



Health perceptions, needs, and behaviors of remote rural women of childbearing and childrearing age
by Ronda Lynn Bales

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in
Nursing

Montana State University

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Abstract:

The purpose of this qualitative research study was to explore the health perceptions, needs, and behaviors of remote rural women of childbearing and childrearing age living in Montana. Little research has focused on this area. Gaining information about rural women in this stage of life may enable health care practitioners to increase health promotion and disease prevention behaviors among their rural female patients and their families.

Qualitative research methods and rural theory provided the underlying framework for this study. A grounded theory approach was used as a means to obtain and analyze data in the discovery of the health perspectives of rural Montana women of childbearing and childrearing age. Semi-structured interviews were conducted with a convenience sample of eleven women age 28 to 49 years who had lived in remote rural communities in Montana for five years or more.

Seven themes emerged from the analysis of the data. They were distance as a way of life, distance as a disadvantage in an emergency, episodic evaluation, children first, prevention for life, access within reason, and holistic health.

The implications of the study for nursing practice include (a) health care providers should remain cognizant of the distance individuals travel to obtain health care, (b) health practitioners need to explore the availability of emergency resources in the local communities of their patients and provide the appropriate education for handling various emergency situations, (c) women should be offered every opportunity for all recommended screening activities appropriate for their age at each visit, and (d) methods for the delivery of health education to rural women should be explored.

Furthermore, implications for nursing research include (a) a need for continued research regarding distance and the utilization of health care services, (b) the impact of stress on rural women and their health status, and (c) the exploration of health perceptions of women of childbearing/childrearing age who suffer from chronic illness. An understanding of how rural women perceive health is important for designing and delivering health care services and for providing the highest level of quality health care.

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AND CHILDREARING AGE

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Bozeman, Montana

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This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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TABLE OF CONTENTS

	Page
1. INTRODUCTION.....	1
PURPOSE OF STUDY.....	4
THEORETICAL PERSPECTIVE.....	4
DEFINING RURAL.....	6
DEFINITION OF TERMS.....	7
ASSUMPTIONS.....	9
2. REVIEW OF LITERATURE.....	10
RURAL HEALTH.....	10
DISTANCE AND SELF-CARE.....	11
EVALUATING ILLNESS AND INFORMAL SUPPORT NETWORKS.....	17
SELF-CARE AND SELF-RELIANCE.....	18
DEFINITION OF HEALTH.....	19
WOMEN, STRESS, AND ILLNESS EPISODES.....	20
SUMMARY.....	27
3. METHODOLOGY.....	29
INTRODUCTION.....	29
SAMPLE.....	29
HUMAN SUBJECTS PROTECTION.....	30
DATA COLLECTION.....	32
DATA ANALYSIS.....	33
4. FINDINGS OF THE STUDY.....	35
DEMOGRAPHICS.....	35
EMERGENT THEMES.....	39
DISTANCE AS A WAY OF LIFE.....	40
Routine Health Care.....	41
Childbirth.....	41
Chronic Illness.....	45
DISTANCE AS A DISADVANTAGE IN AN EMERGENCY.....	46
EPISODIC EVALUATION.....	49
CHILDREN FIRST.....	54
PREVENTION FOR LIFE.....	55

TABLE OF CONTENTS - CONTINUED

ACCESS WITHIN REASON.....	59
HOLISTIC HEALTH.....	63
SUMMARY.....	64
5. DISCUSSION.....	68
INTRODUCTION.....	68
EVALUATION OF FINDINGS.....	69
Health Perceptions.....	69
Health Needs.....	70
Health Behaviors.....	71
Influence of Health Perceptions on Health Behaviors.....	72
LIMITATIONS.....	78
IMPLICATIONS FOR NURSING PRACTICE.....	79
IMPLICATIONS FOR NURSING RESEARCH.....	80
CONCLUSIONS.....	82
REFERENCES.....	83
APPENDICES.....	89
APPENDIX A	
Consent Form.....	90
APPENDIX B	
Interview Schedule.....	94
APPENDIX C	
Demographic Data Sheet.....	99

LIST OF TABLES

Table	Page
1. Age Categories of Rural Sample (N = 11).....	35
2. Education Level of Rural Sample (N = 11).....	36
3. Number of Children in the Home.....	37
4. Age Categories of Children Living at Home (N = 23).....	37
5. Years Lived in the Rural Community (N = 11).....	37
6. Number of Miles & Travel Time One Way for Emergency Care of Rural Sample (N = 11).....	39

ABSTRACT

The purpose of this qualitative research study was to explore the health perceptions, needs, and behaviors of remote rural women of childbearing and childrearing age living in Montana. Little research has focused on this area. Gaining information about rural women in this stage of life may enable health care practitioners to increase health promotion and disease prevention behaviors among their rural female patients and their families.

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CHAPTER 1

INTRODUCTION

Montana is a rural state characterized by vast open spaces, a sparse population, and large geographical distances between many of its cities and towns. An estimated 70% of the state's population live in towns with less than 15,000 inhabitants and 80% of Montana communities have a population of less than 3,000 people. An estimated 12.3% of Montanans lack access to primary care (Montana Office of Rural Health, 1999). Of the fifty-six counties in the state, thirty-five have been designated Health Professional Shortage Areas (HPSA). The designation of an HPSA indicates that the area has decreased access and availability to health care providers and health services. Thus, rural dwellers likely make up a significant portion of those who lack access to primary care in the state.

Nursing researchers have suggested that rural individuals differ from their urban counterparts and applying urban models of health care to rural individuals may not be ideal (Long, 1993; Weinert & Burnam, 1994; Weinert & Long, 1990). Rural health research has indicated that the health perceptions of rural individuals may also be unique when compared to the perceptions of persons living in urban areas. Aspects common to rural dwellers included their definition of health as the ability to work, reliance on self and informal systems, and decreased willingness to use health care services provided by "outsiders" (Weinert & Long). The unique aspects of rural dwellers may impact how and when they seek health care. Internal factors such as self-reliance and reliance on informal

support systems of family, friends, and neighbors, may lead to a delay in seeking formal health care services (Long, 1993). These factors, as well as external factors including distance and lack of adequate health care resources, may put the rural individual at increased risk for illness, disability, and premature death (Long, 1993; Veitch, 1995).

Rural dwellers in general, have often been compared to urban individuals in terms of health behaviors and access to health care (Bushy, 1994b; Long, 1993). To some extent, there has been a lesser focus on rural women. Less research has been directed at the impact of rurality on the health of midlife women or those of childbearing and childrearing age (Hemard, Monroe, Atkinson, & Blalock, 1998). Women of childbearing/childrearing age, regardless of geographic location, have common health care needs. Early detection and treatment of diseases common in women, such as breast and cervical cancer, can reduce death and disability associated with these diseases. Screening tests are available to detect these diseases. However, access to care has been found to be a factor that influences whether or not women participate in the screening processes for breast and cervical cancer (Wilcox & Mosher, 1993; Nuovo, Melnikow, & Howell, 2001). Although the gap is narrowing, rural women continue to have more children than their urban counterparts as well as experience their first pregnancy at an earlier age (Bescher-Donnelly & Smith, 1981). Therefore, in addition to screening for cervical and breast cancer, and general health maintenance, women in this stage of life may have needs for adequate birth control, family planning, prenatal care, and childbirth education.

Women of childbearing/childrearing age may experience stress as a result of multiple demands placed them by family relationships and home and work responsibilities (Kenney, 2000; Bigbee, 1984). The number of women working outside the home has steadily risen and rural women account for a significant portion of this growth (Walters & McKenry, 1985). Rural women have less educational opportunities and less occupational choices and therefore often work at low-wage jobs (Bescher-Donnelly & Smith, 1981). Rural women working outside the home also have fewer provisions for quality child care (Bigbee, 1984). These factors, added to the primary responsibilities for home and family management intensify the multiplicity of roles experienced by rural women. Research has indicated that stress and illness may be closely related and multiple stressors can compromise the immune system therefore putting the individual at increased risk for acute and chronic illnesses (Kenney, 2000).

Women oversee their own health care as well as the health care of their family members. Rural women often act as health officers or gatekeepers of health care for the entire family (Bushy, 1993a; Hemard et al., 1998; Tevis, 1994a; Ross, 1982). Therefore, the manner in which women conceptualize health is integral to the health and health practices of the family. However, women's perceptions of health have rarely been solicited (Bushy, 1993b; Bushy, 1994a; Ross, 1982).

Long (1993) has emphasized the importance of providing care consistent with the way rural individuals conceptualize health. To provide health care that is congruent with the unique aspects of rural women of childbearing/childrearing age, it is necessary to understand their health perceptions, needs, and behaviors. Little has been written about

the health perspectives of women of childbearing/childrearing age in remote rural areas of Montana. Gaining information about rural women in this stage of life may enable health care practitioners to increase health promotion and disease prevention behaviors among their rural female patients and their families.

Purpose of Study

The purpose of this study was to explore the health perceptions, needs, and behaviors of remote rural women of childbearing/childrearing age living in Montana. The research questions guiding this study were 1) How do rural childbearing/childrearing women perceive and conceptualize health? 2) What are the health needs of rural women of childbearing/childrearing age? 3) What are the health behaviors of rural childbearing/childrearing women? 4) How do the health perceptions and conceptualizations of rural childbearing/childrearing women influence their health behaviors?

Theoretical Perspective

Qualitative research and rural theory provided the underlying framework for this study. Qualitative health research focuses on the experiences of people in relation to health and illness (Orb, Eisenhauer, & Wynaden, 2001). Qualitative research methods are used to explore and examine people and their natural environments with the purpose of describing a phenomenon from the participants' point of view through interviews and observations. The knowledge gained through interviews with individuals affects our

understanding of the human experience (Chenitz & Swanson, 1986; Strauss & Corbin, 1990; Orb et al., 2001).

There is a paucity of information on the health of rural women in Montana. Grounded theory as a qualitative research approach provides a method for health researchers to build theories in previously unexplored or under explored areas (Byrne, 2001). Schatzman and Strauss (1973) state that grounded theory allows for the direct examination of the world of rural residents in a naturalistic way.

A grounded theory approach was used for this study. The purpose of the grounded theory method is to generate a theory, rather than test a theory, to explain the phenomena under study (Chenitz & Swanson, 1996; Hutchinson, 1986). Grounded theory provides a means for examining phenomena that are not measurable by quantitative methods and is an alternative approach for exploring complex problems and issues (Chenitz & Swanson). Thus, grounded theory lends itself well to the discovery of perspectives on health. Grounded theory was developed by two sociologists, Glaser and Strauss in the 1960s (Strauss & Corbin, 1990). Grounded theory is based on the assumption that the group being studied shares a psychosocial problem that has been under explored and articulated. The grounded theory method uses a "from practice to theory" approach, using everyday experiences and behaviors to generate theory (Hutchinson, 1986, p. 113).

Qualitative methods and the grounded theory approach provided a meaningful technique for exploring the health perceptions, needs, and behaviors of rural women.

Through exploration of those health perceptions, needs, and behaviors, the goal of understanding how the women conceptualized health and made decisions regarding health was realized.

Defining Rural

According to the United States (U.S.) Census Bureau (2000), the population density of Montana is 6.2 persons per square mile. Montana is considered a rural state, however the definition of rural remains muddled. There are a variety of definitions and ideas about what constitutes rural. A number of government agencies and rural researchers from various disciplines have struggled, and continue to struggle, to provide a consistent definition for the term rural. The U.S. Census Bureau defines rural in terms of what is not urban. Although currently under revision, rural is designated as places with less than 2,500 inhabitants (U.S. Census Bureau, 2000). In Montana, almost half of its population, 47%, is considered rural as compared to 25.1% for the U.S. as a whole (Montana Office of Rural Health, 1999).

Sociologists have discussed the meaning of rural within the context of ecological, occupational, and sociocultural dimensions (Bealer, Willits, & Kuvlesky, 1965). Health researchers have often defined rural with reference to population as well as distance or time traveled to larger urbanized areas (Bushy, 1994a; Henson, Sadler, & Walton, 1998; Koehler, 1998; Veitch, 1995). In regards to population density, urban refers to areas with one hundred or more people per square mile; rural areas are those with six to ninety-nine people per square mile; and frontier applies to areas with less than six people per square

mile (Bushy, 1993a; Elison, 1986 as cited in Lee, 1991a). In addition to the numerous written definitions of rural, consideration must be given to the subjective meaning of rural. To those who live in rural areas, rural is a way of life. Lee (1985) characterized the subjective context of rural by stating that for some, rural is "a place to get away from," while for others it may mean "a place to get away to" (p. 16). Scharff (1998) states that "being rural means being a long way from anywhere and pretty close to nowhere" (p. 21).

Koehler (1995) developed definitions of urban, rural, and remote rural that included the dimensions of population, availability of health care services, and distance to the nearest urbanized area. Defining rural based on population or population density alone is problematic when examining issues related to health care. For example, there are a number of small communities in Montana that may be considered rural on the basis of population or population density but are within a few minutes driving time from a larger town or city that has comprehensive health care services. Therefore, for the purpose of this study the definitions of urban, rural, and remote rural were based on the work of Koehler (see definition of terms below).

Definition of Terms

Urban. Urban was defined as a community with a population of 50,000 or greater that contains one or more hospitals with 100 beds or greater (Koehler, 1995). An urban community has two or more medical clinics with a variety of physicians who are able to

provide comprehensive medical services. There are a number of specialists available for referral and consultation.

Rural. Rural was defined as a community with a population of 10,000 or less located 15 miles or more from a city with a population of 50,000 or greater (Koehler, 1995). A rural community has a critical access facility or a hospital with no more than 100 beds. At least one physician resides and practices within the community. Small communities that do not have a practicing physician, critical access facility, or hospital, but lie within a 15- to 39-mile radius of a neighboring urban community also were defined as rural.

