

USE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE
AMONG RURAL MONTANANS

by

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ABSTRACT

Complementary and alternative medicine (CAM), an assortment of varying health care practices that exist outside the definition or accepted practices of conventional medicine, is increasing. Little is known about CAM use among rural Montanans. Health care providers need this information to better manage patient-care situations such as CAM-drug interactions or skewed laboratory results which may result from CAM use.

The selected method was the qualitative approach. A convenience sample was selected, and after informed consent was obtained, interviews with the subjects were audio taped and transcribed. Coding of data in the transcripts revealed concepts and themes regarding the subject's CAM use. After each interview, field notes were written to record salient points. The committee chair reviewed selected interviews which facilitated triangulation of data and enhancement of credibility.

Data were analyzed for major themes that emerged which where, Using CAM: Pros, Cons and Influences, CAM Providers: Pros and Cons, Validating CAM Use, and Managing Health Issues and Enhancing Control with CAM. The themes showed how the sample was similar to the literature describing national CAM use, but also allowed glimpses into how the rural Montana sample was different from studies of national CAM use.

Results are not generalizable due to sample size. However, the results do offer a glimpse into the use of CAM in rural Montana. Further research on CAM use among Montana populations, including minorities and varying socioeconomic groups, is needed.

CHAPTER 1

INTRODUCTION

Background

Historically, complementary and alternative medicine (CAM) has been in use for thousands of years. From the perspective of modern medicine, CAM has been known as folk medicine, alternative therapy, or the home remedy. However, before the existence of modern medicine, complementary and alternative medicine was the only health care available. It took many forms. It was familial, religious, cultural, regional, and tribal. It was based on belief and experience but little scientific evidence.

CAM is described as an assortment of varying health care practices that exist outside of the definition or accepted practices of conventional medicine. *Complementary* denotes use with conventional medicine. *Alternative* designates practices that occur by themselves, without any additional or complementary conventional medicine. These practices may include therapies, health care systems, and products. The National Center for Complementary and Alternative Medicine (NCCAM) is the United States federal government clearinghouse for CAM. The list of what is and what is not considered conventional medicine changes constantly, according to NCCAM (2003b). What may have been considered outside the realm of conventional medicine just a few months ago may become accepted as research supports its credibility.

CAM may include health care systems such as naturopathy, practices like meditation and biofeedback, and products ranging from herbal preparations to nutritional supplements. The key determinant is that the system, practice, or product is not part of conventional medicine (NCCAM, 2003b). In the Western world, modern medicine is seen as the main, and, to some, the only option for health care today. This has been the case for at least 100 years. The impetus behind this progress has been “the biomedical model, which asserts that all disease is caused by a malfunction of physiological variables” (Rodgers Kinney, Byars Dunbar, Brooks-Brunn, Molter, & Vitello-Cicciu, 1998, p. 175). Modern medicine has offered health and cure rates that have never been seen in the history of humankind.

Researchers have asked why individuals choose CAM in the presence of modern medicine. For example, Eisenberg et al. (1993) learned that the majority of people who use CAM do so for chronic health problems and much less so for urgent or acute situations. People who are experiencing a health problem or trying to manage a chronic condition can be vulnerable to advertising claims. These same people are also susceptible to opinions and testimonials of friends and family (McGill University, 2000).

Individuals may use CAM to try to increase their sense of personal control. In a comparison made between the “concerned consumer” and the “compliant patient,” it was thought that the concerned consumer takes an active role in health care and gathers information from many sources, instead of just one legitimized source, like the medical

profession (McGill University, 2000). CAM users may feel more empowered and autonomous because of their independent contributions to their own health care.

Johnson's (1999) research confirms that some CAM users possess qualities of independence and empowerment. In this study of rural women who use CAM, Johnson found that the women took pride in their own independence and self-reliance. The women liked not having to get a prescription from their conventional health care provider and valued their own ability for self-care. The women believed they were promoting health and disease prevention.

Dissatisfaction with modern medicine has not consistently been found to contribute to CAM use. Astin (1998) found no correlation between dissatisfaction with medicine and CAM use and discovered that many CAM users possessed a "holistic philosophy" about health care. That is, a philosophy that reflects a changing societal paradigm with regard to "the nature of life, spirituality, and the world in general" (p. 1548). The person with a holistic philosophy may look for less traditional health care practices that manage illness in the more holistic framework of body, mind, and spirit.

People also use CAM for very practical reasons like greater choice and availability (Astin, 1998). Astin asserts that CAM use can also be linked to the providers of CAM. If a patient's beliefs are congruent with a CAM provider's, he or she is more likely to seek CAM. For example, some people prefer natural preparations over chemical or synthesized preparations. There are people who fear the side effects of prescription

drugs. Still others do not feel that every illness should be treated with a medication.

These people may seek the care of a CAM practitioner since CAM practitioners usually share these same principles.

Americans depend at least to some degree on CAM for their health care treatment options (Beckman Murray & Proctor Zentner, 2001). In the year 1990, a third of the U.S population saw at least one practitioner of CAM (Friedman, Bowden & Jones, 2003). More recently, it was reported that in 1997, around 40% of adults had employed one or more forms of CAM (Eisenberg et al., 1998). People have made “an estimated 425 million visits to providers of alternative therapies at a cost of \$13.7 billion, most of which is spent out-of-pocket” (Rodgers Kinney et al., 1998, p. 175). That is obviously a sizable portion of the population. It is fair to say that use of CAM is not relegated to the fringes of society.

The Public Health Service took note of the growing interest in and use of CAM. In 1992, the National Institutes of Health (NIH) opened a new office to the public called the Office of Alternative Medicine (OAM). A few years later, the term “complementary and alternative medicine” became the accepted nomenclature for what had previously been known as alternative medicine. So in 1998, with a name change and some reorganization, the OAM became the National Center for Complementary and Alternative Medicine, or NCCAM. This meant an upgrade in status from an office of the NIH to a center (NCCAM, 2003a).

One of the challenges facing NCCAM relates to public safety. Research is critical in determining the safety and efficacy of CAM products and practices. NCCAM (2003d) awards CAM research grants in the United States as well as globally, and they educate providers as to how they may safely integrate CAM into treatment plans. The general public is given information upon request on subjects ranging from whether success exists with certain treatments to whether certain treatments are safe (NCCAM, 2003d). The establishment of NCCAM validated the belief that society views CAM as an important option and/or complement to modern medical care.

Problem Statement

Use of and interest in CAM increased enough to warrant the federal government to start the NCCAM. CAM is a popular subject of research and subsequent writing. Many of articles on CAM can be found in prominent allied health databases. The prolific writings have shed light on who the users of CAM are. CAM users are mostly educated (at least some college), have at least one chronic condition, and are usually more financially solvent (NCCAM, 2003f; Astin, 1998). Another source notes that CAM users are usually white and have a higher income (Parascandola, 2000). Eisenberg et al. (1993) found most CAM users to be 25 to 49 years of age.

It has also been discovered that the individuals who use CAM comprise an appreciable portion of the population Eisenberg et al. (1993) found that a third of those questioned engaged in at least one CAM therapy in the previous year. Four years later,

Eisenberg et al. (1998) discovered that 42% of subjects used CAM in the previous year. In another study, 55% of the 300 women participating reported using CAM (Freeman, 2003). Use of CAM seems to be on the rise.

The extensive research on CAM has also revealed that there may be limited dialogue between patient and health care provider about the patient's use of CAM. Providers may be hesitant to discuss CAM therapies, as they are uninformed or suspicious of them (Bryan Walker, 2002). Additionally, patients are reluctant to report use of CAM. One study found that 72% of subjects did not disclose CAM use to providers (Eisenberg et al. 1993). Another source states that 63% of patients do not disclose CAM use (Ayuk-Egbe, Wutoh, Hailemeskel, Bernard, & Clarke-Tasker, 2000).

In spite of the fact that information is known about many aspects of CAM use, little is known about rural CAM use in the state of Montana. In an extensive search of allied health databases, there were no entries found on the subject of CAM use by rural Montanans. This is a problem because health care providers need this information. Potentially dangerous situations exist directly from not knowing whether CAM use exists in this special population. It is not known what types of CAM some rural Montanans are using, or if they are using CAM at all.

With regard to disclosure of CAM use by patients to their providers, it is problematic not to have the data to indicate possible CAM use in rural Montanans. Rural people perceive independence and self-reliance as important (Lee, 1998). Since rural Montanans are independent and self-reliant, they may be more inclined to use CAM. But,

no information about rural Montanans and CAM use was found in the literature. The data obtained in this study may underscore and strengthen the premise that practitioners ask specifically about CAM use while taking the history and performing the assessment. This would supply the practitioner with information that may prevent a drug interaction or explain unusual laboratory results, and offer the practitioner new options for treatment.

The Purpose of the Study

The purpose of the study was to explore and describe the use of complementary and alternative medicine (CAM) by rural Montanans.

The Research Question

The major research question was this: To what extent do rural Montanans living in the sparsely populated areas of the state use CAM? Three subquestions evolved from the major question:

1. What are the types of CAM used?
2. What is the frequency of use?
3. Is CAM use disclosed to their health care providers?

Setting

The setting for the study was Montana, the fourth-largest state geographically in the United States. Montana is 44th in order of population (FedStats, 2003). The economic

base of this sparsely populated state is built on three key industries: agriculture (farming and ranching), oil and gas (drilling and refining), and tourism (mainly comprised of the service industry). Montana has been a state known for its wide-open spaces, but that is changing. People wishing to escape urban sprawl are moving to the state, which has contributed to an increase of 3,155 residents since 2000 (FedStats, 2003). Total population as of the 2000 census totaled 902,195 (State of Montana, 2000). In spite of the rapid growth, population density reports show that there is an average of 6.2 people per square mile (Montana Department of Commerce, 2001). Even with that average population density of 6.2 people per square mile, 42 of the 56 counties have a population density of less than 5 people per square mile. Despite the growth it is experiencing, Montana is, by any standard, still a very rural state.

Definition of Terms

For purposes of the study, the following definitions of CAM and rural were developed. *CAM* is an acronym for complementary and alternative medicine. NCCAM defines CAM as “a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine” (NCCAM, 2003a). This could be systems like naturopathy, practices such as meditation and biofeedback, and products including herbal preparations, nutritional supplements, and magnets. The key determinant is that the system, practice, or product is not part of conventional medicine.

