Patient Education: A Strategy to Patient Empowerment

By

Susan L. Pasion

Master of Arts in Organizational Change

Hawaii Pacific University

Fall 1998

Certification Page

The Professional Paper submitted by this student has been reviewed and deemed to have met the Professional Paper (MGMT 720) requirement for Hawaii Pacific University's Graduate Program.

Student Name: **Susan L. Pasion**

Social Security No.: [redacted]

Title of Professional Paper: **Patient Education: A Strategy To Patient Empowerment**

[redacted]

Cheryl Ann Crozier MBA

December 7, 1998

Date

Executive Summary

The health care industry is rapidly changing. Changes include the shift from brand name pharmaceutical products to generic versions, consolidation of health care providers, provision of health care through managed care, and disease management initiatives. One important change has been the growing influence of the patient in the health care arena. Patients play a larger role in the emerging health care environment because they are now being asked to share increasing responsibility for the state and care of their health. Preventing illness and controlling its effects when it does occur requires patient participation. Women's health and its determinants, the role of gender, the social context in which women experience life, all play a role in identifying important issues in women's health. The future of women's health can be positively affected by empowering female voices. Because women are major health consumers, it is important that they have participation in both research and policy decisions. There is increased need and a duty for health professionals to communicate with patients efficiently and effectively. For patients to become educated and empowered, health professionals have a duty to keep the patients current in the fields of medical science and health care delivery.

TABLE OF CONTENTS

CHAPTER 1
INTRODUCTION

Good health is something that everybody wants, but different groups may have different ideas about what exactly constitutes good health. To a child, good health may simply mean the ability to attend school regularly and thus have the opportunity to earn good grades. A teenager may focus on having a clear complexion or being free from dependency on drugs, alcohol, or tobacco. To a pregnant woman, good health may mean the ability to give birth to a healthy child. As people mature, their ideas about what constitutes health also change.

Background

In Western thought, as influenced by Plato, Aristotle, and Descartes, the concept of health originally was concerned only with the well being of the physical body. Later, the great pioneers of psychoanalysis, Freud, Jung, and Adler, expanded on the classical definition of health to include soundness of mind and introduced the concept that good health encompasses both physical and mental well being (Downie, Tannahill and Tannahill, 1996). By 1946, the World Health Organization was defining health as "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity." This definition acknowledged the interrelated physical, mental, and social facets of health, both in the positive dimension and the negative dimension (Downie , Tannahill & Tannahill ,1996).

The concept of health in its positive dimension is a complex one because it includes the subjective experience of well being. As Downie , Tannahill & Tannahill

(1996) observed, an individual's subjective estimation of his or her mood or level of happiness varies from time to time and may be influenced by events or induced by chemical substances. Being in love, experiencing good weather, and consuming alcohol all might lead an individual to a feeling of well being.

Personal well being may be found through the more structured quality referred to as *empowerment*, that is, the possession of a measure of control over one's life through acquired life skills. Empowerment has a real place in health care. For example, to treat a patient suffering from mild depression, a physician might prescribe either an anxiolytic drug or recommend that the patient join a support group directed toward the acquisition and development of life skills. Either course is likely to result in improved mood for the patient. However, as Downie , Tannahill & Tannahill (1996) pointed out, the patient's reliance on empowerment to induce a feeling of well being can reduce his or her dependence on drugs to achieve positive mood

Harron, Burnside, and Beauchamp (1983) pointed out that how we define health is far from being a purely academic concern. The definition of good health that we subscribe to will exert a major impact on what we consider legitimate activities, particularly with regard to health care and health insurance coverage. When federal guidelines expanded the definition of health to include mental health, for example, federal employees were able make legitimate claims for reimbursement of costs for treatment by psychiatrists and psychologists.

Our contemporary definition of health is a complex one. As we expand our definition of what constitutes good health, we change what we consider to be good

health care. Moreover, as expanding technologies make possible rapid developments in health care and medical treatments, our expectations with regard to medical care rise. Society regards medical developments in a very positive light and, as Harron, Burnside, and Beauchamp (1983) pointed out, applies pressure to make good health every person's right." When we look at our available resources, however, we must ask ourselves whether we have enough resources to ensure high levels of health care for all individuals and whether we are willing to commit these resources to the effort to provide all individuals with a high level of health care, even if such a commitment competes with other societal requirements, such as, for example, education.

Health is complex and interrelated occurrence. As stated by Spector (1996), health can be analyzed using holistic health concepts which, in line with the World Health Organization's definition of health presented earlier, examines the health of body, mind, and spirit. In holistic medicine, these three areas are explored from a traditional perspective and directed to three main goals: maintaining health, protecting health, and preventing illness. Each of these goals is approached according to the physical, mental, and spiritual traditions of the people who practice holistic health techniques (Spector, 1996).

Some examples of traditional methods of maintaining health include everyday practices such as wearing proper clothing, eating the right food, and getting exercise (Spector ,1996) Mental health is an important part of the health equation. By concentrating and using the mind, an activity like reading helps in the maintenance of mental well being. Spiritual health is maintained in the home and with family closeness.

A strong identity with the community is a part of traditional life and the life cycle, which all relate to health and well being.

At the root of health protection are traditional beliefs about harm, illness, and misfortune. Holistic health traditions have been shaped by culture. Health remedies like special herbal teas, special foods, and massage, among others, are passed down from generation to generation. According to Spector (1996), in the holistic health view, prevention is the way one looks after oneself and avoids harmful elements. Illnesses that are not easily explained, often are viewed as punishments for bad behavior. Special garments or ornaments may be viewed as effective in warding off illness. The mental aspect of protection includes avoiding people who are thought to precipitate illness. On the mental and spiritual levels, health restoration may be accomplished through exorcism, the aid offered by traditional healers, and family support. Religious customs, rituals, and everyday superstitions also are associated with protecting health.

Our quest for health influences us and leads to the individual pursuit of health knowledge. All over the world, health education and promotion is practiced in a variety of settings. Schools provide special programs to increase children's awareness of the hazards of illegal drugs and the benefits of avoiding tobacco usage. Employers promote wellness by offering employees information about how to eat right, the benefits of exercise, and how to deal with stress. Communities and health care providers offer different forms of health screening.

Health education has long been recognized as a way to meet public health objectives and improve the success of public health and medical interventions. Health education activities are considered empowering to people in that they afford people a measure of control over their lives. Other elements that assist in this empowerment are discussed later in this thesis.

Health education is a multi-purpose communication activity geared toward enhancing positive health and preventing or diminishing ill health in individuals and groups. Health education often is perceived as a simple matter of telling people what they ought to do to be healthy. This is far from reality and a dangerous assumption. Health education is not the same as a geography lesson; it is a comprised by a complex set of components. To enhance health and prevent illness, health education must influence people's beliefs, attitudes, and behaviors. Because "knowledge is power," health education leads to patient empowerment (Downie , Tannahill & Tannahill, 1996). Health education should not be viewed as a medically dominated model. Health care professionals and their patients can learn from each other, confirming that the health provider-patient relationship is still the most important ground for health education.

Spector (1996), noted that one aspect of people's beliefs are shaped, at least in part, through the acquisition of information. Many factors influence and strengthen beliefs, such as the credibility of the "messenger," the quality and appropriateness of the health communication, the perceived relevance of the information, and the extent to which the new information ties with existing beliefs. Beliefs about self are important in

shaping perceptions about one's ability to obtain better health. Downie , Tannahill & Tannahill (1996) reported that an individual's self concept and self esteem are important determinants of that individual's health. High levels of self esteem often relate to social competence and high resistance to pressures to conform--a useful defense against injurious behaviors. According to Downie , Tannahill & Tannahill (1996), low self-esteem is associated with unsatisfactory relationships with other people, increased vulnerability to pressures to conform, and a feeling of helplessness to control one's life. Health education offers people help people change negative personal behaviors related to diet, alcohol consumption, tobacco and other drug use, and sexual conduct. Health education nurtures self-responsibility to develop health-related life skills (Dowrie , Tannahill & Tannahill, 1996)

Patient Empowerment

Participants in health education are brought to varying levels of consciousness and critical awareness, which helps them master health-related skills and empowers them to better control over their health (Rudd & Comings, 1994) Labonte (1994) defined empowerment as "the process by which people, organizations, and communities gain mastery over their lives" (p 253)

In the past, patients commonly were viewed as passive participants of health care Health care professionals, by virtue of their expertise, would make the final decision about what was best for the patient (Falvo, 1985). Patient education has helped empower people with greater control over their health and lives. Today's

patients are less passive and better informed about the medical options available to them as the result of increased access to medical information through technological media. Quite recently, the World Wide Web has become a valuable source of medical information, a tool for patient education, and a strategy for patient empowerment. Never before has such abundance of medical information been readily available.

Empowerment exists on several different levels: individual, organizational, and community. The individual component is found in a person's ability to exert control over his or her life, and is thus similar to concepts of self-efficacy and self-esteem, which emphasizes the development of positive self-concept. Empowerment at the individual level combines personal efficacy and competence, a sense of mastery and control, and participation in group efforts to influence institutions and decisions (Israel Checkoway, Schulz & Zimmerman, 1994). The development of personal control, competence to act, and interpersonal, social, and political skills enables linkage at the various levels.

Members of empowered organizations share information and power and work towards mutually defined goals. This organizational process empowers individuals and enables them to increase their control within the organization, and, at the same time, enables the organization to exercise influence over policies and decisions in the larger community (Israel et al, 1994).

An empowered community consists of individuals and organizations that apply their skills and resources in collective efforts to meet their respective needs. Like the empowered organization, the empowered community has the ability to influence

decisions and changes in the larger social system. The three levels of empowerment are important independent systems, yet collectively they can develop the capacity to act effectively to create social changes.

Empowerment can be both a process and an outcome. The term *empower*, when used as a verb, refers to a process through which people gain influence and control over their lives. The traditional definition of *to empower*, "to invest or give power or authority," does not fit into the concept of empowerment as it is regarded in health education. Health educators need to understand they can not "give" power to people; instead, individuals are enabled to strengthen skills and resources to gain power over their own lives. The process that results in this attainment of control and strengthened skills is an outcome. Empowerment is a complex and ever-changing long-term process.

The patient is a consumer of health services. Thus an empowered patient is an empowered consumer. "Empowerment includes individual determination over one's own life and democratic participation in the life of one's community (Geller et al, p. 4). When a patient collaborates with health professionals toward a plan for his or her treatment, this activity can empower the patient. The patient's participation in patient education in different ways and at different stages of the process in itself enhances the decision and empowerment process (Rudd & Comings, 1994).

Bastian (1998) suggested four main approaches to considering consumers in the health care system: scientific, market, legal, and democratic. In the scientific approach, health consumers are subjects of research. This is an important health-

consumer role that represents a vital link in improved health care. In the market approach, health consumers are seen as informed users of health goods and services. In the legal approach, patients are considered citizens with rights. Finally, in the democratic approach, consumers are viewed as citizens and equal partners in their health care. If only one of these characteristics is applied to describe the health care consumer, our view of these consumers is limited to the point of stereotyping. A broader perspective could come from applying the various characteristics of health care consumers in all four approaches (Bastian, 1998).

The concept of empowerment includes the notion of power. Power consists of the abilities to predict, control, and participate in one's environment. Our society is assumed to consist of separate groups, each having levels of power and control. To effectively empower, partnerships must be formed between health professionals, individuals, and communities. To go beyond "victim blaming" stereotyping, health education must incorporate the concepts of power and empowerment into its analysis and strategies. Blaming the individual is not an effective practice. Instead health and social services need to nurture and build upon the strengths, resources, and problem-solving abilities already in place (Robinson & Minkler, 1994).

The acquisition of knowledge influences health behavior because new information can help people assert control over the factors which affect their health. This empowerment can occur at many levels from the personal to the political. It also has potential to create solidarity among certain populations, such as women, retirees,

and managed care groups. Empowerment is essential for influence and social reconstruction.

Women's Health

Women today are increasingly aware of their unique health concerns. Health educators have played an important role in communicating and translating scientific developments concerning women's health. The life expectancy for American women exceeds that for American men by an average of 7.5 years (Pinn, 1992). However, although women live longer than men in this country, they experience disproproportional health care problems and are subject to discriminatory treatment in the health care system.

Historically and until very recently, clinical research has been conducted primarily on men, and thus medical treatments for women largely are based on a male model. This disparity was finally addressed in 1991, when Congress passed several bills mandating the inclusion of women in clinical trials. At this time Congress created the Office of Research on Women's Heath (ORWH), which supports studies to evaluate the prevention of diseases in women and the course of treatment for diseases in women to improve our basic understanding about female growth and development (American Medical Association, 1991).

Females use 65% of all health services, suffer from more diseases than men, and use health services more frequently men. They also exert great influence on the health care choices of their families. Women's views impact about 70% of the health care

service choices made by their family members (Finn, 1997). Clearly, women need information about health care in general and also need to be made aware of the risks they face--and the preventive measures they can take--for such serious diseases as cardiovascular disease and breast cancer, among others.

