USE OF COMPLEMENTARY AND ALTERNATIVE THERAPIES AMONG VETERANS: A PILOT STUDY

Katherine N. Bent, RN, PhD, CNS and Linnea Hemphill, RN, MS, ANP

Recognizing the steadily increasing popularity of these therapies, the VA has called for more research into patterns of use among veterans. Here are the results from one VA facility.

omplementary and alternative therapies (CATs) are a new fixture in the health care landscape. Though terminology and definitions vary widely, we define CATs broadly as medicinal products and therapeutic procedures used either in conjunction with or instead of conventional medical treatments to promote health and treat disease. In the first comprehensive survey of CAT use in the United States, published in 1993 by Eisenberg and colleagues, 34% of the 1,539 adults surveyed reported using at least one of 16 common CATs. 1 By extrapolating their findings to the entire U.S. population, the researchers concluded that, in 1990, Americans made more visits to CAT providers

Dr. Bent is the associate chief of nursing service for research and **Ms. Hemphill** is a nursing supervisor, both at the VA Eastern Colorado Health Care System, Denver. Dr. Bent is also an assistant professor at the University of Colorado Health Sciences Center School of Nursing, Denver and the president of the Council on Nursing and Anthropology.

than to primary care providers and spent nearly as much out-of-pocket for CATs as they did for hospitalizations.¹

Since then, a growing body of research documents a steady increase in CAT use. Eisenberg and colleagues' follow-up to their initial survey indicated that CAT use had increased significantly to 42% by 1997.² Furthermore, the nationwide estimates suggested a 47% rise in visits to CAT providers (from 427 million to 629 million), a 45% increase in expenditures for CAT professional services (reaching \$21.2 billion in 1997), and an 18% increase in out-of-pocket expenditures (from \$10.3 billion to \$12.2 billion).2 In 2001, Kessler and colleagues reported similar trends of increasing lifetime CAT use.3

These trends have important implications for the provision of health care services in this country. 1-3 Although much controversy has surrounded CATs (particularly with regard to the scarcity of safety and

efficacy data from randomized, controlled trials), it's generally agreed that the more health care providers know about the various therapies being used, the better they can serve their patients. This knowledge includes not only basic information about individual CATs but also a broader understanding of patients' knowledge, attitudes, and usage patterns regarding these therapies.

The VA has recognized the importance of these issues in providing quality health care to its veteran patients. In the late 1990s, the VA assessed CAT use throughout its health care system by surveying VA staff, performing site visits, forming patient focus groups, and reviewing relevant CAT research. The ensuing report concluded that the VA patient population is similar to the general population in its interest in and use of CATs. The report also stated the VA's support for further investigation into CAT use in the veteran population.⁴ Moreover, since 1995,

the VA systematically and explicitly has increased efforts to focus on patient-centered care, patient satisfaction, and quality-of-life outcomes, thus lending further support to calls for research into veterans' knowledge, preferences, and practices regarding CAT modalities.

In response, we conducted a pilot study of CAT use at the VA Eastern Colorado Health Care System, Denver in 2002. The study was designed as a preliminary needs assessment to provide information about the interest in and use of CATs among patients at one VA medical center (VAMC). We sought to establish whether our patients have used, currently use, or are interested in using CATs; identify which therapies patients have used, are using, or are considering using; and compare our patients' reported CAT use with use documented in previous studies. In this article, we describe this study, examine the results in the context of related medical literature, and discuss its implications for clinical practice.

STUDY DESIGN

For our pilot study, we surveyed a convenience sample of VAMC patients who presented on a single morning to a selected primary care clinic and were: (1) aged 18 or older; (2) amenable to participating in the study; and (3) able to give informed consent, speak and read English, follow written instructions, and answer written questions with minimal assistance from study personnel. Family members and significant others were permitted to assist participants in completing the questionnaire.

The data collection tool was a version of a written questionnaire in use at the University of Colorado Health Sciences Center, Denver that

had been modified for the VAMC setting. In addition to questions regarding demographic information, primary medical diagnosis, and traditional treatment modalities used, the questionnaire provided a list of 22 CATs with spaces to indicate any that the respondent had used, was currently using, or might be interested in using. Additional questions asked respondents who reported CAT use to indicate the symptoms or diagnoses for which they used the specific CAT, the perceived effectiveness of the CAT used, motivations for using the CAT, and whether they had informed their health care provider at the time of their CAT use.

All study procedures were approved by the VAMC's research and development committee and the Colorado Multiple Institutional Review Board. Patients were approached in the clinic waiting area after they had completed check-in procedures but before they were seen by the provider. Consent was obtained in writing and a study coordinator was available on-site to answer questions. Participants returned their questionnaires to a sealed collection box in the clinic to assure anonymity.

