Growing old on the farm: An Ethnonursing examination of aging and health within the Agrarian rural subculture

Diane Witt

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GROWING OLD ON THE FARM: AN ETHNONURSING EXAMINATION OF AGING AND HEALTH WITHIN THE AGRARIAN RURAL SUBCULTURE

by

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Submitted to the Doctoral Program Faculty
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of the requirements for the degree of
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Duquesne University

2006
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DISSERTATION TITLE: Growing Old on the Farm: An Ethnonursing Examination of Aging and Health Within the Agrain Rural Subculture

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GROWING OLD ON THE FARM: AN ETHNONURSING EXAMINATION OF AGING AND HEALTH WITHIN THE AGRARIAN RURAL SUBCULTURE

Diane Elizabeth Witt

Duquesne University, 2006

ABSTRACT

The purpose of this Ethnonursing study was to discover and explore the elder agrarian rural subculture in regard to well-being, health beliefs, values and practices. In depth interviews utilizing a semi-structured interview guide were carried out with eleven key and 23 general informants in a rural county in south-central Minnesota. A snowball method was utilized to recruit informants. Concurrent analysis was carried out utilizing Leininger’s phases of Ethnonursing analysis for qualitative data. Data management and analysis was facilitated through the use of QSR NVivo software for qualitative data analysis version 6. Sixteen categories, ten patterns and three themes emerged from the data. The themes are: 1) Health and well being in Agrarian elder men and women is characterized by hardiness, 2) Agrarian elder men and women are interdependent with their spouse, family, and God to promote their health and well being and 3) To Agrarian elder men and women care is the physical and emotional presence of others during both health and illness. The findings of this study provide a framework from which to develop culturally congruent care for agrarian elders as well as identify implications for nursing theory, research, education and practice.

Dissertation Advisor: Rick Zoucha RN, DNSc, APRN
ACKNOWLEDGEMENTS

Without the guidance and support of many individuals this dissertation could not have come to fruition. I would like to thank Dr. Rick Zoucha, my dissertation committee chair, for his ongoing encouragement and support as well as challenges to facilitate my growth as a nurse scholar. He was ever willing and able to share his knowledge and expertise regarding qualitative research, Transcultural nursing and Ethnonursing methodology with me.

I would also like to thank and Dr. Joan A. Masters who graciously stepped in and joined my committee just prior to my proposal defense when Carl Ross accepted a position at another university. She provided a wealth of gerontological expertise.

I am indebted to my third Committee Member Dr. Kathryn "Jay" Elliott who shared her expertise in gerontological anthropology. She was a wonderful mentor as well as support system while I was completing my cognate courses and analyzing data.

A heartfelt thank you to all of the informants who participated in this study, without their graciously and openly sharing their perspective this study never could have been completed.

To my husband Dennis and children Jacob and Alyssa I must acknowledge the sacrifices you made economically as well as in quality time we spent together in order for me to complete my doctoral education. You were a source of never ending support and motivation which I greatly appreciate.

Lastly I would like to thank my colleagues at Minnesota State University, Mankato, my sisters and my friends who were an endless source of support.
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I. INTRODUCTION

The elderly are the primary health care consumers in the United States. This in part is due to the incidence of physiologic changes, increased incidence of disease and chronic illness. Even without counting the health care dollars spent on long term care, which is significant, it was found that in the Midwest “health care spending per person age 65 and over was more than three times the average for the population under age 65 in 2000” (Minnesota Department of Health, 2003, p. 10).

There is no question that we are living in an aging society in the United States. At present the elderly make up 12% of the population of central or urban counties and up to 15% in rural counties in the United States. In the state of Minnesota the elderly make up 12% of the overall population and 14.2% of Waseca County, which is rural (US Census Bureau, 2000) According to the Minnesota Department of Health “by 2030 it is expected that over one quarter (26 percent) of Minnesota’s population will be over age 60” (p. 3). This is not new information. It has been known for many years that there would be a sharp increase in the number of elderly in the United States when the Baby Boom Generation reached their elder years.

A significant amount of research has focused on rural culture and aging. However the face of rural America is changing. Fewer and fewer individuals earn their livelihoods through agriculture and agricultural related industries. It is a seriously false impression to equate rural culture with agrarian culture based on the percent of the rural population that is made up of farmers (Cordes, 1985). Agrarian culture can be defined as the rural subculture comprised of individuals and families that earn their living through the production of crops and/or raising livestock. Little is known about the Agrarian
culture in regard to health values, beliefs and practices. There are many vignettes of Agrarian culture members delaying access to health care or ignoring their symptoms yet there have not been systematic studies that examine these phenomena or any cultural exploration of this group.

Ethnonursing methodology will be utilized in this study to seek an understanding of the Agrarian elders’ lifeways in regard to health from their perspective to facilitate understanding, overcome stereotypes, and promote the delivery of culturally congruent care. Culturally congruent and sensitive care is important because it can “contribute to the well-being of older people, enhancing both their self-respect and the quality of their lives” (Olson, 2001, p. 16).

Domain of Inquiry

The domain of inquiry of this proposed ethnonursing study is the discovery of the meanings and lifeways regarding well-being, health beliefs, values and practices of rural Agrarian elders. It is important for healthcare providers to clearly understand and recognize the relationship of rural culture and the local concept of health and well being in the planning and implementation of health care services in rural settings (Pierce 2001). Cultural values and beliefs influence all human behavior including health maintenance and seeking behaviors. With such a high percentage of farm families entering into or already in their elder years when physiologic aging results in decreased physical functioning and an increased incidence of acute and chronic illness it is imperative that nursing have a sound knowledge of their cultural values and beliefs to optimize their health. Gaining an understanding of rural Agrarian culture will help nurses plan,
implement and evaluate culturally congruent and effective health promotion strategies specific to Agrarian elders.

Purpose of the Study

The purpose of this study is to discover and explore the elder Agrarian rural subculture in regard to well-being, health beliefs, values and practices. A significant amount of research has been done on elder rural culture and rural aging. However, little is known about the Agrarian subculture as studies have not differentiated between subcultures in the rural context in their data analysis. Gaining knowledge regarding elder Agrarian culture and health will allow nurses to provide culturally congruent care and develop effective health promotion strategies for this group.

Specific Aims

The specific aims of this study are to:

1) Develop an understanding of health beliefs and practices of upper Midwest Agrarian elders from their perspective
2) Identify how Agrarian culture influences health beliefs and practices in older adults.
3) Develop an understanding of nursing cultural care that that is congruent and not congruent for older Agrarians.

Research Questions

1) What are the cultural lifeways, meanings, values and beliefs of the elder Agrarian population in regard to health and well-being?
2) What is the influence rural Agrarian context has on the worldview, health beliefs, values and practices of older adults?

3) What are the nursing culture care experiences of elder Agrarians that have promoted or hindered their health, well being and health practices?

Rational for the Study

Nursing and health related studies have focused on rural culture yet do not differentiate between Agrarian and non-Agrarian cultures within the rural context. This may have been appropriate in the past when a greater percentage of the rural population was engaged in agriculture and agriculture related or dependent occupations. Historically, the rural economy was dependent on agriculture. This is becoming less true as fewer individuals are engaged in farming and industry has steadily increased in rural areas over the last few decades.

The elderly comprise a higher percentage of the rural population in contrast to the urban or metropolitan population and have been found to have a higher level of poverty, a lower educational level, a lower perceived level of health, and have health care access limitations (Van Nostrand, 1993). The rural elderly have been found to correlate health with the ability to work more strongly than their urban counterparts to the point that “health needs are usually secondary to work needs” (Long, 1993). These factors have been the impetus for a significant amount of research examining rural aging and health and rural culture over the last twenty-five years. In some studies farmers have comprised up to seventy five percent of the participants yet the findings are reported as rural culture.
Previously, individuals engaged in farming made up a significant percentage of the rural population. In 2002 1.84% of the American population was engaged in farm production (United States Department of Agriculture). Farmers are an aging group in the United States. According to Allen and Harris the average age of American farmers is 55.3 years with 23.9% between the ages of 55 and 64 and 26.2% over the age of 65. Only 5.8% of American farmers are 35 or younger (2005).

Some would argue that the notion of family farm culture no longer exists in the United States, that it has been replaced by corporate farming. Farm family culture or Agrarian culture has had many transitions from the early half of the twentieth century based on technological and economic factors. However, the cultural values, beliefs, and practices of this group may still have separate and distinct characteristics in contrast to non-farm rural culture.

From a healthcare perspective it is important to understand the influence of elder Agrarian culture on health beliefs, values and practices. This author has seen Agrarian elders initially present for health care with advanced stages of disease that would have been easier to treat if detected earlier. There is nothing in the literature regarding this phenomenon. Other health care professionals readily agree that they have also seen Agrarian elders present later for initial care except in the case of injuries.

The following vignette illustrates the degree to which farmers may ignore symptoms they are experiencing. A friend in his late 50’s shared this story regarding a farmer who was also in his late 50’s. One spring day he was out helping the farmer put in fence posts. Putting fence posts in is a very intense physical activity. A steel driver is used to dig the hole for the post. After using the steel driver a few times to dig one of the
holes the farmer asked “does this make you really tired”? “I’m all in”. My friend had the farmer rest while he put the rest of the fence posts in. The farmer had been experiencing chest pain but did not report it. He had a history of heart disease and had had coronary artery stent placement one year prior to this incident. Upon returning to the house his adult daughter asked him what was wrong. With the admission of not feeling well the daughter enlisted the help of her brother to insist that he go to the doctor. Upon presenting for health care he immediately had another stent placed for the reestablishment of coronary artery blood flow to his heart muscle. The farmer admitted that he had been having chest pain all spring but was putting off going to the doctor until planting was done. He even admitted to hiding behind a grain bin and resting with one episode of chest pain so his wife would not see him. Without medical intervention and stent placement he could have experienced a myocardial infarction resulting in permanent heart damage or even death.

Even when faced with a potentially life threatening problem this individual chose not to seek out health care. It is doubtful that this is an isolated incident but rather a cultural norm in a peak work season such as planting. It can be difficult to react in a non judgmental manner as a health care provider when these individuals do present for care. The difference between the farmer’s health seeking behavior and health care provider’s beliefs can lead to a culture clash between the two. In order to provide culturally congruent care and effective health promotion strategies for this group a sound knowledge base of their cultural values and beliefs must be identified through rigorous research.
Significance to Nursing

Little is known about elder Agrarian culture in the Midwest. It is imperative to develop an understanding of Agrarian culture from a health care perspective because farmers by nature of their occupation are at a significantly higher risk for injury and illness than other occupational groups. This is especially true for the elderly farmers. Farming has been recognized as one of the most hazardous occupations. The National Safety Council identifies that “in terms of death rates by industries, the agricultural industry topped the death rates in 2000 with 22.5 fatalities per 100,000 workers” (National Safety Council, 2001). The fatality rate for all industries and occupations is 4.3 fatalities per 100,000 people employed.

Up to “ten percent of all agricultural workers experience a disabling injury each year” (Thu, 1998, p.336). The nonfatal occupational injury rate for agricultural production was 6.2 injuries per 100 full time workers in 2003 (United States Department of Labor, 2004). The young and the old are at higher risk for injury on farms (Wright 1993). Xiang, Stallones, & Chiu (1999) surveyed 113 older male farmers in Colorado, of which, 27 reported an injury in the previous 12 months. One wonders what percent of these injuries could have been prevented with health protective behaviors. When interpreting occupational death and injury statistics it is important to take into account that the United States Department of Labor does not include farms with less than 11 employees in the data pool. As 88% of all American farms are owned and run by an independent operator or family, the data under-represents the number and rate of occupational related injuries, illnesses and deaths. The economic burden of farm related work injuries is extremely high and may total up to $4-5 billion per year (Shutske, 1997).
Illness may be related to chronic long term exposure to health hazards on the farm. By nature of their occupation their exposure continues after the work day is done as they usually live on the worksite, which is the farm. Not only is the farmer exposed to health hazards the entire family is. There is a high personal and economic cost of farm related illnesses and injuries.

It does seem that health care workers believe that farm injuries are preventable. A middle aged farmer’s wife who wishes to remain anonymous (personal communication June 19, 2005) shared a story about a time her husband had injured his hand while connecting two pieces of equipment. He went to the emergency department (ED) as he believed he had broken his hand. When he was in the ED the nurse berated him informing him that farmers were always getting hurt and how these injuries were preventable, she then went on to inform him how farmers were destroying the environment. He would have left the ED but knew he needed to have his hand cared for. The ED physician then came in and did the same thing the nurse did, lecture him about how injuries were preventable and destruction of the environment. He was very angry with this encounter with health care professionals, he hand was broken and needed care, yet he had to endure being berated to receive that care. Berating individuals is not an effective method of promoting health or changing risk behaviors.

It is critical that nurses develop a sound knowledge and understanding of Agrarian culture to foster the development of culturally congruent care rather than alienate the cultural group with insensitive remarks or care. Through increasing our knowledge of Agrarian culture, which includes the health beliefs and practices of older farmers and
their family, nursing is in a prime position to implement primary, secondary, and tertiary prevention with this population to maximize their health.

**Orientational Definitions**

1. **Agrarian**: The rural subculture comprised of individuals and families that earn their living through the production of crops and/or raising livestock.

2. **Care**: Is the essence of nursing and a distinct, dominant, central, and unifying focus and is essential for well being, health, healing growth, survival and to face handicaps or death (Leininger, 2001, p. 44).

3. **Culture**: The learned shared and transmitted values, beliefs, norms, and lifeways of elder Agrarians that guides their thinking, decisions, and actions in patterned ways (Lieininger, 2001, p. 47).

4. **Cultural congruent care**: Individual, group, family, community, or culture care values, expressions, or patterns are known and used appropriately and in meaningful ways by the nurse with the Agrarian elders (Leininger, 2001, p. 45).

5. **Elder**: Individuals who are of 65 and older.

6. **Emic**: People-based perspective, which is the local or inside view of elder Agrarian culture regarding health beliefs, values and practices.

7. **Etic**: The outsiders view of a culture. This can include individuals who care for elder Agrarians such as clergy, physicians and nurses who may or may not be members of the culture.

8. **Rural**: A population density of less than 2500 people in a specific geographic location.
Assumptions

It is assumed that:

1) Individuals who engage/d in the occupation of farming throughout their adult lives have a shared or similar cultural belief and value system.

2) There is a relationship between one’s culture and health beliefs and practices.

3) There are Agrarian cultural values and beliefs that are different from those of rural culture in the upper mid west.

4) Participants will be honest in their discussion of their values, beliefs and behavior.

Limitations

The limitations of this proposed study are:

1) The findings of ethnonursing research are not generalizable to the population, however they may be transferred.

2) Each generation or age cohort may become a subculture within itself based on shared life changing events such as wars (World War II, Korea, Viet Nam) or economic crises (such as the Great Depression or farm crisis). It is possible that findings may not be transferred to younger age cohorts as they age as the significant events are history to them rather than lived experiences.

Summary

American farm families are aging at a faster rate than America as a whole. At present 50.1% of all American farmers are over the age of 55. As we age we are more likely to experience acute and chronic illness related to physiologic changes our bodies undergo. Coupled with the high risk for injury and illness that farming entails these
elders are at very high risk for health problems. Health care providers know very little about Agrarian culture and how to best provide culturally congruent care and health promotion with this population. The knowledge gained with this qualitative ethnonursing research study will help nurses and other healthcare providers overcome stereotypes and truly understand this cultural group as well as plan, implement, carry out and evaluate culturally congruent care rather than continue to alienate this group.
II. REVIEW OF THE LITERATURE

Rural Aging and Culture

The concept of rural requires definition. In general “rural” refers to a population density of less than 2500 people in a specific geographic location whereas the term “urban” refers to an area that has a minimum of 50,000 or more people. To confound population density definitions there are the terms metropolitan and non metropolitan as well, these are not the same as rural and urban. A metropolitan area is defined as an area with a minimum of 50,000 people. A non metropolitan area is made up of counties outside of a metropolitan area. (Eberhardt, Ingram & Makuc, 1993) Based on the definitions of rural and non metropolitan it is very evident that these can have two very different population densities yet they have significant overlap as well. A rural area is also a non metropolitan area but not all non metropolitan areas are rural. It is important to understand these definitions as some statistics are reported with the rural/urban dichotomy and others are reported with the non metropolitan/metropolitan one. In addition there can be sections of a metropolitan area can be designated as rural.

Rural aging is an important issue because in general as the population density decreases the elderly population percentage increases. Data from the 2000 census in presented in Table 1. It is evident that there is a difference between the urban/rural and the metropolitan/non metropolitan dichotomies in regard to population statistics. The data indicates that the highest percentage of individuals over the age of 65 live in urban portions of non metropolitan areas in the United States as a whole as well as in the State of Minnesota. There is a striking difference between metropolitan and non metropolitan areas and the percent of the population that is elderly in Minnesota. Even though the
overall elder population percent is only 12.1 percent, slightly below the national average, 16.5 percent of Minnesota’s non metropolitan population and 10.2 percent of the metropolitan population are comprised of the elderly.

Table 1: Percent of population over the age of 65 (U.S. Census Bureau, 2000).

<table>
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<th>Geographic Area</th>
<th>United States</th>
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<td>Percent of population</td>
<td>12.4</td>
<td>12.1</td>
<td>14.2</td>
</tr>
<tr>
<td>Urban</td>
<td>12.3</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>12.8</td>
<td>13.7</td>
<td></td>
</tr>
<tr>
<td>In Metropolitan Area</td>
<td>11.9</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>12.3</td>
<td>10.3</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>11.3</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td>Not in Metropolitan Area</td>
<td>14.7</td>
<td>16.5</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>15.5</td>
<td>17.1</td>
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<tr>
<td>Rural</td>
<td>14.1</td>
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There are factors in addition to a higher percentage of the rural population being elderly that make it important to know about this population. The non metropolitan elderly have been shown to have a higher rate of poverty than their metropolitan counterparts so much so that up to “one-half of non metropolitan elderly are in poor, near-poor, or low-income families (Eberhardt, Ingram & Makuc, 1993, p. 4).

The availability of health care varies significantly from one rural area to another. Rural elders are more likely to need to travel at least 30 minutes to reach their health care
provider and more often have to wait longer to see the provider once they arrive. This is not the case in the county of interest. There is a clinic in the county seat as well as two other cities within the county. A regional medical center is in the county directly to the west of the County and a large tertiary Medical Center is located approximately one hour to the west of the County. Access to health care can be limited due to transportation issues. There is not a mass transit system in this rural region. There are medical transportation vans that will go to the rural communities. However this service can be expensive.

The non metropolitan elderly are more likely to report their health as poor or fair than metropolitan elderly (Eggebeen & Lichter, 1993). No difference has been found in difficulty with activities of daily living or health promotion behaviors such as not smoking, diet, alcohol consumption, being overweight or activity level between metropolitan and non metropolitan elders (Eberhardt, Ingram & Makuc, 1993)

Research on rural culture has found differences between rural and urban culture. Some themes found were the values of individualism, independence, self-reliance, traditional values such as family and love of God (Sellers et. al., 1999). A key concept of rural culture is defining health as the ability to work (Bigbee 1993; Long & Weinert, 1989; Pierce 2001; Sellers et. al., 1999; & Weinert & Burman 1994). Elderly rural residents have been found to be more likely to take no action or ignore symptoms than urban elderly (Stoller & Forster, 1992).

Trust is another concept in rural culture which ties in with the concept of insider/outsider. In rural culture people who are known (insiders) are trusted more than those who are unknown (outsiders). This is especially true of health care providers.
People tend to trust the opinion of an older doctor who they know over a specialist whom they do not know. “Rural dwellers may “resist accepting help or services from those seen as outsiders” (Bigbee, p.140) Vissing et al. (1994) identifies that, in contrast to professional health care culture which is based on expertise, rural culture is based on trust and low status authority.

Rural dwellers tend to seek care through informal systems such as family, friends and the church rather than formal resources or health care professionals (Bigbee 1993; Bushy 1990; Long & Weinert, 1989; Congdon & Magilvy, 2001). Lee (1993) found that rural elders showed a greater dislike of going to the doctor as they got older. Fewer non metropolitan elders use home care services than metropolitan elders (Eberhardt, Ingram & Makuc, 1993). The use of informal over formal resources may be related to limited availability of formal services, a cultural resistance to use them, cultural value of helping each other or a combination of these. Rural culture also values independence and self reliance. If one depends on informal rather than formal resources for care the elder may still feel self reliant.

Rural people value helping one another (Pierce, 2001) through assisting with such things as transportation, meals or companionship. An additional factor is that “rural elderly are significantly more likely to be involved with family members” (Eggebeen & Lichter, 1993, p. 94). The belief exists that rural elders do not need formal care due to the extent that informal care is there for them more so than for their urban counterparts. Coward and Cutler (1989) identify that there is no evidence that rural elders receive more informal care than urban elders do. Schultz (1997) compared the needs and utilization of resources of urban and rural elderly clients at the time of hospital discharge, three days
and three weeks after discharge. An interesting finding of this study was that at the three week mark the urban elderly had more informal assistance from friends and family members than the rural participants yet the rural participants identified a higher functional need. This directly opposes the belief that rural elders receive more informal care. One explanation for this phenomenon is related to the urban migration of family members seeking employment leaving the elder without family in the community.

Religion, faith in God and spirituality are very important in rural culture (Arcury et al. 2000; Congdon 1998; Davis & Magilvy 2000; and Sellers et al. 1999) to the point that “religion has a more central role in the belief systems of people who live in more rural places than in the culture of people who live in more urban places” (Arcury et al. p. 56). In contrast to health being defined as the ability to work rural elders also incorporate the concept of mind, body and spirit with their definition of health. They perceive a relationship between their spirituality and their physical health (Arcury et al., 2000, Armer & Conn, 2001 and Congdon, 1998).

Demographics of American Agriculture

An understanding of the demographics of American Agriculture and how they have changed are very important in the understanding of rural and Agrarian culture. In 1850 there were 1,449,000 farms in the United States with an average size of 203 acres. By 1880 this number had grown to 4,009,000 farms with an average of 134 acres. At that time 43.8% of the population lived on farms in the United States. By 1910 the percentage of the population that lived on farms had declined to 34.9% and 15.3% by 1950. During the next three decades there was a significant decrease in the percent of the population that lived on farms in the United States, in 1960 8.7%, 1970 4.8%, and 1980
2.7% (Albrecht & Murdock, 1990). These declines are related to technological advances in agriculture and economics, which will be discussed in depth at a later time. The average size of a farm in the United States was 443 acres in 2004 (United States Department of Agriculture, National Agricultural Statistics Service, 2005, table 9-2). By 2004 there were over 2.11 million U.S. farms, which is a .6% decline from 2003 (United States Department of Agriculture, National Agricultural Statistics Service, 2005).

When looking at government statistics regarding farms it is important to know their definition of a farm. A farm is defined as “any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year” (Gale, 2000, p. 38). In 1997 the tracking responsibility was transferred from the Census Bureau to the USDA’s National Agricultural Statistics Service. At that time they implemented the North American Industrial Classification Standard, which increased the number and type of operations that are counted as farms. For example if an individual had five or more horses even without $1,000 in sales their land was counted as a farm (Gale, 2000).

The number of farms and individuals or families engaged in farming continues to decline. In 2002 individuals engaged in farm production occupations accounted for 1.84% of the employment in the United States and 6.49% of the non-metropolitan employment. Of the 1.84% farm proprietors made up 1.31% and farm wage and salary workers made up .53%. In non-metropolitan regions of the United States farm proprietors make up 5.17%, and farm wage and salary workers make up 1.3 % of the workforce. Total farm and farm related employment make up 14.28% of total employment in the U.S. as a whole and 21.21% of employment in non-metropolitan
regions. In the state of Minnesota farm production accounts for 2.91% of the total employment of which 2.41% are farm proprietors and .49% are farm wage and salary workers. In non-metropolitan regions of Minnesota 8.4% of the total employment is related to farm production of which 7.06% are farm proprietors and 1.34% are farm wage and salary workers. Total farm and farm related employment is 15.37% overall and 23.96% for non-metropolitan regions of the state of Minnesota (United States Department of Agriculture, Economic Research Service, 2005). According to the U. S. Census Bureau 2000 census of population and housing 0.7 percent of the population in Minnesota and 1.4% of the population of Waseca County were engaged in farming, forestry, and fishing occupations, which is slightly lower than the non-metropolitan average for the state of Minnesota. In contrast 2.6 and 5.2% were engaged in the Agriculture, forestry, fishing and hunting, and mining industry respectively (2005).

Twenty-four percent of the population in the United States resides within the twelve North Central states, which includes the state of Minnesota. This region accounts for 41 percent of the nations farms and 42 percent of the nations agricultural output (Lasley, 1995). From an agricultural production standpoint the state of Minnesota is split into north and south with the southern half of the state being included in the Corn Belt.

It is interesting to note that while farmers presently account for two percent of the population, according to the U.S.D.A. “farmers, ranchers, and private forest landowners own and manage two-thirds of the Nation’s land and are the primary stewards of our soil, air, and water (United Stated Department of Agriculture, 2001).

When looking at the organizational structure of American farms it becomes evident that the vast majority (88%) have sole proprietorship by an individual or a family.
Of those farms 57% have farm sales of less than $10,000 per year, 6.8% have sales between $50,000 and $99,000, and 7% have sales greater than $1,000,000 annually. Partnerships account for 5.6% of farms, corporations account for 3%, and family held account for 2.7%. Of the corporate held farms 14.5% have farm sales of less than $10,000 per year, 10.9% have farm sales between $50,000 and $99,000 per year, and 12.8% have sales over $1,000,000 per year (Statistical Data for agribusiness and the study of agriculture, 2001).

The demographics of American agriculture make it evident that farmers are primarily a Caucasian and aging occupational group. Caucasians make up 96% of American farmers, followed by 3.7% black or other races. Hispanic or Latino individuals make up 1.7% of American farmers. (Statistical Data for agribusiness and the study of agriculture, 2001)

As mentioned earlier there are very few young farmers. To put this low percentage of young farmers in perspective the percentage of principal operators with average ages of less than 35 years has been declining since 1982, when it was 15.9 percent, and was only 5.8 percent in 2002 (Allen & Harris, 2005). The United States Department of Labor counts more young farmers than the Census Bureau because the Census Bureau only counts the senior partner or person in charge when calculating farm statistics. When looking at the United States Department of Labor they identify 15% of farmers under the age of 35, 39% over the age of 55 of which only 18% over the age of 65 (Beale, 2000).

It is not a new phenomenon to see a high percentage of older farmers. Looking back over the last 30 years the median age of farmers utilizing United States Department
of Labor estimates have ranged from a high of 53.4 years in 1970 to a low of 47.7 years in 1984. From 1970 to 1984 the median age of farmers steadily declined, however from 1984 to 1998 the median age steadily increased, and stood at 50.1 years of age in 1998 (Beale, 2000). Regardless of whether one uses the United States Department of Labor or the Census Bureau data it is evident that within the last 15 years there has been a decline in the number of young farmers and an increase in the number of older farmers. It will be interesting to watch the percentages as the baby boomer generation, who are now in their mid 40’s and 50’s enter the older farmer statistical pool.