Remote Rural. Remote rural was defined as a community with a population of 2,500 or less (Koehler, 1995). Remote rural communities must be located 40 miles or further from a city with a population of 50,000 or greater. A remote rural community does not have a local hospital, a critical access facility, or a practicing physician.

Health Perceptions. Health perceptions were broadly defined as any subjectively determined beliefs, ideas, definitions, or attitudes regarding all aspects of health and illness. Health perceptions included an evaluation of one's own health.

Health Needs. "Health needs were broadly defined as any subjectively determined want, concern, issue, or condition arising within the context of promoting, maintaining, restoring, and managing one's own health or well being" (Koehler, 1998, p. 239).

Health Behaviors. Health behaviors were defined as any identified ways in which individuals manage, maintain, promote, or restore health (Koehler, 1998). Health behaviors also involve ways in which individuals respond to illness or injuries, including

but not limited to, who they turn to for health related issues and when and under what circumstances they access health care.

Childbearing/Childrearing Age. Childbearing/childrearing age was defined as women 18 to 49 years of age.

Assumptions

Three assumptions underlie this work. First, given that Montana is a rural state with 35 of its 56 counties designated as Health Professional Shortage Areas and 50% of its population are women, the assumption was made that there were a meaningful number of women age 18-49 years living in remote rural areas of Montana. Secondly, it was assumed that grounded theory was an appropriate approach for the purpose of this study. Lastly, it was assumed that the participants selected would be willing and able to provide information regarding their health perceptions, needs, and behaviors.

CHAPTER 2

REVIEW OF LITERATURE

Two main areas of literature were reviewed for this project. The first area selected for review was the rural health literature. The rural health literature review included information about the concepts of distance, self-care and self-reliance, illness evaluation and informal support networks, access to care, and definitions of health. The second area of literature reviewed addressed issues related to women's stress and illness experience.

Rural Health

There is a growing body of literature that addresses rural health. The origin of the literature seems to be rooted in the fact that unlike the health issues of urban dwellers, aspects central to the health of rural dwellers have not been adequately articulated. Rural health authors and researchers have identified a variety of concepts that may be unique to rural life and factors that may impact health care for rural dwellers. These are access to care, distance, self-care, informal support networks, self-reliance, hardiness, and definitions of health.

Access to care has been discussed at some length in the literature. Factors found to impact access to care include, but are not limited to, distance, lack of transportation, weather, a shortage of health care providers, economic hardship, and lack of insurance (Ballantyne, 1998; Bushy, 1994a; Bushy, 1994b; Long, 1993; Shreffler, 1996; Weinert &

Long, 1990). It is clear that these are issues that rural dwellers face when seeking health care. However, it remains controversial as to whether or not these factors act as barriers to rural individuals seeking health care or if health care utilization is ultimately affected.

Distance and Self-Care

Distance is a concept repeatedly addressed in the rural health literature. While some authors (Bartlome, Bartlome, & Bradham, 1992; Tevis, 1994b; Veitch, 1995; Wamsley, 1978) report that there is less utilization of health care services as the distance to services increase, others (Bushy, 1993a; Hassinger & Hobbs, 1973; Kreher, Hickner, Ruffin, & Shen Lin, 1995) report that it is not a factor that impacts whether or not rural dwellers seek care.

Veitch (1995) found a consistent trend of decreasing willingness to seek care for injuries when distance to medical care increased. The study, which included interviews with 801 individuals from two rural areas in Queensland, Australia, was designed to examine how rural and remote rural individuals responded to three common injuries of increasing levels of severity. The interviewees lived in either the coastal (rural) or inland (remote rural) areas of Queensland, Australia. Participants in the coastal or rural areas lived increasing distances from permanently staffed medical facilities; within 25 kilometers; 25-50 kilometers; and beyond 50 kilometers. Participants from the inland or remote rural areas lived even further from permanently staffed medical facilities; within 50 kilometers; 50-100 kilometers; and beyond 100 kilometers. Interviewees were presented with descriptions of three injuries of increasing severity. The injuries included

a broken limb, a facial cut, and a puncture wound. At each stage of increasing severity of the injury, participants were asked which of the following eight actions they would take: wait and see; home treatment; seek advice from family/friend; have problem checked at next visit to doctor; have problem seen in the next few days; have problem seen within twenty-four hours; telephone doctor for advice; or go to doctor immediately. Veitch found that in the inland areas, where medical services are more limited and distant, remote rural individuals were less likely to seek immediate care for each injury than their coastal or rural counterparts. As distance from health care services increased, inland or remote rural individuals consistently indicated that they were less willing to seek professional care, especially for less severe stages of each injury. Veitch concluded that generally, those further from medical care, especially inland or remote rural residents, delayed seeking health care, regardless of how serious an injury was, and sought health care less often than those living in the coastal areas where medical services were closer and more prevalent. However, Veitch found that although remote rural residents may delay seeking care, increasing distance from medical care did not deter them from calling for advice before seeking care for more serious injuries.

Bartlome et al. (1992) found that frontier dwellers (those living in an area with less than six people per square mile) often practiced informal health interventions on their own, such as self-medicating, when they analyzed self-care and illness responses in this population. The data were obtained from a questionnaire completed by a random sample of 416 adults in a frontier area of north-central Idaho. The participants were asked to recall their most recent illness episode and report their first response. Responses were

reported in regards to whether they waited to see what happened, took a nonprescription medication, took a prescription medication they had on hand, took both types of medications, contacted a physician, or went to a hospital. The behaviors were then labeled as no intervention (waiting), informal intervention (self-medication), or formal intervention (contacting a physician or going to the hospital). They found that waiting as a response to a medical event occurred more often in those who were older, lived further from the local hospital, perceived a better health status, were less satisfied with community health services, and reported appropriate self-care behaviors. Informal interventions or self medication occurred more frequently in younger people and in those who lived further from the local hospital, perceived a better health status, rated emergency services with less satisfaction, and in those who self-medicated appropriately. Formal interventions, including contacting a physician or going to the hospital, occurred more often for those who had lived in the community longer, perceived poor health status, used more prescription medications, demonstrated appropriate illness response of contacting formal providers, and viewed a shortage of physicians in the community as a serious service problem. More than 56% of the frontier residents reported self-medicating behaviors or informal intervention as the first response to medical events. Self-medicating behaviors were practiced more often by those who lived farthest away from formal health care providers. These findings support that distance does play a role in illness behavior and response.

Walmsley (1978) examined the influence of distance on hospital usage. The data were obtained from hospital records from in-patients and out-patients who voluntarily

presented to the Coffs Harbour and District Hospital in rural New South Wales. The random sample included records for treatments performed for 676 out-patients and 1,162 treatments for in-patients. Wamsley calculated hospital usage for the populations of eighteen small towns in the region within distances of up to 100 kilometers of the hospital. He tested two hypothesis in the study: (a) the nearer a patient lives to a hospital, the shorter the duration of hospitalization per admission; (b) the nearer a patient lives to a hospital, the more likely he is to be referred for treatment. Wamsley found no correlation between living closer to the hospital and shorter length of hospital stay per admission. However, he found that the chances of admission to a hospital diminished the further a patient lived from a hospital. Wamsley referred to this finding as distance decay and suggested that individuals who live some distance from formal health care services may have unfulfilled health care needs or are more restricted in their health care choices.

Koehler (1995) used grounded theory to examine how urban, rural, and remote rural elders managed their health care needs. The sample of both healthy and health-compromised individuals included ten urban dwellers, nine rural dwellers, and eleven remote rural dwellers in Montana. Koehler found that distance was more of an inconvenience rather than a significant barrier to accessing care. Rural and remote rural residents viewed distance as a fact of life and were accustomed to traveling long distances for health care. Although distance did not act as a barrier to health care, Koehler found that rural dwellers were affected by expenses related to traveling long distances to access care. Longer distances to health care were found to involve expenses related with travel as well as expenses incurred with food and lodging for overnight stays. In addition,

although rural dwellers were accustomed to traveling long distances for health care, they identified distance as a disadvantage in the event of an "emergent illness episode" (p. 100). Rural individuals were further from emergency care and they realized this put them at risk for death if they experienced an "emergent illness episode." However, it was found that remote rural residents accepted this as "a way of life" (p. 100).

Similar to the findings of Koehler (1995), Bushy (1993a) reported in her writings on rural health that perception of distance is unique to rural life and that traveling 100 miles or more for care may not be far, especially if several tasks can be accomplished in one trip. Koehler reported that people traveling for health care often made reference to "making a day of it" (p. 100).

Hassinger and Hobbs (1973) studied the relationship between availability of health care services in a rural area to the pattern of health care utilization. The data were obtained from surveys of 951 households in four rural communities in south central Missouri with varying levels of health care services. The four Ozark communities had populations of 266 residents, 420 residents, 3,176 residents, and 5,386 residents, with the largest town centrally located at a distance of 35 to 40 miles from each of the smaller communities. All four towns were located 60 to 110 miles from the nearest metropolitan center. Hassinger and Hobbs hypothesized that the use of health care services would be directly related to the health care services available within the communities. However, they found that the location of health care services did not significantly impact whether or not rural dwellers sought care if there was a perceived need for health care services. They reported the rural individuals in their study traveled to a variety of communities to obtain

the health care services they needed and that the people were accustomed to traveling to satisfy their health care needs. Hassinger and Hobbs also reported that the effort of rural dwellers to utilize resources to obtain health care services was related to their perceived need for the service.

Kreher et al. (1995) studied the effect of distance and travel time on compliance with mammography screening in rural women. Questionnaires were given to 474 women aged 40 years and older, without a history of cancer, who visited a network of family practice providers in rural northern Michigan. The questionnaire included three areas: patient demographics, questions about the individual's knowledge and attitudes regarding mammography screening, and questions regarding geographic barriers to mammography. Kreher et al. found that distance, travel time, and transportation did not have an impact on women's compliance with mammography. Kreher et al. did report that 74% of the women in the study resided 20 miles or less from a mammography facility and acknowledged that distance could be a major barrier for mammography screening in rural areas where public transportation is lacking and where there are considerable travel times to health care facilities. They also noted that the high screening rate in this rural sample may have been related to a strong, positive physician influence for mammography and strong motivation of the participants to seek health care. Contrary to these findings, Tevis (1994b), reported in an article on breast cancer screening that 56% of rural women over age 40 have regular mammograms compared to 66% of urban women. The lower rate of mammography in rural women reported in this article was attributed to distance, time, and transportation as well as poor insurance coverage.

Henson, Sadler, and Walton (1998), in their concept analysis of distance, identified the essential attributes of distance as mileage, time, and perception. They suggested that the rural individual's resources and perception of distance influenced the degree of difficulty the rural resident had in overcoming distance.

Although distance is a factor that is encountered by rural dwellers when seeking health care, it is unclear as to whether or not it impacts utilization of services and to what degree it affects health seeking behaviors (Fiedler, 1981; Shreffler, 1996). However, an individual's perception of distance appears to be an important aspect to consider in relation to the utilization of health care services.

Evaluating Illness and Informal Support Networks

The literature suggests that rural dwellers determine which type of illness symptoms can be temporized and which require more prompt attention. In making such a determination, people often turn to an informal network of advisors. Long (1993) suggested that rural dwellers, through their experience, learn to differentiate illnesses or injuries that can be temporized from those that hinder functioning. Factors such as lack of health insurance and sick days that resulted from land based work or self-employment, as well as long distances to formal health care, may impact how rural individuals address illness. Long found that rural dwellers often turned to informal health care providers such as family, neighbors, and friends because they were more accessible and affordable. Koehler (1995) found that both rural and urban elders gauged the seriousness of their illness then decided on a course of action. While gauging the seriousness of an illness, it

was found that urban and rural elders consulted with family members, friends, or other informal providers to help them determine the seriousness of the illness and what to do about it.

Lee (1991b) in relation to her work on hardiness, suggested that rural individuals may delay seeking formal health care when symptoms of illness initially appear. Buehler, Malone, and Majerus (1998) identified that rural women evaluated the symptoms of illness in a manner they referred to as the Symptom-Action-Time-Line (SATL) process. The stages of the SATL process include symptom identification, self-care, lay resources, and professional resources. "Each stage has a time period (time-line) in which the participant takes actions in response to a symptom, evaluates the effectiveness of the actions in resolving the symptom, and decides whether to go on to the next stage" (p. 321). Their findings indicated that rural women evaluated their symptoms and made decisions based on their previous experiences about when and how to respond to a health problem.

Self-care and Self-reliance

Bushy (1994b) discussed in her writings that rural individuals practice self-care behaviors and prefer informal support networks over formal networks. Self-care behaviors, those things people do for themselves, are common among rural individuals (Bartlome et al., 1992; Veitch, 1995). Another concept identified in the rural literature is self-reliance, an expression of autonomy (Chafey, Sullivan, & Shannon, 1998). Chafey et al. found self-reliance to be prominent attribute of elderly rural women in Montana.

Weinert and Burnam (1994) reported that although patterns related to self-reliance and self-care practices were reported in the literature, little research has actually been done to corroborate these identified concepts or compare and contrast them to the patterns of urban residents.

Definition of Health

Rural authors and researchers state that rural dwellers often define health as the ability to work (Bushy, 1994b; Stein, 1989; Weinert & Long, 1987). Lee (1989) quantified rural men and women's health perceptions using Engel's (1984) Health Perception Questionnaire and Laffrey's (1985) Health Conception Scale which was developed using Smith's (1981) four model's of health. Smith's (1981) four models of health included the eudaimonistic, adaptive, role-performance, and clinical models. Lee found that men and older rural individuals perceived health within the role performance model while women perceived health within the adaptive model. Therefore, Lee reported that the definition of health as the ability to work may be more applicable to men and older rural dwellers than to rural women and recommended that further studies examine health views of women and younger populations. The rural dweller's definition of health may play an important role in determining their health needs.

