CAN WE RAPIDLY IDENTIFY TRADITIONAL, COMPLEMENTARY AND ALTERNATIVE MEDICINE USERS IN THE PRIMARY CARE ENCOUNTER? A RIOS NET STUDY

Andrew L. Sussman, PhD, MCRP; Robert L. Williams, MD, MPH; Brian M. Shelley, MD

Objective: Pressed for time to address competing clinical demands within the brief clinical encounter, primary care clinicians often rely on observations of patients to select topics to address. Use of traditional, complementary, or alternative medicine (TM/CAM) may be an important topic for discussion with a patient, but identification of patients using TM/CAM is problematic. We conducted this study to determine if observable characteristics – among southwestern Hispanic and Native American persons – might suggest to the clinician that a patient is likely to use TM/CAM.

Design: A combination of clinic staff focus groups, patient and clinician interviews, and a clinician focus group was used to explore possible predictors of TM/CAM use among primary care patients in practices serving predominantly Hispanic and Native American communities.

Results: No easily observable characteristics were identified that clinicians might use to predict TM/CAM use in their patients. Less readily observable characteristics – identification with culture, family of origin, health condition – were more likely to be associated with TM/CAM use, but not infallibly so.

Conclusions: Rather than attempt to predict TM/CAM use by an individual patient, clinicians may be better served by assuming its use by all, by applying strategies for rapid and effective communications with patients about the topic, by selecting which patients to discuss TM/CAM use with based on clinical circumstances, and/or by gathering information about TM/CAM use as part of routine initial database development. (*Ethn Dis.* 2010;20:64–70)

Key Words: Complementary Medicine, Communication, Ethnic Groups

From Department of Family and Community Medicine, University of New Mexico (ALS, RLW, BMS).

Address correspondence and reprint requests to Andrew L. Sussman, PhD; Family and Community Medicine; MSC 09-5040; 1 University of New Mexico; Albuquerque, NM 87131-0001; 505-272-4077; 505-272-4701 (fax); asussman@salud.unm.edu

INTRODUCTION

Use of traditional medicine and complementary and alternative medicine (TM/CAM) continues to be extensive nationally, as reported recently by the Centers for Disease Control and Prevention and other researchers.[1–4] Most people who use TM/CAM also use conventional care.[5–8] Despite these circumstances, communication between conventional care providers and patients about TM/CAM has been shown to be poor.[9–15]

Increased and improved communication about TM/CAM in the primary care setting is important because it may reduce misunderstandings between patients and providers, may strengthen the quality of the patient-provider relationship, may result in closer agreement between the provider and patient about treatment plans, may uncover potential herb-drug interactions, and may provide an opportunity to discuss modalities with high-quality evidence to support their use.[14,16–18] Recent work has suggested that simple and brief communication strategies applied by the primary care clinician may overcome the barriers to communication about TM/CAM with patients.[15] For example, clinicians might help to bridge the communication gap by initiating the discussion, demonstrating a non-judgmental attitude, openness and respect for patients' choice in TM/CAM use, and candor, where appropriate, regarding limited knowledge about specific TM/CAM modalities.[15]

While more work needs to be done to confirm the effectiveness of these strategies in increasing communications with patients about TM/CAM, the question remains whether, despite the brevity of their application, there is time within the brief primary care encounter to engage in discussion about the topic of TM/CAM. The problem of competing demands that primary care clinicians face in attempting to address multiple clinical issues within a limited time frame is very real.[19–21] These competing preventive and curative needs require the clinician to constantly assess and reassess their priorities for use of time within the encounter. Clinicians use a variety of heuristics, such as their knowledge of risk factors, their prior experience with the patient, and their view of the effectiveness of an action, to assist in their decisions about how to prioritize use of the encounter time. Overt or subtle patient attributes (eg, known smoker, depressed mood, hurried manner) can also help the clinician to decide on choices among the competing demands.

When considering, in the face of competing demands, whether to take time to discuss TM/CAM use with a patient, it would be helpful to the clinician if a similar heuristic could provide guidance about whether a patient is likely to use TM/CAM. Such a heuristic could help the clinician to better estimate whether time spent on the topic might be productive.

