LIBRARY Michigan State University

PLACE IN RETURN BOX to remove this checkout from your record. TO AVOID FINES return on or before date due.

DATE DUE	DATE DUE	DATE DUE

1/98 c/CIRC/DateDue.p65-p.14

AN ANALYSIS OF COMMUNITY DEVELOPMENT APPROACHES TO CARDIOVASCULAR DISEASE PREVENTION PROJECTS FOR AFRICAN AMERICANS

By

Karen Patricia Williams

A DISSERTATION

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Department of Resource Development

ABSTRACT

AN ANALYSIS OF COMMUNITY DEVELOPMENT APPROACHES TO CARDIOVASCULAR DISEASE PREVENTION PROJECTS FOR AFRICAN AMERICANS

By

Karen Patricia Williams

Michigan ranks 38th in cardiovascular disease mortality and morbidity rates among states. Conversely, it ranks in the top third of the states with residents who have some form of health insurance. Mortality and morbidity numbers have declined among the Caucasian population in Michigan. However, life expectancy for African Americans in 1990 was equivalent what it was for Whites in 1950.

Heart disease death rates for African American males and females were 1.5 and 2.5 times higher than for White males and females, respectively. Stroke death rates for African American males and females were 2.9 and 2.5 times higher than for Caucasian males and females, respectively.

The study investigates the use of community development strategies to address the problem of high morbidity and mortality rates among African Americans in eight Michigan communities. The research is exploratory in nature. A multiple method model (triangulation) is used to compare findings derived from three methods--focus groups, coordinators' interviews, and program documents. Based on the study findings, the author recommends moving from a traditional medical paradigm to a social behavioral paradigm that incorporates community development approaches, such as technical assistance and self-help, as a means to foster appropriate life-style changes in the African American population. To attract African Americans to cardiovascular disease prevention and other programs, community change agents will have to be culturally competent. In other words, they will have to understand and respect the residents and their community culture. They will have to include residents in the various stages of programming with an understanding that indigenous involvement and leadership is as valuable as input and direction obtained from professionals. Finally, community developers will have to make community capacity building a major ingredient in every community-based project. Additional research is required to understand how different community-based models apply in different cultural settings and how community-based prevention methods affect the patient revenues within medical systems.

Copyright by

KAREN PATRICIA WILLIAMS

To my parents, LeRoy A. and Evelyn P. Williams, and my fore-parents, on whose shoulders I stand. Thank you for setting high standards. I sincerely appreciate the many sacrifices you made to expose me to the best environments.

To my daughters, Jasmynn Brooque and Ivy Nichole, who have made unselfish sacrifices for their mother. You have shared your mother with her school work and her work in the community with the promise of a better life. To both of you, I pass the torch of high standards that my parents passed on to me. This torch will guide your path so that both of you may reach your full potential and take your rightful place in this world.

To Calvin Roberts, my soul mate, who always provided me with a safe place to share my emotions. Your quiet strength has been a source of nurturing and protection for me.

ACKNOWLEDGMENTS

With deep gratitude to all of my professors: Dr. Robert C. Anderson, my major advisor and dissertation chair. I sincerely appreciate your consistent gentle encouragement, as well as guiding me through my academic maze. Dr. Frank Fear for providing me with special opportunities while department chair and sharing your love, respect, and enthusiasm for The Academy. Dr. Paul Nickel for sharing my dreams and encouraging me to always question. Dr. Patricia Mullan for your intellect and introducing me to the world of public health. Dr. Maxie Jackson, Jr., for being a voice of reason, listening, hearing, and helping me to prioritize. Thank you Dr. James Jay, Assistant Vice-Provost, for providing the support I needed to complete my research.

Rochelle Hurst, Michigan Department of Community Health, thank you for providing me with resources and being a ready and willing reference. Charlotte Pratt of Michigan Public Health Institute, I appreciate your agency funding my research in part and allowing me free use of the data. Also, thank you for showing me how to expand my research into presentations and articles. To Wanda D. Lipscomb, Director of the Center of Excellence in Minority Medical Education and Health, thank you for going the second, third, and fourth miles to support my research, as my employer and soror. Thank you Jan Wallace for transcribing all of the data. John Wulu, thanks for your intellect, dedication, and expertise in statistical analyses. I sincerely appreciate Sandra Philpott-Burke for making sure that I was at the right place at the right time to get all the community development leadership experiences I needed to be considered an expert. Thank you Quindolyn Bradley for always being a source of encouragement. Dr. Patricia Edwards, Michigan State University College of Education, thank you for being a role model who has a standard of excellence and who has motivated me to stay in The Academy. Thank you Marilyn Cotten for your prayers and the homemade brownies you would send me from Philadelphia.

TABLE OF CONTENTS

LIST OF TABLES	 	 x
LIST OF FIGURES	 	 xi

Chapter

I.		1
		1
		2 4
	Problem Statement	7
	Purpose and Importance of the Study	9
	Research Questions	1
	Research Hypotheses	1
	Assumptions	2
	Definition of Terms	2
	Overview	4
II.	LITERATURE REVIEW	5
		5
	Analytical Framework of the Study	5
	Community Development	1
	Health Promotion	2
III.	METHODOLOGY 20	6
		6
	Research Design	8
	Subjects	2
	Research Hypotheses	2
	Data Collection Procedures	3
	Focus Groups	3
	Interviews With Program Coordinators	5

Secondary Data	36
Data Analysis Procedures	36
	39
IV. ANALYSIS OF THE DATA	41
	41
Results of Hypothesis Testing	41
Hypothesis 1	41
Hypothesis 2	47
Hypothesis 3	54
Hypothesis 4	63
Hypothesis 5	66
Discussion of Results Regarding the Research Questions	77
Research Question 1	77
Research Question 2	85
V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	91
Summary of the Study	91
The Problem	91
Methodology	
Findinas	93
Conclusions	. 94
Recommendations	. 96
Research	
Policy	97
REFERENCES	. 100

LIST OF TABLES

1.	Sites Applying Various Community Development Strategies (Combination of Self-Help and Technical Assistance)
2.	Sites Applying Self-Help Strategies 44
3.	Sites Applying Technical-Assistance Strategies
4.	CVD Risk Factors by Behavioral Indicators-Row Percentages 49
5.	CVD Risk Factors by Behavioral Indicators-Column Percentages 53
6.	Frequency and Percentage of Category of Motivation by Site
7.	ANOVA Using General Linear Models Procedure
8.	Results of the ANOVA for Dependent Variable: Rank for Variable Count
9.	Results of the Least Significant Difference Test
10.	Results of Tukey's Studentized Range 60
11.	Qualitative Results: Individual CVD Programs' Objectivesand Their Achievement64
12.	Community Development Experience of Coordinators
13.	Community or Participant Involvement in Designing the CVD Program

LIST OF FIGURES

1.	Dimensions of Exemplary Community Development Projects 17
2.	Dimensions of Health Belief Model Adopted for CVD
3.	CVD Programs Site Locations
4.	The Triangulate Methods Used in This Study

CHAPTER I

INTRODUCTION TO THE STUDY

Introduction

In 1995, the Michigan Public Health Institute (MPHI) awarded eight community-based cardiovascular disease (CVD) grants to organizations in Michigan to address the overwhelming problem of CVD among African Americans. CVD, which affects the heart and blood vessels, includes heart disease and cerebrovascular disease (stroke). It is the leading cause of death in Michigan. Despite declines over the past few decades, CVD remains the leading cause of death and disability in the United States (Kochanek, 1995). In 1992, more than 861,000 Americans died from heart disease or stroke, the main forms of CVD (Kochanek, 1995).

Almost 50% of all deaths in Michigan are attributable to CVD. In 1992, the rates of deaths from heart disease and from stroke per day per 1,000 population recorded for Michigan residents were 73.4 and 13.9, respectively (total Michigan resident deaths in 1992: 78,916). In 1993, the rates of deaths from heart disease and from stroke per day per 1,000 population were 78.1 and 14.5, respectively (total Michigan resident deaths in 1993: 82,286). In 1994, the rates of deaths from heart disease disease and from stroke per day per 1,000 population were 77.2 and 15.6,

respectively (total Michigan resident deaths in 1994: 82,644) (MDCH, 1992, 1993, 1994), making the state the twelfth worst state nationally with regard to CVD death rates.

Since 1960, the survival rate for African American males has continued to deteriorate, unlike that for white males, white females, and African American females (MDPH, 1993). The goal of the MPHI is simple: Involve and empower African American males to improve their cardiovascular health. However, the task has proven to be challenging. The Michigan Task Force on Improving African American Male Health recommended that the state prioritize its resources, allocating them to community-based prevention projects that foster and bring about a healthy lifestyle. basic academic skills, and character and career development among African American males. An initiative stemming from that recommendation is the community-based Cardiovascular Disease Prevention Among African Americans projects sponsored by the MPHI and supported by the Michigan Department of Community Health (MDCH). Eight projects have been funded throughout Michigan communities. Some communities have included females because project administrators have had problems recruiting men. Moreover, hundreds of men and women have been given cardiovascular health screenings.

<u>Health</u>

Health is fundamental. Without it, people become disenfranchised, thereby being relegated to a minimum level of participation in the larger society. Despite widespread gains in cardiovascular health nationally, Michigan is among the

country's leaders in the number of preventable deaths. Yet the number of Michigan residents who have some type of insurance is higher than the national average. In 1993, nearly 30% of African American males' deaths were caused by some form of heart disease. When compared to their white counterparts who suffered from heart disease, Black males' death rates were nearly a third higher. Several lifestyle and environmental factors contribute significantly to the morbidity and mortality rates associated with CVD among Blacks. These include smoking, diet, and various psychosocial factors. Another factor that has been the subject of current research is the possibility of genetic variants linked to hypertension among different racial aroups (Francis, 1994). Although the issue is complex, it is thought that nearly 20 different genes may be involved in the pathogenesis of hypertension, affecting a wide variety of physiologic systems, including sensitivity to salt. The challenge then remains: How can health care providers effectively reach these men to educate them to change their risk behaviors?

One way to change cardiovascular risk behavior is to use the community development process to reach targeted populations when administering healthpromotion programs. "Community development is defined as the process by which the community defines its own health needs and organizes to make these needs known to health professionals in order to bring about change" (Dalziel, 1992, p. 228). Healthy Michigan 2000 (MDPH, 1993) stated that community-based intervention is an important method for achieving health objectives for the nation. A community development approach in health promotion has become one of the preferred

methods of service delivery in the United States, dating back to the 1972 Stanford Three-Community Study in California. That longitudinal study focused on reducing the behavioral risk factors in those communities by using community organizational strategies (technical assistance), which eventually became the catalyst for institutional and environmental sustainability. The findings indicated a significant reduction in cholesterol and blood pressure levels and cessation of smoking in the cohort sample (Farguhar, 1990).

Community-based health promotion projects have increased the public's awareness of, and willingness to play a proactive role in, the health of their communities. People have been feeling a growing sense of empowerment, resulting in a willingness to be part of the solution. "The public mood is now shifting toward the belief that we, as individuals and as communities, can and must fix the serious problems that face us" (Healthcare Forum, 1994, p. 7).

<u>Community Development</u>

The primary community development approaches applied in the context of health promotion are self-help and technical assistance. In many ways, communitybased health promotion mirrors community development approaches and principles. In principle, professionals understand that, for health promotion to be effective, it must be implemented at the community level, using local citizen participation. In 1991, the American Public Health Association acknowledged that, if the health status of Americans was to be improved, the problem would have to be tackled at the community level; the residents would need to be involved in designing such

initiatives. No longer could health professionals administer top-down directives and expect the nation to follow them. Instead, citizens would have to be involved in their own health. This is a technical assistance approach--an approach for planned change. Experts who have the technical background--in this case, health care providers-have developed a model, health promotion, that enables local communities to work with the experts in making lifestyle changes that affect their health.

Technical assistance aids health promotion administratively, having the power to manipulate resources, knowledge, and information (Fear, 1989). As early as 1959, health professionals realized that it was effective to focus on individuals' changing their lifestyles. However, it was more practical to consider a primary prevention model to bring about change at the community level, thus giving rise to health promotion efforts (Winkleby, 1994). The impetus for technical assistance in health promotion that finds its way into the community is twofold. It is both imposed and negotiated. It is imposed because a group of national health professionals have come up with a set of health objectives for communities. However, it is negotiated because the community can decide which objectives it wants to achieve.

Community-based health promotion projects have made significant contributions, from the way health care professionals practice to the way people view health, by causing a paradigm shift in health care. Instead of health professionals solely treating patients for preventable illnesses, they are educating patients on how to reduce and eliminate those diseases. Such projects have ranged from individual

to small-group interventions to media campaigns and public policy advocacy that promotes preventive health care. As MDCH officials view it, the object is to influence a greater number of people. In addition, the public has a new concept of health and what creates healthier communities. The model has moved away from viewing health as the avoidance of disease to embracing the active pursuit of wellness. There is an appreciation for the influence of a broader concept of quality of life. People now tend to feel more empowered and are playing a more proactive role in the health of their communities. They are beginning to view health as being both the individual's and the community's responsibility.

This twofold view of health is of special interest to resource development practitioners because it has the potential to increase the understanding of the community development process and how the community development model transcends disciplines. Too often, community development approaches are considered only in the context of the social sciences, such as community economic development, social welfare, and housing.

In this study, the researcher shows the connections between community development components such as citizen participation and empowerment, and health promotion and health empowerment. When community development practitioners are asked "What constitutes a healthy community?" their answers will have to include the health or well being of the residents if those answers are to be complete. Knowing the effect of CVD, while examining the phenomenon of African Americans' struggle to gain health empowerment by using grass-roots community

development strategies, it was of interest to see how this effort contributes to communities' level of citizen participation. In other words, behavioral change is the most difficult to bring about. But it is believed that applying community development approaches can serve as the catalyst to planned change as it relates to health empowerment, which, in turn, will help this disenfranchised group become more empowered in making other significant changes in their communities.

Problem Statement

CVD death rates among African Americans have dropped nationally since 1985, but not in Michigan (MDCH, 1996). According to the MDCH, Center for Health Promotion and Chronic Disease Prevention, Health Promotion Section, every 15 minutes, one person died of CVD in Michigan in 1994. The same report concluded that the stroke death rates for African American males and African American females were 2.9 and 2.5 times higher than those for white males and white females, respectively. Even more astounding were the heart disease death rates. For Black males and Black females, the heart disease death rates were 1.5 and 2.5 times higher than those for white males and white females, respectively.

The fact that many of the CVD risk factors (smoking, high blood pressure, high cholesterol, overweight, and sedentary lifestyle) can be controlled makes CVD a multifaceted problem. In <u>Healthy Michigan 2000</u> (MDPH, 1993), the four strategies recommended for addressing the CVD problem are community development based:

1. Increase the involvement of African American males and their communities at all levels, including policy development, program implementation, and evaluation.

- 2. Augment department advisory committees with representation from African American males.
- 3. Increase the acceptability of outreach activities and messages designed to encourage healthy decision making by African American males.
- 4. Encourage integrated health systems to utilize urban health initiatives in conducting community outreach programs to teach conflict resolution and to support healthy behaviors by African American males.

Traditional methods of CVD prevention, such as screenings and counseling, have failed to reach sufficient numbers of African Americans, primarily because of their negative perceptions regarding public health practices. African Americans have a general distrust of "clinics" and prefer to be examined by "their own" or by a private physician (Williams, 1997). Medical historian Gamble (1997) argued that the distrust African Americans have toward the medical community predates the popular notion, which involves the 40-year (1932 to 1972) U.S. Public Health Tuskegee Syphilis Study. This study involved 399 Black men from Macon County, Alabama, who were deliberately denied effective treatment for syphilis in order to document the natural history of the disease. In addition, these men were not told they were part of a medical study (Jones, 1993). "Black Americans' fears about exploitation by the medical profession date back to the antebellum period and the use of slaves and free Black people as subjects for dissection and medical experimentation," noted Gamble (pp. 1773-74). Thus, a major concern for health care professionals is the challenge of practicing preventive medicine, as it relates to CVD, in the Black community.

Understanding that making lifestyle changes can reduce the morbidity and mortality rates significantly, one group of health professionals has selected the community-based approach to addressing the CVD problem among African Americans in Michigan. However, there is a limited understanding among health professionals as to why some programs are attracting Blacks and influencing their preventive CVD care, whereas other programs are having problems recruiting Black participants. This study was undertaken to provide information on this subject.

