Dimensions of health and rural resident's health care resources
by Lorinda Marie Doede

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Nursing
Montana State University

Abstract:
This study explored dimensions of health and selected demographics that may influence the rural resident's choice of help-seeking resources. Hand-delivered or mail questionnaires were given to a convenience sample of 315 people in the Northern rural states. Dimensions of health included the concepts of psychological well-being, general well-being, and hardiness. The demographic concepts included age, gender, education, income, employment status, marital status, distance from neighbor, and rurality. The help-seeking resources were categorized into five categories: spouse (partner/significant other); family (parent, child/children, family member); informal (friend, neighbor, co-worker, spiritual advisor); formal (professional, agency, self-help group); and no one preferred or self-care.

Although the sample scored as moderately hardy, as healthy psychologically and physically, the analyses of these data indicate dimensions of health and selected demographic variables vary in explaining help-seeking resources chosen by participants. Participants reported they would first go to their spouse for help, then family and informal resources. The least selected choices were formal resources and self-care. As in previous studies, results indicate women visited formal resources more frequently than men; and those who were older sought formal resources more frequently than the younger generations. Correlation analysis indicated: the psychologically healthy were less likely to rely on their spouse; the single were less likely than the married or those with a partner to report a healthy psychological status; the working reported higher levels of general well-being and utilization of informal resources than the non-working; those who were older reported more pain and more concern about their health; the more educated the higher level of general well-being, less pain reported, and stronger scores of hardiness; and the higher the income, the more hardy, physically and psychologically healthy the rural resident.

Implications of this study indicate understanding rural residents' definition of health and help-seeking resources is imperative for the health care profession. A major goal of rural nursing is understanding the rural resident's perception of health and who is an acceptable resource for help. Such information will facilitate avenues by which the rural nursing profession can enhance and integrate acceptable health care resources which include the spouse, family, informal, and formal resources.

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Lorinda Marie Doede

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4-14-93
Date

Jean N. Gullicks
Chairperson, Graduate Committee

Approved for the Major Department

April 19, 1993
Date

Julie E. Johnson
Head, Major Department

Approved for the College of Graduate Studies

4/27/93
Date

R L Brown
Graduate Dean

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ABSTRACT

This study explored dimensions of health and selected demographics that may influence the rural resident's choice of help-seeking resources. Hand-delivered or mail questionnaires were given to a convenience sample of 315 people in the Northern rural states. Dimensions of health included the concepts of psychological well-being, general well-being, and hardiness. The demographic concepts included age, gender, education, income, employment status, marital status, distance from neighbor, and rurality. The help-seeking resources were categorized into five categories: spouse (partner/significant other); family (parent, child/children, family member); informal (friend, neighbor, co-worker, spiritual advisor); formal (professional, agency, self-help group); and no one preferred or self-care.

Although the sample scored as moderately hardy, as healthy psychologically and physically, the analyses of these data indicate dimensions of health and selected demographic variables vary in explaining help-seeking resources chosen by participants. Participants reported they would first go to their spouse for help, then family and informal resources. The least selected choices were formal resources and self-care. As in previous studies, results indicate women visited formal resources more frequently than men; and those who were older sought formal resources more frequently than the younger generations. Correlation analysis indicated: the psychologically healthy were less likely to rely on their spouse; the single were less likely than the married or those with a partner to report a healthy psychological status; the working reported higher levels of general well-being and utilization of informal resources than the non-working; those who were older reported more pain and more concern about their health; the more educated the higher level of general well-being, less pain reported, and stronger scores of hardiness; and the higher the income, the more hardy, physically and psychologically healthy the rural resident.

Implications of this study indicate understanding rural residents' definition of health and help-seeking resources is imperative for the health care profession. A major goal of rural nursing is understanding the rural resident's perception of health and who is an acceptable resource for help. Such information will facilitate avenues by which the rural nursing profession can enhance and integrate acceptable health care resources which include the spouse, family, informal, and formal resources.

CHAPTER 1

INTRODUCTION

Background of Study

Health is an important aspect of life. Throughout a lifetime, perceptions of health vary. This influences the choice of health care resources. These choices affect people individually and collectively, including their family, their social network, and the day's work. Factors that influence healthful living are social mores, the environment, occupational choices, religious beliefs, and one's culture (Jarvis, 1981). For example, farmers and ranchers consider health relative to its functional value (Lee, 1986; Lee, 1991). Consequently, the farmer may believe his land comes first and that men should be tough, not complainers. Rather than see a doctor about stomach pains, he may choose to get the seed planted in the fields, endure the pain and follow the neighbor's advice of self-care. Therefore, changes and adaption in a day's routine must be considered when health care is needed.

People have a variety of help-seeking resources available to them. The resources include self, family, friends, neighbors, physicians, nurses, nurse practitioners, physician assistants and others. The use of these help-seeking resources varies among individuals and across the life span.

Studies showed that informal care was used more than formal care in rural areas (Bartlome, Bartlome, & Bradham, 1992). Many factors influence help-seeking choices, including health and hardiness traits. Age, gender, income, education, socioeconomic status, ethnicity, insurance coverage, increased availability of physicians, religion, a telephone in the household, and the distance from neighbors may play a role in the decision for health care. In order to promote or maintain health of clients, particularly in rural areas, nurses need to have an understanding of help-seeking and its correlates.