Research has shown that rural individuals are less likely to be insured than their urban counterparts (Bushy, 1993a; Bushy, 1994b; Edwards, Shuman, & Glen, 1996; Long, 1993; Rosenblatt & Moscovice, 1982; Shreffler, 1996; Weinert & Long, 1987). Lack of insurance may be an outcome of type of work common in rural areas, such as

farming, ranching, and small businesses, that do not provide health benefits (Bushy, 1994b; Long, 1993; Weinert & Long, 1987). Lack of insurance may have an impact on how individuals seek health care.

Women, Stress, and Illness Episodes

Although women were discussed in the rural literature, there was little information that specifically addressed the health perceptions, needs, or behaviors of rural women of childbearing and childrearing age. Even less information was found on health issues related to rural women in Montana, particularly for women of childbearing and childrearing age. However, a number of research articles were found that addressed role multiplicity, stress, and illness and the impact of rurality on stress and illness in women.

There are a large number of women living in nonmetropolitan areas in the United States. The population of rural women in the United States is composed of farm women as well as non-farm women. Bescher-Donnelly and Smith (1981) point out that the term "rural woman" is not synonymous with "farm wife" and "the roles and responsibilities of women in rural areas today are much more complex and diversified than this image suggests" (p. 167).

No research studies regarding rural women were found that addressed issues such as participation in the labor force, economic status, or involvement in the education system. However, several authors have written about these issues and their relationship to rural women (Bescher-Donnelly, & Smith, 1981; Bigbee, 1987; Bigbee, 1998; Mansfield, Preston, & Crawford, 1988; Walters & McKenry, 1985). Bescher-Donnelly

and Smith (1981) discussed that although rural women are working outside the home in increasing numbers, they have a limited range of occupations to choose from and often work in low-wage jobs with little opportunity for advancement. They suggested that rural women experience both economic and occupational disadvantages as compared to urban women.

Walters and McKenry (1985) were prompted, as a result of the increasing number of rural women entering the work force, to do a study to determine if "factors descriptive of work-family role integration" (p. 1067) were more predictive of life satisfaction for rural women employed outside the home than urban women employed outside the home. The sample consisted of 237 randomly selected rural and urban mothers from intact families employed part-time or full-time and who had at least one child involved in a 4-H program in the state of Ohio. The participants completed a questionnaire that contained three standardized instruments: Keith and Schafer's Role Strain Scale (1980); Scanzoni's Sex Role Modernity Scale (1978); and Housekencht and Roger's Autonomy Scale (1979). Additional questions were added to elicit information on other factors that may influence life satisfaction and employment outside the home. The findings of the study supported the greater significance of "work-family role integration to the life satisfaction" (p. 1067) for rural women employed outside the home in comparison to employed urban women. However, Walters and McKenry also noted that the factors the rural women identified as having the greatest impact on employment and life satisfaction were specifically related to the job rather than family and peer support as they found other literature had suggested.

When rural women enter the workforce, their roles and responsibilities increase. Woods (1980) studied the effect of role proliferation on the health status of women and their illness experiences. Ninety-six married women, between 20 and 38 years of age, completed an adapted version of the family health diary developed by Roghmann and Haggerty (1972). Information recorded addressed tension and stress levels within the household, health care received by the family, each family member's health status, presence of symptoms for family members, and whether or not anything was done to relieve the symptoms. The diary was kept for a three week period. An illness episode was defined as any sequence of days in which symptoms were recorded in the diary. Of the 96 women in the study, only 2 enacted the single role of spouse; twenty-three of the women in the study enacted the roles of spouse and mother; 28 performed the roles of spouse and employee; and 43 identified themselves in all three roles of spouse, mother, and employee. Although Woods had hypothesized that role proliferation along with sex role norm traditionalism, lack of role reinforcement, and feelings of failure, would have a negative affect on the women's health status and be associated with an increased number of illness episodes, no such relationship was found. Woods also found that role proliferation alone did not negatively impact health status and was not associated with the number of illness episodes experienced by the women.

An association between stress and illness has been noted in the literature. Kenney (2000) compared the stressors, personality traits, and health problems of women in different age groups. A questionnaire was completed by 299 women between 18 and 66 years of age who lived in the south-western United States. The sample was divided into

three age groups: young women who were 18 to 29 years of age; middle-age women who were 30 to 45 years of age; and older women who were 46 to 66 years of age. The questionnaire contained five sections including demographic information; daily hassles, chronic and acute stressors; personality mediating traits; common physical and emotional symptoms; and the inner balance index which was adapted from Eliot's Quality of Life Index (1995). The young women reported high stressors, often related to work and financial problems, and reported more emotional and physical symptoms than middle-aged and older women. Kenney concluded that the young women were at risk for stress-related illnesses. Although the middle-aged women reported the most stressors, she found that they had stronger personality traits that acted as strengths which likely buffered the stressors and contributed to fewer symptoms. Kenney suggested that although middle-aged women exhibited fewer illness related symptoms, they still needed help in reducing their stressors. The older population of women reported the least number of stressors, had the strongest personality traits, and reported fewer illness related symptoms than young and middle-aged women. Kenney suggested that middle-aged women likely had the highest level of stressors as a result of role multiplicity as wife, mother, employee, student, and caretakers of elderly parents. Kenney found that the women's major stressors were associated with their roles and relationships of wife, mother, and employee and that women's perceptions of their spouses' support and involvement with caring for children and assisting with housework had a significant impact on their health. Other factors that affected women's health were employment stressors including low wages and high work demands. Kenney also found that healthy personality traits, such as

assertiveness, optimism, self-confidence, and flexibility positively affected the women's health status while unhealthy traits, such as perfectionism, pessimism, and low self-confidence, negatively impacted the women's health status.

Bigbee (1988) conducted a pilot study that examined the relationships between rurality, stress, and illness in women. Bigbee discussed that rural life, with its emphasis on independence and self-sufficiency, may enhance coping mechanisms when dealing with stress. At the same time, rural life may be associated with unique stressors and may require the utilization of coping mechanisms specific to the culture of rural life. Rural stressors identified by Bigbee were weather conditions, family life, and the women's role in rural society. The non-random sample in Bigbee's study consisted of 13 adult women living in the central Texas area with diverse demographic backgrounds. The sample included urban and rural women, women who were working and women who were not working, women with children of various ages, varying marital status, socioeconomic status, and ethnic backgrounds. The women completed a questionnaire that included demographic data, a modified version of Norbeck's Life Experiences Survey for Women (1984), and a modified version of the Seriousness of Illness Scale from Wyler et al. (1968). In this pilot study, Bigbee found that for both urban and rural women, stressful life events tended to center around work, health, and personal-social concerns. Predominate stressors for rural women included financial and environmental issues while predominate stressors for urban women centered on parenting, family, and friends. Bigbee suggested that patterns and types of stressful life events may be different for rural women than they are for urban women. In examining rurality, stress, and illness, Bigbee

did not find any significant correlations between rurality and higher or lower levels of stressful events or illness.

In a retrospective comparative study, Bigbee (1987) looked at the levels of stressful life events in 157 rural and urban women. The random sample consisted of 80 rural women 18 to 50 years of age living in Saratoga, Wyoming and an urban sample of 77 women living in Casper, Wyoming. The questionnaire included demographic information and a modified version of Norbeck's Life Experiences Survey for Women (1984). Bigbee found no significant difference in the levels of stressful life events for urban and rural women. She also found that the reported categories of stressful life events were similar for rural and urban women. The most frequently reported stressors for the rural sample in descending order were environment, personal/social, financial, parenting, health, work, residence, love and marriage, family and friends, criminal/legal, and school. For the urban sample, the most frequently reported stressors in descending order were financial, personal/social, parenting, environment, work, residence, health, love and marriage, family and friends, criminal/legal, and school. Stressful life events that only rural women reported included getting or losing a pet, severe weather or natural disaster, change in spouse/partner's work, change in nature or size of community, and change in arguments with spouse/partner. Stressful life events identified only by urban women included weight change, addition of a new family member, household convenience, change in work responsibilities, and change in living conditions. Bigbee suggested that these findings indicate that the most common stressors for the rural women

were associated with the community or spouse/partner, while the most common stressors for the urban women were related to personal, family, home, and work.

Mansfield, Preston, and Crawford (1988) looked at psychological well-being in rural and urban women living in Pennsylvania. The random sample consisted of 75 women from a rural county and 78 women from an urban county. Structured telephone interviews were conducted with the women. Five variables, stress, strain, tension, exhaustion, and life satisfaction, were used to measure psychological well-being. The questions in the interview were intended to elicit information about stress the participants experienced in the last year and to what the stress was related. Questions were also aimed at determining how satisfied they were with their life, and whether they experienced mental or physical exhaustion, felt strain or tension. Women who were employed were also asked information about potential work stressors. Like Bigbee's 1987 study, Mansfield et al. found that rural and urban women experienced the same types of stress and the same degree of stress. Both rural and urban women reported their most significant stressors were related to family and friends followed by stressors related to work. Two elements of socioeconomic status, income and education, predicted stress for the rural women; those with a higher socioeconomic status reported higher levels of stress. In addition, as the number of children at home increased, so did the level of stress that the rural women experienced. Neither socioeconomic status or number of children at home were predictors of stress for the urban sample.

Summary

In summary, a number of studies have addressed the concept of distance in relation to health care behaviors. However, the results have been conflicting. While some studies have shown that an increase in distance from health care facilities impacts health care utilization, other studies and literature have supported the idea that rural individuals are accustomed to traveling long distances for health care and that it does not affect their use of health care services. Other rural health literature has focused on the concept of self-care and self-reliance and indicated that rural individuals may frequently practice self-care behaviors while gauging the seriousness of an illness or injury. Rural health authors have suggested that rural individuals preferred the help of informal networks and often turn to family and friends for advice on health care issues as well as involve them in the evaluation of illnesses or injuries. Rural health authors and researchers have also indicated that rural dwellers may define health differently than their urban counterparts and that land-based work and lack of insurance may impact how and when they seek formal health care.

Fewer studies have addressed health issues of rural women, particularly women of childbearing/childrearing age. The studies found on rural women tended to focus on stress, increasing incidence of rural women working outside the home, their multiplicity of roles, and the resulting risk of illness. Research indicated that although rural women are experiencing role proliferation as they enter the workforce, role proliferation alone did not increase the incidence of illness episodes in rural women. In addition, rural research

has shown that although rural women may experience unique stressors, overall rural and urban women reported similar types of stress. Finally, there is little evidence to suggest that there is a relationship between rurality and levels of stress or illness.

CHAPTER 3

METHODOLOGY

Introduction

A grounded theory approach was used to obtain and analyze data for the purpose of exploring the health perceptions, needs, and behaviors of women of childbearing and childrearing age living in remote rural Montana communities. The grounded theory approach is an inductive process that leads to the generation of theory that originates from every day lived experiences and is an appropriate method to use when a paucity of information exists about a phenomenon of interest. The theory assumes that an individual's expression of ideas has meaning (Byrne, 2001; Chenitz & Swanson, 1986; Strauss & Corbin, 1990). Grounded theory provides an appropriate framework for examining the perspectives of rural dweller in their natural setting (Schatzman & Strauss, 1973). This chapter includes a description of the sample, the provision for human subjects protection, and the process of data collection and analysis.

Sample

The convenience sample consisted of 11 women, 28 to 49 years of age who had lived in remote rural communities in Montana for greater than 5 years. Remote rural was defined as "a community with a population of 2,500 or less located 40 miles or further from a city with a population of 50,000 or greater. Remote rural communities do not

have a hospital or medical assistance facility. A practicing physician does not reside in a remote rural community” (Koehler, 1998, pp. 238-239). The initial participants were known to me personally or were identified through personal contacts. Subsequent participants were obtained using the snowball technique. An attempt was made to vary the sample as much as possible by contacting potential participants who comprised the full age range for this study as well as by contacting potential participants from different geographical locations within the state.

Human Subjects Protection

Ethical issues are present in any kind of research and the provision for human subjects protection is essential to maintaining the rights of the participants as well as for achieving the goals of the research (Orb et al., 2001). Therefore, measures were taken to ensure the protection of the participants. Each participant was first contacted by telephone, the study was explained, and they were asked if they would be interested in participating in the study. After interest in participating in the study was established, a time frame for fully considering participation was discussed and agreed upon by the participant and myself. In considering participation, participants were offered written information regarding the purpose of the study as well as a brief description of the procedure. Each participant was given my phone number and were encouraged to make contact if they had any questions regarding the study. During the initial phone contact, if interest was indicated, the individual and I agreed upon a time for me to contact them

again, answer any questions that arose, and if still interested, a time and place for the interview to take place was established.

During the face-to-face meeting and prior to the interview, the participant was given a consent form that included the purpose of the study, a description of their involvement, permission to audiotape the interview, the procedure for maintaining confidentiality, the risks and benefits of participating in the study, and the right to withdraw consent at any time. Again, an opportunity to ask questions was offered. The consent form was signed prior to the start of the interview and the participant was given a copy (see Appendix A).

In some cases, face-to-face interviews were not feasible because of geographical distance between the participant and myself. In this instance, after interest in participation was established during the initial phone contact, the consent form and a copy of the consent form were mailed to the individual along with a stamped return envelope addressed to me. Again, each individual was encouraged to contact me if they had any questions regarding the study prior to returning the written consent. After the written consent was received, a second telephone call was made in order to establish a time to call the participant to conduct the interview via telephone.