Purpose and Importance of the Study

The researcher's purpose in this study was to (a) document the perception of participation by CVD project coordinators and participants at eight sites in African American communities throughout Michigan; (b) measure the knowledge, attitudes, skills, and behaviors of the participants; and (c) measure the efficacy with which the community-based CVD programs have been developed.

Understanding the role that community development approaches play in CVD programs designed for Blacks is crucial. It is particularly relevant to compare the differences between programs managed by community-based organizations and those managed by a health institution. Understanding this phenomenon will lead to the development of a model for designing specialized health education programs and recruitment efforts aimed at African Americans.

There are several community-based or community development approaches. In this study, the researcher focused on the self-help and technical assistance approaches. Self-help or empowerment calls for community members to initiate their own problem-solving process. In contrast, the technical assistance approach relies on the expertise of outsiders to help community people solve problems.

Atthough programs of this nature have existed for more than a decade, they usually have not had a culturally specific design. In other words, health professionals traditionally have designed community-based CVD intervention programs for the broad population. Many African Americans have been reluctant to participate, with any consistency, in programs administered by public health organizations. Therefore, it has been difficult for health professionals and researchers to make definitive generalizations from data gathered from the broad population to specific populations because the numbers of Black participants have been relatively small. This situation underscores the need to understand the participation phenomenon among African Americans.

The MPHI has funded programs that have been designed by lay people and health professionals alike who have ties to the community where the program is being administered. These community-based groups had the freedom to be flexible and creative in their design. They were charged, however, with designing a culturally sensitive program that would address CVD risk factors. It was generally thought that having a community-based program with local people involved in the programming would lead to participation in the program. It was hoped that participation would encourage lifestyle changes that would ultimately lead to a reduction in risk factors.

Participation in and of itself is not the answer. However, it is the part of the process that leads to behavioral change. Discerning why African Americans participate in community-based CVD programs will contribute to a better

understanding of the self-help or empowerment approach of community development. The literature on empowerment and self-help has described empowerment as the process of increasing personal, interpersonal, and/or political power so that individuals or collectives can take action to improve their life situation (Gutierrez, 1988). Moreover, it is held that when self-help is achieved in one area of life, it can be transferred to other areas, eventually contributing to community enfranchisement and community ownership. In other words, if a person learns the skill of community organizing in one setting, he or she can transfer the use of that skill to another setting, thereby contributing to the betterment of the community.

Research Questions

The following questions were posed to guide the collection of data for this study:

1. What contributes to the acceptance and efficacy of community-based CVD programs for African Americans?

2. Did participating in any of the eight CVD-prevention programs influence the perceptions, attitudes, and behaviors of the participants? If so, in what way?

Research Hypotheses

The following hypotheses, stated in the null form, were formulated:

<u>Ho 1</u>: There are no differences in the use of community development strategies for CVD prevention by health institution CVD programs and community-based CVD programs.

<u>Ho 2</u>: There are no differences between the before- and after-focus group perceptions of participants about CVD-prevention programs.

<u>Ho 3</u>: There are no differences between the focus group participants' categories of motivation for adopting healthy lifestyles and preventing CVD.

Ho 4: There are no differences between the individual CVD programs' objectives and their achievement.

<u>Ho 5</u>: Coordinators' previous applied community development experience does not make a difference in program participation.

Assumptions

For the purposes of this study, the following assumptions were made:

1. The eight CVD programs have accurate data-collection and data-

reporting standards.

- 2. Participants were conscientious and trustworthy in giving their responses/comments during the focus group sessions.
 - 3. Information from the coordinators' interviews augmented information

from the focus group sessions in a meaningful way.

4. The perceptions and attitudes that participants expressed in the focus groups were related to their subsequent behavior.

Definition of Terms

The following terms are defined in the context in which they are used in this study:

<u>Acceptance</u> refers to the participants' approval of the CVD projects by assembling with others with the intention and expectation of sharing one's health issues.

African Americans are people of African descent, also referred to as Blacks.

Attitude means the mind-set a participant has in regard to his or her health.

Beliefs are core values that guide the participants' actions and, in turn, affect their lifestyles.

<u>Capacity building</u> is the development of technical expertise to plan, implement, and evaluate chronic disease prevention and control interventions (Schwartz, 1993).

<u>Cardiovascular disease (CVD)</u> can be classified as either modifiable (preventable) or nonmodifiable (Smith, 1993). It includes ischemic heart disease and cerebrovascular disease. Major risk factors for CVD (i.e., heart disease and stroke) include physical inactivity, cigarette smoking/tobacco use, alcohol use, drug abuse, high blood pressure, elevated blood cholesterol, obesity, diabetes, and poor nutrition (Fletcher, 1992).

<u>Cultural competence</u> is a characteristic of individuals who have academic and interpersonal skills that allow them to increase their understanding and appreciation of a group's cultural differences and similarities (Marín et al., 1995).

Efficacy refers to coordinators' mastery of the community development approaches to accomplish the CVD project objectives defined in their grant proposal and by the funding agency.

Exemplary Project Model (EPM), developed in the 1980s, is one of the two analytical frameworks on which this study was grounded. It is a prototype for community development projects consisting of three dimensions, all having a stakeholder component: (a) design, (b) implementation, and (c) consequences. <u>Health Belief Model (HBM)</u>, developed in the 1950s, is one of the two analytical frameworks on which this study was grounded. It is a conceptual formulation for understanding why individuals do or do not engage in a wide variety of health actions. The model has four dimensions: (a) perceived susceptibility, (b) perceived severity, (c) perceived benefits, and (d) perceived barriers.

Indigenous technical knowledge means that the people affected by a particular problem have the knowledge that enables them to define the problem jointly with professionals who have the technical knowledge. Both contribute to the solution.

<u>Overview</u>

Chapter II is a review of literature pertinent to the study. Topics of focus include the analytical framework of the study, community development, and health promotion.

The methodology used in conducting the study is described in Chapter III. The research design is presented, as are the methods of inquiry used. The subjects for the study are described and the hypotheses are restated. The data collection and data analysis procedures are considered next. Limitations of the research are then discussed.

The results of the data analyses are presented in Chapter IV. Chapter V contains the conclusions drawn from the findings, and recommendations for further research and policy.

CHAPTER II

LITERATURE REVIEW

Introduction

This chapter contains a review of literature on topics pertinent to the study. The following topics are discussed: the analytical framework of the study, community development, and health promotion.

Analytical Framework of the Study

Neither community development nor health promotion is the outgrowth of one specific theory. Rather, both fields have evolved as a result of a societal need rather than being the outgrowth of academia. Community development draws from the social sciences. It addresses propositions regarding social technology transfer (Blackely, 1989). Health promotion, on the other hand, has its roots in public health education and the need to gain the cooperation of the public (Green, 1990). For the purpose of this research, two models frame this investigation—the Exemplary Project Model (EPM) and the Health Belief Model (HBM). The rationale for using two models is that this topic serves as the intersection for two areas of concentration: community development and health promotion. The EPM addresses socioenviron-mental intervention, whereas the HBM is focused on disease-prevention

intervention. Each model challenges the other on the basis of accountability. The driving question is: Does what the models do, and how they do it, make a difference in terms of their intervention with those for whom and with whom they do it?

The EPM serves as a guide for designing, implementing, and evaluating community development projects. Constructed in the late 1980s by Frank Fear, a professor in Michigan State University's Department of Resource Development, the model is grounded in the thought that community change agents must be able to connect theory with practice that is deemed beneficial by the people, the organization, and/or the community experiencing the change. One of the components of the EPM that distinguishes it from other project models is its emphasis on participation by local stakeholders. In the three dimensions of the model–design, implementation and consequences--there is a stakeholder component, which is a guiding principle in community development (see Figure 1).

The EPM comprises the following three dimensions, each of which has several components:

1. **Project-design dimension**. This dimension includes five components: (a) the problem-analysis component--the extent to which local problems and needs, to be addressed in the project, are documented and action is justified; (b) the situational-analysis component--the extent to which project designers demonstrate that they understand the "culture" of the place(s) in which the project is to be implemented; (c) the substantive component--the degree of expertise held by the designers relative to the issues to be addressed in the project; (d) the





design-coherence component--the extent to which the design elements (e.g., goals, methods, budget) are coherently related; and (e) the local-stakeholder-participation component--the extent to which key local groups are actively involved in and influence the project design.

2. **Project-implementation dimension**. The three components of this dimension are (a) turning design intentions into action; (b) making in-course modifications (as deemed necessary) in project operations because of design flaws or unexpected consequences resulting from initiating a project; and (c) monitoring stakeholders' perceptions about "how the project is going" and using that information to modify project operations.

3. **Project-consequences dimension**. This dimension has two components: (a) the impact component represents two effects—the primary (intended) effects, *vis.* the extent to which each project objective is achieved, and the secondary effects, including unintended and spin-off effects; and (b) the outcomes component. Outcomes include the following: To what extent do project stakeholders believe the project to be successful? Is the project, in whole or in part, sustainable following the termination of external funding? Has the project contributed to local understanding about how to design and implement a successful change project (Fear, 1990)?

The HBM is a psychosocial formulation developed to explain health-related behavior at the level of individual decision making (Mikhail, 1981). In the 1950s, social psychologists at the U.S. Public Health Service developed the HBM in an attempt to understand "the widespread failure of people to accept disease preventatives or screening tests for early detection of asymptomatic diseases" (Rosenstock, 1974, p. 328). The model helps explain why individuals do or do not engage in a wide variety of health-related actions. Essentially, the HBM is a framework for explaining and predicting the acceptance of health and medical-care recommendations. The basic components of the HBM were derived from a wellestablished body of psychological and behavior theory, whose various models hypothesize that behavior depends mainly on two variables: (a) the value an individual places on a particular goal and (b) the individual's estimate of the likelihood that a given action will achieve that goal (Janz & Becker, 1984).

The HBM has four major dimensions that were developed to explain motivation: (a) perceived susceptibility, (b) perceived severity, (c) perceived benefits, and (d) perceived barriers (see Figure 2).

1. **Perceived susceptibility**. Individuals vary in their feelings of personal vulnerability to a condition. Thus, this dimension refers to one's subjective perception of the risk of contracting a particular condition.

2. **Perceived severity**. Feelings concerning the seriousness of contracting an illness (or of leaving it untreated) also vary from person to person. This dimension includes evaluations of both medical/clinical consequences (e.g., death, disability, and pain) and possible consequences (e.g., effects of the conditions on work, family life, and social relations).





3. Perceived benefits. Although acceptance of personal susceptibility to a condition believed to be serious was held to produce a force leading to behavior, this did not define the particular course of action that was likely to be taken; this was hypothesized to depend on beliefs regarding the effectiveness of the various actions available in reducing the disease threat. Thus, a "sufficiently threatened" individual would not be expected to accept the recommended health action unless it was perceived as feasible and efficacious.

4. **Perceived barriers**. The potential negative aspects of a particular health action may act as impediments to undertaking recommended behavior. A form of cost-benefit analysis is thought to occur, wherein the individual weighs the action's effectiveness against perceptions that it may be expensive, dangerous (e.g., side effects, iatrogenic outcomes), unpleasant (e.g., painful, difficult, upsetting), inconvenient, time consuming, and so forth (Janz & Becker, 1984).

Community Development

In community development, three approaches are generally used-self-help, technical assistance, and conflict. When applying community development approaches or strategies (some literature refers to them as community-analysis methods) to health promotion, self-help and technical assistance are used most often. However, the conflict strategy is most often used when health promotion policy is at issue.

The self-help or empowerment approach is used when the community initiates its own problem-solving process. When the process is initiated by an

outsider, it may also foster empowerment. Neighbors (1994) argued that, in the African American community, empowerment is the most critical and highly valued benefit that can be attained by participating in self-help organizations. Similarly, Bilinski (1969) suggested that self-help should be viewed as a goal in and of itself, as well as a strategy for accomplishing broader objectives.

Technical assistance, another approach used in community development, relies on the expertise of outsiders to help the community solve problems. Although the expert has the knowledge regarding the process, the community must still be involved. "It takes place within a larger process where community residents make a shared decision to initiate a planned change process--a process that is based on a mutually agreeable set of role relationships between community members and outside providers" (Fear, 1989, p. 85).

Health Promotion

In health promotion, lifestyle change is the most popular of the three approaches or theories that is generally discussed. The other two are the germ and environmental theories (Schwartz, 1994). Although these approaches may be viewed as complementary, they usually are seen as competing with one another. For example, Conrad (1994) argued that the worksite health promotion model tends to deflect attention away from the worksite environment as an agent of disease. The model typically focuses on blood pressure screenings, exercise, smoking cessation, and nutrition programs, often omitting health hazards that are job related or caused by the job. The germ-theory approach to disease prevention focuses on health as a technical problem, not a societal one. The health problem can be cured in the laboratory by scientists; it is synonymous with science. For example, the identification of certain microorganisms being linked to specific diseases has made it possible to develop means of supplying the body with defenses against their invasion. In some instances, this has meant injecting people with a vaccine that will lead the cells to produce antibodies. As a result, it is the scientists who are credited with ridding the public of these diseases. One criticism of this theory is that it fails to consider the complex interactions of people with their social and physical environments.

It means that the real cause of disease, the fundamental cause, is tangible, identifiable, and individual. It makes logical the idea that the most efficient method of disease prevention provides the individual human body with a way to fight invasions of microscopic particles, and it expands to advocate behavioral change only when no such particles have been identified. (Tesh, 1994, p. 521)

The environmental theory challenges the chain of causality implied by the germ theory. It holds that significant numbers of chronic diseases are caused by toxins in the environment and implies that disease prevention, instead of requiring personal change or medical treatments, demands changes in industrial production (Tesh, 1994). One distinguishing aspect of the environmental approach is that its sources of hazards continue to expand. They surround us in our work and in our homes and affect what we eat. It has been estimated that nearly 1,000 new chemicals are affecting our health, unbeknownst to us.

One of the most popular health promotion theories is the lifestyle theory. In essence, this theory sees disease as the result of an unhealthy lifestyle. This places the responsibility for one's health directly on personal behavior, whereas from the germ-theory perspective, personal behavior is of secondary importance. The lifestyle theory views stress, lack of exercise, and overconsumption as contributing to disease. Like the germ theory, though, it focuses on the individual. Its popularity has made it the centerpiece of chronic-disease-prevention policy because it stresses personal control and responsibility and claims that lifestyle behaviors can reduce medical-care expenditures. This approach is not without its critics, however. Many sociologists view the lifestyle approach as "blaming the victim" and are afraid it deflects attention from societal causes of disease. That is, how can individuals be held responsible when unhealthy lifestyles are portrayed so positively in the media toward those who are most vulnerable to such appeal (Schwartz, 1994)?

A review of the literature revealed that health care professionals who administer community health programs are using community development strategies. However, gaps do exist. One is in the area of community health care professionals' influencing policy. A second issue involves data, knowledge, attitudes, beliefs, and actions of the professional. Conversely, writers on the social model of community development have not considered the role that community development is playing in health. Finally, literature on African Americans' participation in and satisfaction with community-based health projects seems to be almost nonexistent.
In an article published in the <u>Journal of Community Health</u>, Altman (1991) chided funders and researchers alike for focusing mainly on the participation aspect of health promotion. "Indeed, participation is in vogue as a method for enhancing the effectiveness of community health promotion programs, yet very little data exist on the knowledge, attitudes, and beliefs and action of health promotion program planners." Altman suggested that a coalition of health professionals and community advocates should identify critical elements, processes, and challenges in the development of effective community programs.

Although Altman's argument has merit, it is not without difficulties. The overwhelming majority of the studies he was referring to were conducted on the general population, mainly Caucasians. The literature does not contain many studies that have addressed the issues associated with Blacks' participation. The efficacy of selected community-based CVD programs was examined in this study.

CHAPTER III

METHODOLOGY

Introduction

This research is an exploratory, descriptive study with multiple measures. The purposes are to (a) document the perception of participation by CVD project coordinators and participants at eight sites identified as African American communities throughout Michigan; (b) measure the knowledge, attitudes, skills, and behaviors of the participants; and (c) measure the efficacy with which the community-based CVD programs have been developed and implemented.

Four of the proposed study sites are located in two Michigan cities with the densest Black populations, Detroit and Benton Harbor--76% and 92%, respectively. Detroit, a home to three community-based CVD projects, is located in the southeastern area of the state; Muskegon Heights is the only site located on the far western side of the state. Other sites are located in Lansing, which is in mid-Michigan; Ypsilanti, which is in the southeastern section of the state; and Covert and Benton Harbor, located in the southwestern section of Michigan. The only project that is in a rural community is in Covert (see Figure 3).

26



Figure 3: CVD Programs Site Locations.