Early work suggested that TM/CAM users have more medical problems, are part of a cultural creative class, are more often women, have relatively

Is there time within the brief primary care encounter to engage in discussion about the topic of TM/CAM?

high levels of education, and do not necessarily reject conventional care.[3,22] More recent studies have documented that TM/CAM use is common among many more groups, including ethnic minorities.[12–14,17,23] However, for purposes of making clinical predictions of use, these studies are limited, since the identified characteristics of TM/CAM users are generally very broad groupings and would not permit the clinician to reliably determine the prior probability of an individual patient's likelihood of using TM/CAM.

We conducted a study to explore whether clinicians can be guided by patient attributes in their decisions to engage in discussion of TM/CAM with those patients. Our specific aim was to explore whether observable patient characteristics can suggest the likelihood of a patient's use of traditional, complementary or alternative medicine. We focused on two ethnic minority groups – southwestern Hispanic and American Indian – in which traditional medicine remains an important component of health maintenance and healing. We anticipated that communication about TM/CAM in these groups may be particularly important, because TM/CAM use is common among southwestern Hispanic and American Indian communities.[17,24–30] Providers in these communities, however, do not always understand their patients' use of TM/CAM, nor is communication between the providers and their patients about TM/CAM optimal.[9,15] At the same time, there is evidence that patterns of TM/CAM use among these communities are similar to those among minority groups nationally, suggesting an opportunity for broader understanding of TM/CAM use.[15,23,30]

METHODS

Design

We conducted a qualitative study using focus groups and in-depth interviews to explore whether observable

patient characteristics might be predictive of use of TM/CAM in two ethnic minority groups. The study was approved by four institutional review boards/human subjects review boards with jurisdiction over the clinicians and communities involved. This manuscript was reviewed and approved without change by the Navajo Research Review Board.

Setting

The study was conducted in RIOS Net (Research Involving Outpatient Settings Network; http://hsc.unm.edu/rios), a New Mexico-based, primary care, practice-based research network, following approval of the protocol by multiple community groups and four institutional review boards. RIOS Net has over 250 member clinicians practicing in community health centers, Indian Health Service clinics, and academic and private practices. These clinicians serve predominantly low-income Hispanic and Native American communities.[21,31]

Sampling

We used a purposive sampling strategy based on *a priori* expectations about key factors influencing TM/CAM practices (rural vs. urban setting, Hispanic and Native American community). Eight communities with clinics in the RIOS Network were selected: two in urban Hispanic communities, two in rural Hispanic communities, two in urban Native American communities, and two in rural Native American communities. These communities and clinics included both immigrant and native-born Hispanics and Navajo and Pueblo Native Americans. We initially conducted a focus group of clinic staff and key community informants in each community to determine local patterns and vocabulary of TM/CAM use.[32] The purpose of this step was to assure that subsequent data collection was appropriately grounded in local TM/CAM use.

We then selected patients for interview in out-patient waiting areas at each clinic site as they presented for care. We used a purposive sampling approach, selecting patients to represent a range of ages, including children (whose parents were the interviewees), but not selecting based on apparent openness to TM/CAM, medical condition, or length of relationship with clinicians in order to gather data on the broadest range of possible predictors. We sampled a total of 8–15 patients at each clinic, continuing recruitment until data saturation was achieved.

Next, we purposively sampled one to two clinicians at each study clinic using years of practice experience and expected attitudes toward TM/CAM as the basis for sampling. Finally, we recruited additional clinicians using the same criteria to participate in an analytic focus group, aimed at reflecting on and expanding preliminary findings.

Data Collection

Data collection proceeded in four steps:

- Focus group of clinic staff and key informants - A semi-structured focus group guide was used to determine the best methods of discussing TM/CAM at each community/clinic. Two research team members moderated a group at each community/clinic; discussions were recorded and transcribed.