Societal perceptions of the health status of women have often disadvantaged women and have been used as rationales for barring them from entry into positions in politics, science, medicine, law, and other fields. During the 1960s and 1970s women gathered together to increase gender equality, but the important goal of comprehensive health care for women is still impeded. Women generally have lower incomes than men and may have less education as well, making them vulnerable to less-than-adequate medical care. Managed care is flawed by gender-biased polices that affect women differently than men. Despite the fact that large numbers of women suffer from diseases that are thought to mainly afflict men, including heart disease and AIDS, the focus of women's health care remains centered upon obstetrics and gynecology. Moreover, many medical services for women are fragmented and overlap to produce a situation in which medical care for women is poorly coordinated (Clancy & Massion, 1992).

Until very recently, all clinical research on cardiovascular disease was conducted on men, although cardiovascular disease kills more women than men. While recent developments and initiatives by the ORWH are beginning to change the male-centered focus of clinical research to include studies of females, insufficient clinical research on women is the rule and not the exception. Increased awareness of women's

health needs is crucial both within the health care system and within the general population (American Medical Association, 1991).

Women's health and its determinants, the role of gender, the social context in which women experience life, and women's perceptions of health and illness all play roles in the process of identifying women's health issues. Empowering individuals and communities and influencing public policy can help to ensure that women have the opportunities to achieve optimal health status.

Purpose of the Study

The health care industry is undergoing some of the most dramatic changes ever faced by a major industry. Health care, which once was focused on the individual doctor and hospital, has been transformed by competition, strategic business thinking, consolidation, and managed care (Freund and Patorek, 1997). Health care organizations are becoming very business-oriented and, to remain competitive, they now face a situation in which they must focus on several interrelated strategies. One of the most significant of these strategies is the use of high technology, such as electronic medical records, to increase efficiency. Another important strategy, which is the focus of this thesis, is patient education delivered via patient education programs. Patient education is seen as a mode to enhance prevention and management of health problems and as a method of reducing medical costs.

A great deal of information is available concerning techniques for educating and empowering patients and the effect these techniques have on patient health. This thesis

presents a review of the subject of patient empowerment. In this thesis, a review of the literature on this topic is followed by a discussion of the role of patient education in health care.

The increasing use of technology in the provision of health care results in constant change in the medical field. In this thesis, the use of technology is discussed in light of the current trend to use it as an effective patient education tool for increasing patient empowerment through enhanced patient-physician communication. Specifically discussed is the use of the Internet to provide patients with access to appropriate medical information via the World Wide Web.

Also discussed in this thesis is the role of patient education in the empowerment of women patients to gain greater control of their health. Patient empowerment, for example, has become increasingly important in the effort to reduce heart disease in women, currently the number one cause of death for females (AHA, 1998).

Decisions about health care delivery traditionally have been made by health professionals and health officials, and women's voices have been noticeably absent from health planning. Nonetheless, women are major consumers of health care, and recently health professionals have been responding to increasing concerns that the needs of women be addressed. Patient empowerment is an especially powerful strategy in this effort. Women need to be informed health-care consumers, and they also need to be advocates for increasing the power of women in health care education, research, and delivery (Taylor, 1997).

Importance of the Study

This thesis examines patient education as a means of increasing the ability of people, and particularly women, to improve their health through greater participation in their health care. The goal of this thesis is to examine a variety of factors that affect how people become empowered to maximize the benefits they can receive from health care. A patient's cultural background and socioeconomic status influence that individual's personal expectations for the level of health he or she should be experiencing and the kind of health care that individual will receive. Cultural and socioeconomic factors strongly influence the individual's interpretation of symptoms, response to therapy, and disease patterns.

As health consumers, women in particular often make health care decisions not only for themselves, but for their family members, and they also are likely to exert a strong level of influence on the health-care decisions made by other people in their families. Thus, the level of an individual woman's ability to prevent, intervene in, and manage health problems very often has a direct effect not only on the level of health she will experience, but on the level of health experienced by her family members. Health-care empowerment offers the female patient and health care consumer greater control over her health and life. Importantly, the positive influence of her empowerment is felt by the family members for whom she is makes health care decisions, such as her young children, and the family members whose health care decisions she may strongly influence, such as her spouse, siblings, parents, and grown children. Any increase in the capacity of women to make and implement good health maintenance and disease

management decisions will be felt as a positive benefit not only by individual women, but by society as a whole. Clearly, the empowerment of women as health consumers has far-reaching implications for the general health of society (Finn, 1997).

The key to patient empowerment, of course, is knowledge about what constitutes good health care, both in general and as it relates to the specific health problems of the individual. However, health information alone cannot empower the individual. Several interrelated factors enable the outcome of an attempt to empower a patient to maximize his or her well being in terms of health. Of these, the connection between patient and physician is one of the most important, and this thesis will explore the patient-physician relationship and examine how ever-changing medical technologies and health information make a difference in how the patient and physician communicate.

Statement of the Problem

Our health expectations are strongly influenced by our basic definition of what health is. Based on this definition, and on other beliefs, we arrive at a conception of what good health entails. In addition, our cultural structures and values influence our perceptions of what we should expect in terms of health and the possibilities open to us to reach or maintain our ideal of good health. These perceptions influence our behaviors in terms of preventing or managing health problems.

This thesis seeks answers to basic questions. How do we define health? What is health education? What health-education models are available to us? How effective are these models in empowering patients, especially female patients? How can an

individual's beliefs, attitudes, values, and behaviors enable or disable that individual's power to maintain good health or manage disease?

In this thesis, various approaches to health education will be documented and discussed. Health education includes the dissemination of information, but this information alone cannot empower the individual. Because much of the success of health care depends on patient perception and behaviors, which are strongly influenced by cultural factors and values, in this thesis health education will be viewed as a multidisciplinary activity through which patient empowerment can be achieved. Of the interrelated factors that contribute to patient empowerment, strong focus will be placed on the connection between patient and physician and how the patient-physician relationship is influenced by ever-changing medical technologies and ever-increasing levels of health information.

Assumptions

This thesis addresses the issue of women's health and patient empowerment from a consumer perspective. An assumption fundamental to this thesis is that the average American wants good health. From the perspective of this writer and for the purposes of this thesis, all Americans are considered "average Americans."

In every year since 1984, cardiovascular disease (CVD) has claimed the lives of more females than males in terms of total deaths (AHA, 1998). This fact alone points to a crucial need for the involvement of women in medical research. In 1990, the

National Institute of Health (NIH) responded to this need by establishing the Office of Research on Women's Health (ORWH) (AHA, 1998).

If we assume that knowledge is power, we must assume that patient education results in patient empowerment, and the present research was undertaken with this assumption in mind. This research also is based on the assumption that education can be effective for everyone. Another assumption on which this investigation is based is that the available evaluations of patient education programs provide us with all the information we currently need to assess their effectiveness. Further assumed is that the involvement of the NIH, the AHA, and several other organizations to develop community-based public health interventions were precipitated by statistics indicating increasing levels of various health problems in the female population and that these interventions have been aimed at achieving healthful behaviors in women. Additional assumptions are that the data referred to in this investigation are correct, have been reviewed objectively, and have created an interest in and focus on women's' health.

Critical Questions

Several critical questions central to health education are explored in this thesis. A number of definitions of what constitutes health are extant and, because each of these definitions is comprised by elements that affect the perceptions of the people that subscribe to them, the first question central to this thesis is: What is health?

On this question people must necessarily base a related question which also is central to this investigation: How is good health obtained? Because our answers to

these questions are dependent on cultural attitudes, it is important for us to understand how our cultural attitudes affect our behaviors in terms of maintaining good health and managing disease. Therefore, a third question central to this thesis is : How does culture effect attitudes and behavior about health?

Several models of health education exist, each of which was designed and implemented according to the intended audience. To come to a basic understanding of health education, we must probe several questions: What is considered health education? How do various health education models affect patients? Health education and patient empowerment exist first in the patient-physician relationship. In this thesis we probe the question: Can technology enhance communication between a patient and a physician and increase the patient's health knowledge without intimidating either the patient or the physician?

Very important to the present thesis is the question: Does health education result in the empowering of patients? If it does, do patients who experience a greater sense of control over their health care tend to change their behaviors in ways that are beneficial to their health or in ways that present risks to their health?

The search for possible answers to these questions will provide insight into the complex issues surrounding patient empowerment.

Method of Inquiry

This investigation was based on a review of secondary data on the topics of health, health education, patient empowerment, and women's' health. Books and

periodicals on these topics were reviewed for pertinent published from 1985 to 1998. This information was retrieved from two locations, Meader Library and Hawaii Medical library. Additional medical information was obtained via the World Wide Web. Data specific to heart disease was obtained from the American Heart Association--Hawaii Affiliate, including information received in an interview with the Program Director, Judith Delkeskamp. Together, these sources provided comprehensive information about the issues of health, health education, patient empowerment, and women's health.

Criteria

Data retrieval for this thesis centered on the subject of patient empowerment. In connection with patient empowerment, data concerning definitions of health, methods of health education, and women's' health issues were obtained.

In this thesis, the areas of discussion include the definitions of all topics reported on, theories of health education, and various health education models. Current data in terms of publication date and information was reviewed for relevance to the subject and selected topics. Sources of information concerning patient empowerment included articles on how empowerment is achieved and how effective it may be in disease prevention and intervention. For the purposes of this thesis, specific health issues related to women's health, such as reproduction and childbirth, were not examined. Instead, women's health was examined in light of the current movement to

create a perspective of health provision that is inclusive of women, for example, one which seeks to involve women in health research trials.

The case studies, review articles, and opinion papers reviewed in this thesis demonstrated knowledge of, and consideration of, the efforts and viewpoints of prior researcher. The reviewed literature contained applications and discussions of other research efforts and considered opposing ideas. Professionals in health and academic authored the majority of the sources of information used in this investigation.

Alternatives

An *alternative* is a choice between two or more possibilities. *Patient empowerment* presumes that patients take active roles in the various issues of health care. In terms of the present investigation, one possible alternative to the empowered patient is one who adopts a do-nothing, learn-nothing attitude. In practice, non-empowered patients permit medical insurance companies to deliver (or fail to deliver) health care delivery as deemed necessary by the company. A patient with a "do something" attitude will attempt to make behavioral changes, perhaps beginning with the simple task of reading a brochure on how to lose weight. When a patient does not attempt to make any positive behavioral changes, or when the patient's attempts to make positive behavioral changes are thwarted by situations or circumstances, the patient is likely to experience feelings of powerlessness and even hopelessness, and the likelihood that that patient will do nothing to manage a health care problem. For such a

patient, any form of involvement in his or her health care would represent a positive step forward and the seeking of a positive alternative.

Limitations

For the purposes of research investigations, *limitations* are regarded as restrictions in the particular research and the extent to which the research can be generalized and applied as a result of those restrictions. For this investigation, the data retrieved was limited to that print materials published from the period of 1984 to 1998 which were available in two libraries in Hawaii, and materials available on the World Wide Web during 1998. The information gathered for this study might not be generalized to all cultures. Due to the ever changing aspects of the health care industry, some of the studies and models may not be applicable. The entire body of available data could not be located, searched, and read. Due to time and material restrictions, materials surveyed for this investigation were largely limited to those authored by health care professionals and academics.

Overview

Everyone wants to enjoy good health, but different groups have different ideas about what constitutes good health. These different views contribute to the designs of patient education programs.

The rising costs of health care affect our nation's health. Patient education is a recognized method for meeting public health objectives and improving the success of

medical interventions. Patient empowerment is a process by which individuals gain influence in their health care and control over their health and lives. The process of empowerment is complex and ever-changing. Patient education and patient empowerment are two strategies that can help women achieve better health care and better health.

CHAPTER II
LITERATURE REVIEW

Introduction

Good health can be viewed as a combination of many components of physical, mental, and social well being. To a large degree, individuals who consider themselves healthy participate in activities to protect and maintain their health, and individuals who suffer from illness or disease seek remedies to restore their health.

An individual's health is controllable only to some degree. A person's genetic make-up, for example, may predispose the individual to some types of health problems which are entirely out of the patient's control or may directly result in such problems. An individual's health also may be affected by physical, social, or political environments entirely out of that person's control.

The World Health Organization (WHO) has defined health as "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity" (WHO, 1946). Downie , Tannahill & Tannahill (1996) criticized this definition as misleading because it implies that health is an absolute concept and not a relative one.

The first known definitions of health defined health in terms of physical well being. This definition was later expanded to include mental well being by Freud, Jung, and Adler. In 1946, the World Health Organization include "social well being" in our definition of what constitutes good health. This expanded definition extended our

expectation of good health to a perceived right for all persons everywhere (Harron, Burnside, & Beauchamp, 1983).