Interviews were audiotaped and transcribed as soon as possible after each interview; audiotapes were destroyed following transcription. The names of the participants were not a part of the transcript. Each participant was assigned an identification number, known only by me. The demographic data was transcribed separately from the interview and assigned the corresponding identification number. The

demographic information was reported in summary tables and included ranges for the specified demographic variable.

No benefits were promised to the participants of the study. However, through the interview, the participants had an opportunity to explore their own perspectives on health and may have benefitted from the opportunity to discuss issues of importance to them. A potential risk exists when data are reported that participants may be recognized through their verbalized experiences. Participants were therefore offered a copy of the transcribed interview to review and were encouraged to contact me if they felt there were any miscommunication or errors in the transcript, or if they had any other concerns regarding the transcribed interview.

Data Collection

Data were collected through semi-structured interviews with the participants; 4 in a face-to-face setting and 7 by telephone. All interviews were conducted in the same manner using the same semi-structured interview format (see Appendix B). The questions were open-ended and were intended to elicit information regarding the participants' health perceptions, needs, and behaviors and how their perceptions and conceptualizations of health impacted their health behaviors. The initial body of questions were adapted with permission from an interview guide developed by Drs. Lee and Winters for their study, Rural Health Needs and Perceptions. Due to the population of interest in this study, additional questions were developed based on a review of literature specific to women of childbearing/childrearing age. Demographic data were

collected that pertained to personal and location information. Personal information included age, marital status, number of children, level of education, employment outside the home occupation, and insurance status. Location information included number of years in the community, size of the community, miles to nearest large town or city, miles to regular health care provider, and miles to emergency care (see Appendix C).

The interviews took place during January and February of 2002. Interviews lasted from 25 to 90 minutes. The participants were informed that I might contact them again by phone following the interview to confirm or clarify what had been said.

Data Analysis

The qualitative data were analyzed for common themes using the methodological technique of grounded theory known as constant comparison. First, the transcribed interviews were read in their entirety. The interviews were then read line by line and paragraph by paragraph during which comparisons were continually made between the data obtained. During the process of coding, catchy or meaningful words that the participants used were highlighted and open coding began. Open coding is the process in which each sentence and each verbalized incident is broken down, examined, and compared for similarities and differences. The substantive codes, which were often the exact words used by the participant, were labeled as concepts or themes. The identified codes, concepts, and themes were then grouped into categories of higher levels of abstraction (Chenitz & Swanson, 1986; Hutchinson, 1986). Memos were made to describe possible relationships between codes and categories. Data were analyzed until

all the codes, concepts, and categories were complete or saturated and no new information was discovered (Byrne, 2001; Chenitz & Swanson, 1986; Hutchinson, 1986).

Demographic data were analyzed by reviewing the responses to personal and geographic location information and noting the frequency of each response. The range and mean for age, level of education, number and ages of children living at home, years in the community, and distance to emergency care were calculated by hand. Other demographic information including marital status, religious preference, ethnic background, employment outside the home, and health insurance status were also noted for frequency. The results are reported in Chapter 4.

CHAPTER 4

FINDINGS OF THE STUDY

The findings of the study are reported in this chapter. So that the reader will more fully understand the context in which the study was conducted, demographic characteristics of the sample are reported first. The emergent themes related to the health needs, perceptions, and behaviors of remote rural Montana women are then discussed.

Demographics

The sample consisted of eleven women, ranging in age from 28 to 49 years of age with a mean age of 37.7 years. Age categories for the women are shown in Table 1.

Table 1. Age Categories of Rural Sample (N = 11).

Age Categories*	<u>n</u>
18 to 29	2
30 to 39	4
40 to 49	5

*Mean age of 37.7 years

Education completed ranged from 12 to 18 years ($M = 14.7$ years). The sample is more educated than the general population of Montanans. Six of the 11 women (54%) hold a Bachelor's degree and one has a Master's degree, while estimated 11.7 % of the general Montana population have baccalaureate degrees (U.S. Census Bureau, 2000, online). Table 2 on the following page shows level of education.

Table 2. Education Levels of Rural Sample (N = 11).

Education level	<u>n</u>
High school graduate	4
Bachelor's degree	6
Master's degree	1

All eleven women in the study were married. Two women worked full-time outside the home, five worked part-time, and two women were not employed outside the home. Four of the women were Catholic, two were Lutheran, one was Methodist, two indicated they were Christian, and two stated no religious preference. Three of the women stated they identified with particular ethnic backgrounds; eight women stated they did not identify with a particular ethnic background. All the women who reported on ethnicity stated multiple ethnic backgrounds. All of the women were Caucasian.

All of the women had children and all but one woman had children living at home. For the women with children at home, the number of children in the household ranged from one to five. All together the entire sample of women had 27 children between them and there were a total of 23 children living at home ($M = 2.3$). The age of the children who lived at home ranged from 2 months to 17 years of age ($M = 7.7$ years). The number of children in the home and the age categories for the children living at home are reported in Tables 3 and 4 on the following page.

Table 3. Number of Children in the Home

Number of children*	Number of Participants
5	1
3	2
2	5
1	2
0	1

*Mean of 2.3 per household

Table 4. Age Categories of Children Living at Home (N = 23).

Age categories for children*	<u>n</u>
15 - 18 years	2
11 - 14 years	7
7 - 10 years	3
3 - 6 years	6
Less than 3 years	5

*Mean age of 7.7 years

All the women lived in rural communities with a population of 850 or less. The women had lived in their respective communities from 5 to 40 years with an average length of time in the rural community of 17.9 years. The number of years the women lived in the rural community is shown in Table 5.

Table 5. Years Lived in the Rural Community (N = 11).

Years in community*	<u>n</u>
5 - 9 years	3
10 - 14 years	2
15 - 19 years	2
20 - 24 years	1
25 - 29 years	1
35 - 39 years	1
Greater than 39 years	1

*Mean of 17.9 years

Nine of the women had insurance and two did not have any insurance. Of the two women who reported no health insurance, one was part of a family self-employed in farming and the other participant's husband worked for various individuals who did not provide insurance coverage. Cost was stated as the major factor for lack of insurance. For the nine women with health insurance, seven were part of a family involved in farming, ranching, or small business and all seven women reported that their insurance had a high deductible and premium.

Accessibility to emergency care was analyzed in terms of miles traveled and travel time, one way. Weinert and Boik (1998) identified that emergency care in a rural state such as Montana can be provided in a variety of ways including care in the Emergency Room at a small hospital or a community clinic. Distance to emergency care is preferred over distance to other health care services as a measure of rurality because in an emergency situation, the nearest source of assistance is sought while in non-emergency situations, rural individuals may by-pass the local hospital or clinic to seek care in a large community with more specialized services.

Distance to emergency medical care ranged from 10 miles to 114 miles ($M = 44.8$ miles) with travel time ranging from 12 minutes to 2 ½ hours, one way. The participants cited the hospital or medical assistance facility located in the nearest large town with this available service and ambulance service to the nearest town as their source of emergency care. In addition, the participants identified local individuals with medical training as a source of assistance in an emergency situation. Rural road conditions, weather conditions, geography, and road construction were some of the variables influencing travel time to

emergency care in Montana. The number of miles traveled and approximate travel time to emergency care for the sample are shown in Table 6.

Table 6. Number of Miles & Travel Time One Way for Emergency Care of Rural Sample (N = 11)

Number of travel miles for emergency medical care (one way)*	Approximate travel time in minutes (one way)	<u>n</u>
Greater than 79 miles	Greater than 120 minutes	1
70 - 79 miles	80 - 90 minutes	1
60 - 69 miles	65 - 75 minutes	2
40 - 49 miles	40 - 50 minutes	2
30 - 39 miles	35 - 45 minutes	2
10 - 19 miles	12 - 20 minutes	3

*Mean of 44.8 miles one way

A composite of the study subject would be a married Caucasian female, with health insurance, who has two young school age children at home, most likely of Catholic or Protestant faith, with a college education, living in a Montana community with a population of 850 or less for over 17 years, and traveling a distance of 45 miles one way for emergency care.

Emergent Themes

Seven themes emerged from the data; distance as a way of life, distance as a disadvantage in an emergency, episodic evaluation, children first, prevention for life, access within reason, and holistic health.

Distance as a Way of Life

The participants identified that distance, although an inconvenience at times, was not a disadvantage in everyday life. Most of the participants had lived in a rural environment for many years and were accustomed to the ways of rural life and distance was one part of rural life. The rural women accepted that they lived some distance from health care as well as from a variety of general services such as grocery stores. The women "planned ahead" and realized if they were making dinner and were missing an item, they were not able to run to the store to pick it up. At times this was noted to be inconvenient, but "just the way it is." The women reported "enjoying the lifestyle" that a rural environment provided and the small inconvenience that distance presented in some circumstances was worth it to live in a rural setting. The following comments were made about distance in every day situations:

I think the distance thing, for a lot of people, they just don't understand it. But I think when you have lived around it your whole life, that is just the way it is. You know the distance is there. Just like not having a grocery store down the street. You just deal with it. You kind of prepare yourself and you just know that is the way it is.

It would be nice if you didn't have to drive, but that is just our lifestyle and you get use to it and you just do it because that is the way you live.

We are use to driving the distance. To somebody who maybe lived in town or only a few blocks away then moved out to the country it would seem a real long distance. We have just lived that way all our lives. We were raised here so it just seems natural I guess.

Routine Health Care

Distance was also not seen as a disadvantage when seeking routine health care.

The women reported that distance did not deter them from seeking health care or cause a delay in seeking health care.

I don't think we would be more apt to go to the doctor more even if we were closer. We still get good healthcare. I don't think living out here has hurt our healthcare any just because we live forty miles from the nearest hospital or doctor.

If we are sick, if one of the kids is sick, we are going to go to the doctor if we need to. You just get use to living out here so it doesn't make a difference. I mean you think 30 miles, you know you are going to drive there if you are sick and need the health care services or whatever. Just like you do to go out to pizza, you drive to healthcare.

I guess I feel when I need to go to the doctor, I don't care if it is 50 miles or a 100 miles. I am going to go just because I do want to keep healthy. I don't think distance has that much impact.

The women did not find traveling long distances for routine health care to be a significant issue, as they usually had multiple tasks to accomplish while in the larger town that could not be completed where they lived.

The distance, it doesn't seem very long [70 miles]. Usually we pick up grandma who is half way and we always have something else to do, besides go to the doctor, like get groceries or something, so it doesn't seem bad.

That is kind of the way it is and usually I am going that way anyway as I have to go to get groceries and every other thing I have to do is in that direction.

Childbirth

The woman did not find distance to be a significant concern in regards to their past pregnancies and impending deliveries. Although they took some precautions and had thought about what the distance might mean, no one had specific concerns about their

delivery in light of the distance that needed to be traveled to get to the hospital. The following comment was made about labor and delivery in regards to traveling to the hospital:

It never bothered me living this far out because my mom lived 40 miles from town and she had twelve kids. I thought, well heck, she had twelve kids and I can't believe that I would ever have trouble. Of all the people out here I have never heard of anyone in this area that I know of, and we all live out in the country a long ways, that has ever not made it to the hospital. When you are this far out, you just know you go early. You don't sit and wait.

Another woman who had lived in the country her whole life and was involved in ranching made the following comment about her pregnancies:

I guess growing up 30 miles from town you know what that is like. So living 60 miles from town now, you don't think about it. It is just the way it is. You know that you have miles to travel and you can get there in around an hour and that is just the way it is. You can't worry about it. My husband wasn't concerned about having to deliver the baby if we didn't make it in time. Our big joke was that he was going to bring the calf pullers in. That is just a typical rancher. We deal with animals all the time. Calving and foaling and little animals and birthing and the whole reproductive situation. I guess it is just a natural thing. It is not something that you dwell on. You think about it, what if something happens, but like I said, you just deal with it if something happens.

Another woman talked about taking precautions during labor when considering the distance to the hospital. "I would not worry about the distance, but I would take precautions. There could be a terrible snowstorm and you surely wouldn't want to wait until the last minute to go."

Some woman made plans to come to town early in their labor and stay with family or friends until they felt they needed to go to the hospital. This type of planning allowed them the comfort of knowing they were within minutes of the hospital without having to go to the hospital the minute their contractions started. "We came to town when my labor

started, but we stayed at my parent's house for awhile before we actually went to the hospital, but we were closer that way."

Three of the women chose to have their babies in a larger medical center, rather than the hospital in the nearest community. The women were accustomed to traveling the longer distance to a medical center for their routine gynecologic care and when they became pregnant, chose to continue their obstetrical care in the larger city despite the fact that they could have delivered closer to home.

I guess I actually chose to do that because I lost a pregnancy. I don't think it was the fault of the healthcare providers here, but just because I had that type of pregnancy, I decided I would rather go to an OB-GYN. I started going to the OB-GYN before my first son was born and I just decided to stay with him for my pregnancies.

Another woman related her experience with her decision to bypass the nearest hospital and go on to a larger city for her deliveries.

I had debated about going into town to have my first baby because there was a medical doctor there and they were capable of delivering at that time. I decided not to, I would just go on and drive to Miles City. I am glad I did because there would be no way he would be here today if I would have stopped in town. When I had him, they were having trouble picking up the heartbeat and said I had to have a C-Section. The cord came down along side of his face and got pinched off. This was on a Saturday and they had to call in the anesthesiologist and everybody and it didn't take long. In town, that would never have happened. First of all, they couldn't have done surgery and I don't know if they even had the monitors like in Miles City so I don't know if they would have even picked up the problem. By the time they would have picked it up, it would have probably been way too late. And then they would still have had to transport me to Miles City. So for my next baby I thought, well forget it, we are going to go the bigger hospital where they can deal with problems.