Ethnohistory of Agrarian Culture in the US

Technological Factors

There have been major technological changes in farming over the last two centuries, which began in the early 1830’s when the industrial revolution was applied to agricultural practices (Bogue, 1963). At that time equipment consisted of “a wagon or cart, a couple of plows, a harrow, axe, shovel, scythe, cradle fork, and rake … add a pair of oxen, with yoke and chain, or a team of horses and their harness, and the farm-maker was “tolerably well fixed” (Bogue, 1963, p. 148). Farming in the 1800’s and early 1900’s was very labor intensive with most of the work being done by hand or with the help of oxen or horses.

During the twentieth century there were two primary phases of technological advancement in agriculture, which resulted in “increased farm size, productivity, and efficiency” (Cordes, 1989, p. 770). The first phase according to Cordes (1989) was “mechanical (e.g., replacing horses with tractors); the second phase was chemical (e.g.,
the introduction of chemical fertilizers and herbicides, and the next phase likely will be biological” (p. 770).

The first phase or mechanical revolution began during the late 1800’s or early 1900’s. In the late 1800s the threshing machine and silo loading equipment were introduced. Often the equipment was owned cooperatively by a group of farmers or the equipment was shared with neighbors. Thus the introduction of this equipment did not decrease the amount of cooperative work that occurred between neighboring farmers (Pederson, 1992, p.153).

During the 1920’s farmers began to purchase tractors to the point that they “bought almost a million tractors in the 1920”s” (Bovard, 1989, p. 17). Tractors as a means to mechanize farming became increasingly popular among farmers. According to Pederson (1992) in one Wisconsin county there were not any farmers who owned a tractor in 1920 and by 1930 18 percent of the farmers in the county had one. By 1950, 45 percent of the farmers had a tractor and by 1970, 90 percent had one. Tractors allowed for “a revolution in productivity and a sharp decrease in production costs” (Bovard, 1989, p. 17). Following the introduction of the tractor, the combine, which is used in the harvest of grains was soon introduced.

The introduction and utilization of tractors and combines changed not only the labor intensiveness of farming. They changed the interdependence of work as well. Prior to the introduction of the combine farming was an interdependent process with farmers helping each other to harvest crops. Neighboring farmers would get together at harvest time to thresh grains together. Many families, including men, women, and children would all work together to get the harvest completed (Pederson, 1992). The combine
made the harvest process much less labor intensive and brought an end to the threshing bee. At this point farmers became independent from their neighbors in the harvest process.

Machinery continues to evolve on farms. Modern tractors and combines are much larger than their predecessors of the 1920’s and 30’s. Modern tractors have cabs, which enclose the operator, protecting them from the elements, buffering engine noise, and potential protection from chemicals being sprayed. In addition, the cab protects the operator in rollover situations and protects passengers such as children from falling off of the tractor and into the path of the tractor tires and the implement being pulled.

Combines are becoming a high technology piece of equipment. Caterpillar for example has designed a Laser Pilot small-grain header guidance system for combines. With this system the “Laser-Pilot sweeps a laser back and forth to sense height, color and heat differences along the edge of harvested small grains” (Wenzel, 2001, p. 892). The system then sends a message back to the combine’s auto-pilot. These technologies are very expensive with a tractor guidance system alone costing between 20 and 50 thousand dollars.

The next phase of major technological development in agriculture in the twentieth century was chemical. Farmers increasingly used chemical herbicides, insecticides, and fertilizers to increase their yields. The green revolution occurred during the 1960’s. Through experimentation with seed varieties there were increased yields with certain wheat varieties (Rosset, Collins, & Lappe, 2000). This increase in yield was related to the seeds being more sensitive to fertilizers. Advances continue to occur in seed varieties to increase yield, resist disease, and make them more sensitive to chemicals. According
to Rosset (2000) “improved seeds combined with chemical fertilizers and pesticides have pushed corn yields up nearly three-fold since 1950” (p. 55).

In the 1990’s Monsanto developed a seed variety called roundup ready soybeans. Roundup (glyphosate) is a broad spectrum herbicide that kills most weed varieties that grow in soybean fields. Unfortunately it also kills soybean plants. Roundup ready soybean plants are unharmed by roundup. By planting this seed variety farmers were able to decrease their production costs and potentially increase net income. Within just a few years after their release onto the market farmers had adopted this technology to the point that “roundup ready soybeans were planted on the majority of U. S. acreage planted to soybeans” (Bullock & Nitsi, 2001, p. 1283). It is of interest that “Monsanto has requested and received from the EPA a tripling of the allowance for glyphosate residue on harvested crops” (Holdrege & Talbott, 2001). From a healthcare perspective the adoption of this technology is alarming because “glyphosate has been linked to non-Hodgkin’s lymphoma” (Holdrege & Talbott, 2001, p 37). Therefore there may be direct health consequences of adopting this technology not only for the farmer, but for their entire family who are exposed to the chemical residue.

In the past chemicals were spread over an entire field, now global-positioning satellite systems can “calculate the nutrient content of the soil and transmit the information” (Jones, 2000, p. 13) to a receiver on chemical spraying equipment. This allows for variable chemical spraying, adjusting for the needs of the plants. Finck found that of the 452 farmers interviewed, 19 percent are currently using global positioning satellite systems and 90 percent intend to adopt it within the next five years (1996, p. 24).
The primary reason for adoption of this technology is economic in that it can decrease costs and increase productivity.

The latest phase of technology is biotechnology. According to the United States Department of Agriculture “the development of agricultural biotechnology offers the opportunity to increase crop production, lower farming costs, improve food quality and safety, and enhance environmental quality” (Caswell, Fuglie, & Klotz, 1994, p. i). Examples of biotechnology are the milk enhancer bovine somatotropin, and vine ripened tomatoes. Ultimately the consumer’s acceptance of biotechnology rather than the farmer’s will determine the extent that agricultural biotechnology developments continue in the United States. If the consumer is not willing to purchase a biotechnology product, the farmer will not have a market in which to sell it, thus they will not continue producing it (Caswell et al., 1994).

In summary, there have been tremendous technological advances in the last century in American agriculture. The farmer’s decision to adopt technology is often tied to economics. Adoption of technology is not without consequences. The introduction of machinery increased productivity and independence yet also led to decreased social interaction with their peers. The introduction of chemicals and biotechnology may have long-term human health consequences.

**Religious and Philosophical**

There is limited information in the literature specific to spirituality or religion and farm families. Two studies that focused specifically on culture and farming identify that spirituality is an important part of the lives of many farm families. Stitz (1983) found that most of the farmers that participated in this study were members of a church and that
the church served two roles in the lives of the farm families. The first role was that the church brought people in the community together socially. The second role the church played was that “churches helped farmers to remember that they have a relationship to God and that relationship was basic to their life as farmers. They could not farm without God’s help” (Stitz, 1983, p. 218). For the farmers in this study God served many roles in their personal and professional lives as “they depended upon God for wisdom to know how to farm, for favorable weather for their crops, and for his help in solving their problems” (Stitz, 1983, p. 218).

Johnson (1994) studied life satisfaction of rural farm women in Minnesota. A theme she found in her study was the importance of faith and belief in God. The women felt it was a big part of their lives. In addition to their own spirituality the women verbalized hopes that their children would also adopt their spiritual beliefs. The women identified a link between their lives on farms and their spirituality in that “their lifestyles, work, and concept of stewardship were means of religious connectiveness” (p. 80) and “not only did the women value their religious beliefs but also felt their lifestyles had been advantageous to strengthening their religious affiliations” (p. 93).

**Kinship and Social Factors**

Family ties and relationships are very important in farm family culture. In many farm families work is shared between couples and multiple generations. This is not without conflict. According to Sharrow (1990) “the principle problem among generations, however, ultimately comes down to the issue of who’s in control. Two households working side by side, each with their own set of needs, expectations, and
ideas about how things should be done, are in a position where conflict is difficult to avoid” (p.192).

In farm families the husband and the wife often share in the running of the farm. Barlett (1993) identifies two marital models among farm families; the Agrarian Marital Model and the Industrial Marital Model, which are different in many ways. The Agrarian Marital Model holds to the following characteristics:

“Husband and wife are partners in the family farm enterprise and both share financial responsibilities; Wife’s personal aspirations are linked to farm success; Wife has emotional attachment to the farm and farm life; Leisure and companionship goals reflect a unity of farm and family; When wife has a job, incomes are pooled, reflecting joint responsibility”

In contrast the Industrial Marital Model holds the following characteristics:

“Husband has primary financial responsibility as breadwinner, wife has primary responsibility as homemaker; Wife’s personal aspirations emphasize family consumption, caretaking, and children’s achievements; Wife has little emotional attachment to farming except from a desire to support her husband; Desired leisure activities and companionship with husband may conflict with farm responsibilities; When wife has job, earnings are her discretionary fund, reflecting husband’s primary responsibility for finances” (p. 142).

These models appear exclusive, however, Barlett, (1993) found that farm women “perceive themselves to be in a world of conflicting expectations about marital roles and struggle to find a path through these values and demands” (p. 140).
The post World War II era saw a dramatic change in the mechanization of farming and thus a decrease in manual labor. During this time there was a dramatic decrease in family size. Barlett (1993) notes that in one generation after WW II family size decreased from 7, 8, or even 10 children to two children.

Farm family culture has traditionally valued community connections and neighborliness. Stitz (1983) examined values in three age groups as part of his study on farm family culture. He found that older farmers (over age 65) valued neighborliness more than younger farmers, yet it was still perceived as important by the younger farmers. The older farmers attributed the change to the post World War II time period when more machinery allowed farmers to work more independently from each other.

Cultural Values and Lifeways

The family can be attributed to instilling cultural values and beliefs in farm families. Sharrow (1990) found that “in their observations on work, most farmers credit their attitude on their upbringing” (p. 115). Stitz (1983) also found that the family was a means to carry on the cultural values of farming.

Farming as a Way of Life

Farm families perceive farming as a business and as a way of life that is very important. Johnson (1994) found that farm women echo this sentiment and “of particular satisfaction was the aspect of spending time together as a family and having the children enjoy the farming lifestyle and business” (p. 74).

The farmers in the study completed by Stitz (1983) had strong feelings regarding the business of family farming in that “the farmers believed that all farmers should accept the ideal and practice it” (p. 214) in contrast to corporate farming. Many of these farmers
had family motives for farming, that is, they farmed for “the sake of their family and their children” (p. 219). The younger farmers in this study also valued family life but they “emphasized that farming was a business and they wanted more than anything else to turn a profit” (p. 220).

**Work**

Farm family members have a very strong work ethic. Johnson (1994) found that “the women’s approach to work and business conveyed strong convictions of ‘working hard’, completing tasks to the best of one’s ability, and learning from challenges” (p. 93). Sharrow (1990) also found work to be a value in the culture of farm families to the point that “many farmers comment on the pleasure they take in work and feel the need to always be busy” (p115). One farmer in this study commented, “there’s nothing I’d rather do than work. Besides, it doesn’t seem like work. It’s part of my daily schedule” (p. 116).

The routine of work becomes such a part of their lives that “for older farmers the work becomes so much a part of their life that it can be traumatic, both psychologically and physically, to try to give it up” (Sharrow, 1990, p. 213)

Pierce (2001) explored the impact of rural culture on health. The participants (who were all women) “felt that rural men, especially farmers, were even more close-mouthed than women” (p. 52) in regard to health concerns. This was attributed to gender roles in that men needed to work thus they were unable to focus on or attend to their health needs.
Optimism

Farming as an occupation and a lifestyle is unpredictable at best. It is very dependent upon factors that the farmer has little or no control over such as the weather or the market price of milk or corn. To cope with the uncertainty of farming they have developed optimism or hope as a coping strategy. One of Johnson’s (Johnson, 1994) participants stated “as a farmer, you have this eternal optimism that it will get better. It will get better. And that’s how you keep going” (p. 94). Stitz (1983) found hope and desire to keep farming in the participants in his study even when they knew that they would not be able to continue farming due to the economics of agriculture.

Independence

Farmers are known for their independence. It is a very strong value in farm family culture. Stitz (1983) found that “the majority felt that personal freedom in making decisions was central to their type of farming operations. They feared outside interference as an infringement upon their freedom” (p. 216). Independence or the lack thereof ties in with economics in that “farmers literally have no voice in setting prices for their products” (Stitz, 1983, p. 217) which can decrease their sense of independence.

Time

There are not any sources that specifically address how American farmers view the concept of time. This author believes but could not substantiate that for farmers the concept of time is closely related to the work that must be done. For example in Southern Minnesota the month of April typically marks the beginning of the planting season and September marks the beginning of harvest. Time is not measured in hours but rather acres planted or harvested. It is not uncommon for farmers to work long into the night in
the fields, sleep for a few hours and return to the fields until planting or harvest is done. It is literally a race against time to get the crop planted in the spring to guarantee a long enough growing season and out in the fall before the snow starts flying.

The concept of time in relation to farm culture and health could only be found in one source. Stein (1982) speaks to the phenomenon in which farmers do not seek out health care during peak seasons such as planting and harvest. Although the farmer may recognize that they have a health problem they rarely seek out health care at that time. He found that wheat farmers utilized health care services the most following the New Year when fieldwork and the holiday season are over. Stein (1982) attributed this peak in utilization by farmers as “one may at this time assume the illness role with relative impunity” (p. 88). This could indicate that the farmers place a higher value on work or task completion than on their health.

*Land*

Land is a very important concept for farmers and has multiple meanings for them. It is a means of income, is tied to their independence, and connects them to their ancestors and personal history. Farm families also have a strong sense of stewardship toward the land. Johnson (1994) found that farm women “viewed their connection to the earth as analogous to being a mother figure who tended to the land and provided for the people” (p. 79). Stitz (1983) found that “the family farmer held a special interest in the land and was more likely to treat it with respect and preserve it for the next generation” (p. 214).

Land is also seen as a legacy for one’s children. Stitz (1983) found that older farmers identified leaving their land to their children as their motive for farming. In
contrast, due to the economics of farming younger farmers did not see much hope of being able to leave the land to their children, rather the farm was seen as a place to live and raise their children (p. 219-220).

Salamon’s (1992) study of farm family culture identified that land is sacred, is strongly linked to one’s identity, and that it becomes a part of them (p. 101). Salomon identifies two basic approaches to family farming, the yeoman, and the entrepreneur. The yeoman is concerned with continuity and tradition whereas the entrepreneur is more concerned with the business aspect of farming. Yeomen see the land as a sacred trust, desire to keep the land in the family by producing at least one heir who will take on the farm, prefer to own land, and have smaller than average operations. Entrepreneurs in contrast see land as a commodity, are not specifically interested in producing an heir, tend to own and rent land, and have larger than average operations.

*Political and Legal Factors*

Stitz (1983) found that the farmers “distrusted the federal government and representatives of big business especially the grain trade” (p. 216). Some farmers choose not to participate in federal farm programs. According to Barlett (1993) “their resistance represents a desire to remain independent from federal control and from the bureaucratic intrusion into operators’ plans, budgets, and time” (p. 118).

Lobao and Meyer (1995) analyzed the political involvement of farmers and their spouses following the farm crisis of the 1980’s. It was found that farmers and their spouses were most likely to be involved in traditional farm organizations (Farm Bureau, National Farmers Organization, or National Farmers Union) followed by commodity producer’s associations (American Dairy Association or National Wheat Producers
Association). Prior to the farm crisis 15% of men and 11% of women were members of national farm organizations, by 1989 49% of men and 39% of women were members. This reflects a significant increase in membership during the severe economic stress of the farm crisis. It is interesting to note that only 6% of women and 14% of the men were involved in a local governing board such as a school board or town council demonstrating limited involvement in local politics (Lasley, 1995, p. 189). It was found that “in contrast to the belief that farmers as a group became more politically active, rates and patterns of activism showed little variation from those of pre-crisis years” (Lasley, 1995, p. 201).

**Economic Factors**

The economics of farming like many businesses is very complex. A major difference between farming and other production industries is that “farmers buy their inputs on a retail market and sell their product on a wholesale market … what it means is that farmers are price takers when they purchase their inputs and when they sell their products” (Garkovich, Bokemeier, & Foote, 1995, p. 119). To adjust for this farmers respond by increasing the production of their products, often with the use of chemicals or technology, which increases the cost of production. “Since World War II, as larger harvests have pushed down the prices farmers get for their crops while the costs of farming have shot up, farmers’ profit margins have been drastically narrowed” (Rosset et al., 2000, p. 54). Thus, farmers are producing more agricultural products yet are not reaping the benefits of higher net income. At present production costs account for over 80 percent of gross farm income in contrast to 50 percent at the end of World War II. (Rosset et al., 2000, p. 54).
The history of American agriculture demonstrates boom and bust periods. In the 1920’s farm prices decreased. By the early 1930’s farm prices were so low that “the cost of freight on a bushel of wheat shipped from Hayes to Kansas City was higher than the nineteen cents a bushel farmers received at the local elevator” (Stitz, 1983, p. 204). After World War II farming entered a boom period that lasted until the early 1960’s. During this boom period “land was reasonable, equipment was high but not too high, and interest rates were still reasonable” (Stitz, 1983, p. 206). During this timeframe farmers expanded their operations. The mid 1970’s began a bust period in farming which continues today.

It is becoming increasing common for at least one member of a farm family to work off of the farm to supplement the farm income. According to Lasley (1995) “the Midwest is the region in which the most farm families depend exclusively on their farms for their livelihood” (p. 40). In 1988 48.3 percent of North Central Region farm family income came from farming, 36.1 came from off-farm employment, and 14.8 percent came from other non-farm income in families with less than $100,000 annual income. In contrast families with greater than $100,000 annual income had 83.8 percent of their annual income come from farming, 11.8 percent from off-farm employment, and 4.3 percent from other non-farm income in the North Central Region of the United States. (Lasley, 1995,p. 56). Between 1974 and 1997 “the number of farmers who listed their primary job as farming declined 33 percent (Davenport, 2000, p B 1).

Off-farm income represents more than supplementation of the families annual income. For the smaller farms ‘evidence shows that operators’ off-farm income is being used in fact to subsidize the operating losses of a farm” (Lasley, 1995, p.49). In addition
many farm families will have one member off the farm for the fringe benefit of health insurance according to Ted Haas who is a regional agronomist (Davenport, 2000, p. B1).

The 1980’s bust period has been termed “the farm crisis” and continues to impact farming today. There were many factors involved in creating the farm crisis. One aspect is the international market for American agricultural products. American farmers produce more product than is consumed in the United States. Part of the excess agricultural product is sold internationally. During the early 1980’s there was close to a 50 percent decline in the value of U.S. agricultural exports. This decline was due to the fact that “the dollar was strong and U.S. farm policy moved commodities into public stocks rather than into export channels” (Langley, 2000, p. 3). In addition to the falling prices of commodities according to Little “there was double digit inflation and double digit interest rates” (as cited in Durham & Miah, 1993, p. 9). This combination of falling prices coupled with increasing costs of production made it very difficult for many farmers to survive economically. It was during this time that according to Stam 8 to 12 percent of those who were farming in 1980 went bankrupt, were foreclosed, or experienced financial restructuring during the decade (Lasley, 1995, p. 185). The 1980’s farm crisis “was not shared equally by all rural regions of the country; the effects were borne disproportionately by farm families of the Midwest” (Lasley, 1995, p. 40).

Farmers continue to be influenced in their business decisions today by what they lived through at that time.

Farm revenue is unpredictable. The farmer has no control over the weather or foreign or domestic markets which can significantly impact their net income. For example between 1997 and 1999 there was a 23 percent decline in the value of American
agricultural exports. This decline was related to oversupplies in exporting countries and decreased importation from countries that were experiencing economic crisis. (Langley, 2000, p. 3).

Farmers presently are not making much more than they did in the late 1970’s. In 1977 the average net income for Minnesota farmers was $13,861. The farmers produced 100 bushels of corn per acre receiving $1.90 per bushel, and produced 35.5 bushels per acre of soybeans receiving $5.90 per bushel (United States Department of Agriculture: National Agricultural Statistics Service & Minnesota Department of Agriculture, 1982). In contrast, in 2001 the last year that data is available the average net income for Minnesota farmers was $8,804, $16,458 in 2000, and $15,410 in 1999 (United States Department of Agriculture: National Agricultural Statistics Service & Minnesota Department of Agriculture, 2003). In 2003 Minnesota farmers produced 157 bushels of corn per acre receiving $2.10 per bushel, and produced 36 bushels per acre of soybeans receiving $6.57 per bushel. In 2002 the market prices for corn were slightly higher with corn receiving $2.30 per bushel, and soybeans slightly lower receiving $5.19 per bushel (United States Department of Agriculture: National Agricultural Statistics Service & Minnesota Department of Agriculture, 2005). Upon reviewing these income statistics it is evident that the average farmer in Minnesota is not reaping the economic benefits of their hard work, they are receiving very similar prices for their product that they did nearly 30 years ago.

Following close to 30 years of low net income retirement may not be an option for aging farmers. Low net income translates into low social security payments throughout their careers and difficulty or inability to save for retirement. As most
farmers are self-employed they do not have the option to buy into corporate retirement plans such as 401 K plans. Once they reach retirement age the economic reality of low social security income may require that they continue farming.

**Educational Factors**

Farming is an occupation that is primarily learned through growing up on a farm, sharing in the work, and years of mentorship by family members and neighbors. Children begin farm work at a young age with assigned chores and tasks. According to Wright (1993) “as soon as farm children are mobile, we as parents start teaching where to stand, what to do, and what not to do” (p. 256) in relation to farm safety. Children growing up in farm families also learn the role of the farmer through involvement in organizations such as 4-H or Future Farmers of America.

As farming is a business and has become increasingly complex a college education is becoming increasingly important. Some young farmers opt to stay on the farm and learn the role through mentorship with their parent. “Others are encouraged by their parents to go to college, because they recognize that increasingly, success in farming depends on acquiring all the technical and business management knowledge that is available (Garkovich et al., 1995, p. 69).

American farming is often a multigenerational family run business. Young farmers continue to learn the role on the job with the older family members mentoring them. Keating (1996) investigated legacy, aging, and succession in farm families. It was found that over time the senior partner gradually gave more management decision making to the junior partner (usually an adult child) in the farm operation. Typically the junior partner was given freedom to make decisions about planting and harvest, followed
by marketing decisions if the senior partner agreed that wise decisions had been made previously. The last responsibility given to the junior partner was financial management. It was found that “many fathers were still actively involved in financial management into their seventies” (Keating, 1996, p. 62). Thus, the mentoring and education of the young farmer continues for a significant percent of a young farmer’s career.

Stitz (1983) found a relationship between educational level and farming behaviors. “As a farmer received more education he was more likely to expand his farm size more rapidly, more willing to go into debt and was more likely motivated by economic or business reasons” (p. 224).

Health and Agrarian Culture

From a healthcare perspective it is important to understand farming and family culture. Farming practices and the introduction of technology on farms has made farming a safer occupation than it was in the early 1900’s. However, farming continues to be an occupation with a very high rate of occupational exposures, illnesses, injuries, and deaths. The elderly are at higher risk than their younger counterparts. Farmers may continue to farm long after the standard retirement age in the United States as a result of their work ethic or as a result of economic necessity following many years of low net earnings.

Occupational Risks

Farming has long been recognized as one of the most hazardous occupations. Health risks on farms are related to machinery, livestock, fertilizer, chemical insecticides and herbicides, sun exposure, grain dust, molds, gases produced in confinement barns, and stress. Illnesses, injuries and deaths can be categorized into; a) respiratory illnesses
b) cancers, c) pesticide toxicity, d) dermatitis, e) musculoskeletal syndromes, f) noise-induced hearing loss, and g) stress-related mental disorders.

For many years farming has placed between first and second for occupational deaths and injuries. According to the National Safety Council (2004) the death rate of the agricultural industry was 20.9 fatalities per 100,000 workers in 2003 placing behind mining which had 22.3 deaths per 100,000 workers. The United States Department of Labor identified that the agricultural industry had a fatal occupational injury rate of 30.1 fatalities per 100,000 employed in 2004 making it the most fatal occupational group. To put this in perspective, the fatality rate for all industries and occupations is 4.1 fatalities per 100,000 people employed. When interpreting these statistics it is important to take into account that the United States Department of Labor does not include farms with less than 11 employees in the data pool. As 88% of all American farms are owned and run by an independent operator or family the data under-represents the number and rate of occupational related injuries, illnesses and deaths.

The rate of occupational injury is also extremely high, so high in fact that “ten percent of all agricultural workers experience a disabling injury each year” (Thu, 1998, p.336). According to the United States Department of Labor data the nonfatal occupational injury rate for agricultural production was 7.6 injuries per 100 full time workers in 2001 (United States Department of Labor, n. d.). Again this data does not include farms with less than eleven employees. As many farmers operate a family farm as a small business they probably would not report their work related injury or illness to the United States Department of Labor. This has the potential of under-representing the data, and the interpretation thereof. When addressing the under-representation of farm
related injury, illness, and death statistics Leigh and Miller (1997) report that farming as an occupation may produce more deaths, injuries, and illnesses in contrast to other occupational groups (p. 1174). The economic burden of farm related work injuries is extremely high and may total up to $4-5 billion per year (Shutske, 1997).

Disability is a significant health risk of farming. Geroldi, Frisoni, Rozzini, & Trabucchi (1996) studied disability and lifetime occupation in the elderly in Italy. They found a statistically significant increase in disability in older farmers as compared to other occupations even when adjustment was made for age, education, and financial dissatisfaction.

Wright (1993) identifies that the young and the old are at higher risk for injury on farms. Children have the same exposures as adults on farms. Children start doing tasks on the farm as soon as they are able “however, children are often doing jobs that they are not physically strong enough to do, and lack the maturity to know what to do if something goes wrong” (Wright, p. 256). Older adults are at risk in part due to the aging process. Factors such as decreased strength, slower reaction time, or taking prescription medications may result in the inability to perform or operate machinery safely (Wright). There is a sharp rise in the incidence of fatal occupational injury in the agriculture, forestry and fishing industry in older workers. In the 45 to 54 year age range there were 21.3 fatal injuries per 100,000 workers between 1992 and 2001 and 62 per 100,000 in the 64 and older group which is more than twice the rate for the 55 to 64 year olds who had a 30.4 rate (National Institute for Occupational Safety and Health, 2004).

In their analysis of data from the Census of Fatal Occupational Injuries from 1992 to 1996 Adekoya and Myers, (1999) found that workers over 65 had a death rate “as high
or higher than the rates reported for all age groups except that for 25- to 34-year-olds” (p. 703). Kisner and Pratt (1997) analyzed National Traumatic Occupational Fatalities data that covered the years 1980 to 1991. They found that workers 65 and older had an occupational death rate 2.6 times greater than found with workers between 16 and 64 years old. The occupational cluster of agriculture, forestry/fishing had the highest percentage of deaths in workers over age 65. The leading cause of death for all age groups was machinery related. Men 65 and older were found to have five times the incidence of machinery related deaths than those between 16 and 64. Additionally, the highest rates by cause of death by industry division for workers aged 65 years and older were observed for machinery-related incidents in agriculture/forestry/fishing (27.2 per 100,000)” (Kisner & Pratt).

