Increasing Awareness of Cardiovascular Risks that Impact Black Men through Barbershop Conversation

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Abstract

Black men have suffered abuse and mistreatment within our healthcare system. Past events proliferated medical mistrust and created a separation between provider and patient. As a result, many individuals within the Black community look to people of influence for guidance. A barbershop is a central gathering place for influential people within the Black community. Individuals regularly visit the barbershop for services, advice, fellowship, and direction. Historically, barbershops in the Black community have been a conduit for disseminating important information. As health disparities continue to permeate through marginalized groups, specifically Black men, it is imperative that community-based partnerships are established in efforts to bridge the gap. This project aims to increase awareness of cardiovascular risks that impact Black men through barbershop conversation by highlighting the medical term metabolic syndrome. This three-phase project intends to assess the knowledge base, disseminate new knowledge, and evaluate retention and understanding. Findings support the need for further community-based partnerships and more equitable opportunities to impact the outcomes for Black men.

Keywords: metabolic syndrome, cardiovascular, Black Men, barbershop

Background

Bryant et al. (2020) argue that hypertension continues to be the leading modifiable risk factor that causes death within the Black community. As a country, there has been an overall decline in cardiovascular-related mortalities, yet the health disparity remains evident between Black and White Americans.

Ravenell et al. (2023) noted, "Black men have the higher prevalence of hypertension (HTN) in the United States, 59%, compared to 47% of White men. Black adults have a 1.8 times greater rate of fatal stroke and 1.5 times higher cardiovascular disease (CVD) mortality rate than other groups" (p.241).

This stark reality is believed to be multifactorial. Institutional racism permeates all facets of society, creating further mistrust of healthcare professionals across all specialties. The mistrust of the medical system in response to the historical abuse and neglect of Black men and women also influences the health behaviors or lack thereof. Physical inactivity, high sodium intake, and obesity are also associated with the social determinants of health that influence the quality of life for marginalized groups like Black Americans.

Problem Statement

A North Carolina Assessment Team disseminated data highlighting the health disparities of an urban county in central North Carolina (NC). The age-adjusted mortality rates for cardiovascular disease disproportionately reflect the adverse outcomes of increased risk factors impacting Black residents compared to White residents of a county in a concentrated urban area. The cardiovascular mortality rate also affects Black men at 167.9 per 100,000 compared to 130.6 per 100,000 for White men in a county in central NC.

Purpose Statement

The project aims to increase awareness of cardiovascular risk factors that impact Black men in a county in central NC through barbershop conversations. The plan is to work with barbers to empower them with current knowledge and facts. In response, the barbers will utilize their influence in this community to engage their clients in conversations about their health. The project focused on increasing knowledge regarding the medical term metabolic syndrome.

Instead of looking at each risk, it is more profound to look at them when each risk factor coexists within the body, such as the following:

- Too much fat at the waist (central obesity, Men >40 inches)
- High blood pressure >130/85 or drug treatment for HTN
- High Triglycerides >150mg/dL or drug treatment for elevated triglycerides
- Low high-density lipoprotein (HDL) cholesterol <40mg/dL in Men (also known as "good cholesterol")
- High fasting glucose (blood sugar) >100, 100-125 indicates pre-diabetes mellitus (DM)
 (American Heart Association, 2023)

Methods

Literature Review

A literature search was completed for peer-reviewed articles supporting the need for the proposed project. CINAHL Complete EBSCOhost, PubMed, PsycINFO, and SocINDEX databases were explored in a systematic way utilizing specific keywords listed in Table 1 in various arrangements and sequences to capture any supporting literature. The final literature **Table 1** *Concept Table*

	Awareness	Cardiovascular risk	African American men
Keywords	Awareness	Cardiovascular risk	African American men
	Barbershop conversation	Acute myocardial infarction	Black men
	Knowledge	Heart attack	Black males
	Informed	Coronary artery disease	African American males
	Patient education	Hypertension	
	Educated	High blood pressure	
		Metabolic syndrome	

review included 12 articles with varying levels of evidence for complete abstraction and full-text review.

