Applicability of Healthy Communities in Virginia

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(ABSTRACT)

Healthy Cities/Communities (HC) is an experiment that addresses health from a non-medical perspective. It focuses on health as a phenomenon that is not amenable to conventional scientific investigation or discussion. HC emphasizes values of community, aestheticism, relativism and private behavior.

Review of available material establishes that an existing understanding of the concepts underlying HC movement contributes to its successful application. No research appears on the attitudes of health care providers and public health officials on general beliefs about health. The importance of gauging the perceptions of these two sectors could determine the potential success of collaborative efforts for improving public health. Studies of health-related professionals, their perceptions for community health promotion and role of the administrative process, among others, will establish this potential in accordance with what the literature demonstrates. This study compares the attitudes and preferences of public health professionals and members of the hospital service category in Virginia concerning Healthy Communities concepts. The study concludes that the two sectors surveyed have similar attitudes and preferences on the issues that promote community health, thus showing potential for successful collaboration. Future research can explore the attitudes of other sectors, such as educational institutions, and their potential for engaging in collaborative efforts to create healthier communities.

Keywords: Community-Based Health, Healthy Cities/Communities

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Chapter 1

HEALTHY COMMUNITIES: AN INTRODUCTION TO COMMUNITY-BASED HEALTH CARE

In the last two decades, health and health care advocates have increasingly come to favor disease prevention and health promotion as alternatives to the biomedical model. Reasons for this include the failure of biomedicine to deal with chronic diseases, the increasing focus of biomedicine on treatment rather than prevention, which has proved to be less cost effective; the iatrogenic effects of biomedicine; and the impersonal image of biomedicine (Gesler and Gordon, 1998). Biomedicine, focusing mainly on treatment of illness individually, has only indirectly addressed promotion of good health in populations. Although conventional medical services have played a role in producing health gain, other factors outside the health service have been significant in creating conditions conducive to health improvement (Curtis, 1996). This led to the emergence of a pluralistic approach to health that called for social change and new (or revisited) ideas about health, disease, and appropriate treatment. Healthcare is no longer considered as a service delivery mechanism, but as disease prevention and health promotion that takes into account external factors such as the environment, society, and economy.

The inequalities in health and health care common in both industrialized and developing countries have prompted a new public health movement, a change in perspective on health and health care over the last couple of decades. The "modern" public health movement proposes a chain of causation linking social and economic processes with disease causation. Scott-Samuel (1989) argues that public health should intervene at earlier stages of the chain of causation to act on conditions that produce illness and prevent its occurrence. Such actions include health consideration in economic policy, employment, working conditions, and environmental health policy such as housing and sanitation regulations. The new public health movement introduces the concept that population health is a function of the interaction of three factors (Fig. 1.1):

1. Habitat: environmental aspects of living conditions such as housing, workplaces, and communication systems. Habitat also includes physical conditions i.e. flora and fauna, topography, climate, and services such as economic and political structures.

2. Population: factors that determine health status such as age, gender, and genetic predisposition.

3. Behavior: beliefs and behaviors that are constrained by social and economic factors in a community.

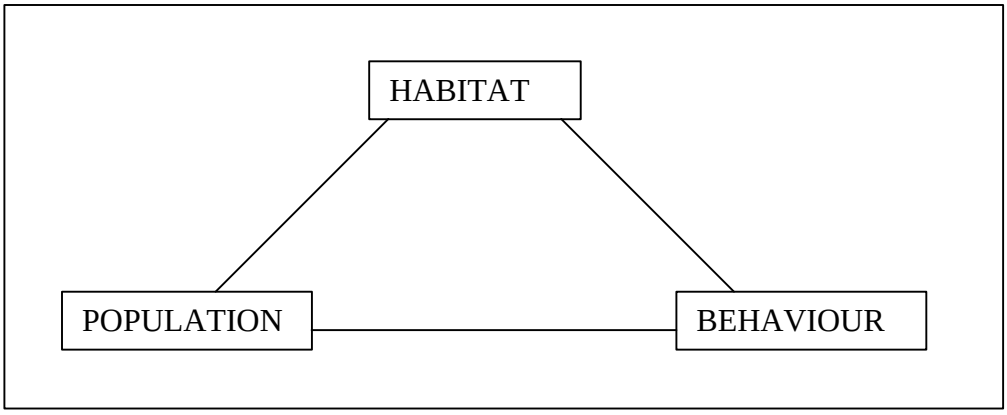

Fig. 1.1. The triangle of human disease ecology.
Source: Meade et al, 1988.

The human disease ecology model emphasizes understanding the interactions of factors that affect agents producing diseases as well as the people affected. This understanding can lead to community efforts to tackle problems that give rise to illness. The model encourages a broader perspective on health and development than evident in the traditional biomedical model of disease.

Multi-sectoral cooperation also emerges as an important strategy in the new approach to public health. In the late 1980s, Scott-Samuel demonstrated how bringing together key people from different sectors, beyond the medical and paramedical professions, underlines the themes that address public health in Britain. The resulting organization, Public Health Alliance, addressed issues such as income, housing, food, transportation, public services, and education among a host of functions (Curtis, 1996). Such collaborations could include a wide range of partners, most important being health authorities and other municipal local governments, and authorities responsible for non-medical functions, e.g. social and welfare organizations (Fig. 1.2).

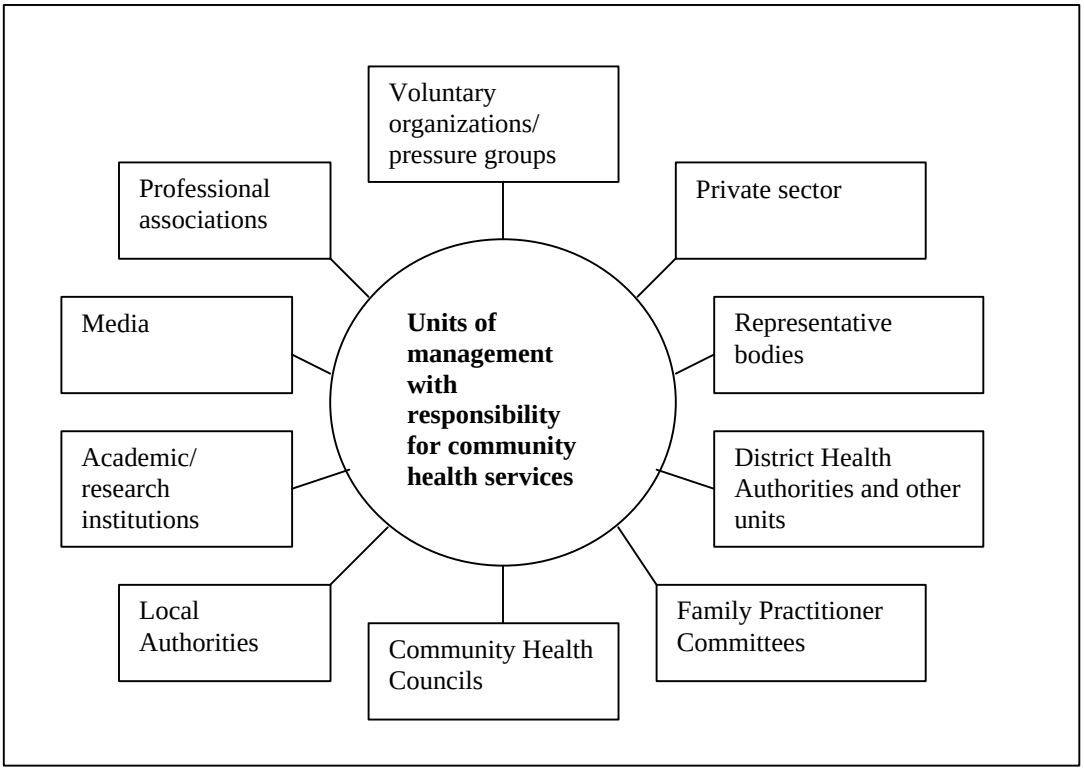

Fig. 1.2. An example of a network of agencies engaged in the provision and development of community health.
Source: Ottewill, 1990.

It is important to realize that collaborations, such as the ones in Fig. 1.2, are more feasible if members of different health profession sectors have *undergone a change in attitudes* towards health that conforms to the concepts of community-based health care. In other words, for effective alliances and partnerships to form and to address community health, health-related professionals should have an appreciation of modern public health principles and its comprehensive frame, as opposed to the traditional biomedical approach to health and health care.

1.1 Research Statement and Significance

The first challenge in launching a Healthy Communities initiative is to identify and recruit partners (Rice, 1993). Literature reviewed in ensuing chapters shows that community-based health care requires partnerships and collaboration between different sectors in a community. For a community health program to penetrate a whole community, change must occur at several levels. Developing a constituency for change becomes critical when planning and implementing programs to address health from a community-based perspective. Different sectors have to "buy into" an initiative to develop a collaborative effort. Partnerships can develop and be sustained only if their members share the same or similar attitudes and approaches concerning the major issues they are addressing. Integrated community

programs, such as Healthy Communities projects, require a shift in perspective at all levels, individual, organizational and governmental (Fig. 1.3). Health professionals must intervene at these three levels to produce a significant change in the community. This change can only be brought about if health professionals themselves have attitudes consistent with Healthy Communities precepts.

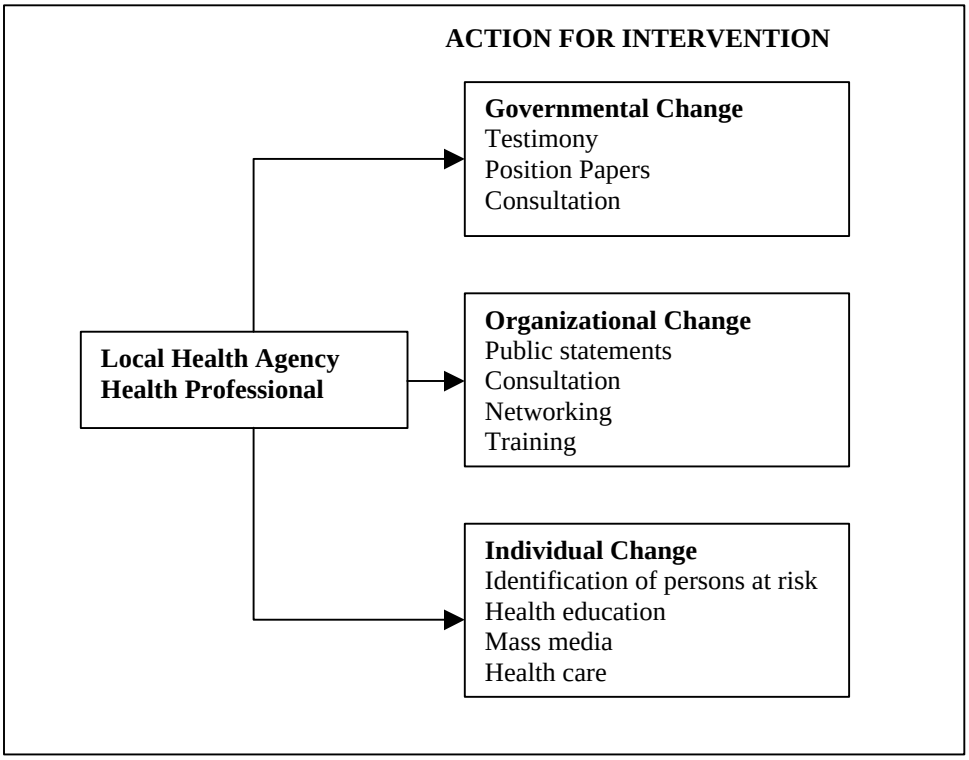

Fig. 1.3: Roles of Professionals in intervention action for community health

Source: Modified from Green, 1994.

The objective of this research is to compare and contrast the attitudes of individuals in two sectors of the health care community on Healthy Communities' foundational concepts. The two sectors from which individuals are selected are the public health and the hospital services. The significance of the basic research is to explore potential for the existence of the attitudinal foundations for Healthy Communities projects in Virginia among these two groups. The extent to which these individuals agree or disagree on key issues critical to a community health approach will influence the potential for finding common ground that could form a suitable environment for partnerships and combined initiatives.

The initial hypothesis is that public health professionals because they deal with community-based issues such as disease prevention campaigns, social aspects of health, and environmental health on a regular basis, are more receptive to Healthy Community precepts than are representatives from the hospital sector. Traditionally, hospital personnel deal with the clinical aspect of health, mainly treatment

and cure. Whether it is bedside nursing or surgery, the intervention that this sector applies is usually late in the natural history of disease, when little in the way of cure can be expected but much in the way of effort and cost can be expended (Green, 1994). Given this approach to health, members of this sector would expectedly advocate the biomedical paradigm more than the community-based approach (Roos, Black, Tate, and Carriere, 1995).

This study will test whether health professionals from both sectors possess different attitudes due to their specific professions. Having same/similar attitudes could increase the chance of collaboration and partnership in efforts to improve community health through programs such as Healthy Communities projects.

1.2 Organization of Thesis

To define the context of the study, I review the history of Healthy Communities movement, both internationally and within the United States to highlight the factors that addressed community health and their effectiveness. This review pinpoints the main concepts associated with HC movement and their importance to successful Healthy Community programs. The importance of collaboration in health initiatives is emphasized. The basic goal of the research in particular is to gauge the perceptions and thinking domains of two sectors in the health profession and identify whether a convergence of thought exists on the fundamental principles of HC.

The thesis is organized into eight chapters. After the introductory chapter, the second chapter introduces and develops the concepts associated with HC. In the third chapter, case studies of community-based health initiatives worldwide provide a context for the later discussion. In this chapter I also review community health in the United States and end by discussing some community-based health efforts in Virginia. The fourth chapter sets the research framework and methodology used in the research. Description and analysis of the research data are reviewed in chapter five. The thesis concludes with an interpretation of the research results and recommendations for future research.

Chapter 2

CONCEPTS OF HEALTHY COMMUNITIES

Health promotion and the advancement of well being are increasingly dominating the health agenda (Breslow, 1989). Community-based efforts that address these two issues are directed towards overcoming poor health, are focused on inequities in health care, are concerned with the overall imbalance of the human body and the environment become more focused through the Healthy Cities/Communities (HC) movement. "Healthy Cities/Communities" movement uses the principles articulated in 'Health for All by the Year 2000' as the basic issues to be addressed. This chapter reviews the inception of the HC movement, the principles upon which it is based, strategies for its implementation, and means and methods for its evaluation. It is divided into four sections:

- Section one summarizes the Global Strategy for Health for All by the Year 2000 and its underlying principles that formed the basis of HC.
- Section two discusses strategies for implementation of HC.
- Section three reviews evaluation and assessment of HC.
- Section four discusses some of the critiques raised against HC

2.1 Principles of HC as derived from Global Strategy for Health for All by the year 2000

> *"The strategy for Health for All aims to add life to years, add health to life and add years to life,"* (Tsouros, 1990).