Pratt, Kisner, and Helmkamp (1996) analyzed machinery related deaths from 1980 to 1989 and found that “tractors and other agricultural machinery accounted for nearly 9 out of every 10 machinery-related fatalities among workers aged 65 years or older” (p. 73). In addition, individuals over age 65 accounted for one third of all tractor related fatalities. Thus, older farmers are at significant risk in comparison to their younger counterparts for sustaining severe injury or death while operating a tractor or other farm machinery.

Xiang, Stallones, and Chiu (1999) surveyed 113 older (age 60 or higher) male farmers in Colorado, of which 27 reported an injury in the previous 12 months. Farmers in the age groups 75 to 79, and 80 or older had statistically significantly higher injury rates than those who are 60 to 64, 65 to 69, and 70 to 74. For this group of farmers the leading cause of injury was livestock (44.5%). Tractors were identified as causing only
11.1% of the injuries. Statistically significant risk factors for injury were deep debt and taking prescription medications. The types of medications that increased risk were not identified. It was found that elevated injury risks were associated with self-perceived poor health, and having preexisting diseases including back pain, hearing loss, and cancer.

Park et al. (1996) did not find age to be a statistically significant risk factor for work related injury in male farmers in Iowa. They did find a higher prevalence of depressive symptoms and the increased number of hours working with farm animals to be statistically significant risk factors for work related injuries in farmers. Additional risk factors for injury that were not statistically significant were: 1) the presence of previous injury as those who had been injured previously had a 1.7 times increased likelihood of re-injury; and 2) higher economic status as farmers who had incomes greater than $100,000/year had the greatest risk for injury.

It is interesting that depressive symptoms were identified as a statistically significant risk factor for work related injury in farmers. Farming has been identified as a very stressful occupation. Farmers are confronted on a daily basis with stressors in which they have little or no control such as market prices for their product, weather, machinery breakdowns, hard physical labor, unpredictable animal behavior, along with seasonal peaks in their work demands for time and energy.

*Health Seeking Behaviors*

The perception of illness, health seeking behaviors, and the use of formal health care services are culturally constructed phenomenons. According to Kleinman, Eisenberg, and Good (1978) “illness behavior is a normative experience governed by
cultural rules: we learn ‘approved’ ways of being ill” (p. 252). Culture also influences the action one takes as a response to that illness. There is not much information in the literature regarding health care utilization by farmers in the United States. Lee (1993) found that farmers have greater rejection of the sick role and are less worried about their health. In general farmers as a cultural group do not seek out preventative or primary care. When they do present to formal health care systems it is often for the treatment of an injury.

Stiernstrom, Holmberg, Thelin, and Svardsudd (1998) examined the reported health status of farmers and nonfarmers in Sweden. They found total outpatient care visits to be similar between the two groups. The reasons for the visits were very different. The percent of out patient visits for trauma was significantly higher for the farmers. Farmers had “significantly less use than nonfarmers of outpatient health care at any time during their lives for psychiatric disease, neurologic disease, ear-nose-and-throat disease, ophthalmologic disease, gastrointestinal disease and dermatological disorders” (p. 920).

American farmers also seek out professional health care when they have injuries. When exploring risk factors for farm work related injuries Park et al. (2001) found in their study population that twenty-seven of the thirty farmers who had experienced a work related injury in the past year did seek out and receive medical treatment for their injuries. The authors did not identify the time of year when health care was sought out or if there was a delay between the onset of symptoms and accessing the health care system. These are important factors as Stein (1982) identified through his primary care medical practice. There are times of the year when farmers do not seek out health care and times
when they do. As Stein put it “there are times not to act sick even if you are” (p. 88).

Times not to be sick are during planting, harvest, and the fall holiday season (Thanksgiving to New Years). Stein found the greatest use of healthcare by farmers to be following the New Year. At that time “one may assume the illness role with relative impunity” (Stein, p. 88).

Gerrard (1998) found that farmers in England did not feel that their health and safety needs were being met. In part due to the farmers not believing that health care providers had an interest or adequate awareness of farm related health and safety risks. It is interesting to note that 61 percent of the participants in this study did not respond to this question as “they had so little contact” (p. 9) with health care providers.

A vignette of a farmer’s farm-work related injury reported by Long (1993) really highlights a farmer’s perspective on when to seek out health care:

Michael T. is a 61-year-old wheat farmer. … During the harvesting season, he often works parts of his fields alone with the help of rented heavy farm equipment. Two years ago while working in this way, the middle finger of his right hand became caught in a moving part of his equipment while he was adjusting a machine component. He could not pull his finger free and the injury was quite painful. Mr. T. realized that it might be some time before anyone would come to his aid. The weather was changing, and there was need to complete the harvesting work in the field to avoid damage to the wheat crop and prevent additional equipment rental costs. He decided to pull his hand free, severing his finger at its base. He was able to control the bleeding with a tightly bound handkerchief, and he completed harvesting his field. Once returning home
his son drove him to the nearest town, 57 miles away, where he sought care in the hospital emergency room. The physician who saw him was very distressed that Mr. T. had not retrieved the digit and sought care immediately. While dressing Mr. T.’s wound, the physician explained that with prompt action and air ambulance transport to the state’s major medical center, it might have been possible to reattach the finger. Fortunately Mr. T. did not develop infection or other serious complications following his injury. He was able to manage his farm as usual after his injury. When he tells neighbors the story of this event, he often comments, “It simply goes to show you that if you go to those doctors too soon, you end up with lots of unnecessary treatment and bills. (p. 126)

This vignette also highlights some of the differences between the professional healthcare culture and farm culture in regard to the utilization of health care technology as well as the precedence work and economics take over health for the farmer.

Economic hardship can play a role in the delay of access to professional health care for the elderly in all cultural groups in the United States. If one does not have supplemental insurance based on the inability to afford the premiums it is unlikely that they can afford Medicare co-payments or deductibles. In those situations individuals are likely to avoid health care until they can no longer ignore the symptoms whether the need is from an illness or an injury. In their study of nonfatal agricultural injuries among Colorado older male farmers Xiang, Stallones, and Chiu found that “older farmers who were deeply in debt were less likely to seek medical help than their counterparts who were not in debt, even though the medical care was deemed necessary” (p. 7).


Taking on Health Protective Behaviors

Thu (1998) identifies that in the United States education is the primary health promotion vehicle used with farmers. This assumes that there it is a knowledge deficit on the part of the farmer that results in occupational related injury or illness. Thu asserts that this is a faulty assumption. In a study on farmers’ knowledge of agriculturally related health problems Thu found that farmers did know about the health risks of farming but there was not a connection between that knowledge and the use of safety precautions.

Safety knowledge has been shown to play a role in the behavior of farmers. Knowledge alone does not explain or predict behavior in this cultural group. Peer behavior and sources of information play a role as well. Peer influence has been found to be a factor for farmers to adopt other behaviors as well. The United States Department of Agriculture has a Water Quality Incentive Program. This program provides stewardship payments to farmers who implement “environmentally benign production practices” (Cooper & Keim, 1996, p. 54) to protect ground and surface water from contamination. One would think with the economic strains of farming that the farmer would be more likely to change their behavior if given a financial incentive; of course they would need to perceive that they were gaining more economically than losing by changing their practices. One reason identified for farmers not initiating this practice even with the promise of economic reward is that “farmers may be unwilling to adopt the practice unless the farmer sees neighboring farmers adopting it” (Cooper & Keim, p. 54).

Gerrard found that farmers in England were aware of the risks and health hazards associated with farming. The participants identified a desire to get health and safety
Sixty-seven percent reported receiving written information regarding health and safety. Of those only 31 percent identified that they would read the information. Factors that influenced whether or not the farmers would read the information were: 1) the source, were they reliable; 2) how understandable the information was; and 3) if the information was applicable to the farmer’s situation. The authors report, “it was evident that farmers did not perceive printed material to be a particularly effective method of communicating health and safety information” (p. 7).

Chemicals are a source of potential occupation related injury on farms. Chemicals including pesticides, herbicides, and fertilizer are restricted in their use to individuals who have undergone training and passed a certification exam. The Environmental Protection Agency has established guidelines for these courses and exams, which are administered by each state (Perry, Marbella & Layde, 2000). Perry, Marbella, and Layde (1999) explored pesticide safety beliefs, intentions, and behaviors among dairy farmers in Wisconsin. This quantitative study gathered and analyzed data regarding: 1) knowledge regarding content in Wisconsin’s Pesticide Application Training Manual; 2) behavior intentions to use personal protective equipment when using a pesticide; 3) safety beliefs regarding pesticide application; 4) risk perception; 5) peer perceptions of pesticide safety behaviors among farmers they know; 6) self-efficacy regarding confidence to avoid exposure and 7) personal protection equipment use. They found that the participant’s behavioral intent of using personal protective equipment was the strongest factor in the use of gloves. It is interesting to note that “the perception that most farmers discuss pesticide safety with other farmers resulted in a six fold increase in the odds of glove use” (p. 21), which indicates that peer’s behavior may increase the
farmer’s behavior. This is an important concept to keep in mind when developing health promotion interventions to decrease farm work related injuries.

Perry, Marbella, and Layde (2000) went on to study pesticide safety knowledge, beliefs, and intentions among dairy farmers in Wisconsin. They found that “knowledge scores were not significantly associated with perceptions of immediate health risks, of long-term harm posed by skin exposure, and of the overall health risk associated with pesticide use” (p. 189). Participants were given an 18 question test measuring knowledge of pesticide safety. Questions on this test were based on information contained in the Wisconsin Pesticide Application Manual (Perry, Marbella & Layde, p. 188). Associations were made between behavioral intentions and two groups of participants: 1) those who scored 9 to 14 correct on the test (lower knowledge), and 2) those who scored 15 to 18 (higher knowledge). There was an inverse relationship between knowledge and being too busy to use protective equipment. It was found that 32 percent of the individuals who had lower knowledge perceived themselves to be too busy to use the equipment in contrast to 11.1 percent of the individuals who scored higher on knowledge. Another marked difference between the groups was in relation to wearing a chemical resistant suit if the label instructions indicate to do so. Only 55.6 percent of the low knowledge scoring farmers planned to do so, in contrast to 71.2 percent of those who scored higher. This study demonstrated that overall knowledge regarding safety and risks of pesticide application do have an influence with protective behaviors that individual farmers take.
Summary

Through examining each of the rays of Leininger’s sunrise model with American farmers it is evident that there are factors that are unique to them as a group in contrast to American’s as a whole. As with Americans as a whole there has been tremendous change in the technological and economic factors over the last fifty years. For farmers these factors have produced a very high stress working and family environment. Basic farm family structure and roles have undergone transition. Economics have required at least one member to work off of the farm. Farmers continue to be unique in that their occupational work-site is where they also live and play. All members of the family are exposed to health risks on the farm.

At this point it is unclear how all of the factors identified influence the health status, practices and beliefs of Agrarian elders. Through synthesis and review of the literature it is evident that traditional health promotion strategies are not effective with this group and that they tend to underutilize professional healthcare unless there is an injury. There is a significant gap in our knowledge about health and elder Agrarian culture in the rural setting. The next logical step it to discover through rigorous qualitative research the unique cultural view of health, well being and health promotion strategies utilized by this group. The very high personal and economic cost of farm related illness and injuries coupled with the much higher risk posed to older adults who are the majority of American farmers makes this a high priority research topic for nursing. Gaining cultural understanding of this group will help overcome stereotypes and facilitate the delivery of culturally congruent care that does not alienate farm families.
This knowledge is critical for both health care providers and more importantly farm families.

Theoretical Orientation

Leininger’s theory of Culture Care Diversity and Universality will be the guiding framework for this study. Leininger developed this theory from both anthropological and nursing perspectives. The central principle of the theory is that “care is the essence of nursing and the central, dominant, and unifying focus of nursing” (Leininger, p. 35).

The primary purpose of the theory:

- was to discover human care diversities and universalities in relation to worldview, social structure, and other dimensions cited, and then to discover ways to provide culturally congruent care to people of different or similar cultures in order to maintain or regain their well being, health, or face death in a culturally appropriate way (Leininger p. 39).

Leininger identifies that “cultural care knowledge derived from the people, the emic culture knowledge, could provide the truest knowledge base for culturally congruent care so that people would benefit from and be satisfied with nursing care practices” (p. 36).

The emic along with the etic or outsiders view of a culture including nurses knowledge of a culture should be considered together to identify areas that conflict or are compatible.

In addition it is important to understand the culture’s generic or indigenous care. This refers to care that is culturally learned and taught to lay members of the culture to aid them in caring for their members. Leininger believes that in order for nurses to provide culturally congruent care they must identify how a cultures generic care is similar to and different from professional nursing care to identify potential areas of conflict and support.
Leininger has developed a Sunrise Research Enabler formally called the Sunrise Model to depict the theory and guide researchers to fully understand cultural groups. The Sunrise Research Enabler is not a conceptual model rather it is a “cognitive map to orient and depict the influencing dimensions, components, facets, or major concept of the theory with an integrated total view of these dimensions” (Leininger, p. 49). The enabler assists the researcher in identifying actual and potential influencers for health and well-being behaviors. The upper part of the enabler identifies a group’s worldview and cultural and social structure dimensions through seven interrelated areas which are: technological factors, religious and philosophical factors, kinship and social factors, cultural values and life ways, political and legal factors, economic factors and lastly educational factors. These factors influence care expressions, patterns, practices and well-being. The lower part of the enabler focuses on the specific cultural group’s ethnohistory (upper part of enabler) whether it is individuals, families, groups, communities and institutions and how they influence and are influenced by generic care systems, professional nursing and other professional systems which in turn can influence and be influenced by nursing decisions and actions. There are three types of nursing actions which are cultural care a) preservation/maintenance, b) cultural care accommodation/negotiation and c) cultural care repatterning/restructuring that influence and are influenced by culturally congruent nursing care.

Leininger’s Culture Care Diversity and Universality Theory will be utilized by this study to facilitate the discovery of the meanings of health and well-being for elder Agrarians in the rural Midwest. The use of the Sunrise research enabler will assist in developing a holistic understanding of influencers in health values, beliefs and practices.
This knowledge will facilitate the delivery of culturally congruent care and health promotion with these elders.
III. METHODS

Methodology

To discover and understand the health beliefs, values and practices of Agrarian rural elders in the rural Midwest this study employed the Ethnonursing method as described and outlined by Leininger (2001). The Ethnonursing method of qualitative research was developed by Leininger to “tease out complex, elusive, and largely unknown nursing dimensions from the people’s local viewpoints such as human care, well being, and health and environmental influencers” (Leininger, p. 75). This qualitative method is different from other qualitative methods as it focuses specifically on phenomena of interest to nursing which can be much embedded within one’s cultural worldview. Leininger defines ethnonursing as:

“a qualitative research method using naturalistic, open discovery, and a largely inductively derived emic modes and processes with diverse strategies, techniques, and enabling tools to document, describe, understand, and interpret the people’s meanings, experiences, symbols, and other related aspects bearing on actual or potential nursing phenomena” (p. 79).

The emic or insider’s view is critical in this methodology. The researcher sought to understand the cultural group from their perspective, which is their understanding of their reality.

The ethnonursing method utilizes a four phase Observation-Participation-Reflection enabler to guide the researcher in their discovery. The four phases are: 1) Primary observation and active listening, during this phase the researcher is observing the group of interest with no active participation; 2) Primary observation, during this phase
the researcher continues to observe but begins to have limited participation with the people in the group of interest; 3) Primary participation, during this phase the researcher changes their focus from observing to participation, yet continues to observe as well; and 4) Primary reflection and reconfirmation of findings with informants, during this phase the researcher takes their thoughts and observations back to the informants to confirm or discount their accuracy and credibility (Leininger, p. 83).

Ethnonursing methodology is very compatible with what this study sought to discover. This method facilitated the discovery and exploration of the meanings of values, beliefs and health practices of Agrarian elders in the rural context from their perspective. The method helped to tease out what influence and impact the rural Agrarian culture has on the worldview or Agrarian elders. In addition this method helped discover the culture care experiences that have been both helpful and hindering to the well being of elder Agrarians.

Setting

The setting for this study was in a rural county in South Central Minnesota. This area of Minnesota is at the Northern edge of the Corn Belt and has a rich agricultural as well as industrial history. The county has a population of 19,526 people of which 14.2 percent are over the age of 65 which is a higher percentage than Minnesota as a whole which has 12.1 percent (U.S. Census Bureau). The County is made up of four cities with the open space between the cities broken up into twelve townships. The County in entirety is considered rural by the state of Minnesota’s definition of rural. The U.S. Census Bureau definitions would classify the county seat which is the largest city in the county as an urban setting in a non-metropolitan area and the rest of the county as rural.
In this county the percentage of the population over age 65 varies significantly between the cities and townships. In the county seat the population over age 65 is 15.6 percent, the other cities have elderly populations of 14.5, 16, and 25.7 percent. The townships range from 5.5 to 21.8 percent. It is evident that this is an aging county with pockets of very high populations of people over age 65. In general the rural cities in this county have a higher proportion of citizens over the age of 65 than the townships do. A couple of factors could account for this. The nursing homes are located within the city limits and as farmers’ age and pass the family farm on to younger family members they often move to town. In addition young people move out of rural communities in search of career opportunities.

The county seat has numerous manufacturing industries which are primarily printing and technology based. There is one food processing plant in the county seat. Thirty two percent of the people employed in this county hold manufacturing jobs. This is significantly higher than the nation and the State of Minnesota which each have eighteen percent of the population employed in manufacturing positions. In this county individuals who earn their living through agriculture and agricultural related occupations make up nine percent of the population. This is still significantly higher than the state of Minnesota and the nation as a whole which have four and two percent respectively. Based on this data it is obvious that the county is no longer a primarily agricultural county but agriculture still has a strong presence. Farming is still primarily a family run business rather than corporate in this county. The crops typically grown in this region are corn and soybeans. Hogs are the main livestock operation.
There is a small hospital and multi-physician family practice clinic in the county seat. Two of the three small cities in the county each have a small clinic as well. The county seat has a nursing home and two assisted living facilities. The two small cities that have a clinic also have nursing homes. There are not any assisted living facilities in this county outside of the county seat. There is a senior citizens center located in the county seat. The senior center does have a small bus they use for a mobility project as well as for entertainment or touring trips for the elderly in the county. There are congregate meal sites as well as meals on wheels in this county. Each city has numerous churches which are primarily Christian denominations.

The county is very racially homogenous with 94.7 percent of the population being Caucasian. This is very typical in rural Minnesota. In recent years there has been an influx of people of Hispanic decent and Somali immigrants moving to this county.

Informants

In ethnonursing research the informants are the way in which researchers learn about a cultural group and the domain of inquiry. This study had two types of informants, key and general. Key Informants are individuals who are very knowledgeable about elder Agrarian culture such as Agrarian elders. Typically key informants are members of the cultural group. Leininger identifies that “key informants are held to reflect the norms, values, beliefs, and general lifeways of the culture, and are usually interested in and willing to participate in the study” (p. 110). For this study inclusion criteria for key informants was: men and women who are 65 years old or older and earned their livelihood through farming, are knowledgeable about the domain of inquiry, are able to communicate verbally and give verbal and written consent to
participate in the study. In contrast general informants do no possess the level of knowledge about Agrarian culture but are still very knowledgeable. For this study inclusion criteria for general informants were: less knowledgeable about the domain of inquiry than key informants yet still have knowledge, are willing to share their knowledge verbally, give written and verbal consent to participate in the study. The general informants were: family members of Agrarian elders, Agrarian elders, clergy, health care professionals or others in the community who were knowledgeable about Agrarian elders and were willing to share their knowledge.

This study had eleven key informants and 23 general informants. It was evident that saturation had occurred after interviewing twenty three people. An additional eleven people were interviewed to confirm that saturation had occurred. Saturation is a concept in qualitative research where the phenomenon of interest has been thoroughly explored with the informants. At that point the informants do not have anything new to share about the topic. Leininger identifies that at the point of saturation “data reveals redundancies and duplication of content with similar ideas, meanings, experiences, descriptions, and other expressions from the informants or from repeated observations of some phenomena” (p. 114). Two one to one and one half hour interviews were conducted with key informants and one, one to one and one half hour interview was conducted with general informants.

The sample was not ethnically diverse as was expected. It was unlikely that the sample would be racially diverse as Caucasians make up 96% of American farmers (Agricultural Statistics, 2001) and 95 percent of the residents of this county are Caucasian. Every attempt was made to recruit racially diverse informants. Most of the
informants were married. Two informants were never married and one was divorced.
One informant who was the principle farm operator was female.

Data Collection

Leininger’s ethnonursing observation-participation-reflection enabler was utilized as a guide for the data collection in this study. Having been a member of Agrarian culture in this region for twenty one years I have had many years of observing as well as participating with the culture of interest. In preparation for this study I spent time doing active observation of the cultural group of interest at a local convenience store where they congregate for coffee as well as at one of the local congregations social gatherings and the socialization that occurs before and after church services. Data was collected from these observations and recorded as field notes. In ethnonursing research the field notes or field journal “covers data related to the worldview, social structure, ethnohistorical, environmental factors, folk, and professional features as areas to be explored as potential influencers of human care” (Leininger, p. 112). Field notes are a major source of data utilized in the analysis phase of research. They also allow the researcher to see what areas need to be explored more. Data analysis begins at the same time as data collection with this methodology.

During the second phase of data collection the researcher begins limited participation with continued observation. This stage was limited as I have significant experience with the cultural group of interest and am perceived as an insider by many. This occurred primarily in their natural social settings such as gatherings for coffee, the socialization after church services and church social events. At this point I identified potential key and general informants by talking to people that I knew about the study.
Many of my normal social contacts were excited about the study and said that I had to interview their parents. A list of potential participants was compiled based on this as well as Agrarian elders that I knew. One woman who grew up on a farm in this county as well as farmed as an adult and held an agriculture related job until she retired served as a gatekeeper allowing me further access to Agrarian elders. She identified many individuals who could potentially participate in the study. Potential informants were primarily contacted by phone to see if they would be interested in participating in the study. Others that I saw in public settings were asked face to face if they would be willing to participate.

During the third phase of data collection I moved toward a more active role in that I was participating more yet still observing. It was at this point that I started conducting interviews with the key and general informants. A snowball method was utilized to identify to recruit additional informants. At the end of each interview the informants were asked if they knew of anyone else that I could interview who would have insight into elder Agrarian health beliefs, values and practices. The individuals identified were approached in person if possible, if not then by telephone to see if they will be willing to participate in the study. I found little resistance from Agrarian elders to participate in the study. Only one person I contacted was unwilling to participate. It is interesting that this was a person who did not know me or know who I was and was identified as a potential informant by another informant. Most of the elders I contacted were willing to participate because they wanted to help me. Helping each other is a very important concept within this culture and will be discussed further in the next chapter.
During this phase I met with individuals who had verbalized a willingness to participate in the study. Interviews occurred in the informants natural setting which for all of them was their home. After obtaining verbal and written informed consent the initial interview occurred utilizing a self developed semi structured interview guide that is based on the Sunrise Enabler, research questions and domain of inquiry to discover Agrarian elders’ health beliefs, values, and practices. The interview guide utilized was based on whether the informant was an elder Agrarian or not. (Appendixes A and B). The interviews questions were open ended and free flowing. The interview guides are just that, guides rather than strict scripts. Questions were modified based on the conversation that was occurring with the informant. Some areas were discussed more in depth than others as they appeared to more important for an informant.

Initially when I was interviewing a married couple where both partners were informants I interviewed them separately. This was interesting as both wanted to sit at the table during their partner’s interview. The partner who was not being interviewed would join in the discussion at different points answering the question, challenging their partner’s answer or adding depth to their answer. It was apparent that it would be better to interview the married couples as a unit rather than separately if they wished. After interviewing the first couple separately I asked each following couple if they wanted to be interviewed together or separately. All chose to be interviewed together. Dynamics were very interesting during joint interviews. With some questions one partner would defer to the other to answer. They also seemed to keep each other honest by challenging each others answers at times. At other times they would answer a question as a tag team, one would start to answer, the other would jump in completing a sentence, and then the
other would come in again. In a few of the interviews one partner would smile and
gently tease their partner when they would give an answer. An example of this was when
a woman was talking about wanting to keep things private. Her husband teased her by
smiling and saying oh no don’t tell anyone. It was evident that these people had been
married for a long time and really knew each other very well. In a few of the interviews
one of the partners would do the majority of the talking asking their partner for
confirmation. Those situations were split evenly between men and women being the
primary speaker. In those situations I made an intentional effort to ask the quiet partner
what they thought about the topic being discussed. When a question was specifically
asked of the quiet partner they would always share their perspective.

In general rural people are known for their hospitality. One way that they show
hospitality is with food and beverages. It was interesting that when I began doing
interviews only about half of the informants offered me a beverage or anything to eat.
Informants seemed somewhat guarded in their answers and apprehensive about the
interviews. About one quarter way through the interviews I began offering to bring
muffins if it was a morning interview or bars if it was an afternoon interview. The
majority accepted my offer. In all cases where I brought muffins or bars the informant
had a beverage ready when I arrived. Most informants had plates and napkins ready on
the table. Sharing food and beverages seemed to facilitate the informant feeling at ease
with the interview. This could be related to the elder choosing to have small talk while
we were eating before moving on to the interview. When I did second interviews with
key informants many of them declined having me bring bars or muffins stating that it was
their turn. This indicated that a relationship had formed between the informants and
myself indicating trust. One couple offered for me to stay for lunch after the interview was completed. Unfortunately I had to decline due to another commitment.

In reviewing the literature regarding rural culture and aging the concepts of insider and outsider are reported as being very important (Bushy, 1997; Weinert & Burman, 1994). I found it interesting that the concept of insider and outsider only came up once during the interviews. I had asked a woman about how she felt about asking for help she replied “you mean from outsiders”. This may be related to the fact that the majority of informants knew me or knew of me and that my husband and I used to farm. In every interview a dynamic that occurred was the informant asking me at some point do you know so and so or do you remember when while sharing their perspective on something. Through shared experiences or knowing the same people they were able to establish increased connection with me. This may have contributed to their seeing me as an insider as well.

The interviews were audio taped. The majority of the interviews occurred at the informant’s kitchen or dining room table. The tape recorder was placed in the middle of the table to facilitate all voices being recorded at an audible level. At the beginning of interviews informants would occasionally glance at the tape recorder. After a few minutes they no longer looked at the recorder and it appeared that they had forgotten it was there. At the point in the interview where I needed to turn the tape over a few of the informants made comments about modern technology in reference to the tape recorder. At the end of the interviews when the tape recorder was turned off seemed to be the time that informants perceived as time for socialization.
After every interview the informants wanted to keep visiting. Many would ask me questions about my family and how we were all doing. Even elders who did not know me personally asked questions about my family. I perceived this as a way for them to get to know me and build trust. I did share basic information such as my husband’s current occupation, how old my children and what my adult son is doing now. I stayed an average of one half hour after the interview was completed. Many of the elders wanted to show me their homes and family pictures they had displayed. Every informant had pictures (family, children or grandchildren) displayed in their homes. Some had artwork their grandchildren had done displayed and showed that to me as well.