The view that good health is the right of every person presents concern in our society because at present this expectation cannot be fulfilled. The degree of health care which can be provided is limited by the availability of resources. Full and complete health care cannot be given to everyone because our resources to do so are outstripped by the demand for health care.

Harron et al. (1983) asked a very pertinent question: Who makes the decisions about who will or will not be provided with various types of health care? In our society, inclusion in or exclusion from health care is largely dependent on the definition of health subscribed to, and who decides what this definition is can make a difference. For example, the definition of health subscribed to by a health maintenance organization (HMO), determines whether certain drugs or medical procedures will be covered by health insurance. A case in point is a policy established by the HMO, Kaiser Permanent, which refused to reimburse their members for the prescription cost of the recently introduced drug, Viagra, which is prescribed to restore male potency. Kaiser Permanent's decision was influenced by a committee of 40 doctors, nurses, pharmacists, and other experts, who took the position that Viagra is not a medical necessity. The cost of the drug was another deciding factor; Kaiser Permanent indicated an unwillingness to pass along the cost of Viagra to all its members and a belief that a failure to provide coverage for Viagra would only affect only those who desired treatment with it. California's Department of Corporations, which licenses the

state's HMOs, is investigating this decision (*Time*, 7/13/98). Clearly, various definitions of health abound, and how they are applied are a result of diverse value systems (Downie , Tannahill & Tannahill, 1996).

While individuals may not have control over the coverage decisions reached by their health insurance carrier, they do have control over many aspects of their own health-related behaviors. Individuals are free to make such choices as refraining from cigarette smoking to improve their health or reducing their salt intake to reduce their blood pressure.

The practices of health care and health education have not kept pace with our expanded definition of health (Harron, Burnside, & Beauchamp, 1983). Despite societal pressure to use money and personnel for activities that promote physical, mental, and social well being, health programs are still largely restrained to the diagnosis and treatment of disease. However, preventative medicine is coming into focus because it decreases suffering, increases the health of entire segments of the population, and saves money (Harron et al., 1983)

The World Health Organization's expanded definition of health, mentioned above, focuses on people's well being, whether physical, mental, or social. The concept of well being is both complex and subjective. A subjective feeling of well being is readily influenced by emotions, may be brought about by such mundane experiences as good weather or a favorite drink, or can arise from influences detrimental to the individual's functioning in society, such as illegal drug addiction (Downie , Tannahill & Tannahill, 1996).

To be objective in our search for the nature of well being, we must consider the origins of subjective feelings. Downie , Tannahill & Tannahill (1996) stated that a true state of well being, that is, well being which indeed is reflective of positive health, must be able to stand up to some sort of "outside scrutiny." Their argument is that true well being involves and reflects the quality of *empowerment*, that is, having control over one's life, which can lead to a deeper level of well being. As Downie and Tannahill (1996), further pointed out, acquiring and developing life skills and thus achieving autonomy creates a long-lasting and true well being that is very different than, for example, the feeling of well being that is achieved via an anxiolytic drug, such as Prozac, prescribed by a physician. The patient treated with Prozac feels good until the drug wears off. To regain that feeling of well being, he or she must take another dose of the medication.

No understanding of what we consider health can be reached without an understanding of what we consider illness. The term *illness* is not interchangeable with the term *disease*--illness has a less technical meaning than disease. A person who experiences weakness or a headache feels ill without necessarily suffering from a medically defined condition such as, for example, heart disease. According to Downie , Tannahill & Tannahill (1996), the distinction between feeling ill and being ill can be the distinction between the subjective and the objective or between the mental and the physical. Nevertheless, both illness and disease are uncomfortable and undesirable abnormalities of a system. Illness is a negative state of health which may be the result of complex physical, mental, and social factors and determinants (Downie , Tannahill &

Tannahill, 1996). Health professionals need to fully assess all the factors that contribute to illness and disease. Our understanding of the determinants of health and a comprehensive approach to preventive care can increase the chance that we will achieve our health goals. According to Falvo (1985), health care professionals need to be aware of these determinants and to understand the roles of these factors so that health care professionals can provide the positive influences that lead to improved patient health.

One set of health determinants concerns the patient's ability to accept health recommendations and to change behaviors that have negative effects on health. The patient's individual values and attitudes can be major determinants of his or her health status. Patients make choices based on their own subjective priorities. They may continue activities despite warnings that such activities may cause further injury. Downy , Tannahill & Tannahill (1996), reported on a survey of cigarette smokers who believed that their continuing to smoke would not make a quantitative or qualitative difference to their future experience of illness. This is an example of the human ability to insulate against information that makes them uncomfortable. Although the cigarette smokers surveyed acknowledged that smoking is injurious to health, it was easier for them to believe that their health wouldn't change than to face the difficulty and discomfort of withdrawal from nicotine. However, as Gray & Fowler (1984), pointed out, people's attitudes vary from time to time. A patient's attitude toward obesity may change when that individual is diagnosed with heart disease.

Successful intervention by health care professionals requires them to assess the individual patient's value system. For example, if jogging holds a high priority for the patient, a recommendation to "stop jogging" may be less effective than a recommendation to use proper running shoes (Flavo, 1985). As Flavo (1985) observed, "Imposing values on patients with little respect for their own subjective preferences may decrease their quality of life rather than improve it " (Falvo, 1985, p. 186).

Another determinant of health is self-concept. The individual's self-concept influences his or her beliefs about the possibility of attaining better health. For example, an individual who believes that he or she is not a "good at sports" may think that he or she cannot exercise. That individual's self-concept thus becomes a barrier to good health. Health educators have emphasized the importance of self-concept and self esteem as determinants of health, and health education may help shape the basic element of self-concept. We accept social competence as a positive attribute, and a high level of self-esteem in this regard will give the individual high resistance to pressures to conform to possible unhealthy activities. Low self-esteem, on the other hand, seems to make the individual vulnerable to pressures to conform. Low self-esteem, for example, has been linked to unsatisfactory relationships (Downie , Tannahill & Tannahill, 1996). Promoting patient self-esteem is an important part of health education and is seen as another step towards the promotion of patient health.

In terms of the communication that occurs between the health care professional and the patient, the patient will assess the credibility of the "messenger" and perceive

the message accordingly, either as fitting or clashing with the individual's existing beliefs. For example, an individual with traditional beliefs about the cause or treatment of his or her illness may be suspect of the views of a health care professional with modern beliefs. Providers need to find a way to care for the individual that matches that patient's perception of the health problem and its treatment (Spector, 1996).

Social and political factors may produce changes that affect people's health. For example, laws, regulations, orders, and legal powers may improve conditions and situations that are injurious to people's health. One instance pointed out by Gray and Fowler (1984) was the creation of improved access for poor people to health and social services by the National Health Services Act of 1946.

As Gray and Fowler (1984) observed, governments have the power to regulate the actions of individuals and groups for the benefit of others or for the benefit of society as a whole. The use of political power to regulate the activities of individuals can change behaviors that cause disease or harm. Seat-belt laws prevent serious injuries and death in car accidents and, although some individuals perceive these laws as paternalistic infringements upon their rights, the public generally accepts these laws because they prevent harm. Compulsory fluoridation may not be as readily accepted by the public because there is insufficient credible data to validate the need for such regulation (Gray & Fowler, 1984).

As Gray and Fowler (1984) concluded, a decision to implement a regulation or law is based on economics. The implied value of a human life is relatively simple to compute. Requiring motorcyclists to wear crash helmets did not cost the government

much money. An economist considering an impending regulation or law might ask, "At what point does the marginal cost exceed the marginal benefit?" (Gray & Fowler, 1984).

A law designed to prevent disease or injury brings up complex issues. Although the benefit of the law clearly is not measurable only in terms of dollar amounts, at issue is what alternative benefits might be obtained if the money was to be invested differently. Thus, promising regulations may not be approved so that available resources may be invested in programs that are more cost-effective or beneficial.

Social and political changes are tightly interwoven. Public opinion, when focused and harnessed, has been important in bringing about change. Many current developments in patients' rights have been brought about by public opinion, which can be a powerful entity (Gray & Fowler, 1984). The opinion of the general public may be reinforced by the opinions of health professionals. For example, when toxic substances in the environment threaten people's mental, physical, and social well being, this environmental concern rightfully become the concern of doctors, nurses, and hospitals (Harron et al., 1983).

Although the benefits of chemical and nuclear advancements are undeniable, the modern-day products of the Industrial Revolution have not come without heavy costs. Years or decades after the benefits of some activities have been received, the price may be paid in environmental pollution or man-made diseases, which often manifest in unforeseen ways (Harron et al., 1983). While exposure to environmental pollutants can cause long-term health problems that are financially expensive, enforcement of

pollution regulations by the Environmental Protection Agency is also expensive in terms of, for example, increasing the rate of inflation. There is no solution to this economic dilemma. Although utility and manufacturing companies can be held accountable for creating environmental hazards through fines, the dollar amount of their loss is merely passed down to the consumer, who incidentally also is paying the additional cost in terms of reduced health and higher cost of health coverage as a result of the environmental hazard that was created (Harron et al, 1983).

We consider health and well being to be important parts of a good life. Although we may believe that all people have the right to good health, under present circumstances this is an ideal that we cannot realize. Industrialization has produced threats to health never envisioned. Science cannot answer all our health questions. The degree to which we support reaching our ideal of a healthy population may ultimately be a question of morality and not of science. Public policy is based on moral values, and we must decide what trade off we are willing to make between our stated policies and our willingness to allocate resources to reach them.

As previously discussed, due to changes in our definition of what constitutes good health, our society now sees the components of health as numerous and interlinked with the physical, mental, and social well being of individuals. Social changes over the past three decades also have affected our health care delivery system. As Spector (1996), pointed out, since the early 1970s, migration to the United States of individuals from Vietnam, Laos, Cambodia, Mexico, and Eastern and Central Europe have made Americans highly aware of different cultures. Each of these cultures

is characterized by its own beliefs and values, which influence its members' perceptions of health, illness, and disease (Spector, 1996). Thus, in today's society, health care professionals who are ignorant of their patients' cultural beliefs and values will be ineffective practitioners. For health care professionals to provide good care, scientific knowledge is not enough. Understanding the patient's cultural beliefs and values in terms of health, illness, and disease can have a positive affect on that patient's course of treatment (Spector, 1996).

Many of the important factors that affect people's health vary from group to group and from individual to individual. If the health care professional becomes sensitive to these factors, he or she can provide more comprehensive health care. For example, social class, peer group, and reference group may bear on the success or application of a treatment. Conflicts between the patient and the health care professional can occur in several areas as a result of prejudices on both sides. Conflicts may arise because each party views the patient's medical condition differently. As mentioned above, a traditional versus a modern viewpoint about the cause of the illness may cause conflict if, for example, the health care professional references the technological health system and the patient references a traditional health care system. Another possibility is that the health care professional may use medical jargon which the patient fails to understand or misunderstands. Understanding these sociopsychological variables can be key to better health for the patient and decreased frustration for the health care professional (Spector, 1996).

As outlined by Spector (1996), one set of strong traditional health beliefs to which patients may adhere falls under the heading of holistic health. In the concept of *holistic health*, all facets of the person--body, mind, and spirit--are interrelated. In this triad, "body" includes body chemistry, gender, age, physical condition, and nutrition. "Mind" includes the cognitive processes of thinking, remembering, knowing, feeling, and esteeming self. "Spirit" encompasses learned spiritual practices, dreams, and symbols. In the holistic view, these facets relate to each other and change over time.

When the patient prefers to use only traditional treatments with, for example, herbs and homeopathic remedies, these methods must be respected as an integral part of the person's heritage. It should be remembered that the health care professional and the patient share the same goals of maintaining, protecting, and restoring the patient's health and that traditional holistic health practices can be used along with modern medical methods.

Health should be seen as the sum or product of all its components. Health care includes both enhancing good health and improving poor health--whether for an individual or an entire population. The physical, mental, and social facets of health have important functions and roles towards better health. Many factors can affect health, such as research, environment, political action, and culture. Some factors, such as genetics, are out of the control of the individual patient. Other factors, such as risky behaviors like smoking and overeating, can be controlled by the individual. To provide comprehensive and effective treatment, health care providers need to be sensitive to the beliefs and values of the individual patient.

The important issues concerning the costs of health care will continue into the new millennium. Which dimension of health will we consider more important: the positive dimension or the negative dimension? Where will we focus our health resources? Downie , Tannahill & Tannahill (1996), have predicted that those decisions will be reached based on value judgments.

Patient Education

The rapidly rising cost of health care has been a concern for two decades. Re-emergence of the threat of infectious diseases, such as tuberculosis and HIV, and the continuing high incidence of heart disease, cancer, and diabetes present strong arguments for recognition of health education as a means of meeting public health objectives and improving the success of medical interventions.

Several terms encompass the concept of *patient education*, that is, informing individuals about illness, treatment options, and overall health and wellness concepts. These terms include health education, consumer health information, and health promotion.