2.1.1 Inception of Global Strategy for Health for All

In most countries of the world, health systems are poorly organized; health care is concentrated in large cities; and most resources are devoted to expensive and sophisticated technology affordable only to a small minority of the population. Furthermore, the lack of coordination between health care delivery systems and other social and economic sectors and deficient planning and management in health care results in inefficiency in the use of resources (WHO, 1981). These factors, among others, led to the development of the Global Strategy for Health for All by the World Health Assembly (WHA) in 1978 at Alma-Ata in the former Soviet Union.

The assembly decided that governments, assisted by the World Health Organization (WHO), rather than markets must assume responsibility for assuring the health of people by the year 2000. Health for

All emphasizes an equitable access to health care among populations (WHO, 1981). The objectives of the strategy are addressing causes of death and disease, nutritional status, water supply and sanitation, literacy, economic situation, organization and management of health care delivery systems, expenditures on health, and demographic trends.

2.1.2 Principles of Global Strategy for Health for All

The comprehensive approach to health articulated in the Global Strategy for Health for All emphasizes six principles: the availability of primary health care (PHC), health promotion, multi-sector cooperation, equity, community participation, and international cooperation as a key to attaining health for all (Fig. 2.1). PHC is "essential" health care based on practical, scientifically sound and socially acceptable methods and technology. Primary prevention as well as health promotion form the basis for an improved health policy in which illness is prevented before its onset (Milio, 1981). Health promotion refers to strengthening the reserves for and reducing the risks to health. Health promotion enables people to take control over and responsibility for their health as an important component of everyday life. It requires the close cooperation of sectors beyond the health services, thus reflecting the diversity of conditions that influence health (Breslow, 1989). The importance of multi-sector cooperation acknowledges the importance of all community sectors, whether it is education, economy, or environmental conditions, or health. Health for All stresses equity in health status as well as equitable access to health care. By providing a voice for all citizens, community participation is important to insure the sustainability of the movement as well as assuring that equity issues are addressed. Because the movement is global, WHA emphasized the importance of international cooperation for attaining a higher health status for populations all over the world.

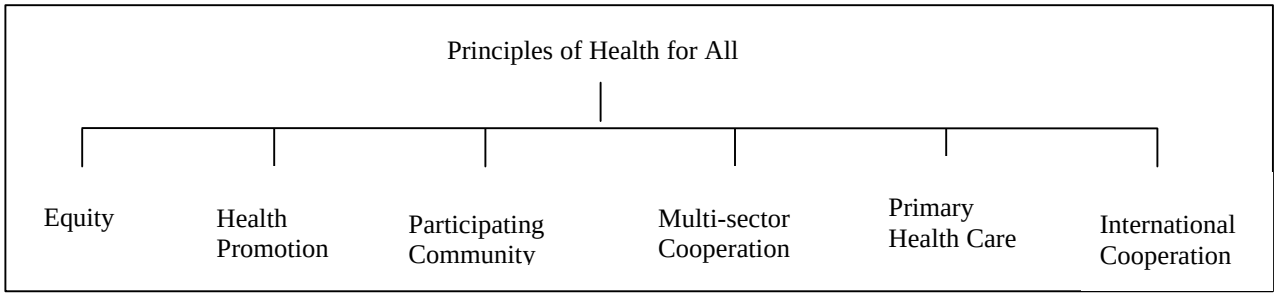

Fig. 2.1. **Summary of Principles of Health for All by the Year 2000**

Source: Modified from Tsouros, A.D. (1990)

Health for All set five goals to achieve by the year 2000:

1. Reduce inequality in the health status of people.
2. Promote individual and collective participation in the planning and implementation of public health care.
3. Insure the political commitment of the whole government to the attainment of health by all.
4. Sustain economic and social development to improve health.
5. Use the strategy of Health for All with its emphasis on social justice and equitable distribution of health resources as a policy agenda that could be applied for the other sectors (WHO, 1981).

Health for All formed the conceptual foundation for Healthy Cities/Communities. HC proposes these same concepts in action-oriented programs for targeting specific health issues. The following section illustrates this relationship and demonstrates its applicability through HC projects.

2.1.3 Inception of HC from Global Strategy for Health for All

The World Health Organization (WHO) initiated Healthy Cities/Communities (HC) movement to develop sound approaches for implementing Health for All principles. HC project was launched as a practical demonstration of how Health for All Strategy could be transformed into local programs (Petersen, 1996). The project began with a Healthy Cities Symposium in Lisbon, Portugal in April of 1986. Twenty-one European cities and seventeen countries were involved in the emerging idea. Why cities? It was estimated that by the year 2000 the majority of the world's population would live in cities or large towns (Ashton, 1992).

The concept of a "healthy city" is not entirely new. This comprehensive approach to public health actually dates back to the nineteenth century when growth of industrial cities presented challenges in health and health care. Edwin Chadwick started a movement that led to the development of Health of Towns Association in Exeter, England, 1844. Later, in 1909, the Canadian Federal Commission on Conservation established a public health advisory committee concerned with the “vital resources”, i.e. health and the prolongation of life (Hancock, 1993). In spite of these efforts by Chadwick and Booth in Britain in 1842 and 1892; and Griscomb and Shattuck in America in 1850, social and economic structures underlying health problems went un-addressed (Curtis, 1996). Work by reformers was typified by collective efforts towards local action to improve the health of the population generally. They did not necessarily advocate community-based perspectives on health that stressed health promotion and the importance of public health (Curtis, 1996).

Communities, in contrast, are the basis of the Healthy Cities model. A unique vision or idea of a preferable future of a Healthy City starts from the community and its people (Hancock, 1992). The

underlying concept that initiated HC was to encourage people to come together and create a new holistic approach to health and related issues by insuring public participation. The emphasis is on the promotion of enabling mechanisms for health promotion developed through public policy and increased public accountability so that health becomes a civic responsibility of the individual as well as public responsibility of the government (Flynn and Rider, 1992).

The emphasis on healthy public policy at the local level can be achieved through public policies that create environments for health through the strengthening of the community-to-personal action. Healthy Cities aims to break down the vertical structures and barriers and to obtain better horizontal integration for communal action. "Public health is what we, as a society, do collectively to assure the conditions in which people can be healthy," (Institute of Medicine, 1988).

The sorts of policy and action necessary to achieve real changes in public health extend well beyond the domain of biomedicine. Managerial reform, political, social, and bureaucratic action is needed to enable new styles of health-related work to be introduced (Curtis, 1996). Health making policies must focus not only on repairing health damage that people incur from workplace, home or community environments, but also on enhancing individuals' health-building activities. As affirmed by the World Health Assembly when launching Health for All by the year 2000, it is the responsibility of governments to establish environments that enable the attainment of a level of health for the total population. Governments can devise the most effective strategies for promoting health and for eliminating health damaging circumstances by focusing on the health effects tied to environmental circumstances, corporate practices and personal habits *induced by public policy* (Fig. 2.2). The key to a sound health-making policy is identifying the changes required to improve public health, as well as adopt strategies that will sway decisions by organizations and individuals in those new directions. This is accomplished by providing opportunities for individuals to make more health-making choices and to engage in health promoting activities. The objective is to empower individuals with the responsibility and resources necessary to improve their own health. Studies have shown that the provision of health-sustaining resources, such as housing, fuel, health care, transportation and community services by governments contribute to the health prospects of the population as a whole (Milio, 1981).

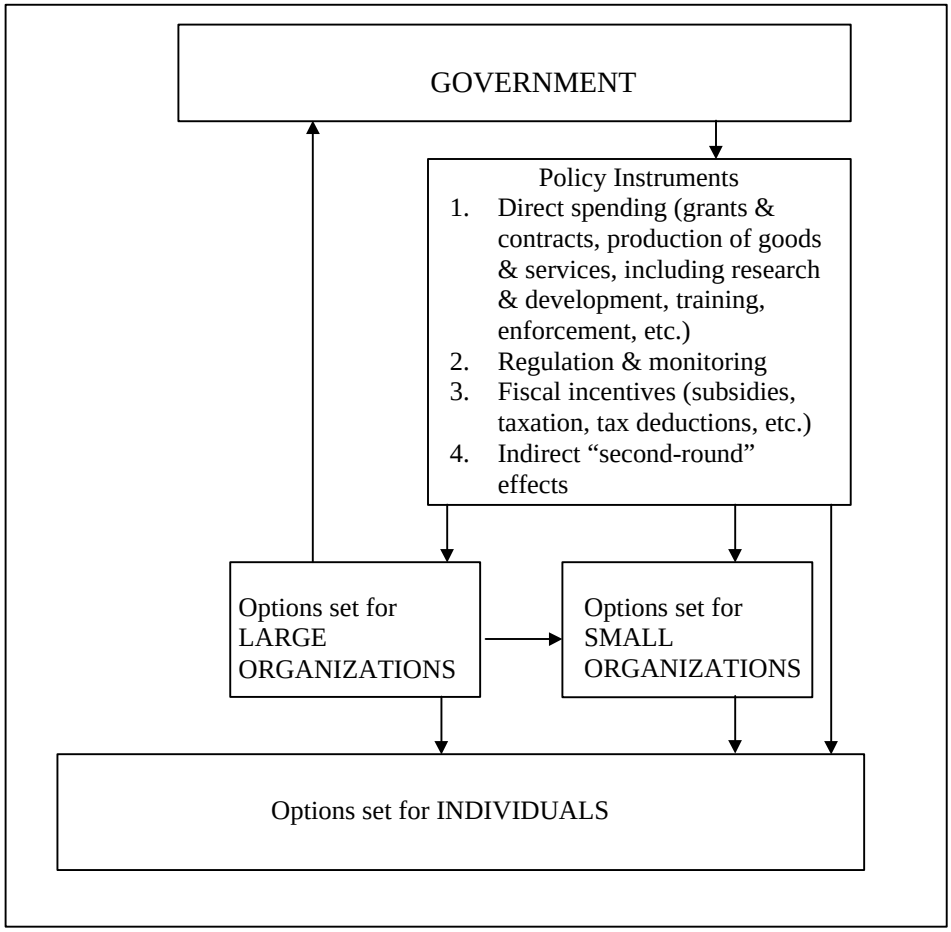

Figure 2.2. Effects of Public Policy on Organizations and individuals
Source: Milio, N. (1981)

An ideal vision of a Healthy City/Community consists of the following:

1. A clean, safe, high quality physical environment (including housing quality).
2. A stable ecosystem which is sustainable in the long term.
3. A strong, mutually supportive and non-exploitative community.
4. A high degree of public participation in and control over the decisions affecting one's life, health and well being.
5. The meeting of basic needs (food, water, shelter, income, safety, and work) for all the city's people.
6. Access to a wide variety of experiences and resources with the possibility of multiple contacts, interaction and communication.
7. A diverse, vital and innovative city economy.
8. Encouragement of connectedness with the past, with the cultural and biological heritage and with other groups and individuals.
9. A city form that is compatible with and enhances the above parameters and behaviors.
10. An optimum level of appropriate public health and sick care services accessible to all.
11. High health status (both high positive health and low disease status).

(Hancock & Duhl, 1986)

The central objective of Healthy Cities/Communities is the reduction of health inequalities as stated in Global Strategy for Health for All. Again, the principal agents for this are health promotion and prevention programs. Health promotion programs deal with issues such as hazard reduction (e.g. pollution control), provision of primary health care and encouraging changes in lifestyles toward more healthy practices (Flynn, 1992). Thus, the aim of HC is to bring together key players in cities, develop advocacy and coalition and build for change through intervention and legislation.

2.2 Strategies for Implementation of HC

Intersectoral collaboration is considered a critical element for implementation of HC. WHA recommends the establishment of health systems that combine interrelated components in housing, educational institutions, workplaces, communities, the health sector and other related sectors. Health for All proposes fostering intersectoral action by:

- Establishing national health councils with personalities representing political, economic, and social sectors as well as the whole population.
- Making arrangements between health sectors and others, e.g. nutrition, water supply and sanitation, housing, environmental protection, production and import of drugs and equipment, and mass media.
- Delegating responsibilities to communities to organize their primary health care.

Several factors can affect the successful implementation of HC projects. Since a HC project is a community-based effort, the community must have potential and capability for organization. The community must also be open to change from individualistic and competitive approaches to a pluralistic and collective mode. The size of a city can interfere with citizen participation and project visibility, i.e. public awareness that would support and sustain the initiative. Larger cities might have more difficulties in achieving public participation and project visibility than smaller cities. The same applies for intersectoral action in which smaller cities with intimate bureaucracies might prove more successful than larger cities. *Intersectoral action* refers to collaborative efforts that link communities, including private and voluntary organizations, with political authorities. Other factors influencing implementation of HC include economic differences, social and political cultures of cities and the differences in their jurisdictions and organization (Hancock, 1986).

WHO provides a handbook on how to develop a Healthy Cities project. The handbook emphasizes three steps:

1. Getting started: building a support group, *understanding the healthy city concept*, (emphasis mine) getting to know the city, finding finances, deciding the organizational structure, preparing a proposal, and getting approvals.
2. Getting organized: appointing a committee, doing an environmental scan, defining project work, setting up an office, planning a strategy, building capacity, and establishing accountability.
3. Taking action: increasing public awareness of health, advocating strategic planning by the city, mobilizing intersectoral action, encouraging community participation, promoting innovation for health, and securing healthy public policy (Hancock, 1993).

It is important to emphasize that unless the different sectors within a community, whether they are from the health profession or otherwise, have an appreciation for the underlying concepts of HC, they will not support it nor push for implementation. The critical issue here is that HC presents an overall change in attitude towards health from the traditional biomedical approach to health to a public health and community-based one. Health care professionals who have been used to centralized decision making and strongly medicalized interventions must adopt participatory approaches to decision making and prevention and health promotion for better health status. Having this attitude is the starting step for developing a HC project.

The three implementation steps are segmented into practical activities to ensure that intersectoral action and community involvement are sustained.

- Setting up a high-level executive group for collaboration between sectors.
- Setting up a technical group to monitor changes
- Carrying out "community diagnosis"
- Establishing links with educational institutions
- Reviewing potential for health promotion by all agencies
- Generating debate on health
- Adopting specific intervention and monitoring the results.

It is important to note that these seven activities are closely related to the three principles Health for All proposes for fostering intersectoral action. They provide a road map for increasing community involvement and collaboration between the various community sectors. Adopting these steps helps assure the attainment of the goals of HC using the implementation strategies (Fig. 2.3). Visibility for health (increasing community awareness on health issues that it is facing) is obtained by the “community diagnosis” proposed above. A high-level executive group will insure political commitment as well as intersectoral collaboration. Networking with various agencies, such as educational institutions is another tool for this collaboration that also fosters institutional change by introducing new stakeholders in addressing health. More public participation and intersectoral action would result in diverse attitudes and debates on health that would form the basis for innovative action.