Research Design

Two competing research paradigms are the conventional and the constructivist. Lincoln and Guba (1989, 1990) depicted the conventional paradigm as the positivist-reductionist approach to inquiry. Its ontology consists of a belief in a single reality independent of any observer, a mechanical explanation of cause and effect, and a belief that universal truths independent of time and place exist and can be discovered. The epistemology is based on a subject-object dualism, in which the subject, the researcher, should and can investigate the object, a phenomenon, free of values and biases. Its methodology favors experimental designs that test specific hypotheses and strive to render the research object, also known as a dependent variable, free of its "confounding context." The conventional paradigm is concerned with predictions made through certainty and proof. This paradigm is dominant in medicine, epidemiology, behaviorist psychology, and social marketing, among other heatth promotion-related feeder disciplines.

The other paradigm referred to by Lincoln and Guba (1989, 1990) is constructivist. Its ontology is relativist, meaning that realities are socially constructed, "locally and specific, dependent for their form and content on the persons who hold them." Given this, the epistemology is one in which the researcher is part of the reality that is being researched. Therefore, the research findings are a creation of the inquiry process itself, rather than a collection of external, already existing facts. Its methodology is heuristic. It involves a constant comparison of differing interpretations. "It is a process of iteration, analysis, critique, reiteration, reanalysis, synthesis, and so on" (Labonte & Robertson, 1996, p. 434).

The conventional research of "how" and "what" is fairly understood in health promotion, but is less true in the constructivist research, according to Laborte and Robertson (1996). They further stated that constructivist research owes much of its heritage to ethnography. Simply put, constructivist research methodology focuses on people's lived experiences. Applications of the constructivist paradiam are in "critical" or interactive approaches to education, community development, community psychology, and other social science feeder disciplines to health promotion. As a result, this study was designed primarily using a constructivist paradigm; qualitative as well as some quantitative research methods were used. Labonte and Robertson argued that gualitative methods can be used in conventional ways like anthropology's old "view from the tent" attempt at objectivity-just as quantitative methods can be used by constructivists. They said it is easy to triangulate methods, but it is clearly another issue to triangulate different methodologies and their epistemologies.

The constructivist paradigm was used in this research because (a) this is an exploratory study, in which the researcher attempted to uncover a host of subtle factors that might have a significant relationship to a complex problem; and (b) effectively addressing the research questions that emerged during the course of developing the research problem called for a thorough investigation.

29

Data for this study were obtained from primary and secondary sources. The primary data are from focus group transcripts and transcripts of interviews with the program coordinators. The secondary data are from the CVD program files located at the MPHI. These files contain CVD program quarterly reports, annual reports, and MPHI-CVD request-for-proposal materials.

A triangulated measurement (multiple-method) model was adapted to compare and correlate the results from three different measures with one another. According to Cohen and Manion (1980), there are several instances in which the triangulation approach in research is especially appropriate. They argued that triangulation is useful when an established approach yields a limited and frequently distorted picture. They also suggested that triangulation might be preferable because of its possible enhancement of the research process itself. They wrote, "Exclusive reliance on one method, therefore, may bias or distort the researcher's picture of the particular slice of reality she is investigating" (p. 175). As to how methods should be combined, they concluded, "No simple directive can be given for the question, how are the methods to be combined, for the answer will depend to a great extent on the objective of the study, the particular situation, and the relative weighting, which the researcher considers desirable to assign to the methods providing her with data" (p. 175). Thus, in using the triangulate measure as proposed by Cohen and Manion, the researcher compared the data gathered through three different methods--focus groups, coordinators' interviews, and program documents (see Figure 4).





Subjects

The primary subjects for the study were African American participants from selected CVD programs. Each of the eight program coordinators also was interviewed for the study. These were the people who administered the program and wrote the quarterly reports for the funding agency. Because of limited resources, the coordinators were the only people (at most sites) who had regular contact with the program participants.

Research Hypotheses

The following hypotheses, stated in the null form, were tested using various

techniques based on the data collected for this study:

<u>Ho 1</u>: There are no differences in the use of community development strategies for CVD prevention by health institution CVD programs and community-based CVD programs.

<u>Ho 2</u>: There are no differences between the before- and after-focus group perceptions of participants about CVD-prevention programs.

<u>Ho 3</u>: There are no differences between the focus-group participants' categories of motivation for adopting healthy lifestyles and preventing CVD.

<u>Ho 4</u>: There are no differences between the individual CVD programs' objectives and their achievement.

<u>Ho 5</u>: Coordinators' previous applied community development experience does not make a difference in program participation.

Data Collection Procedures

Focus Groups

Focus groups were conducted with the CVD program participants at the eight study sites. The focus groups involved group discussions among people from similar ethnic backgrounds and experiences concerning the specific topic of CVD. The researcher served as the facilitator for the focus groups, using a protocol of sequence questions in a discussion. Each focus group session lasted a maximum of one hour and had five to ten participants. An advantage of using a focus group approach is that it does not prohibit people with literacy problems from participating.

Using the focus group technique allowed the researcher the opportunity to elicit exploratory or confirmatory information (Williams, 1997). Focus groups provide immediate feedback. Their group dynamics create an atmosphere in which participants can express ideas and feelings that might otherwise be missed by using a survey. Goodman and his colleagues (1993) found that, at times, behavioral risk factor surveys are considered to be intrusive, "especially by marginalized groups who see data-gathering exercises as another state invasion into their lives" (p. 10). In addition, people often feel intimidated by the technical nature of a survey (Goodman et al., 1993). By using a focus group, the researcher can gain an understanding of the meanings participants assign to concepts. One group's concept of barriers, community development, or empowerment may not be meaningful for other communities. What is of value, what is generalizable, is the

33

process used in developing the measures and involving the stakeholders (Labonte & Robertson, 1996).

The researcher provided the program coordinators with written information about the focus groups. The coordinators were asked to recruit program participants for this study.

Data gathered from the focus groups were validated by the external stakeholders-the funders of the project, the MPHI CVD Resource Center director, and the MDCH Health Promotion section chief. This validation was done by comparing the transcripts with the researcher's analysis. At various times, reliability can suffer due to differences in the facilitator's tone of voice when asking the questions or by the environment in which the session is being conducted.

The protocol for the focus group consisted of five open-ended questions:

1. Tell me about yourself prior to being a participant in this program and your lifestyle now.

2. How has the program made a difference in your life (specifically related to CVD)? Any knowledge, skills, attitudes you've gained as a result of the program?

3. What challenges did you face while being a participant?

4. Why do you think you will be able to continue to improve your well being?

5. If you had to do this program again, what would you like to see done (changed)?

Interviews With Program Coordinators

The second method of data collection was to conduct interviews with the program coordinators. The researcher conducted eight face-to-face interviews (one per site). The principal advantage of conducting interviews is adaptability (Borg & Gall, 1979). According to Borg and Gall, "The well-trained interviewer can make use of the responses of the subject to alter the interview situation" (p. 316). Another advantage of interviews is that they allow for immediate follow-up and clarification. Wiersma (1985) contended that good rapport between the interviewer and the interviewee is essential if one is to obtain accurate and truthful responses. He argued that "the interview should be structured to obtain the necessary information efficiently in a friendly but businesslike atmosphere. If possible, there should be some accuracy checks on the responses" (p. 65). Care was taken with regard to data-recording procedures to guard against interfering with the interview itself.

Each coordinator was asked the same questions in the interview. The questions were:

1. Have you ever coordinated a community-based program before this?

2. Have you coordinated a community-based program for African Americans before this?

3. What have you learned from your experiences as a coordinator of this program?

4. Tell me about the successes and challenges you have faced.

5. Was the community or were the participants involved in designing this program?

6. If you had the opportunity to redesign this program, what would you change? Why?

Secondary Data

The third method of data collection was the use of secondary data. The program quarterly reports, the criteria for those reports, and the Request for Proposal were used as secondary data. In general, these sources contained information on program goals, objectives, participation, and evaluation.

Data Analysis Procedures

The focus group sessions were tape recorded and transcribed. The transcriptions were analyzed using codes and a log. The codes consisted of CVD risk factors--hypertension/high blood pressure, diet/nutrition, CPR, smoking, alcohol/drugs, exercise, cholesterol, and weight. Each transcript was labeled to indicate the specific risk factors mentioned. In addition, a log was created to compare focus group responses that correlated with the objectives of the CVD program and topics revealed in the group sessions. For example, the transcripts revealed that attitude change was mentioned more than 10 times.

The same recording and transcribing methods were used for the interviews with program coordinators and employed with the focus groups. To ensure validity, the data collected were shared with the external stakeholders.

The data from the coordinator interviews were compared to those from the focus groups with regard to the perceptions of the program. Although there were times when the program-coordinator data were studied alone, these data also were analyzed in connection with the secondary data. These data revealed the amount of experience the coordinators had in using community development approaches. The researcher analyzed the interface of community development strategies with program participation.

Specific data-analysis techniques that were used in this study are as follows:

t-test: This test was used to determine whether there was a significant difference between the means of groups (the groups were health institutions and community-based organizations). This test was used for Hypothesis 1.

Analysis of variance (ANOVA): This test was performed to determine whether there was a significant difference within or between groups and/or categories. ANOVA was performed on Hypotheses 3 and 4.

Friedman test: This is a nonparametric test that relies on ranks and does not make assumptions of normality. It was used to determine that there was no group effect (e.g., no group effect due to various categories of motivation for adopting healthy lifestyles and preventing CVD). This test was used for Hypothesis 3.

Qualitative induction: Participant focus groups and coordinators provided primary qualitative information. Participants were encouraged to reflect on their past experience and lifestyles and to recall their perceptions of the intention of the CVD program(s), their beliefs and attitudes about preventing CVD, and their perceptions regarding health screenings and CVD educational training provided during the program time period. This was used for Hypotheses 4 and 5.

Comparative periodic report analyses: Quarterly and annual reports from CVD programs were analyzed to detect differences, similarities, and consistency within and among the CVD programs with regard to the following data elements: progress review, financial status, difficulties encountered and solutions, changes in key personnel, planned activities, and evaluation of ability to complete remainder of the project on time.

Chi-square test: The chi-square goodness-of-fit test is appropriate for comparing the distribution of one population across levels of a single categorical variable. For instance, the distribution of participants in the CVD programs who had self-reported experience with CVD risk factors (e.g., high blood pressure, high cholesterol levels, overweight, and so on) was compared to the known or estimated distribution for the particular community in which the CVD project was located. This test was used to determine, for example, the proportions of participants reporting that they engaged in physical exercise none of the time, some of the time, or most of the time (or regularly). This test was performed on Hypothesis 2.

A contingency table was constructed showing the number of participants reporting CVD risk factors versus those reporting categories of motivation. The chisquare test was used to examine relationships between the variables and was used for Hypothesis 3. **Fisher's exact test**: This test was used instead of the chi-square test where cells and contingency tables had expected counts less than five. This test was used to obtain accurate results and was performed on Hypothesis 2.

Least significant difference (LSD) test and Tukey's test: Both of these multiple comparison tests were conducted to compare means of categories of motivation for the eight sites. Both tests confirmed the same results for Hypothesis 3.

Limitations

Participants volunteered and were recruited to participate in the CVD programs. It is possible that the participants' level of change was a result of their knowledge of, or exposure to, another health promotion effort. The possibility also exists that the participants and/or the coordinators will not be completely honest in their responses.

The following limitations also may affect the accuracy of the study results:

1. Data were collected from the program participants and coordinators after the program had ended.

2. The CVD projects were not uniformly or similarly structured, and they were coordinated differently.

3. No written standard pre- and post-survey tools were designed for program participants and coordinators.

4. Participants were not randomly sampled from targeted populations.

5. The majority of the participants were African American males, making their perceptions, beliefs, attitudes, and behaviors about CVD prevention dominant.

6. Because of limited resources, the site coordinators were the only persons assigned to work with the project. Therefore, these were the only administrators who could be interviewed.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

The data were gathered using multiple data collection methods. This form of data collection recognizes that no single technique will yield the information necessary to conduct an in-depth investigation. Data were gathered through three different methods—focus groups, coordinators' interviews, and program documents. Two questions framed the formulation of five hypotheses, and, in turn, the hypotheses brought knowledge to bear in regard to the questions. For instance, the questions were answered by reviewing the test results from the appropriate hypothesis, as well as raw data from the focus groups, coordinators' interviews, and/or program documents.

The five hypotheses were tested using various statistical methods. In the following section, each hypothesis is restated, followed by the results for that hypothesis. The chapter concludes with a discussion of the findings regarding each research question.

Results of Hypothesis Testing

Hypothesis 1

There are no differences in the use of community development strategies for CVD prevention by health institution CVD programs and community-based CVD programs.

<u>Results</u>. Based on the <u>t</u>-test results, Null Hypothesis 1 was rejected. A significant difference was found between community-based organizations (CBOs) and health institutions in their use of community development strategies for CVD prevention.

Eindings and analysis. Of the eight sites included in the study, five were identified as health institutions (sites 1, 3, 4, 7, and 8) and three as CBOs (sites 2, 5, and 6). According to the coordinators' reports, each agency used community development strategies in the implementation of its CVD program. The strategies were categorized as either self-help or technical assistance. The t-test results indicated that CBOs and health institutions differed significantly in the mean number of strategies they used in implementing their CVD programs (p < .005). The standard deviation of the number of combined community development strategies used by health institutions was more than two times that of the community-based organizations (see Table 1).

Type of Site	Sample Size (<u>n)</u>	Mean	<u>SD</u>	Min.	Max.
Health institution	5	10	2.12	7	12
Community-based organization	3	16	1.00	15	17

 Table 1: Sites applying various community development strategies (combination of self-help and technical assistance).

<u>Discussion</u>. These statistics gave rise to two implications. One is that CBOs have well-established community development interventions. Each of the three

CBOs in this study had had experience with community-based health-promotion projects. Their experience in handling the distrust the Black community has in regard to medical and public health agents had proven to be successful. What the CBOs appeared to have done was to build on their previous track record of managing health-promotion projects. In turn, this cemented the foundation for the CVD project. According to Airhihenbuwa (1992), "Cultural beliefs and experiences, when properly understood, can be used to promote the success of health education programs in African American communities" (p. 271).

Also in this regard, coordinators who were interviewed for this study indicated

that:

This is probably our third one [health-promotion project]. . . . Health care is what we are about and working in the communities. We find out the needs of the community . . . then we go to them and ask them what can we do for you? The reason we do that [is] because we want them to have that ownership of that program, but we just want to always be on the sideline to support them for resources and pull them together. But this is their program. (Site 2)

The coalition has been involved with various community-based programs. They were involved with teaching adolescents and teenagers about health care. (Site 5)

We had a community-based program before, back in the late 80s and early 90s, called the Black Church Health Connections Projects.... We've been involved in another project working on issues of infant mortality and cardiovascular disease. (Site 6)

The second implication gleaned from these statistics is that the health

institutions should collaborate with the CBOs to provide services to the community.

Traditionally, health institutions do not have an established community-based record.

As previously mentioned, African Americans distrust health care providers; therefore,

it is imperative for health institutions to solicit technical assistance from the CBOs in developing and applying culturally appropriate community development interventions. Using a collaborative model in providing services that reduce the risk of CVD in the African American community is cogent. It would allow each sector, the CBOs and the health institutions, to operate from its strengths and learn from the other. The CBOs provide indigenous technical assistance, and, at the same time, the professionals become the learners. Each would provide technical assistance to the other, supplying the community with more resources and a stronger program than either would have alone.

Additional findings. The following findings provided a better understanding of the linkages between the community development approaches applied by health institutions and CBOs. The t-test indicated that CBOs and health institutions did not differ significantly in the mean number of self-help strategies that they applied (p > .03). The standard deviation of the number of self-help strategies used by community-based organizations was approximately 1.8 times that of the health institutions (see Table 2).

 Table 2: Sites applying self-help strategies.

Type of Site	Sample Size (<u>n)</u>	Mean	<u>SD</u>	Min.	Max.
Health institution	5	3.80	0.84	3	5
Community-based organization	3	4.67	1.53	3	6

One strength of health institutions is that they promote self-help interventions, which include targeted media campaigns, self-help literature, and counseling. On the other hand, the results indicated there was no significant difference in the number of self-help strategies being used by CBOs and health institutions. This demonstrates that CBOs with a track record of addressing health care issues in the African American community are as effective as health institutions in administering the self-help approach. This raises the question of why the difference between health institutions and CBOs was not significant, given the fact that health institutions have an established track record, which is considered their hallmark.