- Patient interviews - A brief, semi-structured patient interview guide was used to explore community use of TM/CAM, personal experience with TM/CAM and allopathic care, and circumstances of TM/CAM use. One member of the research team conducted all interviews, with Spanish or Navajo speaking translators as needed. Interviews lasted 15–20 minutes, and were recorded and transcribed.

- In-depth clinician interviews - A semi-structured interview guide was used to explore experience in com-

municating with patients about TM/CAM as well as perspectives about patients' use of TM/CAM. One member of the study team led all interviews, which lasted 45–60 minutes and were recorded and transcribed.

- Analytic focus group – As a final data collection step, we conducted a focus group of additional RIOS Net clinicians in order to have experienced clinicians refine, expand, confirm, or disconfirm the initial data interpretations. We presented the group an overview of patient and clinician interview findings. Two study team members moderated the group; the discussion was recorded and transcribed.

Participants in each step of data collection received compensation for their participation. Focus group and interview guides used for data collection have been previously published.

Data Analysis

A similar analytic process was followed with each category of data using editing and immersion/crystallization approaches.[33] Two to four members of the research team independently reviewed each focus group or interview transcript in groups of 2–12 transcripts at a time. The team then met to discuss themes in the data, to agree on interpretations, and to modify the focus group or patient and clinician interview guides as needed to test ongoing interpretations and to examine anomalous responses. Data collection and analysis proceeded in an iterative fashion with minor modifications of the interview guide as needed. Through this iterative process we developed a preliminary theoretical framework that we further refined in subsequent data collection.

RESULTS

Sample

Forty-one clinic staff and community key informants participated in the

Table 1. Description of Study Participants

Descriptive Characteristic	Clinic Staff Focus Groups (*n*=41)	Patient Interviews (*n*=93)	Clinician Interviews (*n*=14)	Clinician Focus Group (*n*=5)
Female	38	72	4	2
Ethnicity				
Hispanic		40		
Native American		48		
Non-Hispanic White		5		
Age (years)				
<18		4		
18–30		28		
31–44		23		
45–59		18		
60+		18		
missing		2		
Education				
<High school		29		
High school		26		
>High school		35		
Missing		3		
Clinician specialty				
Family physicians			9	4
Pediatricians			1	0
Internists			2	0
Mid-Level (physician assistant, nurse practitioner)			2	1
Clinician experience (10 years or more)			11	4
Practice setting				
Indian Health Service	22	39	6	0
Community health center	19	54	8	4
Academic	0	0	0	1

eight initial clinic focus groups; 93 patients and 14 clinicians were interviewed in the eight sites; and five additional clinicians participated in the clinician focus group. Fifteen of the 19 clinicians who participated in interviews and the focus group had more than ten years of practice experience. Additional details of the sample are provided in Table 1.

Patient Perspectives

Readily Observable Ways to Identify TM/CAM Users

We initially anticipated that in these communities indicators of strong affiliation with the traditional culture such

as primary language and style of dress may be used as predictors of TM/CAM use. Contrary to these initial expectations, no readily observable ways to identify TM/CAM use emerged in the patient interviews. The iterative data collection and analysis enabled us to systematically review attributes that *a priori* we considered likely to be associated with TM/CAM use. We did not find evidence that these observable characteristics – such as pattern of dress, language and age – were associated with likelihood of TM/CAM use. Instead, discussions with patients revealed a more complex, yet less readily observable, portrait of attributes that suggested use of TM/CAM.

Less Readily Observable Ways of Identifying TM/CAM Users

Emerging from the stories told by respondents, we found three patient attributes that appeared to relate to the likelihood that a patient would use TM/CAM: family of origin, identification with traditional culture, and nature of the health condition. None of these attributes (or combination of attributes), was invariably predictive of TM/CAM use, although presence of a greater number of these attributes seemed to be associated with TM/CAM use.