GOALS OF HC	STRATEGIES FOR IMPLEMENTATION OF HC			
	Visibility for Health	Political Commitment	Institutional Change	Innovative Action for Health
Equity				
Community Action				
Supportive Environment				
Reorienting Health Services				
Healthy Public Policies				

Fig. 2.3. Goals and Implementation Strategies for HC
Source: Modified from Tsouros, A.D. (1990)

Public action also challenges governments to use their information gathering, translation, analyzing, and dissemination capabilities to design health making policy options (Milio, 1981). This consumer-led health advocacy should help in making health service-seeking accessible to individuals in community settings. One way of encouraging public action in HC is by decentralization. Four decentralization strategies are advocated:

1. De-concentration: handing over of some administrative authority to locally based offices (with no transfer of political authority).
2. Delegation: transfer of managerial responsibilities for defined functions to local level (indirect control by central authorities is maintained).
3. Devolution: creation or strengthening of sub-national levels independent of national level for a defined number of functions.
4. Privatization: transfer of functions to voluntary organizations or to private non-profit making enterprises under varying degrees of government regulation, often locally based.

An important advantage of decentralization is to maximize opportunities to public participation and community involvement. Other benefits include matching services to local needs, making use of local knowledge, fostering local linkages between sectors, and generation of commitment to implement decisions. On the other hand, disadvantages arise due to loss of equity between geographical areas and loss of accountability for use of any centrally provided funds (Curtis, 1996).

For two of HC goals, i.e. reorienting health services and healthy public policies, HC project cities were required to appoint a politically responsible person for the project (insuring political commitment), as well as indicate a commitment for developing a “Health for All” policy (Fig. 2.3). This commitment is

demonstrated through equity in environmental, social and health issues, as well as accountability for health throughout the city administration through regular reports on agreed sets of health and environmental indicators to city councils. Cities that participated in the project have to meet requirements that included the establishment of a full time office with staff and budget. The responsibilities of this office are innovation, dissemination, developing leadership, coordinating resources, and influencing international organizations (Tsouros, 1990).

2.3 Evaluation and Assessment of HC

Evaluation of programs is important as a means for understanding their progress and achievements as well as identifying failures (Davies and Kelly, 1993). An evaluation is especially useful to guide future decisions about the future shape and direction of a program (Pirie, 1998). The goal of evaluation is to produce useful data, to assess future program needs, and to modify a program to meet the needs. Because Healthy Communities involve complex interactions of different social sectors, monitoring and evaluatiing the entire social context is essential. Thus, the evaluation program must be more comprehensive than simply assessing an area's health services.

One way to evaluate the effectiveness of HC is to monitor comprehensively the health status of project areas, i.e. health measurements that include health environmental measures, behavioral efforts, and social welfare conditions as well as health status and health services. (Breslow, 1989). How can we measure the health of urban populations? Most health professionals use the term health status measurement to mean the measurement of disease or the sick role, or recovery therefrom; mainly applying the term in an activity directed towards patients. The main goal in evaluating Health Communities should be on assessing the success of the prevention of illness and the evaluating levels of disability once an illness has occurred (Milio, 1981). Health measurement should be directed to entire populations with attention to the prospects for a full and satisfying life.

Peter Flynn (1992) of the Liverpool City Council identifies two categories of indicators for assessing health status. The first category deals with medical issues and includes rates of premature mortality, permanently sick or disabled residents and low-birth-weight babies. The second category depicts deprivation and includes unemployment, car-ownership, non-owner occupiers, and over crowded households. Flynn shows a strong association between health and deprivation based on a study conducted in Liverpool in 1986. However, these standard indicators are negative since they measure only ill health or death and do not reflect the true health situation in cities. For example some cities might have more

elderly residents and might display larger rates for permanently sick people, while others might have a large number of young professionals who opt to share accommodation (thus showing over-crowdedness).

The indicators advocated by the WHO are infant mortality rates, life expectancy, birth weight, coverage by safe water supply, adult literacy rate, gross national product per capita, and public expenditure on health (WHO, 1981). Flynn proposes more positive indicators for measuring health, such as *balance and potential*. Balance refers to the biological, psychological and social states that allow an individual to function effectively. Potential implies the exploitation of an individual's health to reestablish it when lost or threatened by drawing from reserves for maintaining the equilibrium or balance (Breslow, 1989).

From these indicators progress towards the goals of HC, or effectiveness of HC, could be measured by the following factors:

1. Current health status of groups. Presently, the above-mentioned negative measures are the ones available that can allow an analysis of health inequalities within communities.
2. Health resources available to groups and individuals that influence their behavior and lifestyles, e.g. employment, income, housing, clean air and water, and also social and cultural values related to health issues.
3. Positive health behavior such as having a healthy diet, exercising and using preventive health services.
4. Overall balance between economic, demographic, social and environmental conditions in a city.
5. Public policy resulting in that state of health of individuals and groups and the conditions in the city (Flynn, 1992).

Health status measurement could also take different forms (other than estimating biologic reserve of individuals by administering physical or psychological tests), such as estimating social functioning e.g. one's ability to eat and bathe without assistance, and self-perception of health i.e. asking individuals whether they rank their health as excellent, good, fair, or poor (Breslow, 1989). These measurement approaches however, do not give a complete indication on the health of the overall population. Social functioning for example has been used mainly to evaluate medical care principally for older people. Self perception of health is a very subjective measure and could be affected by various factors such as past experiences or emotional stability. From a socio-medical perspective, measuring health status would be by placing individuals on a continuum of health with physical, mental, and social dimensions. This continuum extends from perfect harmony with one's environment and maximum potential for responding to adversities on the one hand, to extreme invalidism and no reserves, i.e. the pre-morbid state, at the other extreme.

Another method for assessing health status is through the use of sentinel health events. These are negative health states (diseases, disabilities, and deaths) that are avoidable given current medical and

public health knowledge and technology (Carr, Szapiro, Heisler, and Krasner, 1989). Examples of these events include deaths from hypertensive diseases, diabetes or medico-social problems like alcoholism. Occurrence of these events indicates failure in public health, medical care, and social and personal behavior. Reversing these failures would lead to lower incident rates and ultimately to better health of the population. Although these indicators are population-based and do point out the needs of communities, the actual measurement (based on hospital discharge data) does not actually cover all members of communities, thus ignoring problems of access (Carr et al., 1989).

Dr. Agis Tsouros, Healthy Cities project officer at the WHO Regional Office for Europe, believes that assessing progress of Healthy Cities/Communities is not by improved health status, but rather by assessing the change in the way people and city governments think about and address health. Making health a key social objective of the city, mobilizing political will and social partnership, and harnessing community energy are the evaluative factors that assess progress towards healthier communities (Tsouros, 1990). On the other hand, Janet Shirreffs of Arizona State University states that improvement in public health is through efforts designed to prevent disease and promote health, not through greater health expenditure and increased medical care (Shirreffs, 1982).

2.4 Critique on HC

Alan Petersen of Murdoch University, Australia, criticizes HC as a movement entrenched in the modernist belief that science, expertise, and technical-rational administrative decisions are proper solutions to social problems (Petersen, 1996). Starting with the major sponsor of HC (WHO), the underlying assumption behind the movement is reaching the general agreement on the nature of problems and on the validity of solving these problems through administrative decisions. Thus, professional experts have a key role in problem identification, setting goals and strategies, and developing evaluative instruments; without being closely scrutinized or questioned. Petersen goes on to criticize the somewhat fuzzy definitions that WHO provides on community involvement and public participation without exploring the practical and political implications of particular strategies for implementation of citizen action. However, it is important to note that much debate has arisen on the subject of what constitutes a community and how empowerment and mobilization can be achieved.

Other criticisms on Healthy Cities/Communities movement are its lack of a firm theoretical foundation, a research agenda, as well as being entrenched in bureaucracy (Davies and Kelly, 1993). The emphasis of HC on the role of local government could pose a threat to community empowerment,

leadership and participation, all depending on the local government in question. The most apparent flaw is the lack of means for assessing the impact of the movement on health and the ability to measure these impacts by *agreed upon indicators*. This is further complicated by the time factor since HC is a movement that has long-term effects and in the short-term phase any change would probably be imperceptible. However, the movement does promote the idea that health should be placed in the political agenda along with public involvement ultimately leading to increased social justice and community empowerment. HC also accumulated knowledge about strategies and structures that could promote health at the local levels.

2.5 Summary and Conclusion

The principle goal of Healthy Cities is to decrease inequalities in health. It purports to achieve this by focusing on primary care, health promotion and community empowerment. In HC conceptualization, health promotion emerged as a critique of practice not of theory. Since HC projects were adopted by community level activists, academic thinking and research did not have a significant impact on the concepts (Hancock, 1993). Thus, HC projects are geared more towards action than research. Possible research venues include identifying the important determinants of health, demonstrating how inequity is related to health inequalities, and establishing reliable, cheap and easy to apply methods of assessing health status and determinants at small area level (Hancock, 1993). Since a healthy city is one that is engaging in an ongoing process at multiple levels from the policy level down to the individual level for improving health and well-being, research in community empowerment would be a key to attaining healthy cities/communities.

One of the main goals of Healthy Cities is to build health into the decision-making processes of local governments, community organizations and businesses (place health in the political agenda). To incorporate health in this way, it will be essential to develop a broad range of strategies to address the broad social, environmental and economic determinants of health, and ultimately change corporate and community culture. The above discussion addresses the concept of reorienting health services towards health promotion, disease prevention, and community-based care.

An overview of both HC and Global Strategy for Health for All identifies community-based health care, one that involves the population in addressing health problems, accessibility and inequities, as the focus of these concepts. This is possible through collaborative efforts that include various sectors of the

community aiming to provide primary care, equitable access, increased knowledge and education, as well as increased public participation.

A critical factor for application of HC is acquiring an understanding of the basic concepts of the movement as they relate to community-based health care. To address community health through programs and health initiatives, it is essential that health professionals have attitudes conforming to HC's concepts. Emphasis on concepts, such as public participation and health promotion, would replace focus on treatment and increased spending on medical care facilities, as we move nearer to HC goals.

Chapter 3

CASE STUDIES OF COMMUNITY-BASED HEALTH INITIATIVES

When twenty-one European cities agreed on the concept of Healthy Cities (and Health for All 2000 before that), they did not consider other factors that could interfere with the applicability of the concepts in different parts of the world. Varying political systems, cultures, community structures and geographic locations could interfere in the applicability of HC projects and their outcomes. Developing countries for instance are undergoing an increasingly expanding population growth that is affecting the definition of communities (communities are growing within communities). Most of the efforts for health initiatives in developing countries were aimed to mobilize communities and address some of their more urgent problems, such as housing (Rice and Rasmusson, 1992).

This section demonstrates the application of community based health projects (specifically Healthy Cities/Communities) in various communities and cultures. I chose countries from different continents with various economic, physical, and social conditions to review the alternative methods of implementation of community health efforts.

3.1 Australia

In Australia, the Australian Community Health Association (ACHA) sponsored three pilot Healthy Cities' projects in the cities of Canberra (capital city),Noarlunga (in South Australia), and Illawara (in New South Wales) in May 1987. ACHA is a federally funded non-governmental organization that lobbies for community health. The sponsors meant to choose differing environments for piloting the project to provide models for the different cities in the country (Kaplan, 1992). The criteria that the pilot project adapted were in two main categories:

1. Getting political commitment through the formation of a high-level intersectoral management committee with members from governmental and non-governmental agencies, representatives of local organizations as well as interested individuals.
2. Targeting disadvantaged communities by all means possible such as promoting social health and establishing strong contacts between pilot projects and the media for announcing the project for communities in similar plights.

The main sources for funding for the projects were from the area health services and other organizations. The main activities that the three projects initiated included the cleaning up of Lake

Illawara, resolving the conflict over clean water in Noarlunga, and including new public health strategies on the political agenda in Canberra.

Success of the project was indicated by the numbers of organizations and institutions at the local level that took a much more active role in promoting public health than before implementation of the project. One indicator of this measure was a Public Health Charter that was developed by the project in Illawara and that was signed by thirty different organizations that participated in the Steering Committee of the Healthy Cities Project. The other success indicator was the development of an intersectoral management structure between these organizations and the local government that insured the neutrality of the project.

3.2 Sheffield, United Kingdom

Healthy Sheffield 2000 was initiated in 1986 as a local interpretation of the principles of Health for All. Sheffield is an industrial city with a population of 530,000 and a high unemployment rate. Reports show that patterns of ill health coincide with the areas of deprivation (Thoms, 1992). Sheffield has a history of health initiatives such as the clean air developments in 1960, city-wide efforts for prevention of cot deaths, and the existence of a well-developed joint planning structure between the health authority and the local authorities. This structure is known as the Joint Consultative Committee (JCC). It was to this committee that the intersectoral planning team (Sheffield 2000 Planning Team) that formed as a result of the Healthy Cities project reported. The team also reported to representatives of a number of organizations and departments (table 3.1). The organizational structure of the team consisted of a lead officer who coordinated between authorities, and a small joint steering group that determined and reviewed programs of work. A project subcommittee oversaw the joint operational programs.

The key aims of Healthy Cities Sheffield were:

1. Establish collaboration and coalition between individuals and organizations.
2. Apply the principles of Health for All to the Sheffield area.
3. Develop a local health strategy for Sheffield and insure that it is locally owned.

In 1987 Healthy Sheffield 2000 Planning Team launched a set of targets for equity in health, and distributed it across the city using local, regional and national news coverage. In 1988 the team secured 10,000 sterling pounds after systematic identification of funding resources.

Table 3.1. Organizations and departments represented on the Healthy Sheffield 2000 Planning Team

1986	1988	1990
THE HEALTH SERVICE Health Authority HQ Family Practitioner Committee	(also) Community Services Unit Management Health Education	(also) Hospital Unit Management
LOCAL AUTHORITY Central Policy Unit Health and Consumer Services (Environmental Health)	(also) Housing, Education Social Services, Publicity, and Recreation	(also) Department of Economic Development
VOLUNTARY Council for Voluntary Services	(also) Council for Racial Equality Community Health Council	
		(also) ACADEMIC City Polytechnic Business School
		(also) COMMERCE & INDUSTRY World Student Games Chamber of Commerce, Sheffield Partnerships

Source: Thoms, G. (1992)

From the continuous debate generated by individuals and organizations on the aims of Healthy Cities Sheffield, an approach developed to enable city organizations to optimize the health impact of their policies and activities. This was through practical planning tools developed through a strategic framework for public health. Healthy Sheffield 2000 also established a number of joint operational health programs such as the Joint Food Program, Joint Smoking Program and the Disease Prevention Program.

The main drawbacks of the project was not knowing whether to focus at operation programs which would be vulnerable to changes in organizational priorities, or on the strategic level for developing a unified plan for Health for All.