Purpose

The purpose of this study was to explore dimensions of health that may influence the rural resident's choice of help-seeking resources. Dimensions of health include the concepts of psychological well-being, general well-being, and hardiness. Moreover, the influence of demographic variables were explored. Specifically, this study focused on the following questions.

Research Questions

1. How do rural residents perceive their mental and overall health status?
2. What is the level of hardiness in rural residents?
3. What type of help-seeking resources do rural residents report they would turn to for help?
4. What is the relationship between dimensions of health and help-seeking resources?

5. What is the relationship between demographic variables and the dimensions of health and help-seeking resources?
6. What are the relationships among demographic variables, dimensions of health, and help-seeking resources?

Significance of Study

A major concern of rural health care professionals is acknowledging and addressing the health needs and problems of rural people (Bigbee, 1991). Health care providers implement health services in rural areas but may find that residents do not utilize them. Health care providers may consider their services to be needed in a rural setting while residents in that area may not consider the health care services beneficial for their choice of a help-seeking resource. Studies need to be done considering health perceptions, beliefs, and health care preferences of residents in rural areas in order to better facilitate health care resources.

Rural populations are unique because of physical barriers such as lack of transportation, distance to health care and other resources, isolation and lack of health care providers. Physical barriers may affect the psychological aspects of rural residents. These barriers may prevent rural residents from seeking professional health care, perhaps lowering health expectations.

Moreover, rural residents are thought to possess individuality and hardiness (Bigbee, 1991). These are requirements for survival in geographically isolated areas, in part because so few, if any, health care resources are close. In the last decade, researchers found that

rural residents defined health as the ability to work and to do what needs to be done (Weinert & Long, 1987). Being able to work was more important than being pain free, attractive, or in better overall health. Rural residents considered themselves healthy because they can get a full day's work done. The definition of being healthy included the capability to work, in spite of the inability to hear well, see well, or ambulate well due to the aging process, illness or injury. Instead of seeking professional care for help, rural residents relied on other resources first. Such routes for help-seeking included self-reliance and the use of informal resources, such as the family, the neighbor, or a local retired nurse. Often self-care and informal resources satisfied the inquiring rural residents. On other occasions, people sought professional help on their own accord or because of the recommendation of a lay person.

Personality characteristics associated with rural residents may have an impact on health and health practices. Rural families were more self-sufficient and perform more services for themselves as opposed to relying on specialists (Bushy, 1991). However, the rural work ethic and attitude of hardiness or self-reliance may deter some families from seeking health care. It is not known at this time how these dimensions of health influence help-seeking resources.

Conceptual Framework

The conceptual framework focuses on the influence of dimensions of health and demographic variables on the rural residents' choice of health care (Figure 1). The dimensions of health explored in this

study include the rural resident's psychological sense of well-being, the perception of general well-being, and hardiness. It was anticipated that these factors influence choices in health care.

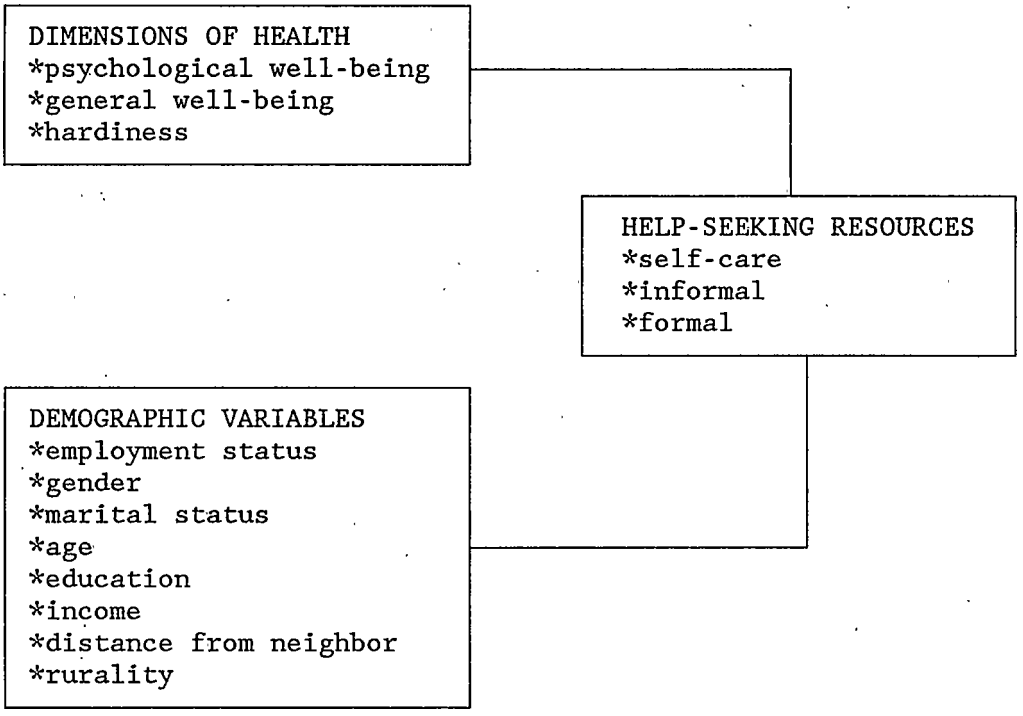

Figure 1. Model of the dimensions of health and help-seeking resources.