For the recent 2000 census, the Census Bureau defined *rural* as lands and population densities that are not considered urban (U.S. Census Bureau, 2000). The Census Bureau defines *urban* as population densities of a least 1,000 people per square mile and surrounding areas with population densities of 500 people per square mile. Since the most populated county in Montana has a population density of 49.04 people per square mile, Montana easily meets rural criteria. There is no designated definition of rural generally accepted by nursing. For the purpose of this study, rural was defined as a community of 10,000 or less residents that is located at least 20 miles from an urban center of 50,000 or more.

Significance for Nursing

This study was about rural Montanans and how they used CAM, if at all, to promote and manage their own health. The study is significant to nursing because it will contribute to the understanding and knowledge of rural Montanans and their use of CAM. The results of this study may contribute to nursing's knowledge base, specifically contributing to information about rural people.

It is well studied and documented that CAM use is occurring (Eisenberg et al, 1993; 1998) It is also known that about 73% of patients, according to one study, do not disclose CAM use to their health care providers (Ayuk-Egbe et al, 2000). This knowledge brings with it concerns about safety. Drug interactions could occur. Skewed laboratory results could slow diagnosis and treatment. Nurses can uncover information that otherwise might be missed if they specifically ask about CAM. This study may

confirm and strengthen the proposal that nurses and other health care providers ask about CAM in assessments and histories. This could increase safety for both patients and providers. The quality of care improves and satisfying patient outcomes increase when providers are armed with more knowledge and insight.

Since no documentation on rural Montanans' use of CAM was uncovered in reviewing the literature, this study may serve as a stimulus for further research. Rural nursing is recognized as a specialty area of care (Lee, 1998). This study may contribute to developing further knowledge about rural nursing. Knowledge of rural Montanans' CAM use may help nurses gain increased understanding of the people they serve.

Theoretical Perspective

The theoretical perspective used for this study was derived from the principles of qualitative research. When little is known and no theories exist, the qualitative approach can lay the empirical groundwork for further, more in-depth studies.

Qualitative research was appropriate for this study because it allows subjects to tell their story from their own perspective. When little is known about a topic, the qualitative approach provides deeper understanding of the phenomenon being studied and a basis from which further research may proceed (Munhall & Oiler, 1986).

Since the data are from the subject, in his or her own words and unique perspective, the qualitative approach is holistic. Holism is a concept that runs through the fabric of nursing. It is present in bedside nursing practices, care planning, policy development, and research. Nurses profess and are known for possessing a holistic

philosophy in theory and practice (Munhall & Oiler, 1986, p. 60). The holistic distinction of qualitative research is not only congruent with nursing philosophy, it also allows insight into the individual and his or her world. Facts alone give only a glimpse into the experiences of a subject or group. A holistic approach to research means viewing the wholeness of the subject's or group's world. Using the holistic framework, the nurse researcher explores and discovers many complexities that exist as part of a larger phenomenon (Burns & Grove, 2001). Little is known about rural Montanans' use of CAM. Since the purpose of this study was to explore the use of CAM among rural Montanans, a qualitative approach was an appropriate method.

CHAPTER 2

REVIEW OF LITERATURE

Introduction

This chapter consists of a review of selected literature about Complementary and Alternative Medicine (CAM). The aspects of CAM addressed in the review of literature include an overview and background of CAM, CAM and conventional medicine, CAM modalities, efficacy and safety of CAM, CAM use among the general population, and lastly, CAM use by rural people.

Background and Overview of CAM

NCCAM (2003a) defines CAM as “a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine.” However, what is presently considered to be conventional continually changes. For instance, treatments or therapies that were outside of the realm of conventional medicine are now a part of it (Martin, 2001). From that perspective, Yuan and Bieber (2003) note that CAM can invoke a different meaning for each individual since what is considered conventional by one person may be alternative to another.

Eisenberg et al. (1993; 1998) define CAM as medical treatment and philosophies not generally included in medical school curriculum or generally obtainable at hospitals. This is different from the NCCAM definition and may be limited because it refers to what is being taught at medical schools.

CAM is also defined by discerning the difference between the words *complementary* and *alternative*. Yuan and Bieber (2003) state that a treatment method is labeled complementary if used as an adjunct to conventional medicine and that when used exclusively, it is considered alternative. Complementing is the preferred approach of most patients. CAM consists of many different practices. Before considering types of CAM, a historical perspective of CAM may be useful.

Historically in the United States, CAM may have started with the healing water spas in the 1800s. Later, tonics and elixirs known as “cure-alls” were hawked by traveling salesmen. Often, the words *scientific* and *modern* were used to convince people of legitimacy (Onconurse.com, 2003). Nonmedical and nonscientific fads have come and gone in this manner. Unfortunately though, some legitimate techniques and practices were also categorized as fads. One physician remembered that when he was in medical school, acupuncture was laughed at and considered quackery. Now he admits that it is an accepted and effective treatment for nausea and vomiting, especially in oncology medicine (Onconurse, 2003).

Complementary and alternative medicine (CAM) is comprised of many practices and therapies, such as homeopathic medicine and acupuncture. It is possible to write about the history of any given number of CAM therapies. However, even if 100 CAM therapies were researched and written about from a historical perspective, there still would not be a history of CAM, just a history of each therapy.

Philosophically, CAM is associated with practitioners (naturopathic doctors, homeopathic doctors, chiropractic doctors, and other healers) who believe that the body has its own healing powers and that they can promote healing and wellness by

influencing the body's healing powers. This is often referred to amongst CAM practitioners as "nature cure" (Whorton, 2002, p. xii) This philosophy that the body's own healing powers can be influenced for a positive result was prominent in the 1850s when huge numbers of familiar and not-so-familiar CAM healers were practicing in New York City. These included the naturopathic, homeopathic, and chiropractic doctors many are familiar with but also practitioners people are not so familiar with, like mesmerists, galvanic doctors, and chrono-thermalists (p. xiii).

However, after the Civil War, even more new and different healers emerged, and when the 20th century was ushered in, more than 300 CAM practices were offered in the United States (Whorton, 2002, p. xiii). Empirically, people determined which of these new practices were effective and which ones were not. Through supply and demand, only the more effective practices and practitioners remained. During that same time frame, medicine changed, and the profession's scientific knowledge base grew. Anesthetics reduced the pain of many medical procedures. In the 1800s, patients "submitted" to conventional medical treatments such as calomel, a mercury-based emetic that was crude and laden with side effects that caused ptyalism and degradation of the jawbone (Whorton, 2002, p. 5). Leeches that adhered to the skin and sucked blood, and bloodletting were common practices as well. However, patients and physicians alike began doubting the "depletive" therapies such as leeching and bloodletting, and they lost favor (p. 6). At that time (around 1900), even conventional physicians began to embrace a more natural approach but continued to use some of the drugs in their limited arsenal because they felt as if they were taking action as opposed to waiting while nature took its course (Whorton, 2002). In the meantime, the battle waged on with conventional medical

doctors and alternative medicine doctors defending their practices to each other and vying for patients. So between the alternative and conventional healers, conflict existed with regard to philosophy and practice. Then politics complicated the situation even more. In the early 1900s, alternative practitioners felt that organized conventional medicine was trying to oppress them. Conventional medicine continued to declaim and discredit the alternative medicines (Whorton, 2002).

The outsider (alternative medicine) fighting the establishment (conventional medicine) is in essence the history of CAM in the United States. Whorton (2002), in his book on the history of alternative medicine, calls alternative medicine “counterhegemonic medicine” due to the fact that the irregulars challenged the medical hegemony.

NCCAM is very important in the recent history of CAM and is pivotal in researching whether alternative therapies are effective or ineffective through clinical trials. Both conventional medicine and alternative medicine can be served by revealing the truth in the form of evidence-based research. This may finally put an end to the bickering between the two sides and bring about a more cooperative environment for patient care.

CAM and Conventional Medicine

CAM is increasingly accepted in the United States. In a landmark study on CAM use, Eisenberg et al. (1993) found that 34% of respondents reported use of a minimum of one unconventional therapy in the previous year. Additionally, a third of these respondents visited unconventional providers and paid for it out of pocket. In a follow-up

study five years later, Eisenberg et al. (1998) found a 25% increase in CAM use and a 47% increase in visits to “alternative” health care providers, such as homeopaths. Gordon, Sobel, and Tarazona (1998) discovered that 25% of HMO health maintenance organization (HMO) members had recently used CAM. Even more intriguing was that 90% of adult primary care physicians and obstetrics-gynecology physicians in the study had recommended one or more alternative therapy. An impressive portion of the members surveyed from this same HMO (70%) desired CAM therapies to be available to them in their plan. Gordon et al. also found that physicians were in favor of HMO coverage for CAM therapies to complement behavioral medicine treatments.

CAM has been in use for thousands of years and gained popularity in the United States in the early 1900s (Bodane & Brownson, 2002). The widespread growth and acceptance of CAM by patients as well as health care providers may have contributed to the federal government’s decision to establish NCCAM. The center’s mission is to support “rigorous” research of CAM and even to train the researchers (NCCAM, 2003a). Education is an important part of the mission, and this applies to the consumer as well as the practitioner. The goal of the center’s mission is to ensure that scientifically proven, safe CAM practices become part of accepted practice (NCCAM, 2003a).

There has historically been conflict between conventional medicine and complementary and alternative medicine. In spite of that conflict, the use, effectiveness, and acceptance of CAM continue to grow amongst the US. populace.

In 2001, Joseph B. Martin, the Dean of the Faculty of Medicine at Harvard Medical School, gave the keynote address to medical colleagues from the United States and Asia at a conference in Seoul, South Korea. The point of the conference was to

facilitate an exchange of knowledge on the subject of CAM. Martin acknowledged “urgent need” for physicians to gain greater understanding of CAM. The agenda included learning about the kinds of therapies included under the heading of CAM, as well as how these therapies may interact with medicines and treatments from the medical treatment regimen (Martin, 2001).

Martin (2001) commented that CAM therapies have existed for years alongside medical treatments, and he acknowledged that they were “scorned, or at best ignored, by most doctors.” Martin went on to say that the popularity of CAM had increased and that this was validated in 1993 by research of one of Harvard’s own, Eisenberg.

In 2003, the White House Commission on Complementary and Alternative Medicine Policy (WHCCAMP) stated that public interest in CAM has continually increased in the United States. WHCCAMP (2003) noted that historically, the attitude of levels of government (local, state, and federal) has been to “restrict access to and delivery of CAM services” in an effort to protect the public from unresearched and hazardous therapies.

Historically, lessening of conflict in the relationship between conventional medicine and CAM has progressed slowly. The American Institute of Homeopathy was established in 1844 and is the oldest professional medical association in the United States (Yuan & Bieber, 2003). Around the time of its establishment, there were 22 homeopathic medical schools in the United States. Homeopathic medicine had a strong presence in American medicine until events occurred that almost eliminated it altogether. One of the most catastrophic events for homeopathy and other forms of CAM occurred in the 1920s with Abraham Flexner’s medical reform (National Center for Homeopathy, 2003).