3.3 Toronto, Canada

Toronto, the capital of Ontario, is Canada's largest city and its economic and communications capital. It has a culturally diverse population of 3.5 million. It has traditionally been known as a "liveable city" with a good transit system, a vibrant downtown and low crime rates. However, it suffers from shortage of affordable housing and poor environmental conditions as a result of over-development (Hancock, 1992).

In 1988 a national Healthy Communities in Canada project was established in Toronto under the supervision of the Canadian Institute of Planners. The project targeted the inner city urban area that has a population of 600,000. Funding and sponsorship was from Health and Welfare Canada, the Federation of Canadian Municipalities and the Canadian Public Health Association. The overall strategy of the project included reduction of inequities in health opportunities, creation of physical and social environments supportive of health, and advocating for a community-based health services system. The project proved successful in stimulating a number of provincial projects with a resulting number of 200 cities, towns and villages involved in the Canadian Healthy Communities network (Hancock, 1993). The main features of the project were the provision of advice, consultation, training and development support to interested municipalities. This was possible through the establishment of a multi-departmental work group (Healthy City Office) that was involved with community consultation, information dissemination and collection, and research and analysis. The project emphasized the monitoring and evaluation of the process, from which a number of publications emerged.

Healthy Communities in Canada does not display a clear community involvement process or a defined intersectoral structure. The reason for this is probably the fact that the project was funded and sponsored by the governmental sector in a top-down approach. The Healthy City Office that did most of the work consisted of public officials who had no political accountability to the public. The lack of an intersectoral structure and the little community involvement in the project defeated the goals of Healthy Cities to some extent.

3.4 Barcelona, Spain

Barcelona adopted a Healthy Cities project in June 1986. The city has two health agencies, Municipal Health Institute (MHI) and Barcelona Municipal Laboratory, which in spite of being in existence for one hundred years were not active in the public health area until the late 70's, the post Franco era (Costa, 1992). The main elements of the project included the creation of a health promotion division to introduce health in the political agenda, encouraging cultural changes in health-related attitudes, adapting health care services to the needs of the population and organizing a Catalan Health Service. The framework that the project used for implementation was the improvement of management effectiveness, concern for the quality of services, and promotion of citizen participation in health issues.

Introducing health in the political agenda led to the development of interdepartmental planning as demonstrated in the example of "Health and Sport for All" between the Health and Sport Departments.

Environmental issues were also addressed in fuel-burning practices in which project officials made agreements with saving banks for low interest loans to industry and individuals to improve their fuel-burning facilities.

For cultural changes in attitudes towards health, the Healthy Cities project organized campaigns to spread new attitudes towards health promotion e.g. the Occupational Health Center prepared programs to encourage employees to quit smoking, offered training for risk control, and reduction of causes and effects of stress. *Adapting health care services* to population needs was through the creation of a health information system, the introduction of health promotion into primary care services, and the development of self-help and self-care activities.

The government of Catalonia has accepted recommendations from project officials for the establishment of *an integrated Catalan Health Service*. Among the responsibilities of this facility is the environment, public health services including two general hospitals, a psychiatric center, a geriatric center, six family planning centers, and two primary centers (Costa, 1992).

The Barcelona Healthy Cities Project has initiated new horizontal programs that coordinate public health with social services, educational services, youth services and sports services, as well as neighborhood associations and voluntary groups. It also led to political and administrative coordination between the various departments and city municipalities. Using the targets of "Health for All" as a starting point, the Healthy Cities project commission succeeded in introducing plans for a healthier city. However, the project demonstrates an interdepartmental cooperation for public health more than intersectoral collaboration. The structure of the teams promoting health programs was mainly professional and governmental.

3.5 HC in Development (low-income countries)

Rochinha Project, Rio de Janeiro, Brazil: Community action for environmental health projects, e.g. rubbish collection, rebuilding of sewage disposal system. The project also addressed educational issues, such as establishing kindergartens, teacher training, renovating school buildings. There was a strong element of community involvement in voluntary efforts with local government officials (Curtis, 1996).

In the slums of Karachi, Pakistan, the Baldi project was designed after the Rochinha model where women coordinated action on sanitation by constructing soak-pit latrines. In Tegicugalpa, Honduras, a group of local women petitioned for construction of sand-pipes in their neighborhood and organized

supervision of the water supply and maintenance of the sites. In the Popular Unity Cooperative in El Puyo, Ecuador, local people set up a low-income housing construction project which later developed into a small industry producing building materials (Curtis, 1996).

3.6 Community-based Health Initiatives in the United States

Health policy in the United States of America is primarily limited to programs for health service delivery to the population. Currently, public health is in a state of disarray not only because it varies from state to state but also because of the lack of coordination between public health professionals, medical professionals and policy makers (Flynn, 1997). Health care is dependent on capital-intensive technology for dealing with health problems, leading to more inequities for lower-income groups (Milio, 1981). In spite of this, some national initiatives have been taken that have emphasized a national concern for community health and have opened avenues for community decision-making. The first two parts of this section review public health initiatives that addressed public health nation-wide while maintaining a community-based focus. The last part explores various public health efforts in the state of Virginia.

3.6.1 Healthy People 2000: National Health Promotion and Disease Prevention Objectives

Healthy People 2000 Objectives were a result of interdepartmental efforts that included the departments of Agriculture, Defense, Education, Interior, Labor, Transportation, and the Environmental Protection Agency. The emerging result was a product of a national effort involving professionals, citizens, private organizations, and public agencies. Public participation was through hearings conducted by the Public Health Service, Institute of Medicine, and the National Academy of Sciences. The final report was produced after extensive public review and comment (U.S. Department of Health and Human Services, 1991).

The report addressed three issues:

1. Increasing personal responsibility for attaining a healthy status
2. Targeting vulnerable populations for promoting responsible behavior conducive to good health
3. Increasing resources (human and financial) by health promotion and disease prevention

The underlying concept of Healthy People 2000 is that science has brought to our attention that we have the ability to control many of the events that form our health status. Through healthy lifestyles and practice there is potential to prevent unnecessary disease and disability and to achieve a better quality of life. The goals of the report were to reduce preventable death and disability, enhance quality of life, and

reduce disparities in health status within the society. Healthy People 2000 aims not only to save lives, but also to reduce unnecessary suffering, illness, and disability through a combination of scientific knowledge, professional skill, individual commitment, community support, and political will to prevent premature deaths and disability. Preserving a physical environment supportive of human life, promoting family and community support, and attaining a maximum level of functioning were also addressed in Healthy People 2000 (U.S. Department of Health and Human Services, 1991).

For attaining the objectives of Healthy People 2000 twenty-two priority areas were recognized. These areas were grouped in three broad categories of health promotion, health protection, and preventive services. Health promotion deals with individual lifestyles and choices, whereas health protection has a general community wide focus and deals with environmental or regulatory measures that provide protection for large population groups. Preventive services deal mainly with intervention for individuals in clinical settings such as counseling, screening, immunization…. etc. (U.S. Department of Health and Human Services, 1991).

Translating these national objectives into achievable community health targets required:

- Readily measurable sets of health status and local press objectives
- Availability of strategies to achieve these objectives involving public, private, and voluntary sectors of the community
- A coordinating process to help ensure that the community can work together. (American Public Health Association, 1991)

There were also other programs that did not address community health directly but helped communities in planning and assessing their health needs and statuses. These programs were marked with collaboration of different sectors as well as community involvement. They included the Planned Approach to Community Health (PATCH) and the Assessment Protocol for Excellence in Public Health (APEX/PH). PATCH aims to help communities plan for health promotion and implement and evaluate health education programs. The driving need for PATCH is reduction of risks for leading causes of mortality, injury and disability (Flynn, 1992). State Health Departments and Centers for Disease Control (CDC) provided technical assistance for the program. A program coordinator, in conjunction with a core group, provided health education at a local health agency as well as administrative coordination and resource identification. Another integral body to the program was the community group, which consisted of citizens, political officials and representatives of private companies. This group helped in developing program objectives and implementing program activities. The community group consisted of five persons while the core group consisted of three persons who had a long commitment to the program.

APEX/PH is an assessment program that guides communities in their efforts to meet community health needs. Local health departments used a manual to assess the health status of the community, the

capabilities of their organizations and the involvement of the community in seeking public health objectives (Flynn, 1992). The National Association of County Health Officials, the American Public Health Association, the Association of Schools of Public Health, CDC and the United States Conference of Local Health Officers provided support for APEX/PH. APEX as a program meant to assess community health status and community participation in public health policy development.

3.7 Case studies of Healthy Communities in the United States.

3.7.1 Indiana

Health status indicators show that Indiana has a poor health status compared to the rest of the United State. The education level, income and living standards in Indiana are below the national average. The health system in Indiana suffers from decentralization and fragmentation of responsibility from federal, state and local governments. There is no fiscal support for the system so that most of it is market-driven and 95 percent of health care money goes to highly technical medical care (Rider and Flynn, 1992).

Given these conditions, the main goal of Healthy Cities Indiana was to build viable community-based leaderships for promoting public policies. Community leadership development was through emphasizing its ability to address its community-wide problems, developing its capacity for action and obtaining its own resources by establishing connections with external resources. The objective for this was to give health a visible position in the political agenda that requires policy-makers to consider the health effects of all their decisions. Focus was on hard to reach populations such as the poor, homeless and elderly groups. Funding for the project was from the Kellogg Foundation and technical and administrative assistance was from Indiana University School of Nursing and the Indiana Public Health Association (Flynn, 1997).

After selection of participating cities, based on certain criteria such as existence of population at risk and demonstrated community support for participation, a Healthy Cities Committee selection took place. Again criteria such as interest in and capacity for participation were used in this stage. Committee members represented several categories that define public health (in its post-modernistic sense) e.g. arts and culture, education, employment, parks and recreation as well as dentistry and health care utilities and energy. Support from mayors of the cities was a key to the effective functioning of the committee (in some cities, the mayor was a member of the committee). In all the participating cities public health officials were full committee members (Rider & Flynn, 1992).

Committee members were able to develop their leadership skills through annual workshops that taught them how to conduct and analyze community surveys, utilize data, and meeting skills as well as the policy process. Some consultants who had previous experience with Healthy Cities projects conducted some of these workshops. Their services were funded by the project. Committee members formed an advisory board in the second year of the project to guide the development of further workshop content.

For assessment of the project, committee members analyzed data about their city (e.g. employment statistics, educational achievement, infant mortality rates…etc.) on a regular basis to recognize any trends, especially in comparison with averages for Indiana and the USA. Assessments from youth and children were obtained through projects like 'Vision of a Healthy City,' a citywide poster competition. The project addressed populations at risk by conducting surveys in homeless shelters, senior citizen centers, and juvenile detention centers.

The above assessments and surveys helped in identifying existing health problems. Project staff provided assistance with reviewing existing health programs and suggesting potential solutions for existing health problems.

3.7.2 California

Although California ranks as the sixth largest economy in the world, it displays a large disparity in health equity. The reason for this is its diversity, since one-third of the total US immigrant population settles in the state (Hafey, Twiss & Folkers, 1992). Immigrant populations tend to be poor and cultural and linguistic barriers often restrict them from attaining social or economic gains.

In spite of these complications, California has a recognized history in leading health initiatives such as cancer control and AIDS education (Hafey et al., 1992). Public Health research centers in the state (e.g. University of California, Berkeley and Los Angeles) have established resources that can provide technical assistance. The other factor that distinguishes California as a potential site for a Healthy Cities project is its tradition of community participation in solving local problems. Groups like the "Green Movement," Mothers Against Drunk Driving and Americans for Nonsmokers' Rights have established their rights to speak out and demand change.

The main goal of the California Healthy Cities Project is to reduce inequities in health status between population groups in cities. Unlike the project in Indiana, this project focuses on the official city government as a site for implementation of the concepts of Healthy Cities. Objectives of the project were

training, technical assistance and brokers' assistance for participating cities. Information dissemination was through a newsletter, a computerized database of Healthy Cities strategies, and conference opportunities. All the above were part of the services that the project supplied for participant cities.

The most important criteria in city selection was commitment of the city to the project as demonstrated by elected officials, administration, and community groups (Hafey et al., 1992). Selected cities had diverse ways of implementing the project (Table 5.1).

Table 5.1: California Healthy Cities Project.

Californian City	Projects implemented under Healthy Cities
City of Arcata	Building a community center for physical and social activities
City of Bell	Expand programs for recreation facilities development, elimination of blight and vandalism
City of Durate	A cost-free bilingual directory identifying diverse health and wellness resources in the community
City of Long Beach	The Long Beach AIDS Project
City of Palm Desert	A long term plan for increased seat-belt usage
City of Pasadena	Development of a Quality of Life Index for comparison with national, state, and county indicators
City of South El Monte	Improve health through education and community leadership, immunization campaigns for pre-school children

Source: Modified from Hafey, J.; Twiss, J; & Folkers, L (1992).

3.8 Public Health Initiatives in Virginia

Virginia has not participated in any pilot Healthy Cities projects. However, the Commonwealth and several communities within the state are participants in a program entitled *Turning Point*, which is designed to strengthen and transform community health in Virginia (Virginia Department of Health, 1998). Turning Point is originally a nation wide program sponsored by the W.K. Kellogg and the Robert Wood Johnson Foundations. Its goal is to strengthen public health infrastructure in the United States so that public health agencies of states and local communities may protect and improve the health of their communities in the 21st century. The program calls for collaborating for a new century in public health. The targets of the program are:

- Rethinking future roles and responsibilities for future health
- Improving decision-makers' knowledge of and appreciation for community health
- Placing health leaders and partners in a position to support information based decision-making, and insuring that the Commonwealth has a skilled workforce to perform core community health functions.

In Virginia this initiative aims to rethink the role of community health by involving an inclusive planning process. The key to this is identifying stakeholders in community health and ensuring their involvement in the activities of the steering committee of the Turning Point program. Representatives of the steering committee include members from the health care delivery system, the faith community, state and local government officials, the education and business communities, and non-profit organizations. Virginia has identified four goal areas to be addressed by this initiative:

1. Reach consensus among diverse stakeholders at the state and community levels on their roles and responsibilities for Public Health functions.
2. Improve state and local policy leaders' understanding of and value for the contributions that Public Health and their partners make to create and sustain healthy communities.
3. Place Public Health leaders and their partners in the pivotal role of developing, collecting, analyzing, and sharing data that support information-based decisions for Virginia's communities.
4. Ensure that the Commonwealth has a skilled Public Health work force to perform core Public Health functions in order to improve the health of Virginia's communities.

(Virginia Department of Health, 1998)

Although it has somewhat different objectives, the Turning Point program shares a number of important concepts with the Health Cities movement. Most important of these is the emphasis on community participation, the need for multi-sectoral approaches to health, addressing equity issues, and the emphasis on prevention and primary care.

