COMPLEMENTARY AND ALTERNATIVE MEDICINE PROVIDERS IN RURAL LOCATIONS

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ABSTRACT

The purpose of this study was to determine the availability of complementary and alternative medicine (CAM) resources to individuals in twenty rural communities in two western states and to ascertain the contribution of one type of CAM provider, naturopathic physicians, to rural health care. Resource data were collected through internet phone directories searches and an on-line survey of Montana naturopaths. Seventy-three CAM providers were identified in the target communities. The naturopathic physician's practices were located in urbanized areas of Montana, some with outreach clinics. Most naturopaths made regular referrals to conventional medical practitioners; however few received referrals. Comparison of use patterns of CAM by older residents of these communities to the presence of providers in the communities suggests that local availability is not the critical factor in use of a CAM therapist or self-directed therapy.

INTRODUCTION

The availability of health care in rural areas is a national policy issue (Institute of Medicine, 2005), particularly as the older populations in rural communities is increasing. Isolated rural communities often have difficulty recruiting and retaining primary or specialist health care providers. Long distances over poor rural roads and through often unpredictable winter weather add to the challenges that older rural residents face in obtaining health care.

Improving access to care requires understanding the care older rural dwellers seek, their use of health care, and the distribution of resources: mainstream, complementary, and self-directed. Rural residents tend to be more independent, engage in more self-care, and have less access to allopathic care than do urban residents. The access of rural residents to alternative health care (CAM) is less well documented. Studies of CAM use show conflicting results for a variety of reasons: varying definitions of CAM, limitations in sampling, and more focus on urban and suburban areas than rural ones (Barnes, Powell-Griner, McFann, & Nahin, 2004; Harron & Glasser, 2003; Johnson, 1999; Vallerand, Foulabakhsh, & Templin, 2003). Shreffler-Grant and colleagues (Shreffler-Grant, Weinert, Nichols, & Ide, 2005) found use of CAM among rural residents

approximated rates of use reported for urban and suburban populations when the use of self-directed practices was included in the definition of CAM. Self-directed practices included such things as nutritional and herbal supplements, meditation, use of magnets, and other non-provider delivered treatments. Use of CAM therapists, however, was found to be significantly lower in this rural population than in national studies.

In this paper we are reporting the subsequent research by the Shreffler-Grant research team on the availability of CAM resources (providers and purchasing outlets). This study was a further investigation of CAM use in the 20 communities involved in the original study (Shreffler-Grant, Weinert, Nichols, & Ide, 2005) and included an exploration of the contribution of one type of complementary provider (naturopathic physicians) to the delivery of health care in rural areas.

Examining the location of CAM providers in relation to users may provide some insight into use patterns and how CAM providers articulate into the overall health care system in rural areas. Distance from one's health care provider has been posed as a barrier to health care utilization, and rural dwellers generally live some distance from their providers. In a recent study of 233 rural women living in Montana and the contiguous states the average distance to emergency care was 16.7 miles (one way) and to routine care it was 57.3 miles (one way) (Weinert, 2002).

Nemet and Bailey (2000) and Arcury, Gesler, Preisser, Sherman, Spencer, and Perin (2005) suggested that it is the location of providers in relation to the individual's normal activity space that is more important than the actual distance involved. That is, health care services are more likely to be used if they are convenient to the normal activities of life. Arcury et al. found that distance was not significant to obtaining chronic or acute health care, but did impact upon discretionary care, care for health promotion or disease prevention purposes, rather than care in response to illness or disease.

CAM USE BY OLDER RURAL RESIDENTS IN NORTH DAKOTA AND MONTANA

The initial exploration of the use of CAM by the research team was conducted with older adults living in 20 rural communities in Montana and North Dakota. All towns with populations of 500 or greater, but less than 20,000 and not within 25 miles of a population center of 20,000 people or greater were identified. Twenty towns (ten in each state) were selected randomly from the total. A random sample of 325 individuals was interviewed by telephone (Shreffler-Grant, Weinert, Nichols, & Ide, 2005). As noted earlier, use of CAM therapists was less than that found in other prevalence studies, although use of dietary supplements, herbs, etc. was consistent with prior research. As the research team considered reasons for this discrepancy, two major questions emerged. First, are there therapists available in these rural communities? Second, do the beliefs and attitudes of the respondents prevent them from considering and using CAM?