A possible explanation for these findings is the level of understanding that CBOs have in working with their communities. The CBO coordinators in this study were experienced in administering health-promotion projects, as well as in working within the African American community. The researcher believes these coordinators learned valuable lessons in self-help approaches from their previous experience; moreover, the CBO coordinators were stakeholders in the process. These were African Americans who recognized that they, too, could be affected by CVD. All of the CBO site coordinators involved their families, friends, and members of their churches, thereby increasing the intensity of the self-help strategy and thereby making that strategy effective. This underscores the importance of collaboration between the health institutions and the CBOs. They are stakeholders and should be viewed as such. Fear (1990) argued that stakeholders' involvement accomplishes three major objectives: (a) It guards against "outsiders" (health institutions) making decisions that are insensitive to the community's culture and/or their preferences; (b) it communicates to the residents that the project is theirs, which can minimize resistance to change; and (c) people are more likely to support what they create. Similarly, Wandersman and Giamartino (1980) found that participation was more likely among those who were concerned about their neighborhood, had more experience in community leadership, and thought that competent colleagues could be enlisted for their support of the project.

The <u>f</u>-test indicated that CBOs and health institutions differed significantly in the mean number of technical-assistance strategies they applied (p < .01). The standard deviation of the number of technical-assistance strategies used by community-based organizations was approximately 1.7 times that of the health institutions (see Table 3).

Type of Site	Sample Size (<u>n)</u>	Mean	<u>SD</u>	Min.	Max.
Health institution	5	6.20	1.48	4	8
Community-based organization	3	11.33	2.52	9	11

Table 3: Sites applying technical-assistance strategies.

The findings indicated that CBOs were more effective than health institutions in administering technical-assistance strategies. The CBOs recognized the community's needs and adapted their technical assistance to meet those needs. In one community, the site coordinator understood that rescue workers were very slow in rendering services to that community; therefore, cardiopulmonary resuscitation (CPR) training was made available to peer educators. In addition, the CBOs used the "train the trainer" model more than did health institutions. In this model, coordinators train lay workers or peer educators, who, in turn, pass their skills and knowledge on to others in the community. This form of capacity building goes to the heart of community development by addressing the issues of personal growth and program sustainability. According to Christenson and Robinson (1989), the primary goal of community development is to help people improve their well-being. These results suggest the level of influence CBOs have in this regard.

Hypothesis 2

There are no differences between the before- and after-focus group perceptions of participants about CVD-prevention programs.

<u>Results</u>. The <u>p</u>-value from Fisher's exact test indicated that there was a statistically significant relationship between the behavioral indicators and CVD risk factors. Therefore, the null hypothesis was rejected.

<u>Findings and analysis</u>. It was observed that there was a statistically significant relationship between risk factors (i.e., cholesterol, diet, exercise, high blood pressure, and weight) and behavioral indicators (attitudes, knowledge, prior illness, participation, skills, self-motivation, and sustainability). In reviewing the transcripts from the focus group discussions, it was observed that 242 times

participants made salient comments (points) that cross-referenced key features of behavioral indicators with CVD risk factors. For the purpose of testing this hypothesis, the researcher examined relationships that were cross-referenced in 20% or more of the comments by participants. For example, diet was crossreferenced with the behavioral indicators in 33% of the comments; exercise was cross-referenced with the behavioral indicators in 27% of the comments, and high blood pressure was cross-referenced in 23% of the comments (see Table 4).

<u>Horizontal analysis</u>. Viewing the tabulated data from a horizontal perspective lends insight into what the participants received while they were in the program. It reveals how much a specific risk factor affected a behavioral indicator.

Diet by behavioral indicators: Of the 79 times (33%) comments were focused on diet, about 22% of the comments had a relationship to attitudes, whereas 32% were associated with knowledge (see Table 4). When comparing the program records, this is not surprising, given that all eight of the sites had strong nutrition emphases. Purposes of the presentations regarding diet were to give the participants knowledge or to educate them concerning nutrition and change their attitudes about healthy eating and cooking. Participants were given low-fat and lowsodium recipes. Cooking demonstrations were held and food samples given out, and participants were taught how to modify their eating habits when they dined out. In some cases, participants who were malnourished received information regarding their circumstances. Participants commented: Table 4: CVD risk factors by behavioral indicators-row percentages.

			Beh	avioral Indica	ator			
CVD Risk Factor	Attitude	Knowledge	Prior Illness	Partici- pation	Skills	Self- Motivation	Sustaina- bility	Total (<u>n</u>)
Cholesterol	8%	13%	33%	13%	8%	17%	8%	100% (24)
Diet	22%*	32%*	19%	2%	16%	5%	4%	100% (79)
Exercise	12%	32%*	14%	%0	18%	21%*	3%	100% (66)
High blood pressure	11%	29%*	15%	11%	22%*	%2	5%	100% (55)
Weight	11%	22%	39%	%0	11%	11%	%9	100% (18)

*Example cited in the text.

It [the program] made me more self-aware of my lifestyle as far as eating. Off and on I did start eating regularly. . . . I became more aware that I needed to put more food in my body to give more nourishment to my body. I think once the awareness came in there, then the attitude also followed. I took an attitude that I'm going to try to do better personally. (Site 8)

Me and the Colonel [Colonel Sanders Kentucky Fried Chicken] has a love thing. But I found out that I didn't have to go and get the fried chicken; I could get the roasted chicken. I really changed my eating habits, and I feel better. I don't feel sluggish like I use to. I have a lot more energy. So I really think that has improved my life in that area. (Site 1)

Exercise by behavioral indicators: Of the 66 times (27%) comments were

focused on exercise, nearly 32% pertained to knowledge with exercise, whereas

almost 21% related to self-motivation with exercise (see Table 4). Exercise was also

a major focus at the sites. The purpose was to make participants aware of how they

could incorporate exercise into their daily lives. With this purpose in mind, it was

hoped that the participants would be motivated to continue exercising after the

program ended.

I use to weigh 286 pounds; now I [weigh] 254. I walk all the time. Sometimes my foot still bothers me, but I still walk if the Lord gives me strength. I walk through the house, sometimes I walk outside to the driveway. (Site 2)

I'm a little more active than I use to be. Like I said, I use to sit around here and now I've gotten away from that. Now I go out and walk, if it's nothing but two or three blocks. . . . I'm a lot more active than I was. (Site 3)

High blood pressure by behavioral indicators: Of the 55 times (23%) that

focus group participants made comments about high blood pressure, nearly 30% of the comments pertained to knowledge about high blood pressure, whereas 22% focused on skills with high blood pressure (see Table 4). Although it is commonly understood in the African American community that disproportionate numbers of Blacks suffer with high blood pressure, many times they are not aware they have it. Much of the educational emphasis in the programs was centered on myths regarding high blood pressure and how it can be controlled—through diet and exercise. The knowledge/skills these participants gained included how to understand a high blood pressure reading, how to shop for and cook foods with less sodium and fat, and how to make exercise part of their regular routine. At site 5, peer educators were trained to be lay health educators; they learned how to take a blood pressure reading, developed specialized presentations on specific risk factors like high blood pressure, and were given an opportunity to earn CPR certification. Therefore, the responses from the focus group sessions regarding skills overwhelmingly came from that site.

Two of those responses were as follows:

I speak on high blood pressure and was trained. . . . When I saw that Black men and women have a higher rate than any other group in America in high blood pressure, that astounded me. It worries me. In talking with the guys that do have high blood pressure, I really responded well. They wanted someone to pull them out and let them know about this. (Site 5)

I had an occasion where, after I finished CPR, approximately two weeks, on a Sunday morning . . . a little girl about 3 to 4 years started choking. Her grandmother grabbed her. . . . I said, "What's wrong with her?" She said, "She's choking." . . . So I just took her and did the Heimlich maneuver, but I didn't have to get in the full position because she was so small. After four thrusts, I was able to dislodge the hard candy. . . . EMS was not going to get here fast enough. (Site 5)

Vertical analysis. Analyzing the data vertically gives sagacity to the program

participants' before and after perceptions regarding the program.

Prior illness by risk factors: Of the 47 times (20%) that prior illness was

mentioned, nearly 32% of those comments related to diet; exercise was mentioned

about 20% of the time. The other risk factors--cholesterol, high blood pressure, and weight--were mentioned less than 20% of the time (see Table 5).

In the health belief model (HBM), prior illness relates to diseases experienced by the participants or their families members that motivated them to be in the program. It may also refer to the diagnosis participants received once they were in the program. In this instance, the illnesses, which also happened to be risk factors, such as high blood pressure, high cholesterol, and obesity, were mentioned as a disease rather than a CVD risk factor. It was a description of themselves rather than a cause of or a factor contributing to their CVD because other diseases also were mentioned that were not risk factors. This category encompassed two dimensions of the HBM--the perceived susceptibility and the perceived severity of participants.

Perceived susceptibility adds insight into the participants' personal vulnerability. In the case of medically established illness, this dimension pertains to the resusceptibility, the belief in the diagnosis and the susceptibility to CVD. These prior illnesses become cues that instigate action and vary with the level of psychological readiness to act (Mikhail, 1981). "The individual's psychological state of readiness to take action is determined by both perceived susceptibility to [CVD] and the perceived severity of the consequences of contracting [CVD]," according to Mikhail.

After I went to the screening, then I found out I was a diabetic. (Site 8)

Well, I really don't have any health problems, not yet. . . . So basically I took this [program] because my brother-in-law had a mild heart attack and end up having a stroke. I'm trying to better understand the field; I plan to go back to school to be a cardiovascular technician. (Site 3)

Table 5: CVD risk factors by behavioral indicators-column percentages (vertical representation of risk by behavioral indicator).

CVD Risk Factor Attitude Knowledge Prior Illness Partici- Skills Self- CVD Risk Factor 6% 4% 17% 27% 5% 14% Cholesterol 6% 4% 17% 27% 5% 14% Diet 48% 35% 18% 5% 14% Diet 48% 36% 32% 6% 15% Diet 28% 31% 19% 25% 56% High blood pressure 17% 23% 17% 56% 7% Weight 6% 15% 0% 56% 7% Total ((1) 100% (53) 100% (47) 100% (41) 100% (41) 100% (28)				Be	havioral Indicat	or		
Cholesterol 6% 17% 27% 5% 14% Diet 49% 36%* 19% 5% 14% Diet 49% 36%* 32% 19% 5% 15% Exercise 23% 19%* 0% 29% 15% High blood pressure 17% 23%* 17% 55% 29% 14% Weight 6% 15% 0% 29% 14% Total (1) 10% (35) 100% (47) 100% (41) 100% (41) 100% (35)	CVD Risk Factor	Attitude	Knowledge	Prior Illness	Partici- pation	Skills	Self- Motivation	Sustaina- bility
Dlet 48% 36%* 32%* 18% 32% 15% Exercise 23% 31%* 19%* 0% 29% 50% High blood pressure 17% 23%* 17% 55% 29% 14% Weight 6% 6% 17% 0% 5% 7% Total ((1) 100% (53) 100% (47) 100% (41) 100% (58) 100% (58)	Cholesterol	%9	4%	17%	27%	5%	14%	18%
Exercise 23% 31%* 19%* 0% 29% 50% High blood pressure 17% 23%* 17% 55% 29% 14% Weight 6% 6% 15% 0% 5% 7% Total (II) 100% (35) 100% (47) 100% (41) 100% (41) 100% (35)	Diet	48%	36%*	32%*	18%	32%	15%	28%
High blood pressure 17% 23%* 17% 55% 29% 14% Weight 6% 6% 15% 0% 5% 7% Meight 6% 10% (47) 100% (11) 100% (41) 100% (28)	Exercise	23%	31%*	19%*	%0	29%	50%	18%
Weight 6% 15% 0% 5% 7% Total (II) 100% (35) 100% (47) 100% (41) 100% (41) 100% (38)	High blood pressure	17%	23%*	17%	55%	29%	14%	27%
Total (<u>n</u>) 100% (35) 100% (69) 100% (47) 100% (11) 100% (41) 100% (28)	Weight	%9	%9	15%	%0	5%	7%	%6
	Total (<u>n</u>)	100% (35)	100% (69)	100% (47)	100% (11)	100% (41)	100% (28)	100% (11)

*Examples cited in the text.

Knowledge by risk factors: Of the 69 times (29%) that participants made knowledge comments, 36% of those comments were diet related, about 31% were exercise related, and 23% were related to high blood pressure. Cholesterol and weight were mentioned less than 20% of the time (see Table 5).

In the HBM, this topic relates to the dimension of perceived benefits. It is not enough to be "afraid" of contracting CVD or being in a high-risk category, like African American, for individuals to participate in a CVD program. There must be benefits. Blacks, like other people, must understand the effectiveness of various actions like exercising and changing one's diet to reduce the threat of CVD. This is self-efficacy. It appears that the participants believed they had the requisite tools to make a difference in their lives. Hence it seems feasible that they can reduce the threat of CVD.

I'm happy to be in the program. It learned me how to do my lifestyle better, since I'm bothered with high blood pressure and high cholesterol. I'm walking up to two miles an hour. I wasn't doing that at first, but I started back and I hope to get up to four miles. (Site 2)

The Pearson chi-square test comparing behavioral indicators with risk factors showed a p-value of < .02. Fisher's exact test (two-tailed) was performed as an alternate test because most expected frequencies were less than 5. On this test, p < .0001.

Hypothesis 3

There are no differences between the focus-group participants' categories of motivation for adopting healthy lifestyles and preventing CVD.

Results. Based on the various tests performed, the null hypothesis that there are no differences between the focus group participants' categories of motivation for adopting healthy lifestyles and preventing CVD was not rejected.

Eindings and analysis. The Pearson chi-square test for independence was used to determine whether the distribution of categories of motivation for adopting a healthy lifestyle and preventing CVD was independent of the site. The distribution of categories of motivation for adopting a healthy lifestyle and preventing CVD was found to be independent of the site. The p-value of .223 of the test was obtained. Because the p-value was greater than .05, the null hypothesis was not rejected. That is, there was not sufficient evidence to indicate that the distribution of the categories of motivation for adopting a healthy lifestyle and preventing CVD was not rejected.

Analysis of variance (ANOVA) was used to determine whether there were significant differences within or between the groups and/or categories. Results are shown in Table 7, using the general linear models procedure.

The ANOVA results indicated that category of motivation was significant; the p-value was .0316 (< .05). That is, differences were suspected between (or within) the counts for categories of motivation for adopting a healthy lifestyle and preventing CVD rather than between given sites.

Cotocort of Moderation				Site*				Total
	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 8	1 0(41
Control of stress	1 1.32%	1.32 7.14%	0 0.00	5 6.58%	1 1.32%	0.00	6 7.89%	14 18.42%
Improvement of dietary habits	6 7.89%	3 3.95%	2 26.3%	2 2.63%	5 6.58%	4 5.26%	10 13.16%	32 42.11%
Living konger	2 2.63%	2 2.63%	1 1.32%	0 0.00	3 3.95%	1 1.32%	0.00	9 11.84%
Performing physical exercise	4 5.26%	2 2.63%	1 1.32%	4 5.26%	6 7.89%	1 1.32%	3 3.95%	21 27.63%
Total	13 17.11%	8 10.53%	4 5.26%	11 14.47%	15 19.74%	6 7.89%	19 25.00%	76 100.00%

Table 6: Frequency and percentage of category of motivation by site.

*Site 7 had a late start and had not implemented the program at the time the data were collected.

Source	df	Sum of Squares	Mean Square	E-Value	<u>Pr > E</u>
Model	9	84.28571429	9.36507937	2.43	0.0522
Error	18	69.42857143	3.85714286		
Corr. total	27	153.71428571			

 Table 7: ANOVA using general linear models procedure.

R-Square	Coeff. of Variation	Root MSE	COUNT Mean
0.548327	72.35646	1.9639610	2.71428571

Source	df	Type I SS	Mean Square	<u>E</u> -Value	Pr < E
Category	3	42.57142857	14.19047619	3.64	0.0316
Site	6	41.71428571	6.95238095	1.80	0.1552

Source	df	Type III SS	Mean Square	E-Value	Pr < E
Category	3	42.57142857	14.19047619	3.68	0.0316
Site	6	41.71428571	6.95238095	1.80	0.1552

The third method used in analyzing the data was the Friedman Fr test, a nonparametric test that relies on ranks and does not make an assumption of normality. The method is straightforward. Within each of the four categories, the observations were ranked. This method was used to test the null hypothesis that there was no group (or agency) effect, that is, no effect due to the factors corresponding to the columns of the table. The results using this method indicated that category was significant because the p-value was .0108 (< .05). In other words, differences were suspected between (or within) the counts for categories of motivation for adopting a healthy lifestyle and preventing CVD rather than between given groups (or agencies) (see Table 8).