Ebinger et al. (2020) found that community-based interventions have historically centered around the church or faith-based venues due to their heavy influence within the Black community. These trusted sites have been the location for chronic disease awareness, education, and intervention. Most faith-based interventions were accomplished through the community partnership of trained congregation members to serve as community health workers (CHWs). The concern with faith-based partnerships is that few Black men would be included, noting that Black men attend church less frequently than their female counterparts. The barbershop is in the perfect position of stature within the Black community to engage this targeted population in cardiovascular risk awareness and knowledge that will ultimately impact the greater community, beginning with the nuclear family.

The Los Angeles Barbershop Blood Pressure Study (LABBPS) is a pioneering study collaborating with Black barbers in Los Angeles, California (Victor et al., 2018). The 52 eligible

barbershops were part of a cluster-randomized trial, where 28 were in the intervention group. The barbers encouraged their clients to meet with a pharmacist-physician collaborative for medication management and routine follow-up. The other 24 barbershops were in the control group, where the barbers encouraged their clients to modify their behaviors and follow up with their providers.

Victor et al. (2018) LABBPS Study resulted in the mean systolic blood pressure at six months decreasing by 27 mmHg in the intervention group compared to the 9.3 mmHg decrease in the control group. Although a pharmacist-physician collaboration would not be possible during the tenure of this project, this new model of engaging Black males in health promotion to increase awareness of cardiovascular risk factors is worth exploring to create the foundation for future interventions and collaborative partnerships.

Evidence-Based Practice Framework

Research is always striving to discover the effectiveness of an intervention. Did the intervention have the expected outcome? Did the results prove or reject the hypothesis? The question for this project is, is this intervention translatable and sustainable within the targeted community? Glasgow et al. (1999) formulated the RE-AIM framework to evaluate further public health interventions and programs for wide-scale dissemination. The RE-AIM framework provides a template for evaluating the *reach* of the number of barbers and clients who will participate in the project. *Effectiveness*: Were the objectives met? Did the barbers and clients feel satisfied with the project? The *adoption* of the project is achieved with consistent participation for the duration of the project. In the *implementation* process, did the barbers facilitate conversations creating awareness of cardiovascular risk factors? Did the clients perform

independent blood pressure checks? Lastly, regarding *maintenance*, is the project sustainable in the long term?

The project proposal was submitted to the Institutional Review Board (IRB) before implementation. It was decided that the project did not warrant IRB approval. The project is categorized as a quality improvement project that did not breach ethical standards.

Implementation

A 10-question multiple-choice pre-survey was generated to collect demographic information for inclusion criteria (Black men at least 18 years and older) and then measure baseline knowledge regarding metabolic syndrome. Five of the ten questions focused on each risk factor leading to metabolic syndrome.

A script was written to outline the five cardiovascular risks contributing to metabolic syndrome development. The script was then used to produce a homemade public service announcement (PSA) video that could be quickly disseminated online and accessible for clients to watch while at the barbershop. Cardiovascular health-related information was displayed on trifold posterboards to represent the information shared in the PSA video visually. Blood pressure self-checking stations were developed and arranged to include step-by-step instructions for checking blood pressure, including the Omron Blood Pressure Monitor Model: BP710N, a sand timer, and disinfectant wipes. These stations were assembled inside the barbershop so clients could obtain specific health data while waiting for their service. Once each client had an opportunity to review the PSA video, trifold posterboard, and perform blood pressure self-check(s), the post-survey was shared with the same questions as the pre-survey to evaluate for increased awareness.

Phase One

An initial meeting was scheduled to pre-brief the barbers about the details of the project. Inclusion criteria were shared to include clients who self-identified as Black males and were at least 18 years of age and older. The first phase was planned for two weeks. During this time, the barbers would begin to engage their clients in conversation regarding heart health and healthy lifestyles. In response, the clients would complete a pre-survey assessing their knowledge base about metabolic syndrome via a quick response (QR) code that led to a Google form with specific questions discussing the risk factors that create metabolic syndrome. Clients were incentivized by being given a raffle ticket for a chance to win a prize after the project for each completed Google form.