Flexner designed a new medical education curriculum that reflected the biomedical view that disease is a crisis in the physical system(s) and interventions should be targeted to restore function (National Center for Homeopathy, 2003; Caplan, Harrison, & Galantino, 2000). Medical students were urged to attend conventional medical schools, and homeopathy and other forms of CAM were soon considered outside of the mainstream (National Center for Homeopathy, 2003).

Bodane & Brownson (2002) reported that CAM was the victim of suppression by the American medical establishment. They too reported that CAM was widely used in the United States in the early 1900s. Bodane and Brownson went on to say that the establishment of the American Medical Association (AMA) was motivated by a movement to present a show of force to counter homeopathy and other alternative systems of health care.

There may be some in conventional medicine who continue to dismiss CAM practices and therapies. The National Library of Medicine Medical Subject Heading (MESH) offers a definition of CAM that carries with it a negative connotation. The definition states that CAM is “an unrelated group of unorthodox practices, often with explanatory systems that do not follow conventional biomedical explanations” (McGill University, 2000). The use of the word “unorthodox” implies negativity and judgment (McGill University, 2000).

In spite of the established disdain of CAM by some in conventional medicine, there appears also to be open-mindedness and curiosity about it from others in the discipline. As Martin (2001) noted in his keynote address, patients are increasingly using CAM, and Eisenberg et al. confirmed this in 1993 and again in 1998. Martin also noted

that medical schools are recognizing that as more patients use CAM, physicians should be trained in it, and he pointed to the University of Minnesota as an example. This school has developed a graduate-level minor in CAM, featuring courses like alternative and herbal medicine. Martin also told the group that the University of California at San Francisco and Columbia College of Physicians and Surgeons in New York now offer integrative medicine (combining CAM with conventional medicine). In a study on physicians and CAM, findings indicate that family physicians and specialists want to increase their knowledge on many aspects of CAM (Kaczorowski, Patterson, Arthur, Smith, & Mills, 2002).

There may always be debate in conventional medicine about the validity and usefulness of CAM. Despite this, it is not only increasingly used by patients, but it is also increasingly being integrated into research, medical education, and individual medical practices (Thorne et al., 2002). While CAM use is increasing, there also appears to be an increase in dialogue between conventional medicine and complementary and alternative medicine (Martin, 2001).

CAM Modalities

CAM practices and therapies are abundant. There are more than 1800 in existence (Kreitzer & Snyder, 2002). NCCAM grouped practices and therapies into five categories or domains: alternative medical systems, mind-body interventions, biologically based therapies, manipulative and body-based methods, and energy therapies.

Alternative medical systems have their foundations in “complete systems of theory and practice” (NCCAM, 2003d). Some of these systems were in existence before conventional medicine. In the West, two of the most prominent systems are homeopathic medicine and naturopathic medicine, with traditional Chinese medicine and Ayurveda (India) most prominent in the Far East (NCCAM, 2003d). Homeopathic medicine follows the premise that “like cures like” (Kreitzer & Snyder, 2002). A passage from the writings of Hippocrates states, “By similar things a disease is produced and through the application of the like, it is cured.” Galen, another Greek physician, also referred to the concept of like curing like. In the 15th century, a Swiss physician adopted the Greek name Paracelsus and began to study and teach the concept that “likes must be cured by likes” (Yuan & Bieber, 2003). During this time, the predominant medical treatments were “repeated and copious venesections, stomach rending emetics, violent laxatives, and massive doses of murderous remedies” (Yuan & Bieber, 2003, p. 67). In the 19th century, Samuel Hahnemann, a German physician, continued the development of homeopathy. Constantine Herring brought homeopathy to the United States in the 1800s, and it became very popular (Huebscher & Shuler, 2004) Early in the 1900s, 111 homeopathic hospitals, 22 homeopathic medical schools, and 1,000 homeopathic pharmacies existed. Approximately one-fourth of urban physicians practiced homeopathic medicine.

Homeopathy continues to be based on the law of similars (Huebscher & Schuler, 2004). In modern-day homeopathy, a minute dose of a substance is given (Kreitzer & Snyder, 2002). If the same substance were to be given in a larger dose, it could cause the patient to develop the illness resulting from the particular substance. Modern homeopaths believe that with the smaller dose, the body is stimulated to produce a defense against the

agent (Huebscher & Shuler, 2004).

The homeopathic care process begins with the homeopathic interview, a case evaluation, and prescribing. Homeopaths believe that the patient's symptoms must be reviewed from the physical, mental, emotional, and spiritual perspectives. Often the *Materia Medica* is consulted. This text lists remedies associated with the symptoms the homeopath has observed. The remedies can be from plant, mineral, and animal sources, and there are more than 2,000 remedies available to the homeopath (Kreitzer & Snyder, 2002). The substances are very dilute. The most dilute substances are considered to be the more potent (Huebscher & Schuler, 2004).

In states that license naturopaths, homeopathy is included in their scope of practice. Three states offer a state license for medical doctors to practice homeopathy. Other practitioners, such as Doctors of Osteopathy, Doctors of Chiropractic, and Nurse Practitioners, may use homeopathy in their practices under certain state laws. Minnesota and California authorize registered practitioners of alternative medicine to practice without being licensed (Homeopathic Directory, 2003).

In naturopathy, the healing power of all things that are natural is the foundation for practice. Principles of naturopathy include finding the cause (of illness), treating the whole person, preventive medicine, wellness, and the physician as teacher (Huebscher & Shuler, 2004). Naturopaths believe that "life is more than just the sum of biochemical parts," and therefore, like homeopathy, it looks at the patient from the perspectives of physical, spiritual, emotional, and psychological existence.

Naturopathy came to the United States in the 1890s, and the core belief of naturopathy is that the body has the ability to heal itself (Kreitzer & Snyder, 2002). The

naturopathic process includes a history and physical and then certain questions are applied to the case. The questions include asking what is the cause, what is contributing to the cause, how is the body trying to heal itself, and what is the minimum level of intervention needed to facilitate the self-healing process (Huebscher & Shuler, 2004). In some states, naturopathic physicians are allowed to perform diagnostic tests, such as blood laboratory analysis and radiologic studies. Treatments may include nutrition, medication (botanicals and modern medicines derived from botanicals), fasting, detoxification, homeopathy, acupuncture, and biofeedback (Huebscher and Shuler, 2004). There are 12 states that license naturopathic physicians, and Montana is included in that group (American Association of Naturopathic Physicians, 2003).

Mind-body medicine uses a varied approach. The goal is to enhance the mind's ability to affect the body. Mind-body medicine includes such practices as meditation, prayer, and art therapy. However, it is noted that patient support groups and cognitive-behavioral therapy are also included in this group (NCCAM, 2003d). Meditation is difficult to define because many philosophies, religions, and practices promote it in their own unique way (Yuan & Bieber, 2003). The practice of meditation means observing but not interpreting, analyzing, comparing, or judging. The person is usually in a quieted state and may possibly assume a certain physical position. But in all cases, the spine and neck are to be straight so that circulation, thought, and breath are not blocked. In this manner, it is felt that the healing powers of the body can be summoned (Yuan & Bieber, 2003).

Biologically based therapies employ natural compounds. This may include food and food combining, vitamins, and products from plants and animals (NCCAM, 2003d).

For example, many different cultures have practiced the use of herbs and other botanicals for thousands of years. Like conventional pharmaceuticals, botanicals and herbs have a certain mechanism of action and side-effect profile (Freeman, 2003) Many modern, conventional medicines, such as Digoxin, come from plants. In the case of Digoxin, the plant substance digitalis is the origin, and this comes from the foxglove plant.

Also known as phytomedicine, herbs may be taken as teas, pills, capsules, powders, or topicals. Use of herbs may be prescribed by medical and osteopathic doctors, nurse practitioners, naturopaths, or homeopaths, and there may or may not be cultural or religious meaning attached to the practice (Huebscher & Shuler, 2004).

Manipulative and body-based methods draw upon movement or manipulation of a part or parts of the body. This can include chiropractic manipulation and massage (NCCAM, 2003d) Chiropractic care is considered alternative by some and mainstream by others. Since the 1970s, Medicare has reimbursed patients for chiropractic care, and about half of all health maintenance organizations (HMOs) and 75% of private insurers will reimburse for chiropractic treatment (Yuan & Bieber, 2003).

Spinal manipulation and adjustment are paramount in chiropractic treatment, and this is reflected in the chiropractic belief that there is a strong relationship in the human being between structure and function (Huebscher & Shuler, 2004). The adjustments are accomplished by an “applied force” to a specific area. Chiropractors also employ nutrition (including nutritional supplements), exercise, heat, cold, and bioelectrical treatments (Yuan & Bieber, 2003). Their diagnostic regimen consists mostly of plain-film radiologic studies, and this reflects the professions’ belief in the significance of anatomical expertise. All 50 states in the United States license chiropractors (Huebscher

& Shuler, 2004).

In energy therapies, energy fields are used. Biofield therapies focus on energy fields reported to surround and permeate the body. NCCAM points out that the existence of these fields has never been proven. Manipulation of the fields of energy is attained by pressure application and/or laying on of the hands through therapeutic touch, religious ceremonies, and Reiki. In bioelectromagnetic-based therapies, magnetic fields or current (either alternating or direct) is used to affect the body's energy field(s) (NCCAM, 2003d).

Efficacy and Safety of Complementary and Alternative Medicine

In conventional medicine, the randomized clinical trial is held as the best method for assessment of the effectiveness or benefits/risks of therapies. CAM therapies are increasingly being submitted to the same standards in research. The focus of a new publication is directed at review of CAM clinical trials. Studies of a more rigorous nature will continue to increase as CAM gains acceptance in health care (Parascandola, 2000).

Some professionals debate whether tightly controlled research should be the gold standard when evaluating a CAM therapy. In an article on how nurse practitioners should go about evaluating CAM, readers were reminded that research for CAM is in its early stages (The Clinical Letter for Nurse Practitioners, 2000). Additionally, the article stated that there is varying opinion about applying the medical gold standard of research to CAM, since some forms of CAM have been employed for a sufficient amount of time to build valid anecdotal data. NCCAM is currently discussing and analyzing methods regarding CAM research evaluation (NCCAM, 2003c).

