

A Cluster-Randomized Trial of Blood-Pressure Reduction in Black Barbershops

The following is a synopsis of the article “A Cluster-Randomized Trial of Blood-Pressure Reduction in Black Barbershops,” published in the March 12, 2018, issue of the *New England Journal of Medicine*.



What Is already known on this topic?

Non-Hispanic black men have the highest rate of hypertension-related death in the United States. This racial, ethnic, and gender group is also underrepresented in trials of pharmacist-led interventions in traditional health care settings. A previous study has shown that getting black men's barbers involved in monitoring blood pressure and promoting blood pressure management may slightly reduce patrons' blood pressure.

What is added by this document?

This cluster randomized trial, conducted in Los Angeles County, California, examined the impact of barber-encouraged, pharmacist-led management of hypertension (intervention group), compared with having barbers trained to encourage lifestyle modifications and doctor appointments (control group). Non-Hispanic black men between the ages of 35 and 79 who had systolic blood pressure in excess of 140 mm Hg (on two screening days), and who reported getting at least one haircut every 6 weeks for at least 6 months at one of the 78 participating barbershops were eligible for the study. The intervention group was identified by measuring five sequential blood-pressure readings at each visit; the first two readings were discarded, and the last three readings were averaged. The barbershops were randomly assigned to either the intervention group or the control group. All study patients at each barbershop were assigned to the same group.

Barbers in the intervention group advised patients to receive care from pharmacists who were specially trained to manage hypertension and who had entered into collaborative practice agreements with physicians. These pharmacists interacted with patients in the barbershops and reviewed their care with the patients' physicians. The pharmacists monitored blood pressure (as did some barbers), ordered blood work for electrolytes and serum creatinine, counseled patients about lifestyle modifications, and prescribed antihypertensive medications. In the control group, barbers educated patients about blood pressure and hypertension and encouraged patients to make lifestyle changes and to visit a physician to treat their hypertension.

After 6 months, subjects in the intervention group had a mean systolic blood pressure reduction of 27 mm Hg, compared with a mean systolic blood pressure reduction of 9 mm Hg in the control group ($P < .001$). There was a greater, statistically significant increase in the proportion of patients taking antihypertensive medications in the intervention group than in the control group. Additionally, 63.6% of patients in the intervention group had blood pressure readings below the recommended goal of 130/80 mm Hg, compared with only 11.7% of the control group. Very few patients left the study, with 95% completing the full 6 months.

What are the implications for these findings?

The results of this study indicate that health promotion by barbers coupled with medication management in barbershops by specialty-trained pharmacists resulted in a larger blood pressure reduction among black men, when compared with the standard management offered by primary care practices. The authors reported that the tailored approach with engagement from trusted community members, and placing pharmacists in barbershops to manage blood pressure medication therapy led to high retention and effectiveness, signifying the potential improvement of prevention and treatment of hypertension among black men. The authors also suggested that other health care professionals and organizations could adopt aspects of their intervention (e.g., blood-pressure measurement and medication protocols), and the need for implementation research. As a result, public health practitioners could examine and consider how to implement such programs in their communities.

Citation

Victor RG, Lynch K, Li N, Blyler C, Muhammad E, Handler J, et al. A cluster-randomized trial of blood-pressure reduction in black barbershops. *N Engl J Med*. 2018;378:1291–301. doi: 10.1056/NEJMoa1717250.

Resources

Centers for Disease Control and Prevention. [*Using the Pharmacists' Patient Care Process to Manage High Blood Pressure: A Resource Guide for Pharmacists*](#). Atlanta, GA: Centers for Disease Control and Prevention, U.S. Department of Health and Human Services; 2016.

Centers for Disease Control and Prevention. [*Advancing Team-Based Care Through Collaborative Practice Agreements: A Resource and Implementation Guide for Adding Pharmacists to the Care Team*](#). Atlanta, GA: Centers for Disease Control and Prevention, U.S. Department of Health and Human Services; 2016.

Whelton PK, Carey RM, Aronow WS, et al. 2017 [*ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines*](#). *J Am Coll Cardiol*; 2017.

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.