Another issue the women consistently identified in regards to planning for their labor and delivery was that their health care provider was in tune to the fact that they

lived some distance from the hospital and helped them plan ahead for their delivery. The women reported that their doctor gave them advice such as, "come in when things start," or "head to town, don't just wait." The women seemed more comfortable with the distance because of their relationship with their health care provider and the fact that he appreciated their situation. The women took precautions suggested by their doctor, but didn't find themselves overly concerned with the distance involved in traveling while in labor.

If someone tells you to leave your house when your contractions are five minutes apart, well that could make for a baby born in the car half way there. The doctors realize that and know that even if you are racing, it is a good two hour drive and at night or with bad roads, you cannot go that fast. So you leave early, right away, and they know you are coming that far and help you know it is important to leave when things start.

Before my first baby was born, they told me some things to do just as a precaution. They said put blankets in your car and some clean towels. Get one of those little aspirator things and then if it happens that you deliver on the road, just wrap the baby up. Use clean towels and plain receiving blankets and just lay him there. Don't worry about the cord, just leave that alone and wrap the baby up and lay him there and aspirate the nose and mouth.

When considering distance during pregnancy, factors that could cause a delay in their travel, such as weather and road construction, were recalled. "It was in the back of our mind, what if a storm comes or whatever. You think about it a little bit, but you know also realizing that comes with this lifestyle." Another stated:

We got there in plenty of time and it was fine. But you always do kind of worry about it. What are the roads going to be like? My first was born the end of March so you wonder, what are the roads going to be like. My youngest was born in the summer, but there was road construction and I thought, what if this happens when I am in labor.

One woman chose home births for the delivery of her last three children. She felt more comfortable delivering at home with a midwife. She indicated that in addition to personal preference, cost and lack of insurance were factors that influenced her decision to give birth at home. She also did not feel distance to the hospital was an issue.

I always felt comfortable giving birth at home and prefer that to a hospital setting where everything is so structured. I realize we are some distance from the hospital, but the first sign of any trouble or things not progressing as they should, we would have headed right there.

Chronic Illness

Two of the women had experienced breast cancer in recent years. Although both women had access to healthcare providers and a hospital within 15 miles, they were forced to travel longer distances to a larger medical center to receive care for their cancer. Both women traveled a distance of 60 to 80 miles, one way, five days a week for six weeks for radiation treatment. One of the women had to travel for chemotherapy as well. Their perspective on traveling for healthcare for treatment of a disease was somewhat different from the rest of the sample who only traveled for routine healthcare, and on a much less frequent basis. For the two women with breast cancer, traveling the longer distance was seen as even more of an inconvenience and somewhat of a disadvantage when considering access to healthcare. Both women discussed that although the daily travel was an inconvenience, both stated that the support of friends and neighbors in the community was an advantage that balanced out the situation for them.

One problem is that we are kind of far away from certain medical facilities that we might need, but in my case at least making the 80 mile trip for radiation did work out really well because I had the advantage of friends and neighbors who were

really helpful. I think that is one advantage of the rural situation. The more specialized things you need to go farther away for. They can handle most things locally, but if you have cancer or heart problems or something that requires more specialized care, then you have to go farther away. You are at a disadvantage in some ways because you are farther from care, but you have got good friends and neighbors to help you out too. I think that is the advantage that maybe people in a larger area wouldn't have.

Traveling to Billings everyday was tiring, but the community that I live in is unbelievable. I had a ton of people that just offered to drive me, so we had a schedule of who would drive me which days. Everybody in a small community just all pull together and help each other out.

In summary, although distance was occasionally viewed as an inconvenience, all the women were accustomed to traveling some distance for general services, routine health care services, and for the delivery of their children. If health care was needed, it was obtained. Distance to health care services did not result in a delay in seeking care, if the care was deemed necessary. In regards to obstetrical care, the woman indicated they planned ahead and took some precautions for their upcoming delivery, but distance was not a significant concern during their pregnancies.

Distance as a Disadvantage in an Emergency

All of the women verbalized that distance was a distinct disadvantage in the case of an emergency. The women were aware that distance presented the risk of serious consequences to their health and the health of the family, or even death, in an emergency situation. Time was of the essence in an emergency situation, whether it be illness or injury related. In an emergency they noted, "It would take you awhile to get somewhere," and "It takes time for them to get to you." One woman stated, "You know the distance is

there if something really happens.” And another stated, “For something serious like a heart attack you are not that close. Not as close as you would like to be for something serious like that.” Several of the women discussed their concerns regarding distance in an emergent situation.

We have had some major injuries where we ended up in the hospital, but it is always kind of scary living so far out. It takes a long time for someone to get out here if someone is injured very bad to where you can't move somebody. To get the ambulance out here is 45 to 50 minutes at minimum and probably an hour just to get somebody out here. That is a big concern about injuries that when somebody is injured, it is not real easy to get them help quick.

To just go to a doctor if you don't have a major problem or emergency is fine. In an emergency situation it is pretty frightening when you have got to go the minimum of 45 miles just to get to a facility that can probably help you out, but then once you get there, if you are real serious, you have to go to Billings. We are so remote that it is a scary thing in an emergency situation.

We were working in the yard and I took my eyes off my son for two seconds. The next thing I knew he was throwing up. We took him inside and changed his clothes, but he couldn't stop throwing up and then he was finally throwing up bile and he had a horrible color, pasty white. All the color was out of his lips. I wasn't sure what he had gotten into. We called Ask A Nurse because now he has fallen asleep and we can't really keep him awake between throwing up. They told me to give it four hours for whatever it is to work out of his system. His breathing was rapid and shallow and he was unable to stay awake. I was taking his pulse the whole time, for four hours that is what I did. Then four hours went by and he woke and said, 'thirsty,' and he was crying. But that was a long four hours and then I thought to myself, if he is not okay in four hours and they told me to bring him in, and it takes an hour and half to get there, should I leave in two hours to be part of that four. I really remember not liking the distance at that moment.

The women had also thought about how they would handle emergency situations.

The issue of distance and time in an emergency was something they had considered and they had reflected on how they would handle emergency situations.

With us, we live 30 miles out so it would take at least 20 minutes. I am sure they go fast and stuff, but you still can't go that fast. I would never sit with my kid in

an emergency and wait for an ambulance. That is at least 45 minutes. It would be an hour by the time they came, put somebody on the stretcher, put them in the ambulance and got back to town. I couldn't sit there and calmly wait. I would get in the car and just tell them I would meet them. I think I would get them that much closer and sooner to getting help. I would call the ambulance and then I would take off.

Another woman discussed that remaining in control was important when handling an emergency. Quick thinking and planning were skills the women used when dealing with serious injuries.

My husband was kicked in the face by a horse and I packed him up and drove him to town. I am pretty cool in emergency situations. I just started barking orders and tried to get things arranged. I had a couple people get the car ready and fuel it up. You call the hospital and tell them we are on our way in and you go.

The women had also identified individuals in their local communities with medical training that may be of assistance should an emergency arise. They felt these people may be of great assistance in an emergency situation, especially while waiting for an ambulance to arrive. "You think about who you would call, who could help you if something happened. I would call our neighbor who is an EMT. She is still 20 minutes away, but could get there sooner than the ambulance coming from town." Another participant also identified a neighbor who is an EMT.

My mother in law told me I could always call A. H. who lives up the road probably 15 miles. She is an EMT so that is somebody that if you called 911, you could call her because she could come and help as far as somebody that has professional knowledge.

Although they consistently identified distance as a disadvantage in emergent situations, they were well aware of the risks involved and accepted this as the one disadvantage to rural life.

I learned early in life that things are going to happen. You are going to have accidents. You just have to deal with it when it happens, whatever the severity of it. If you have an accident, you know you are going to have to wait for the ambulance. If you have to pack somebody up in the pickup and bring them to town, you do it. When you grow up with that and make the decision to live out here, you just take those things into consideration and that is just the way it is.

It is something you live with when you are this far out. You just know that there is always that chance that something real major, a bad emergency, could happen and your chances are a lot slimmer than if you are living right in Billings, Montana.

In summary, distance was identified as a concern and major disadvantage in an emergency situation. This was an issue that the women had considered. They realized that distance presented a risk in certain situations and they had considered how they would handle serious injuries or illnesses. Although distance was noted to be a disadvantage in the case of an emergency, they were well aware of the risks involved in living some distance from emergency care and accepted it as one aspect of rural life.

Episodic Evaluation

A third major theme that emerged from the data was episodic evaluation. The women used their past experience and best judgement to consider each injury or illness episode and made a decision about how to manage it. Episodic evaluation was something they did for themselves as well as their children.

For each illness episode, they considered the symptoms present, the length of the illness, the severity of the symptoms, and the progression or resolution of symptoms. The impact of the illness on daily life, and whether or not the illness affected their ability to go to work or their children's ability to go to school, were factors that influenced their

decision about whether or not to seek formal health care. All of the women began with informal care or self-care behaviors such as home remedies and over the counter medicines and illnesses were allowed to "run their course," unless the symptoms were progressing, continued for a long period of time, or significantly affected the individual's daily activities.

We rest and maybe take some over the counter type stuff. I will use a vaporizer to get moisture into the air if somebody has a real dry hacky cough. There's not much to do but let it run its course but I really try to sanitize the bathrooms and open up the house to get fresh air in. If someone gets where they are absolutely miserable for a few days and I can see they are not going to shake whatever they have, then we will go. If it is something that is affecting their everyday life or if they are missing school, then I will go see a doctor.

Cold wise, I will take OTC decongestants and that kind of thing. I am not a real panicky type person, so I just kind of wait things out and see how bad it is and then I go. In the back of your mind finally something says you have to go take care of this. You do for the kids like what you do with yourself. You try some different things and if that looks like it is not working, then you bring them in.

You just kind of see how they are doing. If after a couple of days they don't get better, you take them in. You think, we are this far out, what if it gets worse. You would rather have it taken care of than have it get worse and then that is more of an emergent state. Then you think, gosh, we are 30 miles out or whatever. Then 30 miles makes a huge difference.

Most women had elicited advice from their mother, sister, friend, or neighbor during some illness episodes. The women inquired about how others had handled similar situations as well as discussed what types of treatments had helped resolve a similar illness. "I talk to my mom. I trust her judgement." "I ask around, see what others have tried." Others sought advice from health care providers over the telephone.

I don't hesitate to call the doctor at the hospital or at the clinic, because one time my daughter, we were worried that she was having an appendicitis attack because she kept complaining how her stomach hurt. On that I called the hospital and

talked to the nurse and she talked to the doctor and called me back and said I didn't need to bring her in, that it was more stomach cramps. I never hesitate to call them and ask a question. I have called the clinic, I am not a pestery patient, but you know I don't feel bad calling and asking them to see if we need to come in.

Sometimes if one of the kids is sick, I might call into the doctor's office, describe the symptoms, and see if they want me to bring them in. I have sometimes called the hospital too, to talk to a nurse.

Some of the women reported they were more apt to seek routine health care for illness episodes after becoming a mother. One participant also discussed why she felt it was important for her to take care of her health as a woman and a mother. Mothers are not allowed "sick days."

I guess with women you are never really allowed to have your health affect you. You are expected to do all your wifely, your motherly, and your personal things even if you are not feeling well. There is really no one there to really take care of you as a woman. I don't know if that is just society or if that is how you grow up. Is that how your mother was, or maybe it is gender. That is just what is expected of you in life in our society, that is that you are one the one who takes care of everybody else. Unless you can't flat get out of bed or function, that is just kind of what you do. So I think you think more of taking care of yourself. I mean for me, I think more of taking care of myself because of that. I don't have anyone there that is going to take care of me. That is just the way it is.

My threshold for deciding I need to see someone is less than it use to be, now that I have a child. I know that if I am sick or hurting, then who is going to take care of her.

The women reported that their husbands were more reluctant to seek formal health care for injuries and illnesses of their own. One woman attributed this to the fact that farmers and ranchers are not allowed "sick days."

I think farmers and ranchers don't have somebody to fill in when they are sick, so they just know they have to do it and you just do it. I do think farmers and ranchers do a whole lot more when they are sick than they probably really should just because there isn't anybody to fill in and the cattle have to be fed. Farmer and

ranchers guys have to be pretty darn sick before they will ever admit they can't do something. I guess myself I don't think I would ever do that because I know I am not tough enough. I couldn't do it. If I am sick, I need to stay in the house and rest.

The same type of episodic evaluation was used when considering whether or not an injury could be handled at home or if accessing professional health care was necessary. In addition, for injury episodes, most mothers found it was important to try to remain calm and assess the situation. Factors such as the type of injury, how much blood was involved, and the pain level or indication of pain by the child, were factors that influenced their decision to handle the injury on their own or take them to a healthcare provider.

I just kind of look at the situation and see how bad it is. Like when the first time my daughter fell off the couch when she was a baby, I thought, oh my god I am going to have to take her to the hospital because she fell off. Then you just kind of calm down and realize she just bumped her head and I watched her to make sure she was okay and it wasn't that bad.

I have handled kids getting bucked off horses, cuts, and scrapes. You look at how deep it is and try to decide, do we need stitches, or is there a concussion or what. I guess you just assess the situation and it just depends on how bad it is.

If they had initially decided to handle an injury at home, the mothers re-evaluated the injury as time went on. They sought formal health care if bleeding continued, the pain became more severe, if the injury did not seem to be healing, or if they felt infection might be present.