At the conclusion of the initial interview with two key informants their adult son who has taken over the family farm came in. He looked very guarded when he saw me and asked multiple questions of me as to what I was doing there. His parents were very open about telling him I was interviewing them. Following my second interview with this couple the adult son saw my husband in town and asked him what I was doing and how many times would I be going back there. Due to confidentiality my husband did not know that I had interviewed this man’s parents and told him that. When the son explained that I had interviewed his parents my husband explained what I was doing. The adult son did not seem angry when he talked to my husband rather he seemed curious. I interpreted this behavior as being protective of his parents as well as representing the desire for privacy in rural settings. The concept of privacy will be talked about further in the next chapter.

During the fourth and final phase findings were reflected and confirmed with key informants to determine their accuracy from the informant’s perspective. In addition
those areas were further investigated with the key informants. These interviews lasted approximately one to one and one half hour each. These interviews were audio taped as well. More socialization occurred at the second interview. It appeared as though relationship had been developed with the informants. They were much more open and candid during the second interview than they were during the first.

Protection of Human Subjects

At the beginning of the initial meeting with each informant I verbally explained the study to them. Topics that I covered were: the purpose of the study, the domain of inquiry, what would be expected of them if they choose to participate, the right to withdraw at any time, and benefits and risks of participation. At that time I asked them if they had any questions and gave them the opportunity to ask and I spent time answering them. I also let them know that if they had any questions that came up later that I would be more than willing to answer them. If they verbally identified that they were willing to participate in the study I gave them the informed consent form to read and I reviewed with them. They were then given the opportunity to ask any questions that they had prior to their signing two copies of the form. (Appendix D). The informant was then given one copy to keep and I keep the other one in my home in a locked fireproof case. All information relating to this study was destroyed upon completion of all the activities related to the study. Transcribed field notes and interviews were on a password protected personal computer of the researcher. Back up discs were kept in a locked fireproof case.

There were no intended risks associated with participation in this study. To protect confidentiality, data was identified with an alpha-numerical coding system rather
than by names. I kept a key of names and codes in a locked fireproof filing cabinet in my home. The list of participants with their coded identifier was destroyed upon completion of all the activities related to the study.

Data Analysis

Following each interview the tapes and field notes were transcribed, coded and analyzed to allow for concurrent analysis. This process continued throughout the study. Leininger’s phases of Ethnonursing analysis for qualitative data were utilized for the analysis of the qualitative data. Leininger identifies four sequenced phases of this process. Data analysis begins with data collection and occurs concurrently throughout the study. During the first phase data is collected, described and recorded. This occurred with the transcription and coding of the field notes from my observations and participatory experiences. When interviews began those were transcribed into the computer and analyzed as well. In this phase the data analysis focused on identifying contextual meanings, making preliminary interpretations and identifying symbols. Data focuses on the “phenomenon under study, mainly from an emic focus, but attentive to etic ideas” (Leininger, p. 95). During this phase there were 139 symbols or concepts identified with coding of the interviews and field notes.

The second phase of analysis data focuses on the identification and categorization of descriptors and components. Coding and classification of data as it relates to the domain of inquiry occurs to identify emic and etic descriptors within the context, indicators and categories. Similarities and differences are examined. Components are studied for meaning to identify categories (Leininger p. 95-96). I identified 16 categories during this phase of data analysis which will be discussed in detail in the next chapter.
In the third phase the data is analyzed to identify patterns with similar or different meanings in regard to the domain of inquiry are identified. This builds upon the data and patterns identified in the first two phases of data analysis. The analysis in this phase also focuses on the meanings and context of the data. During this phase I identified ten patterns which will be discussed in detail in the next two chapters.

The fourth phase of data analysis is the highest level and focuses on the identification of major themes, findings or theoretical formulations are identified. During this phase the researcher synthesizes their thinking and interprets the findings from the first three phases to identify the major themes and findings primarily from an emic perspective of the domain of inquiry. The themes will be presented in detail in chapter five.

NVivo qualitative analysis software was utilized to facilitate the analysis of the data. Transcripts and field notes were saved as rich text formatted documents within the software program. Within the documents section each document was interpreted and coded (phase two). NVivo allows the researcher to view all text from all documents regarding a specific code. The code document lists which transcript the data came from as well as what line it was so the researcher may return to the original transcript to see the context of the data. Each transcript may be viewed with color coding for each code identified as well. This facilitated the third phase or the identification of patterns within the data which are organized in nodes. It is possible to view any previous clustering or document from the nodes. Once the nodes are identified the researcher can see all of the data within a node to facilitate the identification of themes. The researcher also has the ability to create a visual model within the software program.
In summary Leininger’s ethnonursing qualitative methodology was used to facilitate an understanding of the domain of inquiry, that is, elder Agrarian health beliefs, values and practices from an emic perspective. Every effort was made to ensure that the informant’s human rights are respected and protected. As this is a rural area where “everyone knows everyone as well as their business” this was critical. Data analysis occurred concurrently with data collection facilitating building an emic understanding of the themes that evolved.
IV RESULTS AND FINDINGS

Introduction

The discoveries and findings utilizing Ethnonursing methodology in this study will be presented in this chapter. Ethnonursing methodology utilizes four sequenced phases in the analysis of data. This methodology facilitates the teasing out of emic and etic understanding of Agrarian elders in regard to their health beliefs, practices and needs. Utilization of NVivo qualitative analysis software was extremely helpful in managing the massive amount of data as well as facilitating the analysis.

There were eleven key informants and 23 general informants in this study. Ages ranged from 67 to 83 for key informants and from 41 to 84 for general informants. Nineteen formants were women and 15 were men. Twenty nine of the informants are currently married, one is divorced, two are widowed and two were never married. In addition to farming, four of the informants (two women and two men) had off farm employment. Of the elder informants all who were married had children. Families ranged from one to ten children with the average being five. Twenty one of the twenty five informants who are Agrarian elders have at least one adult children residing in their home community. Of the four who do not have an adult child in the home community two never had any children, one has an adult child in a community ten miles away and the other informant’s only adult child recently moved out of state for occupational reasons.

Of the elder informants (over age 65) eighteen still reside on the farm and seven have moved to in town. All of the informants lived in houses which they owned. Half of the elder informants have incomes below 30,000 and half have incomes above 30,000 per
year. The mean income is between 30 and 40,000 per year. Only one informant lived in poverty as defined by the 2006 USDA Health and Human Services Federal Poverty Measure which is 9,800 per year. (aspe.hhs.gov/poverty/06poverty.shtml.)

There were Seventeen farms represented in this study. Of those farms five are still being farmed with the elder being the primary operator. In two of those cases adult children help with the farm operation during peak work seasons, two have help from other relatives and one does not have any help. Eight farms are being run by an adult child of the elders. Of the eight farms being run by an adult child the elders help with the operation of the farm on six of those farms. In both cases where the elders are not helping the adult children with the operation of the farm they did help them when they were younger and physically able to do so. The remaining four farms are being rented out by the elders.

Table 2:
Demographic Characteristics of Key Informants

<table>
<thead>
<tr>
<th>Code</th>
<th>Age</th>
<th>Gender</th>
<th>Marital Status</th>
<th>Marital Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag4</td>
<td>77</td>
<td>Female</td>
<td>Married 54 years</td>
<td>Homemaker/Farmer</td>
</tr>
<tr>
<td>Ag5</td>
<td>78</td>
<td>Male</td>
<td>Married 54 years</td>
<td>Farmer/retired off farm employment</td>
</tr>
<tr>
<td>Ag7</td>
<td>80</td>
<td>Male</td>
<td>Married 51 years</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag8</td>
<td>77</td>
<td>Female</td>
<td>Married 51 years</td>
<td>Homemaker/Farmer</td>
</tr>
<tr>
<td>Ag12</td>
<td>76</td>
<td>Male</td>
<td>Married 53 years</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag13</td>
<td>75</td>
<td>Female</td>
<td>Married 53 years</td>
<td>Homemaker/Farmer</td>
</tr>
<tr>
<td>Ag14</td>
<td>67</td>
<td>Male</td>
<td>Divorced</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag16</td>
<td>83</td>
<td>Male</td>
<td>Married 57 years</td>
<td>Farmer/retired off farm employment</td>
</tr>
<tr>
<td>Ag17</td>
<td>75</td>
<td>Female</td>
<td>Married 57 years</td>
<td>Homemaker/Farmer</td>
</tr>
<tr>
<td>Ag22</td>
<td>75</td>
<td>Male</td>
<td>Married 47 years</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag23</td>
<td>70</td>
<td>Female</td>
<td>Married 47 years</td>
<td>Farmer/retired off farm employment</td>
</tr>
</tbody>
</table>
Table 3:

Demographic Characteristics of General Informants

<table>
<thead>
<tr>
<th>Code</th>
<th>Age</th>
<th>Gender</th>
<th>Marital Status</th>
<th>Adult Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag1</td>
<td>69</td>
<td>Female</td>
<td>Married 51 years</td>
<td>Homemaker/Farmer/retired off farm employment</td>
</tr>
<tr>
<td>Ag2</td>
<td>84</td>
<td>Male</td>
<td>Married 57 years</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag3</td>
<td>76</td>
<td>Female</td>
<td>Married 57 years</td>
<td>Homemaker/Farmer</td>
</tr>
<tr>
<td>Ag6</td>
<td>73</td>
<td>Female</td>
<td>Married over 40 years</td>
<td>RN/Farmer</td>
</tr>
<tr>
<td>Ag9</td>
<td>45</td>
<td>Male</td>
<td>Married 19 years</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag10</td>
<td>41</td>
<td>Female</td>
<td>Married 19 years</td>
<td>off farm employment/Farmer</td>
</tr>
<tr>
<td>Ag11</td>
<td>78</td>
<td>Female</td>
<td>Married 49 years</td>
<td>Homemaker/Farmer</td>
</tr>
<tr>
<td>Ag15</td>
<td>66</td>
<td>Female</td>
<td>Widowed</td>
<td>Retired off farm employment/Farmer</td>
</tr>
<tr>
<td>Ag18</td>
<td>80</td>
<td>Male</td>
<td>Married 48 years</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag19</td>
<td>82</td>
<td>Female</td>
<td>Married 48 years</td>
<td>Homemaker/Farmer</td>
</tr>
<tr>
<td>Ag20</td>
<td>81</td>
<td>Male</td>
<td>Married 59 years</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag21</td>
<td>81</td>
<td>Female</td>
<td>Married 59 years</td>
<td>Homemaker/Farmer</td>
</tr>
<tr>
<td>Ag24</td>
<td>77</td>
<td>Male</td>
<td>Never Married</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag25</td>
<td>73</td>
<td>Female</td>
<td>Never Married</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag26</td>
<td>80</td>
<td>Male</td>
<td>Married 49 years</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag27</td>
<td>78</td>
<td>Female</td>
<td>Married 49 years</td>
<td>Homemaker/Farmer</td>
</tr>
<tr>
<td>Ag28</td>
<td>61</td>
<td>Female</td>
<td>Married 40 years</td>
<td>RN/Farmer/Trucking</td>
</tr>
<tr>
<td>Ag29</td>
<td>55</td>
<td>Male</td>
<td>Married 20 years</td>
<td>Farmer</td>
</tr>
<tr>
<td>Ag30</td>
<td>46</td>
<td>Female</td>
<td>Married 20 years</td>
<td>Teacher/Farmer</td>
</tr>
<tr>
<td>NonAg1</td>
<td>48</td>
<td>Female</td>
<td>Married</td>
<td>RN</td>
</tr>
<tr>
<td>NonAg2</td>
<td>45</td>
<td>Male</td>
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<td>DVM</td>
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<td>NonAg3</td>
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<td>Married</td>
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<tr>
<td>NonAg4</td>
<td>66</td>
<td>Female</td>
<td>Widowed</td>
<td>RN</td>
</tr>
</tbody>
</table>

Presentation of Context of the Study

During the second phase of data analysis it became evident that to understand the domain of inquiry the context of elder Agrarian culture would need to be further explored and scrutinized. Eight context areas were identified which are farm culture; occupational safety on the farm; land; retirement; technology and healthcare; economics; life on the farm; and others don’t understand us. In a manner similar to the identification of
categories these areas were identified by focusing on descriptors and components. Data was coded and classified with NVivo software to identify emic and etic descriptors. A basic understanding of the context will facilitate a deeper understanding of the categories and themes found in this study.

**Farm Culture**

Farming has traditionally been a collective culture rather than an independent culture. Most of the informants remember working with their neighbors to bring the crops in during the fall harvest. With the implementation of machinery and advances in the technology of machinery working with neighbors had become a thing of the past for most. A few of the informants still work with their neighbors to harvest crops. In those cases the informant did not have any children or does not have any other family that they farm with. In the vast majority of cases the farm is a family enterprise that is very collective. Every one works together for the farm to succeed.

In this collective culture multiple generations of a family work together, the old as well as the young. Most share how their parent worked with them on the farm until they were not physically able to. The informants talked about having their chores to do on the farm starting at a very young age. As they got older their jobs got bigger. They continued that tradition in their own families. All talked about their children having jobs to do on the farm beginning as soon as they were able. A man said with pride that his son “was five years old and he was driving the ford tractor”. Even in Agrarian culture this was young for the task but others talked about children driving the tractor between seven and ten years old. One woman said she had her daughter out in the barn as an infant
while she and her husband would do chores. By the age of seven most children are participating in the work of the family farm.

Most elder informants were technically retired or were retired on paper yet continue to actively farm with their children. They talked about their fathers doing the same thing. In six out of eight farms being run by an adult child the informant was helping do the farm work. In the other two the elders did help with the farm work when they were younger and able to. Help varied from working side by side most days of the week to helping with the field work in the fall or spring. One adult son described how his dad continued to come out to the farm every day after he retired and stayed there all day doing what ever task he physically could. He continued doing that until he was 87 years old. Another adult son talked about his dad coming down to the milking parlor and sitting there with him while he milked when his dad could no longer physically help.

Women’s roles also supported the collective of the farm. Many talked about being the gopher and running errands or for parts and bringing meals to the fields all of which allowed the men to continue working. Some of the women worked side by side with the men sharing in all of the farm work. In one case a woman was the sole operator of the family farm after her father was not physically able to farm anymore. Some of the women worked off of the farm for short periods of time to supplement the farm income. Only three of the women had careers off of the farm. In all cases the women were just as invested as the men in the collective effort for the farm to be successful.

In years past a collective effort was necessary as farming was very labor intensive and you needed many hands to get the job done. Farming has transitioned due to advances in technology and economics. As crop prices have remained pretty much the
same for the last 30 years coupled with increased production costs farmers have increased production or run more acres to make a living. This means that machinery is bigger as well. With advances in technology farming is not as labor intensive. In the past most farms were diversified, that is they raised a variety of products, they grew crops, milked cows, and raised livestock such as chickens, pigs or beef cattle. Most of the informants started their farming careers on a diversified farm. Today’s farms are specialized going for higher yield in one or two products whether it is grains, hogs, beef or dairy. Many of the informants milked cows as well as grew crops until they retired. Most that are still actively farming do not have livestock rather they focus their energy on cash crops or grains. Growing crops is not as labor intensive as livestock especially milking. Today’s specialty farms are much bigger than diversified farms of the recent past. As a result farmers are often competing with each other or with large corporations over land. This can lead to conflict between farmers which can move the culture farther away from being collective. As one informant said:

Well for one thing it's kind of a dog eat dog world you know, nobody farmers aren’t really, they used to do stuff together you don’t see too much of that, once in a while you see a couple guys working together, it’s a dog eat dog world cause they’re all trying to rent the land away from each other, it kind of divides everybody a little bit.

As a result the neighborliness has decreased in rural areas. Another informant attributed the decline in neighborliness to the fact that people aren’t working together or exchanging labor like they used to.
Other aspects of farm culture are the concepts of freedom and flexibility. Many elders talked about the freedom and flexibility that farming allows. This comes from being your own boss. They also talked about the flexibility to adjust their schedules if something came up. Another aspect of flexibility was that the farmer needed to be flexible. When the weather conditions were right you go until the job is done. Some described working up to sixteen hours a day during peak work seasons when the conditions were right. They said there was a narrow window in which to get the work done. Even in non peak work seasons long work days were part of the culture. All informants talked about farming being hard work with long hours. They value hard work and those that work hard. Even when the workday was supposedly done they would often still work on something or other rather than relaxing or watching television. As one informant said of work on the farm:

> When you farm the whole thing is your job and so you wake up in the middle of your job, you look out the window and you go oh crap look at that list of stuff you gotta do and because farming is seasonal um the wind makes a difference the weather makes a difference if its fit to do and you can do it today your gonna do it until conditions get so bad you can’t or you get it finished and if that means that you work 14 hours today or 16 hours today that’s what you do.

Work on a farm is seven days a week 365 days a year. There are no holidays. In fact the days most of us have off for rest and relaxation that is Sundays and holidays are days that farmers often work harder as one male informant pointed out:

> With Sundays being kind of the hardest day which a lot of people had Sunday off because we had to get everything done the same as the other days of the week
plus get to church and then if we had any visiting or anyplace to go that had to sandwich in there too so Sundays and Christmas’s and days like that were really busy, but I didn’t think of it at that time as being overly busy it was just things were out there to do and so I had to go and do em you don’t have time to think about well maybe you should a taken time to think about doing something different or different arrangements but we had to try to make as much money as we could to support the family and so you couldn’t hardly start cutting back on your workload.

Another elder talked about coming home from church on Christmas one year to discover their cows had gotten out. The entire family went out to get the cows back in and then they went in the house to continue their holiday celebration.

*Occupational Health and Safety on the Farm*

The elders that participated in this study have had a few injuries as a result of farming. Two of them cut the tip off of one of their fingers working with machinery. One man cut his finger and cut through the tendons and ended up with a contracted finger. One man has farmer’s lung requiring that he retire from farming in his late 50’s. A few have had to get stitches at different points. A few have had back problems. Many of them have degenerative joint disease especially in their knees.

Awareness of health and safety risks on a farm was very wide and ranged from a total denial of any risks to being aware of the majority of them. Most fell in the middle and perceived at the minimum machinery and chemicals to be health and safety risks and knew of someone who had been hurt with machinery. The majority see machinery as being safer than it used to be because of cabs on the tractors and shields. Some did not
see the machinery as being dangerous rather they saw how it was being used as
dangerous. One man said “farmers are human nature and they just get in a hurry or
weather is threatening you go” meaning that they will take more risks with machinery
when they feel pressured or in a hurry.

The majority know that chemicals can be a health or safety hazard. Even though
they knew that chemicals were a hazard the majority did not follow the protective
equipment recommendations. One male informant said “I’m guilty of it when I spray, I
don’t know, the gloves are so clumsy, course they give you those little ones now, there’s
no excuse not to wear em you put on a pair and throw it away”. Others echoed that they
do not like to wear the gloves because they are clumsy or in the way. In the case of
chemicals it is usually not a case of lack of knowledge. Others say that they will wear
gloves if they are handy but they do not intentionally make them handy. It is interesting
that they say they will use them if they are handy because “they even tell you whenever
you put on anhydrous and that stuff they always send the proper equipment with you
glasses and gloves and I guess that’s telling you you’re supposed to wear it use it”. Yet
there are those who admit that they do not use the equipment even when it is provided to
them. Some of the farmers say it is carelessness, habit or being in a hurry that stops them
from using protective equipment. One man said he never had a serious exposure to
chemicals yet he sprays his fields with a tractor without a cab and admits that “sometimes
it drifts a little on ya if it’s windy so that’s not the best thing”. Another informant when
talking about chemicals said that his dad was sensitive to the chemicals and that he was
not allergic, that he could stick his hands right in the chemical without any problems.
One woman will not let her husband apply chemicals anymore because “he was never
very careful about (applying chemicals) and to make him put on all this paraphernalia to keep it out of his lungs it’s gotten to be impossible because we’re now even more stubborn as we get older”.

Very few of the elders perceive grain or livestock dust as a safety or health hazard. The majority do not wear masks when they are working with grain or in the barns. Some will wear one if it is handy. Some do not perceive dust to be a safety or health risk. One man said “it can be for somebody that’s allergic to dust but dust never bothered me that much unless it was very severe” so he did not see the need for or use a mask. Other reasons for not wearing a mask include that they are not handy and that they make it hard for them to breath with it on and it fogs up their glasses. To sum it up one informant when asked if he wore a mask said “nah too tough to do that”.

A few were aware that livestock can pose a health or safety risk. Some would talk about not turning their back on a bull or being more cautious with a new mother and her babies. A few noted that animals can be unpredictable. No one wore any form of hearing protection when they were working with equipment or with livestock in confined areas. Most of the men interviewed have hearing aids. One man knows that the hog noise in the barn is a risk to his hearing but he says I just take my hearing aids out.

On a positive note a few of the elders interviewed are very aware of the health and safety risks on a farm. They talked about educating themselves through the years especially through reading farm journals and applied what they learned. These farmers were much more likely to utilize the protective equipment but that was not always the case. Many of the elders talked about teaching their children to be safe on the farm yet they would get busy and do something that they had told their children not to do and the
children would see them do it. Some of the farmers shared that their adult children adopting more safety behaviors such as wearing a mask or gloves than they did. Many of the elders talked about having to slow down around machinery or being more careful as they “hop around on the bins” as they have aged to remain safe.

*Land*

The land is very important and special to many elder Agrarians. One informant said of the land “if somebody took that away from me I think I’d die right now”. Many were proud that the farm had been in the family for over a hundred years. Most say that their grandchildren will probably not farm because farms have gotten so much bigger but still want the land to stay in the family. Many said that the children or grandchildren could rent out the land and still generate revenue from it. To some of the elders it was critically important that the land stay in the family.

Many talked about being lifetime leasers on the land that it was a gift from God and it was their responsibility to take care of it or be stewards for it. Many do not believe that the big farmers are as good a steward as the smaller farmers because they are too focused on getting as much out of the land as they can or making a profit.

Some described land as representing freedom, security, a way of life and a way of making a living. Others describe it as being their life work and that it has gotten more important as they have gotten older. Many said the land was all they have known referring to the lifestyle of living on the farm. When talking about the land one woman said “it’s something I have always known, that’s the only life I’ve known, living on a farm is something pretty emotional, I mean its something comforting about working the land, living on the farm, its private, a gift”. When talking about their connection to the
land one person said “you just become attached in a different way then it’s a different kind of thing and it’s really hard to put into words it is but it’s a strong connection”. For many there is a very strong connection to the land.

**Retirement**

On paper farmers retire but the majority continues to actively farm with their adult children. Most continue farming until they are physically not able to. Only two informants truly retired. One wanted to travel with his wife. In his situation neither of his children was interested or able to farm. He thought that his grandson might farm but is doubtful that that will happen. The only other farmer who completely retired never married and does not have any relatives that are currently farming. The rest of the informants who are technically retired still help their adult children farm. Their activity on the farm ranges from helping in peak fieldwork seasons to helping with livestock on a daily or near daily basis. The majority of informants talked about how they love to farm and the enjoyment they get from working. In regard to working on the farm after retirement one informant said:

I guess I want something to do. I like to stay busy. I’d go nuts I guess if I couldn’t do something you know and I’m independent I like to go out to the field and plant all day today or if I can just go a half a day or what but I don’t I go until I get it done.

Another person said “I enjoy doing that so I’m glad that he still accepts me” when talking about working with his son. In regard to retirement an 80 year old said “I retired in 91 but you wouldn’t know that I retired I guess” and a 78 year old man said “I failed at retirement”. Their sentiments were not uncommon from the men. Many of the women
are still bringing meals out to the field for their husbands and sometimes their adult children as well as running errands or getting parts.

In addition to giving them something to do continued engagement in the operation of the farm boosts moral and self esteem in Agrarian elders. One woman talked about how her husband would go out and work with their son. Even when her son would know an answer he would still engage his dad and ask him questions or seek his advice. One man said when he works “you feel you’ve accomplished something and your mental you feel your worthwhile”. He also said that he sleeps better at night if he has worked that day.

The five informants who are still the principle operator have no intention of retiring. All of them said they were going to keep farming as long as they were physically able. One of the informants who is a 73 year old woman had her accountant ask her why she didn’t retire and do the things she wanted to do, she told him she was doing what she wants to do.

Technology and Healthcare

All of the informants were in favor of technology and healthcare and will readily use it. They do not feel threatened or intimidated by the technology they have seen when they undergo diagnostic testing or procedures. One woman said “it was thrilling” when describing her angiogram. They believe that technology has made healthcare better because they are able to diagnose and treat things more readily than they could before. Willingness to utilize technology in healthcare is not new with this cultural group. One man talked about his father being the first patient in the state of Minnesota to receive penicillin. He had pneumonia and they did not think that he would survive. He was
willing to try anything even an experimental medication which penicillin was at that time to treat his illness and stay alive. One person said “the more the better” in regard to technology in healthcare.

Some saw down sides to technology in health care as well. A few think that technology is making health care more expensive. One person thought that technology makes health care more depersonalized. One person is concerned with the lack of privacy with electronic medical records.

Their readiness to adopt and utilize healthcare technologies may be related to their readiness through the years to adopt technology in general. When most of the informants were growing up they did not have electricity, indoor plumbing or running water in their homes. Many talked about when they got electricity and how much better it made their lives. One man said his dad was the first to get electricity out in the country and that he was always ready for the newest thing. Most of the informants remember using horses rather than tractors, threshing rather than harvesting with combines and milking cows by hand. They have readily adopted mechanical and chemical technology on the farm and in their homes. About twenty-five percent have computers in their homes, many have cell phones, all have televisions, telephones, and microwaves.

**Economics**

Agrarian elders like many others in their age cohort who were children during the depression are often very frugal. Their general attitude is that if you don’t have the money for it you don’t buy it. They do not like to pay interest. One couple spoke about having a credit card for convenience otherwise these elders tend not to buy things on credit. The couple also said that they have never paid any interest on the credit card and
do not carry any credit card debt. Frugality may be related to the fact that for crop farmers they only get paid a few times a year. In the interim they need to budget their money. As one woman said:

Having worked and having my own job the regular income is much easier to handle than income that comes say 2 or 4 times a year and then you try to make everything come out in between have enough money to last and to pay the bills.