Many non-profit organizations, such as the March of Dimes, Aloha United Way and the American Heart Association (AHA) invest a large portion of their funds in health care education. In a interview with this researcher on October 8, 1998, Judy Delkeskamp, Programs Director reported that the American Heart Association--Hawaii presently spends 22% of every dollar it receives on health education. The new knowledge that is acquired through their research efforts (to which they devote 30% of

each dollar raised) is disseminated to medical professionals through medical symposiums, publications, periodicals, and national conferences.

Messages about healthy life style habits often are developed as a result of research. Research concerning cancer, diabetes, and heart disease has helped influence national health and our level of medical care. Nevertheless, despite successful research and educational programs, the AHA continues to be challenged by the rise of certain forms of cardiovascular disease (AHA, 1998)

Historically, health education has been primarily a practice-based discipline, but recently a more relevant approach developed by academic health educators has applied social and behavioral theories to guide health education programs (Freudenberg et al., 1995). As Glanz, Lewis, and Rimer (1997) noted, health education and promotion are rapidly evolving and reflect a consolidation of approaches, methods and strategies drawn from diverse social and health sciences. This consolidation includes theoretical perspectives, research findings, and practical tools drawn from the disciplines of psychology, sociology, anthropology, communications, nursing, and marketing, among others.

Numerous health educators have observed that health problems have multiple causes and require multidimensional interventions (Freudenberg et al., 1995). Glanz et al. (1997) believe that the close collaboration of many types of professionals that has occurred in the development of health education strengthens health education and research

Several definitions of health and patient education refer to the desired effect of the health educational effort as change in individual behaviors. Toscani and Patterson (1998) stated that the goal of health education is to "bring about behavioral changes in individuals, groups and larger populations from behaviors that are presumed detrimental to health, to behaviors that are conducive to present and future health." Glanz et al (1997, p. 7) referred to "attempts to close the gap between what is known about health optimum health practice and what is actually practiced."

Patient education is more than supplying the patient with facts and then having that person recite them. The patient is most likely to carry out health recommendations when those recommendations have been based on individual needs. Health professionals must be able to listen to and understand what patients are saying and must convey information in a meaningful manner that will meet patient needs (Falvo, 1985).

A variety of health education models have successfully contributed to positive changes in the health behavior of patients. Redman (1998) reported that research conducted on patient education in 25 meta-analyses showed "conclusively that patient education can contribute significantly to positive health care outcomes."

However, according to Ann Haggard (1989), producing a good program that is helpful to people is not enough anymore. In the current cost-conscious, cost-contained, prospectively paid environment, administrators scrutinize every program, and health educators must prove that patient education is of direct benefit not only to the patient, but to the organization.

In order to carry out effective health education programs, health educators must not only sell their programs to institutions, they must also develop the support and cooperation of physicians. As Glanz et al. (1997) pointed out, physicians are important collaborators in health education programs and play key roles in affecting change in individuals' health behavior. However, as Haggard (1989) reported, physicians may regard diagnosis, treatment, and prognosis as their exclusive areas. When health educators get involved in these areas, conflict may ensue. Physician cooperation and support may be facilitated by strategies such as easy access to patient education, physician endorsement, and high program visibility.

To be effective, health education must be a partnership among various professionals in various disciplines and the patient. The skyrocketing costs of health care are of serious concern, and health education can provide some relief by helping people change the behavioral patterns that put their health at risk. The health care industry has moved from a mode of health care expansion during the period from the 1940s to the 1960s to a focus on cost containment and presently is focusing on the accountability and assessment of outcomes (Toscani and Patterson, 1998). Generic drugs have become the norm because health insurance is inflexible if a brand name is requested. Health care has moved from fee-for-service providers to managed care. These changes in the health care arena have brought about growing concern of patients.

As never before, patients are being asked to share responsibility for the state and care of their health by paying very high health-insurance premiums. Preventing

illness and controlling the effects of illness has come into focus as a way to contain rising health costs. High costs also dictate that health professionals must be efficient and effective in their communications with patients.

Because health education depends on the needs and interests of the particular patient, a health care professional who lacks insight into the patient's negative behaviors will be limited in his or her success in educating the patient toward positive behavioral change. For example, a physician who doesn't know the reason for a patient's continued smoking may be hindered in reaching the goal of eliminating the patient's smoking behavior. A realistic acknowledgment that changing behaviors is difficult may help the health care professional to aid the patient in understanding the hazards of smoking and work toward motivating the patient to cut down on the number of cigarettes smoked per day (Falvo, 1985).

The objective of patient education is to present facts in such a way that person's beliefs will be changed. As Falvo, (1985), pointed out, in patient education it is not enough to tell the patient what behavioral changes will result in improved health. The patient also must be helped to recognize ways to incorporate these instructions into daily life. The health care professional should identify the patient's feelings about the information being conveyed and assess the limitations the patient perceives in carrying out the recommendations. It is important that health care professionals realize that the patient's understanding of and perspective on recommendations may differ from the professional's understanding. Recommendations that, to the health care professional, seem reasonably easy to accomplish may appear to the patient as unreasonable or

daunting. The patient's beliefs, values, and social influences will impact his or her ability to carry out the recommended regime. Therefore, health educators must consider the impact of the recommendation on the patient's life--anything less appears to diminish the patient's point of view (Faivo, 1985). As Gray and Fowler (1984) observed, to achieve the goal of changing the patient's unhealthy behavior, health educators need to appreciate the established beliefs of the patient with regard to health and life style. Freudenberg et al. (1995) noted that health education has been tailored to various populations by various models and approaches to health intervention. These various approaches, however, contain the same broad health messages.

Gray and Fowler (1985) discussed the traditional use of preventive health services, which traditionally are classified as primary, secondary, and tertiary prevention. *Primary prevention* is targeted towards individuals at risk of disease, for example, the typical advice concerning the risks of obesity given to middle-aged men to reduce the risk of maturity-onset of diabetes. *Secondary prevention* is often associated with screening and involves early detection and treatment of a disease which has not yet been noticed by the patient because he or she is not yet experiencing symptoms. Some examples of secondary prevention are testing for glucose in the urine or measuring chemical levels in the blood. *Tertiary prevention* helps prevent complications and premature death in individuals suffering disease. In tertiary prevention, individuals are carefully monitored for compliance with drug treatments (Gray and Fowler, 1985). Prevention strategies are deemed successful if they delay or avert morbidity and mortality. As Toscani and Patterson (1998) pointed out, one

perceived value of patient education improvement of patients' understandings of disease and treatment.

For reasons outlined previously, the current cost-conscious health care industry demands data that demonstrates the measured value of educational programs or interventions. Toscani and Patterson (1998) pointed out that outcome studies and trials, such as clinical outcomes, need to be designed and conducted in a scientifically appropriate manner so that data can be properly collected, monitored, and evaluated. Patient education programs can demonstrate their value when appropriate measurement is conducted. Whether the purpose is to secure compliance to treatment, or an awareness of behaviors threatening to health, such interventions enable patients to become active participants and thus improve their overall health. Clinical outcomes with Parkinson's disease, Toscani and Patterson (1998) noted, confirmed that a patient involved in a education program exercised more and utilized health care less than the control group. Improvement in the quality of patient self-care is an indication that the program has structured communications to guide the patient. In addition, patients who participate in properly designed intervention programs feel more responsible for helping to produce improved outcomes. Effective patient education interventions lower the demand in the health care system, which reduces cost of health care. Health-promotion programs at work sites benefit employers by reducing absenteeism and employee's utilization of health care. In addition, patient education increases patient awareness, which has been shown to optimize the time of physicians and their office staffs (Toscani and Patterson, 1998).

Falvo (1985) noted that effective patient education must include responsibility for the outcome in terms of the patient's health. Establishing what outcomes the patient can expect may be difficult. To feel empowered, the patient needs to be part of this process, and the health care provider and patient should jointly design specific and observable goals. Again, effective communication is necessary to enable patients to understand the recommendations of the health care professional. Any obstacles or barriers that might hinder successful communication need to be identified (Falvo, 1985). As pointed out by Toscani and Patterson (1998), one example of how information and communication can influence patients has been provided by pharmaceutical companies which developed, designed, and implemented active programs to improve medication compliance by providing patients with specific information about diseases and medications.

To be effective, patient education programs must produce positive changes in the patients' knowledge, behaviors, attitudes, and skills for maintaining or improving his or her health. Toscani and Patterson (1998) pointed out that the effect of patient education interventions on the patient's knowledge and behavior are predictable in accordance with several principles of education, namely consonance, relevance, individualization, feedback, reinforcement, and facilitation. The first of these, *consonance*, identifies the degree of relationship between the program and its objectives. For example, if the purpose of the intervention were to improve blood pressure, teaching only the benefits of exercise and drug regime are insufficient. Also necessary is showing the patient how to exercise and giving the patient specific

instructions about medication intake. *Relevance* identifies the degree to which the education is tailored to the patient's knowledge, beliefs, circumstances, and prior experiences, including reading level and visual activity. Pretests, baseline questionnaires, and interviews may be effective methods of gathering appropriate data for designing and implementing the program. *Individualization* allows the patient to receive answers to his or her questions and have instructions paced to his or her individual learning style. *Feedback* helps patients determine how much progress they are making and thus allows them to learn from the results of some form of measurement. *Reinforcement*, that is, praise or congratulations for making behavioral change, is an important and effective part of the patient education program and is a good method of motivating the patient to continued compliance with the treatment. *Facilitation* refers to measures taken by the health care provider to accomplish the desired actions or eliminate obstacles to treatment, such as providing samples of medicine to reduce the cost to the patient. These principles can affect patient knowledge and behavior and should be an integral aspect of a properly designed and implemented patient education program (Toscani and Patterson, 1998).

Human nature is complex and has been examined by various disciplines, including sociology. According to Coser (1977), the sociologist Max Weber has authored several theories of human nature, and his analytical focus on individual social actions may help us understand the process of human thoughts and actions. Weber distinguished several types of social actions performed by individuals. In Weber's view, social actions may be oriented to rational goals, values, emotions, or traditions.

An action oriented toward a rational goal will also become purposeful (in this definition) when the individual chooses not only the goal of the action but also the means of the action. For example, in terms of the present theses, if the individual's goal is improved health, that individual might purposefully choose an activity designed to improve his or her health. Value-oriented social actions are aimed at a substantive goal, which may or may not be rational. For example, an patient may strive toward a value goal such as a slim figure, which may or may not be attainable depending on genetic factors. An affect-oriented social action reflects the individual's emotional state. A tradition-oriented action is guided by customary habits or thoughts. Weber observed that behavior in Western society is dominated increasingly by goal-oriented rationality, as compared to values or traditions (Coser, 1977).

Health educators need to review the combination of the previously mentioned educational principles and how they may apply to social actions. Health outcomes can be affected in a number of ways, and health educational programs need to be designed in line with principles and theories that can be appropriately be applied towards effective communication with the patient.

Rogers (1995) stated that one factor affecting the success of a change agent is the amount of effort spent in communication activities with clients. Although the amount of communication it is not the main explanation of change, it is nevertheless important in securing the adoption of new ideas.

To reiterate, health care professionals need to understand who they are communicating with to have any degree of success towards patients changing their

behavior. Patient education can be only as effective as patients' ability to carry out recommendations. Health professionals and health educators need to be cognitive of patient feelings and to be able to identify barriers to patient compliance with recommended treatments and behavioral changes. In the past, according to Flavo (1985), patients were primarily viewed as passive recipients of health care. Patients who asked few questions and offered no criticism were considered "good patients." On the other hand, patients who requested clarification or challenged a lack of information were considered "troublesome" (Falvo, 1985). Today, patients are more sophisticated and are being made aware of health concerns through various information sources.

The Internet has made access to medical information relatively easy. Self-help, information, and support groups communicating via the World Wide Web have increased many patients' desires for enhanced involvement in their health care. A study conducted in 1997 by Emerging Technologies Research Group revealed that 43% of the physicians surveyed used the Internet for professional purposes, either at home or at work. Of the physicians online, 25% used the Internet for patient education. These physicians indicated that they would consider the most valuable Internet resources to be those that would help them manage the business of medicine and reduce their costs while maintaining the quality of patient care (Brown, 1998, January). The 1997 edition of Consumer Health and Medical Information on the Internet reported that 43% of all U S. adult Internet users have retrieved medical information within the past year. Given the trends observed by these surveys, use of the Internet to search for medical

information is growing (Brown, 1998, Febr · · ·lth professionals are realizing that giving patients more information results in patients who are more capable of making good decisions about their treatments. More and more, patients need to be active participants in their own health care, but health information is only part of the patient education process. Patient compliance with treatment recommendations, such as taking medications and maintaining positive exercise routines, are measures of a successful patient education program.

Health promotion and education can be found nearly everywhere, from counter displays in drug stores to healthy cooking recipes distributed at grocery stores. The consumer marketplace offers numerous home health and self-care products. This marketplace represents an opportunity for the dissemination of legitimate health education to consumers and also an opportunity to counter same time misleading health information that can have negative impacts. The AHA sponsors a food certification program designed to help consumers in grocery stores select food appropriate to a balanced, heart-healthy eating plan.