I guess the amount of bleeding or pain that is involved. Like when my son burned himself, at first I thought maybe it was something we could handle at home. As it happened, what he did was touch the exhaust on my husband's motorcycle and it was one of those things where we weren't looking for a second and he touched it. Then he looked at his hand and he started crying. I happened to be watering the lawn at that time, so I ran cold water on it right away and then he kind of quit crying and settled down. I thought, well, he is probably going to be okay. But

then he started crying again and he was just crying and wouldn't quit crying and I looked at it and it looked like it was going to blister pretty good. So I called. That is why I called the doctor's office I guess and they said bring him in right away.

To summarize, episodic evaluation was a method used by the women to assess each illness that occurred for themselves and their children. For an illness, it involved evaluation of the symptoms present, length of the illness, severity of the symptoms, progression or resolution of the symptoms, and the impact of the illness on daily life. The women started with informal care at home, with home remedies and over the counter medications, and continued to evaluate the illness to determine whether or not the treatments were working and the symptoms were resolving. If the illness persisted or worsened, formal healthcare was obtained. They accessed informal networks such as family and friends for advice and also sought telephone advice from healthcare providers.

The same type of evaluation was used for each injury that occurred. The women considered the type of injury, the amount of blood involved, and the level pain present to help them make decisions about whether to handle the problem at home or seek formal care. Some women reported that becoming a mother made it more important to manage their own illnesses. Some women also noted that their husbands were much more likely to handle their illness at home and delay seeking formal healthcare. The women did not indicate that they delayed seeking care for themselves or their children if the care was deemed necessary for the illness or injury.

Children First

Children first was another concept identified through the analysis of data. The women consistently indicated that they sought healthcare sooner for their children than they did for themselves. They used the episodic evaluation process with their children just as they did for themselves, but reported they took their children to a formal healthcare provider more frequently. The women all indicated the reason for taking their child to the doctor sooner than they go themselves is because it is difficult to judge how someone else is feeling and how the illness is affecting them. This was especially true for younger children and infants who could not verbalize how they were feeling. As children got older, mothers were more inclined to "let things run their course" and evaluate whether or not to take them in based on what the child was telling them.

He is our child and he comes first. I definitely don't want him to get sick or hospitalized. I think it is just a motherly instinct. It's what we do.

Cause you are not sure about really what is going on with them and as a mother you always feel like you can get over it, but just being a mother I think you take care of them maybe a little better than you take care of yourself.

I definitely take the kids in sooner. I guess because I don't want it to go on too long with them. I don't want them to get really sick. You know how you feel yourself, but you don't really know how your child feels. You only know what they tell you and what you observe. I don't like to let it get out of hand.

The women also indicated that they were the one in the family who determined whether or not a child was ill and if they needed to see a formal healthcare provider.

Mothers were also consistently responsible for taking their children to the doctor. "Mom takes them to the doctor and mom sits in the waiting room." "You deal with it because

you are the mom, you are the woman, and you take care of everything. They are your children.” Another reason cited by the women for being responsible for determining if a child was sick was due to the fact that many of the mothers spent more time at home with the children than their spouses. “I am more tuned into it because I am with them more during the day. My husband might say, her nose is running or whatever, but I am usually a step ahead of him because I am around more.”

Children first, when considering health and illness of the family, was a concept identified by the entire sample of women. Women cited the fact that gauging someone else’s illness or pain, when the other person is a very small child, is difficult to do. Although they handled many illnesses at home without the help of a formal healthcare provider, they were quick to seek care if they were unsure about how their child felt or uncertain of the severity of the illness or injury. Mothers were responsible for assessing a child’s health and illness and for taking them to the doctor. Care was consistently sought sooner for an illness or injury for a child than for themselves.

Prevention for Life

The women indicated that routine health care and illness prevention strategies were important activities in life. The women reported that it was important to them to detect illness or disease early so that it could be treated properly and so they would have a better chance at a long healthy life. All the women but one, participated in yearly health screening activities. They cited prevention as the main reason for choosing to participate

in health maintenance activities. Prevention for life was important for "catching things early," and "staying healthy."

Prevention. It is a simple preventive thing. I am not going to say it is going to prevent it, but if something happens, they are more apt to catch things at an early stage. I think that is why you do it. It is just another aspect of taking care of yourself.

All but one woman participated in preventive and health maintenance activities for their children on a regular basis. Their reasons for participating in routine health care for the children were the same as for themselves, prevention.

I would rather maintain our health. I would rather just keep going in on a scheduled basis for them and make sure everything is okay instead of waiting until it gets bad and then go in, or find out later there is something bad that you could have taken care of.

The two women who had experienced breast cancer especially appreciated the importance of routine health screening activities such as yearly mammograms and monthly self-breast exams. They felt these activities saved their lives.

I think it is really important to get your annual mammogram anymore. I think it would be an easy thing to let go. But I just always did it and I never thought I would ever get cancer because I didn't have any family history of it. I wasn't really a person considered to be at risk. But I just thought it was a good idea to go in and have that done once a year. I was really glad that I did. I think that is important because it was detected early and if I had let it go and thought it wasn't important, I don't know how far it might have gotten or what would have happened. I definitely think it is important.

When you go through something like that, it is a life and death situation and you just want to do what you can to help yourself get through it. At 37 years old, I wasn't ready to 'bite the big one.' You just want to manage everything the way you can and take care of yourself, especially when you have children. You want to be there when they have their children.

Women reported that maintaining their health became more important to them after they became mothers and had children to care for.

I worried about my health after I had my kids. I never really worried before I had kids. The you worry about if you are not healthy, you worry about the long term. What if you die and your kids are left? That is why I have to take care of myself too.

One woman reflected back to what she had discussed in regards to “being the mom” and having “no one to take care of you.” She verbalized that it was important for women to be in tune to their own bodies and take care of themselves. She also felt it was important for women to educate themselves on health issues.

You are the one who has to stay home and take care of the kids and all the problems and then you are dealing not only with that externally, but what your body is doing internally that nobody sees. It goes back to how you deal with these things. You deal with it because you are the mom, you are the woman, and you take care of everything. Go back to, does anybody take care of you or does anybody recognize what you go through. That is why I think it is so important for women to learn to recognize themselves if something is wrong because there is nobody else out there recognizing it. I think in a rural area, it is really education. Education to be aware of your body and to be aware of what is going on within yourself. Rural people have such limited opportunities to learn a lot of that stuff. Unless you go searching for it personally, it is really not there. So that is something that we have to do as rural women.

The women stated they learned new ideas about health from a variety of sources including reading, the Internet, television, healthcare providers, family, and friends.

Three of the women reported that they would like more educational activities provided in their local communities, especially education on health issues for women. The women were active in seeking information on certain health issues of specific importance to them.

I read a lot and if I want to know something, I get on the Internet and look it up. You just do a lot of education.

When you are this far out of town, you read a lot and you do other things because you know that you just can't run to town. It is not just across the street or just across town.

One of the participants with breast cancer was presented with the option of a lumpectomy versus a mastectomy. She sought out information on the subject in order to make an informed decision.

I questioned the doctor, if it was his wife, which would he suggest. He said, I can't answer that for you. You have to decide. So I thought about a masectomy and then I got to thinking, went to the library and did some research. I just read up on it, looked at books. After I read about both options, I decided that a mastectomy wasn't for me. So, we ended up doing a lumpectomy like I decided on and that was fine. It turned out perfect for me.

Most of the mothers reported that they were primarily responsible for educating their children about health and health issues. Several of the mothers with school age children discussed that they tried to teach their kids to take care of themselves. The mothers of school age children felt that their kids also learned from participation in school health classes and sports. Some thought that their healthcare provider did some education with them during their sports physicals and when they went in for an illness or injury. Most teaching was thought to occur at home, from the mothers themselves.

I think because I am a health conscious type person they hear me talk a lot. They have health classes in school and they learn some of that kind of stuff. But I read a lot and I talk a lot about it at home. About what is important and good habits and bad habits and how you can take care of yourself. Things are going to happen, but you can help some of the stuff from happening if you just take care of yourself.

I worry more about my family's health than I worry about myself. Just because it goes back to the mother thing and the nurturing and taking care of them. You

think to yourself, are your kids healthy, are you taking care of them and doing the preventative things you do for yourself. Try not to force that upon them but trying to teach them that if you do some of these things that you can maybe prevent some of these things from happening before they do.

In summary, prevention for life was an important aspect for the women in caring for themselves and their children. It involved obtaining routine healthcare on a scheduled basis in order to maintain their health and detect illness or disease early in its course. The women who had experienced breast cancer especially realized the importance of health maintenance and yearly exams and credited these activities for saving their lives. The women verbalized that they found they were more aware of the importance of health maintenance activities after becoming mothers because their children relied on them to be healthy and to be there to take care of them. They educated themselves on health issues through a variety of sources and actively sought out information, especially on issues of specific importance in their life. The mothers were primarily responsible for providing health education for their children. Prevention for life was a strategy practiced by the women to keep themselves and their family as healthy as possible.

Access within Reason

All of the women felt that healthcare was accessible within reason for the area in which they lived. The women were accustomed to traveling for healthcare. Although they found the distance to be a disadvantage in an emergency, this was accepted as one aspect of rural life. Overall, they felt healthcare was available to them, and that it just involved travel to get there. Most of the women were unable to identify any type of

healthcare service that they wished they had available to them in their local community that was not currently available.

I guess I think we basically do have most every type of service that there is available, we just have to drive to get there. I think it is probably adequate for what they can justify having in the area.

Even when considering the disadvantage of distance in an emergency, one participant stated, "We have access. We just have to get there. It just takes time. That is the way it is out here."

A few of the women indicated that they would like to see more educational opportunities available in their local communities. They were aware of activities available in the larger cities, but this involved more travel and longer distances.

I would like to see them do more locally on women's health. Like seminars or talks or something on women's health. Especially women and medicines. I would like to see that.

The participant who had chosen home births for the delivery of her children stated she would like to see birthing centers more prevalent in Montana as well as increased access to midwives who were available for home births.

Access was also seen as having the ability to obtain advice from someone over the phone and having the ability to have their questions answered. Other answers for the definition of access to healthcare included "flexible hours" and "getting hold of someone if I need to." Even the women who traveled 60 miles or more for their healthcare felt that over all they had adequate access to healthcare, although it was somewhat more inconvenient and seen somewhat less accessible in emergency situations. One woman who was 60 miles from her healthcare provider stated:

I guess we are in a fairly convenient situation where we are in proximity. Like I say, its because where we live but it is more of an effort to get to town and longer days, so you can't just take the kids out of school for an hour. They are missing a day or a day and a half. It is probably a bigger job than it would be if I lived in town. Not that I expect much different.

When considering access to healthcare, women were also asked about whether or not they had health insurance and if they felt their insurance impacted how they sought healthcare. Nine of the women had health insurance and two did not. Only one of the women without health insurance stated that lack of insurance impacted how she sought healthcare for herself and her family. She practiced less routine preventive care and considered cost when determining whether or not she or a child needed to see a formal healthcare provider. However, if care was considered necessary, lack of insurance did not prevent her from seeking care. She defined access to care as "insurance and money."

The other participant who did not have health insurance had weighed the costs and benefits of insurance and as a family, she and her husband had made a conscious decision not to carry health insurance. They had carried health insurance in the past and found that it was as expensive as paying for the care out of pocket in the long run. Lack of insurance did not result in delay in seeking care in this case.

It is kind of a gamble. But, we had insurance and they were upping our rates like every other month it seemed like. I just couldn't believe it. We looked into the Montana one for low income, but you have to make hardly any money and we didn't qualify for that. We were kind of stuck. We talked about it and I said, well, we are not going to question going to the doctor because we don't have insurance. Like if we are sick we are going to the doctor and we will pay the \$40 office visit and we will go for all the kids routine child checks. We don't question it.

Both women who did not have health insurance fell into the group of farmers, ranchers, and employees of small businesses where health insurance is not offered.

Although the rest of the women had health insurance, cost was still a significant issue for them, especially for the seven women who were part of a family involved in farming, ranching, or small business. Several of these women had gone without health insurance for a period of time. The main reason for not carrying health insurance at times was due to the high cost. The seven women who had health insurance and were part of a self-employed family reported that they had high premiums and high deductibles. They had to pay out of pocket for routine health care and office visits. Most stated their insurance was for "major medical." High deductibles did not result in a delay in seeking care for these women. Healthcare was obtained if it was believed to be necessary.

Having to pay out of pocket doesn't keep us from going to the doctor. I want to keep everybody healthy and we will pay for it one way or another, so you might as well go in and get it taken care of early. It doesn't have an affect on whether I go or not just because I know I have to pay for it.

In summary, access within reason was a concept identified through the data analysis. Overall, the women felt that they had adequate access to healthcare, although there was somewhat more of a concern in emergency situations. They were accustomed to traveling distances for routine healthcare as a way of life and generally did not expect more services in their local area, although they did identify that they would enjoy the opportunity for more educational activities. For the most part, lack of insurance or high deductibles did not impact how the women sought healthcare and did not result in a delay in seeking care.

Holistic Health

The women had a variety of definitions of health. For the most part, health was defined holistically. Three of the women stated they were in excellent health, seven reported good health, and one reported fair health. Overall, good health included a lack of major health problems, minimal or no use of routine medications, being mentally and physically active, and having the ability to perform necessary tasks without limitations or undue stress. Good health also included being physically fit, eating well, and having an overall sense of well-being.

To do what you want to do and you are not impaired. To be well mentally and physically. Something that doesn't keep you from your taste for doing whatever you want to do.

The women felt that health impacted day to day activities, but most of the women, unless they were experiencing an illness episode, did not feel their health had a negative affect on their daily life.

No negative impact on a daily basis. But, I mean once in awhile, you don't feel good and you maybe don't do things as good as you do when you are feeling good.

Although they were not specifically questioned about stress in their lives, none of the women stated that they were under stress or felt that any of the illnesses they suffered were a result of stress they had experienced. One woman did discuss the impact of the current farming and ranching situation in Montana and the resultant stress for rural people in general.

