

# THE HEALTHY HEART COMMUNITY PREVENTION PROJECT: A MODEL FOR PRIMARY CARDIOVASCULAR RISK REDUCTION IN THE AFRICAN-AMERICAN POPULATION

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The Healthy Heart Community Prevention Project (HHCPP) was initially conceived as a 1-year pilot program funded by the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health (NIH). Although the NHLBI funding has expired, the program is being maintained by volunteer coordinators.

The Healthy Heart Community Prevention Project is an outgrowth of the National Medical Association's (NMA) Healthy People 2000 Program, whose mandate is to provide accessible health education and screening for African Americans in an effort to reduce excessive morbidity and mortality from chronic diseases that could be prevented or cured if appropriate treatment is administered.

Keith C. Ferdinand, MD, FACC, is the principal investigator of this New Orleans-based project, which continues to focus on cardiovascular disease and its risk factors. However, most of the work is done by Daphne Ferdinand, MN, RN, administrator of Heartbeats Life Center and project director. As a registered nursing graduate from Dillard University, this health practitioner uses her experience, patient education skills, and contacts within the community to organize this extensive outreach program. She is ably assisted by Dawn Banks, the program's administrative assistant. Avis Pointer, PhD, served as the NMA liaison for the project, and Robinson Fulwood, MSPH, remains the NHLBI project officer.

Through its strong ties with the New Orleans community, the project not only enlists the support of

the local physicians but also has community support from various professional, voluntary health, and community organizations (Table 1). Thus, by having developed a strong coalition, the HHCPP has been able to sustain a massive health screening and intervention project.

In an effort to highlight the significance of both the heart and the home in the African-American community, the HHCPP chose a logo that incorporates the two. Furthermore, the project's slogan is "You've got to have heart."

One important aspect of the HHCPP is the development of the Blood Pressure Control Referral Directory. The directory is a list of doctors and facilities that made a commitment to provide follow-up care to screened patients because one should not simply go into a community, take blood pressures, and leave without follow-up.

The implementation of the HHCPP involved many volunteers. The funding from NHLBI was used mainly for staffing, hardware, including a computer, and other office supplies. Much of the work was done by volunteers: 27 nurses, 19 physicians from the New Orleans Medical Association, the local chapter of NMA, and 10 lay persons.

## THREE COMPONENTS OF HHCPP

The HHCPP has three components, which are described in the referral directory. First, there is "Cut Your Pressure." It is a play on words because this is the barbershop/beauty shop intervention, where volunteers actually teach beauticians and barbers how to check blood pressures. The instructions are not given in a

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Dr Ferdinand is from the Heartbeats Life Center, New Orleans, Louisiana.

cursory manner. The project requires a 10-hour intervention training using the American Red Cross and American Heart Association guidelines. The trainees are taught how to check blood pressures appropriately. Those who meet requirements are allowed to take sphygmomanometers back to their salons and barber-shops to measure the blood pressures of their customers.

The blood pressure protocol, as previously described, was based on the American Red Cross and American Heart Association guidelines. The barbers and beauticians were taught basic blood pressure screening techniques according to the latest Fifth Joint National Committee Report (JNC V). They were given a written test and needed to score 80%. The screeners had to accurately determine blood pressures on each other within 4 mm Hg of the instructor's blood pressure measurement to qualify as "specialists."

They also were familiarized with various NIH publications: the National Cholesterol Education Program (NCEP) Adult Treatment Panel Report (ATP-II) summary, the "Eat Right to Help Lower Your High Blood Pressure" pamphlet, and the "Eat Right to Lower Your High Blood Cholesterol" pamphlet. The health education literature was distributed in salons, barbershops, and churches. However, the project wanted the screeners to recognize and know what they were distributing.

The barbershops and beauty salons are not simply the "shops of the stars." Several of these businesses are one-room shops in some of the poorer neighborhoods in New Orleans. But that was the purpose—to go to places where no one else may have desired to screen in the past and to reach areas where working class and lower socioeconomic status clients reside who traditionally may not be exposed to advocates of risk factor modification. Mrs Ferdinand's ability to communicate effectively with hard-to-reach clientele enabled this aspect of the program to be facilitated.

The second component is "Give God a Hand"—again, somewhat a play on words. This component offers health education in various churches throughout New Orleans. The ministers give what is called a "health sermon" or a "healthy heart sermon." These sermons relate health and the church and are delivered on one Sunday each quarter. These are essentially planned sermons on high blood pressure, hyperlipidemia, smoking, and exercise.