In 2003, WHCCAMP called for funding from both the private and public sectors to pay for research on CAM therapy. The premier concern, according to WHCCAMP, is safety. The policy explains that in order to obtain data needed to make judgments about safety and efficacy, solid research must be done. This information will be pivotal in regulating and recommending CAM for proper use. It will also provide the data needed for quality control and/or assurance. Information from research will also be used to educate not only consumers but health care providers as well. Once safety, efficacy, education, and quality are addressed, insurance coverage for CAM products and services could follow (WHCCAMP, 2003).

Research on CAM therapies has increased in large part due to the mission of NCCAM, where there has been a designation of human and material resources for research. The result has been establishment of the Center for Research on CAM (CRC) program at NCCAM. This program is devoted to developing and promoting CAM research. The CRC conducts planning sessions and assessment of requests for research funding. They then prioritize and develop strategies for funding research. Additionally, the CRC considers and facilitates collaboration with other agencies. Funding is a major focus of the CRC, and worthy applications are given consideration based on ever-changing priorities (NCCAM, 2003f).

The principles that guide the CRC in awarding funding are as follows: “a priority to elucidate mechanisms of action and conduct small, well-developed phase I and II trials, a priority to build infrastructure in CAM institutions, and a priority to collaborate” (NCCAM, 2003f). Research priorities for fiscal year 2003 are in the areas of arthritis, asthma/allergy, cardiovascular disease, climacteric, digestive diseases, immunology,

infectious diseases, manual therapies, mental health, mind-body medicine, neurological diseases, pain, and probiotics (NCCAM, 2003d). After reports from Europe supporting the positive effects of St. John's Wort on mild to moderate depression, NCCAM sponsored research on it here in the United States with a randomized, double-blind trial. The trial was funded by NCCAM, the Office of Dietary Supplements (ODS), and the National Institute of Mental Health (NIMH). The impetus behind the study was evidence that the use of St. John's Wort for depression in the United States was increasing. NIMH felt that it was necessary to obtain definitive data on St. John's Wort with regard to depression. The trial compared the active ingredient in St. John's Wort (*Hypericum perforatum*) to placebo and also to Zoloft (a proven selective serotonin reuptake inhibitor). The type of depression the subjects presented with was "major depression of moderate severity." There were 340 subjects and multiple sites were used (NCCAM, 2003d). The subjects' responses were similar whether on the St. John's Wort or placebo, using common depression rating scales. The subjects on the Zoloft had scores that represented better relief from depression than the St. John's Wort and placebo groups (NCCAM, 2003d) This information clarified for laypeople, providers, and patients that St. John's Wort had not been demonstrated to help study subjects with mild to moderate depression (NCCAM, 2003d).

There are many studies in the works at NCCAM, and one that may spark public interest is the GAIT trial, or Glucosamine/Chondroitin Arthritis Intervention Trial. This trial will test the effectiveness of glucosamine and chondroitin, which are dietary supplements commonly taken for arthritis (NCCAM, 2003d). The trial will examine if there is a difference in pain relief and functional improvement in subjects with knee

osteoarthritis when glucosamine and chondroitin are used together or separately. Subject recruitment is underway (NCCAM, 2003d).

NCCAM conducted another study whose results were clinically significant for HIV/AIDS patients and their providers (NCCAM, 2003d). In this study, it was found that garlic supplements reduce serum levels of a certain protease inhibitor. Saquinavir levels fell by half in the subjects who took garlic (NCCAM, 2003d). This information is important in the clinical setting, where this drug may be prescribed and monitored. This study is an example of how clinical evidence about a CAM therapy (garlic) was produced as a result of a NCCAM study. It is difficult to know or speculate about when this information would have been available if NCCAM had not performed this study.

Research by credible teams continues at NCCAM. Teams from NCCAM are collaborating with other NIH Institutes and Centers for purposes of research. Collaborators include the National Institute on Aging, the National Institute of Mental Health, and the Office of Dietary Supplements. These studies are large and rigorous. NCCAM is also awarding funds to other research centers. The resultant studies are building the foundation of a strong base of clinical evidence on CAM (NCCAM, 2003c).

There are also studies occurring on CAM outside the realm of the federal government and NCCAM. Two studies done on yoga as a therapy for osteoarthritis of the hand and carpal tunnel syndrome revealed more substantial decreases in pain than in control groups (Raub, 2002). Another study found that chronic obstructive lung disease (COPD) patients had measurably less dyspnea after a four-week yoga program (Behera, 1998). In conventional medicine, practitioners are taught that the best clinical and/or bedside decisions for treatment are those that include evidence-based research results.

Evidence-based literature is readily available in print and online (United Health Foundation, 2003). This comes from the establishment of a solid, dependable base of scientifically obtained knowledge. For CAM to be accepted and included in conventional medicine and mainstream health care, there must be dedication to creating a base of clinical evidence on its practices and therapies (WHCCAMP, 2003).

CAM Use Among the General Population

In 2000, Stephen E. Straus, MD, Director of NCCAM, addressed the Senate Appropriations Subcommittee regarding budgets for the fiscal year 2001, asking for an increase of \$3,381,000 above the fiscal year 2000 appropriation. The reason for this increase was growing public interest in CAM (NCCAM, 2003e). Ott (2002) suggests another reason for increased CAM use in her article on meditation in pediatric clinical practice—that CAM is used in addition to conventional medical treatment, complementing the patient’s existing medical treatment. Therefore, patients do not have to abandon their prescribed medical treatment. They can add to it, perhaps with a feeling that they are contributing to the healing process.

Considering the concept of “complementing” brings greater understanding to results of the studies by Eisenberg et al. in 1993 and 1998, where a surprising number of participants reported CAM use. In the subsequent study, CAM use increased and was paid for out of pocket. Gordon et al. (1998) discovered that 25% of HMO members had recently used CAM and that 90% of adult primary care and obstetrics-gynecology physicians in the study had recommended one or more alternative therapies. A large portion of the members surveyed from this same HMO (70%) desired CAM therapies to

be available to them in their plan. In that same study, physicians were found to favor HMO coverage for CAM therapies to complement behavioral medical treatments.

Demographically, Eisenberg et al. (1993) found that most users of CAM were non-black, ranged from 25 to 49 years of age, were more educated, and had higher incomes. Eighty-three percent had seen a medical doctor for chronic conditions and got no relief. Seventy-two percent of these same respondents did not disclose CAM use to their conventional medical physicians.

Ni, Simile, and Hardy (2002) found that of 30,801 adults queried (response rate 70%), CAM use was lower in men than in women (33.4% and 24.0%). Again, it was found that people with more education were more likely to use CAM. People in the Midwest and West were more likely to use CAM than in the Northeast or South. Notably, 86.7% of CAM users had conventional medical primary care providers.

Astin (1998) set out to study why people would choose CAM in the United States. Some of what Astin found validated what Eisenberg et al. (1993, 1998) discovered: Users of CAM were usually more educated. What compelled most study respondents to use CAM was not dissatisfaction with conventional medicine. The study found that the majority of CAM users feel that CAM is more congruent with their own philosophies, values, and beliefs regarding life and health (Astin, 1998). Additionally, most of the respondents who reported using CAM suffered from chronic health problems, such as back problems, allergies, and lung problems. This study, like the two done by Eisenberg et al. (1993, 1998), was not exclusive to any particular group or population.

CAM Use by Rural People

One group of people that has recently emerged as the focus of studies regarding CAM is rural people. From a varied sample of rural, older adults residing in the Southeastern United States, one group of researchers found that most of the people sampled used a form of CAM, such as vitamin therapy, home remedies, faith, or herbs (Arcury, Quandt, Bell & Vitolins, 2002). Vallerand's research discovered that of urban, suburban, and rural patients in Michigan who suffered from pain, the rural residents were less likely to use CAM (Ham, 2003). Of the group, 77% of the urban and 82% of the suburban subjects used CAM in managing pain. This contrasted with only 58% of the rural residents using CAM to assist in pain relief. This may be because the suburbanites had higher incomes and could afford to pay out of pocket for CAM (which is usually not covered by insurance). Some of the highest levels of poverty in Michigan are in rural areas, so this could be a powerful influence on whether or not a rural person might use CAM (Fedstats, 2003).

Research conducted by Johnson (1999) studied rural elderly women in the western United States. The majority of the women had greater than 12 years of education and incomes of over \$40,000 per year. Johnson's sample is probably not representative of most rural women, especially rural women in Montana. However, some of the findings are congruent with others' findings about traits of rural people (Lee, 1998). The women in Johnson's (1999) sample shared characteristics of rural people such as "self-sufficiency, independence, and the ability to care for themselves." Therefore, Johnson surmised that health care consultation and practices outside the established norm

appealed to their independent nature. They liked the independence of being able to manage self-care without the required prescription or office/clinic visit. Appealing as well was the sense the women had of being in control and self-reliant with regard to their self-care, health promotion, and disease management.

In spite of the characteristics of independence and self-reliance that rural people exhibit (Lee, 1998), cost can influence and alter decisions. The cost of CAM might influence a person to use CAM if prescribed medications were out of reach financially. On the other hand, a person might decide not to use CAM since out-of-pocket payment is required.

Level of education plays a major role in whether a subject uses CAM (Eisenberg et al., 1993; Astin, 1998). It also seems that people who have a holistic health philosophy are more likely to use CAM (Astin, 1998). In the study by Johnson (1999), the subjects chose CAM due to their self-reliance and independence. It also appears that having a chronic health condition is a predictor for CAM use (Astin, 1998; Eisenberg et al., 1998). In summary, the literature supports that use of CAM is present and appears to be increasing. However, little is known about rural people and CAM use, particularly rural people living in large, sparsely populated states like Montana.

CHAPTER 3

METHODOLOGY

Introduction

The study purpose was to explore and describe use of Complementary and Alternative Medicine (CAM) among rural Montanans. Because little is known about rural Montanans and their use of CAM, it was deemed that the qualitative approach was most appropriate for this study. Additionally, the qualitative method allowed the researcher to interact with the study subjects in their natural setting (Rossman & Rallis, 1998). This facilitated the gathering of data from the subject's perspective.

Human Subjects Protection

In order to ensure protection of human subjects, the study was submitted for approval by the Montana State University (MSU) Institutional Review Board (IRB). Study participants were advised of the purpose of the study and the voluntary nature of their participation in the study. Each participant received an informed consent that explained the benefits/risks of participating in the study and the voluntary nature of their participation in the study. The participants were not coerced in any way to participate in the study. Additionally, the subjects received assurance that should they decide they no longer wanted to participate in the study, they could withdraw at anytime with no penalty or negative outcome. The informed consent was reviewed with the participants at the time

of data collection, prior to their signing it. Each subject received a copy of the informed consent questions, and concerns about the informed consent were answered at that time.