Maybe that is wrong, but I think sometimes people can talk themselves into health problems too. I think health is just as much of a mental thing as it is a physical

thing. I had a doctor tell me this summer how probably seventy-five percent of things he has seen, especially with the drought and everything in the rural community, the health problems are stress related. What is happening is because of stress and what that causes and how people perceive it mentally. Or people who internalize everything. It has to go somewhere. Your body has to do something with that. It causes problems. I never have that problem because I will always vent. I am a good venter.

Although there were a variety of definitions of health, overall health was viewed in a holistic manner. Good health did not affect day to day activities in a negative way, while illness episodes did have a slight impact on their ability to carry out their day to day activities in the manner they would like. The women did not identify stress as a part of their daily lives or that it had impacted their experience with illness episodes.

Summary

The major themes or concepts that emerged from the data analysis included distance as a way of life, distance as a disadvantage in an emergency, episodic evaluation, children first, prevention for life, access within reason, and holistic health. The women were accustomed to traveling long distances for routine health care and although this was occasionally seen as a minor inconvenience, it did not deter the women from seeking health care for themselves or their children when it was deemed necessary. The women also did not find distance to be of concern in regards to their obstetrical care or while in labor and traveling some distance to the hospital to deliver. Distance did not result in a delay in seeking care for these women.

Distance, however, was identified as a distinct disadvantage in emergent situations. The women had considered the distance to emergency services and their main

concern was the time involved in accessing the appropriate medical care. The women had thoughtfully considered how they might handle different emergency situations and also identified people within the community that they could contact to “help out” in an emergency situation while waiting for an ambulance or preparing for transport to the nearest hospital or medical assistance facility. Although distance was viewed as a disadvantage in an emergent situation, the women were aware of the possible risk of a poor outcome or even death for themselves or their family members and accepted this as one aspect of rural life.

Episodic evaluation was the manner in which the women gauged the severity of illness and injuries experienced by themselves and members of their family. When ill, the women considered the symptoms present, the length of the illness, the severity of the symptoms, the progression or resolution of symptoms, and the impact the illness had on daily activities when deciding to seek healthcare. When injured, the women considered the type of injury, how much blood was involved, and the level of pain experienced. The women used episodic evaluation to determine if the illness or injury could be handled at home or if professional healthcare was needed.

Mothers were primarily responsible for assessing their child’s health and illness and for taking them to a healthcare provider when necessary. The women consistently sought healthcare sooner for their children than they did for themselves, putting their children first. The women suggested that children were taken to a healthcare provider sooner for any illness or injury because it is difficult to determine another person’s level

of discomfort or pain. This was especially true for younger children who could not clearly verbalize their discomfort.

Prevention for life was a method utilized by the women to manage their health and the health of their children and was thought to be an important facet of life. They participated in screening activities and routine health care to prevent illness and disease and in order to detect health problems early so they could be treated with the prospect of a better outcome. They educated themselves on health issues and were primarily responsible for their children's health education. Prevention for life was a strategy used by the women to maintain their health and the health of their children.

Access within reason was a concept that indicated the women felt they had most of the necessary healthcare services available to them. The women reported that although the travel was somewhat inconvenient at times, it was a part of rural life. Educational activities and presentations were services the women identified they would use if they were more available locally. Overall, the women felt they had reasonable access to healthcare considering the environment in which they lived and felt that it would be difficult to justify the provision of more services to the small population of their community. For the overall group of women, lack of insurance and "paying out of pocket" due to high deductibles did not deter them from seeking care if it was considered necessary.

The women provided a variety of definitions of health that indicated that they viewed health in a holistic manner. The women reported as a group that their overall health was good and that their health only impacted their day to day activities if they were

experiencing an illness episode. The women did not indicate that they were under any significant level of stress or that their illness experiences were a result of stress.

The emergent themes and concepts identified through the analysis of data in relation to the health needs, perceptions, and behaviors of rural women were explored. In the final chapter, a discussion of how these findings compare to the review of literature and the implications of the findings for healthcare providers is discussed.

CHAPTER 5

DISCUSSION

Introduction

The purpose of this study was to explore the health needs, perceptions and behaviors of remote rural women of childbearing/childrearing age living in Montana. The research was designed to answer the following four questions 1) How do rural childbearing/childrearing women perceive and conceptualize health? 2) What are the health needs of rural women of childbearing/childrearing age? 3) What are the health behaviors of rural childbearing/childrearing women? 4) How do the health perceptions and conceptualizations of rural childbearing/childrearing women influence their health behaviors? Seven emergent themes and concepts identified through an analysis of the data answered the research questions that prompted the study. The emergent themes included distance as a way of life, distance as a disadvantage in an emergency, episodic evaluation, children first, prevention for life, access within reason, and holistic health.

This chapter includes a discussion of how the findings of the study relate to the research questions and how these findings compare to the existing rural health concepts identified through a review of literature. The implication of the findings for healthcare providers and for further nursing research also are discussed.

Evaluation of Findings

Health Perceptions

The women viewed health in a holistic manner. Holistic health has been defined as:

An ongoing state of wellness that involves taking care of the physical self, expressing emotions appropriately and effectively, using the mind constructively, being creatively involved with others, and becoming aware of higher levels of consciousness (Edelman & Mandle, 1998, p. 335).

In addition to perceiving health holistically, they verbalized other perceptions related to health issues that defined how they conceptualized health. They perceived that distance was a way of rural life, but also perceived that distance was a disadvantage in the case of an emergency. They also perceived that it was more difficult to gauge the illness of a child than it was their own illness. They perceived that prevention was an important aspect of health. The concept that best addresses how women perceived health was their conceptualization of holistic health.

The women defined health based on both objective and subjective aspects. The objective components of their definition included current health status and physical health, medication intake, nutrition, and ability to function.. The more subjective components of health included mental health, level of stress, and a sense of well-being. Women perceived that they had good health if they did not suffer from any major health problems, took few if any prescription medications on a daily basis, and were able to perform their necessary daily tasks without limitation. They also viewed themselves and others as healthy if they were physically fit, consumed a nutritious diet, had good mental

health, and did not experience a significant amount of stress on a daily basis.

The concept of holistic health is different than the definition of health in the rural literature. Much of the rural literature reports that rural dwellers define health as the ability to work (Bushy 1994b; Lee, 1989; Stein, 1989; Weinert & Long, 1987). The women of this study identified that in addition to having the ability to carry out necessary tasks without limitations, there are many other components to health such as mental health, nutritious eating, minimal stress, and an overall sense of well-being.

Health Needs

Three concepts addressed the women's health needs; access within reason, prevention for life, and distance as a disadvantage in an emergency. First, although travel was required, the women felt they had access within reason to routine health care services. Only two needs were identified by the women. Several women indicated that rural women had decreased access to health information and identified a need for more health education in their local community. Education was the one need that they felt could be made available locally. One woman also stated the need for more birthing centers in Montana for women who preferred to deliver outside of the more structured hospital setting. She also felt there was a need for more midwives who could be available to assist with home deliveries.

Prevention for life describes the second health need expressed by the women. The women saw a need for routine and preventive health care services including screening for breast and cervical cancer. They needed prenatal care, health care services for their

deliveries, and health care for their children. These services were felt to be available to them, although it involved traveling some distance to obtain them.

The concept of distance as a disadvantage in an emergency demonstrated that they had a need for adequate emergency services. Although emergency services were available to them, they were some distance away and a significant amount of time was involved in accessing emergency services.

Health Behaviors

Three concepts were used to describe the health behaviors of the women. These concepts were episodic evaluation, children first, and prevention for life. Episodic evaluation was one health behavior that the women engaged in to assess illness episodes for themselves and their children. This evaluation behavior helped them to decide to manage an illness at home or to seek professional help.

Children first was the concept used to describe women's behavior to seek care more quickly for their children than for themselves. The women found it more difficult to assess an illness or injury episode for their children because they were uncertain of how the child was feeling or the amount of pain involved. Therefore, they were quicker to access formal health care for illness and injury episodes that occurred for their children than for themselves.

Prevention for life was another health behavior of the women. Within their perception of health, they viewed prevention as an important component of health. They felt it was important to participate in routine health care for themselves and their children

in order to stay healthy and if illness or disease was present, it could be treated early. As part of prevention for life, the women sought information on health issues of importance to them and were active in trying to maintain their health through preventative screening. They were also primarily responsible for educating their children about health.

Influence of Health Perceptions on Health Behaviors

Nearly all of the concepts identified through an analysis of the data had an impact on how the women's perceptions and conceptualization of health influenced their health behaviors. Distance as a way of life, distance as a disadvantage in an emergency situation, episodic evaluation, children first, prevention for life, and access within reason impacted the women's health behaviors.

First, the perception of distance as a way of life indicated that the women did not feel that traveling for routine health care was a problem. The distance was sometimes perceived as inconvenient, but their perception of distance in everyday life did not result in a delay in seeking care for illness episodes or for routine preventative healthcare.

Distance was a concept that has been discussed at length in the rural literature. The studies reviewed in the literature presented conflicting results regarding whether or not distance influenced health care utilization. Several rural studies and writings reported that increasing distance resulted in a decreased willingness to seek healthcare, an increase in self-care behaviors, and a heightened level of unfulfilled healthcare needs (Bartlome et al., 1992; Tevis, 1994b; Veitch, 1995; Wamsley, 1978). Other rural health researchers and authors reported that distance did not negatively impact health care utilization and

that rural dwellers did not delay seeking care if there was a perceived need for the services (Bushy, 1993a; Hassinger & Hobbs, 1973; Kreher et al., 1995; Koehler, 1995).

Similar to the findings of Koehler (1995), the women in this study viewed distance as a way of life and were accustomed to traveling some distance for health care services. The women did not delay seeking care if there was a perceived need for the services, a behavior which supports the findings of Koehler (1995) and Hassinger and Hobbs (1973).

Second, the perception of distance as a disadvantage in an emergency influenced the women's potential behaviors in an emergency situation. The women contemplated how to manage emergencies they might experience for themselves or their families. The women's behaviors included considering where they would access their emergency care, how long it would take for emergency care to arrive or how long it would take them to get to emergency services, and who in the community they could contact for assistance in an emergency situation. Their perception of distance as a disadvantage in an emergency situation resulted in the women verbalizing that it was important to remain calm while waiting for help to arrive and to determine whether they should begin transporting an individual or wait for an ambulance to arrive.

The concept of distance as a disadvantage in an emergency was not identified in the review of literature. Although the women viewed distance as a way of life, they also identified that it was a distinct disadvantage if an emergency should arise. Like the participants in Koehler's (1995) study, the women accepted the risk of distance in an emergency situation. However, the women in this study identified distance in an

emergency as a much more significant concern than the participants in Koehler's study. One factor that may contribute to this difference is the age difference of the two samples. The mean age of the sample in Koehler's study was 75.4 years while the mean age of the sample in this study was 37.7 years. The women in this study also had children to consider when evaluating the impact of distance in an emergency and this may have contributed to their increased concern in comparison to the older sample. The concept of distance as a way of life is not new to the rural health literature, while distance as a disadvantage in an emergency was infrequently discussed.

Episodic evaluation also influenced the women's health behaviors. With each illness or injury, the women used a process to evaluate the severity of the episode and this influenced the health behaviors that followed. Through the evaluation of illness episodes, the women determined whether or not they could handle illness or injuries at home or if they required the attention of a professional health care provider. When a child became ill, they often sought advice from family, friends, and neighbors. If they perceived that the symptoms were severe or progressing, or the illness was significantly affecting day-to-day activities, the women accessed professional health care. Similarly, if an injury was perceived to be severe, involve a significant amount of blood, or involve considerable pain, the women sought professional health care.

Koehler (1995) and Buehler et al. (1998) identified that rural individuals evaluated and gauged illness while making decisions about how to manage their health and illness episodes. The concept identified in this study, episodic evaluation, is similar to Koehler's "tactics for managing illness episodes" which included the elements of

gauging the seriousness of an illness, deciding on a course of action for the illness episode, and dealing with distance when managing illness episodes (p. 89). Episodic evaluation is also similar to the Symptom-Action-Time-Line (SATL) process described by Buehler et al. which included the stages of symptom identification, self-care, lay resources, and professional resources. During episodic evaluation, the women considered the symptoms present, length of the illness, severity of the symptoms, the progression or resolution of symptoms, and the impact of the illness on daily activities. The components of episodic evaluation are similar to the steps in the SATL process and "tactics for managing illness episodes," and therefore, episodic evaluation is not a new concept in the rural health literature.

Also not new to the rural health literature is the concept of informal networks in which rural individuals seek advice and assistance from friends, family, and neighbors prior to accessing the formal healthcare system. Koelher (1995), Buehler et al. (1998), and Weinert and Long (1987) all found that rural dwellers accessed informal networks while making decisions about how to handle illness episodes. The women in this study also sought advice from family, friends, and neighbors during the process of episodic evaluation. The women in this study, like the participants of Koehler's, Buehler et al.'s, and Weinert and Long's studies, initiated self-care activities at home at the onset of an illness episode, especially if it was not thought to be serious in nature.

Another concept that impacted the women's health behaviors was children first. Because the women perceived it was more difficult to gauge the illness of a child, they sought health care more quickly for their children than they did for themselves.

Children first was not a major theme identified in the review of literature.

However, Buehler et al. (1998) in their discussion of the implementation of the SATL process, reported that the women in their study had a lower threshold of tolerance for the duration and severity of symptoms in their children and that the SATL process was shorter for their children. The concept of children first resulted from the women reporting that although they implemented the process of episodic evaluation for their children as they did for themselves, they were consistently more likely to seek health care more quickly for their children than for themselves. The women were prompted to seek care sooner for their children because they found it was more difficult to gauge the illness of a child than it was to gauge their own illness.