Health promotion occurs not only in the consumer marketplace, but also in schools, communities, health care sites, and work sites. These settings represent avenues for disseminating health information to various populations which usually possess communication systems that can be used to facilitate communication of the health message across to the intended population (Falvo, 1985).

Health education in schools usually is geared toward supporting healthy behaviors. School health programs often target health problems that are preventable

through behavioral changes. Programs such as "No Hope in Dope" or "Jump Rope for Hearts" are examples of programs in which children are instructed about risk factors like chemical dependencies and learn the benefits of good nutrition and exercise.

Community-based health education draws on social relationships and organizations to reach large populations through media and interpersonal strategies. Churches, clubs, and neighborhood groups have been used to encourage healthful nutrition and to promote screening for diseases such as breast cancer and heart disease. An example of such a program is HeartFest, a week-long activity sponsored by the AHA to promote nutrition awareness which is held in grocery stores, businesses, and schools. In a community setting, peer influence can be a valuable asset to promotion of healthy behaviors.

Health care sites provide a setting ideal for educating patients, their families, and their surrounding communities. Primary health care settings are facilities in which a large number of people can be reached. Such settings provide natural atmospheres for health education focusing on preventing and detecting disease. The AHA has several programs designed for health care sites. One of these is "Answers by Heart," a multi-media education program designed to enhance education and counseling by health care professionals about how to prevent and control heart disease.

Work sites have emerged as a place to harness social support for health education.. Many companies offer health promotion programs for their employers. One possible solution to the rising cost of medical care is the implementation of employee health promotions in the workplace, and the implementation of such

programs is part of a current trend among corporations. These programs focus on disease prevention. Companies want to see a reduced risk of disease, particularly cardiovascular disease and stroke, because this reduction in turn results in a reduction in company costs for employ health care utilization (Pelletier, 1993). According to statistics provided by the AHA (1998), more than one in five Americans--58 million people--have some form of heart or blood vessel disease. Of these 58 million, many of which are employed in American corporations, 25% have high blood pressure. This statistic alone gives companies good reason to invest in employee health promotion programs (AHA, 1998). Workplace programs represent an opportunity to reach a very large number of people: workers and their dependents.

As Pelletier (1993) noted, both employers and employees have a vested interest in the promotion of health and well being. Pelletier provided alarming data about company spending on health care for employees and their dependents: almost half (48.3%) of after-tax profits are spent on medical care. According to U.S. Health Care Financing (HCFA), this figure is expected to increase to over 60% by the year 2000. Prevention-oriented health promotion programs have become crucial to reducing health care utilization and costs. Efforts are being made at many work sites to provide workers with information they need to make informed decisions affecting their health (Glanz et al., (1997). Many workplace programs, such as the AHA's "Heart at Work" program, are effective, affordable, and easy to use. The goal of workplace health education programs is to give employees the information, motivation, and support they need to make good lifestyle choices.

To summarize, patient education is more than persuading patients to do what the health professional wants them to do. Health professionals need to communicate to the patients the process of possible courses of action and their consequences. Patient education is a matter of outlining facts so that patients and health professionals can work together to devise the plan that will be most beneficial to the patients. The patient and health professional need to mutually participate in a plan that assumes that the reaching good health outcomes for the patient are a shared responsibility. Health professionals need to develop skills to enhance patient participation in treatment by supporting and guiding the patient's efforts based on the needs and perceptions of the individual patient.

Changing patterns of disease and the changing trends in health care will continue to challenge health professionals. To address that challenge, behavioral research must do more to help health care professionals communicate with patients. A coordinated and focused effort based on theory, research, and educational practices can help advance the outcomes of patient education. Patient empowerment, which has been significantly affected by behavioral research, is discussed in the following section.

Patient Empowerment

Health education is aimed at helping people to gain greater control over their health and lives. Health information can transfer power to individuals in a process referred to as *empowerment*. A current trend in health education and health promotion places strong emphasis on patient empowerment (Minkler, 1994).

Empowerment is a psychological sense of personal control or influence (Geller et al., (1998) Empowerment can include determination over one's life and participation in the life of one's community. Another definition of empowerment is "the ability of people to gain understanding and control over personal, social, economic and political forces in order to take action to improve their life situations" (Isreal et al., 1994 , p. 149).

People taking action can be considered positive and proactive (Isreal et al. 1994). Empowerment can be defined as a social action process that promotes the participation of people in organizations and communities to gain control over their lives in society (Wallerstein & Bernstein, 1988). This concept of empowerment does not refer to the achievement of power over others but instead refers to the power to act in concert with others to effect change.

According to Wallerstein and Bernstein (1988), a health education practice that aims to effectively empower patients will involve much more than improving the patient's self-esteem, self-efficacy, or health-related behaviors. It must target change in individuals, groups, and structures. From a broader perspective, patient empowerment encompasses disease prevention, self-development, improved quality of life, and social justice. The health education process is a means of enabling individuals and communities to increase control over the determinants of health and thereby improve the health of their members (Wallerstein & Bernstein, 1988).

Although one focus of health education is to change negative behaviors, health educators recognize that several components need to be in place at various levels for

transformation to take place. Many researchers have studied the relationship of empowerment to education. As reported by Wallerstein and Bernstein (1988), the Brazilian educator, Paulo Friere, assumed that knowledge does not come from experts inculcating their information. Instead, it is the collective knowledge that emerges from a group sharing experiences. Friere emphasized action and subsequent thought as keys to the learning process and saw the group process as a more effective method for uncovering the personal and sociopolitical dimensions of problems (Wallerstein & Bernstein, 1988).

The assumption that patient empowerment will enable individuals to live longer than average lives may be unrealistic. No matter what health care improvements are made, most people will not live longer than 85 to 95 years. However, health education and patient empowerment may give people an opportunity to live the fullest possible lives for the longest possible time rather than being infirm due to ill health (Goeppinger & Lorig, (1992).

Empowerment can be described as a process by which individuals and communities are enabled to act effectively in transforming their lives and their environment (Robertson & Minkler, 1994). This description suggests that patient empowerment occurs within partnerships between professionals, individuals, and communities, rather than simply within the traditional provider-client relationship. However, the reality may be that, due to the structural distinctions now existing between health professionals, individuals, and communities, power remains in the health structure (Robertson & Minkler, 1994). As Israel et al. (1994) concluded, individual

and community empowerment to set and achieve an agenda occurs not when given, but when taken. No matter where the power lies, it must be hoped that patient empowerment will be accomplished (Israel et al., 1994).

Empowerment can be the result of an education activity. The educational materials used to support the process can determine whether the individual will be empowered or oppressed. When individuals or communities participate in the development of educational materials, the learning process is enhanced (Rudd & Commings, 1994).

A community-empowerment model of health education focuses on individual and community choices. Leadership from outside is acknowledged as the provider of resource and experience. The goal of an empowered and supportive community in a health education effort is to analyze successes and failures, identify obstacles, and maintain motivation to address the causes of disease (Wallerstein & Bernstein, 1988). Empowerment at the community level is connected with empowerment at the individual and organizational levels. Communities are collectively formed by individuals. Although patient education may be directed to the individual, community support enhances the educational activity. According to Israel et al. (1994), programs which aim at individual empowerment but do not consider community influence will be less likely to increase health and quality of life. The capacity to act effectively to create social change is developed by individuals, organizations, and the community as a whole (Israel et al., 1994). This is not to say that each component alone is not viable, Israel et al. (1994) argued. Rather, the individual, organization, and community collectively

provide the support and control necessary to develop needed skills, resources, and change. This theory reinforces the practice of health education in various settings such as work sites and schools in which a multilevel support system in place

Community empowerment is an especially powerful strategy for women. The importance of empowerment through the community is evident in the recent initiatives regarding women's health issues. The voices of individual women are less noticeable than the collective voices of communities and organizations. The voices of groups are more powerful than the voices of individuals for accruing power and attaining goals.

To understand how patient empowerment occurs, we can turn to theories used to explain changes such as improved health-related behaviors. Models and theories are guidelines to practice and tools for building strong successful patient education programs (Goeppinger & Lorig, (1992). Theories explain why things happen and help guide the practice or process. Many theories are used to explain the processes of organizational development. Theories derived from research in the fields of sociology, psychology, and adult education can be applied to patient education. Three theories relevant to patient education and empowerment were developed by Goeppinger and Lorig (1992). These theories are discussed in the following paragraphs.

The first of these three theories addresses self-efficacy. According to Goeppinger and Lorig (1992), an individual may have high efficacy, that is, effectiveness, for one behavior versus another. Individuals who feel that they have no control over a situation, such as a chronic illness, will be less likely to do anything to change their behaviors. Individuals who feel most of the control in a situation and

believe that making changes will help them are likely to make behavioral changes. Thus, the perception or belief that one can or cannot accomplish some future behavior can be predictive of future performance in terms of that behavior. To encourage change in the behavior of a patient, several efficacy-enhancing mechanisms can be used: skill mastery, modeling, and persuasion.

Skill mastery consists of breaking down skills into manageable tasks and then making sure that each skill is successfully completed. For example, an individual who has had a stroke may need regain muscles by walking half a block twice a week. If the individual feels confident about his or her ability to complete this activity, encouraging the individual to increase this activity to four times a week will help the individual increase his or her mastery of the skill. Individuals need to feel successful in what they are trying to do. Thus sense of control and skill mastery develop empowerment at the individual level.

Another way to enhance efficacy and to change patient behavior is to allow the person attempting to change the behavior to see someone else with the same problem successfully attempting to make the same change. This can be referred to as *modeling*. Alcoholic Anonymous makes use of modeling by exposing alcohol abusers to people who are recovering from or have recovered from alcohol abuse. Health educators need to use this mechanism with caution and sensitivity, whether they are pairing an individual with another individual or with a media package. For example, using appropriate ethnic and socioeconomic models can provide realistic inspirations, whereas using a super-achiever as a model may discourage a patient. Peer influence

has advantages, and encouraging patients to join support groups can be successful in enhancing a patients feeling of efficacy. This form of social support is another link in the process of patient empowerment.

Health professionals may see some patient actions as irrational. The patient, however, may feel otherwise and thus continue the action based on his or her own belief system. Health professionals need to determine why individuals believe as they do, then when possible change these beliefs. Individual beliefs affect patient's interpretations of disease and illness. A health professional who identifies the belief can then set out to reinterpret the belief to the patient. Explaining medical concepts in simplified language serves the patient by helping the patient develop a sense of participation in the treatment and thus increasing that patient's level of empowerment.

Most health educators are quite familiar with the use of *persuasion*, a powerful method of enhancement that is similar to skill mastery in that it makes use of realistic short term goals to enable the patient to believe he or she can accomplish a task.

The second of Goeppinger and Lorig's (1992) theories concerns stress and coping. Patient education helps patients cope with the stress associated with illness or changing health-related behaviors. An individual's ability to cope is determined by his or her constantly changing cognitive and behavioral efforts. Moreover, individuals cope differently in different situations. Because coping efforts are not constant, the health educator must be prepared for different individual's capacities to change and for changes in each individual's ability to cope with each different situation. There is no one way of coping that is best for everyone all of the time.

Two types of factors influence stress and coping: personal factors and situational factors. *Personal factors* refer to life experiences and individual history. *Situational factors* are events that occur at a given moment. Although a given stimulus may be the same for different patients, the stress it causes will vary from patient to patient. A three-month old and a six-year old, for example, will feel different levels of stress from a similar stimulus, such as a fever. The patient appraises the stress in an individual way to determine whether or not a threat exists and whether or not something can be done about that threat. Appraisal is defined as falling into one of two categories: primary and secondary. In a *primary appraisal*, the patient determines the seriousness of the threat. For example, an individual who has just discovered a lump in her breast may be very concerned and experience a high level of stress because she has a family history of cancer, whereas another patient with no such history may be much less alarmed. *Secondary appraisal* is judgment about whether the situation is changeable or controllable. An patient whose grandparent lived a full life as a diabetic may view diabetes as controllable, whereas a patient who lost a loved one from diabetes at an early age may consider a diagnosis of diabetes as catastrophic. Health professionals should take the time to offer patients a variety of strategies for coping with their health problems. Presenting a variety of strategies from which to choose offers the patient the chance to find something of value to that individual . Moreover, being able to cope in a variety of situations enables the patient to experience an enriched sense of control in life.

Goeppinger and Lorig's (1992) third theory concerns learned helplessness. Learned helplessness, a concept drawn from social psychology, manifests in a variety of identified ways. (For in-depth information on the categories of learned helplessness, please see Goeppinger and Lorig, (1992). In one form of learned helplessness, the individual attributes external outcomes to internal factors. For example, a person who fails to stop smoking may attribute the failure to his or her lack of will power. Feeling this failure is inevitable, the person gives up trying to make the behavioral change. Some individuals experience helplessness as a global condition in which they always feel helpless and always have a reason for not doing something. For others, learned helplessness is specific to a specific situation only. For some people learned helplessness is a relatively stable condition, for example in the case of a person who feels entirely helpless to lose weight. For some people, the helplessness is experienced as a less stable condition, for example in the case of person who feels he or she can lose weight except during a particular holiday season.