To determine whether there were CAM therapists or places to purchase supplements in these communities, the researchers tried to identify all complementary and alternative health care providers available in the 20 communities of the original survey through internet and paper-based phone directory searches. Internet phone directories searched were: Yahoo! Yellow Pages, and YellowPages.com. The searches

were done by zip code and by general categories, such as alternative medicine, pharmacies, chiropractors, massage, etc. Only providers with mailing addresses in the predetermined town zip codes were selected. Pharmacies were included in the list of therapies/therapists because in rural communities the pharmacies often stock dietary supplements and other complementary and alternative mixtures. In addition, DexOnline.com, the online directory for Qwest, was searched by using names of town and state. This search resulted in no additional information. To determine if there were differences between the paper copies of Dex, the Qwest Official Directory of Montana and the internet version, Montana phone books were examined and the results compared. As no differences were found, only the internet directories were used to identify North Dakota providers.

The internet search for complementary therapists, e.g., acupuncture, aroma therapy, massage, chiropractic, etc. was conducted using the MSN search engine at http://www.msn.com/. The object was to locate online provider listings and caches of registered members contained within professional organizations, such as the American Chiropractic Association. Such sites were searched by zip code and the registered members from each organization retrieved. Information found included individual practitioners and offices in which they practiced. Specific therapies or sites searched included chiropractic, health club, massage therapy, natural and organic food, naturopath, nutrition and supplements, pharmacy, podiatrist, reflexology, and other, e.g., yoga, reiki, therapeutic touch, biogenesis. The categories of providers which were identified in the rural communities are shown in Table 1.

Table 1

Complementary and Alternative Care Providers in Target Communities by Type and State

Provider type	North Dakota	Montana	Total
Chiropractor and Massage Therapy	1	1	2
Health Club	0	3	3
Chiropractors	10	12	22
Massage Therapy	5	9	14
Natural and Organic Food	1	4	5
Naturopath	0	1	1
Nutrition and Supplements	1	3	4
Pharmacies	9	8	17
Podiatrist	0	3	3
Reflexology	0	1	1
Yoga, Reiki, Therapeutic Touch, Bach Flower Remedies, BioGenesis and Hanna Kroeger's	0	1	1
Totals	27	46	73

Examining the availability of CAM providers in rural communities was just one piece of the puzzle of rural health care accessibility. We wondered whether CAM providers traveled to other more remote rural communities to deliver services as some mainstream providers do, to what extent CAM providers were seen as primary care providers, how people learned about local CAM providers, and what the referral relationships were between mainstream and complementary providers. To begin to find information about those components of the puzzle, we conducted an internet-based survey of the naturopathic physicians in Montana. This group was selected as they are licensed in several states, they present themselves as primary care providers, there were comparative data from other states, and we were able to access these providers through their state professional organization. The survey of the practice characteristics of naturopathic physicians was sent to all twenty-five licensed naturopaths in Montana after approval by the Montana State University Institutional Review Board for the Protection of Human Subjects. Following a sequence of prompts and resending of the questionnaire, 11 naturopathic physicians completed the survey for a 44% response rate.

FINDINGS

CAM Provider Availability

A total of 73 complementary providers were identified across the 20 rural towns. Forty-six of these were in Montana towns and 27 in North Dakota towns. In both states, chiropractors were the most common providers identified:10 in North Dakota towns and 12 in Montana towns. This is consistent with the pattern of provider use found in the original study – chiropractors were the most used CAM provider. Two towns in each state listed no alternative therapists. After chiropractic, pharmacies (16 listings) and massage therapy (14 listings) were the most common. With the exception of pharmacies, there were higher numbers of alternative providers in Montana towns than in North Dakota towns. Also, the variety of providers was greater in Montana than in North Dakota (see Table 1).

Characteristics of Naturopathic Practices

All of the naturopathic physicians had their primary practices in the more urbanized areas of the state, although three of them indicated they did have outreach practices in smaller communities. They reported traveling an average of 147 miles to the more rural sites, and said that patients traveled an average of 25 miles to their primary practice site. When asked what percent of their patients they saw as a primary care provider, 64% of them indicated that over half of their patients saw them for primary care. Their clients, they reported, selected a naturopath primarily because they did not feel that the mainstream provider had been effective in treating them (n = 11, 100%), they had a desire for a more natural approach to health care (n = 10, 91%), and/or that the mainstream provider did not spend enough time with them (n = 8, 73%). Naturopathic physicians stated that patients learned of their services mostly by word of mouth (n = 11, 100%) and/or through listings in local telephone books (n = 7, 64%). Almost two-thirds

(63.6%) of the respondents indicated they made monthly referrals to mainstream providers. However, only 36% indicated that they received any referrals from mainstream providers, and these were estimated to be at the rate of one a year. Another 36% indicated they had never received such a referral.