Finally, two multiple-comparison tests (least significant difference [LSD] and Tukey's test) were used to compare means of categories of motivation for groups (agencies). Both tests revealed that the means (or counts) of *improvement of dietary habits, living longer,* and *control of stress* did not differ significantly among the seven groups. The most participants pointed out *improvement of dietary habits* as their number-one choice for adopting a healthy lifestyle and preventing CVD (*improving dietary habits* was followed by *performing physical exercises* in terms of rank, but *improving dietary habits* stood out from the rest of the categories (see Tables 9 and 10).

Source	df	Sum of Squares	Mean Square	E-Value	Er > E
Model	9	15.21428571	1.69047619	1.66	0.1710
Error	18	18.28571429	1.01587302		
Corr. total	27	33.50000000			

 Table 8: Results of the ANOVA for dependent variable: rank for variable count.

<u>R</u> -Square	Coeff. of Variation	Root MSE	RANCOUN Mean
0.454158	40.31621	1.0079052	2.5000000

Source	df	Type I SS	Mean Square	<u>E-Value</u>	Pr < E
Category	3	15.21428571	5.07142857	4.99	0.0108
Sites	6	0.00000000	0.00000000	0.00	1.0000

Source	df	Type III SS	Mean Square	E-Value	Pr < E
Category	3	15.21428571	5.07142857	4.99	0.0108
Sites	6	0.00000000	0.00000000	0.00	1.0000

T Grouping		Mean	N	Category
	Α	3.5714	7	Improving dietary habits
В	A A	2.7857	7	Performing physical exercises
B B		1.9286	7	Living longer
B B		1.7143	7	Control of stress

 Table 9: Results of the Least Significant Difference (LSD) test.

<u>Notes</u>. This test controls for the Type I comparisonwise error rate, not the experimentwise error rate. In terms of pairwise comparison, the mean of improvement of dietary habits was not significantly different from the mean of performing physical exercise. Means with the same letter were not significantly different.

Alpha = 0.05	<u>df</u> = 18	MSE = 1.015873
Critical value	of <u>I</u> = 2.10	LSD = 1.1319

Table 10: Results of Tukey's studentized range (HSD).

T Grouping		Mean	N	Category
	Α	3.5714	7	Improving dietary habits
В	A A	2.7857	7	Performing physical exercises
B B		1.9286	7	Living longer
B B		1.7143	7	Control of stress

<u>Notes</u>. This test controls for the Type I comparisonwise error rate, but it generally has a higher Type II error rate. Means with the same letter were not significantly different.

Alpha = 0.05 <u>df</u> = 18 MSE = 1.015873Critical value of standardized range = 3.997

Minimum significant diff. = 1.5227
Discussion. The implication from these tests suggests that participants' primary source of motivation for adopting a healthy lifestyle and preventing CVD was their understanding of improving their dietary habits. This finding was consistent with the comments from the focus groups and the programs' emphases. There was a high concentration on exposing participants to the nutritional aspects of CVD.

When using the HBM to explain these findings, all four dimensions are brought into play. This model is an example of the value-expectancy theory (Campbell, 1996). The first dimension is *perceived susceptibility*, an individual's belief that he or she is susceptible to contracting the said disease. In this case, program participants were given information in oral and written form on the mortality and morbidity rates of African Americans in regard to CVD. Apparently, they internalized the information and perceived that they were at risk. Some participants thought they were at risk because they had been diagnosed with a particular illness related to CVD and/or because a family member had a certain illness that led to CVD. Other participants understood that they were indulging in one or more of the CVD risk factors.

The second dimension, *perceived severity*, addresses the deep feelings an individual has regarding personally contracting the disease. Nearly half of the focus group participants identified previous CVD-related illness as a factor influencing program participation. They thought that such illnesses as high cholesterol would eventually result in their contracting CVD or that a hereditary illness, like obesity,

would lead to the disease. In turn, this belief became a reality for them. What people believe is as important as what they know (Breckon, 1982).

One can see that these two dimensions are closely related. In fact, they should be considered together because people evaluate their personal susceptibility and perceived severity as a threat (Campbell, 1996). A higher perception of threat predicts greater likelihood of action. However, Campbell argued that too much fear can lead to paralysis and fatalism.

The last two dimensions—*perceived benefits* and *perceived barriers*—should be viewed in tandem. Individuals will weigh the benefits of changing their lifestyles against the costs of changing their lifestyles. When benefits outweigh barriers, people are likely to adopt the behavior (Beckon, 1982; Campbell, 1996). In this case, the coordinators must have presented nutrition education in a way that increased the self-efficacy of the focus group participants. In other words, they helped build participants' confidence in their ability to purchase, cook, and eat healthier foods. Campbell explained that self-efficacy is a strong predictor of success in behavioral change, including weight control and smoking cessation, and also predicts the likelihood of attempting behavioral change. In this case, as in other situations, personal experience and vicarious observation were the two main factors for increasing self-efficacy, thereby leading to motivation for adopting a healthy lifestyle and preventing CVD.

Hypothesis 4

There are no differences between the individual CVD programs' objectives and their achievement.

Results. This hypothesis was analyzed using qualitative induction because of the small counts. When comparing the health institutions with the CBOs, it was found that the latter experienced a 99% achievement rate, whereas the health institutions had a 50% achievement rate. Based on these percentages, the null hypothesis was rejected because there was a difference between individual programs' objectives and their achievement. The qualitative results are shown in Table 11.

Collectively, health institutions were successful in achieving their objectives in the areas of conducting referrals/follow-ups, establishing community coalitions, and training lay health workers. Two sites (sites 1 and 8) listed four objectives. They achieved one objective, making medical referrals and conducting follow-ups. This is not surprising because health professionals are skilled in making referrals and follow-ups. This is a part of health institutions' structure. However, achieving this objective should not be taken lightly, given that these two sites were in economically distressed locations. In their interviews, the coordinators revealed that the CVD project participants were relying on health professionals as their primary health care workers because they did not have a primary physician. Clearly, the CVD project is meeting a community need. Achieving this objective addresses the issue of providing services to an underserved population. The EPM identifies this within the *project consequences* dimension, in the project impacts component. In

Table 11:	Qualitative results:	individual	CVD programs'	objectives	and th	wir
	achievement.		-	-		

Site	Objectives	Researcher's Rating
1	 Provide screening/300 people Medical referrals/follow-ups 18 risk-reduction workshops Train 2 volunteers per organization 	+- ++ +- +-
2	 6 workshops at different sites by lay health workers 2. Conduct 4 health-promotion activities 3. Follow up on high-risk participants 	++ ++ ++
3	 Implement CVD basketball program at 2 to 3 sites Implement program at 2 adult ed sites Implement program at 2 community sites 	+ - + - + +
4	 Adapt/implement program to be culturally based Train lay health workers to implement exercise program Train lay health workers to implement nutrition program Lay health workers collect data on eating patterns Promote program sustainability 	+ + + + + + - + - +
5	 Recruit 50-100 male participants 50% peer educators conduct 3 workshops each Train 24 peer educators 10% of participants show decrease in 2 risk factors 	++ ++ +- ++
6	 Educate African American community on CVD risk factors Conduct workshops at churches Conduct screening 	++ ++ ++
7	 Establish community-based coalition Work with churches to educate/train lay health workers Implement screening and education program 	++ ++
8	 Conduct 6 screenings for 180 people Conduct secondary screenings for 54 people Perform 150 hours of ed/referral/follow-up Perform on-site health ed/referral/counseling 	+ - - + + + - +

Rating scale: ++ = achieved objective

- +- = nearly achieved objective
- -+ = attempted to achieve objective
- -- = did not achieve objective

this component, a project has two effects, a primary effect and a secondary effect. The former concerns the objective at hand, whereas the latter is an unintended occurrence, known as a tangible effect. "Tangible effects include actual endproducts and accomplishments that would not have likely occurred had it not been for the project" (Fear, 1990, p. 9). An end-product was a teen pregnancy prevention group comprising community mothers and daughters at site 8. Without question, this is not related to the goal of reducing CVD in the African American community, but it does contribute significantly to building good rapport between the community and the health institution.

Establishing community coalitions and training lay health care workers were objectives at two sites. Achieving these objectives addresses the issue of making a contribution to the local capacity, a segment of the *outcomes* component in the EPM. Fear (1990) argued,

The exemplary project is a learning experience for local participants. It gives them practical exposure, and lessons on the process of organizing and carrying out a successful community development effort. This "residue" contributes to increasing the level of community competence.

When examining the CBOs, one can see that the site coordinators established three to four objectives; conversely, the health institutions established four to five objectives. Program documents showed that actual program implementation began three to six months after receiving the grant award. Sites that had established rapport with the Black community were able to begin actual program implementation one to three months faster, whereas other sites spent a lot of time trying to establish rapport. Moreover, they lagged behind in being able to achieve their objectives. Also, not understanding the culture of the community and not involving them during the design process seemed to result in establishing overly ambitious objectives. This leads the researcher to conclude that setting a few objectives that can be attained in half of the grant cycle contributes to the achievement of objectives.

Project coordinators had 12 months to implement this community-based project. Site 7, a health institution, had not achieved its objective of implementing a screening and educational program. In other words, they had not implemented the actual program within the 12-month grant cycle. They ran into serious problems with the community. The coordinator did not have any community development experience, nor had she conducted a program specifically designed for African Americans; therefore, she did not understand the culture. Moreover, had the stakeholders been involved during the design process, the coordinator would not have spent time "redesigning" the screening and education objective with the community coalition.

I think we set our sights [objectives] a little bit high.... I think it is very difficult to try to develop a whole new program with new people, and getting information into the community and getting the support of the community and getting a grasp of the group organizations to be involved.... We just couldn't get there. (Site Coordinator 7)

Hypothesis 5

Coordinators' previous applied community development experience does not make a difference in program participation.

Results. Because of the small numbers, qualitative induction was used. It appears that applied community-based experience, along with understanding the culture of the community, made a difference in program participation. Therefore, the null hypothesis was rejected.

<u>Findings and analysis regarding community development experience of</u> <u>coordinators</u>. Five out of eight site coordinators had community development experience; two were health institutions (see Table 12). The coordinators at sites 4 and 5 said they did not have the experience directly, but worked with others who had community development experience to administer the program. One site (site 4) was a health institution, and the other (site 5) was a CBO. The coordinators of the remaining three health institutions (sites 1, 7, and 8) said they did not have any community development experience.

Site	Community Development Experience?		Community Development Experience With African Americans?	
	Yes	No	Yes	No
1		X		×
2	X		X	
3	X		×	
4	X		×	
5	X		X	
6	X		X	
7		X		X
8		X		X

Table 12: Community development experience of coordinators.

Key: Health Institutions.

According to the quarterly reports, lack of participation was not a problem for

the coordinator at site 1, who did not have any community development experience.

Under Difficulties Encountered and Solutions, one report stated:

During the last quarter, we reported that our obstacle was in recruiting participants to the program. This obstacle was overcome when we began to hold screenings at individual church sites rather than at the centrally located street ministries office. Our difficulty now is that we are too successful. Taking the screening to the churches tremendously increased the participation. In fact, in February, 97 individuals were screened, and the budget allows for 300 to be screened throughout the fiscal year. Our agency has responded by affirming its commitment to this project and pledging to the community that we will aggressively seek additional funding sources. (Site 1)

However, at site 7, it appeared that the coordinator's lack of community

development experience made a significant difference in regard to getting participants in the program. As late as July, in the second-quarter report, under Difficulties Encountered and Solutions, it can be seen that there were obvious problems with understanding the community culture. According to the report, there was not complete buy-in from the Black church community. In addition, it appears that the focus group participants had a better understanding of community development then did the exercipator:

development than did the coordinator:

It was noted that the churches proposed to participate in the CVD Prevention Project needed more time to understand the implementation plan and the future sustainability of the project. More time was given to hold individual meetings with pastors to discuss the project implementation plans and its future direction. This problem has significantly eased.

The preparedness of participating churches to support the training of wellness leaders and appropriateness of the curriculum presented a concern. It was resolved that the project coordinator take the lead in development of a culturally appropriate church-based CVD prevention curriculum that would be used in training wellness leaders. More time has also been spent in promoting pastors' awareness of the planned CVD prevention project and the churches' role in the project implementation. There is support for the project now from the four first targeted churches. The project coordinator has teamed with the curriculum advisory group, and the curriculum will be ready before the next quarterly report. (Site 7 report)

I would like to see more health care people in the community have a part in implementing the program itself . . . rather than for the packet to be put together and say, "This is what we have for you." It's like throwing something out to [us]; maybe what you think is needed, is not what we feel we need. . . . It does not take much time initially to understand both needs and those who want to work with you to develop strategies to meet those needs. (Site 7)

The coordinator at site 8 experienced a low rate of participation. It appeared

that she was not willing to be flexible and to go to the community:

Participation of the area churches is progressing slower than projected, but progress is being made. With the advent of better weather and familiarity of the program and its components, initial suspicions are being overcome. . . . The women in the area are forming a women's group that meets weekly and are interested in some of the classes that the health educator provides, along with a beginning aerobics class. Lack of participation by the community during this quarter is evident by the lack of participants that use the facility and its services. Again, poor weather . . . [has] hampered access to the site with mud and puddles. The end-of-the-school-year functions were also a factor in participation as many persons attended those functions rather than those at the center. (Site 8)

According to the focus group reports, participation suffered because the

coordinator did not have an understanding of the culture of the community.

Sending letters don't work in this community. It's more than one-to-one contact. It's certain hit places in this community that you can catch a crowd of people--church and school. If you don't catch that person at church, you will catch them at school because they support all the games. . . . This community is more school based and church based, and there is nothing else. (Site 8)

The site coordinators who said they did not have direct community

development experience, but worked with others who had such experience, did not

record any problems with participation in their quarterly reports. They cited

challenges in working with peer educators' (volunteers who were also participants) skill levels to perform the given task. For example, the coordinator at site 4 identified literacy problems, which would affect the peer educators' ability to present as well as read the health material. In addition, this also would hinder their completing internal surveys given by the administering health institution. The solution was that they would have team presentations. The health institution would mail the peer educators their surveys. This would allow them to complete the survey with the aid of a friend, and they would be required to mail it back. At site 5, where the program was administered by a CBO, the report stated that peer educators were uncomfortable with taking blood pressures. Their solution was to continue having a medical technologist take the blood pressure readings until the peer educators were comfortable with their skills.

The three sites (sites 2, 3, and 6) where the coordinators had community development experience did not have any participation problems. However, they cited administrative problems, such as underbudgeting. The only health institution site with a coordinator who had applied community development experience reported that there were some literacy concerns. This was in regard to an internal survey the health institution wanted. In an attempt to resolve the problem, they lowered the literacy level of the questions that appeared to be stumping the participants.

<u>Discussion</u>. Health institution site 1, where the coordinator did not have any community development experience or experience with the African American

community, did not have a problem attracting participants. It was evident that the coordinator changed her strategy when she saw it was not working. In her report, she noted that she had been having a hard time attracting participants to the original location. She had changed days to coincide with a free food giveaway, but participation was still low. Therefore, the next quarter, she made significant changes by using multiple locations. This gave her more access to the community. She sent a message to the community that the health department was flexible and willing to work with them.

This change in strategy should not be taken lightly. The typical public health model is to render services from a single location in the community, allowing community members equal access. However, the problem is that access is not equal in underserved communities. Lack of transportation becomes a major barrier because of (a) limited money to use available transportation or (b) the location of the site in relation to public transportation lines. When people cannot access an intervention, even though it is free, it might as well cost money. One perception in the African American community in regard to the public health department is that "they really don't care about us." Making a major paradigm shift in rendering services sent a message that "This CVD program is important, so important that we are willing to come to you." This sent a message, not only that the program was important, but also that the community's well being was valued.

In contrast, another site coordinator (site 8), who was affiliated with a health department, chose not to be flexible and change the public health paradigm.

Inability to be flexible is a serious problem that plagues many well-meaning health professionals who work with community-based intervention programs. "Currently, culturally sensitive educational and behavioral change models for health promotion in the African American communities tend to be based primarily on the Caucasian experience" (Airhihenbuwa, 1992, p. 270). The focus group participants were emphatic in their statements regarding how to reach their community. These participants said they had told the coordinator that evening prayer meetings and choir practices were good times to reach church members. In addition, they recommended that she should work with the high school coaches to have a health promotion night as a half-time activity. For whatever reason, the coordinator was reluctant to listen to the participants' advice. However, she eventually held sessions at the high school for staff and faculty during the day, and some of those individuals participated in the focus group.

