

Two Community-Based Strategies to Recruit Black Women in Research

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Abstract To adequately address health disparities, underserved populations must be recruited for biomedical research. Particularly, Black women have been insufficiently included in biomedical research for reasons beyond those of participant preference. Researchers can and should be taking responsibility to ensure rigorous methods are employed to appropriately recruit Black women and enable meaningful implications of their results. The objective of this paper is to identify and describe innovative community-based strategies for successful recruitment of Black women in research. Three studies are referenced to exemplify recruitment methods and demonstrate promising recruitment results in sample size and screening-to-enrollment ratio.

Keywords Black Americans · Black women · Recruitment · Biomedical research · Health research · Structural racism · Community-based · Community-based participatory research

Background

Historically, Black women have not been readily included in health or biomedical research. Certainly several factors effect this reality, and many of which are likely results of structural racism [1]. Research has established healthcare biases contributing to lower quality care and

K. P. Williams · A. M. Anderson (☒) College of Nursing, The Ohio State University, 1585 Neil Ave, Columbus, OH 43210, USA e-mail: anderson.3457@osu.edu poorer health outcomes for Black Americans [2]. Subsequently, medical mistrust, a byproduct of history, knowledge, and repeated exposure to everyday racial discrimination, is prevalent among Black Americans [3]. Lack of adequate care and low healthcare engagement create a vicious cycle that further contributes to the health disparities seen today. Thus far, biomedical research has been found to be insufficient [2] and only stands to act synonymously with the vicious cycle if not intentionally and thoughtfully including effective methods to recruit Black Americans.

The results of biomedical research on women's health have limited effectiveness if unable to include a culturally diverse sample. This is especially true for research relating to diseases that are known to disproportionately affect Black women, such as cancerrelated diagnoses, treatments, and deaths [4]. The urgency to enhance equitable access to biomedical research for Black women is not a new phenomenon. A systematic review of two decades of research showed only 51.6% of cancer prevention and treatment trials reported race/ethnicity, and for the studies that did less than 7% of the sample was African American [5]. Further, the same review found only 26.5% of participants in prevention trials were women and 40.2% in treatment trials [5]. To address this gap, it is imperative to successfully recruit Black women in research. Barriers to recruitment such as fear and mistrust as well as economic and social stressors [6] require contextually sensitive methods. Other barriers that should be considered are those of researchers, such as the lack of practical knowledge about the



S130 Williams and Anderson

Black community they want to include in their research, bias that a study is "good science" even if the results do not provide meaningful implications for Black Americans and other underserved populations, not recognizing the town gown relationships' impact in recruitment, and not including Black researchers as investigators who can contribute to the design of the recruitment strategy. Community-based participatory research (CBPR) is a promising approach for fostering trust with cultural sensitivity and engaging the community affected by the research [7]. In biomedical or health research, this method includes community stakeholders in a collaborative relationship with the research team to better understand the phenomenon of interest in context and the unique social and cultural factors influencing health behaviors and promotion [8]. The Agency for Healthcare Research and Quality (AHRQ) described characteristics of CBPR, including reciprocal learning, shared decision-making, and mutual ownership of the research process [8]. The CBPR framework has been used in studies to enhance the effectiveness of intervention in underserved populations and enable the affected community to embrace research findings and recommendations [9].

The Kin KeeperSM Model [4] is a wellestablished, advocacy intervention model grounded in CBPR strategies and, specifically, empowerment, self-efficacy, and familial engagement of Black women. Following a human ecological perspective, the Kin KeeperSM Model has been used to enhance cancer education, prevention, and screening in Black women through a dynamic and nested approach [10]. Black women are the point-people for personal and familial health decisions with generational, faith, and cultural influences. In this way, the woman is the kin keeper and able to facilitate their own and female relatives' health promotion behaviors. Community-based public health partners serving Black women are able to identify the kin keeper and link the family unit and the health care system.

Future research needs innovative application of CBPR strategies such as those incorporated in the Kin KeeperSM Model [4]. The implications of research are only as useful as they can accurately apply to the populations affected by the topic. This paper will describe the following two recruitment strategies successfully used to include Black women in biomedical research: [1] partnering with community health workers and [2] leveraging membership organizations and events.



The first community-based recruitment strategy is partnership with community health workers (CHWs) exemplified in two studies with two different cohorts. Both studies, however, employed identical recruitment designs in concert with CBPR methods. *Study A* [11] conducted psychometric evaluation of the Cervical Cancer Literacy Assessment Tool (C-CLAT) with Black, Latina, and Arab women in real-world settings using the Kin KeeperSM Model [4]. *Study B* [10] examined the effects of a randomized controlled trial using the Kin KeeperSM Cancer Prevention Intervention. With the same methodology, population, and research team, both studies found success recruiting large samples of underserved women, particularly Black women.

