[3,15] and opportunities to interact with members of the research team[10,13] further enhanced the efficacy of the preintervention sessions. Finally, answering potential participants' questions and encouraging them to offer suggestions conveyed to women that their input was valued. Qualls[13] notes that recognizing the intellectual contributions participants can make to the development of new knowledge is important to the successful recruitment of African American participants into studies.

The physical examination and baseline data collection visit proved to be unexpected recruitment tools. Women received nurturing and support from the nurse practitioner and protocol specialist. Their personalized interactions demonstrated a commitment to women as individuals and not just potential study participants. This enhanced women's desire to participate in the study. During the physical examination and in-home data collection women shared more intimate details about their daily struggles, fears, and dreams with the protocol specialist and nurse practitioner. This information was conveyed to the PI during debriefing periods with the protocol specialist or nurse practitioner. Information garnered through these interactions assisted us in fine-tuning our intervention to better meet the needs of the specific women who participated in the pilot study. For example, many participants were extremely reluctant and fearful of interactions with healthcare providers. Through storytelling and interactive problem-solving, we allowed women to articulate their fears, contextualized their concerns from a historical communal perspective,[13,21] encouraged women to move forward even though they were afraid, and provided strategies for getting through health provider visits.

Development of an enhanced enrollment procedure will be critical to the success of future intervention studies. We underestimated the time that was needed to enroll potential participants in pilot study by 2 months. Providing sufficient time to enroll participants in a larger clinical trial is essential to ensuring there are sufficient numbers of participants to allow for attrition. The availability of multiple data collectors, 2 or more nurse practitioners to complete physical examinations, and contracting with a physician to do follow-up visits as necessary are additional strategies that would facilitate a more efficient enrollment process.

CONCLUSION

Recruitment and entry of participants have traditionally been treated as preliminary or prerequisites to the real research phases of intervention studies. Our experiences suggest

that these phases can provide the foundation for the development of collaborative relationships between potential participants and research team members. Procedures can be designed to utilize interactions between team members and potential participants as opportunities for developing new insights that will allow interventions to be fine-tuned in ways that respond to the unique concerns and resources of communities serving as the context for the study. An enriched relationship between research team members and potential participants enhances the efficacy of recruitment efforts and equally important expands opportunities for health promotion to a targeted population.

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