The coordinator at site 7 also had no community development experience. She was able to attract a limited number of participants, the peer educators, because she used "community elites" (people who had a reputation for being involved in community activities) to form a minority health coalition. However, she was not able to attract participants outside the coalition.

Comments made by the focus group participants, as well as what was documented in her site reports, indicate that this coordinator also lacked cultural competence. However, her saving grace was that the participants who became peer educators had community development experience and had an intimate relationship with their community. In turn, they taught her the norms of the community and community development strategies. The participants insisted that they be involved in writing a curriculum for the community and its pastors, rather than using one that did not have their input. As a result, the coordinator realized that it takes time to build relationships and that it is through those relationships that one begins to understand the culture of the community. This was not an easy lesson for this coordinator to learn. She said it was very difficult because she had a set of goals and a timeline that did not yield results. In this coordinator's interview, she said the community had not been involved in any way before writing the proposal, and she realized that, in the future, that would be a key to getting community buy-in.

Two of the eight site coordinators who said they did not have direct community experience, but had worked with someone who did, never mentioned in their reports that they were challenged with getting the community to participate in the CVD program. Neither coordinator revealed who her community development consultant was, such as someone from her agency or organization. These two sites, although they were very different (one a health institution--site 4--and the other a CBO--site 5), used similar models for attracting participants. The initial participants were trained as peer educators and served as recruits for the program. In addition, the peer educators were given a stipend for their time. At site 4, peer educators were recruited from several local churches and CBOs, in order to build capacity to sustain the program after the funding cycle ended. The coordinator said this strategy had worked to get participation, but she was concerned that the satellite

sites would not be able to sustain the program. She thought that the volunteers eventually would become burned out or lose interest. In addition, most did not have the skills to seek additional funding. On the other hand, site 5 used peer educators who were family and friends of the CBO sponsoring the CVD program. They, too, went to various sites to present the CVD program and were quite successful. Peer educators from both sites who participated in the focus group sessions indicated that being a peer educator was a great responsibility because it was so time consuming. The remaining site coordinators who indicated that they had community development experience demonstrated an ability to attract African Americans to their programs as participants.

Eindings and analysis regarding the community's or participants' involvement in designing the CVD program. When the coordinators were asked whether the community or any of the participants had been involved in designing this program, three out of five responded in the affirmative (see Table 13). One indicated that she had solicited input from future participants but did not receive a response. The other two coordinators said they had not requested any input from the community or prospective participants.

The community's input had been solicited at various points in the process, with varying degrees of involvement, thereby leading to conclusions regarding community involvement. One coordinator said that the health institution had solicited community participation after receiving the grant. It was a person from a partnering agency, whose responsibility it was to help locate outreach workers (volunteers); they, in turn, would help spread the CVD message and get community members to participate in the screenings. Other sites used existing models from a previous community-based program or from Healthy Michigan 2000, or they used health professionals to advise them. At only one site was participation solicited before writing the proposal.

Site	Community or Participants Involved in Program Design?		
	Yes	No	
1	×		
2	X		
3		Xª	
4	×		
5	X		
6		X	
7		X	
8	×		

Table 13: Community or participant involvement in designing the CVD program.

Key: Health institutions.

^aTried but received no input.

Discussion. Some of the methods of involving community members raise certain questions. At what point should the community be involved, before writing the proposal or afterwards? According to the EPM, the community should be involved from the beginning. "Projects are not done to the community but rather, are

done in cooperation with communities" (Fear, 1990, p. 9). This is a serious process issue that needs to be addressed on a case-by-case basis. In fact, all of these strategies involved some form of community participation. Even when considering those sites that adapted preexisting models, those models were tested on the community. Bracht (1990) explained that local values or legislative considerations frequently determine the degree to which citizens are engaged. In addition, time is a reality that must be given serious attention. Engaging the community can be done formally or informally. Bracht defined citizen participation as "the social process of taking part (voluntarily) in formal or informal activities, programs, and/or discussions to bring about planned change or improvement in community life, services, and/or resources" (p. 110).

In essence, it is important to understand that time and values are a driving force in the issues of citizen participation and who will participate. In this case, proposal writers had only two months between the announcement and the deadline. This does not allow much time in which to schedule meetings with various community members to gain their input. Sites that had a previous relationship with other agencies or with key community people had an advantage. They could use their past associations for propositions. In most cases, the health institutions' site coordinators had other job-related responsibilities aside from writing the proposal. Further, it takes much time to coordinate volunteers' schedules in order to gain their input. This was the first round of funding. Because three of the site coordinators did not have any experience with the Black community or with community organizing,

it was only natural that they should consider using an existing community development model and try to solicit input at various points while implementing the program. Although this approach is not completely in accord with the EPM, it certainly does not negate the citizen participation component. Moreover, the beauty of this model is that at any point in the model one can make changes in the project with input from citizens.

There is evidence that the site coordinator who had no previous community development experience tried to solicit community input before writing the proposal. It also appears that she made adjustments in her approach, based on community input. Although she was inexperienced, obtaining local stakeholder participation before designing the project appeared to make a difference in this coordinator's participation outcome.

Discussion of Results Regarding the Research Questions

Research Question 1

What contributes to the acceptance and efficacy of community-based CVD programs for African Americans?

In this study, three factors contributed to the acceptance and efficacy of community-based CVD programs for African Americans. These factors are based in community development principles and methods, which are people centered. They are (a) cultural factors, (b) citizen participation/stakeholder factors, and (c) capacity-building factors. Although community development principles and methods are elementary in their application, they often are overlooked or misunderstood by

professionals, in this case health care professionals. The community development paradigm often goes against the grain of the professional mind set. Chambers (1993) described professionalism as being embodied in norms, methods, and behaviors that are taught, learned, and rewarded. To maintain that mind set, professionals have certain defenses. Many operate from the belief that they and only they have the expertise to define and solve the problem, never considering that those affected by the problem possess "indigenous technical knowledge." "I define. I solve because I'm the expert." Indigenous technical knowledge means that the people affected by the problem have the knowledge that enables them to define the problem jointly with the professional and contribute to the solution. In the community development paradigm, the participation of local people and/or prospective program participants is paramount in all stages of the solution process. "We define, we solve because we both have valuable knowledge." Christenson (1989) stated, "The key debate is the difference between working for people and working with people, that is, helping people or enabling people to help themselves" (p. 38).

The literature is filled with articles about organizational culture, organizational environment, and organizational climate. Just as organizations have a culture, so do communities; that culture is not limited to the ethnicity of the residents, but is learned largely through the socialization process and symbolic interaction among the residents (Anderson, 1993). Mazuri (1986) stated that culture is a system of interrelated values active enough to influence and condition perception, judgment, communication, and behavior in a given society. Those who are conducting health-

promotion programs in Black communities must understand the community culture as well as the African American culture.

To a large extent, culture and health coincide. Each culture gives shape to a unique Gestalt of health and a unique conformation of attitudes towards pain, disease, impairment, and death, each of which designates a class of that human performance that has traditionally been called the art of suffering. (Illich, 1976, p. 88)

In essence, this means that health care professionals who want to effectively influence the behaviors of the Black community in the case of community-based CVD projects need to understand the culture of African Americans in general, understand the specific community culture in which they plan to operate the program, and understand the local Black residents' perspective on health. Culture becomes a major underpinning in the acceptance and efficacy of community-based CVD programs for African Americans. Airhihenbuwa (1992) argued that, in order to have an aggressive health promotion campaign that will increase health knowledge in the Black community, frameworks that guide the issues of cultural sensitivity to educational intervention are needed.

It is hard to imagine a successful community development project in which there is limited understanding of the people and their environment. Surely, the health professional would need to gain such knowledge directly or indirectly at some point during the project's implementation. Thus, the issue becomes one of the health professional's gaining cultural competence before program implementation. Marín (1995) defined cultural competence as a "characteristic of individuals who have academic and interpersonal skills, which allow them to increase their understanding and appreciation of a group's cultural differences and similarities." Cross, Bezion, Dennis, and Isaacs (1989) and Davis and Voegtle (1994) named five factors that culturally competent health care systems and professionals need to possess: (a) Be aware and accepting of cultural differences, (b) have the ability for cultural self-assessment, (c) be sensitive to the dynamics inherent when cultures interact, (d) have the required cultural knowledge of the target group, and (e) develop skills that facilitate adaptation to diversity. Developing cultural understanding and sensitivity will guide the design of community-based CVD projects, from gaining citizen participation to having Afro-centric health education materials.

Citizen participation is another major factor that contributes to the acceptance and efficacy of community-based CVD programs for African Americans. It is a matter of full participation by African Americans in their respective communities. A cornerstone of community development, citizen participation, is fundamental to effective community development projects. It acknowledges that the African Americans in the community are the stakeholders. In addition, it sends the message that they are valued for their knowledge regarding their community and that they have something meaningful to contribute to solving the problem of CVD mortality and morbidity.

Conveying the message that Black residents are stakeholders means they have a vested interest in the CVD project and its message, as well as in the project methodology. This was very helpful to coordinators who did not have community development experience and did not have experience working with African Americans. These coordinators seemed to have good intentions in designing their programs without input from the community; however, they quickly realized they would not be successful in implementing those programs without the Black community's participation. At some sites, the community residents taught the coordinators how to organize the community, how to gain buy-in, and how to learn what works well and what does not. The Black residents shared with the coordinators their indigenous knowledge about implementing a community-based project, as well as knowledge pertaining to the culture of their community. These residents understood that they were stakeholders as well as gatekeepers. At one site, the residents acted in both capacities and would not allow the program, which had been designed without their input, to be implemented in the community. In this instance, they took the lead in redesigning a curriculum that was more appropriate for their community. These were residents who had been actively involved in their community for years. Some of them were retired health care professionals, as well. Wilkinson (1992) described the benefits of using indigenous health care workers as follows: "The indigenous workers have been able to interact successfully with and speak the 'language' of the people in their communities, a feature that remains essential for viable projects with urban and low-income African Americans" (p. 260).

The natural question with regard to citizen participation is who should be involved and when they should be involved. The EPM suggests that citizens be involved as early as in the design dimension. Constraints like project proposal deadlines may not always allow full participation at that stage; however, key stakeholders should have input. This will foster goodwill within the community and guard against the likelihood of having to redesign the entire project. This was the case at one of the sites. As a result, the coordinator was unable to implement the program during the grant cycle. Instead, the health institution had to find internal resources for implementation.

As with most community development methods and principles, including people in various dimensions of the project is time consuming. However, it helps to ensure community buy-in. The goal should not be limited to conducting large numbers of CVD screenings; rather, it should be to influence behavior. Screenings alone cannot achieve that goal; if they could, there would be no CVD problem. Like people in developing countries who have been disenfranchised and are living on the periphery, Blacks in the United States are considered to be part of the underserved population when it comes to health care. Researchers have found that African Americans, with or without health insurance, do not receive the same state-of-the-art treatment as do their Caucasian peers when they have been diagnosed with CVD or when they are deemed at high risk for the disease.

The coordinators mentioned time as being a challenge in implementing the CVD projects. This was true of coordinators from both CBOs and health institutions and held true no matter what their experience was in implementing community-based projects. There is no short cut. The coordinators without community development experience spent much precious time during the grant cycle trying to

establish a relationship with the community. Coordinators who had an established track record with the community, meaning they had community development experience, found the length of the grant cycle to be prohibitive. Time invested is time well spent in reaching the African American population about CVD. The focus group participants were aware of, and appreciated the time commitment made by, the coordinators; it was viewed as valuable. In addition, it underscored the seriousness of the CVD problem and sent a message that Black residents in that community were worth saving.

Capacity building is the third major factor that contributes to the acceptance and efficacy of community-based CVD programs for African Americans. Fischer (1989) argued that capacity building should be the primary concern of those involved in community development. Relating capacity building to health promotion, Schwartz (1993) defined it as the development of technical expertise to plan, implement, and evaluate chronic-disease prevention and control interventions. He added that the areas of expertise include problem identification, epidemiologic and behavior risk factor analysis, coalition building, program planning, marketing, program implementation, knowledge of intervention methodologies, evaluation, and the development of capabilities to obtain ongoing support and funding through administrative and legislative means. According to Fear (1990), the EPM is a learning experience for local residents, and the benefit is that they have acquired skills that will outlive the project. Moreover, Fear suggested that capacity building "contributes to increasing the level of community competency" (p. 13). The focus group participants were recipients of capacity building. Together the eight CVD programs demonstrated capacity building in all of the aforementioned areas except administrative and legislative. Although these skills were not distributed equally among sites or participants, there was evidence, based on the test results for Hypothesis 2, that focus group participants received knowledge and skills related to CVD. Gaining this new knowledge and skills increased the participants' confidence and gave them a sense of control. The skills they acquired ranged from being certified in CPR, to learning how to give a technical presentation regarding CVD risk factors, to learning how to understand the results of blood pressure screenings, to learning how to prepare low-fat soul-food dishes. Wilkinson (1992) asserted that, regardless of the participants' backgrounds, the principal objective of such programs is to demonstrate how nonprofessionals from the community can encourage positive health attitudes and behaviors.

The focus group participants shared the knowledge and skills they acquired with their family and friends and others in the community. In some instances in which the focus group participants were involved in formal training (often called peer educators or lay health care workers), they were amazed at the knowledge and skills they received. Not long after becoming CPR certified, one man was forced to use his skills at his church to dislodge hard candy from a child's throat. Other scenarios were not as dramatic but were equally influential, like the young men who learned how to control their tempers under stressful conditions. While playing basketball, they used stress-controlling techniques to avoid fighting a biased referee and the

opposing team. Often, African Americans live in environments in which their perceived control is limited. Undoubtedly this affects their lifestyle choices. Madden et al. (1992) found that the inclusion of perceived behavioral control enhances the prediction of behavioral intention and behavior. Capacity building in whatever form gives people positive options and helps to influence their choices.

In summary, there is not one easy answer concerning what contributes to the acceptance and efficacy of CVD programs for African Americans. However, the research conducted on eight community-based CVD programs in Michigan indicated that applying community development strategies positively influenced participants' acceptance of the program, as well as their efficacy. The researcher found that African Americans are insulted when people come into their communities, with whatever good intentions, and have not bothered to learn the culture of the people and their community, do not include them in the planning process, and do not provide or leave them with self-help resources. When this happens, the community seriously questions the motives of those who come bearing gifts.

Research Question 2

Did participating in any of the eight CVD-prevention programs influence the perceptions, attitudes, and behaviors of the participants? If so, in what way?

This question can be answered in the affirmative by examining the results from testing Hypothesis 2 and from focus group Question 4: There was no difference between the before- and after-focus group perceptions of participants about CVD-prevention programs. Why do you think you will be able to continue to

improve your well being? The purpose of this hypothesis and question was to measure and understand participants' before- and after-focus-group perceptions, rather than to predict long-term behavior.

Avis, Smith, and McKinlay (1989) found that people tend to underestimate their own risk of developing certain conditions or diseases, and Weinstein (1982) referred to this as having an "optimistic bias." However, perceived susceptibility is essential in motivating a change in behavior (Janz, 1984). If African Americans do not perceive themselves as vulnerable to CVD, they are less likely to adopt the recommended behaviors.

From this it follows that each of the eight coordinators in this study had the challenge of raising the consciousness of the program participants. They were responsible for delivering the message of CVD morbidity and mortality among Blacks. To influence behaviors, the coordinators had to provide the participants with practical alternatives. This they did by using community development approaches (self-help or empowerment and technical assistance) focusing primarily on nutrition and exercise. The self-help or empowerment strategy involves helping people gain understanding and control over the factors that affect their lives (Airhihenbuwa, 1994; Gibson, 1991). Clark and McLeRoy (1995) asserted that strategies to imbue community residents with a sense of efficacy and capacity, often referred to as empowerment strategies, have been found to contribute to changes in health outcomes. Conversely, technical assistance refers to the application of expertise to aid the client (Fear, 1989). The coordinators at each of the eight sites used both of

these strategies in their programs to raise the consciousness of African Americans about CVD and to influence their behavior. This was done by having CVD screenings to detect hypertension, cholesterol levels, and diabetes in churches and community centers. If necessary, individual counseling was provided in follow-up sessions.

