

## CARDIOLOGY NEWS

# Barbershop-Based Care Dramatically Trims Blood Pressure

Bridget M. Kuehn

**P**harmacist-delivered care for hypertension in barbershops led to dramatic reductions in blood pressure in black men, according to study results presented at the American College of Cardiology's 67th Annual Scientific Session.

The cluster-randomized trial, which was simultaneously published in the *New England Journal of Medicine*, enrolled 319 black men with a blood pressure of  $\geq 140$  mmHg at 52 barbershops in Los Angeles County. Men in the intervention group received monthly monitoring and medication management from specially trained pharmacists at their barbershop. The men in the intervention group were able to reduce their blood pressure by an average of 27 mmHg. This was a remarkably large result for any trial of hypertension care, but was particularly remarkable for a hard-to-reach population of patients, said lead author Ronald Victor, MD, director of the Hypertension Center at Cedars-Sinai Medical Center in Los Angeles.

"This is a home run; this is something that clinical trialists dream of," said Eileen Handberg, PhD, ARNP, director of the Cardiovascular Clinical Trials Program at the University of Florida in Gainesville at the meeting. Handberg noted that even the control group, which received lifestyle advice from their barber and were urged to see a physician, saw a 9.3 mmHg drop in blood pressure.



**Eric Muhammad, a Los Angeles barbershop owner, takes the blood pressure of patron Mark Sims as part of a clinical trial that found hypertension management in barbershops could substantially reduce blood pressure.**

Photo courtesy of Cedars-Sinai Medical Center, Los Angeles.

## COMMUNITY-BASED CARE

Black men face higher rates of hypertension-related mortality than any other group, yet they have low rates of treatment and are less likely to visit a physician than black women, according to Victor and his colleagues. So finding ways to reach them outside the clinic is essential.

Using barbershops or other community gathering places for health outreach is a well-established practice throughout the country, noted Victor. The idea of using churches and barbershops for health outreach in black communities was pioneered by cardiologists Elijah Sanders, MD,

and Waine Kong, MD, in Baltimore in the late 1970s. The [Heart Healthy Community Prevention Project](#), led by Keith Ferdinand, MD, and Daphne Ferdinand, RN, PhD of Tulane Medical School, brought this model to New Orleans starting in the 1980s. Both efforts trained lay people to monitor blood pressure and promote health behaviors in community settings.

Loyal patrons of a barbershop may come in biweekly for a decade, and many in the latest study had known their barbers since childhood and had trusting relationships with their barber, noted Victor.

"I can't overemphasize how important the barber's buyin is," said

Victor. In fact, one of the study's co-authors was Eric Muhammad, BA, a barbershop owner in Inglewood, California, who participated and helped recruit other shops.

"It's the silent killer, and it has cost the lives and health of a lot of good men," said Muhammad in a press release. "It's a no-brainer that black men are at the highest risk of high blood pressure. What's different about this study is it looks at ways to effectively bring it down with the help of your friends, family and support group."

Another key to the study's success was that it provided 1-stop shopping for care. Specially trained pharmacists, working in concert with the men's physicians, met with barber-shop patrons once a month to measure their blood pressure and adjust medications as needed. They used a point-of-care finger stick blood test to monitor electrolytes and creatinine after medication adjustments. Victor said the study team was careful not to overmedicalize the barber-shop and tried to maintain the fun and relaxing atmosphere.

"There is a different level of trust and respect that's earned when you meet people where they are, instead of in a hospital or clinic," said study pharmacist C. Adair Blyler, DPharm, CHC, in a press release. "The rapport I've been able to establish with this group of patients has been unlike any other I've had in my professional career."

Pharmacists also made home visits when necessary and were available for questions by cell phone, Vic-

tor noted. Without such easy access to regular care afforded by the intervention, many participants would have had a difficult time getting care. The study also removed the burden of the cost of care, noted Ferdinand.

"A lot of men in our study were working 2 jobs just to make ends meet. They didn't have the flexibility (to come into the clinic)," Victor explained.

## PHARMACIST LED

Using pharmacists to deliver hypertension care was likely another key to the study's success, and may serve as a model for other types of community-based cardiovascular care, Handberg suggested.

"We need to get people out of thinking they need to be in the clinic to give care," she said.

She noted that nurse practitioners or physician assistants might also be able to deliver this sort of community-based care, which should count as a billable visit. Victor agreed that any midlevel clinician with proper training could provide this type of care. He noted that >40 states already allow pharmacists to dispense medications. This model might also be used for diabetes mellitus or heart failure care, Victor suggested.

The latest results build on previous work and demonstrate that hypertension care in barbershops can have "powerful and beneficial results," said Ferdinand. But he cautioned that the pharmacist-led mod-

el used by Victor might be hard to replicate.

"This collaborative element of the intervention, while important, may not have the same legal status in other areas and may be cost prohibitive," he explained.

In addition, Ferdinand noted that the drug regimen used in the study might also have contributed to its success. The regimen included 2-drug therapy "preferably amlodipine plus a long-acting angiotensin-receptor blocker or angiotensin-converting enzyme inhibitor" with the diuretic indapamide as a preferred third drug when necessary.

"This regimen may be superior to conventional drug therapy from primary care providers," he said.

For integrated health systems, Victor said this type cost-saving preventive care is "a no brainer." But he noted it might be less of a slam dunk for private insurance carriers who may turnover patients frequently. Still, he anticipates that the cost-effectiveness studies will be very favorable. The drugs used are inexpensive. Two-thirds of the men in the intervention group were able to achieve a systolic blood pressure target <130 mmHg from a starting reading that was on average in the mid-150s.

"If this model was scaled up and sustained, millions of lives could be saved, and many heart attacks and strokes could be prevented," Victor said in a press release. ■

<http://circ.ahajournals.org>

© 2018 American Heart Association, Inc.