Learned helplessness occurs most frequently in situations perceived as beyond the individual's control. To empower the individual with a sense of control, the individual's thoughts must be reconstructed. Patient education sometimes cannot change an existing belief, but educational efforts may add to the existing belief and thus enhance the patient's self efficacy (Goeppinger & Lorig, (1992).

As Airhihanbuwa (1994) noted, changes in behavior resulting from empowerment may vary according to the situation and needs of the individual. Health education can be an activity that empowers patients to change health care practices that

they find unsatisfactory. Patients are consumers of health care and as such can be expected to require satisfaction with the health care services they purchase. Focusing on the consumer status of patients empowers them with recognition as agents of change.

Health professionals like to claim that consumers are on their side. When consumers are used as "endorsers" of a health service or cause, they legitimize the image being presented. While consumers are often presented as true representatives in the health care system, in reality their position as lay members of the health care community renders them relatively powerless, and the position that they hold any other status has been based on theory. However, this reality may be changing. Health officials now are advocating consumer participation in the development of research and service priorities. Using consumers to achieve change based on their input would be very effective. Health care is now a competitive industry facing limited budgets and expanding technologies. The voice of the consumer is becoming increasingly important in the decision-making process. Participation approaches involving the community, individuals, and organizations are strategies for identifying ways of improving consumer experience (Bastian, 1998).

Health care professionals and physicians continue to hold the chief power as advocates for patients, but their duties to their patients may conflict with their economic interests. Cerminara (1998) suggested that patients assert their own power in the managed care arena. One way to gain such power is litigating class action suits aimed at improving medical care and access to medical care, and to reduce the cost of

health care. Class action litigation can help patients assert their concerns with inequities in the system because class actions band patients together to better their position. According to Cerminara (1998, p. 9), class action litigation remains "the classical method of empowering groups of people who individually would be without effective strength to bring their opponents into court at all." Cerminara (1998) also reported that, as consumers of health care services, patients have become wary. Recent changes in health care can account for this caution. For example, the increasing importance of economics in health care that has resulted in health care cutbacks. Today patients find themselves in the position of needing to protect themselves rather than relying on health care professionals or the health care system for protection (Cerminara, 1998).

The concept of empowerment is complex and requires patients to master new skills and exert control over their own lives. Empowerment is achieved through development of personal strengths that enable individuals to grow. To do so, patients need to have information provided to them in manner which they can relate to and in language that they can understand. When individuals become empowered with information, they can decide how to use that information to make decisions about their own health agendas.

To actually empower patients, health professionals need to approach patient education from a variety of disciplines. Attention to areas that have an impact on health, such as economics, ethnicity, and gender, will help define the focus for development and implementation of appropriate programs.

In certain instances, the process of becoming empowered is more likely to occur collectively at the organizational and community levels. Including the voices of health care consumers with the voices of health care professionals makes sense in any effort aimed at developing new and better health care. No better way exists to ensure that patients needs are addressed than to involve empowered patients in addressing those needs.

This literature reviewed yielded several interpretations of what constitutes health and being healthy. As was seen health education is not accomplished by one entity. Health education is a process and an effort to help patients that makes use of interrelationships within the health care profession, the community, and the work site as well as research from a number of disciplines. Ideally, patient education is directly connected to patient empowerment to improve their health and health care delivery.

Women's Health

Women are becoming increasingly aware of their unique health concerns and are seeking policies, research, and health care that address all aspects of their health with sensitivity and understanding. While traditional gender-specific health concerns like reproductive and gynecological disorders continue to be areas of focus in women's health, attention recently has been turned to health problems that disproportionately strike women, such as autoimmune diseases, depression, and gastrointestinal tract disorders. In addition, heart disease, lung cancer, and AIDS, once considered problems that mostly affect males, recently have been recognized as major health problems in

women's health as well (Freund & Pastorek, 1998). Although historically women typically experienced shorter life spans than men due to complications of childbirth and chronic malnutrition, American females in our aging population now outnumber their male counterparts. Although life expectancy for American women now exceeds that of American men by an average of 7.5 years, the longer life span of American women does not also mean better quality of life, often due to illness and disease (Pinn, 1992).

Women's health is disadvantaged because inadequate attention has been paid to the research, diagnosis, and treatment of women's health care problems. More than a decade has passed since the lack of research data on women that limits our understanding of women's health needs was reported by the U.S. Public Health Service's Task Force on Women's Health Issues in 1985 Clinical trials have been conducted primarily on men, resulting in medical treatments for women based on a male model, regardless of the fact that women may react differently to treatments than men (American Medical Association, 1991).

These shortcomings were finally addressed in 1991 when Congress passed bills mandating the inclusion of women in clinical trials. At that time Congress also established the Office of Research on Women's Health (ORWH) at the National Institutes of Health (NIH). ORWH supports studies that evaluate the course, treatment, and prevention of disease in women to improve our basic understanding of normal female growth and development. Large-scale studies supported by the ORWH focus on such concerns as heart disease, osteoporosis, and cancer in women (Schur, 1997).

Women's health has recently been perceived as a continuum that extends though the life cycle and is related to the conditions under which women live. The prevention and treatment of disease in women are connected to complex interactions between individual biology, health behavior, and the socio-political context of women's lives, which include mental, social, and spiritual factors (Cohen, 1998).

Some other recent developments reflect the U.S. medical profession's increasing focus on women's health needs, as follows: Clancy and Massion ,1992)

1. Health services researchers are reporting significant disparities in the use of major diagnostic and therapeutic interventions for women compared to men.
2. Women's health care centers offering many services at a single site are evolving as a new model for comprehensive health care.
3. Some women's health concerns, such as menopause, osteoporosis, and breast cancer, have received increased attention and resources.
4. The number of female physicians has increased. Two studies have found that female physicians spend more time than male physicians with patients, collect and provide more information, and encourage more patient participation in treatment.

Consolidated efforts such as those of the ORWH and inclusion of women in clinical studies are evidences that intentions and actions are changing. Moreover, there is increasing recognition of the link between the typical caregiver roles of women and the critical importance of the health of women to the well being of men and children

(Clancy & Massion, 1992). Now is an opportune time to advocate for improvements in women's health in all areas.

Rising interest in women's health has revealed the dominance of the female patient in the health care consumer population. Women not only have more diseases and use health cares services more frequently, but they also exert a great influence over the health care services used by their family members (Finn, 1997). The fact that more women have become breadwinners, heads of families, executives, and white-collar professionals attests to their increased purchasing power in terms of health care products and services (Freund & Pastorek, 1998). The following statistics illustrate the representation of women in the consumption of health care services.

1. Women account for 65% of all health care services.
2. Women initiate 90% of all calls for physician referral and health information services.
3. Women make or influence 70% of all family health care decisions.
4. Women account for 66% more physician visits than men.
5. Women are hospitalized 15% more frequently than men.

These statistics have made women a focus of health marketing efforts. They also indicate the necessity of informing female patients about health care and the need for heightening women's awareness of diseases that affect them, including heart disease and breast cancer. A women's power to intelligently approach the selection and use of medical care is increased by health knowledge (Freund & Pastorek, 1998).

Ancient peoples considered women to possess the secrets of life and death and particularly able to practice the magical art of healing. Helen of Troy and the goddess Athena were renowned as healers. When the Western focus shifted to a male god, however, women's roles as healers were diminished and women's access to education was withdrawn. Today, Aristotle and Hippocrates are referred to as the fathers of medicine (Finn, 1997)

Societal perceptions regarding women have often disadvantaged them and gender-stereotyped roles remain strong in our society. The perception that women are disposed to illness has historically been used as a rationale for barring women from positions in politics, science, medicine, and law (American Medical Association , 1991)

During the 1960s and early 1970s, the feminist movement grew in force. Women's studies programs were instituted all over the country, and increasing self-awareness on the part of women led women to demand improved women's health education and care. Women's health became a unifying issue for women (American Medical Association , 1991).

Despite decades of concerted work by women to focus attention on women's health issues, many obstacles continue to impede the goal of comprehensive health care for women. Women are more likely than men to encounter financial barriers to health care because they generally have lower incomes than men and often are not covered by health insurance. At least 46% of women obtain medical insurance through a spouse and are vulnerable if the marriage dissolves (Department of Health and Human Services, 1998). Medical providers offer better coverage for health problems more

common for men than women. Due to the disproportionate representation of women in our nation's older population, gender-biased reimbursement policies continue. This is due to acute illnesses in men, such as prostate disorders or pneumonia generate lower out –of-pocket expenses than chronic diseases more common in older women, eg. breast cancer, arthritis and depression. (Clancy & Massion, 1992).

Policy makers also impact women's health. Managed care covers a large proportion of the Americans who do have medical insurance coverage, and managed care policies affect women differently from men. The managed care practice of 24-hour stays after vaginal delivery and the disallowance of overnight stays for women following mastectomies are examples of current restrictive trends (Freund & Pastorek, 1998).

Attitudes of health professionals present further obstacles. Many health professionals regard themselves as better educated and better informed than their patients and believe that they understand the female patient's body better than the patient herself. A focus-group study of 250 women conducted in 1993 and 1994 revealed that "women felt frustrated to the point of not wanting to visit doctors because of this perception of provider superiority" (Taylor & Dower, 1997, p. 411). Possibly due in part to the fact that health care professionals overwhelmingly train and work in a male-centered system, many health care professionals do not seem to understand the needs of women--a clear disadvantage to the woman patient (Taylor & Dower, 1997). Studies have shown that gender disparities exist in areas of access to kidney transplantation, diagnosis and treatment of cardiac disease, and diagnosis of

lung cancer (American Medical Association, 1991). Although biological factors can account for some differences between the sexes in the provision of medical care, the studies cited here indicate that nonbiological factors accounted for the reported disparities in provision of health care for women.

Medical schools offer neither preclinical nor clinical course work in women's health. Without a curriculum in women's health, women's health issues are not examined unless students themselves voluntarily and independently examine these issues. Women's health care remains centered upon obstetrics and gynecology. Primary care for women is fragmented and overlaps with obstetrics and gynecology, internal medicine, and family medicine, resulting in poorly coordinated and inadequate care for women (Schur, 1997). This overlap means that women receive duplicate conventional services and less or no attention to other issues that have significant health consequences (Clancy & Massion, 1992).

Biological differences between men and women may account for the differences in the use of health services. Women may get more care because they have more illnesses that require more care compared to men However, wide differences in the rates at which women and men receive kidney transplants and catherization for coronary bypass surgery are not explained by biological differences. A study conducted in 1987 showed that, in a group of 390 patients with abnormal exercise tests, 40% of the male patients were referred for cardiac catherization compared to only 4% of the female patients. Female patients were twice as likely as men to have their symptoms attributed to somatic, psychiatric, or other noncardiac causes.

Evidence suggests that cardiovascular disease in women often is not diagnosed or treated early enough. Studies have shown that women have a higher operative mortality rate for coronary bypass surgery and a higher mortality rate at the time of an initial heart attack (American Medical Association, 1991).

Recent studies have shown that the overwhelming failure to include women in clinical studies has resulted in a lack of diagnostic criteria and treatments appropriate for diseases in women. Significant differences in cardiovascular disease in women and men have been shown to exist.

In every year since 1984, cardiovascular disease (CVD) has claimed the lives of more females than males. Despite this statistic and the fact that CVD is the leading cause of death for women in the United States, research on CVD has concentrated on men. CVD ranks first among all disease categories in hospital discharges for women. Due to an aging population, the number of deaths due to CVD in women is actually increasing. Not only is CVD a health epidemic for women, it impacts the lives of family members. Moreover, the economic impact of medical costs associated with CVD can be devastating for families, especially if a stroke makes long-term care necessary. Insufficient research on women is not only discriminatory but may also be dangerous because effective treatments for men may be ineffective or unsafe for women (American Medical Association, 1991).

As discussed above, women face many critical obstacles in obtaining proper medical care. Several strategies mentioned earlier have potential for empowering women in the health care system. Patient education can lead to empowerment, and the

larger the group of women that becomes empowered, the greater influence this group can exert to bring about the changes needed to upgrade medical care for women to satisfactory levels.

The establishment of the Office of Research on Women's Health is addressing the need for the involvement of women in medical research. Research is being directed towards the understanding of the relationship between personality and behavioral features and disease. This research is starting to have an impact on prevention, clinical care, and medical treatment for women.