The HHCPP used a nondenominational, broad-based ecumenical approach. The project included various types of churches because African Americans are a

**TABLE 1. HEALTHY PEOPLE 2000  
COALITION MEMBERS**

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American Diabetes Association, Orleans Chapter
American Cancer Society, Orleans Division
American Heart Association, Orleans Affiliate
Auxiliary to the New Orleans Medical Association
National Black Nurses Association, New Orleans
Dillard University Professional Nurses Organization
Louisiana Office of Public Health, Chronic Disease Control
Louisiana Coalition of Churches
New Orleans Black Social Workers
Union Bethel A.M.E. Church
Unity for the Homeless
Urban League of Greater New Orleans
New Orleans Health Department Nutrition Services

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heterogeneous people. One must reach into all segments of the community, if one really desires to impact the African-American population. Lower Algiers is the area of New Orleans across the Mississippi River from the French Quarter, and most people have never been there. Thus, the church provides a unique opportunity to teach African Americans in these underserved areas.

The third component is professional education, which included clinical presentations and speaker training. HHCPP held two clinical presentations. One was based on the Fifth Joint National Committee Report; the other was based on the National Cholesterol Education Program Adult Treatment Panel Report. The lectures focused on primary prevention and getting doctors and nurses introduced to the latest scientific information on detection and treatment of hypertension and high blood cholesterol. It is often said that one can tell which year a doctor graduated from medical school by the type of prescriptions he or she writes. Physicians tend to prescribe the same regimen over and over. Therefore, the project was determined to add professional education along with community intervention.

The first session was held on May 5, 1994. Edward D. Frohlich, MD, FACC, vice president for academic affairs of Alton Ochsner Medical Foundation, Parent Committee member of JNC V, and editor of *Hypertension*, presented "Practical Applications of JNC V." Brenda Owens, PhD, RN, associate professor of nursing, Louisiana State University Medical Center School of Nursing, taught "Nursing Perspectives." Dr Ferdinand, medical director of Heartbeats Life Center and associate professor of pharmacology, Xavier

University College of Pharmacy, made a presentation on "JNC V and Special Populations."

The second professional education seminar was held on May 21, 1994. Shiriki K. Kumanyika, PhD, MPH, professor and associate director of epidemiology, Pennsylvania State University College of Medicine, Center for Biostatistics, discussed techniques of effective dietary modification for cardiovascular risk reduction among African Americans. Luther Clark, MD, FACC, associate professor of clinical medicine, State University of New York Health Science Center, and Expert Panel member, Adult Treatment Panel II, discussed coronary heart disease and lipids. William C. Roberts, MD, executive director of Baylor Cardiovascular Institute, Baylor University Medical Center, and editor-in-chief, *The American Journal of Cardiology*, highlighted concepts and controversies on preventing and reversing atherosclerosis.

The cholesterol and hypertension seminars were approved for contact hours for both the nurses and dietitians; the physicians received continuing medical education through the National Medical Association for the hypertension program.

Participants in this program completed a 2- to 3-hour speaker training in which they were taught the importance of eye contact and how to organize talks, relieve anxiety, and increase audience participation. They also gained an understanding of cholesterol, JNC V, and risk factor information. The training was designed to help them be very firm and assured when making community presentations. Most of the participants were registered nurses and some were registered dietitians.

### THE HHCPP KICKOFF AND RESULTS

The HHCPP designed a major kickoff event to launch the project. The kickoff was held at the Louisiana Superdome, which is the largest indoor stadium in the world. The Bayou Classic, a football game between Southern University and Grambling State University, is the granddaddy of the historically black college heritage bowls. It is estimated that 68 000 to 70 000 African Americans attend each year from all over the nation. Project administrators determined this activity would be an excellent vehicle for highlighting cardiovascular disease prevention and secured permission from appropriate officials to conduct a blood pressure screening competition among fans.

The HHCPP volunteers checked blood pressures of 877 participants. The latest NHANES III data suggest that 32.4% of African-American adults have hyperten-

sion with systolic or diastolic pressure  $\geq 140/90$ ; this is exactly what was found. Twenty-one clients were referred to physicians for immediate care within 1 week because they had elevated blood pressure greater than the guidelines for JNC V of systolic 180 to 209 or diastolic 110 to 119.

In total, the pilot Healthy Heart Community Prevention Project screened more than 1350 clients for high blood pressure. Furthermore, this was done with appropriate blood pressure technique, health education, and follow-up. The project volunteers lectured on heart disease and hypertension to more than 550 people throughout the community. Through media presentations and church sermons, hundreds of thousands of others have been reached to date with heart-healthy messages.

### FINAL RECOMMENDATIONS

Recommendations for conducting a successful community-based project include the following. The foremost consideration is that a working coalition be in place before a major project is undertaken. Moreover, one must have strong community support. The principal investigator is not the most important person for success. In fact, one physician or one institution cannot accomplish the goal alone. There must be a critical mass of people who are willing to support the effort. The principal investigator, however, should meet with participants, coordinate activities, and provide educational training.