Definitions

Brief definitions of the dimensions of health and help-seeking resources follow. Further explanation is in the literature review.

Dimensions of health were divided into three categories. It is thought that these dimensions of health influence the choice of resources. Definitions of terms used in this study are as follows:

Psychological well-being: The participants' perception of their own mental health.

General well-being: The participants' perception of their general health status.

Hardiness: The participants' perception of their capability to embrace and grow with the opportunities in every experience.

Help-seeking resources were divided into three categories.

Self-care: Defined as managing or relying on oneself for resolving health needs.

Informal resources: Defined as nonprofessional care, such as the neighbor, friend, family, or spouse.

Formal resources: Defined as professional care, such as the health clinic, hospital, doctor's office, other agencies and self-help groups.

Rural residents: Defined as people residing in the Northern states of Montana, Washington, Wyoming, and North Dakota.

Demographic data were explored to see if gender, age, marital status, education, distance from the neighbor, rurality, income, or employment status influence the choice of resources.

CHAPTER 2

LITERATURE REVIEW

Health

Health, has been defined in a variety of ways by nurses (Smith, 1981; Weinert & Long, 1990). Smith (1981) divided these various concepts of the nature of health into four models: (1) eudaimonistic, (2) adaptive, (3) role-performance, and (4) clinical. All four models are interdependent, yet differ in view and significance.

The eudaimonistic model views health as holistic (Smith, 1981). The holistic picture produces the characteristics of wholeness, unity, and individuality. In this model, an individual has a sense of general well-being and a sense of intrinsic fulfillment and growth. On the opposite end of the spectrum, illness is a condition that prevents or hinders the state of self-fulfillment and development.

In the adaptive model, an individual's health is viewed as the state in which one can effectively interact or flexibly adapt to the physical and social environment (Dubos, 1965). Thus, an inability to cope with certain changes produces disease or illness.

The role-performance model visualizes healthy people as those who effectively accomplish their tasks connected with work or family responsibilities (Smith, 1981). In this view of health, people are

able to produce a maximal output in social roles whereas illness is the failure in performance of their roles.

The clinical model portrays health as the absence of signs or symptoms of disease or disability (Smith, 1981). Conversely, the presence of signs or symptoms is an indicator of illness.

Smith (1981) suggested concepts of health can be resolved into these four distinctive types. However, all four models of health are interrelated, although they can be viewed separately. The clinical model views the physiological aspects of a person. The other three health models concentrate on the psychological qualities of life, rather than focusing on only clinical status. The clinical model is the narrowest model, yet the definition of health requires the addition of the other models (role-performance, adaptive, eudaimonistic) of health. Healthy people are viewed as having no signs or symptoms of disease within the physiological system. With this viewpoint people who have signs and symptoms of a disease cannot be considered healthy no matter how productive or creative they are in life. If people do have signs and symptoms of a disease, they can be considered healthy using another model of health.

The role-performance model added the social and psychological aspects to the dimension of health in the clinical model (Smith, 1981). If nothing in a person's condition prevents "doing a day's work" or the effective performance of their role, then they are considered in healthy condition.

The adaptive model incorporated both the clinical model and the role-performance model (Smith, 1981). From this viewpoint, people are

considered healthy when they engage in effective interaction with the physical and social environment. Changing situations are seen as a challenge and a time of growth. According to this concept, if people are free of disease, yet fail in effective social functioning, they are not considered healthy.

The eudaimonistic model encompasses all three preceding components of a model of health; those being the clinical, role-performance, and adaptive models. The eudaimonistic model conceptualizes health as the ideal, holistic person who has the capacity to continue being creative, to continue refining the senses, and to resume growing and developing with life's experiences. Weinert and Long (1990) suggested Smith's (1981) model of health describes the views of the rural population.

Neuman (1982) diagrammed health on a continuum from wellness to illness. The state of health is seen as an individual's wellness and functioning as a state of optimal stability. Health was further defined by Neuman as the best possible health state at any given time. Neuman viewed health as a flexible interaction or a state in which a person is able to make corrective or adaptive responses to the environment. King (1981) defined health as the dynamic life experiences of a human being, which suggests continuous adjustment to stressors in the internal and external environment. This adjustment requires the optimum use of one's resources to achieve the utmost potential for daily living. She also defined health as the ability to function in social roles. King's (1981) predominant view of the concept of health is functional ability. In other words, absence of health means an inability to function in one's expected role (Chinn &

Jacobs, 1987; Fawcett, 1989; Parse, 1987). This view coincides with the health model of Smith (1981). All of these definitions can be tied together because of the commonality of health perceptions.

Psychological Well-Being

A person's psychological sense of well-being is one aspect of health studied in this research study. Self-confidence in judgments about health occurs when a person has a positive mental attitude. A person's mood may vary over time according to life situations which could affect the psychological sense of well-being. If people feel hopeless during a period of time, decisions may be different than when they feel hopeful about a particular situation.