The informants did not set out to get rich by farming. For most of them it was a way of life and a way to make a living. One informant said “we lived comfortable we never really had to go without something that we absolutely wanted if we wanted something we could get it”. This was the case for most of them. The economics of American agriculture has had highs and lows throughout the informants farming careers. The one constant of farming has been that it is economically unpredictable. Most of the informants started farming in the 1940’s and 50’s which were a boom time for farming. You could earn a good living on a homestead of less than 200 acres. They enjoyed good prices for their products until the 1980’s farm crisis. Since that time crop prices have remained low. When speaking about low crop prices an informant verbalized her frustration when she said “the farmer is way down here at the bottom of the totem pole and all the other people you know they get their fair share but the farmer gets what’s left over and believe me that’s not very much”. Many informants talked about the economic struggles they went through with farming. The struggles included the topics of the farm crisis, low crop prices, and the rising cost of machinery, land, fuel and chemicals. Those that were still farming were concerned with the rising fuel costs and wonder if they will be able to break even or make a profit this year.
All of the informants who are over 65 or older have Medicare as well as a supplement with the exception of one person who has medical assistance rather than a supplement. All of the informants had health insurance prior to being eligible for Medicare. Most of them had health insurance for the majority of their adult lives. A few of the informants commented that the insurance they had prior to getting Medicare was not very good and had high co-payments or deductibles. It is interesting that all of the informants have a supplemental insurance policy in addition to Medicare. In all cases the reason cited by the informants for having supplemental insurance was financial security. They are all aware that health care is expensive and many commented that without the supplement you could be wiped out if something happened. The bottom line for them was the risk of losing the family farm. These elders survived the farm crisis in the 1980’s and the low crop prices that have continued from that point. They have seen friends lose their farms and are not willing to take that risk. In addition to Medicare and supplements most of the elders were looking at signing up for Medicare D to assist with the cost of prescription medications. All of them were confused when trying to decide which Medicare D plan to sign up for.

Agrarian elders may be more economically secure than their peers. Regardless of whether they still farm or not the vast majority still own the land and can generate an income in addition to social security. One person said they were land rich but cash poor. Of the seventeen farms represented in this study four of the elders rent their land out. Five are still the primary operators of the farm and eight farms are operated by an adult child. In many of the cases elders help the adult child farm in a type of a partnership in which the elder is receives part of the farm revenue. In some of the cases the elder still
owns a percentage of the land or receives rent from the adult child. Thus many are still generating income.

Only one elder was living in poverty according to the USDA Health and Human Services 2006 Federal Poverty Measure with an income under $9,800. Only four of the informants (three women and one man) had jobs off of the farm that they were able to get pensions or have retirement accounts with. The mean income for the elders was between 20 and 30 thousand dollars per year. Even though the majority of informants are well above the poverty level they have still had to learn to live with fixed incomes. One woman said “you learn to how to ah so much for your medicine and so much for this and that you learn to gauge all your money”. Even with an income above the poverty level this couple that are no longer farming struggle to make ends meet. They have been enrolled in a program through a pharmaceutical company to get their prescription medications at a lower cost.

*Life on the farm*

When discussing their lives on the farm most informants identified that they loved living on the farm and that there was no better place to raise a family. A few of the informants have moved from the farm to town. For those who have moved to town most of them did so to make room for an adult child and their family on the home farm. One elder moved to town when her husband was ill. An adult child said his mom had always wanted to live in a specific little house in town. One day she went to town to take a hog check to the bank and saw a for sale sign on that house so she bought it and informed her husband they were moving to town. The son said his mom lived in town but his dad didn’t, he slept there but he did not live there. His dad spent his entire day out at the farm
and would go home only at night. Many of the men say that they will never move to town because the guys who move to town come out to the farm every day anyway as was the case of the couple just mentioned. One couple talked about how people they have known who have lived in town have not lived long after the move. They think it might be because people are more active out on the farm and they change their routines when they go to town. Some of the women would not mind moving to town because things are closer and more convenient. Living in the country is more work than living in town. Lawns are much bigger thus there is more mowing to do in the summertime. In the winter you need to use the tractor to clear the driveway whereas in town that is not the case.

The things that the informants like about living in the country are the privacy, space, fresh air and that there is always something to do. One man who lived in town as a young adult did not like living in town because he thought it was too crowded. The informants also think that the farm is a great place to raise children. The children have a place to go and play and explore. One man talked about how children today are becoming couch potatoes because they do not have anything to do in town.

Elder Agrarians have experienced social stigma and discrimination because they live on a farm. One woman who grew up in town and married a farmer shared that after she got married:

I was not included by a lot of the snooties in town for coffee or come to their house or that kind of thing in fact one professional person in town told us that he didn’t tell us he didn’t say it specifically to us but he told friends of ours that he couldn’t associate with them anymore because they were farmers. I think that’s
really sad I mean I didn’t change because I changed my address from there to here but I would not give you back this and move there for anything.

Treating farmers differently is not just limited to adults. The same woman shared that “our kids got picked on with that too they always talked about all the money we had it was such a farce”. The people in town had preconceived ideas about farmers and treated them differently because of it.

**Others Don’t Understand Us**

In general elder Agrarians believe that people who live in rural communities understand farmers because they have been around them, socialized with them and many of them grew up on farms. They do not believe that people in bigger towns or urban areas understand farmers. Some talked about how people in cities do not even know where their food comes from. One woman laughed as she said this one man would not eat bacon because pigs were not clean but he would eat eggs. She said he must have never seen an egg before it got to the store. One woman shared how her daughter brought a friend home that lived in a community of about 40,000 people. They were grilling hamburgers and the girl asked where hamburger comes from, the woman pointed to a cow, the girl blanched. She had no idea that hamburger came from cows. From my own experience I have had people pull into our yard, hear a rooster crow and ask was that a chicken, where is it I’ve never seen a live chicken.

The other big areas that elder Agrarians do not feel understood in are the workload and economics of farming. Many of the informants shared stories of how people in town thought they had an easy life that they did not work hard. One woman shared the following story:
One lady was riding with me one time it was harvest anyway she said oh my she says that looks so easy all you do is go up and down back and forth in the rows she said and then drive up and unload and go back and forth. She looked at me I didn’t say anything I thought lady you have no concept of what’s gone into that. (the passenger then said) and then you just put it in the bin and the auger unloads it and everything boy that farming is really easy so I don’t think anybody unless they have gone through the process of being on a farm that they know.

This story is not an isolated incident. Many of the elders made comments about the people in town thinking their job was easy that they did not understand how hard they work. People in town do not understand why farmers continue farming after they have reached retirement age either. One man said “even now they say what are working for? Well should I sit down and die, I like to keep busy”.

Most people who do not live on farms are aware that there are subsidies that the government pays to farmers for certain crops such as corn and soybeans. Many farmers share stories of how people in town have made derogatory remarks to them about receiving these payments. One person said “that’s like the first joke out of many peoples mouths did you get your government check today”. The elders do not think that the non farmers understand the economics of farming of how grain prices are regulated, how much it costs to raise a crop and how much the machinery costs. They also share that people in town think they have a lot of money or are rich. As one woman said: well some people got the impression just because your on a farm you’re a millionaire but they don’t realize all the money that they have to borrow in order
to keep their operation going where the people in town don’t have to do that see everything that you earn goes right back into your farm.

Presentation of Categories

In this section phase two of the data analysis will be presented. Phase two of Ethnonursing analysis is the stage of analysis where the data is coded and classified to reveal categories. Initially data was coded into what are called free nodes in NVivo qualitative analysis software. This free coding revealed 139 symbols or concepts in the interviews and field notes. These concepts were scrutinized to identify the emic and etic descriptors to identify the categories. The categories were organized into what are called tree nodes within the NVivo software. Tree nodes allow one to see all of the concepts included as well as each specific item within their context.

Sixteen categories were identified through the second phase of analysis. These were independence; help; kinship, marriage and roles; coping with farm life; spirituality; socialization; staying close to home; privacy; care; professional caring and non caring characteristics; health; health seeking behaviors; health knowledge; not wanting to take medications; choices about healthcare recommendations; and doing. A full description of each category will be presented.

*Independence*

Independence is a very important concept that is highly valued by Agrarian elders. One aspect of independence for farmers is being your own boss. There is no time clock to punch and no one to tell you what task to complete next. Farmers by nature of their job need to be independent and self directed because tasks such as planting and
harvest require long hours followed by periods of time where they do not have to work as many hours per day. As one informant put it:

I think the independence because you worked your tail off and then you had free time, you don’t have to answer to anyone except maybe the banker and, you know, I don’t have to explain why I’m at the auction or at this or that or whatever, maybe the wife, I don’t mean that, but I mean any outsider I don’t have to. I don’t have a boss except the weatherman and that’s the way I looked at it, that’s the upside and of course the down side is you sometimes you have to work doubly hard to pick up.

Another informant echoed those sentiments when he said “I don’t know, I get more, be you own boss and kind of free to do what you want and you can do it at a certain time you don’t got to be there at a certain time, you know you feel better some days”. With physical aging there can be a decline in physical abilities and stamina. The independence of this occupation allows aging farmers to continue working at their own pace rather than the dictates of an employer.

In discussing where independence comes from in these people an older farm couple she said “I don’t know I guess I always grew up that way I mean my dad died when I was small or younger and we just did things and we did them independently I mean”. This implied that being independent was a characteristic instilled in her in her youth growing up on the farm. He said “I think that comes from a farm life, a rural life, you learn to do things yourself its just kind of a natural I think that’s more or less”.

Living in the country on a farm can also give one a sense of independence. A nurse who grew up on a farm identifies how resistant some elder farmers are to moving to
town as they age when she said “I think it goes back to that human instinct of being independent and being my own boss when you’re out there on the farm you have control over your own little acreage and nobody can tell you what to do, so you move into town and you lose some of that control I think that’s how they would perceive it”

Another aspect of independence in this group is the importance of maintaining their personal independence as they age. They do not like to depend on others. As one person said “well I guess I just feel I don’t like to have make other people wait on me or something I don’t want to be a burden to anybody I guess I don’t want to be a burden”. This was echoed by a woman when she said “I hope I’m very self sufficient the rest of my life” and “I don’t like to be dependent upon somebody”.

In the following conversation an adult daughter and her husband, both of whom farm as adults describe her mother’s strong need for independence as she ages and her strong dislike of being dependent on others when she had been so independent throughout her adult life:

Daughter: yes I wonder if that was the last time before she went to assisted living she was in and out of the nursing home numerous times, if she took a fall, when she broke her hip it was an extended stay and she did she hated it, she hated the lack of privacy, she very much disliked being dependent on people for her physical care, very much in fact that’s probably the number one, her number one hate is I hate having to depend on other people. It’s just huge with her that’s just that’s probably the biggest issue she has.

Son in law: well farmers are independent
Daughter: oh and she was, out here I mean even after dad died she mowed the lawn herself, if something needed fixing she fixed it herself because nobody else was going to do it, if she wanted the weeds pulled or machinery moved or whatever she did it. She was a very strong physical kind of woman and gall darn it if it had to be done she did it and that physicality and strength she had for so many years and when that went away that was really tough because she was always very physically vital she was not a sit around person and so that was really hard for her.

They went on to identify how his father also had a strong desire to be independent as his health declined and was in the nursing home when she said:

I think it was a dignity issue too you know (he) had always worked real hard to be able to do it himself, so the thought of somebody taking care of him was real distasteful. He spent a lot of time in the hospital as a younger man, had real problems with pneumonia and just hated being physically dependent on somebody.

Another couple in talking about his aging mother who lives in a separate house on the same farm site that their home is on talked about her desire to maintain her independence and how important it was for her. At this point his mother walks with a walker. They did get her a cell phone (which she carries in a bag on the front of her walker so that it is always within reach) for her a year ago so that if she does have problems (such as a fall) she can call them.

Daughter in law: always been independent
Son: always independent I mean she could always, everything by herself and now she’s gotta kinda depend on someone to help her with some of those things she’s still independent she goes, she drives even to Mankato. She goes to Janesville, Waseca, and Mankato she can go to them 3 towns. Janesville and Waseca. Well she’ll go to church and gets her groceries in Waseca. She gets her groceries on her own yet she gets out of the car and she always parks um right

Daughter in law: in the handicapped

Son: In the handicap at the carts are right there and she’ll grab a cart and she follows the cart the whole time she’ll just follow the cart and then she won’t need her walker and she’ll leaves the cart right by her car well its usually by the handicap there they got the carts right there so she can she gets her own groceries

Son: so that way she maintains her independence which she strives to be independent that way she can set the few light things there on the deck and she can go up and hook them on the walker and go in but the heavy things he does carry in for her.

This adult son does go into his mother’s home two to three times every day to assist her with any task that she might need done. By having her son and his wife so close she has been able to maintain her independence and live in her own home.

Help

There are a few aspects to the category of help; asking for help, accepting help, patterns of help, helping on the farm and helping others. As a group these people do not like to ask for help especially from outsiders. This is related to their strong sense of independence. A nurse who had functioned as a parish nurse in a rural community
identified that farm families were extremely resistant to asking for help “In five years of parish nursing those folks there was only one time somebody (from a farm family) asked me for help. That was the culture and because that was the culture it wasn’t really socially acceptable to ask for help”. One informant who has had a major heart attack with significant residual damage gets short of breath and very tired climbing one flight of stairs relates that rather than asking anyone to do anything for her stated “oh I just leave things slide and when I feel good enough I do them”. She would rather just get by than ask someone for help. When discussing help one woman said about her husband:

AH! (laughing while she says this) him ask for help! Oh God forbid! The kids have to play a guessing game with him to find out to come and help him, he wouldn’t ask anybody and that if I arrange it sometimes he’s angry with me. They do not want to be a burden or impose on anyone.

Another informant was the primary caregiver for her husband when he was dying of cancer. She shared that he started falling and she could not get him up by herself so she would call her son to come and help get him back into bed. She was working full time off the farm at this point and was getting sleep deprived. She shared how she struggled with the decision to ask for home care and hospice:

Well at first I thought oh dear why cant I, you know, I can do this you know I don’t need any help course you were always so independent you know and then after he just knowing that I cant do this anymore so I have to ask for help or you know get help.

Interviewer: Sounds like that was hard for you to do at that point
It was and its hard you know even like (my sister in law) now, you know it, you been together you’ve taken care of each other for so long and then all of the sudden you got to terms with I need help and its not wrong, its not wrong to ask for help.

To get to the point of asking for help was very hard for this informant, she was at the point of exhaustion before she made the decision to ask for help. She shared that her sister in law (also a member of a farm family) is caring for her husband who had a stroke and is paralyzed on one side. She was wearing herself out caring for her husband. She would not ask for help. Finally her adult daughters intervened and told her to get home care to help out with his physical cares. Another informant shared her mother’s strong resistance to asking for help:

She’d go to sit down on the side of the bed and miss and slide off onto the floor and she would sit there on the floor and struggle to get up for 2 hours before she’d call me. I mean she’d sit and struggle until she wet herself before she would call me. We got her one of those push button things you know so they would call me and just to get her to even use that was a major major step forward because yeah she would just sit on the floor until she was just so exhausted that there was no way and then say I’m so sorry I’m so sorry I had to call you I just, its like good golly I’m not mad about it I want you to call me if you need me but she just hated being dependent just hated it and that’s been one the great things about assisted living, she knows she’s paying for the care she gets so if she needs help she knows they’re getting paid to do it this isn’t just somebody taking care of her because you know they have to they get paid to do this, this is their job that’s fine.
As a rule they will accept help if they perceive that they really need it and are grateful for the help when they receive it. They will readily accept help from family members if it is offered rather than asked for. One informant said “I don’t know I guess in those times you know you can’t do it yourself and so it feels good to see someone come in and doing it”. Her husband said:

I think she copes with it pretty well she adjusted to the fact that she needed help and that she lets people come in and help she generally likes to do everything on her own but when she had a problem I think you adjusted to letting other people come and help”. Even though she lets others come in and help she said that “it was hard even now after there’s a lot of things I can’t do so then I try to find something else that’s quiet that I can do.

Often times adult children do not wait for mom and dad to ask for help they will see a need and volunteer to do it or just come and do it. One individual identified how his son in law had been over the week before to put in a new water softener. When asked if he had asked him he responded that oh no his son in law knows what is going on and will just come and do things for them. In the past the son in law has done things for them such as putting in a handicapped toilet stool and installed new carpet for them. Their adult grandson has come out since his childhood to shovel the sidewalk and clear snow from the yard with a bobcat without being asked. Another informant identified how his son will come over and plow the snow from his driveway without being asked. He knows that when it snows his son will come and plow the driveway. In another situation a woman shared that her daughter called and told her that she and her sisters were coming down that day to clean her house and put up her Christmas decorations. Another
informant was discussing what his adult children do for he and his wife, he said “they did it on their own I didn’t ask for anybody to do anything”. In all of these situations the elders talk very favorably about their adult children helping them, there is almost a sense of pride conveyed that their children are helping them without them asking.

Often times it is the adult child who is running the home farm who is called first if help is needed. As one adult child said “you bought the farm” meaning that the responsibility for caring for aging parents falls to you. This could be related to the close working relationship the parent and adult child have running the farm together for many years, the closer proximity of the adult child running the farm, or a cultural expectation placed upon the adult child running the farm.

This dynamic is not always the case. Another adult child (currently farming his home farm) talks about being the primary caregiver for his wife’s uncle. The uncle lived in a town ten miles away on a working dairy farm. A different nephew was running the dairy farm at that point and the plan was that the farm would be left to him. The uncle had cancer and was undergoing chemotherapy in a tertiary care center over an hour away. The nephew who was running the farm was not involved in the uncle’s health care at all. The niece’s husband would drive him to his doctor appointments and chemotherapy sessions, go with him into the appointments to help him understand what was happening. At one point his platelets were low and he developed a nose bleed she shared that:

I don’t know if he wanted to die or what because he wouldn’t call for 8 hours over there with a nose bleed because he had no platelets and his heart is starting to beat erratically and he calls (my husband) and I think I have a heart problem and (her
husband) goes over there and here he had been bleeding through his nose for 8 hours and that point he got scared enough to call and say come and help me.

It is important to note that his other nephew was on the farm site less than 50 yards away in the barn milking cows that day and the uncle did not let him know what was going on nor did the nephew stop up at the house to see how his uncle was doing. This situation demonstrates the severe reluctance to ask for help.

During the peak work seasons on the farm of planting and harvest adult children return home to help their parents with the fieldwork. One family shared that two of their adult sons schedule their vacations to coincide with the fall harvest so they can help their father. Traditionally planting and harvest are carried out by multiple generations helping each other get the work done. The majority of informants who identified themselves as being “retired” still go out and help their adult children with planting and harvest. In the event of a health crisis resulting in a farmer’s inability to complete spring or fall fieldwork family members and neighbors will come together to help and complete the work. One informant shared of a time when he had to have surgery during the middle of fall harvest. He had gotten to the point that he was literally crawling to the tractor before he had surgery. While he was in the hospital his sons completed the harvest. Neighbors had volunteered to help but his sons declined the help. In this situation he did not ask anyone for help, rather the culture being what it is people saw a need and acted.

It is interesting to note that this cultural group does not like asking for help yet they value helping others or “being neighborly”. One couple has volunteered to drive a friend to his doctor appointments 65 miles away. Another informant identified that they have offered to help others if:
Other people needed and asked, you hate to intrude because why we say if you need help give us a call we would be more than glad to help you, well some do, but some feel like a lot of people, that could use help or they don’t like to they feel that if they call us they’re imposing. This puts the cultural group in a bind because they want to help each other but nobody wants to ask for help.

_Kinship, Marriage and Roles_

Agrarian Elder’s families are typically very tight knit with family being very highly valued. Family includes the nuclear family as well as the extended family. Nuclear families tend to be large and ranged in size from one to ten children with five children being both the mean and median number. There were no married couples that had no children.

Agrarian families are very close knit for four primary reasons; working together, playing together, eating together and going to church together. A farm is a communal enterprise with everyone helping to make it a success. Children share in the work. Many elders attribute their family’s closeness to working together. As one woman said “I think being on the farm there was always chores to do so they had to work together and later on in life they had that thing in common when they were growing up”. Another informant also attributed closeness in the family to working together when he said:

they had projects together and chores together and working together and so they played together and of course we were always right here with them so I think that might have had quite a bit to do with it the fact that they were pretty close to one another and at that time the kids didn’t, our kids anyway, didn’t head down town
and to different things away from here, their entertainment was on the farm, your swimming or riding bicycle or camping out in the backyard and things that didn’t seem too important but it seemed like it was important to them.

The family togetherness went beyond work as the informant above said. The children had to play with each other, there was no one else. The parents were there with the children working and playing side by side with them. The physical presence of the parents and involvement in their lives influences their closeness. One woman talked about how she was always home when the children got off the school bus and how many of their friends went home to an empty house. She tested the children one day and hid from them when they came in the house to see what they would do. The children were distressed and sad when they did not see her right away.

Off farm activities were done as a family, they would go to movies together, go out to eat together, go to card parties together, go to the children’s sporting events together and go to church together. Life was very family orientated. These factors contributed to a family unit that is very committed to each other and close knit. Many of the informants stressed that they always ate meals together as a family and that that contributed to the family closeness as well. Most of the informants are deeply spiritual or religious and raised their children to be the same way. A few expressed that going to church together as a family also brings families closer together. Some of the participants talked about the decline of the family in American society and attribute it to families not spending time together. One woman said “well now a days you know like he said the wife works, the dad works, the kids are in school but this kid goes this way after school this ones going this way this one is traveling over there, so there is no family unity”.
Family interactions between elders and their adult children, grandchildren and siblings are very frequent. Contact varied from daily to monthly for the informants. Many of the informants have daily phone contact with their adult children while others see at least one of their adult children daily. Contact with their siblings is less frequent but most report at least monthly contact. The primary factor that influences contact with adult children and grandchildren is physical distance. Many adult children left the farm and relocated to different communities to pursue their careers. Some of the elders have established a routine for visiting over the years. One woman meets her daughter for lunch every Friday; another elder’s daughter brings coffee every Friday morning before she goes to work. In both of these situations the adult child lives close to the elder making the frequent visits possible. Most of the informants have at least one adult child in a community within ten miles of the home farm. In many cases the home farm is being run by an adult child, in those cases there is usually daily contact between the elder and the adult child. Some of those interactions are work related and others are social.

In the cases where the adult children live at a distance from the elder both the elders and the adult children make an effort to see each other on a regular basis. One couple who had many children make a point of going to visit each of their children at least twice a year. The adult children who are at a distance also make a point of getting home. This is not unusual in this cultural group. In some cases the elders are not able to travel due to their health status and their adult children are not able to get home very frequently. In those cases all elders reported at least weekly phone calls to those adult children.
In most Agrarian families the only time when the entire nuclear family unit gets together is to celebrate Christmas. In some of the families they also get together for birthdays, Thanksgiving and Easter. As most of the adult children have children and even grandchildren of their own they find it hard to find a time when everyone can gather together.

In many cases residents of nursing homes get few visitors. This is not the case with the Agrarian families in this study. One couple talked about his parents being in the nursing home and going to see them every week as well as spending holidays with them there. An adult child said that he goes to see his mother in the nursing home at least twice a week. Between he and his siblings there is someone there to see her at least six days out of the week. This is not unusual in Agrarian families. All informants who had a relative in the nursing home reported visiting them at least weekly and on holidays.

The two informants who were never married and the informant who is divorced have very frequent interactions with their extended families whether it be their siblings, cousins or nieces and nephews. One informant was extremely close to one of her brothers and sister but is not close to her other brother and his family because she “never sees them” that is they do not go out of their way to visit her.

Divorce is a very rare event in elder Agrarian families. Only one of the informants was divorced. The rest were married for a very long time (see tables 2 and 3). Many couples had reached the 50 year mark. Agrarian elders do not see divorce as an option. Their marriages were not without conflict. One man said its give and take. A couple described their way of resolving conflict in the following exchange:

Wife: Well if something came up we talked about it
Husband: Yeah we’d discuss it and try to come to some conclusion (laughs) right or wrong you don’t get all your problems solved in the right direction but you have to come to some conclusion and I think we were able to do that without a lot of bickering.

Many informants identified that they were so busy working on the farm they did not have time to fight.

Marriages were very strong in the informants. They attributed this to both of them being home and working together on the farm. They had to learn how to communicate with each other to get the job done. As one man said it makes your marriage stronger to work together.

A few of the informants talked about the divorce rate in younger couples. They attributed this to a higher economic status and both husband and wife working. The couple did not have as much time together and had more money to fight over how it would be spent. The elders struggled financially through the years and many started with nothing. In reference to young couples getting divorced informants eluded to them having too much to start out with, life was too easy. One woman spoke about the adversity she and her husband faced (no telephone, no indoor plumbing, and no running water) when they were first married and how it brought them closer together as they struggled to survive and said “well if young couples today started out like with us when we first got married”.

Another characteristic of these marriages is overlapping roles. Typically the husband was the one who was primarily doing the farm work. The women typically focused their energies on the home and children. However many of the women helped
with the livestock and most helped with fieldwork in the peak seasons of planting and harvest. The women may not have been operating machinery but they were driving the grain truck or doing the running when a part was needed for the equipment and they brought meals to the fields for the men. Bringing meals to the field can be a large undertaking. One woman and her sister in law bought a camper with a kitchen in it because her husband and brother in law were farming multiple sites many miles apart. The women typically kept the farm account books as well. Some of the men assisted with domestic duties as well helping with cooking and cleaning. Childrearing was primarily the woman’s role. However children start doing farm chores as soon as they are interested or are physically able to. At that point they are under their father’s supervision as he would teach them how to do the task and oversee it. Many of the men talked about the kids tagging along with them when they were doing their chores. One man said “when the kids were big enough to go outside if I was around doing something they were out there you know”.

Coping with Farm Life

Farming as an occupation can be very stressful with many unknowns and factors that are beyond one’s control such as the growing conditions, animal health and income and expenses which are dependent on the markets. One never knows until harvest what the yield will be and what the price for the crop will be. Many elder farm families were children during the Great Depression, survived the farm crisis in the 1980’s and the low market prices for the past 30 years. They are very familiar with uncertainty and survival. Additionally they face challenges that other Americans do such as raising their families,
health crises, war etcetera. Three major coping mechanisms were found in this cultural
group; work, acceptance and spirituality.

Regardless of gender both men and women utilize work as a way of coping with
the challenges in their life. One woman who is still actively farming said:

Just keep going. Think while you’re doing it too, go and think what will make it
better what will make it worse or what I did to make it this bad in the first place
(laughs). I say you feel better when you got ten times more to do than you can get
done, then you feel the best, probably can’t get it done but you can try. Yep and
then you have something to get up for the next day.

Other women talked about going out and pulling weeds or mowing the lawn to help them
cope. One man said “and work through em that’s the name of the game of em” when he
was discussing how he copes with life’s challenges.

Accepting life’s challenges by taking them as they come is the second major coping
strategy utilized by the majority of informants. Many would make comments such as you
just accept it, you just go with the flow or you just do it like the man who said “You have
to accept what comes along I guess that’s about it you have to roll with the punches”.

When talking about the challenges of raising children one woman said:

Probably day by day, did what you could, did your best, sometimes not your best
but did what you could. Wasn’t the best probably but at the time that was your
choice, and just dealt with it day by day and look back on it and the time goes so
fast you wonder where has the time gone and they are grown and move on.

