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CARDIOVASCULAR MEDICINE AND SOCIETY

Promoting Cardiovascular Health Equity

Association of Black Cardiologists Practical Model for Community-Engaged Partnerships

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Despite advancements in the assessment and treatment of cardiovascular disease (CVD) and its risk factors, certain populations remain disproportionately affected by suboptimal CVD outcomes. Hispanic and Non-Hispanic Black Americans have overall worse cardiovascular health (CVH)[1] and higher CVD-related mortality rates than their Non-Hispanic White counterparts.[2] These disparities arise from systemic health inequities deeply rooted in racism that lead to unequal social drivers or determinants of health (SDoH) and unfair yet avoidable differences in health outcomes.[3] Events related to the COVID-19 pandemic exemplified how long-standing CVD risk factor-related disparities, stemming from adverse SDoH (ie, unequal social, economic, and environmental conditions), resulted in disproportionately higher infection and death rates in Black communities.[4]

Prioritizing health equity within the contemporary, cardiovascular care delivery model is crucial. Mital et al[5] proposed a multipronged strategic approach that includes: 1) recognizing structural inequalities; 2) diversifying clinical trials; 3) training a workforce in culturally humility; and 4) addressing SDoH. Implementation of these measures through community engagement and culturally congruent education programs may foster a culture of health, eliminate CVD disparities, and advance health equity.[6]

The objective of this paper is 2-fold: 1) to illustrate how a medical professional society, the Association of Black Cardiologists, Inc (ABC), designed and implemented a practical model for developing sustainable community partnerships focused on promoting CVH equity in underserved communities; and 2) to issue a call to action for medical professional and health care organizations to embrace and integrate such partnerships into their core mission. Founded in 1974, ABC comprises health care professionals and community, corporate, and industry members, all committed to eradicating CVH disparities in people of color. ABC designs and conducts innovative research, educational, advocacy, and community outreach programs focused on equitable CVD prevention and treatment. One of its mission-driven committees, the Community Programs Committee, partners with medically underserved communities to implement community-wide initiatives to improve CVH among those persons at highest CVD risk. Signature programs, such as the Spirit of the Heart-Health and Wellness Fair and Community Health Advocate

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Training (CHAT) Program, have substantially impacted communities nationwide, even influencing health care reform legislation.

DEFINING COMMUNITY ENGAGEMENT

Community engagement is a vital collaborative process involving trust building among individuals linked by location, shared interests, or common circumstances influencing their well-being.[7] It serves as a tool for health interventionists to engage communities in research, health promotion, and policy making to address health issues. Furthermore, it aids in advocacy and proves instrumental in mitigating health disparities faced by marginalized groups as a result of social, cultural, and structural barriers.

Several community engagement models aim to drive population-level health improvements by actively involving the community. Successful approaches among disadvantaged populations yield positive health outcomes by incorporating transparent, culturally adapted shared decision-making.[8] However, community engagement is not devoid of challenges. There may be unstable health system infrastructures, inadequate resources, varying receptiveness from the community, or differing priorities among government stakeholders.[8] Overcoming these obstacles involves continuous re-evaluation of evolving priorities, securing diverse funding sources, and nurturing bidirectional relationships for sustainable partnerships.

All in all, effective community engagement is vital in socioeconomically disenfranchised communities. Medical professional societies should lead in creating mutually beneficial and sustainable relationships for improved health outcomes in these communities.

CREATING A SUSTAINABLE MEDICAL PROFESSIONAL SOCIETY-COMMUNITY PARTNERSHIP: THE ABC CHAT PROGRAM

As mentioned earlier, ABC strives to dismantle structural inequities and promote health equity in marginalized populations and communities through meaningful community-engaged partnerships. Herein, we highlight an exemplar partnership between ABC and medically underserved Black communities.

In 2020, ABC collaborated with the National Institutes of Health/National Heart, Lung, and Blood Institute (NHLBI) to launch the CHAT feasibility pilot program. ABC also partnered with 2 community-based organizations to establish CHAT program cohorts: the Sankofa Community Development Corporation (New Orleans, Louisiana) and the Mississippi Congregational Network of Nurses and Advocates (Jackson, Mississippi). These cities were selected because of their disproportionately high rates of CVD and suboptimal health outcomes among Black Americans. The stakeholders mutually agreed to train and empower individuals as community health advocates (CHAs) to engage the health care and political systems to reduce CVD disparities in this vulnerable population. Specific pilot program objectives were to: 1) train at least 35 CHAs to enhance their CVH knowledge and self-efficacy for healthy lifestyle change; 2) equip CHAs to lead monthly community health education sessions; and 3) encourage CHA cohorts to organize at least 2 community outreach activities annually.