Family of Origin. Patients often referred to how they were cared for as children as a way to explain their current use or non-use of TM/CAM. Given that many of these patients were raised in settings where traditional cultural systems remained intact, many had exposure to TM/CAM and patients often integrated both systems:

"When I was younger, it was 'go to the doctor first.' And if that didn't really work, then we'd start trying traditional ways of, you know, trying to heal, like blessings and stuff. But then, as I got older and I got to know my mom's side of the family a little bit more, I'm more likely to go to a traditional healer than come here [the clinic]…Growing up going to both, now as an adult I believe that together, hand in hand, they fit together good."

Identification with Traditional Culture. A second, subtle attribute linked to TM/CAM use involves the degree to which the patient identifies with her/his traditional culture. Patients sometimes explained care decisions as a function of "who I am," indicating that a strong cultural identity may be associated with TM/CAM use:

"Well, we are Latinos, Mexican; we come from traditions that are like that. Even though we came to the

United States we are still following the customs.

Nature of the Health Condition. Lastly, patients who identified themselves as users of TM/CAM reported that their decisions about whether to use traditional and/or allopathic modalities varied depending on the specific health condition. Many patients, for example, indicated that they would typically use traditional remedies initially to treat a minor problem (eg, a cough), but would seek allopathic medical attention if the symptoms persisted or worsened. In other conditions, the sequence was reversed, or the two modalities were used simultaneously. This complexity of treatment approach by users of TM/CAM appeared more prominent with regard to treatment decisions for more chronic conditions (eg, diabetes mellitus) and situations where patients have faced a life-threatening diagnosis (eg, cancer).

The story of two patients from the same clinic illustrates the complexity of these decisions. The first patient, a 74 year old Hispanic woman born and raised in New Mexico reported using traditional modalities with her diabetes. She described an integrative approach to managing her diabetes, although she does not feel comfortable sharing these choices with her physician:

Patient: Well, I take my glucophage in the morning, and then I take this… oh, I forget the name of it…
Interviewer: Is it an herb?
Patient: It's an herb, it's to lower your sugar – but it's natural. So I take one of those in the afternoon, and it works just as good as the other.
Interviewer: Have you talked to your doctor about using that to control your diabetes?
Patient: No, I haven't.

Another native New Mexican patient, a 61 year old male with a similar history of traditional medicine use, had been recently treated for lung cancer.

While grateful for the allopathic care that he believed saved his life, he indicated that the experience has since led him to abandon the use of traditional modalities as he no longer feels comfortable using these forms of self care:

Patient: Never been to the doctor 'til eight months ago. I dropped dead in my driveway from a lung collapsing, but I never been to a doctor.
Interviewer: …You used to always use herbs or take care of yourself back then and so now that you, you've been coming to see doctors, do you also use the drugs that they… (prescribe)?
Patient: Yeah, well I have to. I used to know my body good. I used to know exactly what, what was going on with my body. Now I don't…I've gotten to where I don't know my body anymore…

Clinician perspectives

Readily Observable Ways to Identify TM/CAM Users

In each of the clinician interviews, we asked participants if there were any discernible cues or markers that may be predictive of patient TM/CAM use. Most responded that it was not possible to accurately identify TM/CAM users based on readily observable attributes such as pattern of dress, language, and age:

Interviewer: Are there patients for whom you feel like your level of suspicion is higher, based on a certain characteristic or attribute, that they may be more likely to be using traditional ways of care versus other patients?
Clinician: I don't. Because I think that any of us, from anywhere and from any walk, have the possibility of encountering or hearing about [TM/CAM]…I wouldn't say that it's just the old, non-English speaking, Hispanic person that's just newly from

Mexico that has their bag full of tricks, you know, alternative medicine type things…I think everybody's 'at risk' for wanting to use it.

This perspective was common among most clinicians across locations of practice (rural vs urban), predominance of patient ethnic group (Hispanic vs Native American), years of experience in the community, and cultural background of clinician. Clinicians specifically spoke to the importance of challenging easily accepted stereotypes about TM/CAM use, affirming instead the need to engage patients as a way to lead to disclosure:

"…You just never know. And they may be young, speak English and they use [TM/CAM]. But on the other hand, I may see a grandma who may not even speak much English at all and she doesn't really use traditional medicine. You really have to talk to people and be open and be willing to listen."