Prevention for life was a fifth concept that impacted the women's health behaviors. Because they perceived that prevention was an important part of maintaining health, they participated in routine health care and screening activities. In addition, due to the perception that prevention was an important aspect of maintaining health, they did not delay seeking care for routine health care or for illness episodes.

Prevention for life was a theme for which no analogous concept was found in the rural literature. Although there were differences between the concepts, Koehler (1995) identified the concept of "maximizing health," which was the closest finding to prevention for life in the rural literature. Koehler's participants identified holistic tactics for maximizing their health. The tactics for maximizing health included "tending the body," "nurturing the mind," "feeding the spirit," and "minimizing interference" (p. 73). "Tending the body" involved maintaining physical activity, eating well, complying with

medical advice, and taking medications as prescribed. "Nurturing the mind" included staying active in mental activities to keep the mind sharp. "Feeding the spirit" involved spiritual activities and charitable activities. "Minimizing interference" involved the belief that health was maximized by avoiding contact with physicians unless it was absolutely necessary. The women in this study focused less on a holistic approach to prevention of illness, although this may be a result of how the interview questions related to prevention were worded. Prevention for life was used to describe the importance women placed on participating in routine health care and preventive screening activities. The concept also addressed self-education and education for their children on health issues. While the concept of "maximizing health" focused more on holistic activities that decreased the need for formal health care, prevention for life focused on routine health maintenance and health education.

The last concept that influenced the women's health behaviors was access within reason. One aspect of access within reason was health insurance status. A few women were currently without health insurance or had been without health insurance in the past, and a large portion of the remaining women paid for routine health care expenses out of pocket due to high deductibles. Despite the fact that many of the women did not have health insurance that covered routine office visits for preventive care and illness episodes, it did not result in a delay in seeking care if the care was perceived to be necessary.

Long (1993) suggested that rural individuals learn to determine what types of illness and injuries can be temporized and which require medical attention. She also suggested that factors such as lack of health insurance and "sick days" that stemmed from

employment in farming, ranching, and small business, may impact how rural individuals handle illness and injuries. Although most of the women in this study paid for routine health care expenses out of pocket because of lack of insurance or high deductibles, it did not result in a delay in seeking care or an increased tendency to temporize symptoms. However, some of the women indicated that their husbands may be more inclined to delay seeking care and to participate in self-care activities at home to manage illnesses or injuries. Access within reason is a concept that addressed insurance status and overall availability of services. The women in this study sought health care for themselves and their children if it was needed regardless of whether or not they had insurance coverage that paid for an office visit, whereas they identified that their husbands were likely to delay care due to lack of sick days as Long suggested.

Limitations

The study was limited in that the sample was small and the information gained from this research was specific to the participants studied. Thus, no unequivocal generalizations can be made about the health perceptions, needs, and behaviors of rural women of childbearing/childrearing age as a whole. In addition, the interview questions may not have been fully understood by some participants and the questions may not have been fully answered.

Implications for Nursing Practice

There are several implications for nursing practice identified as a result of the findings of this study. The first implication of this study was that although distance was perceived as a way of rural life for the women, health care providers should remain cognizant of the distance and time traveled for routine health care. The women coordinated their health care visits with other activities that needed to be carried out in the town in which they accessed their health care services. Every effort should be made to take into consideration the distance they travel to access care. In addition, although distance was not a concern when contemplating labor and travel to the community in which they delivered their babies, nurses and other health care practitioners should continue to educate their patients on the appropriate precautions.

The second implication relates to the concept of distance as a disadvantage in an emergency. The women verbalized valid concerns about the problem that distance presented in regards to the time it takes to access the necessary care in an emergency. This is an issue that should be explored with women when they are in contact with nurses and health care providers. The availability of emergency resources in their local communities should be discussed. Education regarding planning for and handling various emergency situations can be undertaken during routine health care visits.

The third implication for nursing practice is the importance of providing thorough health evaluations and screenings when the women access the health care system for health care maintenance. The women are clearly interested in maintaining their health

and participating in screening activities to identify illness early in the course of a disease process. Therefore, the women should be offered every opportunity for all recommended screening activities appropriate to their age. Information regarding preventive health and health maintenance activities for their children should be offered at each encounter with health care providers as well. Health education should also be an important activity that occurs at each visit. Other methods of delivering health education to women could be accomplished through the provision of seminars on women and children's health issues locally and over the Internet by providing health information on Web sites. Women would also have increased access to health information and answers to their health questions through email on health Web sites. The women are interested in learning about health issues of importance to them and a variety of learning sources and opportunities should be provided to women.

Implications for Nursing Research

The implications for research are a result of the review of literature and the findings of this study. Distance continues to be an interesting concept in the rural literature. Much controversy remains as to the impact of distance on health care utilization and whether or not individuals who live at increasing distances from health care engage in more self-care behaviors and delay seeking health care. I was intrigued by the study conducted by Veitch (1995) in relation to how rural dwellers at varying distances reported they would handle injury scenarios of increasing severity. A similar study with women of childbearing/childrearing age in Montana may address how distance

and the concept of episodic evaluation are related. This type of study may indicate whether or not there is a difference in how women handle illness or injury episodes at varying distances from healthcare.

Another area for further research is the experience of illness episodes and stress in the rural women's lives. The women in this study were not specifically questioned regarding their stress level and the semi-structured interview may not have elicited information that would give an indication of the impact of stress on the health and daily life of rural women of childbearing/childrearing age.

Another implication for nursing research relates to chronic illness or presence of a serious disease in rural women of childbearing/childrearing age. The women in this study who suffered from breast cancer and traveled for treatment viewed distance as slightly more inconvenient than the women who traveled less frequently for routine health care. The women in this study also verbalized significant community support that counterbalanced the inconvenience of daily travel of 60 miles or more, one way. The health perceptions of women of childbearing/childrearing age who have suffered from a life threatening illness have rarely been solicited and may add to the rural health literature.

A final implication for research is the need for further studies that address the health perceptions, needs, and behaviors of rural childbearing/childrearing women. Women who live in different geographical areas and at varying distances from health care services may perceive health differently and have different health care needs. The health needs of women early in their childbearing years may differ from those who are raising

older children. Therefore, more research is needed to further understand the health perceptions, needs, and behaviors of women in this stage of life.

Conclusions

This research was designed to add information to the existing rural health literature specific to the health perceptions, needs, and behaviors of rural women of childbearing and childrearing age. Many rural health concepts have been discussed in the rural literature, but there has been little focus on rural midlife women raising families. This research identified some health concepts specific to rural women of childbearing and childrearing age along with concepts that are similar to existing concepts in the rural health literature.

The implications for nursing practice that resulted from this research are similar to the implications identified in the rural health literature. An understanding of the manner in which rural dwellers perceive health, regardless of gender or age, is important for designing and delivering health care services. However, all rural dwellers do not conceptualize health in the same manner and do not engage in the same health behaviors. Therefore, continued research and a further understanding of how specific rural populations perceive and conceptualize health is necessary for providing the highest quality of health care to all rural individuals.

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APPENDICES

APPENDIX A
CONSENT FORM

PROJECT TITLE: Health perceptions, health needs, and health behaviors of remote rural women of childbearing/childrearing ages.

PARTICIPATION: You are being asked to participate in a study to learn more about the health perceptions, needs, and behaviors of women living in remote rural areas. To be in the study you must be a woman 18 to 49 years of age. You must also live in a remote rural area or a town in Montana with a population of 2,500 or less located 40 miles or further from a city with a population of 50,000 or greater. The community you live in must not have a hospital, a medical assistance facility, or a practicing physician residing in the community. You must have lived in the remote rural community for five years or longer.

PURPOSE: The purpose of the study is to explore the health perceptions, health needs, and health behaviors of remote rural women of childbearing/childrearing age. The study is part of the work being done by the investigator as part of a Masters in Nursing program. Your participation may help me to better understand the health care needs of rural women.

PROCEDURES: You were identified as a potential participant because you are known to me personally, were identified as a potential participant by a personal contact of mine, or were identified by another participant in the study. If you agree to take part in the study, you will participate in one audiotaped interview lasting from 45 to 90 minutes. Following the interview, the tape will be transcribed and the data will be analyzed for common themes. With your permission, you may also be contacted again by the researcher via telephone following the interview if it is realized that the interview is incomplete or more

information is needed.

RISKS: While identifying information will be removed from transcripts and not used in any reports about the study, a risk exists that you may be recognized through your verbalized experiences.

BENEFITS: The study is of no direct benefit to you. However, you may benefit from talking about what matters to you.

COST: Your participation is voluntary. Taking part in this interview means an investment of your time without payment.

CONFIDENTIALITY OF RECORDS: Any information identifying the participant will be removed from the interview transcript. However, the participant's actual words may be quoted on any reports that result from the interview, including the final thesis. The actual interview transcript may be seen by the members of the investigator's thesis committee, Drs. Charlene Winters, Helen Lee, and Vonna Branam after identifying information has been removed. Audiotape recordings will be destroyed following transcription. Transcripts of the interview will be kept in a locked file cabinet in the investigator's home office. Signed consent forms will be kept in a locked file cabinet at Montana State University-Bozeman College of Nursing for five years and destroyed after that time.

ADDITIONAL QUESTIONS: Additional questions about the study can be answered by the investigator, Ronda Bales (406) 652-0879 or the committee chair, Dr. Charlene Winters, (406) 243-6515. Additional questions about the rights of human subjects can be answered by a member of the College of Nursing's Human Subjects committee, Dr.

Karen Zulkowski (406) 657-1739.

AUTHORIZATION: I have read the above and understand the inconvenience and risk of this study. I _____ (printed name of participant) agree to participate in this research. I understand that I may later refuse to participate, and that I may withdraw from the study anytime without it affecting any relationship I might have with the College of Nursing, Montana State University-Bozeman.

I have received a copy of this consent form for my own records ____ Yes ____ No

I wish to have a copy of the transcribed interview ____ Yes ____ No

I grant permission to be contacted again, by phone, if necessary ____ Yes ____ No

_____ Signature	_____ Date
_____ Witness	_____ Date
_____ Graduate nursing student signature	_____ Date

APPENDIX B
INTERVIEW SCHEDULE

Date:

ID#:

1. How would you describe your health - - excellent, good, fair, or poor?

Tell me a little more about that.

2. How do you define healthy? OR What does healthy mean to you?

3. How does your health effect your day-to-day activities?

Are you concerned about your health?

Do you ever worry about your health?

4. Tell me what you do when you become ill (example would be a cold, flu, pneumonia).

How soon do you seek health care once you become ill?

Who do you turn to when you become ill?

What remedies do you use?

What factors influence your decision to seek health care?

5. Tell me what you do when one of your children becomes ill.

How soon do you seek health care for your child?

Do you turn to anyone for advice? If so, who?

Do you try similar remedies for your children as you do for yourself?

Who in your family decides if one of your children is sick?

If you do seek formal health care, who is usually responsible for taking the child to the health care provider?

Do you seek health care sooner for your children than for yourself?

What factors influence your decision to seek formal health care for your child?

6. Tell me what you do when you are injured (an example would be a cut requiring stitches).

Do you turn to anyone for advice? If so, who?

What types of injuries have you handled without formal health care, either for yourself or for your family?

What types of injuries have you sought health care for, either for yourself or for your family?

What factors influenced your decision to treat the injury yourself or seek professional care?

7. Tell me what types of formal health care maintenance and screening activities you participate in. (Such as yearly breast exams, PAPs, blood laboratory testing).

Can you tell me why you participate (or do not participate) in these health care activities?

What types of formal health care maintenance do you participate in for your children? (Well baby/child exams, sports physicals, immunizations).

Can you tell me why you participate (or do not participate) in these activities for your children?

8. Do you have a primary health care provider? If so, what is their title (Family physician, NP, PA, etc)? Do you and your child have the same health care provider?

If they are not the same individual, can you tell me why you have chosen a different provider for your child?

When was the last time you saw a health care provider?

What was the reason for the visit?

When was the last time you took one of your children to a health care provider?

What was the reason for their visit?

9. Have you ever been pregnant since you have lived here (this rural environment)?

If yes, did you handle your health care any differently than you do now?

Did you have an opportunity for family planning, childbirth education, etc.?

10. From whom do you usually find out new ideas about health? (Primary provider, nurse, pharmacist, family, friends, community groups) Whom do you think your children learn the most about health from? (Yourself, other family, their friends, primary provider, schoolteacher, community activities, TV)

11. How do you define access to care? OR What does access to care mean to you?

Do you feel that where you live has any impact on how you access care?

12. Do you feel that there are any advantages or disadvantages to living here?

In general, are there any advantages or disadvantages to living in a rural community?

In regards to health care, are there any advantages or disadvantages to living here or in a rural community?

13. Is there anything that concerns you because you live here? (for example - economic issues, environment [examples include fire, snakes, rodents, pollen, dust])
14. Do you feel that there is any type of health care service that you or other women in your community, or your children would benefit from that you do not currently have?
15. Is there anything else you would like to tell me?

APPENDIX C
DEMOGRAPHIC DATA SHEET

Date:

ID number:

Personal information

Year born?

Age?

Years of education?

Marital status?

With whom do you presently live?

Number of pregnancies?

Number and ages of children?

Employed outside of the home?

Occupation?

Insurance?

Religious preference?

Ethnicity?

Location information

Number of years you have lived in the community (town or area)?

Size of community (or nearest town)?

County of residence?

Miles to nearest large town/city?

Name of large town/city?

Miles to your regular health care provider?

Name of community where healthcare provider is located?

Miles to your emergency care?

Name of community where emergency care is located?

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