To ensure confidentiality, signed copies of the informed consent for each subject were stored in a locked file in the investigator's home office. Because data were collected by recorded interview, all taped interviews were kept in a locked file in the investigator's office, and no one had access to that data except the investigator. Subjects received telephone numbers of the researcher and the Montana State University research department with instructions to call if they had questions or concerns. The participants were advised that all data would be reported as group data and that there would be no way to identify them as individuals from their answers to interview questions. The participants again received time to ask questions and reassurances that confidentiality would be honored. They were assured that there were no right or wrong answers to the interview questions and that their answers would be used for data only. Interviews were conducted at a location where the participant felt most at ease, non-threatened, and comfortable.

Sample and Sampling Procedures

The number of subjects was not defined a priori in keeping with the principles of qualitative research. Subject selection was expected to be a continuous process. This is congruent with field research and the qualitative method of study.

For this study, a convenience sample was selected. Recruitment of subjects began with contacting rural acquaintances who might assist in seeking people who may consent

to be interviewed for the study. It was anticipated that once a few participants were identified, subsequent participants would be recruited using the “snowball” effect, with subjects offering names of friends or relatives who would participate in the study. These people were then contacted by the researcher and invited to participate in the study.

Inclusion criteria were the ability to read, write, and speak English; an age of 18 years or older; and no known history of diagnosed dementia or cognitive impairment. The sample area was comprised of south-central/eastern and western rural portions of Montana. Study participants were to be year-round residents of Montana. It was anticipated that subject participants were to be residing predominantly in south-central/eastern Montana, but it was possible that other areas of the state might be sampled. Extensive effort took place to ensure variation of the sample group with regard to gender, income, educational level, and location within the geographic area of the study.

Data Collection

All interviews were conducted with study subjects face to face in a setting of their choosing. Prior to beginning the interview, informed consent was reviewed, the consent form was signed by the subject, and a copy was given to him or her at that time. The recording of demographic data was collected by the researcher prior to beginning of the interview. An open-ended interview guide was used to focus the nature of the interview. However, the interviews were allowed to proceed naturally, and redirection was used only when needed. Field notes were written after the interviews were completed to avoid distracting the subject during the interview.

It was anticipated that interviews would take from a minimum of 30 minutes to no longer than 2 hours to accomplish. Time parameters were not imposed to allow for individual and situational differences. Closing the interview included an expression of gratitude from the researcher. The researcher asked the subject for permission to contact him or her via telephone if it was discovered that clarification was needed.

Data Analysis

The recorded interviews were transcribed by a professional transcriptionist into a formal document. Each interview was read in its entirety to get a feel for the context of the interview. The interviews were studied line by line in a search for concepts that emerged from the data and key themes were identified through this process.

Coding

Transcribed interviews were typed in a manner that allowed adequate space for coding and making notes in the right-hand margin. The interviews were read carefully, with identified concepts noted in the margin. As recurring concepts were identified and noted, major themes emerged. Recurrent themes were grouped and then named. As major themes emerged from the data, redundancy began to occur. At that point, it appeared that saturation had occurred and that sampling could cease.

Credibility

To ensure credibility, the committee chair overseeing this study reviewed selected transcribed interviews in order to validate the researcher's interpretation of the data. In

addition, the researcher wrote field notes after each interview to note salient points. Field notes could then be compared to transcribed interviews, thereby allowing triangulation of data sources. Follow-up telephone calls were made to selected subjects. Credibility of findings was enhanced in this manner.

CHAPTER 4

FINDINGS OF THE STUDY

The purpose of the study was to explore the use of Complementary and Alternative Medicine (CAM) among rural Montanans. The major research question was the following: To what extent do rural Montanans living in the sparsely populated areas of the state use Complementary and Alternative Medicine (CAM)? Three subquestions evolved from the major question: What are the types of CAM used? What is the frequency of use? Is CAM use disclosed to health care providers? A qualitative approach was used to explore and elicit descriptions about the concepts from the subjects.

For the purpose of this study, *rural* was broadly defined as a community of 10,000 or fewer residents, located at least 20 miles from an urban center of 50,000 or more. Study subjects resided in areas consistent with the definition of rural used for this study.

Sample Description

A convenience sample of eight subjects participated in the study. They were all Anglo-American. Data were collected from the subjects by semistructured interviews over a three-month time frame.

There were five female subjects and three male subjects in the study sample. The study subjects ranged from 40 to 75 years of age with a mean age of 56 years. Two subjects were divorced, five were married, and one was married but separated. Though a

few of the subjects were born in neighboring states, such as Idaho and North Dakota, all of the subjects had been Montana residents for the majority of their lives. The towns the subjects resided in ranged in population from 556 to 8,487.

All of the subjects were high school graduates. Four subjects had two years of college, and three subjects had completed four years of college, obtaining bachelor's degrees.

The subjects were asked to identify their income levels by selecting the category that best reflected their annual income. These data are displayed in Table 1.

Table 1. Income levels identified by subjects

Income Level	Male	Female	Total
\$10,000 to \$20,000		1	1
\$21,000 to \$30,000	2	2	4
\$31,000 to \$40,000	1	2	3
Total	3	5	8

All of the subjects had health insurance. One subject had Medicare only, and one subject had Medicare with a supplemental private insurance. The remaining six subjects had private health insurance.

Distance to health care was reflected by how many miles the subject had to travel to access the primary care provider. The distance traveled ranged from 2 miles to 12 miles, with a mean of 6 miles. Two of the study subjects were living with a chronic illness, which required them to travel long distances to access specialty medical care. One subject traveled 150 miles to see a specialist, and the other individual traveled 190 miles to access one specialist and 220 miles to access another specialist.

Emergent Themes

Four recurrent themes, entitled Using CAM: Pros and Cons, CAM Providers: Pros and Cons, Validating CAM Use, and Managing Health Issues and Enhancing Control with CAM were identified from the data and are discussed in the following sections of this chapter.

Using CAM: Pros, Cons, and Influences

All of the subjects reported using complementary and alternative medicines (CAM). Seven of the eight study subjects stated they used CAM extensively, and subjects communicated that they were open to many CAM practices. The subjects used many forms of CAM, including reflexology, hypnosis, massage therapy, chiropractic care, herbs, vitamin therapy, diet, and nutrition, and some subjects expressed interest in trying other forms of CAM. Even when they had not tried a particular form of CAM, subjects seemed open to considering it. For example, one subject stated:

You know, I don't know anything about acupuncture, nothing, I don't even know anyone who's done it, but I almost sort of think, I mean the Chinese do it. . .

Another subject described using several CAM therapies and practices:

. . . ginseng, I love massage techniques. I am a great believer in trying to do natural things. I love candles, I love the smell. Those kinds of things.

One subject with a scientific background who worked in an environment where research was discussed almost on a daily basis described the variety of CAM practices she had investigated and used:

Well, the different things that I have investigated in my short life time is

[sic] hypnosis, herbs, vitamins and odors, like say lavender and that kind of thing. Relaxation techniques like Reiki and different feng shui, things that are lucky like crystals, praying, angels, exercise . . .

Even the one study subject who used primarily chiropractic care for the majority of his health care needs verbalized that he would use other forms of CAM if his health determined the need. When asked to describe other forms of CAM that he might consider using he said:

Well, I guess massage therapy because that is part of going to the chiropractor. But I haven't really used any herbs. I use Vitamin C if I feel a cold coming on and I guess I have used . . . Echinacea.

There were two married men in the study and three married women. These subjects offered data about how wives who believed in CAM had influenced the husbands and families to use CAM. For example, a study subject who was an enthusiastic user of CAM credited his wife with introducing him to it:

She was the driving force. She has found that massage helps, especially in my situation under stress . . . she had a gal come in and do aromatherapy, and it's a relaxation-type effect.

Another man, when asked about how he got started on CAM joked:

Whatever my wife put me on. I have little choice in that.

Two of the study subjects who were health care professionals credited their profession with influencing them to use CAM:

The workshops I've been to. Absolutely, because I went to [National Teaching Institute for Critical Care Nurses] and I think the point they were making is to make sure you know what your patient . . . this was many years ago, about the time we started putting on the admission sheets if they take any supplements.

I think it gives a person more of an open mind and then to bring the whole family into the living process I love humor, and I think that is another form of it. There's all different kinds of things, the Eastern things that are brought in.

Other factors that influenced CAM use were testimony from other CAM users.

This came in the form of friends and family who gave testimony on how CAM had worked well for them, influencing the study subject to try it. In this rural sample, distance was not a compelling factor in CAM use. None of the study subjects described distance from conventional health care as being a factor in their decisions to use CAM.

While all of the subjects felt comfortable using CAM on their own with no direction from any type of health care provider, they acknowledged that CAM use is not without some degree of risk. As enthusiastic as these subjects were about CAM use, they were also cautious, some more than others. Examples of the study subjects' awareness of potential risk that might be associated with using CAM included comments such as this:

I haven't [experienced any adverse effects] because I haven't pushed it to the extreme, you know.

Yes . . . there are some [CAM/drug interactions] that can prolong your bleeding time, and I don't even know what they are, but you know that's out there, and I guess I'm aware.

Well I do [use CAM] to a point. I'm really open-minded about it but careful because there has not been a lot of research. I have a neighbor who is really into herbal care. It's just that I want proof.

While all of the subjects reported using CAM and most were enthusiastic and comfortable with it, two subjects described situations where using CAM on their own did not work and may have delayed them from correctly diagnosing the problem:

. . . I'm in there telling this little kid [chiropractor] that I've got sciatica, and he's trying to treat this . . . there's no way in the world anything was even going to fix that! We were getting into a little bit of trouble there,

number one, diagnosing myself and making it worse and not better. Anyway, we got [to town] and Dr. _____ sent me to Mayo.

Well, I might say that at one time, St. John's Wort, and I didn't feel it did anything, and then I didn't take anything that helped. So, there I was.

Despite these experiences and associated risks, these two subjects continued to use CAM and remained committed to the therapies and practices they used.

The study subjects described using CAM frequently and discussed using many different forms of CAM. Study subjects also discussed how family and friends influenced their use of CAM. Though they were comfortable with their CAM use, they were able to identify that, like all medical interventions, there could be associated risks with using CAM, and therefore, they were assessing for risk with CAM use also.

CAM Providers: Pros and Cons

Considering the limited sample size, a wide variety of CAM providers was mentioned. All of the subjects discussed specific experiences with at least one type of CAM provider, including massage therapists, acupuncturists, reflexologists, a homeopath, and a colloidal mineral proponent.