Phase Two

Following the initial two weeks, the barbers would continue engaging their clients in health conversations and directing them to watch the PSA video created. The video detailed the five risk factors that entail metabolic syndrome. The clients were also exposed to a posterboard with heart-related information and a self-checking blood pressure station. Once clients viewed the PSA video or checked their blood pressure, they would be directed to a QR code that led to a Google form that recorded their participation. Clients were given another raffle ticket for completing the Google form.

Phase Three

Before concluding the project, access to the PSA video and self-checking blood pressure station was removed from the barbershop in the last two weeks. The barbers then directed the clients to complete the post-survey via a QR code that led to a separate Google form that evaluated their increased knowledge of metabolic syndrome. The clients were given their last

raffle ticket after completing the post-survey. After the project, all raffle tickets were collected, and a random drawing of three raffle tickets awarded the winners a cash prize for participating.

Results

Thirty-one clients completed the pre-survey. Sixteen clients completed the post-survey. The data yielded increased awareness of metabolic syndrome, stages of high blood pressure, understanding of *good* and *bad* cholesterol, and the understanding that the use of nicotine is a negative lifestyle choice. The results highlighted that further clarity is needed regarding which body shape implies metabolic syndrome, how to properly prepare for doctor appointments, and what numerical value defines pre-diabetes. Although further engagement with clients is needed, 68.8% of clients reported that they are likely to make at least one lifestyle change.

Glasgow et al. (1999) and Glasgow et al. (2019) formulated the RE-AIM framework to evaluate further public health interventions and programs for wide-scale dissemination. The RE-AIM framework provides a template for evaluating the *reach* of two barbers, with 151 client encounters during Phase One and 73 client encounters during Phase Three. Of the *effectiveness*, only one barber completed the project. *Adoption* of the project and consistent participation for the duration of the project were not achieved for various reasons. *Implementation*: 28 clients watched the custom-made PSA video title, *Barbershop Conversation*, while 16 completed self-blood pressure checks. The *maintenance*, completing a project evaluation to assess opportunities to recreate and reimplement. Project results indicate decreased awareness and understanding of body type risk factors, how to prepare for a doctor appointment, and specific criteria for pre-DM. These are areas of improvement that can be influential in shaping the next project.

Implications

Community-based programs and partnerships are needed to create opportunities for engaging with targeted populations to address healthcare disparities. Programs implemented within the targeted community must assess intentions through the lens of equity versus equality. Equality creates equal access to information by ensuring that the disseminated knowledge is the same for each client. Equality would include:

- Setting up precisely the same posterboards at the barbershops,
- Creating identical self-check blood pressure stations and,
- Having access to the PSA video for each client to review.

Equitable access focuses on increasing health literacy by creating opportunities for discussion and understanding of information. This entails being mindful of the timing and avoiding high-traffic times such as back-to-school weekends and holidays. Distractions during busy seasons do not ensure the environment for learning. Equitable access includes not assuming everyone has access to technology or understands how to navigate technological devices.

Therefore, ensuring that the appropriate technology is available for equitable access for viewing the PSA video.

Conclusion

The barbershop is a revered establishment that postures itself as the ideal venue to share information. As a trusted community member, the barber is in the perfect position to empower their clients with the knowledge that will ultimately impact the greater community. More community-based programs and partnerships with barbershops and their barbers are needed to create future opportunities for engaging with the targeted population to address healthcare disparities.

Author Contributions

The entirety of this manuscript and project was accomplished autonomously as the sole author and contributor. There was oversight by the graduate faculty and peer reviewed at least three times during the process.

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Ethical Approval

The University and Medical Center IRB prescreened the project and did not require an IRB review.

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