Growing interest in research on women's health resulted in the launch of a long-term (15-year) health study involving over 167,00 women aged 50-79. This study by the Women's Health Initiative (WHI) is focusing on strategies for preventing heart disease, breast and colorectal cancer, and osteoporosis in postmenopausal women. One of its components, a community prevention study, is a collaborative venture between the Centers for Disease Control and Prevention (CDC) and the NIH. These organizations will conduct and evaluate health programs that encourage women of all races and socioeconomic backgrounds to adopt healthful behaviors such as improved diet, nutritional supplementation, smoking cessation, exercise, and early detection of treatable health problems The goal of the community prevention study is to develop carefully evaluated, model programs that can be implemented in a wide range of communities throughout the U S (AHA, 1998) Patient education can provide tools necessary to help determine women's risk for particular diseases and make the necessary changes that will lower the risks

The American Heart Association has introduced a health education initiative, "Take Wellness to Heart." This is an AHA National Women's Heart Disease and Stroke campaign implementing three awareness goals (AHA, 1998). These three objectives are:

1. To increase the public's awareness of heart disease and stroke in women, including the risk factors and the special needs of African American, Hispanic, and post-menopausal women.
2. To increase physicians' awareness of heart disease in women, less common heart attack warning signs in women, and alternative methods for diagnosis and care.
3. To increase communication between patients and doctors through awareness, education, and self-empowerment.

These objectives reflect conclusions in the literature that awareness of women's health needs must be approached at a multilevel to be effective.

Many pharmaceutical corporations have increased their attention and efforts in women's health research. New drugs are in development and many are under review by the Federal Drug Administration (Allen & Phillips, 1997). Wyeth-Ayerst Laboratories' partial sponsorship of the "Take Wellness to Heart" campaign is an example of the effort pharmaceutical companies are making in the direction of women's health.

The current status of the women's health issue is well reflected in the following statement published in *Women's Health Policy and Research* by (Allen and Phillips) (1997, p. 15):

> The recent attention to women's health and research underscored by the congressional mandate [Congressional Caucus for Women's Issues] demonstrates that such efforts are becoming an integral part of the scientific and clinical infrastructure of this country. Yet, considerable effort must be expended to assure full integration. (Allen and Phillips , 1997, p.15)

Literature distributed by the AHA emphasizes that women must recognize the seriousness of cardiovascular diseases. The *Heart and Stroke Statistical Update* (AHA. 1998) clearly states that "What women don't know can hurt them." According to his update, the major factors of heart disease risk faced by women must known so that they can be changed--this is an important step in reducing heart disease for women (AHA, (1998). In this update, heart disease in women was emphasized because it is the number one killer of women.

Although the current interest in women's health was initiated more than 30 years ago, in the 1960s, women still are seriously disadvantaged in receiving comprehensive health care. Women can be empowered with information through patient education, which places strong emphasis on patient empowerment to master health-related skills and exert control over their health.

Women's health and its determinants, the role of gender, the social context in which women experience life, and their perceptions of their personal health and well being all are critical in providing a basis for patient education and disease prevention activities in women. Women's health is not solely a biological issue. Focus on

women's health must include all health issues identified by women themselves. Empowering individuals and communities, and influencing public policy, will help ensure that all women achieve optimal health status.

Summary

Understanding the meaning of health, the determinants of health, individual perceptions about health, and the factors that influence those perceptions will assist in the approach to patient education. Patient education has been defined as a process for enabling individuals to take control over and improve their health. Approaches to patient education must include a recognition of the relevancy of gender and socio-cultural issues.

In the process of patient empowerment, reinforcement of two-way communication between patients and health professionals is critical. Patients must be provided with information, and this information must be presented in a manner and using language that facilitates and ensures patient understanding.

The future of women's health can be positively affected by empowering female voices. Because women are major health consumers, it is important that they have participation in both research and policy decisions. The obstacles women encounter in meeting their health needs can be overcome by a multilevel effort to enhance women's health. The more involved and empowered the individual woman becomes in her own health care network, the more intelligently she can approach the selection and use of her medical care options.

Today's women are becoming increasingly aware of their unique health concerns. Health educators have played an important role in communicating and translating scientific developments concerning women's health. The life expectancy of American women exceeds that of American men by an average of 7.5 years, but living longer does not also mean that women enjoy better quality life because they suffer from numerous avoidable health problems.

Medical research primarily has been conducted on men, and thus medical treatments for women largely are based on a male model. This disparity was addressed in 1991 when Congress passed several bills mandating the inclusion of women in clinical trials. Congress created the Office of Research on Women's Heath (ORWH), which supports studies that evaluate prevention of disease in women and courses of treatment for women in order to improve our basic knowledge concerning female growth and development.

Female patients are health consumers who account for 65% of all health services. Women suffer from more diseases than men and use health services more frequently than men, and they also exert influence on about 70% of the health care services choices made by members of their families (Finn, 1997). The need for women to be well informed about health care and to have increased understanding of heart disease, breast cancer, and other health problems is clear. Social perceptions regarding women's health status have disadvantaged women. The perceived disposition of women towards illness has frequently been used as a rationale for barring them from important social arenas such as politics, science, medicine, and law.

During the 1960s and 1970s women gathered together to increase awareness of the need for gender equality. Many obstacles continue to impede reaching the goal of comprehensive health care for women. Women's generally lower economic and educational status make women vulnerable to iess than adequate medical care. Managed care is gender biased because policies affect women differently than men. The focus of health care for women remains centered on obstetrics and gynecology. Many medical services for women are fragmented and overlap, resulting in poorly coordinated medical care for women (Clancy & Massion, 1992).

Despite the fact that cardiovascular diseases kill more women than men, clinical research in this area historically has been conducted on men. Recent developments and initiatives by ORWH are starting to change this focus, but the clinical research addressing this problem remains insufficient. To increase the awareness of both professionals and women in the area of cardiovascular diseases, patient education is needed.

Women's health and its determinants, the role of gender, the social context in which women experience life, and women's perception of their personal health and illnesses all play a role in identifying important issues in women's health. Empowering individuals and communities, and influencing public policy will help ensure all women achieve optimal health status.

CHAPTER III
METHODOLOGY

Introduction

This chapter describes the research method followed in the collection and analysis of data used in this investigation. Data concerning our understanding of the meaning of health, patient health education, patient health promotion, and patient empowerment, particularly as they concern women, were selected from a large body of secondary sources. These sources included periodicals and books found in the Hawaii Medical Library and the Meader Library of Hawaii Pacific University. Data also was collected from a variety of sources available on the World Wide Web and supplemented by information gathered in an interview conducted by this researcher with the Program Director of the American Heart Association--Hawaii. The data analysis was designed to probe the relationships between our conceptions of the meaning of good health, practices in patient health education and promotion, and the empowerment and health of women patients.

Required Data

This investigation was based on a review of available information on the general topics of current health definitions, health promotion, patient health education, and patient empowerment. Health education is not accomplished by one entity but is the product of interrelationships among the patient, the community, the work site, and the health-care provider. Thus, a large body of information is available on these topics.

Because this investigation focused on how these topics relate to the relationship between the health education of women and their empowerment as patients and advocates of women's health issues, this researcher performed a careful review of the literature on the health education and empowerment of women patients.

As mentioned, this investigation probed topics of interest to health care professionals, individual patients, and the community at large. For this reason, the selected data was gathered from a wide range of scholarly, governmental, private-sector, and popular sources. Scholarly sources included review articles, conceptual articles, descriptive studies of patient-education models, opinion papers, patient-satisfaction surveys, physician surveys, and books. Governmental sources included government policy reviews and publications of government agencies. Private-sector sources included publications of non-governmental health-care associations. To further investigate the implementation and measurement of patient education, an interview was conducted with (J. Delkeskamp), Program Director of the American Heart Association--Hawaii.

Location of Data

As discussed above, the data collected as part of this investigation was retrieved from a variety of sources. Chief among these sources were medical journals spanning the nearly two decades between 1980 and 1998. These journals contained reports of case studies, reports on surveys of patients and physicians, review articles, conceptual articles, and opinion papers which were reviewed as part of this investigation. Other

important sources of information were books on topics of patient education, patient empowerment, and patient-physician communication. Most of this material was obtained from collections in the Hawaii Medical Library. Additional data was obtained from collections in the Meader Library at Hawaii Pacific University. The Internet was used as a tool for locating periodical abstracts made available via the World Wide Web (WWW). The PubMed system in particular offered a fast and simplified method of searching the MEDLINE periodical abstracts database by matching journal article abstracts with search keywords.

The WWW also was used as a resource for gathering additional related information, for example, in government policy reviews and newspaper articles. Some Web sites provided full-text articles on various topics under investigation in this study, and the Web sites of a variety of medical schools, government agencies, and the American Heart Association provided additional helpful information on health care, patient education, and their consequences in terms of women's health.

Judy Delkeskamp, Program Director of the American Heart Association--Hawaii, was interviewed on October 8, 1998, in Honolulu, Hawaii. During this interview, notes of the information supplied by Ms. Delkeskamp were made by this researcher for future analysis in this thesis.

Method of Inquiry

As described above, as part of this investigation, periodicals and books concerning health, health education, patient empowerment, and women's health were

obtained from the Hawaii Medical Library. Additional data was obtained from the Meader Library at Hawaii Pacific University. The information thus obtained was supplemented by information made available on the World Wide Web and in an interview with the Program Director of the American Heart Association--Hawaii. Together, these sources provided comprehensive information about recent models of health education and how they have affected women's health and patient empowerment. The information thus gained was reviewed, analyzed, and cited in this thesis.

Data Analysis

Once collected and reviewed, the information was analyzed to determine whether prior researchers and commentators had reached a general consensus on the usefulness and possible results of patient education. In this investigation, specific questions were of particular concern. Does patient education contribute to patient empowerment? If so, do women thus empowered make gains in terms of improved health care delivery and improved health?

A majority of the reports were found to be characterized by the recurring theme that pertinent patient education results in improved patient understanding of the importance of disease prevention. Patient education appears to result in enhanced compliance of patients to the treatments recommended to them by their health care providers and seems to be a positive force in helping patients manage illness. Many prior researchers agree that, when patients have information about their health needs

and exert a measure of control over their health care, they are likely to develop strategies for maintaining and improving their health status.

Our definitions of the meaning of good health affect patient health and empowerment, and this investigation also sought to enrich our understanding of the relationship between our understanding of what constitutes good health and the actual health of patients and their ability to achieve health improvements. The literature reviewed yielded several interpretations of good health, which were then explored in this thesis.

Conclusion

As part of this investigation, a broad spectrum of data concerning current health definitions, health promotion, and patient health education was reviewed. The goal of this effort was to provide a comprehensive view of the effects of our understanding of what constitutes good health and the efforts we make to provide health education to patients on the actual ability of women patients to participate in their health care and to achieve improved health. The following chapter presents the results of this investigation

CHAPTER IV
RESULTS

Introduction

Chapter II revealed that much of the literature reviewed for this thesis shares several recurring themes concerning patient education. Of these, the chief theme is that pertinent patient education results in patient understanding of the importance of disease prevention. Results of 25 meta-analyses of health education programs in diabetes education showed conclusively that patient education can contribute significantly to positive health outcomes (Redman, 1998). In areas such as diabetes education, sufficient research has been conducted to show that health education has a positive influence. These findings are robust and generalizable across gender, age, and time (Finn, 1997). Recent developments in cardiovascular research have had a significant impact on prevention, clinical care, and outcomes for women (AHA , 1998).

Another prevailing theme in the reviewed literature is that approaches to patient education must include sociopolitical and environmental factors that influence health behaviors. Prior researchers have suggested that restricting health education to the physical illness and behaviors of individuals is too narrow an approach, and that including the community in the education relationship can enrich our perspective for developing successful health education programs (Israel et al, 1994).

The reviewed literature also showed a strong acknowledgment of communication as another important aspect of patient education. The quantity and quality of communication significantly influence the way health-related information is

delivered and received. In patient education, the use of clear, simplified language is important because health professionals are prone to dispensing medical jargon, and the patient's interpretation of the information provided may be significantly different from that intended by the health care professional, jeopardizing the effectiveness of the treatment (Tones & Tilford, 1994). In addition, good communication requires health care professionals to be sensitive to the patient's cultural background, which plays a strong role in the patient's beliefs about health and health care.

Successful patient education interventions produce positive changes in patients' health-related behaviors. A full understanding of how changes occur in individuals requires a full exploration of social and behavioral theory. Much of the reviewed literature identified similar principles related to effective interventions in patient education. Several researchers explored principles indicating the concept of empowerment. The involvement of a patient in the planning, implementation, and evaluation of his or her treatment is more likely to elicit feelings of ownership of the treatment, behavioral changes necessary to health improvement, and treatment outcome. The integration of behavioral change at the individual level with change at the environmental level helps support behavioral change. To sustain lasting behavioral changes, the patient needs to find meaning for change within his or her own life. Changes in health-related behaviors need to be connected to improvements in living conditions and be part of campaigns to improve health (Freudenberg et al., 1995).