Less Readily Observable Ways of Identifying TM/CAM Users

While most clinicians rejected the notion that it was possible to rapidly identify TM/CAM users based on observable characteristics, they did describe more nuanced ways to discern patient use of traditional modalities and health beliefs. Clinicians expressed the need to use their intuition as a way to read more subtle cues in their efforts to deliver appropriate care. Clinicians cautioned, however, that developing such intuition is an ongoing process:

"There's no end to that learning process. It's more a matter of having to be very intuitive and watch for body language and be aware that there could be a lot of reservations …are they buying into what I'm saying, or are they kind of looking a little skeptical or are they looking like there's just no way I can do this…Then it's important to figure out where those things are coming

from. Like, 'does this conflict with something else that's really important to you?'"

Conscious of the limitations of their efforts to identify TM/CAM use among their patients and in particular conditions, some clinicians avoid attempts to make the distinction:

"I just assume that everybody is, basically. I assume that everybody is using some other type of modality." "I always ask them, whatever condition they're coming in with, have they tried something else? Whether it's over-the-counter stuff or herbals, the best way to find out is to ask."

DISCUSSION

We conducted this study to explore whether, in two ethnic groups in which use of TM/CAM is an important part of health and illness care, it would be possible to describe readily identifiable patient attributes (eg, specific chronic illness, language preference, style of dress) that clinicians could use to recognize patients with an increased likelihood of using TM/CAM. If present, such recognizable attributes could assist the clinician in determining the best use of time in the brief primary care encounter. Recognition of TM/CAM use could also improve care provided to the patient.[17,19–21]

We found that in the study communities, use of TM/CAM could not be predicted by any observable characteristic, by patient diagnoses, by length of relationship with a clinician, or by medical complexity.

The results of the study did not reveal any such readily identifiable attributes. We found that in these communities, use of TM/CAM could not be predicted by any observable characteristic, by patient diagnoses, by length of relationship with a clinician, or by medical complexity. At the same time, we identified three less readily observable patient characteristics that could suggest an increased likelihood of TM/CAM use among patients being seen in these primary care practices. First, we found that TM/CAM use is perhaps most closely linked to an individual's personal identification with their traditional culture. Second, this linkage did not appear to be predictable based on observable characteristics, but did seem, not surprisingly, to be related to their family of origin context. Finally, among TM/CAM users, aspects of the health condition were reported to influence decisions about use of TM/CAM.

Comparison with Published Literature

Previous studies have suggested that among minority patients in New Mexico and nationally, use of TM/CAM is commonly associated with diagnoses of chronic pain and diabetes mellitus.[16,23,30,34–35] This would suggest that diagnosis may be an indicator that clinicians could use as a predictor of possible TM/CAM use. However, it is contrary to our finding that persons with a variety of diagnoses use TM/CAM, and those with a specific diagnosis vary in their use of TM/CAM, even among TM/CAM users.

A previous study among Native Americans in New Mexico reported, as we found, that TM/CAM use cannot easily be predicted by age, education, income, English fluency, or having an identified primary care provider.[28] Further underscoring our findings, previous publications have found that cultural affiliation is both a strong predictor of TM/CAM use in Hispanic and Native

American patients, and of non-disclosure to clinicians of TM/CAM use.[12,23,34] Elsewhere, a study among urban Native Americans in Seattle found that identification with the Indian way of life was the strongest predictor of TM/CAM use and that TM/CAM use was high in the urban setting.[34]

Implications

Taken together, the results of this study and those of previously published studies suggest that the continuing effort to easily identify persons likely to be TM/CAM users may be quixotic. Rather than searching for rapid methods to assess the likelihood of a person's being a TM/CAM user, clinicians may do better to assume that every patient could be using TM/CAM, as some of our clinicians reported doing. With this approach, the clinician can base a decision to engage a patient in discussion about TM/CAM use either on a specific clinical situation or, where circumstances permit, as part of routine clinical information gathering. Use of brief communication strategies may help to make these conversations more productive, concise, and feasible.[15]

Limitations

Our study was conducted within two specific ethnic groups; as a result, our findings may not be applicable to other populations. For these two groups, however, traditional medicine is an important part of health and illness care for many. The widespread use of traditional medicine would suggest that if identifiable patient characteristics for TM/CAM use exist, they would be most likely to be definable in these groups. Our failure to identify readily recognizable characteristics of TM/CAM users in primary care patients in these communities, coupled with the findings of other studies showing similar difficulties defining characteristics of TM/CAM users, suggests that our results may be generalizable.