The foundation of the CHAT program is built on the NHLBI Community Health Worker (CHW) Health Initiative. The initiative leverages evidence-based, culturally appropriate materials and health educational programs to improve CVH in communities of color. A key strategy uses a CHW-driven, community-based participatory approach to deliver community education sessions to promote CVH and lifestyle changes. Before implementing community education, CHWs underwent virtual training using the NHLBI curriculum, to enhance their knowledge of CVD processes, risk factors, and prevention. This CHW training model in minoritized racial/ethnic communities has demonstrated improved knowledge and healthy behaviors.[9]

The ABC Community Programs Committee developed a CHW-centric CHAT program agenda in consultation with NHLBI staff (including a former NHLBI Medical Officer) with previous CHW Health Initiative experience. Concomitantly, the committee identified site coordinators from each cohort within the aforementioned community-based organizations and local health professional hosts for community outreach activities. The site coordinators recruited participants from their respective organizations throughout the greater New Orleans and Jackson regions. Given the virtual training format, CHWs within a community-based research program from Mayo Clinic in Rochester, Minnesota were also included in the New Orleans cohort. Many site coordinators held leadership positions within their community-based programs and had professional backgrounds in health care systems leadership as well as community mobilization (eg, chief executive officers, case managers, nurse managers, and community health center founders), whereas local hosts were clinicians (eg, cardiovascular nurses and cardiologists).

Before CHA education training, a formal agreement was established between ABC and CHAT program participants to bolster future community

engagement. This agreement outlined CHAs' commitment to lead at least 1 monthly education session and 2 yearly outreach activities after training completion, with a modest financial incentive provided for their time. CHAT program participants received virtual educational training through a "train-the-trainer" model during the pandemic over a 2- to 4-month period (November 2020-February 2021). The educational training sessions were adapted from NHLBI's manual, *With Every Heartbeat Is Life: A Community Health Worker's Manual on Heart Disease for African Americans,*[10] and included additional topics such as heart failure, COVID-19, influenza, and health advocacy. Participants completed a 22-item pretest and post-test survey to assess CVH knowledge, attitudes toward CVD prevention, changes in behavior, and training satisfaction. Knowledge questions specifically probed strategies to prevent CVD (eg, regular physical activity and increased fruit/vegetable intake), recommendations for food serving sizes, and identification of specific CVD risk factors (eg, hypertension and diabetes diagnostic parameters).