When people would talk about accepting challenges as a coping mechanism most of them
would insinuate doing their best or working with the challenge as the woman above did.
When speaking about accepting challenges many informants spoke about not worrying. One woman said of her husband “I don’t think you were ever excited about anything you always said that isn’t so bad that isn’t so bad and just let things go by I don’t think he ever worried too much”.

It is interesting to note that not one person identified talking with friends or family members as a way of coping with challenges. In fact all of the coping mechanisms utilized by this cultural group discourage talking about the issue.

**Spirituality**

Spirituality is a very important part of Agrarian elder’s lives. The majority of informants have very deep spiritual beliefs. Spirituality is frequently utilized by this cultural group to cope with their challenges. Many talked about using prayer when they were faced with challenges. One couple said “well we always had great faith and we were always kind of religious people we always went to church every Sunday and kind of put our faith in that in the man above” when talking about coping with challenges. Others spoke about God’s will or God’s plan as well as God not giving you more than you can handle. One woman who is dealing with complex chronic illness and pain said “well I guess it must be gods plan it’s that these things are, they say you can never get more than you can handle, sometimes you wonder (laughs)”.

Another woman talked about how she had trouble sleeping and would get up and go in the living room and say her rosary in the middle of the night. She identified that saying the rosary gave her comfort in this situation.
All of the informants were either Catholic or Lutheran which are the two primary religions in this geographic region. All but three of the informants go to church regularly. One person went to church when he was younger according to him out of habit but has gotten out of the habit. He alluded to the hypocrisy that is sometimes seen in congregations when he said “I just don’t like the people who sit up there and act like they’re above everybody else and aren’t really all that honest with themselves most of em aren’t fooling anybody but themselves either”. Another gentleman had gone to church his whole life but quit going to church two years ago because he said he didn’t want to dress up anymore. I found this hard to believe but he would not admit to any other reason, he still has deep spiritual beliefs but does not go to church with his wife. Another woman quit going to church because she was very disappointed in the clergy when her brother died. She has not looked for another church since that time. She continues to have her faith and said “oh yes I should be going to church I know I should but when you got that cold feeling you don’t get out of church what you should”. She has yet to get over here hurt feelings with the clergy. She has not addressed it directly with the clergy so they are unaware that she was upset by them.

The vast majority of the informants attend church every week. They attribute this to the way they were raised and that it was a habit. One woman said “And yes the church is a big part of my life it always has been I guess it’s because it’s become a habit, a good habit to go to church and if I don’t get to church on Sunday or the weekend I feel like I’m missing something”. Others identify that they go to church for spiritual nourishment and adoration or worship of their God. One woman said:
You know, I’ve always felt like that and when the kids complain they don’t like the priest they don’t like the sermon. Well is that why you go to church because of the sermon or because of the priest. I always tried to teach the kids that that’s bogus because it really should have nothing to do with it. It’s the adoration of Christ and communion, the food for your soul.

Others echoed her sentiments as when they talked about attending church.

The church functions as a social centerpiece in many Agrarian elders lives. When talking about his church one man said that “to belong to (the church) you’re a part of (it) and you see other people there and its kind of a community thing your closer together”.

The church is a place to come together once a week to socialize with others and stay current with the events in their lives. It is the place where you find out who has died, who was born, who is getting married, who is ill etcetera. One of the comforts Agrarian elders get out of going to church regularly is the being part of a community and knowing each other. One woman identified that:

I think religion, church, lets not say religion, church is where everything comes together and there’s huge comfort in that in knowing that no matter who you’ve lost or what happened this week that group of people is always gonna come together. There is predictability and a safety and a sense of belonging in all of that.

However the social aspect or sense of community in congregations is changing according to some of the participants. One person identified that:

everybody seems to be in a hurry, more so now than when we were first married it seemed like people would get out of church and they’d all congregate and visit
and now if your one of the last ones out of church there’s nobody outside to talk
to you anymore because I mean they’re all gone.

Most of the informants do still visit with other members of their congregations after
church. There are a few that leave right away or only socialize with the people who are
standing near them as they exit the church.

Other ways Agrarian elders practice their spirituality is through prayer, daily
devotions, reading their bible and saying the rosary. They identify feelings of inner
peace, comfort and serenity when they do these activities. Many of them do these on a
daily basis. Many have strong beliefs in the power of prayer. One person said:

I think it’s a good thing, I do, I believe in prayer and I believe in it brings a peace
somehow, no matter what happens I know it all works out for the good, maybe
you don’t see it at the time, but it all works out.

They believe that prayer helps those who are sick. Many are in prayer chains through
their congregation. In contrast they do not believe that illness is a punishment from God.

Many will contact their clergy member to request prayers when they are ill or
hospitalized. However most do not want to have their names in the church bulletin for
prayer requests nor have the clergy say a public prayer for them in church. They want to
maintain their privacy and not become the center of attention in the faith community.

The majority of informants who attended church regularly identified that they
were active in their congregations. Most of the women were involved in volunteerism
through their churches in activities that included; sewing quilts for missions, converting
books into Braille, preparing and serving meals at funerals, delivering meals on wheels
and preparing and maintaining the altar. In addition many belonged to the formal church
organizations such as Dorcas and Ladies Aid. Many of the men also served as volunteers in their congregations through choir or leadership. All of those involved in volunteerism in the church verbalized personal satisfaction in doing so. The local Catholic Church started adoration which is where someone is in the church 24 hours a day from Monday morning until midnight Thursday night. Many of the catholic informants participate and volunteer one hour a week to this. When talking about his hour of adoration one man said “I’ve really found a lot of peace and satisfaction and prayers answered through” the adoration. Others identify feelings of peace or serenity when they do the adoration. The amount of time individuals spent volunteering in their congregations varied greatly from a few hours a week to close to 40 hours per week.

Some of the informants believe that shared spiritual beliefs and attending church together enhances their family life. One man said “oh seems like people that go to church together kind a stay together a little more, family kind a seems like its knitted a little bit better”. Many attributed their long marriages to their shared Christian values and beliefs. The majority of family gatherings where the entire family gets together are centered on the Christian holidays of Christmas and Easter. Many families will attend church together on those holidays.

Some described farming as being a calling from God. It was their job to grow food for the world. One man said:

We believe that god rules the world or made the world and so all these plants are god given plants and we have to take care of em to make em produce, I think there’s a part of growing tied into our belief of the father.
Many described how they love to watch things grow to nurture them. Most of the elders enjoyed riding in the car to look at the crops to see how they were doing. One informant, a nurse who grew up on a farm believes that watching things grow is a spiritual experience for farmers. One man said it was a miracle that you just take a bushel of corn and you can get 200 bushel back”. Another woman described the connection between growing crops and her spirituality when she said:

To me it was like the miracle of birth, he was always excited about a new baby and I think the miracle of the growth of the plants and the effects of the light well where do we get the light and so many light hours a day well you know its all connected god creating the earth.

Many informants echoed these sentiments that farming is a very spiritual undertaking for them.

Informants talked about praying for their crops, animals and the right weather conditions such as rain. They talked about trusting in God for productive crops and successful harvests. One person shared a story his dad used tell him:

My dad used to say look at how corn grows, its leaves reach out and its head is up like its praying for rain. If we got just a little rain dad would take us out there and there would be moisture around the base of the corn plant because the leaves were out to catch the rain and funnel it in to the plant. It goes with our beliefs we prayed for good crops and for weather and rain.

One informant shared that whenever it stormed she would go out and sprinkle holy water in the field and around the building site to help protect the farm. She said the one time
she was unable to sprinkle holy water on the field was the only time they ever got hailed out.

The solitude and peacefulness of farming can bring people closer to God and nature as described by this man when he said:

You talk about praying the best when I was cultivating you know on a nice day there was nothing better. The sun was shining and just a little breeze and maybe you’d see a deer at the end of the field or pheasants you know and just it was quiet out there and you just could ride along and everything going good it just made you feel good.

*Socialization*

Socialization in Agrarian elders tends to center around family, church and neighbors. Most of the informants identify that the majority of their socialization occurs with family. This may be going out to eat to celebrate extended family member’s birthdays or visiting their adult children. For many of the informants farming interfered with their ability to socialize when they were younger. One woman said:

We missed out on so many weddings of our nieces and nephews we got to go to the weddings but we’d always have to hurry home to milk. We always thought we’d go back to the dance and everything but by that time why oh gosh I’m guess I’m too tired to get dressed up again and go back in and so ya just don’t do a lot of things when you’re tied down with the cows.

This was not an isolated incident. Others talked about being tied to the farm and chores and how that would limit their ability to go.
Many informants shared stories about getting together with their neighbors when they were younger for card parties. When they would get together with their neighbors for card parties or other events they were family events. The entire family went, one man recalled that “when we would go in the evenings if one of the neighbors had a card party the kids were included you never got a babysitter so you could go to a card party you took the kids along everybody’s kids were there”. Very few of the elders still get together with friends to play cards. One couple said they used to go out once a week to play cards but now they stay home and play cards with each other. Often this is related to the death of friends or friends spending the winter down south.

A few of the informants do go for coffee in town every day; one even goes twice a day. Going for coffee means sitting with your friends at a local bar, restaurant or gas station/convenience store telling stories, catching up with the local news (gossip), talking about current events or reminiscing. If a regular is missing from coffee the others will speculate about where they are. They may be called or a relative may be called to see what is wrong if they have not been there for a few days.

It was rare to see an informant who did not do any socializing. There was one informant who did not really socialize at all. They said “I mean I enjoy people when I see them but I don’t go out of my way. I mean I’ve never been a card player, never gone to little ladies things, I never when I was working I never had time”. Another individual who did very little socializing attributed it to his not liking large groups. He said he did much better one on one. He does have a friend that he gets together with every two to three months.


**Staying Close to Home**

For many elder Agrarians vacation was a foreign concept when they were younger. The demands of the farm with peak work occurring in the summer months and livestock that needed tending daily throughout the year discouraged them from taking a vacation. At one extreme of the spectrum was one man shared how he had only hired someone to milk for him once in all his years farming and that was when his son was in a state athletic event. Others would occasionally take a family vacation.

Many of the informants did do some traveling when they “retired”. I say retired loosely as most are still actively farming with an adult child. Some of the informants did extensive travel around the United States and a few have traveled to Europe and other countries. Only one couple is still doing any traveling at this time. Most of them quit traveling due to health concerns in either their spouse or themselves. Many of them advised me to travel now while I still can do it and enjoy it.

**Privacy**

Agrarian elders value their privacy. In small towns or rural areas where the population is low one dynamic that occurs is that people know each other. Knowing each other can help build a sense of community and establish connections as well as identify one as an insider or an outsider. Insiders know each other. A dynamic that occurred in every interview was the elder saying at least once “you know so and so” when they were telling me a story or making a point. They were making connections with me as well as establishing me as an insider. Knowing each other can be comforting however the down side is that everyone seems to know everyone else’s business. Gossip or talking about each other is not an uncommon event. When something happens to someone
everyone seems to know about it. In the event of a tragedy such as a fire or major illness people are curious and want the details. Some just want the information while others want to know so they can help if they are able to.

Agrarian elders who still reside on the farm like the privacy living in the country offers them. They like the freedom of being able to go out to get the newspaper in their bathrobe or walk in the yard in their housedress. One man even talked about the freedom to answer natures call (urination) outside which he could not do in town. They like the privacy of coming and going without people knowing about it. As one man said “we go where we want and do what we want and nobody says well where were you or what are you doing or what not go and do our own thing”. One woman who has moved to town said she did not like the lack of privacy in town. She keeps her shades pulled and curtains drawn because the neighbors can see all the way through the house if they are open. She said she does not even walk in her yard in town which she did when she lived on the farm. One man talked about another farmer who moved to town and lasted three months before he moved back to the country he said:

    You know he sold the house three months later cause he said you know I’m damn tired of the neighbors saying you mowed your lawn yesterday huh or you changed your screen and he was done, it was gone, he didn’t want anything to do with those people in town.

He did not like that his neighbors were watching him and commenting about what he was doing. He was used to the freedom and privacy the country offers.

Agrarian elders do not like to be the center of attention or be the topic of conversation (gossip) at the coffee shop. As mentioned during the discussion of
spirituality they do not like their names in the church bulletin or having public prayers in church because it will stimulate people talking about them. One adult son talked about keeping family issues private when he said:

There have been a number of things a couple of things I can think of in the family that happened that everybody tried to keep quiet nobody could talk about it nobody could know about it just kind a quiet so it would disappear.

One woman who was having health problems needed to use a walker and a wheel chair on a temporary basis. She talked about going to the grocery store in another community when she thought there would not be anyone there that she knew so that they could not ask her any questions. She felt like she was being drilled with questions whenever anyone would see her in the wheel chair. As she said “I don’t feel that its anybodies business. Like my grandmother used to say soup made at home should be eaten at home”.

Agrarian elders also have concerns regarding data privacy associated with technology. One man cut up his credit cards because he had seen a program on identity theft and now shreds his bills and paperwork. A woman does not like that personal information is now computerized in the health care system she uses. She had been taken by ambulance to the hospital and six months later received a letter from the ambulance company informing her that their computer information records had been stolen which included her social security number.

Care

For Agrarian elders care is about helping people and relationship. Helping people is a reciprocal process, I help you and you help me. They talked about their adult
children doing things for them like bringing food, shoveling snow, mowing the lawn, fixing things in the house and driving them to the doctor. One man said “if we ever have any problems they’re all right here asking whatever they can do for us”. The elders also talked about the things they do for their adult children such as babysitting the grandchildren, giving them money, helping them with farm work or listening to them talk about a problem. The key was that you help each other, it was not one sided.

Maintaining relationships especially through physical presence was critical for the demonstration of care. This involved visiting each other and phone calls. In a crisis situation such as a hospitalization the elders spoke about how the entire family would be at the bedside within a matter of a few hours and how everyone would come when someone was hospitalized. One elder talked about their son who was hospitalized this past summer and how all of his siblings came to the hospital to see him. One woman said when she was in the hospital all of her adult children were at the hospital. Her daughter who is a nurse took time off from work and stayed at her bedside during the entire hospital stay.

In general Agrarian families are not emotionally demonstrative regarding care. One adult son said “I never got a hug from my mom or my dad, never”. This was not said in a negative manner; rather it was matter of fact. He said that he knew that his parents loved him and cared about him. One exception was a woman who grew up in a home where her parents never hugged the children or said “I love you”. With her children she did hug them and tell them she loves them. She said this was a change as she got older and more so since the death of her husband and two of his brothers within a few months time frame. One man said people knew he cared because “I help them and
do things and stuff” and another said “I’m not real good about showing that, I don’t get real emotional about care”.

Care for others outside of the family unit especially friends and neighbors is demonstrated through doing things for them as well. This could mean stopping and giving roadside assistance if their vehicle is on the side of the road with a flat tire, giving them a ride to the doctor, or helping with field work in a crisis situation. Care is shown especially through food. If a neighbor or friend has a crisis you bring a hot dish. One woman shared how she had broken her leg and how people just brought food with out asking. Excess garden produce is also shared with friends and neighbors as a way of showing care. When you bring food you are also getting into the relationship aspect of care. When you deliver the food you do not set it down and run away, you make time to stay and visit with the person giving them the opportunity to talk.

*Professional caring and non caring characteristics*

In regard to nursing care Agrarian elders expect nurses to be knowledgeable and proficient but to be perceived as caring when providing nursing care to them the relationship aspect of care is critical. An adult daughter said “all her health care related stuff is all relational you know if the nurse is nice to me and I know who she is if she tells me what to do I’ll do it”. A caring nurse is one who takes time and will listen and talk with you. One woman said a particular nurse was caring because “they would always come over to the bed and talk to you it wasn’t as though they came in just did their thing and left”. Another woman was quite upset that the nurses would bring her meal tray in and just set it down and leave without saying anything. She felt they could have at least
said hello which would not have taken them any more time. They also felt that a caring nurse is one who is careful, gentle, friendly, cheerful and not grumpy.

The helping or doing aspect of care was also very important to the rural elders in relation to nursing care. One man said “they did everything for me. Every time I asked for something they were right there”. A caring nurse not only helps you when you ask, they check in on you to find out if you need or want anything. This goes back to Agrarian elders not liking asking for help; rather they prefer if it is offered. One person really like that their nurse “would come and check on you often it was not like you were left until they called they would come and check on you to see how you were doing”

In contrast to a caring nurse a non caring nurse according to Agrarian elders is one who is cold, abrupt or does not seem to enjoy what they are doing. A non caring nurse is also one who does not pay attention to what is happening in the patient or does not take action when things are found. One woman shared that when her husband had a knee replacement he developed a paralytic illness and was jaundiced from blood loss. She could not get anyone to take action on the changes in her husband. She said she had to be the one to take action and draw the changes to the doctor’s attention instead of the nurses doing it. She said “I mean he was deteriorating if I hadn’t gone in there and raised heck I think he’d a been dead, they would a just let him die”. Another woman described how she was having leg pain following a hip replacement. She told the nurse she was having terrible pain in her leg and requested that the abductor pillow be loosened or removed. The nurse told her to “shut up and quit being such a baby and that she would get her a pain pill”. The nurse did not do any assessments at that time. By the next morning the
woman did not have any feeling in her foot. The abductor pillow had been pressuring on a nerve resulting in permanent nerve damage and foot drop.

A non caring nurse is one who only comes into the room when they have to. One person described how the nurses “just sit at the computer” and only came in her room at the beginning of their shift to check on her. A non caring nurse is one who does not do their job. One person described how she had a post operative wound infection that was draining. The drainage was all over her gown and the bed linens and her family had to change her gown and linens because the nurses would not do so. A non caring nurse does not listen to their patient and does not carry out assessments.

**Health**

To all Agrarian elders informants’ health means the ability to do. To do means being able to do the things they want to do or their normal activities. They do not attribute health to things they have done but rather to a force outside of themselves (external locus of control). Many said things such as; my health is a blessing (from God), I have been fortunate or they relate it to luck. All of them highly value their health. It is no surprise that they have come to value their health more as they age. Some said things like when I was younger I took my health for granted, now it is the most important thing.

It is interesting that the vast majority of the informants describe themselves as being healthy yet there is a significant amount of complex chronic illness. One couple stated that they had been so fortunate that they have not really had anything. Yet this man is taking thirteen pills a day, is diabetic, has heart disease (had stents placed twice) has severe arthritis in his knees (bone on bone) as well as other health problems. His wife has arthritis to the point that sometimes it is very hard for her to get up out of the
Many will internally and externally minimize their health problem by comparing themselves to others or say it could be much worse I can still do what I want to do.

When they talked about the things they have done in their lives to stay healthy most would attribute their health status to hard work. One man said “I guess just went out and worked and been able to sleep good and eat good and that’s about the extent of it”. Some would refer to the avoidance of smoking and rarely drinking alcohol and then only in moderation. In regard to diet one woman said I eat what I want. In describing their diets most would describe they typical American meat and potato diet with vegetables. All of the informants had gardens to provide fresh produce for their families when they were younger. Many still garden but not to the degree as when they were younger. Those that do not garden often get fresh produce in the summer from family members, friends or neighbors gardens. Many of the elders get a flu shot every fall and take a multivitamin. Many talked about getting enough sleep at night to stay healthy.

Illness on the other hand is something they do not have time for; it is seen as an inconvenience that interferes with their ability to do what they want to do. When they were ill many men and women kept going and just worked right through the illness. In comparing himself to younger generations one man said “for having a cold back then holy cow that was nothing you still kept going. Now they curl up on the bed and they think they’re dying”. The attitude of not letting illness slow you down or stop you carries over into how they manage chronic illness. One woman is on a very complex home treatment regimen that can take her the majority of the day to complete. Her husband said “we could cry or we could laugh at it and keep going you know rather than dwell on it whether she never dwelled on it we just talk about something else and go on with life”. 
Many Agrarian elders deal with pain on a daily basis. For most of them it is from degenerative joint disease or wear and tear arthritis. Most do not take anything for the arthritis on a regular basis but rather put up with the pain. One woman when asked how bad the pain has to be before she will take anything said oh when I can’t get up out of the chair. She went on to say “I don’t like drugs so I don’t make a habit of using it so when it get where I think I really cant stand it I will go and take one but otherwise I figure well I should work this out”. This is not atypical. They will not take anything unless the pain is very severe. For many they cope with the pain by toughing it out, ignoring it or by focusing on something else such as work. One woman who has severe arthritis in her back still sews quilts for the missions at church for up to eight hours a day. She says it isn’t so bad if she is sitting down. Another person said in regard to taking anything for pain “I just think I don’t want to take that many if I can handle myself”.

Many would speak almost in a proud manner that they could take pain or had a high pain tolerance. One man talked about how he did not take anything for pain after he had surgery. The nurse had come in and talked to him trying him to take something for pain because people who had the procedure he did had a lot of pain. He refused to take anything saying that it wasn’t that bad.

*Health Seeking Behaviors*

Agrarian elders regardless of gender tend to delay seeking out health care when they are experiencing a health problem. They will seek out health care if they perceive that the condition is a medical emergency at which point they will go to the emergency department. Most elders admit that they wait longer than they should but they want to
wait to see if the problem will go away on its own. As one woman said “I don’t go fast enough they tell me. I keep thinking I can, I don’t want to bother them and I think oh I can battle this myself and I guess when I really get sick is when I really go”. Many of the elders talked almost with pride of how they rarely went to the doctor. One man said up until a couple of years ago he had not gone to the doctor at all since he was married (over 50 years) with the exception of a couple of incidents when he was hurt.

When faced with diagnosed chronic illnesses such as heart disease or diabetes Agrarian elders will for the most part go to their follow up appointments. When talking about their follow up appointments they talk about knowing the provider and the social aspect of the visit. One adult daughter described her mother did not mind going in for monthly follow up visits for lab work because she had a relationship with the doctor and nurses “so it was a social thing as long as she wasn’t going cause she was sick it was okay to go for this maintenance stuff because there’s no choice about that”.

Another dynamic that is present in this cultural group is that they do not want to bother the doctor. One man described how he had a cold and when he finally went into the doctor he was over the worst of it and the doctor just told him to continue what he was doing. He perceived that he was wasting the doctor’s time. Others have had health problems in the evening, over the weekend or on holidays and will delay access until the next work day. One woman described how she had rolled over in bed and broken her hip. It was thanksgiving morning so she waited until the next day to go to the doctor because “you know me I don’t want to bother the doctor”.

Fear of the unknown motivates some Agrarian elders to avoid going to the doctor. One woman said that she was “afraid of what they’re gonna tell ya or find, we’re both the
same way”. They would rather not know than find out they had a problem. One way to avoid this is to avoid going to the doctor. When they do go to the doctor a dynamic that is present is limiting what they tell the doctor in fear that something will be done. One person has had back problems for many years and goes to the chiropractor when it is flaring up. They have intentionally not told their medical doctor about it because they are afraid that the doctor would want them to have surgery. Many of the informants suffer from severe degenerative joint disease (DJD). Some have not told their doctor’s about their joint pain because they fear that surgery would be recommended. A few of them who have DJD in their knees that it is to the point that it is bone on bone. All of these individuals say they will not have surgery, they do not see the need for it even though they have daily pain and limitations in their activity.

Some of the elders have long term health consequences of delaying access to health care. One woman suffered a heart attack. Her husband said:

Her heart attack was quite severe and she actually lost about 1/3 of the part of her heart. Well the doctor said, the term he used was that much died and your probably know more what I’m talking about, well first when they talked about the heart attack and how serious it was when we went in there and I thought well they do bypass or put a stent in or and he said it was too late for that they couldn’t, he called it 1/3 and I don’t know how he was estimating that but that part of the heart was dead and that it wasn’t as bad as it sounds because ah the rest of the heart can pick up quite a bit of the function.

This is not an isolated incident regarding chest pain and delayed access. Another person had experienced chest pain with exertion for over a week before he sought out health
care. When he did seek out care an angiogram was immediately done and a stent placed for blockage of one of his coronary arteries. He said “I don’t go to a doctor too easy”.

One woman described how her mother had fallen and broken her hip. A friend had come over and found her on the floor. The woman refused to let her friend call an ambulance. The friend then called the woman’s daughter. The daughter tells how her mother was very resistant to going to the hospital even though her hip was broken. She kept saying “just put me in my bed and I will be fine”.

Delayed access is also related to work taking precedence over health. One man had been feeling tired and weak for a few weeks before he sought out health care at which time he was diagnosed with diabetes. He had put off going in because it was in the middle of spring planting. Another man was literally crawling to his tractor and had to use two hands to turn the key in the ignition to start the tractor during fall harvest. His family finally insisted he go to the doctor. Surgery was recommended; he wanted to put it off until after harvest was completed. When given the option to sign out against medical advice and told that he may be dead in 10 days he agreed to stay and have the surgery. Farm work is there whether one is healthy or ill, it does not go away. People talked about doing their chores when they were ill and just working through it. One person had hurt their back but continued to milk the cows because there “was not anyone else to do it”. He described himself as crawling to the barn at that time.

Some delay access due to the cost of health care. This is an interesting dynamic as all of the informants have Medicare and a supplement. Even though they do not have to pay much for the appointment they review the bills and are concerned about the cost of the appointment and diagnostic tests. One person said “well it just bugs me they want so
much for a doctors call its a hundred dollars”. When she needs to go to the doctor she asks herself “do I really have to go” and said “I don’t go unless I have to go”. Having to go for this person meant you are very ill.

Health seeking behaviors are also passed onto the next generation. One man described his adult son’s health seeking behavior when he said:

I think maybe some of our kids that’s rubbed off on (my son) cut his hand really bad about that far (base of thumb down about 2 inches) wide open and he got a needle out of the pig house and some thread that we normally use for sewing up pigs. He set down right in the pig house and washed that all off with iodine, his hands all off, he set there and sewed that up he had about 10 stitches. He said he wasn’t gonna give the doctor a couple hundred dollars to sew that up (laughs) and you know that healed up and he never had a bit of infection or anything he set right in the hog house and sewed it up (laughs).

For younger farmers as in this case economics plays a role in the decision to seek out health care as they may not have insurance or when they have insurance they have very high deductibles

Health Knowledge

Agrarian elders have limited health knowledge or health literacy. They do not always know what their symptoms mean or when to take action. Many asked health questions during their interviews. One woman did not know that she could call the clinic and talk to a nurse free of charge if she had health questions or had a question for her doctor. Many would ask questions about medications they were taking. Many did not know why they were taking different medications or what their action was. One woman
started coumadin a year earlier and had no idea why she was taking it. She also had
questions about what the side effects of coumadin were as well as drug interactions.
When she asked her doctor if she could quit taking it the doctor informed her that she
would be on it for the rest of her life but did not tell her why she was taking it. Many will
not ask their health care provider questions or will not push them for further explanation
if they do not understand. An example of limited health knowledge would be a
gentleman with a history of hypertension who had had a severe nosebleed that would not
quit bleeding earlier in the week was wondering what it could have been from and did not
check his blood pressure or seek out health care with the nose bleed. Another example
was a woman whose sister in law had recently broken her hip and then fallen. She did
not know that that could happen and asked me if that really could be the case.