The chiropractor was the most widely used CAM provider. Most of the subjects made mention of having used chiropractic care. Whether it was the subject who felt that the chiropractor had a place complementing conventional medicine or the subject who went to the chiropractor for the majority of his health care, chiropractic care maintained a high-profile presence in the data:

I'm a firm believer in the chiropractor . . . I got pinned up against a fence by a horse and it hurt my back really bad, oh, I guess I was about 16, and my folks just took me right to the chiropractor and I been with 'im ever since.

One woman explained how she discovered that conventional providers and chiropractic providers were different as she told of her experience:

They [chiropractor] didn't prescribe, they can't prescribe, because I asked them why aren't you giving me Flexeril, what's the deal on that? You have to go to another doctor if you needed something like that, but they didn't suggest it, which I was surprised, because they said I was nearly bent over the wrong way, subluxed.

During a follow-up phone call, this subject reported relief from her symptoms because of her visit to the chiropractor. The subject stated:

Oh yeah! Within a couple of days I was fine.

Several of the subjects stated that they sought care from massage therapists. For example, one subject reported a positive experience with the massage therapist in the following way:

. . . she was very good and [Name] was very good too . . . she did take away a headache of mine. I definitely like massage.

One study subject even sought the care of a homeopath. He had to drive 190 miles to this provider, as there were no homeopaths in his town. He was having gastrointestinal difficulties and stated:

I had a hiatal hernia, and they just tried some stuff, medicines, or whatever it was. She tried to move my stomach down. Stuff like that. I was on something, I'm not sure what it was.

Another subject discussed using a CAM provider who placed him on an unusual treatment that he was obviously willing to try, even though he chose not to continue the treatment:

I was on colloidal minerals for a while. I went to this “Dead Doctors Don’t Lie” and he had that stuff, so I took that for a while. That was a mess. It was a liquid and I mixed it with juice. It turned my pee orange. I didn’t last on that.

When discussing CAM providers, subjects also discussed the costs of CAM. Most of the time, visits to CAM providers and other CAM therapies, such as supplements, were not covered by insurance, and study subjects reported paying for them out of pocket. A subject who had a long history of using chiropractic care had insurance that apparently did not pay for his care, but this did not deter him from using the chiropractor provider:

Well, like I said, my folks took me in [to the chiropractor]. My Dad was a ranch hand and we didn’t have any insurance . . . I just pay. I just go when I need to go because I know it will help me. It’d sure be nice if it [insurance] did though! It’d be nice not to have to shell out money every time I went.

On the other hand, another subject who was going to a chiropractor for migraines reported that this provider helped his migraines, but because of cost, he explained he will have to forego his chiropractic care:

. . . the chiropractor I stopped going to, because of the insurance, it’s such a hassle to get them [insurance] to pay for it.

This subject reported that had his insurance covered the cost of his chiropractor, he probably would have gone to the provider more frequently. When the subject who had used the homeopath was describing that experience, he also mentioned cost as a reason for stopping the treatment:

I didn’t stick with it for long because of the expense, and insurance didn’t pay for it . . . to go in and pay \$95 for an hour plus potions, just wasn’t feasible.

The study subjects described using a variety of CAM providers, and the majority of them reported being satisfied with the care they received from the providers. The most

frequently mentioned concern associated with CAM providers was not the quality of care but the cost associated with the care. In spite of this, those subjects who could were willing to pay out of pocket for the services.

Validating CAM Use

The subjects did seek validation about CAM use as a way to enhance their understanding and knowledge. One subject validated her idea to use CAM through lay literature. Some read books and articles about it. However, four of the eight subjects described validating their CAM use by talking with local or community-known experts on CAM. These individuals had no formal education but were recognized as long-standing practitioners of CAM in some form or fashion. A subject described one such expert:

I don't take them [herbals and medications] unless they're two hours apart. I kind of leaned on a health food store. There's an old gal that's been in the

business and if I could have anywhere near her pep and vinegar I'd be happy. She said definitely not to take this with this, wait after you ate [sic], you know . . .

Even though the study subjects were well educated, they preferred to seek advice on CAM use from residents of the community who possessed empiric knowledge as opposed to health care professionals, such as physicians, nurses, or pharmacists:

I did reflexology once too, and that was awesome. It was wonderful. She could tell me when she was touching my toes . . . that I had a sore shoulder, or either I was pregnant or on my cycle, she could tell that. And she kept finding my sore shoulder all over my foot. She's an older lady. She charges like ten dollars. She needed to practice doing arms, and so she did another half an hour on my arms. She was studying on the arms or hands and it was just awesome.

Another subject, when experiencing confusion about herbal supplements sought clarification from the staff at a health food store:

. . . you just have to be real careful. I think they're probably more up to date on health foods but there are some little gals in there who have been there since the beginning of the store and they can tell you about everything.

The subjects gravitated towards health food store staff and community practitioners of CAM for their information about CAM. The subjects did not report receiving warnings about CAM use from their health care providers. One subject volunteered to her physician that she was taking a supplement, and she received no warning. Another subject explained that she told her physician she was taking ginseng and the physician did not object, give any admonition, or ask any further about it.

A few of the subjects' CAM use was validated because their physicians personally used CAM. One subject described seeing his cardiologist at the chiropractor's office:

The cardiologist I have right now, I went in to have a massage on my neck. I had an accident, and I looked over and my physician was having his back rubbed at the chiropractor's office. In fact, he gave me the names of who he thought was good.

This subject seemed to feel encouraged to continue CAM use because of his physician's use of CAM. When asked if his physician knew about his CAM use he immediately retorted:

He's right in the middle of it My old cardiologist after 17 years, we parted ways. This fellow here, he really believes in holistic. That's right, he's right there. He's into all that, he's a younger one.

Another subject described how her physician recommended CAM to her:

. . . my arm was starting to hurt, and the doctor I went to had an area of concentration in the chiropractic end of it. He was a GP, and he said I've got to go to a chiropractor because my whole back was out, the nerves were pinched, and the muscles were knotted, and it's going to take awhile to fix.

One subject described how she came to use hypnosis for the birth of her third child. She explained that her obstetrician had a son who was going to learn hypnosis for an upcoming childbirth. She felt that if this particular CAM therapy was acceptable for her physician's son, then it was acceptable for her. Her physician's endorsement was a validation of her own CAM use.

When encountering conflicting feedback from his physicians, one study subject described how his generalist and his specialist differed with regard to CAM:

Well, my specialist, I see a neurologist and I see an internist. My internist doesn't have much use for that when I talked to him about the diet and the vitamins and supplements. He just said there was no proof that they helped or anything. The neurologist was probably more open to it. So, I don't discuss it with him now, what I see most is that he doesn't see much use for it.

This subject continued to use CAM, apparently feeling that the validation received from his specialist was enough to bolster his belief in using CAM. He disclosed his CAM use to the physician who was open to it and did not disclose to the physician not open to it.

Most study subjects reported using CAM and conventional medicine together and believed they complemented each other:

. . . or some might use a combination, they'll go to the doctor, he's diagnosed this, and he's prescribing this, but the herbal remedy has this.

I think it [chiropractic medicine] has its place. Chiropractic works hand in hand with the physician.

One subject who was a health professional believed CAM and conventional medicine complemented each other and described seeing this in an institutional environment:

. . . they put together a unit where the patients and doctors would do things on the units, like you could see your family or you had places there, libraries where you could research things . . . Charts were open, you could look in your chart at anytime . . . Everything there was oriented to the aromatherapy, that wonderful smell, and music was another thing that they brought in too, sunshine, the sound of water.

The subjects in the study all discussed how and with whom they validated their CAM use. They identified experts on CAM as those persons who were not associated with traditional Western medicine but were community based or folk providers of CAM.

The study subjects reported combining conventional medicine and CAM in managing their health-related needs. It did not seem as if they withheld their CAM use from their physician providers, and while not all of the subjects stated that CAM was complementing their traditional care, most of them were using a combination of conventional medicine and CAM in health management and disease prevention.

Managing Health Issues and Enhancing Control with CAM

This theme emerged from the subjects' own accounts of managing health-related issues with CAM use. Subjects described using CAM to help manage pain, to help manage a specific health concern or disease, to improve the odds of staying healthy, and to enhance their self-control when managing health-related issues. One woman stated she was taking chondroitin for her arthritis:

The chondroitin *is* helping.

When asked to elaborate on this, she reported less pain with movement in the morning than she did before she was taking the chondroitin. She had read about chondroitin in *Reader's Digest* and bought the chondroitin at her local grocery store. Another subject described using exercise therapy for the pain she experienced after back surgery. A male study subject who believed in chiropractic care stated:

The chiropractor keeps me out of pain. I have a really bad back.

Another subject told about how she used hypnosis to manage the pain of childbirth:

. . . she was born in Bozeman . . . Dr. _____ there was a father and I think he had two sons and one of the sons was getting ready to have a baby with hypnosis, so I decided I would try this, now this is my third child so I did have some idea what was going on . . . and he taught us to do self-hypnosis, so then when we could go home we could also practice doing this with our coach so we could get into a deeper relaxation . . . I practiced and practiced . . . I sort of remember this and I sort of didn't, but a student nurse was in there and I was on the table, and the doctor said, "Take her pulse," so I raised my hand up like this for her to take my pulse and my hand stayed in that position for the whole time of delivery. I was so relaxed, and I just apparently stayed in that position until I got done delivering the baby . . . it went extremely well, because the whole secret is relaxation if you stop to really think about it . . . I don't remember feeling the pain and of course with the other two I was gas masked . . . but I remember the other labors and I had quite a bit of pain. With this labor, I didn't have anything.

Pain, whether it was chronic pain from osteoarthritis or chronic back pain or acute pain such as that associated with labor and childbirth, was one condition that the subjects attempted to modify with various CAM therapies. From the accounts, it appears that CAM was an effective option for these subjects in managing their pain.

Some subjects described how they used CAM to help manage heart disease and how the heart disease led to their consideration to use CAM options:

Well, I had some heart trouble, coronary heart disease, so relaxation to reduce the anxiety level. I went through that, then also I went on the Ornish diet massage helps, especially in my situation under stress, and then also [wife] believes . . . in aromatherapy, and it's a relaxation-type effect Primarily, that's what got me started, and high blood pressure. It was elevated so high, that's why they did this relaxation, and semi-self-hypnosis . . . biofeedback is what it is Oh sure, you're willing to try anything, so they put you through that [biofeedback program] and in that program they teach you to relax.

Another male subject who is now an enthusiastic proponent of CAM stated that he began thinking of CAM when he had chest pain and had to go to an emergency department.

This experience was a factor that influenced him to consider trying CAM therapies:

Being on a gurney going in the ER. That kind of gave me a tap on the head.