The hospital association in the Commonwealth has also taken steps to heighten awareness among its members of the importance of more holistic approaches to health. Recently the Virginia Hospital and Healthcare Association (VHHCA) published a set of indicators -*Indicators for Healthy Communities 1997*- that enables leaders to assess the health of their community (Brown and Evans, 1998). This indicator project seeks to educate hospitals and health decision makers of the need to take a more holistic view of health and to develop empirical evidence to support decisions on community health. The indicators included, as well as traditional health care data, statistics on population, economics, health services, housing, public safety, and the natural environment. The significance of the project is that it provides easy to use and accessible data on health care components for each county and city within six regions in Virginia. A task force of representatives from health care, local government, higher education, chambers of commerce, poverty law centers, community foundations, the YMCA, and the United Way decided upon the indicators. As a result of the diverse nature of the group, community health was defined holistically as (among other things) the cleanliness of the air, students' scholastic achievement in public schools, and the number of available jobs (Brown and Evans, 1998).

The overall goal of the indicator project is to increase awareness of communities on what constitutes healthy communities. "Healthy communities manage their growth and demand on services, maintain or improve their environment, reduce poverty or dependence on public assistance, and provide for future generations through education for future jobs and healthy lifestyles." (Brown and Evans, 1998)

A further initiative that the VHHA has launched was conducting informational sessions for communities in Virginia about the above indicators (measuring health and the quality of life in communities). Public and private health officials attended workshops that introduced them to new approaches to measuring health-related issues. VHHCA started with their member facilities and local and state departments of health, as they were all involved in improving community health. Participation branched out to include people from different community. The objective of these workshops is to provide attendees with options for collecting data, reviewing data about their region and using it to set priority activity to improve community life. The workshops also aim to get community members to move beyond indicators by analysis through cross tabulation (e.g. dropout rates by teen pregnancy) that would enhance understanding of influence beyond indicators. Using data from indicators to review inputs from special groups and quality of life issues would help in suggesting solutions to community health problems (Brown and Evans, 1998).

3.9 Summary and Conclusion

From the above examples we can deduce that the central objective of community-based health initiatives, as applied by these projects, is improving public health by integrating decisions both from within the health sector and outside of it. Decisions that improve the quality of life such as improved education, environment, economic conditions etc., would also improve health. The main criteria for the adoption of a Healthy Cities project is the existence or the formation of an *intersectoral management structure* to insure the inclusion of the social, physical and economic aspects of livelihood to public health. Targeting disadvantaged populations and insuring equity in health are key factors in implementation. Another important issue is emphasizing the importance of primary health and personal habits in health promotion for individuals and communities.

However the most noticeable factor in the implementation of these projects is the existence of a collaborative team that addressed health from a public and community health perspective, rather than a biomedical one. It was important that the team members had the same goals and objectives in order to secure the success of the various efforts addressing community (rather than health) problems. It is also

interesting to note that these projects were geared more towards disease prevention and health promotion than treatment. This shift in focus necessitates an accompanying change in policy to be implemented.

Health in the United States is at a turning point in which community groups, networks, and partnerships are gaining increasing visibility through their advocacy efforts. This is an atmosphere that could allow for success of a HC project.

Virginia is undergoing the same change that the nation is experiencing through the increased efforts of its Department of Health and the Virginia Hospital and Health Care Association to include communities in health initiatives. It is important to note that these efforts were based, for the most part, on collaborative efforts and partnerships between the public health sector, the service provider sector manifested in the VA Department of Health and the VA Hospital and Healthcare Association, and various community groups. The question is whether these communities have potential for this transformation through the proper understanding of community health and the attitudes that would help lay the foundation for a healthy community.

Chapter 4

RESEARCH FRAMEWORK

To be successful, community-based programs require collaboration between members of the service provider sector of the health system and those in public health. A review of Healthy Communities and Healthy People 2000 projects affirms the importance of intersectoral or cross sector collaboration in achieving healthier communities. Mutual understanding of the principles associated with HC is a key to achieving sustainable partnerships. When different sectors have similar beliefs about what constitutes health and contributing factors to population health collaboration is more likely to occur and be successful. Collective decision-making in a community is successful when individuals with opposite points of view can come together and collaborate on the basis of agreed-upon compromise and consensus (Rosenau, 1994).

The service provider sector traditionally, emphasized treatment modalities; whereas public health professionals have placed greater emphasis on prevention, health promotion, and the relationships between health and other elements of the community (Gesler and Gordon, 1998). Now, the two areas need one another if healthier places are to occur. Public health officials understand who is at risk and how to implement health promotion. Service providers, particularly primary care providers, can also play a key role by utilizing their resources and organizational capacities (Rovner, 1998).

The creation of collaborative, community-based health care systems can not be solely attributable to the Healthy Cities/Communities movement. HC movement represents but one thread of a complex weave of factors that have created a window of opportunity for the formation of community-based systems. Among these is a renewed emphasis in public health through the formation of coalitions and partnerships that addressed public health goals. The Turning Point program sponsored by Robert Woods Johnson is an example of a recent effort to foster community-based, multi-sectoral approaches (VA Department of Health, 1998).

Community-based programs that have also developed in small communities, particularly in rural areas, continue to grapple with the problem of building health service capacity. Despite years of federal program efforts to change the distribution of physicians in ways that would advantage rural communities, many have a very thin health care system (Tenner and DeToro, 1996). Rather than rely on yet another federal program, rural communities began to marshal local resources and to form partnerships that create community systems of care.

Another force for change has been the cost containment imperative within the health care industry resulting from managed care and capitated reimbursement systems. Capitated managed care systems create a major incentive for preventive care and health promotion among major service providers such as hospitals. It is not in the economic interest of many providers to encourage healthy lifestyles and to promote behaviors that lower the risk of an event occurring that requires treatment.

1. All of these forces can create an incentive among public health and health care service providers to achieve many of the goals adopted for the Healthy Cities/Communities initiatives. At issue is whether a sufficient understanding of the importance of HC concepts and values is present in the minds of public heath and health service providers in Virginia.

4.1 Prior research on Provider Attitudes

A noticeable absence exists of any research on Healthy Communities attitudes among public health or health care providers. Moreover, no research appears on the attitudes of health care providers and public health officials on general beliefs about health. Surveys of physicians are numerous but none have focused on these issues. As an example, the American Medical Association (AMA) conducted surveys on public and physician opinion on health care issues to gauge attitudes to the social environment of medicine over a period of years (Harvey and Shubat, 1989). Results of these surveys showed that public and physicians differed in issues to be addressed by the medical profession. The public was more inclined towards social and environmental issues such as child abuse and environmental health hazards whereas physicians thought that topics related to biomedical problems, such as AIDS and cancer, deserved more scientific attention. The surveys also demonstrated the awareness of physicians of the increased interest of the public in personal health and the decreased control that physicians had over patient treatment decisions. Generally the surveys conducted by AMA over a period of years have indicated an increased public awareness of the importance of community health in terms of disease prevention, healthy lifestyles and the role of community-based groups in the medical profession.

Other than the studies conducted by AMA comparing public and physician attitudes on health and health care issues, none has been done on hospital personnel and public health officials. As noted earlier, the importance of gauging the perceptions of these two sectors could determine the potential success of collaborative efforts for improving public health.

4.2 Research Goals and Hypotheses

The objective of this research is to determine the extent of similarities in attitudes and preferences about Healthy Communities concepts between individuals working within the hospital sector and those working in public health. The main issue is to identify the points of convergence and distinction between the two sectors.

4.3 Research Questions:

Two research questions are proposed:

1. **Do similarities in attitudes exist between personnel in the hospital service sector and in the public health sector on key HC concepts?**
2. **Do similarities in preferences exist between personnel in the hospital service sector and in the public health sector about the processes for implementation of HC concepts?**

The research hypotheses are:

1. **No differences exist in attitudes exist on key HC concepts between personnel in the hospital service sector and in the public health sector.**
2. **No differences exist in implementation preferences between personnel in the hospital service sector and in the public health sector.**

4.4 Research Methodology

4.41 Variables

Based on the review of the Healthy Community literature five precepts categories were defined for use in the study. The five precept categories are:

1. Public Participation and Community Empowerment
2. Intersectoral/Multisectoral Structure (including inter-departmental)
3. Provision of primary health care
4. Health Promotion and Disease Prevention
5. Targeting underprivileged/under-served populations

Statements were constructed that elicited from individuals their attitudes about several different dimensions of these five precepts. A survey instrument was then constructed to obtain responses to these statements (Appendix A).

For control, the survey included statements that measured attitudes towards concepts more consistent with a biomedical approach to health, for example, statements on medical costs, and the availability of technologically advanced medical care facilities. Respondents' reaction to these statements would help differentiate between the two professional sectors.

Other controls included in the survey for analysis purposes were measures of the individuals' gender, age, length of employment, and professional position.

4.4.2 Sample Frame

The sample of persons from the hospital sectors was drawn from a list of participants in workshops conducted by the Virginia Hospital and Healthcare Association (VHHCA) on the use of indicators to gauge community health. The reason for selecting this list for a sample was twofold. First, participants in the workshop represented a varied group of hospital professional positions, ranging for CEOs to community service managers. This variability in professional position enable the researcher to consider differences within the hospital service sector.

Second, because this group had chosen to participate in the workshops, they have been introduced to the concepts of community assessment through workshops and would represent a group more informed about community health issues than other professionals not in attendance. Thus, these individuals are more likely to have a broader view of community health than other members of the service provider sector who did not participate in such informational workshops. The seminars were a follow up to an earlier initiative, Indicators for Healthy Communities 1997, which provided easy to use and accessible data on health care components for counties and cities within six regions in Virginia. Seminar participants learned how to collect and review data about their regions and use it to set priority activity to improve community life (Brown and Evans, 1998). Although the sessions did not distribute information about Healthy Communities per se, they did bring to the awareness of the participants the importance of alternative health data, such as school dropout and teen pregnancy rates, to quality of life issues and community health problems. As such, these individuals represent "early adopters" or innovators within the health care provider community as it relates to healthy communities' concepts. Their selection was purposeful in that if convergence in health perspectives is occurring we would expect it to be evident initially with providers in this category. If similarities do not exist we would expect dissimilarities to be present in the larger service provider community. It is important to stress that the sample does not

represent a true random sample from the hospital sector. Thus, no attempt is made to generalize from the results.

The sample frame consisted of fifty-six individuals. The most notable characteristic of members of the sample frame is forty-nine were females (75%). The gender bias to the sample frame reflects is due in part to the sizable number of persons whose job description indicated more community-based positions within hospitals, positions normally occupied by females.

The public health officials sample frame consisted of all directors of public health agencies in the Commonwealth and individuals from the VHHCA workshops whose employment was in the public health sector. Between the two groups, the sample frame consisted of forty-three individuals. The gender composition of the sample frame was 24 females to 19 males, i.e. about 56% to 44% respectively.

4.4.3 Survey Instrument

The research instrument is a mail survey questionnaire (Appendix A). The first part of the questionnaire asks respondents to situate their attitudes on ten statements. All statements were scaled on a Likert scale from 1 (strongly agree) to 4 (strongly disagree). As noted earlier in order to obtain some variability in responses, the instrument included statements that did not actually address community health as articulated by the literature but that were part of traditional health care practices (e.g. focus on treatment). The second part asks respondents to rank ten health concepts according to the importance of each in improving community health. The third part of the questionnaire requests information on respondents' age, education, genders, length of employment, and position description. Finally, respondents are asked to identify the issues influencing community health in their opinions using open-ended question format.

The instrument was piloted tested on local public health professionals and service providers (about three of each) in the Montgomery County. Feedback from these individuals led to further refining of the instrument before it was sent to the research sample.

4.4.4 Survey Implementation

The survey was mailed simultaneously to all individuals on the two sample frames. The mailing included a copy of the instrument and a self-addressed, stamped return envelope. Respondents were given two weeks to respond to the first mailing. An identification number was affixed to the instrument

for purposes of identifying individuals who did not responded in the different rounds of mailing. Identification of the two categories (public health and hospital sector) was through specific number code allocation to each respondent. The codes were accessible only to the investigator and the faculty advisor. Only the principal investigator entered the codes into data files for subsequent statistical analysis. All instruments were shredded after the data had been entered and verified. These procedures ensured the anonymity and confidentiality of the responses after all data are coded.

A second mailing was sent to those who did not responded initially. Ten days was allotted for responding to the second mailing. At the end of the ten-day period, the survey process was closed. The response rate overall over sixty-six percent. The response rate for hospital personnel was higher (73%) than for public health personnel (56%).

4.4.5 Data Analysis Techniques

All the responses were coded and entered in a data file for analysis. Descriptive statistics and frequencies were obtained using SPSS (Statistical Package for the Social Studies). Profiles for the respondents in the two sectors were constructed using the personal information they provided in their responses.

Comparisons of the responses from the two professions were made using mean scores and the percentage strongly agreed with statements or concepts. Chi-Square tests for independence were used to test hypotheses about the similarities in the two groups. Responses to the opened questions were analyzed to increase understanding of the specific concerns of individuals as they pertained to community health.

Chapter 5

SURVEY RESULTS

5.1 Profile of Respondents

The information from the respondents illustrates that the two groups were similar in most respects except in terms of gender and educational background (Table 5.1).

Table 5.1. Profile of Survey Respondents

Respondents	Response Rate	Gender	Mean Age	Average years of Employment*	Average Length of stay in VA
		Female			
Hospital Personnel	73.2%	83%	46.3	11.7	21.6
Public Health Professionals	55.8%	64%	48.2	13.2	18.8

* Within current organization

The higher percentage of female respondents among hospital personnel is because of the greater number of females in the sampling frame for this group (see Research Sample, Chapter 4). The majority of respondents from the hospital community had either a Bachelor or a Master's degree with about five percent with Ph.Ds. and about ten percent with less than college education. Public health professionals on the other hand, mostly had a Master's degree with twelve percent having a Bachelor's degree and eight percent having less than a Bachelor. Most of the members from the hospital personnel sector are in two categories, community-related positions and executive/service positions. Public health professionals on the other hand, had three job categories (Table 5.2).

5.2 Interpretation/Description of Survey Responses

Seven statements in the first section of the survey articulate the concepts underlying HC movement. Three statements, although on health care issues, are not conforming to HC concepts, rather they express attitudes related to the traditional biomedical approach to health (Table 5.3). These statements are included to obtain some variability in responses.:

Table 5.2. Respondents' Job Categories

HOSPITAL PERSONNEL				
Job Category	Community-related		Executive/Service provision	
	Community Health/Wellness*	Community Education/ Outreach	Marketing/ Management/PR	Clinical Services**
% Respondents	36.6	17.1	31.7	14.6
PUBLIC HEALTH PROFESSIONALS				
Job Category	Health District Director	Nurse Manager	Specialized Staff***	
% Respondents	52	28	16	

*Includes Neighborhood Health Coordination and Development of Community Relations

**Includes inspection control, pharmacy, and medical/surgical product line
*** Includes District Epidemiologists and Preventive Services Coordinators

Respondents were asked to indicate the extent to which they agreed or disagreed with ten statements that covered the above themes by choosing from four numbered categories (Appendix A). The expected directionality of the responses (if the responses are in accordance with concepts of healthy communities) is as follows

- Public health professionals would agree more strongly to the seven statements on HC concepts than would hospital personnel.

