Of Barbershops and Churches
Can Community-Based Interventions Improve Cardiovascular Risk in High-Risk Patients?

Black Americans experience higher rates of poorly controlled hypertension and related complications, including kidney disease and stroke, than white Americans. Indeed, hypertension explains most of the racial gap in mortality between black and white adults in the United States. Well-known historical atrocities, such as the Tuskegee Syphilis Study or the long-standing respect accorded to the gynecologist J. Marion Sims—whose greatest accomplishments come from unethical experimentation on black slaves—play a role in this distrust. These plus regular experiences with discrimination harm people’s trust in formal health care systems, resulting in decreased use of health care, in turn contributing to higher rates of hypertension. Other barriers to care, such as living in areas with fewer healthcare providers, fewer specialists, less healthy food, lower insurance rates, or having jobs that make attending visits more difficult, are all more common in black than white Americans, making clinic-based hypertension control even more difficult.

Two promising strategies to increase trust, engagement, and access in hypertension care and self-management are to bring health care programs to community settings and to have trusted individuals deliver the programs. In this issue, Schoenthaler et al present the results of the Faith-based Approaches in the Treatment of Hypertension (FAITH) in Blacks study, a church-based program in New York. In this cluster randomized trial, 32 black churches were randomized so that their parishioners received 1 of 2 church-based interventions: (1) eleven 90-minute weekly sessions of an evidence-based therapeutic lifestyle change program delivered by trained fellow parishioners to promote healthy behaviors followed by 3 monthly sessions; or (2) 1 therapeutic lifestyle change session followed by 10 sessions on health topics, led by outside health experts. This program had moderate success: At the conclusion of the 6-month program, participants had a systolic blood pressure 5.8 mm Hg lower than the comparison group ($P = 0.03$), but there were no changes in diastolic blood pressure. The investigators will report on secondary outcomes of physical activity, weight, and intake of fruits and vegetables in a later report. They did not measure changes in numbers or doses of blood pressure medications or medication adherence.

In gauging the promise of this church-based program, it is worth comparing it with another community-based intervention reported earlier this year. That cluster randomized trial randomized 52 barbershops in Los Angeles. In that trial, barbers encouraged regular male patrons with poorly controlled blood pressure to meet with pharmacists in the barbershop who prescribed and titrated antihypertensive medications under practice agreements with physicians. This intervention was compared with an active control group in which barbers encouraged healthy behavior changes and attending doctor appointments. This 6-month trial led to a
stunning 21.6 mmHg difference in systolic blood pressure and 14.9 mmHg difference in diastolic blood pressure between groups. At 6-month follow-up, participants in the intervention group were using an average of 2.6 antihypertensive medication classes, compared with 1.4 in the control group.

Why were the effects reported in the FAITH study modest compared with the stunning findings in the barbershop study? These 2 trials had several differences that may explain the difference in outcomes. First, the studies used different interventions. Behavioral change alone, like that encouraged by the FAITH Study, has many benefits, but it is a more difficult way to lower blood pressure than medication management. Second, the barbershop trial achieved significantly higher levels of participant engagement in the intervention. Participants in the barbershop program received on average 7 in-person pharmacist visits and 4 follow-up telephone calls. In contrast, in the FAITH trial, only 46% of intervention participants completed all 3 of the individual telephone counseling sessions. Third, although both trials enrolled predominantly low-income black adults, there were important differences in their participants. The barbershop study exclusively enrolled men who had at least 1 haircut every 6 weeks for at least 6 months. The FAITH study participants were primarily women, but they may or may not have attended the church regularly. These differences in eligibility criteria may also explain why the barbershop trial achieved a remarkably low attrition rate (<10% in each arm) at 6 months, whereas the FAITH trial only had complete data on 71% of participants at 6 months, a rate similar to other trials of low-income urban populations.

Despite these key differences, both studies significantly advance the field of intervention research targeting access to health care of high-risk populations. They both showed the effectiveness of using trusted members of the community to deliver care. They reinforce the value of reaching out to communities who have limited access or do not trust the medical community, especially communities who have excellent reason to feel that distrust. They also point to the need to include lessons from these and other community-based trials on how to create the necessary links between community and healthcare organizations to engage difficult-to-reach communities. In this sense, these studies demonstrate how far the US medical system has to go to provide care that is fair to underserved and vulnerable populations. For black patients especially, the larger problems that cause health disparities remain fundamental reflections of differences in our broader society. As long as black Americans receive worse care and have lower access to tests and treatments, community-based efforts will be essential.

An important limitation of both studies was the extraordinary challenge in carrying them out. The FAITH study was unable to recruit 20 patients per church as planned. Nearly half of all participants did not attend the arranged intervention sessions. In the barbershop study, 43% of the patients who completed the 2-stage screening declined participation before enrollment. (In fact 3 times as many declined participation in the intervention arm than in the control arm, raising the possibility of an enrollment bias.) One-third of barbershops enrolled fewer than 2 patients. The barbershop study offered substantial incentives and an on-site pharmacist, a likely unsustainable practice for a barbershop or a health system.

More importantly, these difficulties are potential hints of how challenging community-based practice—in contrast to community-based research—could be. If these studies can reach only a small fraction of the desired community despite the resources and motivations of study investigators, how does this work get moved into real-world care? How can we maximize the public health impact of community-based practice with standard resource constraints? One may argue that clinical adoption could be easier. Many low-income people decline participation in formal studies because they do not want to be study subjects. Adoption to clinical programs might prove much easier, in fact, but this is uncertain. These will be key questions moving forward.

Given these questions, it is encouraging that both these trials were funded by the Center for Translation Research and Implementation Science, which was started by the National Heart Lung and Blood Institute in 2014. The Center for Translation Research and Implementation Science itself has a focus on both community health and disparities research. As approaches like those tested in these 2 trials are found effective, it will be important to develop and test how to make these approaches sustainable beyond rigorously controlled studies. The National Heart Lung and Blood Institute’s dedication to developing new approaches to eliminate racial and other disparities in cardiovascular disease outcomes is a promising sign of growth and interest in difficult-to-reach communities. And it is also a promising sign that the New York City statue to J. Marion Sims, a symbol of mistreatment of black patients, was finally removed.

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None.

REFERENCES