Non-normative and normative life cycle transitions are experienced in all individuals and families which require adjustment and adaption (McCubbin & Figley, 1983). These transitions in life can influence a person's psychological sense of well-being. Non-normative events are those associated with accidents, crises, and catastrophic events which generally can neither be anticipated or expected (Figley & McCubbin, 1983). Normative events are those associated with normal life transitions that are fairly predictable such as birth, adolescence, marriage, and death (McCubbin & Figley, 1983). Although considered normative events, these changes still require ongoing adjustment and adaptation by family members and the family system. Often the normal transitions require just as much adjustment as a sudden extraordinary event (McCubbin & Figley, 1983). Bereavement brought about by a non-normative or a crisis event, a loss, or a major transition, is

believed to cause an excess utilization of the health care system. Depression among the bereaved can precipitate or exacerbate physical and psychologic dysfunction, leading to increase use of formal resources (McHorney & Mor, 1988).

Studies show that women are more likely than men to seek help for mental health problems; the better educated are more likely than the less educated to seek professional help from mental health specialists; and the younger and middle-aged people are more likely than the older people to seek professional mental help (Veroff, Kulka, & Douvan, 1981). Research studies from 1957 to 1976 suggested that people's attitudes about seeking formal mental health care had changed. By 1976, people were more likely to seek professional help for an emotional problem than in 1957 (Veroff et al., 1981).

General Well-Being

When people consider their general health, a broader paradigm incorporates the physical as well as the psychological status. One's perception of self health is the view of a general health sense of well-being which may be different from the health provider's perception. People may have a chronic disease or a physical disability, yet rate themselves in good health because of their overall perception and definition of health. Others may rate themselves in poor health because of their overall perception and definition of health.

Attitudes about health have been found to influence the use of help-seeking resources. Kessel and Shepherd (1965) studied health

attitudes of people who seldom consulted a doctor. Those who hadn't seen a doctor for ten years were not neglectful of their health and were even rated lower for emotional disturbance than those who had recently visited a doctor. Most often trivial ailments were not seen as an illness. This attitude reflected opinions about their own health. Attitudes about their past, present and future were favorable and they were less worried about health, i.e., they considered themselves healthy. The late adulthood study by Battistella (1971) concluded that persons having positive attitudes towards their own health and the effectiveness of medicine delayed getting professional help less than persons with a negative attitude.

Hardiness

Hardiness is a relatively new concept in health care which encompasses the ideas of adaptation, resilience, resistance, determination, optimism and assertiveness (Lee, 1983). This personality trait cannot be described in pictures or words, but it produces positive health effects for people when it functions as a moderator to stressful life events. On the other hand, this characteristic may be harmful if people ignore danger signals in their health or do not comply with medical advice.

According to The American Heritage Dictionary hardiness means (1) being rugged and strong; (2) being courageous; and (3) brazenly daring (Berube, 1985). The adjective, hardy, is often used in the description of cultivated plants. When a plant is considered to be hardy it means the plant is capable of surviving unfavorable conditions

such as weather extremes or drought. The concept of hardiness is applied to the bold and daring adventurers who conquered land and sea. Even animals that are sturdy and endure hardship are considered to be hardy. Likewise, hardiness emphasizes independence, self-care and self-reliance which seems to represent rural culture (Bigbee, 1991).

Kobasa (1979) was the first to suggest that persons who do not fall ill despite considerable stress have a strong, hardy personality trait. According to Kobasa, the concept of hardiness serves as a buffering or moderating factor in the stress-illness relationship. In other words, persons under high levels of stress may not develop an illness if they possess a hardy personality trait as a health-protective buffer (Bigbee, 1991; Pollock and Duffy, 1990).

Kobasa, Maddi, and Kahn (1982) proposed that "hardiness is a constellation of personality characteristics that function as a resistance resource in the encounter with stressful life events" (p. 169). Three characteristics of hardiness are commitment, control, and challenge. Thus, according to these researchers, a hardy person is one who demonstrates all three traits.

Commitment is the tendency to become involved in, rather than alienated from, various activities of life. Of particular importance to health is the strong sense of commitment to self, which motivates active involvement in promoting one's health and confidence in dealing with health problems (Bigbee, 1991; Kobasa et al., 1982; Pollock and Duffy, 1990).

The characteristic of control is described as the tendency to feel one has a definite influence in the varied experiences of life and acts

rather than feels helpless. This enhances stress resistance by increasing the likelihood that events will be seen as a natural growth from one's own decisions and actions and not as overwhelming experiences (Kobasa et al., 1982). An event can be stressful only if the individual perceives it that way (Lazarus, 1966; Pagana, 1990).

Challenge is described as the perception of change as a part of life and that the anticipation of changes means growth rather than insecurity. Challenge means learning to cope in order to bring about a willful transformation rather than preserving and protecting the former life. This coping flexibility also encourages growth (Kobasa et al., 1982).

Kobasa's studies showed that people with the three characteristics of hardiness (commitment, control, and challenge) were able to keep healthy in spite of stressful events in life (Kobasa, 1979; Kobasa, Maddi, & Courington, 1981; Kobasa et al., 1982). Furthermore, hardiness has its greatest health-preserving effects when stressful life events mount. More research needs to be done to understand how hardiness is developed and how it plays a role in other resistance resources.