- Public health professionals would agree less strong than hospital personnel with the three statements that focus on a traditional (biomedical) approach to health.

The above expected response pattern also applies for the second section of the questionnaire in which the last two statements are geared towards the biomedical approach for health care, rather than the community-based approach. We would expect that the ranking of these statements be on the least important category (9 or 10), compared to the other statements if the respondents had preferences that correspond to what the literature has emphasized for healthy communities

Table 5.3. Interpretation of Instrument

Statement	HC related concept	Direction of response	
		HP*	**PH****
To improve community health, the emphasis should be on primary rather than specialized care	Primary Healthy Care	Disagree Strongly	Agree Strongly
A healthy community is the sum of health of all its members	Traditional (biomedical) definition of community health	Agree Strongly	Disagree Strongly
Communities will be healthier if there was more knowledge about health needs and healthy lifestyles	Health Education	Disagree Strongly	Agree Strongly
Health within a community is more a function of housing, environmental protection, literacy, and economic conditions than the quality of its health services	Social and Environmental aspects of community health	Disagree Strongly	Agree Strongly
Communities will have healthier populations if the public is included in local decisions health programs and approaches	Public Participation	Disagree Strongly	Agree Strongly
Equitable access and use to health services should be a high priority for improving a community's health	Equity and Access	Disagree Strongly	Agree Strongly
Partnerships among various health sectors (e.g. service providers and public health professionals) are critical to a healthy community	Inter-sectoral Management	Disagree Strongly	Agree Strongly
Health promotion and prevention is more effective than acute care in improving a community's health	Health Promotion & Disease Prevention	Disagree Strongly	Agree Strongly
Fair reimbursement to medical providers is essential to maintaining a healthy community	Increased spending on health care	Agree Strongly	Disagree Strongly
Access to the most recent types of medical technology is important to maintain the health of a community	Importance of Technology	Agree Strongly	Disagree Strongly

*: Hospital Personnel **: Public Health Professionals

5.3 Qualitative Analysis of Results

Close study of the mean scores reveals that for most attitudes the two sectors are similar in their response (Table 5.4). However, because of the small range on response categories (1-4), mean scores are not sensitive to measurement of differences in this instance. Percent of respondents strongly agreeing with a specific statement offers a more appropriate indicator of difference. If we focus on the percentages resulting from responses to the first section of the survey, we can identify a number of notable differences:

- A larger percentage of public health professionals, than members from the hospital sample strongly agreed that primary health care should be emphasized in community health (Table 5.4). The percentage difference between the responses of service providers and public health professionals is consistent with the assumption that public health professionals place more emphasis on health promotion and disease prevention (aspects of primary health care) than service providers.

- A larger percentage of hospital personnel than public health officials strongly agreed with the traditional definition of a healthy community articulated in the statement that the health of a community is simply the sum of the health of community members (Fig. 5.1). This is also consistent with the assumption that public health professionals associate health with other elements of the community and not just health status or absence of disease.
- On importance of health promotion and prevention in community health, there was significant disparity in the percentage of respondents strongly agreeing with the statement between the two professional sectors. A larger percentage of public health officials strongly agreed with the statement, which is consistent with placing more emphasis on promotion and prevention than on treatment.

- Respondents' reaction to the two statements on the traditional biomedical approach (fair reimbursement to medical providers and access to recent medical technology) showed a low strongly agreeing percentage for both sectors with public health professionals showing a notably lower percentage than hospital personnel. Again this is consistent with the expected direction as hypothesized in Table 5.3.

Table 5.4. Respondents' Attitudes on Themes for Applicability of Healthy Communities

Statement	All Respondents	Hospital Personnel	Public Health Professionals*
To improve community health, the emphasis should be on primary rather than specialized care	1.5 (54%)*	1.6 (47%)*	1.4 (64%)*
A healthy community is the sum of the health of all its members	1.3 (74%)	1.3 (78%)	1.4 (68%)
Communities will be healthier if there was more knowledge about health needs and healthy lifestyles	1.6 (53%)	1.6 (51%)	1.6 (56%)
Health within a community is more a function of housing, environmental protection, literacy, and economic conditions than the quality of its health services	2.0 (30%)	2.1 (29%)	2.0 (32%)
Communities will have healthier populations if the public is included in local decisions on health programs and approaches	1.6 (44%)	1.7 (46%)	1.6 (40%)
Equitable access and use to health services should be a high priority for improving a community's health	1.4 (68%)	1.4 (68%)	1.3 (68%)
Partnerships among various health sectors (e.g. service providers and public health professionals) are critical to a healthy community	1.2 (85%)	1.3 (83%)	1.1 (88%)
Health promotion and prevention is more effective than acute care in improving a community's health	1.5 (62%)	1.6 (54%)	1.4 (76%)
Fair reimbursement to medical providers is essential to maintaining a healthy community	1.6 (47%)	1.6 (51%)	1.6 (40%)
Access to the most recent type of medical technology is important to maintain the health of a community	2.1 (24%)	2.0 (29%)	2.3 (16%)

*Percent respondents strongly agreeing.

Breaking down the sample by gender and exploring the pattern of responses to the first section of the survey reveals similarities in most cases (Table 5.5). However, differences can be identified on the responses on four issues: definition of healthy communities, equitable access and use of health services, reimbursement to medical providers, and importance of access to advanced technology to community health. From the response percentages on definition of community health males tend to have a more comprehensive understanding of community health as defined by concepts of HC than females. However, a significantly larger percentage of females agreed with the importance of equity in attaining community health than males, showing a heightened sensitivity to accessibility of services to all.

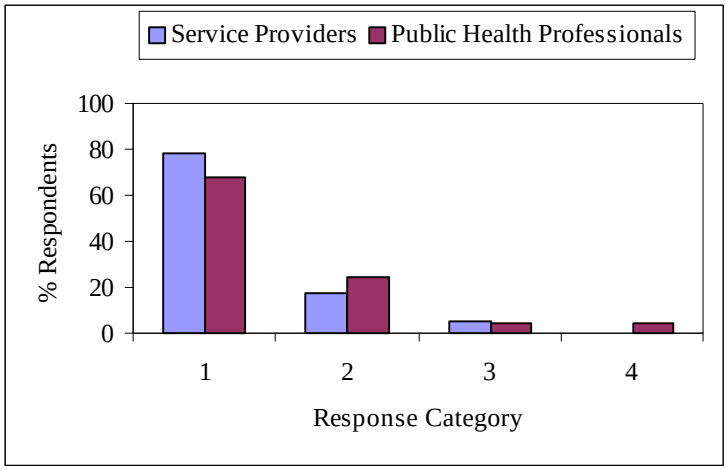

Fig. 5.1. Response Pattern on Definition of Healthy Communities

Categories:

1. Strongly agree 2. Somewhat agree 3. Somewhat disagree 4. Strongly disagree

On the two statements concerning the biomedical approach to health (fair reimbursement to medical providers and importance of hi-technology facilities), a larger percentage of females strongly agreed. This response pattern indicates that the males in the sample placed more emphasis on community-based health practices and concepts than the females.

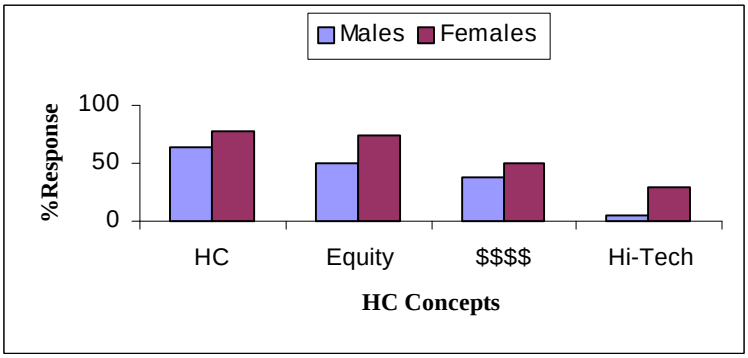

Fig.5.2. Response Pattern by Gender on Specific HC Concepts

Table 5.5. Respondents' Attitudes on Themes for Applicability of Healthy Communities (by gender)

Statement	All Respondents	Males	Females
To improve community health, the emphasis should be on primary rather than specialized care	1.5 (54%)*	1.4 (56%)	1.5 (53%)
A healthy community is the sum of the health of all its members	1.3 (74%)	1.6 (63%)	1.2 (78%)
Communities will be healthier if there was more knowledge about health needs and healthy lifestyles	1.6 (53%)	1.4 (56%)	1.6 (52%)
Health within a community is more a function of housing, environmental protection, literacy, and economic conditions than the quality of its health services	2.0 (30%)	2.0 (25%)	2.1 (32%)
Communities will have healthier populations if the public is included in local decisions on health programs and approaches	1.6 (44%)	1.5 (50%)	1.7 (43%)
Equitable access and use to health services should be a high priority for improving a community's health	1.4 (68%)	1.5 (50%)	1.3 (74%)
Partnerships among various health sectors (e.g. service providers and public health professionals) are critical to a healthy community	1.2 (85%)	1.2 (81%)	1.2 (86%)
Health promotion and prevention is more effective than acute care in improving a community's health	1.5 (62%)	1.5 (63%)	1.5 (62%)
Fair reimbursement to medical providers is essential to maintaining a healthy community	1.6 (47%)	1.7 (38%)	1.6 (50%)
Access to the most recent type of medical technology is important to maintain the health of a community	2.1 (24%)	2.5 (6.3%)	2.0 (30%)

* Percent respondents strongly agree.

An age breakdown of the responses is shown in Table 5.6. I chose forty-five years for age classification because for younger in the sample, Global Strategy for Health for All has already been launched. One might assume that younger respondents would therefore have an increased general awareness of the importance of public health as well as a shift to more comprehensive means of addressing population health. Thus, we would we expect health professionals in that age group to have an attitude more consistent with concepts of HC than individuals over forty five who would already have been practicing their profession when the Global Strategy for Health for All gathered momentum. However, the responses do not support this assumption. This is evident in the response pattern to the last two statements that addressed community health from the biomedical approach of reimbursement and advanced technology. A larger percentage of the less than forty-five group strongly agreed with the more traditional concepts than do the over forty-five age group. Another disparity is demonstrated in the response to the concept of partnership. Again the over forty five years group showed consistency with HC foundations more than the under forty-five group (Figure 5.3).

Table 5.6. Respondents' Attitudes on Themes for Applicability of Healthy Cities (by age)

Statement	All Respondents	Under 45 yrs.	Over 45 yrs.
To improve community health, the emphasis should be on primary rather than specialized care	1.5 (54%)*	1.5 (50%)	1.4 (58%)
A healthy community is the sum of the health of all its members	1.3 (74%)	1.4 (71%)	1.3 (79%)
Communities will be healthier if there was more knowledge about health needs and healthy lifestyles	1.6 (53%)	1.7 (50%)	1.5 (54%)
Health within a community is more a function of housing, environmental protection, literacy, and economic conditions than the quality of its health services	2.0 (30%)	2.0 (32%)	2.1 (33%)
Communities will have healthier populations if the public is included in local decisions on health programs and approaches	1.6 (44%)	1.7 (46%)	1.7 (40%)
Equitable access and use to health services should be a high priority for improving a community's health	1.4 (68%)	1.4 (71%)	1.4 (64%)
Partnerships among various health sectors (e.g. service providers and public health professionals) are critical to a healthy community	1.2 (85%)	1.4 (79%)	1.2 (88%)
Health promotion and prevention is more effective than acute care in improving a community's health	1.5 (62%)	1.5 (61%)	1.5 (64%)
Fair reimbursement to medical providers is essential to maintaining a healthy community ($$$)	1.6 (47%)	1.5 (57%)	1.8 (33%)
Access to the most recent type of medical technology is important to maintain the health of a community	2.1 (24%)	1.8 (43%)	2.4 (9%)

- Percent respondents strongly agreeing.

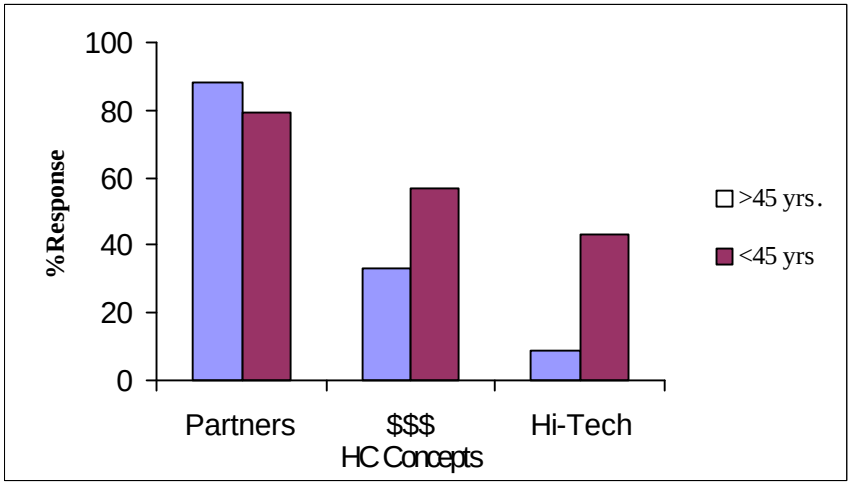

Fig.5.3. Response Pattern by Age on Specific HC Concepts

A break down of the the hospital personnel by professional category reveals more dissimilarities than that displayed between categories (hospital personnel and public health professionals). Significant differences in response patterns are on the emphasis on primary health care and the importance of health promotion. Hospital personnel who were in more community-related environments tended to agree more with HC concepts than do those in service-related positions (Table 5.6). Some non-conforming response patterns emerged on definition of community health, importance of health education, public participation, and fair reimbursement. Contrary to the assumption that community-related professionals would have a higher awareness of importance of knowledge and public participation, the percentage of respondents from that sector that strongly agreed with these concepts was less than the percentage of service-related professionals who strongly agreed with the same concepts. Another inconsistency is apparent in the response pattern to the importance of fair reimbursement to medical providers where more community-related professionals strongly agreed than service-related professionals.