The literature also was in agreement that, for patient education and interventions to be successful, they must demonstrate value. Value can be expressed in

a variety of ways and may be perceived differently by patients and members of the health care community. However, programs are evaluated in terms of the patient-related outcomes. Clinical outcomes can improve significantly when the quality of patient self-care improves. When a patient feels more responsible for improving his or her life style, that patient's quality of life and satisfaction with health care providers is increased (Toscani & Patterson, 1998).

The literature reviewed suggested that patient education enables the individual to increase control over and improve his or her health, resulting in empowerment of the individual. Community empowerment was a concept mentioned by some of the reviewed researchers. Empowerment has a dual focus: participatory reflection and action. Patient education can be seen as a means of enhancing personal growth. The individual's empowerment is complimented by the inclusion of the community in the health care support system. Changes in public policy and environment can, at times, be affected by the solidarity of empowered patients.

Many health campaigns share similar objectives which center on increasing awareness, either in individuals or communities, so as to increase communication and self-empowerment of patients. Literature concerning women's health emphasized that educational messages are significant methods of conveying important information about women's health issues. Many patient education programs focus on educating and empowering women. The high incidence of cardiovascular disease in women has precipitated the launching of several initiatives whose main goal is increasing women's

awareness of behavioral risks that can cause health problems. Education is seen as the key to empowering women.

Summary

Many factors characterize good health. The meaning of health is interpreted according to an individual's culture, beliefs, and values. In designing patient education programs, health professionals and educators look at various models. Patient education programs and messages are designed to favorably influence the awareness, knowledge, and behaviors of patients. Positive behavioral changes result in patient empowerment that improves the patient's quality of life. Health educators have played an important role in communicating and translating scientific developments concerning women's health. As women become more educated and empowered, they approach health care issues with increasing confidence.

CHAPTER V
CONCLUSION AND RECOMMENDATIONS

Health and well being are two conditions that enable us to enjoy life. Today, people are living longer than in the past, in part because scientific researchers have experienced great success in improving diagnostic techniques and treatment procedures that ensure greater health and increase longevity. Due to competition for health care resources, however, we will be forced to decide how much health care we shall administer and how we will decide who will receive that health care. Through our public policies, we are likely to be deciding matters of health--and of life and death--on the basis of our moral values (Harron et al., 1983).

Of the many dilemmas facing our society, health care is at the top of the list. Now is the time to engage in processes that will prepare society to meet the challenges. The competition for who will receive health care results from a finite supply of resources that does not appear to meet the needs of our increased p pulation. In theory, we need health care coverage to cover the costs of the medical services that are rendered. People usually consult physicians and other health care professionals when they feel ill or experience disease. We can assume that people who feel healthy do not seek or need remedial health treatments and surgery as frequently as those who feel ill. People who feel healthy are more apt to seek and need health services that provide disease prevention measures, such as checks on blood pressure and cholesterol levels.

As scientific research leads to new developments and understandings of methods to prevent disease, this knowledge is disseminated as patient education. *Patient education* is the exchange of information between a health educator and a patient. Numerous groups deliver health-related information using a variety of methods, commonly traditional physician-patient exchanges, pamphlets and brochures, and videos. The source of the information can be, but is not limited to, a hospital, a drug company, a television spot or program, a conference or seminar, or a Web site. Studies have proven that patient education has been highly effective in contributing to positive health outcomes for patients. Moreover, effective patient education has been documented as enabling people to act in an empowered way. This empowerment is an important element in the prevention of illness and disease. It seems reasonable to assume that persons who value themselves are more likely to respond to the messages of health educators. Self-esteem is an important determinant of healthful behaviors, and all education programs should incorporate self-esteem building into their programs. Empowered patients have better control over their health and lives and seem to enjoy better relationships with their health providers, possibly because, in exerting positive control over their health, they often need less medical attention than passive patients who may be have behaviors that are not supportive of, and may even be destructive to, good health. The development and success of health education programs is dependent on the appropriate measurement of its value, and utilization of patient education has demonstrated significant value in improving patient comprehension of and compliance

in treatment. In addition, patient education interventions have been shown to reduce the cost of health care lower the demand on the health care system.

In view of the positive benefits of patient education, the principle recommendation of this researcher is that patient education be increased. All of the reviewed literature pointed toward this conclusion. Another recommendation indicated by this investigation is increased use by health professionals of the Internet to provide access to reliable health information and to integrate this information into their patient education programs. The World Wide Web can be an effective tool for delivering health education because use of the Internet is gaining acceptance among both health care professionals and patients. Concerns about the accuracy of the medical information available on the World Wide Web can be addressed by health care professionals who can make sure that reliable information is available on the Internet. Computer technology can and should be employed to improve communication and strengthen bonds between health professionals and patients, to involve patients more actively in their medical care, and thus to ultimately improve health care outcomes. As this medium of information is more widely accepted and utilized, it will become more effective in enabling patients to gain knowledge and empowerment.

Today's women are becoming increasingly aware of their unique health concerns. Decisions about health care delivery traditionally have been by health professionals and health officials, women's voices have been noticeably absent from health planning. Nonetheless, women are major consumers of health care, and recently health professionals have been responding to increasing concerns that the needs of

women be addressed. Women can be empowered with information through patient education, which places a strong emphasis on patient empowerment to master health-related skills and exert control over their health. Women's health is not solely a biological issue. Focus on women's health must include all health issues identified by women themselves. Increasing the confidence in women, empowering individuals and communities, and influencing public policy will help ensure all women achieve optimal health status.

Recommendations for Future Research

One weakness of prior studies of health education is that the relationship between the impact of health education and patient outcomes over time has not yet been fully explored. Tracing the effects of patient education over longer periods of time will enable researchers to understand the longevity of the results of patient education and the patterns of interventions that are likely to sustain beneficial changes in people's health-related behaviors. Studies have indicated that the impact of patient education results in the desired outcome. What also needs to be determined are the links sustain the desired outcome. Health education research needs to reach a fuller understanding of what works, why it works, and the component that ensures that the outcome is evident over time (Clark & McLeroy, 1995).

Education to increase the awareness of CVD among women and health care professionals is critically needed. In all the literature reviewed for this study, a strong emphasis on prevention was stressed as necessary to reduce CVD. Women's health

demands that the prevention and treatment of CVD be incorporated standard medical school curricula. Women's health also demands that educational programs concentrating on cardiovascular health and disease be presented at professional meetings of physicians in family practice, internal medicine, gynecology and obstetrics, and pediatric and adolescent medicine (Wenger, Leonsperoff, & Packard, 1993).

References

Allen, K., Phillips, J., (1997). *Women's Health Across the Life Span. Lippincott*

American Heart Association. (1997). *Cardiovascular disease in women: A statement for healthcare professionals from the American Heart Association.* (Circulation No. 1997; 96-2468-2482). Dallas, TX.

American Heart Association. (1998). *Heart and stroke statistical update 1997.* Dallas, TX

American Medical Association. Gender disparities in clinical decision making. (1991). *Journal of the American Medical Association 266(4),* 559-562.

Airhihanenbuwa, C. (1994). Health promotion and the discourse on culture: Implications for empowerment. *Health Education Quarterly, 21(3),* 345-353.

Bastian, H. (1998). Speaking up for ourselves: The evolution of consumer advocacy in health care. *International Journal of Technology Assessment in Health Care, 14(1),* 3-23.

Brown, M. (1998, January). Physicians on the Internet: Ambivalence and resistance about to give way to acceptance. *Medicine on the Net,* 19-21.

Brown, M. (1998, February). Healthcare information seekers aren't typical Internet users. *Medicine on the Net,* 17-18.

Brown, M. (1998, March). Online communications gap between physicians and cybersavvy patients. *Medicine on the Net,* 15-16.

Cerminara, K. (1998). The class action suit as a method of patient empowerment in the managed care setting. *American Journal of Law and Medicine, 24(1),* 7-58.

Clancy, C, & Massion, C. (1992). American women's health care a patchwork quilt with gaps. *Journal of American Medical Association, 268,(14),* 1918-1920.

Clark, N., & Mcleroy, K. (1995). Creating capacity through health education: What we know and what we don't know. *Health Education Quarterly, 22(3),* 273-289.

Cohen, Mary. (1998). Towards a framework for women's health. *Patient Education and Counseling, 33(3),* 187-196.

Coser, L. (1977). Masters of sociological thought. (2nd ed.). San Diego: Harcourt Brace Jovanovich.

Department of Health and Human Services. (1998). Comprehensive survey of working women's health issued. *Public Health Reports, 113,* 196

Downie, R., Tannahill, A., & Tannahill, C. (1996). *Health promotion models and values* (2nd ed.). Oxford Press.

Eriksson, S., Kaati, G., & Bygren, L. O. (1998). Personal resources, motives and patient education leading to changes in cardiovascular risk factors. *Patient Education and Counseling, 34(2),* 159-168

Falvo, D. (1985). *Effective patient education: A guide to compliance.* Rockville, MD: Aspen Systems Corporation.

Finn, S. (1997). Women in the new world order: Where old values command new respect. *Journal of the American Dietetic Association, 97(5),* 475-480.

Freudenberg, N., Eng, E., Flay, B., Parcel, G., Rogers, T., & Wallerstein, N. (1995). Strengthening individual and community capacity to prevent disease and promote health: In search of relevant theories and principles. *Health Education Quarterly, 22(3),* 290-306.

Freund, K., Patorek, J. (1997). *Examining women's health: 1996-1997. Medscape Women's Health, (2)3.* Online. Available: Internet.

Geller, J., Brown, M., Fisher, W., Grundzinskas, J., Jr., & Manning, T. (1998). A national survey of consumer empowerment at the state level. *Psychiatric Services 49(4),* 498-503.

Glanz, K., Lewis, F., Rimer, B., (1997). *Theory, research and practice* (2nd ed.) San Francisco: Jossey-Bass.

Goeppinger, J., & Lorig, K. (1992). *Patient Education: A practical approach.* San Francisco: Mosby.

Gorman, C. (1998). Playing the HMO game. *Time, 152(2),* 22-32

Gray, J., Fowler, G., (1984). *Essentials of Preventive Medicine.* Blackwell Scientific

Haggard, A. (1989). *Handbook of patient education.* Rockville, Maryland: Aspen Publishers.

Harron, F., Burnside, J., & Beauchamp, T. (1983). *Health and human values.* New Haven, NJ: Yale University Press.

Hill, M., (1998). Behavior and biology: The basic sciences for AHA action. *Proceedings of the 70th Scientific Sessions of the American Heart Association, Orlando, Florida.* (Circulation No. 1998:97-807-810).

Israel, B., Checkoway, B., Schulz, A., & Zimmerman, M. (1994). Health education and community empowerment: Conceptualizing and measuring perceptions of individual organizational and community control. *Health Education Quarterly, 21(2),* 149-170.

Israel, B., Cummings, K., Dignan, M., Heaney, C., Perales, D., Simons-Morton, B., & Zimmerman, M. (1995). Evaluation of health education programs: Current assessment and future directions. *Health Education Quarterly, 22(3),* 364-385.

Labonte, M., (1994). Health promotion and empowerment; Reflections on professional practices. *Health Education Quarterly, 21 (2),* 253-268.

Minkler, M., & Robertson, A. (1994). New health promotion movement. *Health Education Quarterly, 21(3),* 313-327.

Pelletier, K. (1993). A review and analysis of the cost-effective outcome studies of comprehensive health promotion and disease prevention programs at the worksite: 1991-1993 update. *American Journal of Health Promotion, 8(1),* 50-61.

Pinn, V. (1992). Women's health research prescribing change and addressing the issues. *Journal of the American Medical Association 268(14),* 1921-1922.

Redman, B., (1998). *Measurement tools in patient education.* Springer Publishing

Rogers, E. (1995). *Diffusion of Innovations* (4th ed.). New York: The Free Press.

Rudd, R., & Cumings, J. (1994). Learner developed materials: An empowering product. *Health Education Quarterly, 21(3),* 313-327.

Schur, E. (1997). Medical students and the future of women's health. *Journal of the American Medical Association, 277(17),* 1406-1407.

Spector, R. (1996). *Culture diversity in health and illness* (4th ed.). Stanford, CT: Appleton and Lange.

Steckler, A., Allegrante, J., Altman, D., Brown, R., Burdine, J., Goodman, R., & Jorgensen, C. (1995). Health education intervention strategies: Recommendations for future research. *Health Education Quarterly, 22(3),* 307-328.

Taylor, D. (1997). Toward a women-centered health care system: Women's experience, women's voices, women's needs. *Health Care for Women International, 18,* 407-422.

Toscani, M., & Patterson, R. (1998). Evaluating and creating effective patient education programs. *Drug Benefit Trends, 7(9),* 36-39

Wallerstein, N., & Bernstein, E. (1988). Empowerment. Freire's ideas adapted to health education. *Health Education Quarterly, 15(4),* 379-394

Wenger, N., Speroff, L., & Packard, ((Initial)). (1993). *New England Journal of Medicine, 329(4),* 247-253.