Demographic Variables

Research has shown various findings in studies addressing help-seeking and utilization of health care services. The elderly consumed more health resources (Coward & Lee, 1985; Davis, 1983; Hulka & Wheat, 1985; McKinlay, 1972; Ward, 1977), but were least likely to seek professional mental help (Veroff et al., 1981). Further studies

indicated there is no relationship between psychological distress and the decision to seek medical care among the Medicare population (Berkanovic & Hurwicz, 1989). Women visited the doctor more than did men (Hulka & Wheat, 1985; McKinlay, 1972). One study indicated that for a certain set of symptoms such as cancer, the association between gender seeking health care services was comparable (Marshall, Gregorio, & Walsh, 1982). Another study indicated that the less well-educated were more inclined to visit the doctor (Sharp, Ross, & Cockerham, 1983) in comparison to another study which indicated the better educated were more likely then the less educated to seek professional help from mental health specialists (Veroff et al., 1981).

Blacks and nonwhites have more positive attitudes toward visiting doctors than whites. The lower social class and nonwhite racial groups experienced more doctor visits and hospitalizations (Hulka & Wheat, 1985). Blacks and the less educated were more inclined to think that symptoms such as repeated indigestion were serious enough to warrant the care of a physician (McKinlay, 1972; Sharp et al., 1983).

Research has shown insurance coverage with Medicare and Medicaid increased the utilization of health care services (Hulka & Wheat, 1985; Roemer, 1976). Increased availability of physicians also increased the utilization of health care services (Coward & Lee, 1985; Davis, 1983; Hulka & Wheat, 1985; Roemer, 1976). The Jewish population sought health care services more than Protestant and Catholic populations (Mechanic, 1963). Having a telephone in the household affected health utilization by increasing the convenience of making scheduled appointments (Wolinsky, 1982).

Rurality varies in both social and environmental characteristics (Carlson, Lassey, & Lassey, 1981). The census statistics not only determines the degree of rurality, but also includes analysis of the social and environmental circumstances at the particular time and place. For example, a rural county of 150 people may be located a short distance from a major urban center, yet be considered urban in lifestyle and occupation, as the dwellers commute to work. Small towns may be immediate suburbs of cities and therefore have close access to medical and other health care services. A town of 10,000 may be located a long distance from a major urban area, affecting the availability of medical services, occupations, and type of lifestyles. Rurality may affect the type of help-seeking resources rural residents choose. Spouses or partners, families, neighbors, and friends most likely would be the first resource available in an emergency or urgent situation.

Literature suggests the rural population is generally poorer, older and less likely to have health insurance (Rosenblatt & Moscovice, 1982). Health services are less available in rural communities and the health care accessible tends to cost more (Rosenblatt & Moscovice, 1982). Rurality can effect communication and transportation patterns, the networks and interactions between family, friends, and neighbors, and the availability or lack of specialized services (Cordes, 1985).

Clearly, demographic variables influence help-seeking. For this particular study the focus was on age, gender, marital status, education, distance from the neighbor, rurality, income, and employment status which were considered to be important in the rural population.

Help-Seeking Resources

Help-seeking resources are represented in the range of activities that people initiate to promote or restore their own health. Help-seeking resources include self-care, the use of informal resources, such as the family network or lay people, and the use of formal resources, such as health care professionals. The decision for self-care, informal resources, or formal resources is the result of previous experiences and present perceived seriousness and duration of the problem. For example, a study on a Medicare population showed people were more likely to seek medical care for musculoskeletal illness episodes, such as arthritis, as compared to musculoskeletal injury or respiratory illness (Hurwicz & Berkanovic, 1991). Respiratory episodes are shorter in duration and are more often self treated than musculoskeletal episodes. The decision to restrict activity, drink extra fluids, take aspirin and seek recommendations from friends and family for a respiratory episode may be a result of previous experience that has been satisfactory. If the episode does not resolve and the duration is longer than expected the person may then seek medical care. Both characteristics of the person and characteristics of the illness affect how people respond to illnesses in help-seeking behavior (Hurwicz & Berkanovic, 1991).

Self-care, a help-seeking resource, represents the range of behaviors exhibited by individuals to promote or restore their health (Dean,1989). For the purpose of this study, self-care was defined as self-management of health, illness or injury and self-reliance. The

term self-care has been defined in many ways, from self-observation to symptom labeling to deciding on choice of treatment which may include not taking action or taking action by seeking professional care (Bentzen, Christiansen & Pedersen, 1989). Self-care, seen as the basic level of non-professional care, suggests the individual chooses no care or follows through with care activities to maintain or improve health. In many cases, self-care does not take the place of professional care, but instead, compliments it in reaching optimum health (Bentzen et al., 1989; Dean, 1981). Self-care addresses activities such as self-medication, stress reduction, life-style changes, including dietary and exercise changes, and attitudinal adjustments. People learn effective self-care and self-treatment strategies (Alonzo, 1979).

Informal resources, family members and friends, or those who are significant to individuals, are another kind of help-seeking resource. Individuals interact with friends and family members in specific social situations to assist in the performance of health related behaviors, including decisions to seek and comply with professional care (Dean, 1989; Levin, Katz, & Holst, 1976). The term "lay consultation" refers to seeking counsel from people other than health professionals about health problems. Members of the lay network assist in deciding on courses of action for self-care measures and whether to seek professional care (Furstenberg & Davis, 1984). The lay network can consist of several people or only one person and may be consulted more frequently than health experts (Booth & Babchuk, 1972). The more anxious an individual is about the severity of a health problem, the availability of interpersonal resources, and the potential effect of

the problem on the individual's financial resources, the greater importance of the lay network for advice and counsel.

