Working Session 3B: Diabetes Mellitus

Strategies for Community Participation in Diabetes Prevention: A Detroit Experience

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The African-American community has been disproportionately burdened by diabetes and its associated complications. Nearly 2.8 million African Americans have diabetes. It is essential to increase community participation in diabetes prevention and health promotion as a method to improve health disparities. To address these issues, the Center for Medical Treatment Programs in Diverse Populations (MedTEP) was developed at Henry Ford Health System. The community participatory strategies described in this paper give a framework, which health systems can use to develop community-based partnerships and improve participation of community members in diabetes prevention and diabetes-related research. The strategies include receiving guidance by community leaders, providing a service, establishing partnerships, and disseminating information to the community. It is the goal of the MedTEP Center to continue to further develop and test models of community outreach to determine the most effective approaches to improve health outcomes and sustain the gain in African-American communities. (*Ethn Dis*. 2003;13[suppl3]:S3-63–S3-66)

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Introduction

Despite major advances in the last several decades, racial and ethnic health disparities remain. Many diseases contribute to the gap in health status between African Americans and Caucasians. Disparities have been documented concerning the receipt of appropriate cardiac medication, and access to appropriate cardiac surgery, kidney dialysis, and kidney transplants.[1–4] The Institute of Medicine recently reported that racial and ethnic minorities tend to receive a lower quality of health care than their Caucasian counterparts, even when access-related factors, such as patient's income, insurance, and medical condition are controlled, indicating that the healthcare playing field is not a level one.[5] These disparities must be addressed to improve the quality-of-life of individuals of color and ultimately build healthier communities. At the community level, it is imperative for individuals to become empowered by gaining the knowledge, experience, and resources to improve their short- and long-term health outcomes.

Racial disparities in the treatment in control of diabetes are quite evident. Diabetes has reached epidemic proportions and is now the 6th leading cause of death. Seventeen million Americans have diabetes, and more than 200,000 people die each year of related complications.[6] Over the past decade, death rates and complications associated with diabetes (ie, heart disease, stroke, kidney failure, leg and foot amputations, and blindness) have steadily increased. Nearly 2.8 million African Americans have diabetes. The African-American community has been disproportionately burdened by diabetes and its associated complications.[7] Among adults, 20 years of age and older, African Americans are twice as likely as Caucasians to have diabetes. Death rates for people with diabetes are 27% higher for African Americans compared with Caucasians.[8] Additionally, African Americans are at greater risk of diabetes-related complications associated with the disease compared to the Caucasian population. As we aim to improve health and reduce disparities in health treatment outcomes in racial and ethnic populations, we recognize that there are many barriers still to overcome, including: racism; lack of knowledge and inaccurate perceptions of diabetes; lack of or limited access to primary care; increasing reliance on emergency departments for care; cultural values; poverty; lack of culturally competent healthcare; and lack of a trusting healthcare environment.[9] Since 95% of diabetes care is self-care, it is essential to develop strategies for community participation in diabetes prevention, as well as health promotion activities to improve health outcomes. Such efforts must engage the community in prevention activities and be conducted with the knowledge, experience, and respect for the target population through an understanding of its culture and gender issues.

In 1993, to address these issues, Henry Ford Health System (HFHS) established the Center for Medical Treatment Effectiveness Programs (MedTEP). The vision of the Center is to improve health-related treatment outcomes and quality-of-life for minority populations within HFHS and the wid-

er community. The mission of the Center is: to facilitate research on improving health outcomes for aging minority populations, with a focus on the African-American population; to assist and encourage minority investigators to conduct research relevant to minority populations; to provide technical assistance to minority investigators and other investigators working in this area; to involve the community in Center activities; and to disseminate information on results of Center projects.

The strategies described in this paper give a framework within which major health systems can function to develop community-based partnerships and to improve the participation of community members in diabetes prevention while conducting research focused on improving health outcomes of diabetes and other chronic diseases. All activities were community-based and not designed as a tool to market the services of the health system. Instead, this outreach effort sincerely sought to engage individuals in recognizing the importance of preventive care.

STRATEGIES FOR COMMUNITY PARTICIPATION—THE MODEL

There are 4 elements in our model that we used to establish and maintain community participation in diabetes prevention efforts: 1) obtain guidance by community leaders; 2) provide a service; 3) establish partnerships; and 4) disseminate or promote findings. This model can best be characterized as a dynamic circle, where obtaining guidance leads to providing a service, providing a service leads to establishing partnerships, establishing partnerships leads to dissemination/promotion of findings, and dissemination/promotion of findings component facilitates obtaining further guidance by community leaders.

Guidance by Community Leaders: the "Speak Out"

In the African-American community, leaders can be broadly defined. Often leaders are individuals with influence, regardless of title, socioeconomic status, or educational level. It is with assistance by such individuals that we were able to learn more about members of the local community. Community leaders also helped us to understand the community ecology regarding where to recruit potential participants to engage the community, whether it was a faith-based organization, senior center, community center, or school.