CONCLUSIONS

In a study based in several southwestern Hispanic and Native American communities and primary care clinics, we found that there are no easily identifiable external, demographic, or clinical characteristics of patients that would suggest to clinicians that the patient uses TM/CAM as part of their health and illness care. While a person's connection to their traditional culture did appear to be associated with TM/CAM use, this connection was not apparent in any observable or expected patient characteristics. Clinicians should assume that every patient might be using TM/CAM, should focus their efforts on communicating effectively with their patients about possible use, and should target those communications based on clinical circumstances or as part of their routine clinical data gathering processes.

REFERENCES

1. Astin JA, Pelletier KR, Marie A, Haskell WL. Complementary and alternative medicine use among elderly persons: one-year analysis of a Blue Shield Medicare supplement. *J Gerontol A Biol Sci Med Sci*. 2000;55:M4–9.
2. Barnes PM, Powell-Griner E, McFann K, Nahin RL. Complementary and alternative medicine use among adults: United States, 2002. *Adv Data*. 2004:1–19.
3. Eisenberg DM, Davis RB, Ettner SL, et al. Trends in alternative medicine use in the United States, 1990–1997: results of a follow-up national survey. *JAMA*. 1998;280:1569–1575.
4. Crock RD, Jarjoura D, Polen A, Rutecki GW. Confronting the communication gap between conventional and alternative medicine: a survey of physicians' attitudes. *Altern Ther Health Med*. 1999;5:61–66.
5. Frenkel MA, Borkan JM. An approach for integrating complementary-alternative medicine into primary care. *Fam Pract*. 2003; 20:324–332.
6. Eisenberg DM, Kessler RC, Van Rompay MI, et al. Perceptions about complementary therapies relative to conventional therapies among adults who use both: results from a national survey. *Ann Intern Med*. 2001;135:344–351.
7. Keith VM, Kronenfeld JJ, Rivers PA, Liang SY. Assessing the effects of race and ethnicity on use of complementary and alternative therapies in the USA. *Ethn Health*. 2005; 10:19–32.
8. Sirois FM. Treatment seeking and experience with complementary/alternative medicine: a continuum of choice. *J Altern Complement Med*. 2002;8:127–134.
9. Sleath B, Rubin RH, Campbell W, Gwyther L, Clark T. Ethnicity and physician-older patient communication about alternative therapies. *J Altern Complement Med*. 2001;7: 329–335.
10. Corbin Winslow L, Shapiro H. Physicians want education about complementary and alternative medicine to enhance communication with their patients. *Arch Intern Med*. 2002;162:1176–1181.
11. Flannery M. Communication about complementary and alternative medicine: perspectives of primary care clinicians. *Altern Ther Health Med*. 2006;12:56–63.
12. Graham RE, Ahn AC, Davis RB, O'Connor BB, Eisenberg DM, Phillips RS. Use of complementary and alternative medical therapies among racial and ethnic minority adults: results from the 2002 National Health Interview Survey. *J Natl Med Assoc*. 2005;97:535–545.
13. Marbella AM, Harris MC, Diehr S, Ignace G. Use of Native American healers among Native American patients in an urban Native American health center. *Arch Fam Med*. 1998; 7:182–185.
14. Howell L, Kochhar K, Saywell R, et al. Use of herbal remedies by Hispanic patients: do they inform their physician? *J Am Board Fam Med*. 2006;19:566–578.
15. Shelley BM, Sussman AL, Williams RL, Segal A, Crabtree B. They don't ask so i don't tell them: patient-clinician communication about traditional, complementary and alternative medicine. *Ann Fam Med*. 2009;7:139–147.
16. Cassidy A. Are herbal remedies and dietary supplements safe and effective for breast cancer patients? *Breast Cancer Res*. 2003;5:300–302.