Table 5.6. Hospital Personnel's Attitudes on Themes of Applicability of Healthy Communities (by professional category)

Statement	All Respondents	Comm.[a]	Service[b]
To improve community health, the emphasis should be on primary rather than specialized care	1.5 (54%)*	1.5 (52%)	1.7 (39%)
A healthy community is the sum of the health of all its members	1.3 (74%)	1.3 (83%)	1.3 (72%)
Communities will be healthier if there was more knowledge about health needs and healthy lifestyles	1.6 (53%)	1.6 (43%)	1.5 (61%)
Health within a community is more a function of housing, environmental protection, literacy, and economic conditions than the quality of its health services	2.0 (30%)	2.2 (26%)	2.0 (33%)
Communities will have healthier populations if the public is included in local decisions on health programs and approaches	1.6 (44%)	1.9 (36%)	1.4 (61%)
Equitable access and use to health services should be a high priority for improving a community's health	1.4 (68%)	1.4 (74%)	1.4 (61%)
Partnerships among various health sectors (e.g. service providers and public health professionals) are critical to a healthy community	1.2 (85%)	1.3 (83%)	1.3 (83%)
Health promotion and prevention is more effective than acute care in improving a community's health	1.5 (62%)	1.4 (74%)	1.9 (28%)
Fair reimbursement to medical providers is essential to maintaining a healthy community	1.6 (47%)	1.4 (61%)	1.4 (39%)
Access to the most recent type of medical technology is important to maintain the health of a community	2.1 (24%)	2.0 (30%)	1.9 (28%)

* Percent respondents strongly agree

[a] Community-related professional category

[b] Executive/Service-related professional category

Break down of the public health professionals by their position description also highlighted within group differences (Table 5.7).. The most significant difference in response patterns is in the response to the concept on social and environmental aspects of community health. While over forty percent of district directors strongly agreed with the statement, only a small portion of the nurse managers and the specialized staff strongly agreed to the concept. Examining the overall response pattern shows that Health District Directors are more consistent in their responses with HC concepts than nurse managers or specialized staff. This is evident by their response to emphasis on primary health care, definition of community health, importance of public participation, equity, and partnerships. This is further indicated in their responses to traditional biomedical approaches to community health (reimbursement and access to technologically advanced medical facilities), where the percentage among public health directors that strongly agreed is much lower than that from the nurse and specialized staff sectors. However, deviation from the health director's attitudes is evident in the their responses to the importance of health education and health promotion and to prevention. Here a smaller percentage than the other professional group within public health strongly agreed.

Table 5.7. Public Health Professionals' Attitudes on Themes of Applicability of Healthy Communities By Professional Categories: Means Scores and Percent Strongly Agreeing

Statement	All Respondents	District Director[a]	Nurse/ Special.[b]
To improve community health, the emphasis should be on primary rather than specialized care	1.5 (54%)*	1.3 (71%)	1.5 (50%)
A healthy community is the sum of the health of all its members	1.3 (74%)	1.5 (65%)	1.3 (75%)
Communities will be healthier if there was more knowledge about health needs and healthy lifestyles	1.6 (53%)	1.5 (53%	1.8 (63%)
Health within a community is more a function of housing, environmental protection, literacy, and economic conditions than the quality of its health services	2.0 (30%)	1.7 (41%)	2.6 (13%)
Communities will have healthier populations if the public is included in local decisions on health programs and approaches	1.6 (44%)	1.5 (47%)	1.8 (25%)
Equitable access and use to health services should be a high priority for improving a community's health	1.4 (68%)	1.3 (71%)	1.4 (63%)
Partnerships among various health sectors (e.g. service providers and public health professionals) are critical to a healthy community	1.2 (85%)	1.1 (94%)	1.3 (75%)
Health promotion and prevention is more effective than acute care in improving a community's health	1.5 (62%)	1.4 (71%)	1.4 (88%)
Fair reimbursement to medical providers is essential to maintaining a healthy community	1.6 (47%)	1.6 (35%)	1.5 (50%)
Access to the most recent type of medical technology is important to maintain the health of a community	2.1 (24%)	2.4 (12%)	2.1 (25%)

[a] Health District Directors [b] Nurse Managers and Specialized Staff

Table 5.8 compares between professions and within professions on the HC concepts that displayed the most disparity. This is to identify the existence of similarities or distinctions between the various sectors. Generalizing the results shows that Health District Directors are the professional group most consistent with HC concepts. Hospital personnel who worked in a community-related environment and public health nurse managers showed a somewhat similar response pattern, that is a moderate acceptance of HC concepts.

Table 5.8. Summary of Response Patterns of Professional Categories and Subcategories on Themes for Applicability of Healthy Communities

HC Concept	HP Response Pattern		PH Response Pattern	
	Community-related work	Service-related work	Directors	Nurse Managers/ Specialized staff
Primary Health Care	52%*	39%*	71%*	50%*
Traditional Definition of Community Health	83%	72%	65%	75%
Intersectoral Management	83%	83%	94%	75%
Public Participation	36%	61%	47%	25%
Health Promotion	74%	28%	71%	88%
Increased Spending on Health Care	61%	39%	35%	50%
Importance of Technology	30%	28%	12%	25%

***** Percent strongly agree

5.4 Quantitative Analysis of Results

Chi-Square tests of independence are used to identify whether a relationship exists between the professional backgrounds of respondents and their response to HC concepts. The null hypothesis is:

> **Attitudes of health professionals on parameters of healthy communities are independent of their specific profession.**

Results

P values are greater than 0.05 for all the statements, indicating that the two categories are in fact independent of one another (Table 5.7).

In the preference section of the survey, respondents from both sectors demonstrate a similar response pattern. The two concepts considered least important (according to the mean rate of the responses) are those that the literature described as traditional/biomedical health care practices, i.e. increased spending on health care and importance of the availability of technologically advanced medical facilities. The two

concepts most important in both groups are disease prevention and availability of primary health care respectively (Table 5.8).

Table 5.7. Chi-Square Test on Respondents' Attitudes

Themes for Applicability of Healthy Communities	Chi-Square	df	P value for 2-sided significance
Primary Care	2.50	3	0.29
Equity	2.26	3	0.52
Knowledge	0.55	3	0.91
Physical & Social Aspects	0.33	3	0.96
Public Opinion	3.65	3	0.30
Equitable Access & Use	2.16	3	0.54
Partnerships	1.95	3	0.58
Health Promotion & Prevention	5.94	3	0.12
Medical Provider Reimbursement	4.31	3	0.85
Access to Hi-tech medical care	2.55	3	0.47

Table 5.8. Respondents' Ranked Preferences on Themes for Applicability of Healthy Communities

Statement	All Respondents	Service Providers	Public Health Professionals
Effective primary care system	3.3	3.2	3.5
Fair market system for provision of health care	7.1	7.0	7.3
Health education	3.9	3.9	3.9
Effective environmental protection	5.6	6.1	6.1
Public participation in health decisions	6.1	6.3	6.3
Equitable access to health care	3.6	3.6	3.6
Partnerships among health organizations	5.0	4.6	5.7
Focus on disease prevention	2.7	2.9	2.4
Increased spending on health care	8.3	8.0	8.7
Availability of hi-tech facilities	9.1	9.1	9.0

On the open-ended questions, the two professional sectors again showed a similar pattern on their responses. There was a consensus for both professions that the most critical community health problems were lack of access to care and chronic diseases. Service providers, however, had more responses on lack of education as a community health problem than public health professionals (Appendix B).

5.5 Conclusions

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It was originally hypothesized that Public health officials would be expected to possess a positive attitude towards community health. Community-based care is an important component in the training and education of public health professionals. Service providers and hospital personnel on the other hand would be expected to emphasize the biomedical approach (acute treatment practices) since the nature of their profession deals more with treatment than with prevention and promotion. This expectation is not supported by the analysis. Quantitative analysis of the responses to the survey question show considerable convergence in the attitudes and preferences of respondents indicated by their similar responses to concepts of healthy communities (TAHC). Chi-Square analysis indicates that the responses are independent of the professional background of the respondents. In other words, the two group of respondents have an attitude that is consistent with understanding Healthy Communities concepts as proposed in the literature

One explanation for the similarities maybe the result of the professional roles of the service providers. The largest percentage of respondents in the hospital personnel category has a community focus (53.7%). Because these individuals are involved in community coordination and program implementation it is expected that they would have a more thorough understanding of community needs and how these needs could be addressed in a collaborative and sustainable manner. They would be similar to public health professionals who are actually dealing with community-based health care as part of their job description.

It is important to realize that most of the disparities in opinion are with certain concepts, mainly three or four out of ten. Thus, the extent to which we might consider convergence or divergence of thought based on these concepts becomes diminished as we look at the larger picture. Elements other than professional categories might come into play and affect the response pattern of the sample surveyed, as seen from the analysis on the control factors.

5.6 Research Venues

The central objective of HC is for communities to attain a healthier status by taking responsibility for their health through participation and health promotion, and to establish a decentralized and multi-sectoral

structure for implementation of HC projects. For a successful application of HC, all participants must agree upon goals, objectives and implementation strategies; in other words be in agreement and consensus on basic concepts of HC is an important prerequisite for the formation of the partnerships and collaborative structures required for HC.

The results of the analysis of the sample raise questions for future research rather than actually supporting a single hypothesis. The fact that professionals within the same category showed more disparities than between categories raises many questions. More research could also be done on the control factors and how response patterns differed between males and females, and members from different age groups.

Looking into two professional sectors, public health officials and hospital personnel, and identifying where they share similar attitudes on Healthy Communities and where they differ is only a first step towards defining the potential for HC. Other sectors in the community have to be in the same mindset to reach the status of "adopters" in community health programs. An intersectoral management structure, integral to implementation of HC, can exist if all members have same or similar attitudes. Thus further research can be conducted on the educational sector, commercial sector, and the media; among others, to gauge their attitudes and to determine whether they can be part of the intersectoral management structure needed in Healthy Communities.

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APPENDIX A

Survey Questionnaire

Dear Health Professional,

I am a student in the Department of Urban Affairs and Planning of Virginia Polytechnic Institute and State University. I am conducting research on the perceptions of health-related professionals on community health as part of a Master's thesis on the potential applicability of healthycommunities concepts in Virginia. Answering this questionnaire should take 5 minutes. I would appreciate receiving your response by December 14, 1998.

Please indicate the extent to which you agree or disagree with each of the following statements by placing the number that corresponds with your opinion in the blank space. The response categories are as follows:

STRONGLY AGREE=1 SOMEWHAT AGREE=2
SOMEWHAT DISAGREE=3 STRONGLY DISAGREE=4

1. To improve community health, the emphasis should be on primary rather than specialized care. _____
2. A healthy community is the sum of the health of all its members. _____
3. Communities will be healthier if there was more knowledge about health needs and healthy lifestyles. _____
4. Health within a community is more a function of housing, environmental protection, literacy, and economic conditions than the quality of its health services. _____
5. Communities will have healthier populations if the public is included in local decisions on health programs and approaches. _____
6. Equitable access and use to health services should be a high priority for improving a community's health. _____
7. Partnerships among various health sectors (e.g. service providers and public health professionals) are critical to a healthy community. _____
8. Health promotion and prevention is more effective than acute care in improving a community's health. _____
9. Fair reimbursement to medical providers is essential to maintaining a healthy community. _____
10. Access to the most recent types of medical technology is important to maintain the health of a community. _____

On a scale of 1-10 order each of the following health concepts according to their importance in community health. One represents the most important and ten the least:

Effective primary care system ____
Fair market system for provision of health care ____
Health education ____
Effective environmental protection ____
Public participation in health decisions ____
Equitable access to health care ____
Partnerships among health organizations ____
Focus on disease prevention ____
Increased spending on health care ____
Availability of hi-tech health facilities ____

This section includes a few general questions.

Date of birth: _____

Gender: Female ____ Male ____

Highest degree achieved: _____

How long have you worked in your current organization? _____

What is your job description within your current organization?

_____

_____

How long have you worked in Virginia? _____

What do you consider the most critical health problems in your community?

_____
_____
_____

What, in your opinion, are the most important actions that should be done to improve the health of your community?

_____
_____
_____
_____

Feel free to add any additional comments you might have. Please return your completed questionnaire in the accompanying postage paid reply envelope or to:

Hala Ahmed
C/O Professor James Bohland
Department of Urban Affairs and Planning
College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University
Blacksburg, VA 24061

Results of the study will be available for review on the Virginia Rural Health Policy Program web page: http://www.rhpp.vt.edu.

If you have any questions or concerns please call (540) 961-0221 or email: haahmed2@vt.edu.

Thank you for your cooperation.

Appendix B

Hospital Personnel Comments:

Critical health problems:
Child health issues.
Lifestyle changes -overweight, smoking.
Financial access to services.
Actions to improve health:
Adequate insurance coverage for all.
Additional regulation to limit smoking.
More "health behaviors" orientation throughout social institutions.
More penalties for unhealthy behaviors.

Critical health problems:
Hypertension.
Heart disease.
Stroke.
Diabetes.
Actions to improve health:
Private & public organizations & providers should be mandated to provide a minimum amount of community health service. Cooperative efforts are important.

Critical health problems:
Access, availability of medication (cost to certain portion of communities).
Teen pregnancy.
Drugs & alcohol.
Actions to improve health:
Collaboration with broad community (agencies, business, government, other organizations) to determine needs, prioritize locally & focus resources.
Comments: Equitable is a subjective term. (About #8) Intuitively, generally makes sense. Acute care is a critical component.

Critical health problems:
Well-care education & management.
Actions to improve health:
Community awareness & education.
Events screenings in medically under-served areas.

Critical health problems:
Poverty.
Lack of education.
Lack of public transportation.
Rural attitudes.
Actions to improve health:
Cooperation + coordination among health care providers.
Health education.
Access to transportation.

Critical health problems:
Care of children with special needs & long term care for aging.
Actions to improve health:
Partnership of acute care providers & the public health sector.

Critical health problems:
Unequal access.
Too few medical providers.
Actions to improve health: Reverse above.

Critical health problems:
Prevention for young children and families.
Consistent community messages.
Services for Medicaid recipients.
Actions to improve health:
Reach at-risk mothers, children & families with health education, health care & prevention services.

Critical health problems:
Heart disease.
Teen pregnancy.
Tobacco use.
Healthy eating habits.
Exercise frequency.
Actions to improve health:
Continue health screenings- this usually gives individuals the opportunity to be aware of their every day habits (eating + exercise) and how it effects their health.

Critical health problems:
Right now: dental.
Actions to improve health:
Continued dialogue with service providers

Critical health problems:
Regulation
Government involvement and control over health care providers

Critical health problems:
Financial and transportation access to primary and some specialty health care services
Financial access to prescriptions and medical supplies for those with chronic illnesses
Smoking prevention and cessation activities/education
Shortage of outpatient mental health services and access to appropriate psychotropic meds
Actions to improve health:
Universal health care coverage with 3 to 5 year health plan lockin (requiring investment in education and prevention by insurers)
Intensive health education for school age children
Extensive investment in Healthy Families or similar programs for at-risk children beginning pre-natally or at birth
Comments:
Increased spending on health care: Just need better distribution and prioritization of money already available in the system

Critical health problems:
Lack of education & access to health care.
Actions to improve health:
Educational programming- educate public & they could assist in making needed change.

Critical health problems:
Lack of available health care for non-acute conditions (chronic conditions) to prevent institutionalization e.g. home care for frail elderly.
Actions to improve health:
Medicare/Medicaid needs to pay for disease prevention and early intervention to avoid admissions to hospitals + nursing homes.