The way that coordinators implemented CVD screenings was a combination of self-help and technical-assistance strategies. It was technical assistance because the health professionals were providing a specialized service, whereas at the same time they were teaching the participants new skills that would increase their level of self-efficacy. Participants were taught to understand the screening results, how to take their own blood pressure, and, if necessary, how to manage the results. Coordinators addressed myths surrounding hypertension and emphasized that it can be controlled. In some cases in which participants were referred to physicians or clinics, those individuals were more confident about their ability to understand their health status.

It wasn't up to the doctor, it was up to me and the good Lord to do something about that. (Site 2)

She learned me how to take care of my health much better, 'cause I have high blood pressure and it's suppose to be permanent. I learned to take care of it very well, and I lost weight behind it. (Site 2)

Screenings usually served as a gateway to introduce nutrition and exercise information. Program participants were given information regarding nutrition in various creative and practical ways. When addressing these risk factors, coordinators used a combination of technical assistance and empowerment strategies. Participants were taught how to eat healthily at home, at work, and when dining out. In addition, some sites provided cooking demonstrations, showed participants how to shop for healthy foods by reading food labels, and taught them to include more fruits and vegetables in their diets. The chi-square and Fisher's exact tests indicated that participants' attitudes and knowledge were affected by this nutrition education.

I found out different things that I can eat. I've changed my diet and I found out that I have to take my high blood pressure medicine every 24 hours. I didn't at first, now I'm on it. (Site 1)

I learned you can eat too much sugar, and I don't eat that much anymore. I kind of watch what I eat. I eat certain foods. I have certain things that I really like, and I eat it once a month and that's about it. (Site 3)

I would never drink water until one day the nurse sat down and showed me an ugly picture of a kidney. The thought of being on a kidney machine and all that stuff, it stays on my mind. Drinking water is a challenge. (Site 8)

Exercise was also strongly emphasized. Coordinators helped participants

realize the benefits of exercise by demonstrating simple routes, emphasizing walking

at the mall, at work, and around the neighborhood. At some sites, exercise classes

were offered. Participants were taught not to berate themselves if they missed days

of exercising. Focus group participants who actively took part in the exercise

component and changed their eating habits realized a weight loss, had more energy,

and were sleeping more soundly; as a result, they were motivated to continue

exercising.

The diet and eating properly has changed me physically. [If] you eat properly and exercise, you sleep better and you have more energy during the day. It's all around. It moves into other areas in your life to do more positive things. When you feel good, you just want to live as long as possible. (Site 5) I used to weigh 286 pounds, now I [have] lost 32 pounds. I walk all the time ... I have to. Sometimes my foot bothers me, but I still walk if the Lord gives me strength. I walk through the house, sometimes I walk outside to the driveway. (Site 2)

It [the program] came at a good time. It has added to my support group. I said I wanted to ride my bide because I lived like three or four miles from my factory, where I use to work. I use to ride my bike back and forth to work, and then the sickness came and I was not able to ride my bike anymore. ... [The coordinator] and I got together, and she said, "Why don't you try to get back on the bike again? Why don't you make that one of your goals?" ... Having a little push from her and everyone else was encouragement. She saw me a couple of times a week at the health club to help me achieve this goal. I did achieve it; I was able to ride my bike this summer. It has been a long time since I was able to ride my bike... This was the biggest benefit I have gotten from this program. (Site 8)

)

Focus group participants were asked why they thought they would be able to

continue to improve their well being. Their responses reflected the fact that they had

been taught how they could take control of their health status. This is important

because many of the focus group participants had no health insurance and were

living in environments where they had no control.

I think that I will be able to continue doing this because when I start something I don't like to have to give up. Because if I like it and I think that it is straight, I will continue doing it. (Site 4)

I think that we have made a difference. I feel that we will continue to make a difference in the years to come as we continue to embark upon new avenues of health care. I think CVD was just a point for us to start, but I think in our development this year and the years to come it will grow. I think the community will be receptive to what we are doing as we are receptive. We are working together to build a strong Afro-American community. (Site 7)

I'm going to improve because I feel better. Too, see, some of the results in our high blood pressure and cholesterol, it went down. It's not down like I think it should be, but I'm working on it. And I think we are all working on it. (Site 2) In summary, there was conclusive evidence, both statistical and anecdotal, that the eight CVD programs did, in fact, influence the perceptions, attitudes, and behaviors of the focus group participants. This was done by using a combination of community development approaches--self-help and technical assistance--throughout the programs.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of the Study

The Problem

CVD death rates among African Americans have dropped nationally since 1985, but not in Michigan (MDCH, 1996). Every 15 minutes, one person died of CVD in Michigan in 1994, according to the MDCH, Center for Health Promotion and Chronic Disease Prevention, Health Promotion Section. The same report concluded that the stroke death rates for African American males and African American females were 2.9 and 2.5 times higher than those for White males and White females, respectively. Even more astounding were the heart disease death rates. For Black males and Black females, the heart disease death rates were 1.5 and 2.5 times higher than those for White males and White females, respectively.

Traditional methods of CVD prevention, such as screenings and counseling, have failed to reach sufficient numbers of African Americans, primarily because of their negative perceptions regarding public health practices. In general, African Americans have a general distrust of the medical and health profession.

The fact that many of the CVD risk factors (smoking, high blood pressure, high cholesterol, overweight, and sedentary lifestyle) can be controlled makes CVD

a multifaceted problem. Understanding that making lifestyle changes can reduce the morbidity and mortality rates significantly, one group of health professionals has selected the community-based approach to addressing the CVD problem among eight African American communities in Michigan.

Understanding the role that community development approaches play in CVD programs designed for Blacks is crucial. It is particularly relevant to compare the differences between programs managed by community-based organizations and those managed by a health department. Understanding this phenomenon will lead to the development of a model for designing specialized health education programs and recruitment efforts aimed at African Americans.

The purpose of this study was to (a) document the perception of participation by CVD project coordinators and participants at eight sites in African American communities throughout Michigan; (b) measure the knowledge, attitudes, skills, and behaviors of the participants; and measure the efficacy with which the communitybased CVD programs have been developed.

Methodology

In this study, multiple data collection methods (often referred to as triangulation) and multiple analysis techniques were used. The data used were from participant focus group sessions, coordinators' interviews, and program documents. Appropriate qualitative and quantitative methods were employed.

Findinas

The study revealed three factors that contributed to the acceptance and efficacy of community-based CVD programs for African Americans--cultural competency, citizen participation/stakeholder participation, and capacity building. CVD program participants deemed it important for the program coordinators to have academic and interpersonal skills that allowed them to respect and understand the differences and similarities of African Americans. In addition, it was important for coordinators to understand the culture of the specific community in which they would be operating the program. When coordinators were not culturally competent, the residents expressed feelings of disrespect and felt devalued. Citizen participation was another factor that influenced program participation. At most of the sites, residents wanted to be involved in the program design and even recruitment. In cases where this did not happen, there was either low participation or no participation until the residents were involved to their satisfaction. Capacity building was also an influence on participation. Residents expressed high program satisfaction when they learned a new skill, like CPR, that would benefit their family and their neighborhood.

To influence behaviors, the coordinators had to provide the participants with practical alternatives. This was done by using community development approaches, self-help and technical assistance, that focused on nutrition and exercise. In addition, participants were taught how to understand CVD screening results, how to take their own blood pressure, and, when necessary, how to manage the results.

<u>Conclusions</u>

It is important to understand the complexity of CVD in relation to African Americans in general. The researcher understands that the Black population is not monolithic in nature, but the discussion that follows is expressed in generalities. In addition, each community has its own nuances, thereby adding another layer of complexity to the problem. The grant writers of the eight CVD projects approached the CVD problem from a lifestyle framework. This means that they believed that if Blacks changed their lifestyles, they could reduce their risk of CVD. This is a practice approach that requires ownership on the part of the project participants. It also lends itself to sustainability and to influencing the whole Black family, rather than a single individual. However, the lifestyle approach becomes somewhat of a rubric, in which issues of safety, family traditions, cooking, and economics must be considered.

Beginning with safety, it is unrealistic to ask people to exercise by running or walking in their neighborhoods if they do not feel safe. Some of the site locations were in high-crime areas. Second, the tradition of gathering together to eat a big meal is quite common in Black families, as it is in other ethnic groups. Fried meats, well-cooked vegetables seasoned with pork, and butter-rich baked goods are served. Third, when considering the issue of cooking and its relationship to CVD, the person shopping for food and doing the cooking is the one who needs to be reached. It is hard for a child or even an adult who is not responsible for this household chore to give the other family member directives. It could be viewed as

insulting. Finally, when giving forethought to issues related to lifestyle, economics must be considered. Although placing a CVD project in a community adult learning environment seems prudent, one must realize that the adult students are concerned primarily with earning their GEDs so that they can obtain employment. This was certainly the case at one study site. In that instance, although the program participants were concerned with making a lifestyle change, their primary focus was employment rather than CVD. In addition, the cost of changing one's eating habits and learning a new way of life can exacerbate a person's stress level.

Bringing these issues to the forefront is not intended to imply that effective community-based CVD projects are impossible to manage. On the contrary, benefactors and health professionals should understand the parameters when embarking on community-based CVD projects for African Americans.

The effect of the community development strategies on community-based CVD programs for African Americans is significant. The strategies of technical assistance and self-help address the problem of reaching Blacks in a comfortable environment. In contrast, traditional methods like one-on-one doctor visits are limited in their effectiveness. The combined community development strategies go beyond the protocol visit of patient and doctor or health professional in the clinic. These strategies encourage and welcome African Americans to be part of the CVD solution. Further, these strategies help empower Blacks, whereas with traditional methods, power lies with the health professional and not the patient. This makes patients passive about their health care.

The strength of community development approaches, whether they are administered by a health institution or a CBO, is that they are people centered. For instance, in a traditional paradigm, the professional gives technical assistance to the nonprofessional. However, in the community development paradigm, both the community and the professional offer technical assistance. When the professional renders technical assistance, he or she does it in relation to CVD; when the community renders technical assistance, they are rendering indigenous technical knowledge that relates to the community and its culture. This is a critical difference between the traditional paradigm and the community development paradigm. Selfhelp, the other approach, is a "bonus strategy." The traditional paradigm does not have a matching approach. This approach directly gives African Americans skills and knowledge regarding CVD that they would not receive in a clinical setting because of time, personnel, and priority constraints. In addition to giving knowledge to the Black community, it is building capacity. It is highly likely that those skills and knowledge will be translated into other community-based projects.

Recommendations

Research

To date, there have been no longitudinal studies involving African Americans and CVD. Such research is critical if one is serious about reducing the morbidity and mortality rates among this population. Longitudinal studies will provide a wealth of knowledge regarding best-practice clinical methods, capacity building, and sustainability, as well as specific educational and cultural approaches. Without
serious long-term research, there will continue to be large gaps in the literature. Moreover, African Americans will continue to suffer and die from CVD at alarmingly higher rates than other people in the United States.

With respect to African Americans, CVD should be investigated in relationship to other illnesses and living and working environments. This would be appropriate in both clinical outcomes research and applied research settings. It is important that we understand how people who have CVD respond to various treatments and how they manage their illness within their personal environment.

Another area that can be addressed is in testing and developing culturally specific community-based models for health care delivery, so that they move past the conceptual stage into practice. Airhihenbuwa (1992) developed a conceptual model, PEN-3, that is culturally specific and promises to be applicable at the community level, integrating the individual, the extended family, and the neighborhood. It should be tested, and appropriate adaptations should be made.

Policy

With regard to funding short-term projects, it is critical that benefactors include in their request for proposals that the personnel responsible for the communitybased CVD project have cultural competence. This seems to be of particular concern with health institutions. Therefore, it would be prudent for the Michigan Department of Community Health and any other benefactor to offer training to local public health departments. Because Michigan's population is so diverse, this training should not be limited to the African American culture.

Community-based projects should be funded for a minimum of two years. It has been established that people generally go through several stages before changing their behavior. These stages depend on people's readiness to change and their perception of the situation they need to change. Therefore, it is imperative and wise to build more time into the grant cycle. Some experts have predicted that it takes a minimum of six months to be able to maintain a new behavior. It is unrealistic to expect large numbers of African Americans to make major lifestyle changes in a few months or after a few visits to a community center. The important factor regarding time is that it needs to be long enough to provide support, but not so long that it creates dependency.

Finally, it is necessary for the RFPs to foster partnerships between CBOs and health institutions. This means going beyond receiving a letter of support from the CBO or health institution. It requires that each organization have a distinct role, each operating from its strengths to serve the community in a more efficient and effective manner. A collaborative partnership is necessary, to debunk the myths and address the fears that the African American community has about the health profession. Collaborative partnerships also are important if we indeed want to impact the problem of exaggerated CVD mortality and morbidity rates among Blacks.

In addition, these collaborative partnerships with the local health departments and the community should put a structure into place that assures sustainability neighborhood or village health councils. These councils would include residents, local merchants, school and church officials, as well as representatives from the local health department. This structure empowers the community, helping them define and prioritize their own health problems. Moreover, it will allow the community to work in harmony with health professionals to solve those problems.

REFERENCES

REFERENCES

- Aday, L. A., Begley, C. E., Lairson, D. R., & Slater, C. H. (1993). <u>Evaluating the</u> <u>medical care system: Effectiveness, efficiency, and equity</u>. Ann Arbor, MI: Health Administration Press.
- Apostle Islands Group. (1994). <u>Accountability health communities: Meeting the</u> <u>needs of rural America</u>. Position paper from the summit meeting.

- Anderson, R. (1993). <u>The interorganizational community</u>. Lewiston, NY: Edwin Mellen Press.
- Antonovsky, A. (1996). The salutogenic model as a theory to guide health promotion. <u>Health Promotion International</u>, <u>11</u>, 11-18.
- Avis, N., Smith, K., & McKinlay, B. (1989, December). Accuracy of perceptions of heart attack risk: What influences perceptions and can they be changed. <u>American Public Health Journal</u>, <u>79</u>(12).
- Babbie, E. (1995). The practice of social research. New York: Wadsworth.
- Belinski, R. (1969). A description and assessment of community development. In L. T. Wallace et al. (Ed.), <u>Selected perspectives for community resource</u> <u>development</u>. Raleigh: North Carolina State University, Agriculture Policy Institute.
- Bennett, C. F., & Nelson, D. L. (1975). <u>Analyzing impacts of community</u> <u>development</u>. State College, MS: Southern Rural Development Center.
- Bhattacharyya, J. (1995). Solidarity and agency: Rethinking community development. <u>Human Organization</u>, <u>43</u>, 60-61.
- Blackely, E. (1989). Theoretical approaches for a global community. In J. Christenson & J. W. Robinson, Jr. (Eds.), <u>Community development in</u> <u>perspective</u>. Ames: Iowa State Press.

Blum, T. C., Roman, P. M., & Patrick, L. (1990). Synergism in health work sites: An option of employee assistance programs and promotion activities. Journal of Occupational Medicine, 32, 461-467.

Borg, W. R., & Gall, M. D. (1979). Educational research. New York: Longman.

- Bracht, N. (1988). Use of community analytic methods in community-wide intervention programs. <u>Scandinavian Journal of Primary Health Care</u> <u>Supplement</u>, <u>1</u>, 23-30.
- Bracht, N. (1990). Health promotion at the community level. London: Sage.
- Breckon, D. J. Introduction to the theoretical foundations of hospital health education.
- Brockner, J., Mahan, T., & Thomas, B. (1983). The roles of self-esteem and selfconsciousness in the Worthman Brehm model of reactance and learned helplessness. Journal of Personality and Social Psychology, 45, 199-209.
- Butterfoss, F. D., Goodman, R. M., & Wandersman, A. (1996). Community coalitions for prevention and health promotion: Factors predicting satisfaction, participation, planning. <u>Health Education Quarterly</u>, 23, 65-79.
- Buxton, K., Wyse, J., & Mercer, T. (1996). How applicable is the *stages of change* model to exercise behavior? A review. <u>Health Education Journal</u>, <u>55</u>, 239-257.
- Campbell, M. K. (1996, July 18). <u>Stages of change: From thought to action.</u> <u>Nutrition skills training</u>. Keynote address.
- Caplan, K. (1993). The importance of social theory for health promotion: From description to reflexivity. <u>Health Promotion International</u>, <u>8</u>, 147-157.
- Carleton, R. A., Lasater, T. M., Asaff, A., et al. (1987). The Pawtucket Heart Health Program: An experiment in population-based disease prevention. <u>rhode Island Medical Journal</u>, <u>70</u>, 5333-538.
- Chrislip, D., & Larson, C. (1994). <u>Collaborative leadership</u>. San Francisco, CA: Jossey-Bass.
- Christenson, J., & Robinson, J. W., Jr. (Eds.) (1989). <u>Community development</u> <u>in perspective</u>. Ames: Iowa State Press.