In 1998, we hosted a community meeting, "Speak Out," a forum for community leaders such as legislators, other elected officials, ministers, community advocates, consumers, researchers, and clinicians. The following needs were identified by this group: 1) better access to screening for diabetes at places such as health fairs; 2) provision of health education in the community—specifically pertaining to the benefits of exercise and recreation; and 3) additional emphasis on the health of African-American males. Participants felt it was important to conduct outreach activities in the community, target specific populations, and provide a health-related service. From this meeting, a proposal was developed to provide health screening, on-site education at the screening clinic, follow-up and referral service, and comprehensive (21-hour) diabetes self-management classes to those who were subsequently diagnosed with diabetes. The proposal was funded by the Michigan Department of Community Health and was entitled "AIM^{HI}—The African-American Initiative for Male Health Improvement."

Provide a Service: AIM^{HI}

Coincident with the submission of our proposal for funding for AIM^{HI}, the Michigan Department of Community Health published a strategic plan entitled "Healthy Michigan 2000" and

[In Michigan], in 1993, a 15-year-old African-American male had only a 58% probability of reaching the age of 65, in contrast to an 85% probability of reaching the age of 65 for Caucasian 15-year-old males.[10]

made "improving the survival of the African-American male" one of the top 4 priorities. While the negative health disparities in health outcomes were adverse for African-American men in the state, perhaps the disparities are best exemplified by the finding that in 1993, a 15-year-old African-American male had only a 58% probability of reaching the age of 65, in contrast to an 85% probability of reaching the age of 65 for Caucasian 15-year-old males.[10]

AIM^{HI} was designed as a response to the challenge of reaching out to the African-American community, particularly in the Detroit metropolitan tri-county area, where 76% of the African-American men reside. In order to facilitate access to the greatest number of people, services were provided at community-based sites utilizing some of the networks and resources of established community-based organizations.

The program consisted of several activities: health screening for diabetes, hypertension, and cholesterol; stroke risk assessment and education; and eye disease screening for glaucoma. Individuals who manifested an abnormal screening result for any of the conditions assessed were provided with referrals to primary care providers and were followed-up by telephone. Education/self-management classes were provided for African-American men and their

Of those screened, one in 3 had an abnormal screening result for diabetes, hypertension, or both.

families to assist these individuals in effectively managing their chronic condition.[11] Program components reflected the desire to move beyond the point of diagnosing illness to empowering the African-American community with the capacity to positively affect their health.

Over a 4-year period, more than 180 screening clinics have completed assessments of more than 8,000 individuals. Ninety percent of those screened were African-American, 50% were men and the average age was 50 years. Of those screened, one in 3 had an abnormal screening result for diabetes, hypertension, or both. Also, more than 350 individuals have participated in a comprehensive (21-hour) diabetes self-management program.

Establish Partnerships: AIM^{HI} Partners

The enthusiastic support of dedicated community partners is important. In our case, some partners made a commitment to host a screening clinic at their community-based site on an annual basis (ie, faith-based organizations, barbershops, fraternities, schools). Other partners were professional organizations that involved AIM^{HI} staff in promoting a particular theme for the month (ie, American Diabetes Association, American Heart Association). There were partners that encouraged their volunteer members to assist us in conducting some of the eye screening tests (ie, Lions Clubs of Michigan). Several partners offered additional services at the health screening clinics. We developed partnerships with legislators, health department officials, and a fitness club, which offered complimentary access to a group of community members with diabetes.

These partnerships were considered informal since no contractual agreement was established between the partners. However, more recently we have established formal partnerships, which include signed leases for space at a nominal or negligible cost to provide community-based services for chronic diseases.

As our experience with our formal partners grows, we are establishing a community advisory council to participate in developing recruitment strategies and in assuming substantial ownership of the programs used to promote health in the community using the approaches they developed. We are striving toward incorporating the community-based participatory public health research principles for upcoming research studies. These principles promote research projects that are designed to enhance the capacity of the community, strengthen collaborations, and involve representatives of community-based organizations as appropriate in all major phases of the research process.[12]

Disseminate/Promote: Promoting AIM^{HI}

Dissemination of findings is critical in building trust, credibility, and future collaborations. Our dissemination efforts included: using respected community leaders to spread the health message; conducting special events; arranging media coverage; and starting the MedTEP newsletter. On one occasion, a renowned diabetes expert presented a diabetes lecture to the professional medical community followed by a second presentation specifically tailored for a group of former diabetes self-management class participants. At other times, well-known sports celebrities have provided public service announcements and the use of their image to promote AIM^{HI}. In an AIM^{HI} sponsored diabetes "class reunion" for the 300+ individuals who had participated in diabetes self-management classes, individuals were informed about new advances of diabetes care and were provided with the opportunity to share with others the benefits of engaging in better self-care behaviors. Local newspapers and radio media have supported the outreach efforts by featuring articles about individuals who have participated in the program. In addition, we have highlighted the accomplishments of diabetes self-management class participants in a newsletter entitled, "AIM$^{HI-LITES}$". This publication is distributed to individuals who have participated in the program, health system physicians, community-based organizations, and community leaders.

CONCLUSION

The HFHS MedTEP Center will continue to support the vision of improving health-related treatment outcomes and quality-of-life for minority populations within HFHS and the wider community, and will move toward the elimination of racial and ethnic health disparities. It is essential that major health systems continue to utilize existing and new methodologies to enhance community participation in disease prevention activities. It is also imperative to identify nontraditional models of care to engage an underserved, disproportionately disease-burdened and vulnerable population. It is our goal, working collaboratively with the community, to further develop and test models of community outreach and to determine the most effective approaches to improve and sustain gains in health outcomes for the African-American community today, and to expand this goal to include other racial and ethnically diverse communities in the future.

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