In studies of help-seeking resources in a life threatening crisis, lay consultation significantly affected the patient seeking medical help (Alonzo, 1986). Less life-endangering illness encouraged individuals and other lay people to continue in a pattern of self-treating. A certain amount of self-treatment was deemed necessary before medical care could be validated. Alternatively, family and lay people helped to avoid excessive self-treatment and encouraged the need for medical care (Alonzo, 1986). In an urban adult study by Brown (1978), people who had a supportive informal network or had social support and resources within their community, such as family and friends, were more self-reliant and perhaps were more able to bypass professional help.

Some research has shown that persons who are more socially isolated may seek medical care when signs and symptoms are evident, because of feelings of apprehension, insecurity and helplessness (Battistella, 1971). Communication with the family and neighbors may alleviate the isolated person's feelings by defining the symptoms in non-serious and familiar terms (Battistella, 1971). Often, the lay individual's interactions with the person seeking advice produces health related behaviors including choices from self-treatment to compliance with professional care (Dean, 1989).

Formal resources offer another choice. People may choose to seek professional care on their own accord or from the advice of the family network or lay person. The types of help-seeking resources can range

from phoning a nurse or physician about the problem, being visited by a home care nurse, or traveling to professional health care providers. Health care professionals need to preserve people's confidence in their own health care. A part of preserving confidence is educating people about signs and symptoms of disease that require medical attention.

These determining factors and how people regard symptoms, as well as how sensitive they are to discomfort, likely affect whether health care services will be sought (Hulka & Wheat, 1985; Mechanic, 1972). Dimensions of health influencing people's choices need to be further studied in well rural residents to determine the utilization of help-seeking resources.

In summary, the literature suggests that general well-being or people's evaluation of their physical and mental health affects their definition of health and that traits of hardiness exhibit positive effects on the definition of health. The literature also suggests that psychological-well being, general well-being, hardiness and the selected demographic variables (employment status, gender, marital status, age, education, income, distance from neighbor, and rurality) may influence people's choices of help-seeking resources.

CHAPTER 3

METHODOLOGY

Design

The goal of this study was to explore and describe how dimensions of health influence the help-seeking resources for rural residents. This study is an exploratory descriptive study, using mail and hand delivered questionnaires.

The study is part of a larger set of studies called The Montana Family Cancer Project (MFCP). The MFCP at Montana State University College of Nursing has examined help-seeking resources of rural families managing cancer. The Montana Family Cancer Project received the first Eagles Art Ehrmann Cancer Fund Grant (referred to as the Montana Family Survey) in Montana on December 7, 1991. Major goals of the Montana Family Survey were to maximize the validity of current data and to establish scale ranges for residents on the existing tools used in the larger study. The Montana Family Survey (MFS) focused on residents of several rural states and facilitated comparison of rural individuals managing cancer with rural healthy individuals in the larger study. The study was a portion of the Montana Family Survey examining dimensions of health and help-seeking resources.

Population and Sample

The population consisted of rural residents. A broad array of Northern rural residents with a variety of occupations and residences were sought to participate in this study for the purpose of a community sample of rural residents. A convenience sample of 315 participants was obtained for the MFS.

"Rural resident" participants were defined as men and women, 20 years and older, who reside in the Northern states of Montana, Washington, Wyoming, and North Dakota. The researcher introduced the study and encouraged participant involvement. Women's groups, men's groups, church groups and other known community groups as well as individuals were approached.

Data Producing Instruments

The questionnaire used in the Montana Family Survey included a variety of measures. This study used selected tools from the MFS that measured help-seeking resources, health perceptions and hardiness traits.

Psychological Well-Being

Psychological well-being was defined as the participants' perception of their own depression and was measured using the Center for Epidemiologic Studies-Depression Scale (CES-D) (Radloff, 1977), (see Appendix A). The CES-D consists of a 20-item four-point Likert-type scale designed to measure depressive symptomatology in the general population. The questions cover symptoms of a depressed mood which

include feelings of guilt, worthlessness, hopelessness and helplessness. Psychophysiologic manifestations also are measured by asking about loss of appetite and sleep disturbance (Radloff, 1977). The CES-D scale is designed to measure the current ("this week") level of symptomatology, which is expected to vary over time and in a cyclic manner in the face of certain life events (Keyser & Sweetland, 1985; Radloff, 1977). The twenty items are summed for a total score of zero to 60. The higher the CES-D score, the greater the depressive symptomatology. Scores of 16 or higher indicate the severity of depressive symptoms (Radloff, 1977). The score reflects depressive symptoms and emotional distress only and is not compared with a clinical diagnosis of depression. The score of 16 is intended as a cutoff point to identify high-risk groups (Turner & Avison, 1989). Persons with a score of 16 have at least six of the twenty symptoms in the CES-D scale and have experienced them for most of the previous week or for a short periods of time (Comstock & Helsing, 1976). The alpha coefficients range from .84 to .90 which reflects a high internal consistency (Radloff, 1977). For this study, the alpha coefficient was .88.