In addition, a coordinating center must be established with sufficient equipment and staff. A computer is essential, not only for word processing but also for data compilation and processing. There also must be a strong administrative assistant, ie, a salaried employee who is computer literate.

There must be support from physicians throughout the community. In New Orleans, physicians from several clinics (Table 2) signed an agreement with the project to treat patients with high blood pressure; if needed, to accept whatever health insurance the patient had; and if the patient had none, to initiate treatment and stabilize the person regardless of insurance status.

To hold a massive kickoff event, there must be at least 8 to 12 months of planning and a budget sufficient to meet program needs. Wherever a screening project is held, one must communicate and coordinate activities in an organized fashion with the governmental officials to get the public health sector involved. The HHCPP received support from the Louisiana Department of Public Health, the City of New Orleans, and the office

of US Congressman William Jefferson for the kickoff activity.

With regard to the church participants, project officials must meet with the church representatives to share program concepts. It is inappropriate to simply show up or send a letter requesting screening on a specific day. Relationships must be established beforehand.

The Health Sunday presentations must be approved by the ministers. While many ministers may find a set script and guidelines helpful, most ministers noted that they were restrictive and not needed. This request must be respected. The HHCPP personnel offered information on the current medical knowledge about hypertension and cholesterol but in no way suggested a script nor any specific message that had to be given.

For church seminars, the project used a modified version of the NHLBI Healthy Heart IQ and Hypertension Pretest. In New Orleans, the literacy level for a significant portion of the African-American community is about an eighth-grade education. Standard teaching materials, however, are developed at comprehension levels beyond that of the target population. Thus, the HHPC could not use many of them. To ensure the success of our project, products were redesigned to meet the special needs of the local population.

For the beauty shops and the barbershops, realistic limits must be set on the number of blood pressures to be taken. Salon operators are busy professionals and need to have information on what they must do as a minimum to stay in the program. Final decisions about duties and responsibilities must be made in conjunction with input from them. Moreover, guidance and follow-up must accompany training and implementation of blood pressure screening programs in barber and beauty shops. Volunteers cannot be expected to achieve accuracy and maintain consistency without ongoing support from project leaders.

The educational videos that we used were not all culturally relevant. Some did not show any African Americans. Major networks such as NBC, CBS, Fox, and ABC have all learned that black people like to see black people. Therefore, if the project is going to use videos, it should attempt to have videos that are ethnically and culturally appropriate.

The Healthy Heart Project developed a video based on the kickoff activity at the Bayou Classic. It includes remarks from Tracy Walton, MD, president of the

**TABLE 2. PARTICIPATING CLINICS AND PHYSICIANS**

Central City Neighborhood Health Center	Wanda Timpton, MD Don Carter, MD
Desire-Florida Neighborhood Health Center	Cherilynne Cottles, MD Michael Hunter, MD
Lower Ninth Ward Health Center	Gilbert Mason, MD William Stallworth, MD
St Bernard Ave Medical Clinic	James Davis, MD Emile Labranche, MD
St Thomas Health Service	George Howard, MD Larry Wooden, MD
Christopher Bloom, MD	Keith C. Ferdinand, MD
Ronald Wyche, MD	Jean Desse, MD
Rosalind Cropper, MD	Farere Dyer, MD
Robert Magee, MD	Joseph Braud, MD
Shelton Barnes, MD	Robert Brown, MD
Adrian James, MD	Henry Evans, MD
Thaddeus Temple, MD	Alix Bouchette, MD
Ellis Williams, MD	Daniel Bouchette, MD
Evita Currie, MD	Rhonda Kroll, MD

National Medical Association, interspersed with scenes from the screening effort and some footage from the Bayou Classic with two of the greatest marching bands in the land, Southern University and Grambling State University. The video reflects the underlying theme of this health promotion project, that healthy living should be fun!

The principal investigator, Dr Ferdinand, designed a Southern pennant and a Grambling pennant to give to clients who participated in the blood pressure screening. The pennant was somewhat of a gem, an incentive for fans to get their pressures taken. When fans found they could only get the pennants if they were screened, they agreed to wait 5 minutes to have their blood pressure taken.

When conducting similar activities, measures need to be taken to publicize the activity. At the same time, the environment must be constructed to help facilitate accurate readings as much as possible. During the Bayou Classic, blood pressure screening rooms were not on the main concourse. The project used small rooms along the sides of the Superdome so they were protected from game noise.

*Note:* The principal investigator and project director would like to thank the many professional and lay volunteers and the people of New Orleans for making the Healthy Heart Prevention Project successful.