Not Wanting to Take Medication

In strong contrast to what is thought about mainstream American culture where
health care consumers want a pill to fix everything Agrarian elders do not like to take
medication unless they absolutely have to. One man said “I think to hold off as long as
you can (laughs). I think they’re really needed in a lot of cases but I guess I don’t like to
take any more than absolutely necessary”. They think that doctors are too quick to
prescribe medication and describe some doctors as pill pushers. They think that most
people take too many drugs. When medications are prescribed most will take them if
they agree that they are necessary. A few of the informants talked about cutting back on
the dosage or stopping a medication entirely to see if they really needed it. If they did not
have any symptoms they believed that they did not need the medicine. Some delayed
beginning a prescription to see if a life style change would bring about the desired effect
One woman described how the doctor wanted her to take a medication to lower her cholesterol. The woman refused and said she wanted to try diet changes first. Her cholesterol did come down with diet therefore she never did take the medication.

Some dislike medication to the point that they do not tell their health care provider what they are experiencing for fear of getting another prescription. One woman said “you can’t get under your breath some times and I don’t want to say too much cause I’m afraid she’d put me on more pills (laughs) and I never was a pill taker until a year ago”. Many do not like to take medication because of the potential side effects and will point out that even Tylenol has side effects. Some are very afraid of potential side effects. One woman said:

I read instructions on the bottle and I mean its just when you read that I mean there’s everything is wrong with it I mean its don’t take it this way don’t take that much and well okay I wont take any at all then.

Many talked about just putting up with severe arthritis pain rather than taking medication. When talking about pain medication one woman said:

I think what it does is that it masks the problem and I guess I would rather suffer through the problem than to keep doing that because that’s hard on your stomach and I think there’s some other side effects from it. I’m not so sure it’s so good for people.

They are unsure of the long term effects of medication. Many alluded to how health care professionals thought medications were good for you and then were pulled from the market because of side effects. As one person said “well its scary you know some of that
stuff they put on the market and then it comes out a few years later maybe that stuff isn’t very good for you”.

*Choices about Healthcare Recommendations*

Many Agrarian elders adhere to the regimens their health care providers recommend if they believe it will make a difference for them. Four of the elders interviewed are oral control diabetics. Two of them never check their blood sugar with a glucometer, one of which does not even have one. One of them had their glucometer break three days before the interview and had not gotten in to replace it yet. The two that do check their blood sugars do not do so as frequently as they have been instructed to. They do not see it as being necessary as their blood sugar is usually in the same range when they check it. One who never checks it said he could tell if it was high because he would get a dry mouth.

As mentioned previously some will cut back on their medications to see if they really need them. One woman cut down on her heart medication because she did not think she needed to take it three times a day. She felt that taking it three times a day was too much yet she did not understand how the medication worked or what it did. One man quit taking his cholesterol lowering medication because he was having muscle pain in his legs. He did not inform his health care provider that he was having this side effect. He told a nun about it, she told him to quit taking the cholesterol lowering agent because that was what was causing his problem. He quit taking it on her advice and reports that his legs feel much better. It is interesting that he took the advice of a nun and did not talk to his provider about the problem.
In only one case did someone say that they quit taking a medication for economic reasons. She said the medication was expensive. Upon further discussion she admitted that she did not take it because of all of the potential side effects and that she was not much of a pill eater. This is an interesting dynamic as the popular belief is that elders cut back on or quit taking their medication because they can not afford them. This was not the case with Agrarian elders. All of them said that their economic status does not interfere with their ability to get health care or medications.

Trust in their health care provider also influences adherence. The physician in one of the communities retired this past summer after over thirty years of practice. One man who has oral control diabetes and hypertension had been to see him last spring for his regular follow up visit. His blood sugar was high so the doctor doubled his medication. The man said that he was weak and tired after doubling the medication so he basically quit taking it. He reports that he still takes it yet the bottles he showed me that should have run been gone by last July (over seven months ago) are still full. There are a couple of dynamics present in this situation. One the man does not have much faith in medication, he believes he can control his hypertension and diabetes with physical activity and two he has not established a relationship with another health care provider yet. He laughed and said he would go to the doctor when his medications ran out. Another factor is quality of life, he is in his eighties and did not feel well when the dosages were increased and in his words he is alive yet.

One man who had a coronary artery stent placement talked about the day he came home from the hospital:
I come home and she went uptown so I got the pick up and drove out to the farm to see how the cattle are doin (laughs). Well I shouldn’t a done that really. Well first of all I signed a paper up there but I forgot, it said I shouldn’t drive a car for a week or 10 days and I drove and I didn’t really think. I felt good well I’m gonna go out, I had interest in the cattle yet, I wanted to see how they were doin.

He was very driven to go out and check on the cattle even though he was not supposed to drive. It was very hard on him to sit and watch others work or think about others doing the work rather than himself. His wife said she asked the doctor about him going back to work so quickly because this happened shortly before fall harvest and he was out in the combine that fall. She said” he looked at me laughed and he said well I think it was easier on (him) to be running the combine than sitting in the window looking at someone else running it”. For this cultural group this is a very true statement.

Doing

Staying busy by doing something is very important to Agrarian elders. Informants varied in the activities they choose to keep themselves busy. Activities included but are not limited to: farming, gardening, going for coffee, cutting wood, volunteer work in the church or community, and hobbies such as wood or metal work. Some of the men talked about working on the farm building site with activities that included mowing lawn, painting buildings and organizing storage within a building. Both men and women talked about the need to be doing something. Both genders linked doing to staying healthy. As one man said:

Because you’re moving around and they say not to shovel snow if you go out and (you) do it or scrape it you come in and feel like eating you know. You just sit all
the time I mean like guys my age they do so much sitting when they do anything they’re paralyzed (laughs).

Many others echoed these sentiments and linked inactivity with muscle stiffness, fatigue, boredom, hardening of the arteries as well as mental health. Some talked about how staying busy helped them by focusing on things other than their physical ailments as one person said “you don’t have time to think about stuff or back pain you know”. Being inactive is very hard on these elders. One woman who has multiple health problems and must limit her physical activity said “keep doing stuff keeps your mind active because I can tell it myself I don’t get out and do like I used to do and you can tell it on your mind”.

As they have aged many of the men are not as busy with farm work because of retirement, getting out of livestock or turning the farm over to an adult child. With less farm work to do the men fill their time with other work such as gardening, cutting wood, mowing lawn, working in a shop (woodworking or metal) or just tinkering with something.

Many talked about going crazy if they did not have anything to do and that they just can’t sit around. Most of the activities that the men do to stay busy are outside. Most said they hated to sit around in the house. Some of the men talked about how hard it would be for them to live in town because there would not be anything for them to do and how there was always something to do on the farm. One person said of living in town if you mow the lawn in the morning you can’t mow it again in the afternoon. This man talked about all the things he can do on the farm and described a typical day activities as:
I just go out to the shed and I find something to do and I gotta feed the cats and I get the mail right away in the morning and then we got a stove in the basement and I cut a little wood well if I aint got nothing else I can go up and cut up a little wood or something you know. In essence if they do not have anything they have to do they will find something to do.

Women also stay very busy and fill their time doing things. In addition to their homemaker tasks of cooking and cleaning these women often have gardens (flower and vegetable) and do a lot of volunteer work. Most volunteer work centers around their church as discussed in the spirituality category. When I say they do a lot of volunteer work I mean they do a lot. One woman in particular works almost full time doing volunteer work by sewing quilts for missions. Some of the women also stay busy by helping their adult children with their grandchildren.

Presentation of Patterns

During the third phase of analysis the data is analyzed to identify patterns with similar or different meanings in regard to the domain of inquiry. This builds upon the data and categories identified in the first two phases of analysis. The focus of this phase is on the meanings and context of the data. This phase revealed ten patterns which will be presented below.

1. A pattern of underutilization of healthcare by Agrarian elders.

**Supporting Categories/Cultural Context:** independence, coping, privacy, health, health seeking behaviors, health knowledge, not wanting to take medications, doing what the doctor tells you to do, pain, doing, occupational health and safety on the farm, technology and healthcare, and economics.

*Supporting Categories/Cultural Context:* independence, help, kinship, marriage and roles, coping, spirituality, socialization, privacy, health, health seeking behaviors, not wanting to take medications, doing what the doctor tells you to do, economics, farm culture, doing, life on the farm and others don’t understand us.

3. A pattern of the farm being a higher priority than self care.

*Supporting Categories/Cultural Context:* independence, help, coping, health, health seeking behaviors, health knowledge, doing what the doctor tells you to do, pain, occupational health and safety on the farm, economics, farm culture, doing, life on the farm, and others don’t understand us.


*Supporting Categories/Cultural Context:* independence, help, kinship, marriage and roles, coping, spirituality, socialization, care, professional caring and non caring characteristics, health, health seeking behaviors, health knowledge, not wanting to take medications, doing what the doctor tells you to do, pain, occupational health and safety on the farm, farm culture, land, retirement, doing, life on the farm and others don’t understand us.

5. A pattern of economic uncertainty throughout Agrarian elder’s adult lives.

*Supporting Categories/Cultural Context:* Independence, help, kinship, marriage and roles, spirituality, staying close to home, privacy, health, health seeking behaviors, occupational health and safety on the farm, economics, land, retirement, life on the farm, and others don’t understand us.

6. A pattern of freedom for Agrarian elders.
Supporting Categories/Cultural Context: Independence, help, kinship, marriage and roles, socialization, staying close to home, privacy, economics, farm culture, land, retirement, doing, life on the farm, and others don’t understand us.

7. A pattern of very close knit Agrarian families.

Supporting Categories/Cultural Context: independence, help, kinship, marriage and roles, coping, spirituality, socialization, care, economics, farm culture, land, retirement, doing, and life on the farm.

8. A pattern of very strong spirituality in Agrarian elders.

Supporting Categories/Cultural Context: help, kinship, marriage and roles, coping, spirituality, socialization, privacy, care, health, farm culture and land.


Supporting Categories/Cultural Context: independence, help, kinship, marriage and roles, spirituality, socialization, economics, farm culture, land, retirement, doing, life on the farm and others don’t understand us.

10. A pattern in which care is taking time for Agrarian elders.

Supporting Categories/Cultural Context: help, kinship, marriage and roles, socialization, professional caring and non caring characteristics, farm culture and doing.

In summary this chapter presented the second and third phases of data analysis that is the identification of categories and patterns. The second phase of analysis identified eight context areas that help one understand Agrarian culture as well as seventeen categories related to the domain of inquiry that is Agrarian elder’s health values, practices and needs. The third phase of data analysis revealed ten patterns related
to the domain of inquiry. The following chapter will present the fourth and final phase of
data analysis the presentation of themes.
V. DISCUSSION

Introduction

The fourth phase of data analysis is the highest level and focuses on the identification of major themes, findings or theoretical formulations are identified. During this phase the researcher synthesizes their thinking and interprets the findings from the first three phases to identify the major themes and findings primarily from an emic perspective of the domain of inquiry. There were three themes identified in this study which were: 1) Health and well being in Agrarian elder men and women health and well is characterized by hardiness, 2) Agrarian elder men and women are interdependent with their spouse, family, and God to promote their health and well being, and 3) To Agrarian elder men and women care is the physical and emotional presence of others during both health and illness. These themes will now be presented in depth.

Theme One: Health and well being in Agrarian elder men and women is characterized by hardiness.

The patterns that supported this theme are: 1) A pattern of underutilization of healthcare by Agrarian elders, 2) A pattern of self reliance in Agrarian elders, 3) A pattern of the farm being a higher priority than self care, 4) A pattern of doing by Agrarian elders and 5) A pattern of economic uncertainty throughout Agrarian elder’s adult lives.

Agrarian elders are very hardy people and universally define health as the ability to do what they want to do. Doing what they want to do is typically represented by work and activities of daily living. The majority of the men were still actively farming either alone or with an adult child. The women were involved with helping during peak work
seasons or were involved in volunteer work. Some of the women were involved in volunteer work that equated to a full time job. One woman sews quilts for missions eight hours a day. She continued doing this when she had severe back pain that prevented her from standing up straight. She said she was okay as long as she could sit down.

There is a tendency for Agrarian elders to minimize their health problems even when they live with complex chronic illness and significant pain. One key informant stated that they had been very fortunate that they hadn’t really had any problems. This was an individual who takes eleven medications a day, has had two heart stents placed and has been diabetic for over 20 years. His wife echoed that they had been very fortunate in regard to their health. She has arthritis and is reluctant to take anything for the pain. She will take an advil she admits when she is unable to get up from the chair. This was not an uncommon finding. As long as people were able to do what they wanted to do they perceived themselves as being healthy. Many of the informants still work on the farm. Many of them attribute their health to working. As one informant said “Yep I feel a lot better if I go out and work in fact I’ll put in a big days work but I field cultivated for corn and beans this year probably 1600 acres”. Not only do they feel better physically but emotionally as well if they work. Many connected increased appetites and sleeping better at night if they worked that day.

When faced with acute illness in peak work seasons Agrarian elders tend to attempt to work through the problem rather than seek out health care. In one case as discussed previously an informant was literally crawling to his tractor and had to use two hands to turn the key in the ignition. He wanted to wait until harvest was done before he sought out health care. His priority was the harvest of the crop rather than his health. It
took his wife and daughters intervention to get him to go to the doctor. When he was informed that he needed surgery he wanted to put that off as well until the surgeon informed him that he would be dead or paralyzed in ten days. Another informant shared how he had crawled to the barn to milk his cows when he had an episode of severe back pain when he was younger. He identified that there was not anyone else to do it and the cows needed to be milked. Another informant described the time he was diagnosed with diabetes. He related that “I spose I wasn’t feeling too good for a few weeks we were planting corn at the time and finally I didn’t want to quit but I just had to go in”. These were not isolated incidents for Agrarian elders, the typical pattern is to put off seeking out health care when they have work that they perceive has to be done. There were cases where the informants had delayed seeking out health care which resulted in permanent disabilities.

In addition to attempting to work through illness Agrarian elders attempt to cope with illness by working. One informant who has hypertension and oral control diabetes and is not currently taking his medications stated that to manage his diabetes he just cuts more wood. He believes that by being more physically active he can control the diabetes.

Agrarian elders tend to put up with pain or ignore it rather than taking medication. Many felt that pain was just a part of life that everybody has it at some point. One woman when talking about medicating her arthritis pain with advil said “it has to get pretty darn bad, it has to get to the point that I can’t get anything done and then I’ll give in and take it if its just pain and I don’t have a lot of work I have to do then I just live with it yeah I rarely take it”. Many informants, both men and women identified that if you ignore pain it will go away. One woman said “well that’s just like over the years
because if you cut yourself and you look at that finger oh my gosh that pain really hurts its hurting worse and the more you look at it the more pain you got and if you look at from oh its just a little cut and you go about pretty soon that pain disappears”.

A possible explanation for Agrarian elder’s attitudes toward health and doing may be related to the fact that they were self employed. If they were not able to do the work the work did not get done. If the work did not get done they did not have a product to sell. With the economics of American agriculture over the last 30 years it may not have been realistic for them to hire the work done if they were not feeling well. Thus they got in the habit of working through pain and health challenges.

It is interesting that all of the informants had health insurance throughout most of their adult lives and all currently have a Medicare supplement many of which covered their prescription medication. Yet the vast majority admits that they do not go to the doctor unless they absolutely have to even though they have very good insurance coverage. Many identified that the reason that they have the insurance is related to economic uncertainty. If they were to have a significant health event it could wipe them out financially with the end result being the loss of the family farm. One informant identified that the insurance company was probably way ahead with him because he had not gone to the doctor at all in his adult life until a couple of years ago.

Agrarian elders tend to minimize the health and safety risks on the farm. Awareness of risks on the farm ranged from total denial of any occupational or health risks associated with farming to very aware of the majority of risk areas. Even those who were aware of the risks did not follow all of the recommended safety precautions. In regard to wearing gloves with chemical application most do not wear them. Some do if
they “are handy” but they have not intentionally made them handy. One informant no longer lets her husband apply chemicals in the field because he does not follow the personal safety recommendations of the chemical manufacturer. Most do not wear hearing protection around equipment. One man grinned as he said that he does not wear hearing protection in the hog barn rather he just takes his hearing aides out. Utilization of personal protection equipment may have been viewed as weakness by the informants. One man when discussing wearing a mask in grain bins said “nah too tough to do that”. Many did not like to use personal protection equipment because they did not like them. They felt it was harder to work with gloves on and did not like the masks. When discussing his dislike of masks one man said “and I never liked em cause we didn’t use em I guess you know we didn’t use em the way you were supposed to if they had a deal where your breath could have got out of there but it didn’t seem that way but well sure when your breath went out it filtered it going out too so they weren’t what they were supposed to be”. This individual did not seem to understand that the purpose of the mask was to filter what he was breathing in. Most of the men are more cautious around the equipment and climbing than they were in the past. They attribute this to their slowing down as they have aged and recognize that they could fall more easily.

Theme Two: Agrarian elder men and women are interdependent with their spouse, family, and God to promote their health and well being.

The patterns that support this theme are: 1) A pattern of freedom for Agrarian elders, 2) A pattern of self reliance in Agrarian elders, 3) A pattern of very close knit Agrarian families, 4) A pattern of very strong spirituality in Agrarian elders, 5) A pattern
of collectiveness in Agrarian elder’s families and 6) A pattern in which care is taking time for Agrarian elders.

Even though the patterns of freedom and self reliance conflict with the concept of collectiveness it is very present in this cultural group. Rural culture has been described as valuing independence by several authors. The informants in this study also value independence. In fact most of the informants spoke about independence as being of the best things about farming. They were their own boss; they were free to do what they wanted to do. They could set their own schedule; they could work as few or as many hours as they wanted. However farming in not an independent venture as it is very difficult to farm completely alone. As discussed previously farming is not nearly as labor intensive as it was in the past as a result of machinery and chemicals. All of the elders remember the days of the threshing bee and the collective effort of neighbors helping each other with harvesting the crops. They speak fondly of that time and of the neighborliness that existed. Many attribute the decline in neighborliness in rural areas to the introduction of machinery and chemicals into farming.

The neighborhood collectives have all but ceased to exist but the family collective is still very strong in this culture. In one case an informant works with her neighbor during planting and harvest. This informant does not have any family in the area to help with the work. In all other cases the key and general informants worked with nuclear or extended family members during the peak work seasons. In some cases where the elder was the primary farm operator and no adult children were actively farming the adult children arranged their vacations to coincide with the fall harvest so they could return home and help their parents. In the cases where the informant was “retired” and an adult
child was running the farm they continued to help with the work until they were no
longer physically able to do so. One adult child informant described how his father when
he was no longer able to actively help with the farm work would still come down to the
barn every day during milking just to visit. This was not uncommon. Even when the
elders were no longer helping they would still come out the farm or to the work area to
visit with their children or to see what was going on. One informant described how
emotionally difficult it was for him to watch and not work after he had a heart stent
placed. They want to be involved in what is going on.

As discussed in the kinship, marriage and roles category Agrarian elder’s families
are very close knit. They are characterized by very frequent interactions over the phone
or in person. All of the elders still lived in their own homes. Their adult children’s
involvement helped facilitate this. Help from adult children was based on the needs of
the elder. One informant who has limited mobility and walks with a walker could not
bend over to tie her shoes or reach up in the cupboard. Her adult son and his family live
on the same building site and he goes over to her house at least three times a day to help
her with whatever she needs help with. His spouse and their children also help her
frequently. Their goal is to help her remain as independent as possible for as long as
possible to maintain her emotional well being. All parties involved verbalized that they
knew she would not be able to live in her own home if they were not on the same
building site. This is not a one sided relationship. The elder informant also gives her
time and nurturance to her son and his family. The grand children have been able to
grow up with their grandmother involved in their lives and there for them.
Interdependence does not begin in these families when the parents are elderly. It begins when the family begins. As discussed in the farm culture context area children begin working with their parents on the farm as soon as they are able to. In the family discussed above the adult son and his father farmed together until the father was no longer able to. The elders believe that the history of working and playing together brought the family closer together. Families remained very close knit and interdependent after the children grew up and moved out onto their own. Even when the adult children are not actively farming they remain close to their parents and help them. As discussed in the help category the elder informants do not like to ask for help but readily accept it when their children offer it. The adult children are just supposed to know when they need help and offer it.

As discussed in the socialization category most of the socialization Agrarian elder men and women experience is with their family members. They go to visit their adult children or they come to visit them. Many of the elders talked on the phone to their adult children on a daily basis. For others it was a weekly basis. Many of the elder informants still socialize with their peers on a regular basis as well.

In the kinship, marriage and roles category family roles were discussed. Marriages tend to be life long commitments for Agrarian elders. Divorce is very rare. These couples depend on each other. Family roles varied from very traditional where the man was primarily responsible for the farm labor with the wife responsible for the home and children to homes where both the man and woman shared the farm labor. In the majority of cases women focused their energy on home and family. Many of the women were responsible for the accounting or farm books, running for parts and bringing meals
to the field for the men. Some of the women shared in the field work during peak work seasons as well. Regardless of how the work was split the couples depended on each other for the operation to be a success.

The following exchange between a husband and wife informant dyad who had very traditional roles that complemented each other demonstrates the interdependence of the couple very well:

Wife: well I think he was working outdoors on the farm all the time and I never helped out there and so I never was involved in any of their problems and in here it was the same way he didn’t do anything in the house and ah and he I always worked that stuff out pretty well.

Husband: we each had our area I guess that’s what she’s saying I think that’s true she solved with the kids in the house and I pretty much kept out of it laughs well to some extent I was involved with the children growing up of course and their activities but I think the decisions in the house were pretty much left up to you.

Wife: yeah and the farming I didn’t do anything on those decisions.

Husband: you did help quite a bit on the farming maybe not on the decisions but on the ah well one thing was the book work she took care of the book work completely and ah then ah she helped a lot on ah when we were in the fields getting parts and ah and bringing us meals and so it was a lot of help although she says she never helped outside she didn’t help drive the tractors but it was a lot of help yeah.

They are willing and able to shift roles when needed. He shared that “not this Christmas but the Christmas before I had to make the Christmas cookies but I didn’t have
to but I did. She gave me directions at that time you had sciatic nerve pinched that you couldn’t get off the bed but you could give me directions but it was kind of fun”.

Agrarian elders also depend on each other for their health decisions. As discussed previously they are very resistant to going to the doctor. When the decision to go is made it is often at the prompting of their spouse. This can be the case for both men and women.

Agrarian elders are very religious and spiritual people. Membership in their church is a given for most of them. It was deeply ingrained in them during their childhoods. When talking about what motivates them to go to church most replied that it is habit, a good habit. Informants talked about their dependence on God for the well being or their crops and their health. Many made comments regarding their health being a blessing. One informant said “oh a lot of times I’ll say thank you lord for good health well I don’t say it out loud I just say it to myself”. Many believe that prayers when they are ill will help restore them to health as one informant said “I prayed when I had that flu symptoms or whatever it was”. Another informant said “I’ve been really quite fortunate with my health this last fall here I knew there was something going on and ah went to the doctor and found out that I had stone in my bladder and they removed that and at that time that kind of gives you some thoughts that what could possibly be happening you know and yeah there was some prayers going on there then so ah but that turned out real good too”.

**Theme Three: To Agrarian elder men and women care is the physical and emotional presence of others during both health and illness.**
The patterns that support this theme are: 1) A pattern in which care is taking time for Agrarian elders, 2) A pattern of very close knit Agrarian families, 3) A pattern of collectiveness in Agrarian elder’s families, and 4) A pattern of doing by Agrarian elders.

In the professional caring and non caring characteristics category it was very evident that the behaviors that Agrarian elders perceived as caring by health professionals was the physical and emotional presence of the provider. It was not just a matter of the nurse doing physical care but rather that they attempted to form an emotional relationship with the elder as well. One informant said “they seemed to be personally interested in my condition and they were always cheerful” when talking about a caring nurse who had cared for them. Another informant said this about a caring nurse she had had “they would always come over to the bed and talk to you it wasn’t as though they came in just did their thing and left”. She found that very comforting especially when the nurses “came in and hang over the edge of the bed and talk to me and hang on to my hand and reassure me everything was going to be all right”. Another informant said “just say hi and how you doing they just was really something”. The nurse taking just a moment to say hi helped to build the emotional relationship with the Agrarian elders. They do not expect a large amount of time or anything special from the nurses as one informant said “I don’t expect them to do much more than what their job is really most of em as long as their not grumpy that’s all I care”. The key to the elders perceiving nurses as caring was that they took time to establish relationship with them.

As discussed in the professional caring and non caring characteristics category a non caring nurse is one who does not take time with the elder. One informant described an encounter with a nurse she perceived as non caring. The informant was reporting that
she was having post operative pain and had a change in sensation in her leg the informant stated “she said to me quit being such a big baby and be quiet she said I’ll just give you more pain pills you’ll be fine”. In this situation the nurse did not attempt to establish relationship with the elder or assess her condition. The elder perceived the nurse as not caring for her.

In the care category it was very evident that Agrarian elders perceive care by maintaining relationships with their family members through frequent contact. When describing how their family shows care one informant said “the girls talk to each other quite a bit on the phone and the boys do too”. Another informant said of people who cared about you “that they are interested in ya they come around like my brothers, they come here every once in a while, they care about me they come to visit and stuff”. Yet another informant connected care with spending time when he said “pretty near every day I get someone who comes here, they care about me. (My son) came yesterday and the day before, he cares he wondered how my (physical symptom) was coming”.

Helping or doing for each other is very important in regard to care for Agrarian elders. One informant said “if we ever have any problems they’re all right here asking whatever they can do for us”. Keep in mind that Agrarian elders do not like to ask for help so within this culture it is important for others to initiate and offer help rather than wait to be asked. When describing how her family shows care one informant said:

Oh gosh they’ll do little things for you. Well I tell you (my son) but he lives on the (home farm) he’s the closest you know so he’ll if I got little things to do he’ll always does em, he’ll come in and do em, clean my eve trellis out and I still mow
my lawn and the faucet breaks or something he’ll come in and fix it. I always say you got a disadvantage of living so close to your mother.

Another informant said:

well they come and mow the lawn the grandkids do, mow the lawn and sometimes they shovel the snow, sometimes I do it, and (our son in law) was here and shoveled the last time we didn’t tell him or ask him to he just did it.

The elders convey a sense of pride when they talk about their family members helping them without being asked.

Helping each other is perceived as a reciprocal relationship rather than one sided as one woman said “I think care if I give care then people give it back to me”. An example of how she does this is “I try like say my neighbors sick or something I go over to her and see if I could do something or take her someplace and the grandkids or anybody I just feel offer my services”. Again the key is offering help rather than wait to be asked.

The elders show their care for their adult children who are farming by helping with the farm work. One informant said “I help (my son) with the field work especially in the fall. I did chopping and chiseling and a lot of gopher work, go get this and get that”. Many of the men who are technically retired help their adult children with the farm work. Many of the women show their care by running errands during the harvest or bringing meals to the field.