General Well-Being

The definition of general well-being incorporated the participants' perception of their current health status (see Appendix B). Participants' were asked to rate their perception of health in terms of "excellent", "good", "fair", or "poor". Self-ratings of general health are among the most commonly used measures of health status (Ware, 1976). These rating are measures of general

health because they do not focus on a specific health status characteristic. Instead they are linked to a wide range of physical and mental health concepts as well as health and illness behaviors (Davies & Ware, 1981).

Hardiness

The hardy personality has a three dimensional constellation: control, commitment, and challenge (Kobasa, 1979; Kobasa, et al., 1982). The concept of hardiness was measured using a revised version of the scale developed by Kobasa, Maddi and Kahn (1982) (see Appendix C). This 20-item instrument consists of two parts. The first part is a four-point Likert-type scale in which the participants choose the present degree of attitude to which they agree or disagree (0-STRONGLY DISAGREE to 3-STRONGLY AGREE). The second part has six items in which participants choose between two statements (either A or B) which best represents their attitude. Control is measured by absence of powerlessness, commitment is measured by absence of alienation, and challenge is measured by absence of need for security. A score for the instrument is obtained by summing the total scores. The range of possible scores will be from -18 to +18. High scores indicate a lack of hardiness and low scores indicate hardiness. The original and shorter version of the hardiness instrument have been used in numerous studies. The revised 20-item measure has a reliability of .86, which correlates with the original measure at .89, and has been shown to duplicate all the major findings of the original scale (Lambert & Lambert, 1987). For this study the alpha reliability was .75.

Help-Seeking Resources

Help-seeking is defined as the range of activities a person engages in to promote or restore health. Resources available in help-seeking include self-management of health problems, informal resources such as the family network, and formal resources such as professional health care providers. The tool used to assess the participant's help-seeking resources was the Personal Resource Questionnaire (PRQ-85) (Brandt & Weinert 1987). It consists of two parts and only the first part was used in this study (see Appendix D). The PRQ-85, Part I, is used to assess who the respondent would turn to in case of urgent needs or a crisis situation involving an illness, injury or psychological concern. There are ten questions dealing with specific needs. Help-seeking resources in response to the specific needs include parent, spouse/partner, other relatives, friends, formal services such as spiritual and professional help, and no one or self-care.

For each of the specific help-seeking resources including the category of "no one", percents were calculated for the number of times each was used for the ten health needs. For example, the "parent" index was calculated based on the number of times parent was identified as a resource for the ten health needs. Twelve specific indicators were calculated. The "other" category for the ten health needs was coded into one of the first twelve resources. The twelve indicators were collapsed into the categories of spouse/partner/significant other, family, informal resources, formal resources and no one. The category of spouse or partner or significant other was analyzed separately. The category of family resources include parent, child or children, and a

relative or family member. The category of informal resources include friend, neighbor or co-worker and spiritual advisor (minister, priest, etc.). The category of formal resources include professional (nurse, counselor, social worker, employer, etc.), agency, and self-help group. The category of self-care is indicated by the selection of no one (prefer to handle it alone). Data from the selection no one (no one available) were collapsed and were analyzed separately.

Demographics

Demographics were addressed last (see Appendix E). Information includes participant's age, gender, education (highest degree or number of years), perception of distance from a neighbor, rurality, marital status, occupation, employment status and income.

Rurality was assessed using the rurality index (Weinert, Bork, & Bender, 1990). The rurality index reflects the accessibility to emergency care and the county population. Accessibility to emergency care varies for people who live in the same county.

Description of Procedure

The procedures for the Montana Family Survey were as follows. Data were generated for the Montana Family Survey by having participants voluntarily fill out questionnaires that took approximately 45 minutes to complete. The MFCP staff introduced the study and encouraged participant involvement. Women's groups, men's groups, church groups and other known community groups as well as individuals were approached and asked to participate in the study.

When mailed, a cover letter was enclosed with the questionnaire. The letter explained that the participant provided critical data to the study and emphasized that accurate responses were imperative to the success of the study. If the questionnaire was hand delivered, the researcher was informative about the study, and also provided a letter with written information about the study. The returned questionnaire was considered consent to participate. The researcher showed appreciation for the efforts of completing the questionnaire in a letter and stressed the importance of the participant's data contribution to the study's outcome.

The questionnaires were numbered and participants' names and addresses were collected when they received a questionnaire. A sign-out sheet for names and addresses coincided with the number on the questionnaire. This helped the researcher keep track of unreturned forms and allowed reminder notes and/or thank-you notes to be sent to the participants. Code numbers and data were not associated with or stored with names.

A postcard prompt was sent to each participant who had not returned the questionnaire in two weeks. If there was no response, a second prompt letter was sent to encourage the participant to either complete the booklet or return the blank booklet. A thank-you letter was sent to all who had returned the completed questionnaire.

If the booklet was mostly completed, the questionnaire was used for data analysis. If many pages or items were missing, usability was addressed on a case-by-case basis.