A woman subject elaborated how a new diagnosis of hepatitis C led her to consider CAM therapy to help her manage the disease. She described researching the medical treatment, then deciding to opt for CAM because the conventional treatment offered an unacceptable side effect profile:

I've got hepatitis C. I should use milkweed but I haven't done that yet. I do some feet work That massage therapy works on headaches, muscle tension, all that stuff. I checked into that alpha interferon and if you start reading the information on it, it had less than a 20% cure rate on it, and you could not get into other medicine until you had failed alpha interferon. I'm not going to do it They were finding out that people who were not showing any symptoms of hep C, once they went into the alpha interferon treatment, then they did start showing symptoms.

In addition to pain and specific health concerns, subjects described the use of CAM to improve their odds of staying healthy. Subjects used CAM to "hedge the bet" that a person would stay healthy. For example, a study subject who primarily used chiropractic for his health care felt he improved not only his odds of staying healthy by going to the chiropractor but also decreased the frequency of physician visits:

I mean, I think it's just good to get adjusted even if you don't have pain. Then you prevent problems . . . I haven't seen my doctor in about 10 years. He's a real nice guy, I just don't need him.

Improving the odds of staying healthy with CAM was verbalized by another man who planned to travel in his motor home when he and his wife retired. He described how using CAM might keep him more healthy so he could minimize the likelihood of having to use services in geographical locations with which he was not familiar:

You know, it's a concern as I get older, because we want to travel, so you sort of want to be in the best health you can be, and that's why you get a backup . . . Down in Phoenix, I heard it's terrible. People that go down there go to the ER and it's eight hours before they see anyone. We're not used to that.

Some subjects verbalized that using CAM gave them greater control over their health issues. After going through a stress-reduction program, a subject attributed the mind/body connection with helping him gain greater control of his blood pressure:

With my type of blood pressure, I could do that [lower his blood pressure] by just breathing deeply.

Another study subject described being very stressed and anxious. Physicians told her she should be on anti-anxiety and anti-depressant medications. She avoided this by using CAM and acknowledged that she was able to gain greater control over stress and anxiety and avoid taking psychotropic medications:

Some of that just comes from trying to learn about how to manage your stress a little bit and not to be stressed . . . I am not afraid to try things. So, I did evaluate all that and see what worked for me with the alternative type things.

Another woman described how she used CAM to help her manage stress, weight, and premenstrual syndrome (PMS):

Weight management, that was the hypnosis. Just managing PMS, which is a good thing for me with herbs and relaxation, with stress and stuff in my life. Most of it is not a medical problem but just that I've used complementary stuff for, just the everyday stressors and anxiety. I think through some of the practices I have achieved a level of balance, comfort and relief of stress.

A subject with a chronic disease used CAM to self-manage her disease, which helped her maintain a sense of control. This woman felt that using CAM had enhanced her ability to manage her own health, thereby decreasing the frequency of visits for conventional care:

. . . and I think it's been two years since I've been to her [primary care provider], so I've been able to manage on my own. Which, in a lot of ways, you learn your body that way, so that you can, by doing that, tell about an abnormality. I go to see her about the annual female stuff.

Still another subject reported he had been actively managing his health with diet, exercise, and stress-reduction techniques. He told how CAM helped him gain greater independence and reduced the frequency of his visits to his primary care provider:

I'm going in to see the doctor on Monday, it's my vacation, but it's almost been two years because I feel good you know . . . he says why fix something that isn't broke, that's what I hear all the time, but I ask a couple of questions about working out and diet.

The data revealed that the study subjects used CAM to help them better manage health-related issues, including pain management, chronic disease management, and improving the odds of staying healthy. In using CAM to manage health-related issues, the study subjects also described experiencing an enhanced sense of control with CAM use.

Summary

There were four themes that arose from the data. Themes were entitled Using CAM: Pros, Cons, and Influences; CAM Providers: Pros and Cons; Validating CAM Use; and Managing Health Issues and Enhancing Control with CAM.

The theme Using CAM: Pros, Cons, and Influences developed as all of the subjects described CAM use. The subjects were open to a wide variety of CAM therapies and practices.

The subjects cited various influences in their decisions to use CAM. One concept that was not an influence in CAM use with this particular sample was distance. None of the subjects cited distance or their rural residency as factors in their CAM use.

Some of the subjects discussed risks associated with CAM. However, being aware that risk may exist with CAM did not necessarily deter CAM use in the subjects.

CAM Providers: Pros and Cons is a theme that resulted from the reports the subjects gave of interacting with CAM providers. The most widely used CAM provider in the sample was the chiropractor, followed by the massage therapist. Positive health care experiences with chiropractic care were widely reported in the sample. Examples of the providers used are reflexologists, a homeopath, and a promoter of colloidal minerals of unknown specialty.

The subjects also discussed the financial aspects of employing CAM providers and explained that CAM providers were paid for out of pocket and in most cases were not covered under insurance. Vexation was verbalized regarding lack of insurance coverage.

Validating CAM Use was a theme that emerged as the subjects told how they verified their decision to use CAM. These experiences ranged from reading about CAM therapy in lay literature, testimony from friends, and talking with community-based or folk providers in their areas. These nonprofessional individuals were contacted by the subjects for CAM-use validation, in spite of the fact that the sample was well educated.

An important validating experience was having one's physician support CAM use. The subjects described how some physicians recommended certain CAM providers or were accepting and nonjudgmental about CAM. The subjects also discussed the concept of using CAM and conventional medicine to complement each other. This seemed to be a way for subjects to validate CAM, by associating it with conventional medicine.

The theme Managing Health Issues and Enhancing Control with CAM developed from the subjects' accounts of how they managed specific health issues with CAM. The subjects described using CAM to prevent and manage pain, control the course of chronic disease, and enhance wellness. This was done independently, without prescriptions from or office appointments with health care providers, conventional or alternative.

CHAPTER 5

DISCUSSION

Introduction

Four distinct themes emerged from the data. The themes that emerged were entitled Using CAM: Pros, Cons and Influences; CAM Providers: Pros and Cons; Validating CAM Use; and Managing Health Issues and Enhancing Control with CAM. Following discussion of the themes, the study limitations are acknowledged and the implications for nursing and nursing research are discussed.

Using CAM: Pros, Cons and Influences

All of the subjects reported using Complementary and Alternative Medicines (CAM). Many forms of CAM were used by the subjects in this study and included herbal therapies, chiropractic care, reflexology, hypnosis, massage therapy, vitamin therapy, diet, and nutrition, and some subjects expressed interest in trying other forms of CAM. The types of CAM used by the study sample were consistent with the types of CAM identified by NCCAM.

NCCAM (2003g) listed CAM therapies and categorized them into five domains that included alternative medical systems (homeopathic and naturopathic medicine), mind-body interventions (meditation, prayer, mental therapies), biologically based therapies (herbal therapy, food/dietary therapy, vitamins) manipulative and body-based methods (chiropractic care and massage therapy), and energy therapies (biofield therapies,

bioelectromagnetic-based therapies). The subjects in this study used four of the five domains of CAM as listed by NCCAM, including homeopathy (alternative medical systems domain); hypnosis, aromatherapy, prayer, and Reiki (mind-body interventions domain); herbal therapy, dietary/nutritional therapy, vitamin therapy, and dietary supplements (biologically based therapies); and massage, yoga, reflexology and chiropractic care (the manipulative and body-based methods domain). With the exception of the electromagnetic domain, CAM domains used by rural Montanans' in this study were similar to those considered representative as reported by NCCAM.

In this study, all of the subjects listed at least one herbal supplement they had tried or continued to use. This finding was consistent with the literature in that use of herbal and natural products is commonly reported by up to one-third of CAM users sampled (Bryan Walker, 2002; Freeman, 2003). In fact, in the United States, people have access to more than 20,000 herbal and natural products (Bryan Walker, 2002), so it was not surprising to find that the subjects in this study also accessed and used herbal remedies.

In addition to herbal remedies, all of the study subjects reported using varying amounts of chiropractic care as part of their CAM use. Ni et al. (2002) reported that data from the National Health Interview Survey (NHIS) found that, along with herbal remedies, other leading types of CAM used in the United States were spiritual healing or prayer and chiropractic therapies. In 2002, WHCCAMP noted that a third of people with back pain went to chiropractors and that chiropractors dispensed 40% of primary care for back pain. Another source stated that chiropractic care is the largest CAM discipline in the United States, with 10% of the population using it (Clinician Reviews, 2004). Arcury

et al. (2002) also reported that chiropractic care was one of the top three CAM therapies used by older rural adults in the southeastern United States. Again, the subjects in this study were similar to the literature findings in that chiropractic care was common and also frequently used for pain, particularly back pain.

Unlike the findings of Ni et al. however, the subjects in this study did not discuss spiritual healing or prayer as a part of their CAM use. In fact, only one subject reported that prayer or meditation was part of her CAM therapy regimen. A possible explanation for this might be that the study subjects did not define spiritual healing or prayer as complementary and alternative medicine. It is also possible that the sample size was not diversified enough and did not include rural Montanans who use spiritual healing and prayer as part of their CAM practices.

The NHIS study, as reported by Ni et al. (2002), discovered that use of CAM was greater among people with more education Freeman (2003) also reported that CAM users were more likely to be college educated. The rural Montanans in this study were well educated with all but one of the subjects having attended college. It appears that the rural Montana sample is congruent with the literature regarding education and CAM use. Additionally, the NHIS study noted that CAM users were more likely to be Caucasian. While all the subjects in this study were Caucasian, that should not lead to the conclusion that CAM use is more common among Caucasians in rural Montana. Indeed, had the sample been more diversified, this finding might not have existed.

It has also been noted in the literature that people reported that most CAM therapy was used along with, or to “complement,” conventional medicine (Ni et al., 2002; Yuan & Bieber, 2003). The rural Montana sample comprising this study also reported using CAM and conventional medicine together in a complementary fashion.

The literature reported varying use of CAM among rural dwellers. For example, Ham (2003) reported that in a study conducted in Michigan, the rural subjects were less likely than suburban and urban dwellers to use CAM. On the other hand, Johnson (1999) found in a sample of rural, older, southwestern women that all the subjects used a variety of CAM and CAM practitioners. Ni et al. (2002) also reported that residents living in the Midwest and West areas of the United States were more likely to use CAM than residents living in the Northeast or South. The findings of Johnson and Ni et al. were supported by this study in that all of the rural Montanans interviewed reported some type of CAM use.