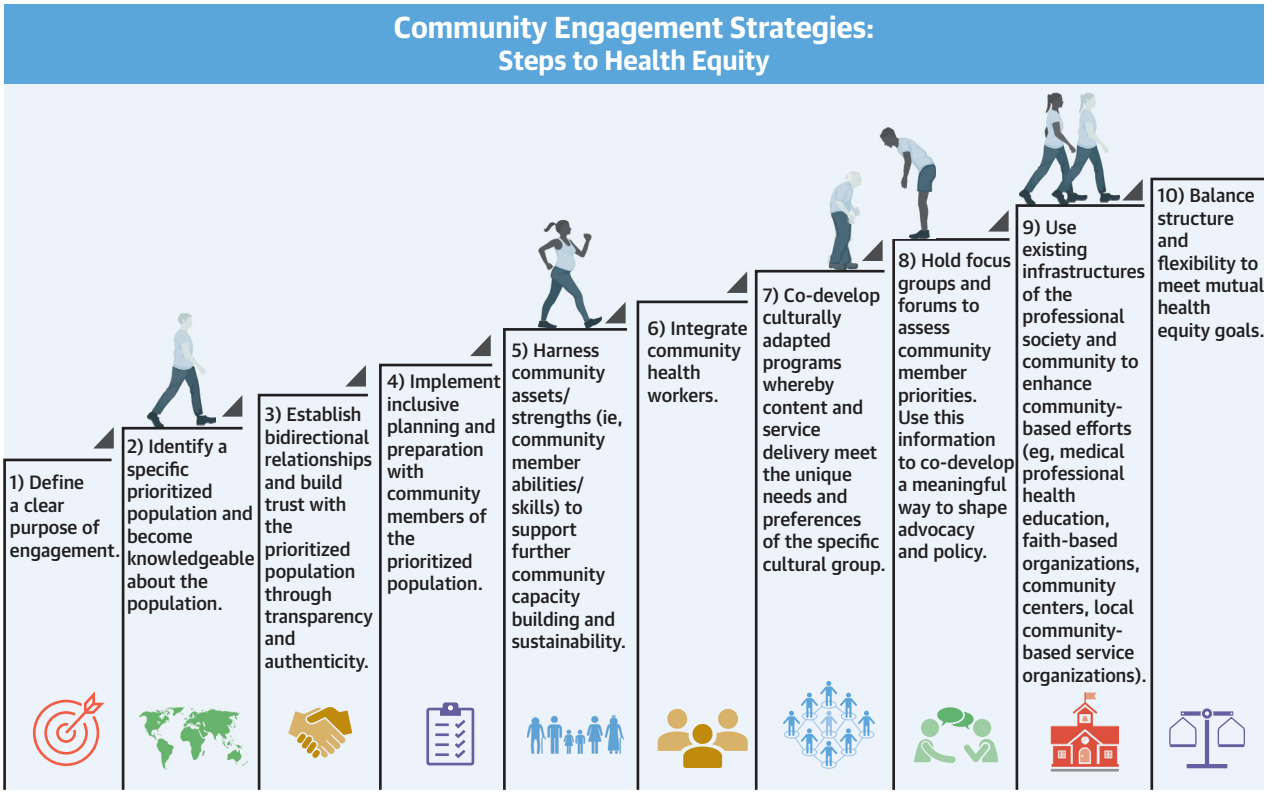
CHAT IMPACT AND LESSONS LEARNED

The recruitment goal across all sites was exceeded (N = 36), and there was excellent retention (100% program completion). All participants were women, and 36% reported previously working as a CHW. Following the CHA training, both cohorts demonstrated improvements in CVH knowledge, with a mean 9.6% score increase (mean 83% ± 0.1% at pretest vs 91% ± 0.05% at post-test, on the basis of summarized cohort data; formal statistical testing to compare *P* values was not performed). The predominance of women and the high CVH literacy level in the cohorts likely reflect the affiliation of a large proportion of the participants with faith-based organization health ministries (20 of 36; 55%). Fortunately, all CHAs (36 of 36; 100%) reported that improving CVH for CVD prevention was of utmost importance to them before and after the training. Furthermore, among all CHAs, 92% (33 of 36) reported that they led monthly community health education sessions, and each cohort conducted at least 2 community outreach events in the year following the CHAT program. Feedback suggested that the program was well received as 78% (28 of 36) of the CHAs rated the program materials, trainers, and overall training experience as "excellent." Additionally, 97% (35 of 36) of the participants indicated that they plan to change their health habits and use the materials to increase CVH awareness within their communities through health education.

The CHA-led educational sessions and outreach activities occurred within their respective cities at local community venues (eg, churches and community centers) and virtually. Between February 2021 and November 2022, the New Orleans cohort conducted >10 education sessions using the CHW manual and trained more than 60 community members. Additionally, 16 community outreach activities were conducted, including blood pressure screenings and influenza and COVID-19 vaccination drives. CHAs also partnered with a Tulane University medical student group to conduct point-of-care glucose screenings at >10 local, community-wide events. Community members were referred to primary or subspecialty care as well as for social needs resources on the basis of health screening results. The Jackson cohort partnered with 13 regional churches, led 10 monthly education sessions, and hosted 16 outreach activities similar to those of the New Orleans group. Additionally, both cohorts partnered with the ABC to develop videos dispelling COVID-19 myths and promoting awareness of the importance of receiving COVID-19 vaccinations. Altogether, these CHA-led health promotion activities had tremendous reach to hundreds of individuals (estimated 851) within under-resourced communities, a remarkable feat during the pandemic.

Gleaned from feedback provided by CHAs and site coordinators throughout the program implementation process, there were 4 key lessons learned. First, it is essential to tailor the program to various learning abilities when delivering health education training. On the basis of CHAT participant feedback, a teaching tool was modified to fit the learning needs of trainees while not compromising the educational content (eg, NHBLI's manual picture cards transferred to presentation slides to enhance the virtual learning experience). Second, support participants with inflexible schedules that hinder active program participation. Although training schedules were adapted to participants' requests, it was identified that sessions delivered over a shorter period would likely yield more participant benefits, including enhanced knowledge retention. A solution would be to provide more frequent, conveniently timed sessions. Third, balance program structure and convenience to adapt to the community's needs. Although the virtual platform training proved to be an effective communication method, some participants had intermittent internet connectivity issues. A future solution would be to provide readily accessible technical support and

FIGURE 1 **Community Engagement Strategies for Medical Professional Societies**



Recommended effective community engagement strategies for medical professional societies to build sustainable community partnerships with socioeconomically disenfranchised and medically underserved communities.

digital literacy training. Fourth, it is crucial to develop a systematic and robust, yet community-oriented data collection and process evaluation plan while balancing participant burden. Participants were understandably unable to complete all follow-up assessments because of competing demands from the COVID-19 pandemic that included their own extended outreach activities to mitigate the crisis disproportionately affecting their communities. Ongoing ABC efforts are in place to rigorously measure and formally analyze participant and community-level data for future CHAT program cohorts to comprehensively demonstrate program impact and sustainability.

CONCLUSIONS

CVH disparities persist among minoritized racial/ethnic communities, and sustainable, culturally tailored programs to promote ideal CVH are necessary to advance health equity. Our community-based pilot program successfully met its recruitment goal and equipped CHAs with evidence-based, community-centric CVH educational and advocacy tools to have a substantial downstream positive public health impact within medically under-resourced communities. Heroically, this was accomplished even in the face of a global public health crisis. The ABC CHAT program is a practical model of culturally congruent community engagement that could be emulated and adopted globally by medical professional societies and health care organizations to: 1) increase community awareness about CVD and associated risk factors; 2) equip community health leaders with knowledge and skills to educate community members about CVH lifestyle changes within their sociocultural contexts; and 3) serve as liaisons between the community, medical professional societies and health care systems. Altogether, these approaches may improve population-level CVH among communities of high cardiometabolic risk. As an impactful medical professional society with a long-standing history of

leveraging community partnerships to address health disparities, ABC recommends 10 community engagement strategies to the broader cardiovascular medicine community for the collective pursuit of CVH equity (Figure 1).

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