DISCUSSION

Care seeking behavior is very complex and there are interrelationships between many of the variables hypothesized to predict health care use (Arcury et al. 2005). These interrelationships are made even more complex when the role that CAM is increasingly playing in health promotion and illness management is considered. Differences in CAM use found in the original study are not well explained by the availability of providers in the selected communities. North Dakotans were more likely to use complementary therapists than were Montanans; however, it was evident that there were more, and a greater variety of, CAM providers in the Montana communities. Montanans were more likely to use CAM practices that were self-directed or not administered by a CAM practitioner than were North Dakota participants – 45.6% compared to 26.1% (Shreffler-Grant, Weinert, Nichols, & Ide, 2005). This discrepancy between use patterns and the availability of providers in the two states suggests that local availability is not the critical factor in the decision to use or not use CAM.

Boon and colleagues (Boon et al., 2004) in a two-state study of CAM providers, reported that visits to naturopathic physicians were primarily for chronic complaints and that these visits lasted a mean of 40 minutes – similar to the data reported by our sample of naturopaths. Cherkin and associates (Cherkin et al., 2002) in another publication from the same study noted that visit rates to these providers was low, a finding consistent with our work. While naturopaths may be increasing in number, they continue to be a small component of health care delivery in rural areas.

With the mainstreaming of CAM it is increasingly difficult to get an accurate picture of the availability of products and providers. Thus we recognize that these results likely represent an under-estimate of the availability of dietary supplements and other self care CAM products in rural areas. These products are now readily available in grocery stores, general merchandise stores, as well as by mail and over the internet. The use of providers is also less limited by local availability as has been noted earlier; use of services is more related to trade patterns than to absolute differences in availability of providers. Rural individuals group activities around trips to trade centers, thus a trip to a larger community may well include a stop at a discount store that sells dietary supplements, a visit to the CAM provider, a stop at the farm and feed store for supplies, and a stop at the grocery store. In fact, all of these may be accomplished at one stop!

Andrews (2003), a researcher in Great Britain, suggested that when complementary providers are grouped into a practice, there is greater use and use of a greater range of therapists, and, further, people will travel greater distances for treatment than is the case when CAM providers are in individual practices. The group practices, they noted, were generally in well-populated areas; practices in rural areas tended to be individual in nature. We found that rural residents traveled significant distances to visit the naturopathic provider who met their needs and offered a relatively broad set of CAM

options. Economic and socio-cultural realities also impact on the selection of practice sites of providers (Andrews & Phillips, 2005). This appears to be the case in this study where the practice sites for the naturopaths were in the state's population centers that offered a market potential, opportunities for cultural and social activities, and the potential to be close to colleagues, factors found to be important to CAM providers in choosing practice locations (Williams, 2000). These factors have also been found to be important in the choice of practice locations for mainstream health care professionals (Robinson & Guidry, 2001).

LIMITATIONS

Data on provider availability were only collected from twenty communities in two states and in one section of the United States, therefore it is not known whether these provider and consumer patterns are reflective of the broader set of rural communities and residents. It has become increasingly difficult to define CAM and CAM providers and to differentiate between CAM and mainstream providers since some mainstream providers have begun to integrate CAM into their allopathic practices. Further, as only a few of the various CAM therapies require licensed providers, identification in this study was reliant upon self-disclosure (advertising) and participant report (who they used). This probably does not result in an exhaustive list of the providers in these various communities, however, it does provide a picture of those providers who were used and why they were used.

CONCLUSIONS

These two studies, while modest in nature, begin to clarify how and why rural residents use CAM and the relationship between CAM use and mainstream medicine. Clearly additional research is needed to more fully understand the true rates of CAM use and whether that use is related to availability of CAM providers in rural areas, distance to CAM and mainstream providers, beliefs and attitudes regarding CAM use, or some combination of these and additional factors. Understanding the role that CAM plays in overall health promotion and illness management among rural residents is important in rural health care practice, and warrants additional research. Health care professionals working with rural residents need to be well informed regarding CAM therapy and therapists in order to better assist their clients in making informed health care decisions regarding the use of CAM.

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