17. Herman CJ, Allen P, Hunt WC, Prasad A, Brady TJ. Use of complementary therapies among primary care clinic patients with arthritis. *Prev Chronic Dis*. 2004;1:A12.

18. Perlman AI, Eisenberg DM, Panush RS. Talking with patients about alternative and complementary medicine. *Rheum Dis Clin North Am*. 1999;25:815–822.

19. Jaen CR, Stange KC, Nutting PA. Competing demands of primary care: a model for the delivery of clinical preventive services. *J Fam Pract*. 1994;38:166–171.

20. Flocke SA, Frank SH, Wenger DA. Addressing multiple problems in the family practice office visit. *J Fam Pract*. 2001;50:211–216.

21. Sussman AL, Williams RL, Leverence R, Gloyd PW, Jr., Crabtree BF. The art and complexity of primary care clinicians' preventive counseling decisions: obesity as a case study. *Ann Fam Med*. 2006;4:327–333.

22. Astin JA. Why patients use alternative medicine: results of a national study. *JAMA*. 1998;279:1548–1553.

23. Kronenberg F, Cushman LF, Wade CM, Kalmuss D, Chao MT. Race/ethnicity and women's use of complementary and alternative medicine in the United States: results of a national survey. *Am J Public Health*. 2006;96:1236–1242.

24. Borkan J, Neher JO, Anson O, Smoker B. Referrals for alternative therapies. *J Fam Pract*. 1994;39:545–550.

25. Cherrington A, Lewis CE, McCreath HE, Herman CJ, Richter DL, Byrd T. Association of complementary and alternative medicine use, demographic factors, and perimenopausal symptoms in a multiethnic sample of women: the ENDOW study. *Fam Community Health*. 2003;26:74–83.

26. Zeilmann CA, Dole EJ, Skipper BJ, McCabe M, Low Dog T, Rhyne RL. Use of herbal medicine by elderly Hispanic and non-Hispanic White patients. *Pharmacotherapy*. 2003;23:526–532.

27. Higginbotham JC, Trevino FM, Ray LA. Utilization of curanderos by Mexican Americans: prevalence and predictors. Findings from HHANES 1982–84. *Am J Public Health*. 1990;80:32–35.

28. Kim C, Kwok YS. Navajo use of native healers. *Arch Intern Med*. 1998;158:2245–2249.

29. Dole EJ, Rhyne RL, Zeilmann CA, Skipper BJ, McCabe ML, Low Dog T. The influence of ethnicity on use of herbal remedies in elderly Hispanics and non-Hispanic Whites. *J Am Pharm Assoc*. 2000;40:359–365.

30. Shelley BM. Integrative medicine research in New Mexico: lessons from the published literature. *Complement Health Practice Rev*. 2006;11:107–119.

31. Binns HJ, Lanier D, Pace WD, Galliher JM, Ganiats TG, Williams R. Describing primary care encounters: the primary care network survey and the national ambulatory medical care survey. *Ann Fam Med*. 2007;5:39–47.

32. Williams RL, Snider R, Ryan MJ. A key informant "tree" as a tool for community oriented primary care. The Cleveland COPC group. *Fam Pract Res J*. 1994;14:273–280.

33. Crabtree BF, Miller WL. *Doing Qualitative Research*. Thousand Oaks, CA: Sage Publications; 1999.

34. Buchwald D, Beals J, Manson SM. Use of traditional health practices among Native Americans in a primary care setting. *Med Care*. 2000;38:1191–1199.

35. van Haselen RA, Reiber U, Nickel I, Jakob A, Fisher PA. Providing complementary and alternative medicine in primary care: the primary care workers' perspective. *Complement Ther Med*. 2004;12:6–16.