When an acute episode of illness occurs that requires hospitalization family members flock to the hospital to surround their family member. An informant shared how one of her adult children had had a stroke. The entire family gathered at the hospital
including the siblings who lived at a distance. When she herself had been hospitalized all of the adult children came to the hospital to see her. Many were there within a matter of hours. Her husband said one of their sons “didn’t even change clothes he got out of his back hoe, jumped in the pick up and he was down there”. To this couple the physical presence of family at the bedside shows care. An informant who is a retired nurse who also grew up on a farm stated that she really noticed that Agrarian families “were right there” when a family member was in the hospital and that “urban families are much busier with their lives” and were not there as much.

Sharing food is one way of doing for others or showing care for Agrarian elders. An informant shared:

Well I mean when I had my leg broke, you know I had my leg broke, well I guess I was in the hospital about one day and then they sent me home and they were very good each one would bring a hot dish every day, well between the three of em there was always food in our and they’d come and clean the house.

Another informant said “a daughter comes here quite often, she cares, brings me stuff to eat all the time”. Many of the women informants talked about how they showed care to the family by bringing meals to the field for the men during peak work seasons. This was to the extent that one informant and her sister in law purchased a camper so they would have a place to cook away from home and the men would have a place to sit down and eat. Bringing meals to the field also allowed the couples to spend time together in what were very long work days. As discussed previously many of the women continue to bring meals to the field for their adult children who are farming.
Agrarian elders are not demonstrative in showing their care physically. When asked how he shows care one informant said “Oh they know that”. He is not demonstrative verbally or physically with those he cares about which does not mean that he does not care. He said they knew he cared because “I help them and do things and stuff”. Frequently people talked about not hugging each other unless something significant was occurring in their lives. One informant said “we’re not real huggy, no, I don’t know why, I know how that goes some people are but we’re not real huggy”. An adult child reported that he did not ever remember getting a hug from his parents. This does not mean that they do not care. He said he knew that his parents loved him and cared about him. It is not the cultural norm for this group to hug. One woman described how this had changed in her family after her husband died. She said that they were never really a hugging family until his death. After he died she said she hugs everyone in the family hello and goodbye. She even gave me a hug at the end of the interview which was an isolated incident.

Discussion of Culturally Congruent Nursing Care

To provide optimal care to any group it must be congruent with their cultural values and belief system. Nursing actions are guided through three components to providing culturally congruent nursing care according to Leininger which are: culture care preservation and/or maintenance, culture care accommodation and/or negotiation, and cultural care repatterning and/or restructuring. Each of these three areas will be discussed in depth.
Culture Care Preservation and/or Maintenance

Culture care preservation and/or maintenance should be considered by nurses when caring for Agrarian elders. Nurses need to understand the importance of spending time and establishing relationship rather than just providing physical cares for Agrarian elders. Just taking the time to say hello, to engage in light conversation helps the elder build trust that the nurse cares about them as a person. This can not be stressed enough. Along with the elder attempts should be made to build relationship with the family member of the elder as care is viewed as spending time with and communicating with them. This could be done by greeting the family member and establishing what their relationship is with the elder, that is, are they an adult child, a sibling, their spouse, a cousin etc.

Agrarian elders live very spiritual lives. To many of them it is integrated into everything that they do. Many believe that prayer during illness helps restore them to health. It is important for nurses to be sensitive to their spiritual needs and practices. Being aware of their religion and spiritual practices will help guide the nurse. If they are practicing Catholics they may appreciate an audio version of the rosary played for them. They value privacy in their spirituality as well. Some would appreciate the nurse praying with them if they share the same faith, others would not. It is important to ask permission before praying for or with an Agrarian elder. Most will have their clergy come to see them when they are ill but do not want it to be public information that they are ill.

It is important for nurses to recognize that Agrarian elders rarely truly retire unless they have severe physical limitations. Even when they are retired they often remain very physically active. Do not make activity assumptions based on a person’s
physical age. Work is very important to these elders. Taking time out for a physical illness may not be socially or emotionally acceptable for them if it is during a peak work season. It is important for the nurse to be aware of their current work status as well the work season to anticipate their level of potential distress. They tend to not be emotionally demonstrative which does not mean that they are not distressed. It is important to take time to talk with them about their work, as well as who is doing it currently and how they are coping with that.

Culture Care Accommodation and/or Negotiation

Agrarian elders tend to put off seeking out health care as long as possible unless it is an accident or what they perceive to be a medical emergency. When they present for care is not the time to tell them they should have come in sooner. Nor is it the time to tell them that farm injuries are preventable. They are aware of that. Rather focus on treating the ailment at that point. Seize the moment and do what health screening you can when they do present. For example they have significant occupational sun exposure so screen for skin cancer on exam areas and visible skin.

Agrarian elders define health as the ability to do. Many believe that they maintain their physical and emotional health by being active and working. It is not uncommon to see them pushing themselves to return to their normal level of activity in an acute health event. If you tell them they need to walk a minimum of four times a day they may push themselves and attempt to walk much more than that. It is important to assess their activity level and allow activity that is safe for where they are at physically. Unduly limiting physical activity may actually hinder their recovery as it is very stressful for them to be idle.
When planning for discharge it is important to talk about what their normal activity level is and what they plan on doing when they get home. Limiting rather than totally eliminating activities if possible or realistic based on their physical condition may be more effective for this group. If placing them on a driving restriction make sure that this is discussed in depth as to why they should not drive as well as the potential risks involved. If it is related to a medication they are taking they may elect to just not take the medication rather than eliminate driving as many live in the country where there is not any public transportation available. Thus the nurse should discuss why the medication is needed if it is truly needed in this particular situation.

Agrarian elders deviate from what is thought to be the average American illness response of wanting a pill to fix everything. Agrarian elders do not want to take prescription or over the counter medications unless it is absolutely necessary and then only with reservation. When caring for Agrarian elders it is important to assess not only what medications are prescribed for them but what they are taking, how much and how often. Just going by what is prescribed for them could lead to untoward effects as they may or may not be taking the medication at home. When new medications are being prescribed determine if there are any life style changes that could be done prior to beginning the medication. Most of the elders are willing to try a behavior change rather than take a pill.

It is important for nurses to anticipate the elder’s needs and ask them if they need something rather than wait for the elder to push the call light and make a request. Asking for help goes against their cultural values. An example where a nurse could initiate an offer of help would be to assess pain levels and offer pain medication. Agrarian elders
are very hesitant and even resistant to medicating for pain. Coupling this with their not asking for help can make a prn pain medication schedule ineffective for pain control. If pain medications are declined ask if there is anything you can do to make them more comfortable as well as offer non pharmacologic pain management strategies.

Interdependence with family is very important to Agrarian elders. It is not uncommon for multiple family members to be at the hospital with their family member. Many nursing units limit the number of visitors a client may have at a given time. If this is the case it is important that arrangements be made to allow for the family to be present as the family shows care by physical presence. In some cases the at least one of the family members may want to stay overnight with their relative. Every effort should be made to allow for this. It may not be realistic to have an Agrarian elder in a double occupancy room as the number of visitors they have may disturb the roommate. Family members also demonstrate their care by doing for each other. The nurse may need to involve the family in the care of the client if they wish to be involved.

**Cultural Care Repatterning and/or Restructuring**

Setting out to intentionally change a life way is a difficult task. This can be especially true with elders who have lived the way they do for many years. The majority of Agrarian elder’s values and beliefs contribute to their well being. There are two major areas of concern which are: laxity in personal protection on the farm and the reluctance to seek out health care.

How does one facilitate the use of personal protection equipment such as gloves, goggles, a mask and hearing protection is the big question. Many researchers have focused specifically on this question as was presented in the review of the literature.
Thus far there is not a good answer. Based on the data collected in this study from key and general informants the first step may be to get the elder to acknowledge that the health risk exists. The majority of elders minimized the health risks on the farm. Some even went so far to say that there were not any health risks. Some level of denial is to be expected when one is engaged in a dangerous activity or else you would not be willing to do the activity. The elders who did use personal protection equipment seemed to have a higher awareness or acknowledgement of the health risks. When discussing the topic more in depth all of the informants knew that chemicals were dangerous to their health and that they should wear gloves when they apply it. The majority were still very lax even when the gloves were provided to them when they got the chemicals.

Nurses could have very candid non judgmental discussions with Agrarian elders starting with what they do to stay safe on the farm. The nurse could also ask the elder about which farm journals they read as most Agrarian elders read farm journals which usually have a column on health and safety. Nurses could then ask what the safety column was about this month and discuss the elder’s willingness to do that specific behavior.

If an elder presents with a farm related injury it is important for the nurse to not scold or belittle the elder. Rather assess what they do to stay safe, praise them for what they are doing and ask them what they could do in the future to prevent a similar incident. Most know what they need to do to stay safe, they just don’t always do it when they are in a hurry or perceive a limited time frame such as during harvest.

As Agrarian elders are reluctant to seek out health care nurses may need to go to them. Two ways in which nurses can reach these elders is with Agricultural based health
fairs and through the parish nurse role. As most Agrarian elders are very spiritual and attend church regularly nurses functioning if the parish nurse role could address both the occupational health issues as well as the reluctance to go to the doctor. Knowing they have someone that they perceive as an insider about their health may help facilitate more timely access to health care. Parish nurses often do health screenings such as blood pressure monitoring after church services. This gives the elder a safe entry into dialogue with the parish nurse. When they are getting their blood pressure checked they have sole access to the nurse and can ask their health related questions. I found this dynamic when interviewing the informants. As most perceived me as an insider and they had me to themselves they asked me medical questions. In addition parish nurses could have a farm safety column in the church bulletin or put occupational safety and health brochures in the brochure racks in the church.

Nursing Implications

Nursing research should have implications for nursing theory, nursing education, nursing practice and further nursing research. As nurses work with many cultural groups including Agrarian elders that is the case with this research. Each of these areas will now be discussed.

Implications for Nursing Theory

The use of Leininger’s theory of Culture Care Diversity and Universality and Ethnonursing methodology was very beneficial in teasing out Agrarian elder’s health beliefs, practices and needs. This study discovered care meanings and practices for Agrarian elders and their families which contribute to the body of knowledge of Leininger’s theory. This study also found that understanding the context or world view
of Agrarian elders is critical to understand Agrarian elder’s concept of care and caring by the professional nurse.

This study confirmed Leininger’s assumption that “care is essential to curing and healing, for there can be no curing without caring” (p. 45). An adult child shared that if nurses did not establish a relationship (which demonstrated care in this cultural group) with her mother her mother would just ignore them. It is very difficult for the professional nurse to facilitate healing when the client is ignoring you. This further supports that culturally based care in which the nurse establishes a relationship with the Agrarian elder by spending time with them as well as doing for them.

**Implications for Nursing Education and Practice**

The findings of this study have implications for both nursing education and practice. Nursing education has the charge of preparing our future’s nurses. As the United States continues to get more and more culturally diverse it is imperative that the foundation of cultural knowledge begin in the undergraduate education process for nurses. Nursing education can foster the awareness of cultural diversity and the need to individualize nursing care based on the cultural group an individual associates most closely with.

Although Agrarian elders are a small and shrinking cultural group in the United States it is still important for nurses in practice to have a basic understanding of their cultural values, beliefs and practices in order to provide culturally congruent care. When an Agrarian elder presents for health care nurses need to take very seriously their health concerns as the elders are often very hesitant to seek out care and wait until the symptoms can no longer be tolerated. Agrarian elders tend to be very stoic when it comes to
reporting and treating pain. What they may report as a little ache in their chest may indeed be a massive myocardial infarction. Pain assessment needs to be very fine tuned for this group. Nurses need to establish relationship in order to build trust with this group in order for them to be willing to share their concerns.

**Implications for Nursing Research**

This study affirms the use of Ethnonursing methodology when seeking to understand people’s health values, beliefs, and practices. Qualitative methodologies allow nurse researchers to gather rich data about nursing domains which in turn can promote high level nursing care. The findings of this study can be used as an impetus for further nursing research to continue to build our body of knowledge.

**Recommendations for Future Studies**

As with any research the more you answer questions the more questions you ask. The findings of this study create the platform from which to launch additional studies. Future studies could focus on:

1. What are the health beliefs, practices and needs of 40 to 65 year old Agrarians?
2. What are the health beliefs, values and practices of rural elders who grew up on a farm but did not farm as adults?
3. What are the health beliefs, values and practices of rural elders who did not grow up on a farm and did not farm as adults?
4. What are the health beliefs, values and practices of rural elders who were self employed in a non agricultural based occupation as an adult?
5. What are the similarities and differences between Agrarian and Non-Agrarian rural elder’s health values, beliefs and practices?
6. What health promotion strategies are effective in getting Agrarian elders to utilize personal protection equipment such as ear plugs, gloves or masks?

7. What are health care providers perceptions regarding the needs of Agrarian elders?

These questions could significant increase our body of knowledge about rural aging and health from a cultural perspective. As the United States population is aging and there are a higher proportion of elderly in rural areas this is very important area for nurses to investigate.

Reflections on the Study

This study found similarities and differences between itself and other studies that have focused on rural culture. This study was unique in that it focused on discovering the culture care meanings for elder Agrarians. No other study has done this. The findings are new to the discipline of nursing and build on the body of knowledge in nursing. The three themes identified in this study were: 1) Health and well being in Agrarian elder men and women health and well is characterized by hardiness, 2) Agrarian elder men and women are interdependent with their spouse, family, and God to promote their health and well being, and 3) To Agrarian elder men and women care is the physical and emotional presence of others during both health and illness.

Sellers et al. (1999) studied health care meanings, values and practices in Anglo-American men in the rural Midwest. It is interesting to note that 57 percent of their informants were farmers. They found that “cultural care meanings and actions among rural men relate to maintaining individualism, independence in decisions and actions, and being as self-reliant as possible whether healthy or ill” (p. 325). Vandello and Cohen
(1999) studied individualism and collectivism in the United States. They hypothesized that “self-run farms should foster individualism” (p. 287) and found that “there is evidence that collectivism and individualism relate to types of farming (self-run farms and herding in the United States tend to promote individualism)” This study’s findings would support both of these studies to some degree in regard to independence, however the elders focused more on the interdependence with their family members rather than independence. This could be related to the age of the informants. Seller’s study informants ranged from 25 to 49 whereas this study focused on elders over the age of 65. As the informants in this study aged they relied on the support of their adult children more to meet the needs of their instrumental activities of daily living as their strength, endurance or health declined. However even when they were younger they were interdependent with their family and extended family in the operation of their farm and lives.

Weigel and Weigel (1987) studied coping strategies utilized by farm families. It is of interest that this study occurred during the farm crisis when farm families were under tremendous stress. They found that “having faith in God was the most frequently used coping strategy” (p. 381). This study found that Agrarian elders utilize their spirituality to cope with life’s stressors to the point that I describe their relationship with God as interdependent and much embedded in their cultural values and beliefs. Arcurry, McDonald, and Ronny (2000) have also found the pervasiveness and level of integration of spirituality into rural elders lives and how they depend on God for their over all well being.
One striking similarity between this study and Sellers et al. was that informants delay seeking out health care especially during planting or harvest and equate health with working or doing. Bushy (1997) has also identified that rural clients wait longer before they seek out health care. I found that in general these elders wait to go to the doctor until they can no longer do what they want to do and that they define health as the ability to do. Pierce (2001); Weinert and Burman (1994); & Long and Weinert (1989) also identify that rural dwellers define health as the ability to work or do. Long and Weinert (1989) also identify that for rural dwellers work is a higher priority than health. The elders in this study definitely place their work needs before their health needs. As this study did not focus on rural culture as a whole it is unknown if the Non-Agrarian elders in this region also put their work needs before their health needs.

Many authors (Bushy, 1997; Weinert and Burman1984; & Stitz, 1983) focusing on rural culture have identified the concept of insider/outside and the importance it plays in the development of trust within rural culture. The concept of insider/outsider did not come up in this study with the exception of one informant when she defined anyone outside of her family as an outsider. The lack of this dynamic occurring may be because I am seen as an insider in Agrarian culture. This is interesting as I have only resided in this area for the last 21 years. This may seem like a long time but to “locals” it is not. In a general private conversation with a woman who is just a few years older than I we were disagreeing about something when she informed me that “I was not really from here” as a way to negate what I was saying. She was effectively saying I was an outsider and always would be.
As Agrarian elders are resistant to seeking out health care one method of reaching them is for nurses to facilitate health fairs. Rydholm and Kirkhorn (2005) studied the impact of a farm health fair on personal protection equipment usage and health seeking behavior. At the health fairs they found 30 percent of the participants had elevated blood pressure, 33 percent with elevated serum cholesterol, 9 percent with elevated serum glucose consistent with diabetes, and 52 percent with an abnormal hearing test (p. 445). Six months after the health fair they placed a follow up phone call to the participants of the health fair. Of those that they had called back 39 percent reported a positive lifestyle change (p. 445) and 70 percent of the 90 individuals (32% of the farm fair participants) who had been referred for follow up treatment had sought out and received that care (p. 444). These are quite impressive numbers. In the qualitative analysis of the follow up phone interview the researchers identified that “comments pertaining to lifestyle behaviors suggested that accountability to a caring professional audience helped promote lifestyle changes” (p. 446). The key may be that the Agrarian participants perceived that the nurse cared about them which in turn encouraged them to make changes in their life.

In Summary this study found similarities and differences between Agrarian elder’s health beliefs, needs and practices and the overarching rural culture. Both Agrarian elders and rural dwellers are very spiritual with religion playing a big part in their lives. However in addition to spirituality facilitating their health and well being Agrarian elders have very close knit families that promote their health. No other study has found the level of family involvement that this study did, nor the importance that family plays in their lives. For Agrarian elders and rural dwellers as a whole health has been equated with the ability to work with work being a higher priority than health. The
findings of this study go beyond the concept of work in relation to health. For Agrarian elders the concept of hardiness more adequately defines their concept of health which includes the ability to work. Hardiness also encompasses their tolerance of discomfort and disability rather than seeking out health care or utilizing pain medication. Finally independence has been identified as a characteristic that is highly valued within rural culture. This study found that Agrarian elders value independence but they lead more interdependent lives than independent ones. This is in stark contrast to the commonly held belief that rural elders value independence. Thus this study has made discoveries that do indeed build on the body of nursing knowledge.

Conclusion

This study sought to discover the cultural lifeways, meanings, values and beliefs of the elder Agrarian population in regard to health and well-being as well as the influence the rural Agrarian context has on their worldview, health beliefs, values and practices. In addition it set out to identify the nursing culture care experiences of elder Agrarians that have promoted or hindered their health, well being and health practices. This study was guided by Leininger’s theory of Culture Care Diversity and Universality and utilized Ethnonursing methodology to investigate these concepts. This study helped me gain insight into elder Agrarian worldview and culture as they relate to the domain of inquiry. Ten patterns and three universal themes were identified with this study that will help nurses plan, implement and evaluate culturally congruent nursing care for Agrarian elders.
REFERENCES


APPENDIX A:

OPEN INQUIRY GUIDE: AGRARIAN ELDERS
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APPENDIX A

Open Inquiry Guide: Agrarian Elders

ENVIRONMENT

1. Tell me where you were born. Where did you live?

2. Where do you live now? How long have you lived here?

3. If no longer living on farm site – What influenced your decision to move off the farm?

4. Who lives with you in your household?

5. Can you tell me about your home and where you live?

6. Tell me, does your home pose any challenges for you as you have aged?

7. When you think about the work you did and living on the farm can you tell me if there were any safety concerns?

8. Tell me, what does the land mean to you?
APPENDIX A

Open Inquiry Guide: Agrarian Elders

Codename:

**KINSHIP/SOCIAL FACTORS**

1. Tell me about your family.

2. Tell me how often do you have company?


4. What does family mean to you?

**RELIGIOUS FACTORS**

1. What do spirituality and/or religion mean to you?

2. How do you practice your religion or spirituality?

3. Which religious holidays do you observe and how do you celebrate them?

4. What kind of influence if any does your religion or spirituality have on your health?

**TECHNOLOGICAL FACTORS**

1. What kind of technology do you use in your home?

2. How do you view technology and health care?

3. How does technology influence the health care you have received?
APPENDIX A

Open Inquiry Guide: Agrarian Elders

Codename:

ECONOMICAL/POLITICAL FACTORS

1. What type of health insurance do you have? Does it meet your needs?
2. What concerns if any do you have about your economic situation in relation to care?
3. What effect does your economic situation have on your health and well-being?
4. Are you still working? If so, What does working mean to you?
5. Tell me about any experiences you have had about health and politics?

CULTURAL VALUES AND LIFEWAYS

1. Describe a typical day to me.
2. What do you do to meet your transportation needs?
3. If you had to identify top three important things in your life were what would they be?
4. If you had to describe the most significant challenge in your life what would you be?
5. How did you cope?
6. When you think about your life on the farm would it be possible to describe how your life was similar and different from people who did not farm?

CARE

1. What does the word “care” mean to you?
2. How do you and your family show care?
3. Describe a caring person for me. A caring nurse? A non-caring nurse?
APPENDIX A
Open Inquiry Guide: Agrarian Elders

Codename:

HEALTH, ILLNESS AND WELL-BEING

1. What does health mean to you? Well-being?

2. What does illness mean to you?

3. Tell me what do you do to maintain or promote your health and well-being?

4. How has your health changed as you have gotten older?

5. Describe a time you were ill. What did you do?

6. What do you normally do when you are ill? Who cares for you?

7. What would happen if you got ill during planting or harvest?

8. How do you decide when it is time to go to the doctor?

9. What influences your decision on whether or not to follow the doctor’s recommendations?

10. Describe a time when you got hurt while you were working on the farm. What happened, what did you do, did you go to the clinic or emergency room?

11. What do/did you do to prevent injuries or illnesses?

12. What source of health information do you believe or trust the most?

13. What are your beliefs about using prescription medicine?

14. What are your beliefs about using over the counter medicine?

15. What home remedies do you use?
APPENDIX B:

OPEN INQUIRY GUIDE: NOT AGRARIAN ELDERS
## APPENDIX B

Open Inquiry Guide: Not Agrarian Elders

### ETHNODEMOGRAPHICS – Part I

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APPENDIX B

Open Inquiry Guide: Not Agrarian Elders

ENVIRONMENT

1. Tell me where you were born. Where did you live?
2. Where do you live now? How long have you lived here?
3. What concerns do you have about older farm families and their living environments?
4. Do you feel they are safe living there?
5. What safety hazards are on farms?
6. What does the land mean to older farmers?

KINSHIP/SOCIAL FACTORS

1. What family do older farm families have living in this area?
2. How often do older farm families visit with their family and friends?
3. Who helps them when they are sick or need care?
4. What do you think family mean to them?

RELIGIOUS FACTORS

1. What do spirituality and/or religion mean to older farm families?
2. How do they practice your religion or spirituality?
3. What influence does your religion or spirituality have on their health?
APPENDIX B

Open Inquiry Guide: Not Agrarian Elders

Codename:

TECHNOLOGICAL FACTORS
1. How do you view technology and health care?

2. How does technology influence the health care older farmers have received?

3. What are their beliefs about using prescription medicine?

4. What are their beliefs about using over the counter medicine?

5. What are home remedies they use?

ECONOMICAL/POLITICAL FACTORS
1. What type of health insurance do they have? Do you think it meets their needs?

2. What concerns do you have about their economic situation in relation to care?

3. What effect does your economic situation have on their health and well-being?

4. Are the older farmers you know working? If so, What does work mean to them?

5. What political concerns do you have?

CULTURAL VALUES AND LIFEWAYS
1. What transportation needs do you see for older farmers?

2. What is important to them? What do they value?

3. How do they cope with challenges?

4. How are farmer’s lives similar and different from people who do not farm?
APPENDIX B
Open Inquiry Guide: Not Agrarian Elders

Codename: CARE

1. What does the word “care” mean to you? To older farmers?

2. How do you and your family show care? How do they show care?

3. Describe a caring person for me. A caring nurse? A non-caring nurse?

4. Describe a time when an older farmer received care from a friend or family member.

5. Describe care they have received from caring nurses in a clinic or hospital.

6. Describe care they have received from non-caring nurses in a clinic or hospital.

HEALTH, ILLNESS AND WELL-BEING

1. What does health mean to you? Well-being? To them?

2. What does illness mean to you? To them?

3. What do they do to maintain or promote their health and well-being?

4. How has their health changed as you have gotten older?

5. Describe a time they were ill. What did they do?

6. What do they normally do when you are ill? Who cares for them?

7. What happen if they got ill during planting or harvest?

8. How do they decide when it is time to go to the doctor?

9. What influences their decision on whether or not to follow the doctor’s recommendations?

10. Describe a time when they got hurt while working on the farm. What happened, what did they do, did they go to the clinic or emergency room?

11. What do/did they do to prevent injuries or illnesses?
12. What source of health information do they believe or trust the most?

APPENDIX C:

CONSENT FORM
CONSENT TO PARTICIPATE IN A RESEARCH STUDY

TITLE: Growing old on the farm: An ethnonursing examination of aging and health within the agrarian rural subculture

INVESTIGATOR: Diane E. Witt RN, MA, CNP
4784 390th Ave
Janesville, MN 56048
(507) 234-6906

ADVISOR: Rick Zoucha, APRN, BC, DNP, CTN
School of Nursing, Duquesne University
521 Fisher Hall
Pittsburgh, PA 15282
(412) 396-5228

SOURCE OF SUPPORT: This study is being conducted as partial fulfillment of the requirements for the doctoral degree in nursing at Duquesne University

PURPOSE: You are being asked to participate in a research project that seeks to understand agrarian culture and identify how agrarian culture influences health beliefs, practices, and self care behavior in older adults. You will be asked to allow me to interview you from one to three times. The interviews will last up to one and one half hours and will be audio taped and transcribed. In addition you will be asked to complete a demographic questionnaire. These are the only requests that will be made of you.

RISKS AND BENEFITS: The only inconvenience or discomfort you might experience is the time and effort you spend to answer the questions. I will make every effort to make the experience a comfortable one for you.
Your participation would benefit others, in that I would have a better understanding of the health beliefs, practices, and needs of older adults in South Central Minnesota.

COMPENSATION: You will not receive any compensation for participating in this study. Participation in the project will require no monetary cost to you.

CONFIDENTIALITY: Your name will never appear on any survey or research instruments. Verbatim quotations may be used but no name will ever be attached to ensure that confidentiality will be maintained at all times. No identity will be made in the data analysis. All written materials and consent forms will be stored in a locked file in the researcher's home. All information relating to this study will be destroyed upon completion of all the activities related to the study.

RIGHT TO WITHDRAW: You are under no obligation to participate in this study. You are free to withdraw your consent to participate at any time.

SUMMARY OF RESULTS: A summary of the results of this research will be supplied to you, at no cost, upon request.

VOLUNTARY CONSENT: I have read the above statements and understand what is being requested of me. I also understand that my participation is voluntary and that I am free to withdraw my consent at any time, for any reason. On these terms, I certify that I am willing to participate in this research project.

I understand that should I have any further questions about my participation in this study, I may call Dr. Paul Richer, Chair of the Duquesne University Institutional Review Board (412-396-6326).

Participant's Signature __________________ Date __________________

Researcher's Signature __________________ Date __________________