Critical health problems:
Uninsured/underinsured clients
Lack of knowledge about prevention

Critical health problems:
Knowledge on prevention
Actions to improve health:
Knowledge/education + prevention screening.

Critical health problems:
Drug/Alcohol abuse.
Actions to improve health:
Partnerships to tackle problems.

Critical health problems:
Patient responsibility/ownership of their health.
Communication between various health care providers
Actions to improve health:
Start more outpatient clinics and educational opportunities to help patients participate in staying well

Critical health problems:
Access to services.
Affordable health care.
Actions to improve health:
Make services accessible and affordable.
Let the doctors not the insurance companies make decisions on what care the patient receives.

Critical health problems:
Health care to indigent/working poor.
Actions to improve health:
Make health care available to all.

Critical health problems:
Heart disease.
Diabetes.
Cancer.
Actions to improve health:
Provide health programs & screenings to citizens- but we have to go <u>out</u> to them- go out in community.
Need for a wellness-fitness center.

Critical health problems:
Coronary artery disease.
Diabetes.

Asthma.
Actions to improve health:
Increase community awareness, education.
Provide health care professionals with information.
Increase community screenings (BP, blood sugar, cholesterol).

Critical health problems
Infant mortality.
Low birth weight.
Actions to improve health:
Collaboration of services and addressing social + psychological issues.

Critical health problems:
Poverty.
Actions to improve health:
Living wage.

Critical health problems:
Poor lifestyle choices at all levels & age groups.
CV disease/cancer/diabetes.
Actions to improve health:
Partnership among agencies/providers, the greater the number working toward the same goal, the greater our chance for success.

Critical health problems:
Teen pregnancy
Smoking
Uninsured
Actions to improve health:
Partnerships
Education
Accessibility

Critical health problems:
Poverty and its effect on compliance to medical/health promotion reforms.
Specifically diseases of cardiovascular and pulmonary along with teen pregnancy and overall sub standard academic performance in public schools which add to the challenges and complexity of health problems throughout the life span.
Actions to improve health:
A true coordinated, community wide systematic effort beyond needs assessment must be developed and implemented over time to result in any significant improvement in a community's health. Short terms assessments which end with huge reports and then are put on a shelf are not helpful in addressing and solving long term problems.
Comments: Best wishes on your study and thank you for the opportunity to participate.

Critical health problems:
Low reimbursement rate for Medicaid recipients.
Many doctor's panels are closed and there are few providers.
Actions to improve health:
Make smoking an unacceptable choice.
Provide more health education and consistent tracking of patient compliance (chronic disease patients).

Increase the number of primary health care providers that will accept Medicaid.

Critical health problems:
Dental care
Mental health care
Cost of prescription

Critical health problems:
Heart disease (smoking).
Diabetes.
CVA.
Actions to improve health:
We are doing this now- Community health forum with the leaders & community to develop plans to improve our health.

Critical health problems:
Access to care
Provider capacity
Lack of insurance model/ or programs for adults
Actions to improve health:
Medical reimbursement to physicians
Priorities for health care coverage for adults

Critical health problems:
Poverty.
Lack of preventive care services.
Lack of school-based health nurses, clinics & services.
Actions to improve health:
Increase the above two and decrease poverty.

Critical health problems:
Access to specialty services
Lack of knowledge about prevention
Actions to improve health:
Education
More accessible care

Critical health problems:
Heart disease.
Cancer.
Teenage pregnancy.
Actions to improve health:
Effective partnerships with health care providers.
Additional funding.

Critical health problems:
Access to primary care for all sectors of the population
Actions to improve health:
Broader outreach
Insurance for at risk populations/working poor

Critical health problems:
Housing.
Sanitation.
Access (easy) to care.
Actions to improve health:
Indoor plumbing.
Better housing.
Easy access to medical care.

Critical health problems: Not enough data to really know.
Actions to improve health:
Collect data to determine what problems need to be addressed. Should include health agencies, providers and area business' input.

Critical health problems:
Housing.
Actions to improve health:
Continued collaborative planning.

Critical health problems:
Access to care
Poverty
Literacy
Parenting
Actions to improve health:
Prevention
Improve access

Critical health problems:
Lack of education
Actions to improve health:
Improved communication/knowledge of available health care services

Critical health problems:
Equitable access to care.
Teen pregnancy.
Affordable medications for low income people with chronic disease.
Actions to improve health:
Address need for health coverage for uninsured.
Expansion of prevention programs such as Healthy Families.
Broaden physician network of Medicaid/Medicare.

Summary of categories (in order of frequency):

Health Problems	Actions to improve health
Chronic diseases	Partnerships/Collaboration/Cooperation
Access (equal/financial)	Health Education
Teen pregnancy	Prevention/Screening
Lifestyles	Primary Care provision by Medicaid/Medicare
Education and management	Access to services
Poverty	Regulating lifestyles
Lack of prevention	Coverage/insurance
Too few medical providers	Community health services
Child Health Issues	Funding
Drug and alcohol	Decisions by doctors/not insurance companies
Housing	Living wage

Public Health Professionals Comments:

Critical health problems:
Teen pregnancy.
Lack of understanding
Actions to improve health:
Improve health education initiatives.
Strengthen Communicable Disease Control.
Environmental Health Activities

Critical health problems:
Air pollution.
Adolescent risk behaviors.
Lack of services for uninsured, especially immigrants and children
Actions to improve health:
Comprehensive community center for women's and children's health.
Comprehensive mental/physical/social health programming for teens

Critical health problems:
Poverty
Unhealthy lifestyles
Risk-taking behavior by youth
Actions to improve health:
Healthy economy
School-based health programs
Improved access to primary care

Critical health problems:
Consequences of poverty
Actions to improve health:
Availability of care for indigent people

Comments: Increase funding to public health, it only gets 1% of total health care expenses.
Critical health problems:

Lack of universal health care coverage.
Actions to improve health:
Provide access and some manner of financing to all the community to obtain primary & preventive medical care.
Emphasize wellness and primary prevention at work sites/schools.

Critical health problems:
Access to health.
Actions to improve health:
Close look into Social Services and how funds are distributed.

Critical health problems:
Growth
Influx of recent immigrants
National breakdown in health care delivery
Actions to improve health:
Health care for indigent and poor
Better distribution of health resources
De-politize tobacco in VA to help decrease use

Critical health problems:
Access to affordable, quality health care including preventive services
Chronic diseases of which >50% are preventable
Mental health
Actions to improve health:
Partnering
Strengthening community/public health system
Avoidance of duplication of services
Emphasis on health education and prevention

Critical health problems:
Lack of primary care services.
Dental access.
Actions to improve health:
Education- Health + high HS degrees.
Community based primary care facility- accessible to all.
Dental care for schools.
School based clinics.

Critical health problems:
Lack of dental care.
Free clinic cannot provide medication to client.
Out of wedlock births.
Actions to improve health:
Mandated dental care.
Public funds to purchase medical- for free clinics.
Prevention grants to reverse teen pregnancy and out of wedlock births & promote fathers in the home.
Many of society ills would be improved by these strategies.

Critical health problems:
Development of youth

Actions to improve health:
More preventive services for youth

Critical health problems:
Access to affordable primary care.
Stressor diseases.
Dental health- adults.
Actions to improve health:
Education
Partnerships (public/private), education.

Critical health problems:
Access to care for those without health insurance
Actions to improve health:
Eliminate indoor public smoking
Easier access to health screening
Reduce alcohol/substance abuse

Critical health problems:
Epidemic of chronic disease.
Actions to improve health:
Access to medical/dental care of under & uninsured.
Funding for prevention.

Critical health problems:
Rise of STDs.
Chronic disease (high blood pressure, diabetes) among uninsured.
Poor or absent parenting.
Actions to improve health:
Insurance coverage for all.
Case management for high risk prenatal & children (baby care has reduced negative outcomes by 90%).
Create more family friendly business practices (day care, time to go to schools, insurance for dependents, flex time).
Stronger support for family life.
Education.
Comments: You provided no definition of health but implication was that it is absence of disease, this is not accepted definition today.

Critical health problems:
Lack of financial access to health care.
Chronic diseases (aging populations).
Actions to improve health:
Establish community health advisory group.
Fund public health activities.

Critical health problems:
Access
Chronic disease HIV/AIDS.

Critical health problems:
Cardiovascular disease- diabetes

Hypertension
Actions to improve health:
Prevention efforts
Health education

Critical health problems:
Lack of medical insurance for those who do not have employer coverage or Medicaid.
Funding problems for meds for chronic diseases.
High teen pregnancy rates.
Actions to improve health:
More outreach education to families regarding parenting skills, physical/psychosocial development of children.
Promotion of school based clinics that can also provide STD/family planning services to include education on prevention of pregnancy and disease.

Critical health problems:
Elderly care
Unwanted pregnancy
Environmental concerns
Actions to improve health:
Partnerships (private and public)
Accessible health insurance for citizens
Community involvement
Accessible health care

Actions to improve health:
Mobilize community resources.

Critical health problems:
Teen Pregnancy.
Decrease in services provided by the local health departments due to budgetary problems.
Actions to improve health:
Increase the number of primary care providers who accept indigent patients or fund the health department to provide primary care.

Critical health problems:
Limited access to care.
Limited Medicaid providers.
Limited medical providers for uninsured.
Community diseases- STD and TB.
Actions to improve health:
Early prevention Programs- Preschool- on wellness.
No substance abuse- positive self image.
Correct nutrition practices-Incorporate in public PUT sector.

Critical health problems:
Cardiovascular.
Access and use of health care.
Actions to improve health:
Systems for all economic levels to receive care and pharmaceuticals in all geographic areas not in few central places.

Facilitate health care clinics managed by public health nurses.

Critical health problems:
Access to care (equitable).
Children's mental health services.
Public awareness of disease-related issues, prevention, early detection.
Actions to improve health:
Community network of agencies to develop care system, public awareness/education activities.

Summary of categories (in order of frequency):

Health Problems	Actions to improve health
Equitable Access (financial)	Health Education
Chronic/Community Diseases	Financing/Funding
Teen/out of wedlock pregnancies/poor parenting	Community-based Primary Health Care facilities (at schools/work)
Lack of coverage/insurance	Access
Dental access	Partnerships
Lack of understanding	Dental Care
Lack of affordable primary care	Insurance coverage
Medicaid providers	Disease control
Air pollution	Family-friendly business/family support
Risk behavior	Teen programs
Inefficient free clinics	Environmental health activities
Budgetary problems	Women & children/prenatal health

VITA

PERSONAL DETAILS

Name: Hala A. Ahmed
Date of Birth: November 4, 1970
Email: haahmed2@vt.edu

EDUCATION

Masters of Urban and Regional Planning, March 1999
Concentration: Environmental and International Development
Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA, U.S.A.
Thesis: *Applicability of Healthy Communities in Virginia*
Advisor: Professor James Bohland
GPA: 3.6/4.0

Bachelors of Science in Architecture, February 1994
Faculty of Engineering and Architecture
University of Khartoum, Sudan
GPA: 3.8/4.0

PROFESSIONAL EXPERIENCE

Virginia Tech, Blacksburg, VA

Service Learning Projects

- Designed a Strategic Plan for the sustainable economic, environmental and social development of Bosnia Herzegovina, Former Yugoslavia, January-April 1998
- Completed a Needs Assessment Study and recommendations for a Grant Proposal for the Town of Glade Spring, VA, January-April 1998
- Performed an analysis and suggested recommendations on environmentally-oriented energy and water consumption on campus, January-April 1997
- Designed a plan for the sustainable water resources management of the River Nile, Sudan-Egypt, January-April 1997
- Facilitated two community meetings on the best means of waste disposal for the Town of Blacksburg, VA, January-April 1997

Graduate Assistantship

- Assisted the Dean of the College of Architecture and Urban Studies in presenting research on Global Cities, Netherlands, October 1997
- Completed a survey on the administrative structure of the Occupational Health and Safety Administration, August 1997-April 1998
- Assisted the Associate Dean for Research in the College of Architecture and Urban Studies in conducting research on Historically Black Schools and Universities, August 97 – April 98

Internship

- Built a Geographic Information Systems database on the distribution and accessibility of medical utilities for the Southwest VA Health Systems Agency, VA, June 1998- present
- Conducted a study on the safety of Manufactured Housing for the Montgomery County Planning Department, Christiansburg, VA, June-August 1997

Miscellaneous

- Assisted in administering a university wide survey on Information Technology, Institutional Research and Self Study, January-April 1997
- Operated, organized, filed, and entered data for the library of the Community Design Assistance Center, Blacksburg, VA, March-August 1997

Khartoum, Sudan

Research Assistant

- Part of a research team for a national project "Shelter and Habitat in Sudan," Department of Human Settlements, Sudanese National Center for Research, June-December 1996

Volunteer Work

- Prepared workshops for rural communities on the importance of tree-planting and preservation for fighting desertification, Sudanese Environmental Conservation Society, August 1996
- Prepared workshops for rural communities on the adverse health effects of improper waste disposal, Sudanese Environmental Conservation Society, September 1996
- Raised funds for the Maigoma Orphanage, Checher Home for the Disabled, Women's Prison and Sakina Institute for the Deaf and Mute; International Voluntary Welfare Group, 1990-1996

Architect

- Designed, prepared drawings and cost estimates for different building types; Designers' Group Architects-Planners & Consultant Engineers, April 1994-June 1996
- Teaching Assistant and Studio Instructor in the Department of Architecture and Urban Planning, East Nile University College, April 1994-March 1995

PUBLICATIONS

Ahmed, Hala A. (1997, March). Energy Conservation in a Dwelling Unit. Presented at and published in proceedings of the Third Annual Scientific Conference, Khartoum, Sudan.

Ahmed, Hala A. (1998, December). Healthy Cities: A Comprehensive Approach to Public Health. *Rural Health Policy Program.* Available: http://www.rhpp.vt.edu

SKILLS

Word	SPSS for Statistic Analysis	ArcView for GIS
Excel	PowerPoint	PhotoShop
Internet	HTML	

LANGUAGE PROFICIENCY

- English
- Arabic
- French

CONFERENCES/TRAINING

- First Africa Economic Forum, Africa Club of the World Bank and International Monetary Fund, Washington D.C., October 23-25, 1998
- 1998 National Planning Conference, American Planning Association, Boston, MA, April 4-8, 1998
- Conference on Socially Sustainable Development, World Bank, Washington D.C., October 6-10, 1997
- Housing and the Built Environment Conference, International Sociological Association, Alexandria, VA, June 11-14, 1997
- 2-week exchange at University of Halab, Syria, February 1993-Reviewed methods of preservation of historical buildings
- 1-month training with Arab Contractors, Cairo, Egypt, May 1990-Reviewed building constructions methods for hot climates

ACTIVITIES

- American Planning Association
- Virginia Tech Women Crew Team
- International Voluntary Welfare Group
- Sudanese Environmental Conservation Society
- Sudanese Society for Engineers and Architects