- Chronic Disease Advisory Committee, Cardiovascular Disease Subcommittee. (1991). <u>Promoting cardiovascular health in Michigan</u>. Lansing: Author.
- Cockerham, W. C. (1995). <u>Medical sociology</u>. Englewood Cliffs, NJ: Prentice-Hall.
- Cohen, L., & Manion, L. (1980). <u>Research methods in education</u>. Dover: Croom Helm.
- Cohen, R. A. (1969). Conceptual styles, culture conflict and nonverbal tests of intelligence. <u>American Anthropologist</u>, <u>71</u>, 827-828.

- Clark, N., & McLeRoy, K. (1995, August). Creating capacity through health education: What we know and what we don't. <u>Health Education Quarterly</u>, 22(3).
- Collins, T. (1995). Models of health: Pervasive, persuasive and politically charged. <u>Models of Health</u>, <u>19</u>, 317-324.
- Cresswell, J. W. (1994). <u>Research design: Qualitative and quantitative</u> <u>approaches</u>. London: Sage.
- Crocket, S. J., Heller, K. E., & Peterson, J. M. (1990). Assessing beliefs of older rural Americans about nutrition education: Use of the focus group approach. <u>Journal of the American Dietetic Association</u>, <u>90</u>, 563-567.
- Cross, T. L., Bezion, B. J., Dennis, K. W., & Isaacs, M. R. (1989). <u>Towards a</u> <u>culturally competent system of care</u> (Vol. 1). Washington, DC: CASSP Technical Assistance Center, Georgetown University Child Development Center.
- Dalziel, Y. (1992). Breaking down the barriers. <u>Health Visitor</u>, <u>65</u>, 228-229.
- Davis, B. J., & Voegtle, K. H. (1994). <u>Culturally competent health care for</u> <u>adolescents: A guide for primary care providers</u>. Chicago: Department of Adolescent Health, American Medical Association.
- Dean, K. (1996). Using theory to guide policy relevant health promotion research. <u>Health Promotion International</u>, <u>11</u>, 19-25.
- Dean, K., & McQueen, D. (1996). Theory in health promotion: Introduction. <u>Health Promotion International</u>, <u>11</u>, 7-9.

- DeVries, H., Weijts, W., Kijkstra, M., & Kok, G. (1992). The utilization of qualitative and quantitative data from health education program planning, implementation and evaluation: A spiral approach. <u>Health Education</u> <u>Quarterly</u>, <u>19</u>, 101-115.
- Dignan, M. B., & Carr, P. (1987). <u>Program planning for health education and health promotion</u>. Philadelphia: Lea & Febiger.
- Dignan, M., Michielutte, R., Sharp, P., Bahnson, L., Young, L., & Beal, P. (1990, December). The role of focus groups in health education for cervical cancer among minority women. <u>Journal of Community Health</u>, <u>15</u>(6).

)

- Eng, E., & Parker, E. (1994). Measuring community competency in the Mississippi Delta: The interface program evaluation and empowerment. <u>Health Education Quarterly</u>, 21(2), 199-220.
- Family Heart Study Group. (1990). Randomized controlled trial evaluation cardiovascular screening and intervention in general practice: Principal results of British family heart study. <u>BMJ</u>, <u>308</u>, 313-320.
- Farquhar, J. W., Fortman, S. P., Flora, J. A., et al. (1990). Effects of communitywide education on cardiovascular disease risk factors: The standard five-city project. <u>JAMA</u>, <u>264</u>, 359-365.
- Farquhar, J. W., Fortman, S. P., Maccoby, N., et al. (1985). The Stanford Five-City Project design and methods. <u>Am J Epidemiol</u>, <u>122</u>, 323-334.
- Fear, F. (1992, September 15). <u>Elements associated with exemplary projects</u> (course handout). Drawn from a draft paper, August 1990.
- Fink, D. J. (1989). Community programs: Breast cancer detection awareness. <u>Cancer</u>, <u>64</u>, 2674-2681.
- Fischer, M. (1989). The practice of community development. In J. Christenson & J. W. Robinson, Jr. (Eds.), <u>Community development in perspective</u>. Ames: Iowa State Press.
- Fletcher, G. F., Blair, S. N., Blumenthal, J., Caspersen, C., Chaitman, B., Epstein, S., Falls, H., Froelicher, E. S. S., Froelicher, V. F., & Pina, I. L. (1992). American Heart Association's scientific statement on exercise: Benefits and recommendations for physical activity programs for all Americans. <u>AHA Scientific Council</u>, <u>86</u>, 340-344.

- Forte, D. A. (1995). Community-based breast cancer intervention program for older African American women in beauty salons. <u>Public Health Reports</u>, <u>110</u>, 179-183.
- Francis, C. K., Oberman, A., & Saunders, E. (1994). Racial and ethnic differences in CVD: Who's at risk and why. In J. N. Travalino (Ed.), <u>Patient care</u> (pp. 28-46).
- Fraser, E., Bryce, C., Crosswaite, C., & McCann, K. (1995). Evaluating health promotion: Doing it by numbers. <u>Health Education Journal</u>, <u>54</u>, 214-225.
- Gamble, V. N. (1997, November). Under the shadow of Tuskegee: African Americans and health care. <u>American Journal of Public Health</u>, <u>87</u>(11).
- Gillum, R. F. (1996). The epidemiology of cardiovascular disease in black Americans. <u>New England Journal of Medicine</u>, <u>335</u>, 1597-1598.
- Glasgow, R. E., McCaul, K. D., & Fisher, K. J. (1993, Fall). Participation in worksite health promotion: A critique of the literature and recommendations for future practice. <u>Health Education Quarterly</u>, 20, 391-408.
- Goodman, R. M. (1995). Evaluation of the heart project: Lessons from a community-based chronic disease prevention project. <u>American Journal of Health Promotion</u>, <u>9</u>, 443-455.
- Goodman, R. M., & Steckler, A. (1989). A model for the institutionalization of health promotion programs. <u>Family and Community Health</u>, <u>11</u>, 63-78.
- Green, L. W., & Kreuter, M. W. (1990). Health promotion as a public health strategy for the 1990s. <u>Annual Review of Public Health</u>, <u>11</u>, 319-334.
- Guba, E. (Ed.). (1990). The paradigm dialog. Newbury Park, CA: Sage.
- Guba, E., & Lincoln, Y. (1989). Fourth-generation evaluation. London: Sage.
- Gutierrez, L. (1987). <u>Toward a model of empowerment for social work practice</u>. Unpublished manuscript, University of Michigan.
- Halbert, T. L., Chambers, L. W., & Johnson, N. A. (1993). Population-based health promotion: A new agenda for public health nurses. <u>Canadian</u> Journal of Public Health, 84, 243-245.

- Illich, I. (1976). <u>Medical nemesis: The expropriation of health</u>. New York: Pantheon.
- Janz, W., & Becker, M. (1984, Spring). The Health Belief Model: A decade later. <u>Health Education Quarterly</u>, <u>11(a)</u>, 1-47.
- Johnson, K. (1995, July/August). Healthcare Forum Journal.
- Jones, J. H. (1993). <u>Bad blood: The Tuskegee syphilis experiment</u>. New York: Free Press.
- Kelly, M. P. (1989). Some problems in health promotion research. <u>Health</u> <u>Promotion</u>, <u>4</u>, 317-330.
- Kochanek, K. D., & Hudson, B. L. (1995, March 22). Advance report of final mortality statistics, 1992. <u>Monthly Vital Statistics Report</u>, <u>43</u>(6). (Supplement)
- Kong, B. W. (1989). Community programs to increase hypertension control. Journal of the National Medical Association, 81, 13-16.
- Kristal, A. R. (1990). Development and validation of a food use checklist for evaluation of community nutrition interventions. <u>American Journal of</u> <u>Public Health</u>, <u>80</u>, 1318-1322.
- Labonte, R., & Robertson, A. (1996, November). Delivering the goods, showing our stuff: The case for a constructivist paradigm for health promotion research and practice. <u>Health Education Quarterly</u>, <u>4</u>, 431-447.
- Lefebvre, R. C., & Flora, J. A. (1988). Social marketing and public health interventions. <u>Health Education Quarterly</u>, <u>15</u>, 299-315.
- Luepker, R. V., Jacobs, D., Gillum, R. F., Folsom, A. F., Princes, R. J., & Blackburn, H. (1985). Population risk of cardiovascular disease: The Minnesota Heart Survey. <u>J Chronic Dis.</u>, <u>38</u>, 671-682.
- Luepker, R. V., Murray, D. M., Jacobs, D. R., et al. (1994). Community education for cardiovascular disease prevention risk factor changes in the Minnesota Heart Health Program. <u>Am J Public Health</u>, <u>84</u>, 1383-1393.
- Marín, G. et al. (1995, August). A research agenda for health education among underserved populations. <u>Health Education Quarterly</u>, 22(3).

- Marshall, C., & Rossman, G. B. (1995). <u>Designing qualitative research</u> (2nd ed.). London: Sage.
- Mazuri, A. A. (1986). The Africans: A triple heritage. Boston: Little, Brown.
- McGraw, S. A., McKinlay, L., McClements, T. M., Lasater, A., & Carleton, R. A. (1989). Methods in program evaluation: The process evaluation of the Pawtucket Heart Program. <u>Evaluation Review</u>, <u>13</u>, 459-483.
- Merry, M. D. (1994). Shared leadership in health care organizations. <u>Top Health</u> <u>Care Financing</u>, 20, 26-38.
- Michigan Department of Community Health. (1995). Health risk behaviors among African Americans in Michigan. <u>Center for Health Promotion and</u> <u>Chronic Disease Prevention</u>, July 1996. Lansing: Author.

- Michigan Department of Community Health. (1996). <u>Michigan critical health</u> <u>indicators</u>. Lansing: Author.
- Michigan Department of Public Health. (1993a). <u>Health risk behaviors</u>. Lansing: Author.
- Michigan Department of Public Health. (1993b). <u>Healthy Michigan 2000</u>. Lansing: Author.
- Michigan Department of Public Health. (1994). <u>Health risk behaviors 1992</u>. Lansing: Author.
- Michigan Task Force on Improving African American Male Health, Michigan Department of Public Health. (1995). <u>Improving the health of African American males in Michigan</u>. Lansing: Author.
- Mikhail, B. (1981, October). The health belief model: A review and critical evaluation of the model, research, and practice. <u>Advances in Nursing Science</u>.
- Milburn, K. (1996). The importance of lay theorising for health promotion research and practice. <u>Health Promotion International</u>, <u>11</u>, 41-46.
- Milburn, K., Fraer, E., Secker, J., & Pavis, S. (1995). Combining methods in health promotion research: Some considerations about appropriate use. <u>Health Education Journal</u>, <u>54</u>, 347-356.

- Mittlemark, M. B., Hunt, M. K., Health, G. W., & Schmid, T. L. (1993). Realistic outcomes: Lessons from community-based research and demonstration programs for the prevention of cardiovascular diseases. <u>J Public Health</u> <u>Policy</u>, <u>14</u>, 437-462.
- Mittlemark, M. B., Luepker, R. V., Jacobs, D. R., Bracht, N. F., Carlaw, R. W., Crow, R. S., Finnegan, J., Grim, R. H., Jeffery, R. W., Kline, F. G., Mullis, R. M., Murray, D. M., Pechacek, T. F., Pirie, P. L., & Blackburn, H. (1986). Communitywide prevention of cardiovascular disease: Education strategies of the Minnesota Heart Health Program. <u>Preventive Medicine</u>, <u>15</u>, 1-17.
- Murphy, B., Ruth, D., & Hodge, M. M. The use of qualitative research in the development of the "heartwise" program for general practitioners. <u>Medical</u> <u>Journal of Australia</u>, <u>158</u>, 626-628.
- Murray, D. M., Hannan, P. J., Jacobs, D. R., et al. (1994). Assessing intervention effects in the Minnesota Heart Health Program. <u>Am J</u> <u>Epidemiol</u>, <u>139</u>, 91-103.
- Neighbors, H. W., Elliott, K. A., & Gant, L. M. (1988). Self-help and black Americans: A strategy for empowerment, pp. 189-217.
- Noller, K. L. (1996). Screening for vaginal cancer. <u>New England Journal of</u> <u>Medicine</u>, <u>335</u>, 1599-1600.
- O'Brien, K. (1993). Using focus groups to develop health surveys: An example from research on social relationships and AIDS-preventive behavior. <u>Health Education Quarterly</u>, 20, 361-372.
- OXCHECK Study Group. (1994). Effectiveness of health checks conducted by nurses in primary care: Results of the OXCHECK study after one year. <u>BMJ</u>, <u>308</u>, 308-312.
- Pearson, T. A., Jenkins, G. M., & Thomas, J. (1991). Prevention of coronary heart disease in black adults. <u>Cardiovascular Clinics</u>, <u>21</u>, 263-276.
- Randall, O. S., Retta, T. M., Order, O. E., & Courtney, B. L. (1996). Can risk factor modification reduce cardiovascular mortality in minority populations? <u>Preventive Medicine</u>, <u>25</u>, 61-62.
- Rimer, B. K. (1994). Interventions to increase breast screening: Lifespan and ethnicity issues. <u>Cancer Supplement</u>, <u>74</u>, 323-328.

- Rissel, C., Finnegan, J., & Bracht, N. (1995). Evaluating quality and sustainability: Issues and insights from the Minnesota Heart Health Program. <u>Health Promotion International</u>, <u>10</u>, 199-206.
- Rosenstock, I. J. (1974). Historical origins of the Health Belief Model. <u>Health</u> <u>Education Monographs</u>, 2, 328.
- Rothman, J. (1970). Three models of community organization practice. In <u>Strategies of community organization: A book of readings</u> (pp. 20-36).
- Saunders, E. (1991). <u>Cardiovascular diseases in blacks</u>. Philadelphia, PA: F. A. Davis.
- Schwartz, H. D. (1994). <u>Dominant issues in medical sociology</u>. New York: McGraw-Hill.
- Schwartz, R., Smith, C., Spers, M. A., Dusenbury, L. J., Bright, F., Hedlund, S., Wheeler, F., & Schmid, T. L. (1993). Capacity building and resource needs of state health agencies to implement community-based cardiovascular disease programs. <u>J Public Health Policy</u>, <u>14</u>, 480-494.
- Shea, S. (1992). Community health, community risk, community action. <u>Am J</u> <u>Public Health, 82,</u> 785-787.
- State and County Health Statistics Profiles. (1991). Profiles of Ingham County, Genesee County, and Kent County, pp. 37, 45, 53.
- Steckler, A., Allegrante, J. P., Altman, D., et al. (1995). Health education intervention strategies: Recommendations for future research. <u>Health</u> <u>Education Quarterly</u>, 22, 307-328.
- Tang, K. C., Sullivan, S., & Fisher, J. (1995). A review of five existing guidelines for planning focus groups in GP research. <u>Australian Family Physician</u>, 24, 184-186.
- Trorrer, G. (1994). Critical health diagnosis for many blacks. <u>The Crisis</u>, <u>101</u>, 8.
- Tsouros, A. D. (1995). The WHO Healthy Cities Project: State of the art and future plans. <u>Health Promotion International</u>, <u>10</u>, 133-141.
- Weinstein, N. (1982). Unrealistic optimism about susceptibility to health problems. Journal of Behavior Medicine, 5.

Wiener, R. L., Wiley, D., Huelsman, T., & Hilgeman, A. (1994). Needs assessment: Combining qualitative interviews and concept mapping methodology. <u>Evaluation Review</u>, <u>18</u>, 227-240.

Wiersma, W. (1985). Research methods in education. Boston: Allyn & Bacon.

- Wilcox, K. R. (1995). Heart disease in Michigan black males.
- Wilkinson, D. Y. (1992). Indigenous community health workers in the 1960s and beyond. In R. Braithwaite & S. Taylor (Eds.), <u>Health Issues in the Black</u> <u>Community</u>. San Francisco: Jossey-Bass.
- Williams, G. A., Abbott, R., & Taylor, D. K. (1997, February). Using focus group methodology to develop breast cancer screening programs that recruit African American women. Journal of Community Health, 22(1).
- Williams, S., & McIntosh, J. (1996). Problems in implementing evidence-based health promotion material in general practice. <u>Health Education Journal</u>, <u>55</u>, 24-30.
- Winkleby, M. A., Flora, J. A., & Kraemer, H. C. (1994). Predictors of change during a community-based heart disease intervention program. <u>Am J</u> <u>Public Health, 84</u>, 767-772.