Data Analysis

Descriptive statistics were used to summarize the characteristics of the community sample. Research questions one to three, which dealt with psychological well-being, general well-being, hardiness, and type of help-seeking resources, were analyzed using descriptive statistics such as means, percentages, and frequencies. The Pearson's *r* correlational analysis of health dimensions and help-seeking resources was used in testing research questions four and five, which dealt with relationships between dimensions of health and help-seeking resources and relationships between selected demographic variables and the dimensions of health and help-seeking resources. Multiple regression analysis was used in research question six to examine the relationships among demographic variables, dimensions of health, and help-seeking resources.

Human Subjects

This study was a secondary analysis of data that were being generated by the Montana Family Survey, a sub-study of the Montana Family Cancer Project federal grant number 5 R01 CA46330. This secondary analysis was approved by the Human Subjects Committee at Montana State University, College of Nursing (see Appendix F). Permission was obtained for use of the data from Dr. Weinert, the principal investigator on the MFCP (see Appendix G).

Participants were men and women, 20 years and older, living in sparsely populated states. The sample included 315 participants who could read and write English.

There were no physical, social, or legal risks involved from participating in the MFCP Montana Family Survey. Minimal psychological risks may have been involved from answering some of the questions concerning participants' attitudes about their families and functioning.

Confidentiality was protected in the MFCP Montana Family Survey. Names and identifiers were kept separate from data in a locked office where only Montana Family Cancer Project staff had access. Confidentiality was assured as there were no names used on the questionnaires; only identification numbers were stamped on the questionnaires. Only aggregate data were reported. Participation was completely voluntary and participants could choose to not answer questions if they did not want to.

There were no direct benefits for the participants in the MCFP Montana Family Survey. The participant's interest, time, and information were acknowledged and appreciated. Individuals may have felt an indirect benefit from the satisfaction they had contributing to nursing research and having evaluated their own lifestyle.

The risks for participation in the MCFP Montana Family Survey were minimal in relationship to the potential benefits in knowledge gained about lifestyles of rural residents. The information will provide further knowledge for planning health care services in rural areas.

CHAPTER 4

RESULTS

The purpose of this study was to explore dimensions of health that may influence the rural resident's choice of help-seeking resources. The influence of demographic variables on the rural resident's choice of help-seeking resources was also explored.

The first section of this chapter is the description of the sample. The second section is the findings of dimensions of health and help-seeking resources rural residents use in different situations. In the third section, the relationships among demographic variables, dimensions of health, and help-seeking resources are described. The significance level was .05 for all statistical tests.

Sample Description

Descriptive statistics were used to summarize the demographic data. Means were determined for all of the key variables: gender, age, education, income, neighborly patterns and residency patterns. The sample was composed of 315 rural residents with a variety of occupations and residential locations. The Northern rural states represented in the sample were Montana (95%), Washington (3%), Wyoming (1%), and North Dakota (1%). There were 224 women and 91 men. Ninety-eight percent were caucasian and seventy-five percent were married. The age of the participants ranged from 21 to 84 with a mean of 46.8

years. The residents' years of education ranged from 7 to 24 years with a mean of 15 years.

The employment status of the sample was varied (see Table 1). Almost half the sample worked full-time for pay and forty percent (n=127) worked as full-time homemakers, full-time homemakers with part-time jobs or helpers on the farm/ranch, full-time students or full or part-time students with jobs. The mean for hours per week worked for pay was 37.78 hours. A small percent were unemployed due to age, disability, and inability to find suitable work because of where they lived.

Participants worked in the following occupations: health services (28%); educational services (17%); agricultural production/livestock/ services (10%); clerical, cleaning, catering, consulting services (3%); trucking/warehousing/postal service (3%); executive/legislative/ general government/military (3%); depository institutions (3%); personal services (3%); self-employed (3%); finance/taxation/monetary policy (3%); and other occupational categories (22%). The total annual family income levels ranged from less than $15,000 to greater than $80,000. Fifty-one percent of the sample made less than $30,000 (see Table 1).

The majority (58%) of participants described the area where they lived as a city/town (see Table 1). Twenty-three percent described the area as outside city limits, 17% as farm/ranch area, and two percent as suburban.

Table 1. Employment status, income, and description of residential area.

Variable	Frequency	Percent
Employment Status		
Full-time for pay	155	49
Full-time homemaker	35	11
Unemployed	33	11
Full-time homemaker/part-time job	31	10
Part-time for pay	21	7
Full-time homemaker/helper with ranch	18	6
Full-time student	11	3
Full or part-time student/work for pay	11	3
Income		
Less than $15,000	56	18
$15,000 to $19,999	25	8
$20,000 to $24,999	39	13
$25,000 to $29,999	37	12
$30,000 to $34,999	40	13
$35,000 to $39,000	15	5
$40,000 to $49,999	36	12
$50,000 to $59,999	25	9
$60,000 to $69,999	15	5
$70,000 to $79,999	8	3
Greater than $80,000	13	4
Description of Area		
City/town	168	58
Outside city limits	72	23
Farm/ranch	53	17
Suburban	5	2

The majority of the participants lived next door or within a few blocks of their neighbors (see Table 2). A minority of the participants considered neighbors as very distant emotionally. Eighty-one percent considered they were between somewhat distant to somewhat close to the neighbors. Sixty-eight percent of the participants reported visiting their neighbors from a few times each week to every few weeks.