Finally, some of the subjects in this study reported their CAM use was influenced by positive testimony from family and friends. While this was not a predominant theme in the literature reviewed, Beyerstein (2003) did note that testimony of family and friends may be viewed as more credible than scientific analysis regarding CAM use.

In terms of the CAM domains as identified by NCCAM, the study subjects used four of the five named domains of CAM. The study subjects also used common types of CAM, such as herbal medicine and chiropractic care, but did not describe spiritual healing or prayer as part of their CAM use. The subjects in this study were well educated, a demographic described in the literature as a common characteristic of CAM users in other studies. The purposive sample for this study was all rural dwellers and they consistently reported CAM use as part of their health care practices.

CAM Providers: Pros and Cons

Considering the limited sample size, the study subjects recounted use of a variety of CAM providers, and the majority of the subjects reported satisfaction with their CAM providers. Types of CAM providers used by the study subjects included chiropractors, massage therapists, reflexologists, a homeopath, and a colloidal mineral proponent. In this study, the chiropractor was the most widely used CAM provider followed by massage therapists. These findings were consistent with those of the literature reviewed.

In a study of CAM use among older rural adults in the southeastern United States, the subjects listed chiropractic care as one of their top-three CAM providers (Arcury et al, 2002) Astin (1998) also reported that the chiropractor was the most frequently visited CAM provider among his sample. The majority of the rural Montana subjects had sought or were continuing to seek the care of a chiropractor. The subjects in this study reflected the findings in the literature regarding the wide use of, and favorable outcomes with, chiropractic care, especially with regard to back pain.

Frequent use of chiropractic care may be related to the perception of what is conventional medicine and what is alternative medicine. The view that chiropractic care is perceived by many to be conventional and part of mainstream medicine has been reported (Arcury et al, 2002; WHCCAMP, 2003). Even though chiropractic care is recognized by conventional physicians and chiropractic physicians alike as a form of alternative medicine (NCCAM, 2003g; WHCCAMP, 2003), the frequent use of the chiropractor by the rural Montana subjects may have been because they perceived chiropractic care as conventional medicine or closely related to it as a subspecialty.

While Gordon et al. (1998) reported chiropractors as the most frequently used provider, they found that the second most commonly used CAM provider was massage therapists. Indeed, the rapidly increasing popularity of massage therapists as providers was also noted by Bodane and Brownson (2002). NCCAM (2003g) lists massage therapy as a manipulative and body-based method, and NCCAM formulated that list to be reflective of U.S. CAM use. In this study of rural Montanans, there was also frequent use of massage therapists reported. In that respect, the findings were similar to the literature.

Some of the rural Montana subjects had gone to reflexologists, and for those subjects, the experiences were positive. Little discussion of the pros and cons of reflexology providers was found in the literature. However, reflexology is within the domain of the manipulative and body-based therapies designated by NCCAM (2003g), and use of this type of CAM provider suggests the study sample was similar to nationally reported data.

Concerns about costs and reimbursement for CAM providers emerged from the data in this study. Some of the literature reviewed discussed this issue also. Eisenberg et al. (1993) reported that in 1990 almost \$14 billion was spent out of pocket for CAM. In a follow-up study, Eisenberg et al. (1998) noted that increasing amounts were being spent not only on CAM products but also on CAM providers and that these costs were paid out of pocket. Chiropractic care is offered in all 50 states, but only 30 states offer “some form of Medicaid chiropractic benefit under a fee-for-service arrangement” (Department of Health and Human Services, 1998).

Subjects in this study reported frustration with having to pay out of pocket for CAM providers. The subjects reported cost as a key factor in their decision to see or

continuing seeing a CAM provider. There was also frustration verbalized as to lack of reimbursement by third-party payers or reimbursement only after lengthy paperwork battles. This dilemma influenced some of the subjects to stop seeing a provider that they felt had helped them.

Validating CAM Use

The subjects reported seeking validation about CAM use as a way to enhance their understanding and knowledge about it. Subjects described validating their CAM use through such mechanisms as reading lay literature, talking with local or community-known experts on CAM and by discussing CAM use with their physician providers.

The literature documents advertising as a way that consumers validate CAM. It has been noted that many CAM products are directly marketed as “natural and comparatively safe alternatives to prescription drugs” (Bryan Walker, 2002) Subjects in this study did report that they too validated their use of CAM by reading books, articles, and other sources of lay literature. Individuals who work in retail settings where CAM products are sold may be perceived as knowledgeable, may sound authoritative, and thereby, may be convincing about a CAM therapy to a would-be customer (Beyerstein, 2003).

The subjects in this study also discussed validating their CAM use with local health food store employees or locally known experts on CAM. These individuals had no formal education but were recognized as longstanding practitioners of CAM in some form or fashion, and the subjects took their input as credible health care advice.

Conclusions regarding CAM use may be connected to beliefs that have emotional or

doctrinal meaning to the person involved (Beyerstein, 2003). It is possible that interpersonal aspects of CAM validation discussed by Beyerstein were applicable to the rural Montana sample.

All of the rural Montana subjects in this study disclosed CAM use to their physician providers, although there were a few who disclosed cautiously. Indeed, one of the most impressive validations for CAM use for the study subjects related to feedback they obtained from their physician providers regarding CAM use. Gordon et al. (1998) found in their research that more physicians do seem to be open to accepting and even recommending CAM use in their patient populations. Of those study subjects who discussed CAM use with their physician provider, only one reported receiving advice discouraging CAM use. This subject described his physician as older. It is speculated that age may have been a factor in the physician discouraging his CAM use. Gordon et al. (1998) found that younger physicians were more likely to be interested in CAM therapies and practices than older physicians. WHCCAMP (2003) recommends integration of CAM into conventional medical school education. Some medical schools, such as Harvard, are researching CAM and including it in their medical school curriculum (Martin, 2001).

While all of the subjects in this study disclosed CAM use to their physicians, some studies have found that anywhere from 63% to 75% of subjects do not disclose CAM use to physician providers (Ayuk-Egbe et al, 2000; Eisenberg et al, 1993). It may be that because the subjects in this study sample were well educated, they may have been more assertive and believed that using CAM was an individual choice and right with regard to managing their health care. The sample as a rule reported open communication

with their physicians, which may have led to partnering as opposed to a more paternalistic physician-patient relationship. The fact that the physicians to whom study subjects revealed CAM use were nonjudgmental about it may have contributed to comfort to disclose CAM use.

Managing Health Issues and Enhancing Control With CAM

The rural Montana subjects in this study used CAM to relieve or prevent pain, to help manage a specific health concern or disease, to improve the odds of staying healthy, and to enhance their self-control when managing health-related issues.

WHCCAMP (2003) reported that pain was a leading factor in CAM use followed by chronic conditions. Astin et al (1998) indicated that pain was the most prevalent reason people use CAM. The sample of rural Montana subjects in this study also used CAM as a way to relieve and or prevent pain.

Chronic disease is a factor in CAM use (Haynes, Martin, & Endres, 2003; Astin, 1998) In this study, subjects also used CAM as a way to help them manage an ongoing health concern, and for those subjects with a chronic disease, CAM was identified as a factor in managing the disease.

Little was found in the literature reviewed that specifically addressed the use of CAM to increase the odds of staying healthy. This did emerge in the data from the rural Montanans in this study although this was not reported by all subjects uniformly. Prevention and health promotion with CAM have not been well researched, and this may be an area where further research will reveal more about the use of CAM in promoting health and wellness.

The study subjects described that CAM use enhanced feelings of self-control and independence regarding the management of health-related issues. Rural nursing theory describes the characteristics of self-reliance and independence as prevalent traits in rural people (Koehler, 1998; Lee, 1998). Independence and self-reliance were qualities also noted in Johnson's (1999) research of older rural women and CAM use. It may be that, as the literature suggests, the rural Montanans in this study also possessed traits of independence and self-reliance, and these characteristics may have been a factor in their decision to use CAM in managing their health care concerns and goals.

Limitations

A major limitation of this study is that the sample size was small, purposive, and not as diversified as it could have been. Therefore, the study findings are limited to and applicable only to this particular sample and cannot be generalized to complementary and alternative medicine use among rural populations. Greater diversity of the sample and more time in the field would have enhanced the richness of the data, but time constraints precluded this. Lastly, due to inexperience, the interview process may not have been as skillfully conducted as it could have been.

Implications for Nursing Practice

The findings of this study provide some implications for nurses caring for people in rural Montana. Nurses may enrich patient assessments and strengthen the information gathered for the patient database by asking about CAM use. Questions should be specific and reflect the five domains of CAM identified by NCCAM. Conscientiously collecting

data on CAM use and CAM practitioners from rural patients may increase the potential to identify hazards that could enhance patient and provider safety. The nurse should take a nonjudgmental approach when exploring CAM use with the rural patient and family.

Nurses should take more responsibility for their own knowledge and education regarding CAM use. Designing classes on effective and noneffective CAM should be based on research. This may be accomplished by using reliable sources of information, such as NCCAM. Nurses should be at the forefront of CAM education for the profession of nursing as well as for colleagues in health care, such as physicians and others. Nurses could address their mission to patient teaching and public safety by designing classes about complementary and alternative medicine for the public.

Implications for Nursing Research

This was a pilot study and as such, the first implication is for further research on CAM use in rural populations. This should be in the form of a study with a more diverse sample population in terms of location, education, age, and socioeconomic status. It would also be interesting to gain a greater cultural understanding of complementary and alternative medicine use among minority populations of rural Montana, including American Indians and Hutterites. Since so little is known at this time about CAM use in rural populations, further qualitative research studies are appropriate to provide the foundations for larger quantitative studies on CAM use in rural populations.

It would be helpful to conduct research with samples of subjects living in remote rural areas of the state. Rural Montanans in these areas may indeed use home remedies or folk medicine that is different from those described by the subjects in this study. While

distance was not a factor that affected CAM use in this study, it may be that distance is a factor in CAM use for people living in remote rural areas who are farther from health care providers of any type.

Lastly, it would helpful to know more about how CAM use and conventional medicine complement each other from the CAM user's perspective. This knowledge would enlighten and promote dialogue and understanding among CAM users, CAM providers, and conventional providers.

Conclusion

Little is known about CAM use among rural Montanans. The findings of this study, while not generalizable, do suggest that, for this sample of rural Montanans, CAM use is varied and common, is disclosed to physician providers, and is used to complement conventional medicine. Many of the findings of the study are consistent with the literature on CAM use that was reviewed.

As conventional medicine and CAM are integrated by health care consumers, there is a growing need by health care providers to know the details of how this is occurring. Further research on CAM use among Montana populations, including minorities, is needed. This will provide additional knowledge and understanding about CAM use for all health care professionals who provide care for rural Montanans.

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