In both studies, the academic research centers collaborated with community-based partners including the local department of health and wellness promotion, community centers, and social services [10, 11]. The CHWs at these partnering locations played a key role in facilitating access to a large, culturally diverse sample. CHWs are the liaisons, having already established and trusted relationships, between the family unit and the health care system through the kin keeper. Research team members collaborated with the CHWs in the design and implementation plan. The CHWs were contracted to recruit up to 10 participants from their public health client caseload as the kin keepers. The kin keeper then recruited two to four of her female family members. Each racial/ethnic group had seven CHWs of the same race/ethnicity serving the women. This three-tiered, nested sampling took place such that the kin keeper is nested within the family unit, and the family units are nested within the CHWs [10, 11]. Intentionally broad inclusion criteria captured diversity amongst kin keepers and the family members. Both kin keepers and family members were aged 21 years or older. Kin keepers also met the following criteria: (1) participant in a CHW's non-cancer-related public health program (e.g., maternal and child health); (2) selfidentified in one of the three racial/ethnic groups; (3) able to recruit, in any combination, 2–4 adult bloodline female family members (mother, sister, daughter, grandmother, aunt) to participate; and (4) willing to assist the CHW in locating the family members for the 12-month follow-up visit. Family members were bloodline mothers, sisters, daughters, grandmothers, or aunts of the kin keeper [10, 11].



Study A [11] recruitment and enrollment took place between 2007 and 2008 and resulted in a sample of 543 women from 176 families. The initial enrollment consisted of 71 Black kin keepers, 50 Latina kin keepers, and 55 Arab kin keepers [11].

Study B [10] recruitment and enrollment took place over the course of 11 months between 2011 and 2012. The final sample included 514 women (Black *n*=216, Latina *n*=65, Arab *n*=233) from 242 kin keepers. Researchers and CHWs achieved a high screening-to-enrollment ratio of 52% [10], superior in comparison to trials involving similar populations [12].

Importantly, these recruitment efforts are likely to have contributed to the successful retention of participants in both studies. Accompanying retention strategies are described elsewhere [6]. Study A and Study B had overall retention rates of 85%. In each study, retention rates for Black women were 94% and 80%, respectively [6].

Leveraging Membership Organizations and Events

The second community-based recruitment strategy is leveraging membership organizations and events exemplified in a mixed-method study examining knowledge, attitudes, and perceptions of participation in biomedical research among Black women. Again, highlighting an academic and community partnership, this study team [13] collaborated with a regional section of The Links, Incorporated (The Links) [14], a national volunteer service organization. The Links membership is made up of over 14,000 professional Black women across the USA who are college educated (>98% Bachelor's degree) and beyond (>37% doctoral or professional degree) [13]. For the first phase of the study involving focus groups, an invitation to participate including information about the research and available session times was included in The Links registration packet for the Central Area regional conference [13]. The following phase involved designing the education-to-action program while receiving insight and feedback from Central Area Links leadership. Finally, in the third phase of the study, regional leaders of The Links collaborated with the researchers to identify eight chapters to draw participants based on heterogeneity in chapter size, demographics, and location. The chapter presidents were sent digital invitations to participate in the education-to-action web-based program and responsible for disseminating the opportunity to their members. In this way, the chapter president acted as the established and trusted liaison between the woman and the research, similar to the CHWs in the previous strategy [13].

The first phase of the study [13] included focus groups and involved 34 Black women from nine states. Findings from the focus groups revealed interest in future programming to communicate information about research participation; however, the women also discussed concerns about the standard of ethical conduct in research. The third phase of the study included education-to-action program testing and involved an additional 244 Black women [13]. Nearly 100% (n=239) of the women reported adequate health literacy at baseline, though over 50% of the sample had little to no understanding of the types of research available to participate in at baseline. Post-test results demonstrated the education-to-action (brief, self-directed online program) intervention improved knowledge of research participation and intent to participate. Perceptions of ethical research conduct post-test significantly increased along with the women's confidence in research ethics [13].

Conclusion

The studies discussed here exemplify two communitybased recruitment strategies: (1) partnering with community health workers and (2) leveraging membership organizations and events. Both strategies demonstrated success in adequately recruiting Black women for research. The primary value in these strategies lies in the equitable access to research participation opportunities through intentional incorporation of culturally sensitive methods. This serves to facilitate positive interactions and experiences between Black women and biomedical research. Additionally, the community-based strategies described here are advantageous in the efficient use of established resources through partnerships with public health services and community groups. These recruitment strategies are mutually beneficial endeavors and should be used in all research involving underrepresented and underserved populations.

Researchers have an obligation to responsibly conduct their work within ethical principles and standards, including beneficence and justice, not just theoretically but practically and tangibly [15]. The question researchers and those who review research will need to ask, "Is it good science if inadequate numbers of Black Americans are not included in the research?" Examining phenomena with culturally sensitive approaches to the



S132 Williams and Anderson

real-world contexts in which they arise has great implications for enhancing the effectiveness of research and the influence research can have in combating structural racism and health disparities.

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