Some patients who consented to participate were unable to complete the questionnaire before being called for their appointments. Many were eager to take part in the study, but some were more reserved and wanted to read the questionnaire prior to consenting.

PATTERNS OF CAT USE

Of the 44 patients invited to participate, 27 (61%) consented and completed the study (Table 1). Just over a quarter of these respondents were older than 65 years, and the vast majority (93%) were male.

Of the 27 respondents, 19 (70%) indicated that they had used or were currently using one or more of the listed CATs. Of these CAT users, 13 (68%) reported informing a health care provider about their CAT use. Among the remaining six users, three did not answer the question, leaving only three (16%) who explicitly stated they had not informed their health care provider of their CAT use.

Five respondents (19%) indicated interest in but no current or past use of CATs. Therefore, a total of 24 patients (89%) either had used or were interested in using CATs, with only three (11%) expressing no interest at all in these therapies.

Of the 22 CATs we listed in the questionnaire, chiropractic and massage therapy were used most frequently by respondents (Table 2). Biofeedback, nutritional therapy, relaxation techniques, vitamin therapy, meditation, herbal therapy, and magnets also were used by five or more of the respondents. Each of the CATs was reportedly used by at least one respondent—except for Native American healing (though three respondents expressed interest in this type of therapy). The CATs of most interest to respondents included aromatherapy (14 respondents), acupuncture (14), and massage therapy (11).

In a separate analysis of the seven respondents who were over age 65, we found that five (71%) reported current or past CAT use. Neither of the two who reported no CAT use expressed interest in using these therapies in the future. Patterns of specific CAT use and interest appeared to be similar between the over-65 group and the total sample, though the small sample size precludes defining such patterns conclusively.

Continued on page 47

Continued from page 44

When asked to identify the symptoms or diagnoses for which they used CATs, at least half of the respondents reporting CAT use named joint pain, high blood pressure, arthritis, chest pain or angina, urinary problems, and high cholesterol (Figure). Other common problems for which respondents turned to CATs included depression, diabetes, sleep disturbances, and posttraumatic stress disorder. In the space on the survey provided for respondents to explain their motivations for trying CATs, there were a variety of responses, such as "I like being proactive" and "until now, no one would give me anything that works on pain and I had to find some way to go on."

PUTTING THE RESULTS IN CONTEXT

The results of our pilot study suggest that a large proportion of primary care patients at the VA Eastern Colorado Health Care System use or are interested in using CATs. This study contained important limitations—most notably the small sample size and single clinic site, which limit the ability to generalize findings, and participant self-selection, which might have favored patients who use CATs—thus slightly overestimating actual rates of CAT use in our population. Nevertheless, our results generally are consistent with those of other published studies. Overall, 70% of our respondents indicated current or past use of one or more CATs—which is in line with a 2001 study by Kessler and colleagues that reported lifetime CAT use at nearly 68%.3

In previous studies, researchers have found that people commonly use CATs for chronic, often painrelated conditions, such as back and neck pain, headaches, pain from spinal cord injury, arthritis,

Table 1. Characteristics of patients surveyed about use of complementary and alternative therapies (CATs) at the VA Eastern Colorado Health Care System

Characteristic	No. (%) of patients
Total sample*	27 (100%)
Over age 65 years [†]	7 (26%)
Male	25 (93%)
Have used or interested in using CATs	24 (89%)
Have not used or not interested in using CATs	3 (11%)
Over age 65 and have used or interested in using CATs	5 (71%)‡

^{*}Those who agreed to participate, gave informed consent, and completed the questionnaire. (A total of 44 patients were invited to participate, 34 agreed, and 29 gave informed consent. Among those 29, two were unable to complete the questionnaire before they were called for their appointment.) †Age range for the total sample: 25 to 85 years. ‡Percentage among respondents over age 65.

urinary tract problems, anxiety, and depression. ^{2,5,6} Our survey results were similar, with joint pain, high blood pressure, arthritis, and chest pain topping the list of conditions for which patients used CATs.

Research into patients' motivations for trying CATs has yielded various, sometimes conflicting, answers. For example, a survey of 1,035 randomly selected adults, published by Astin in 1998, concluded that people use CATs because they have found these modalities to be "more congruent with their own values, beliefs, and philosophical orientations toward life and health"—but not necessarily because they are dissatisfied with conventional medicine.⁵ By contrast, Nayak and colleagues' 2001 survey of 77 patients with spinal cord injuries found the most common reason for using CATs was, indeed, dissatisfaction with conventional medicine.⁶ Our patients' responses indicated that frustration with conventional therapies was a factor for some patients, while others were motivated more by a desire to take responsibility for their own health.

There were a few important ways in which our findings differed from those of previous studies. In 2000, Foster and colleagues found that 30% of people over age 65 reported using one or more CAT in the previous year. A much higher proportion (71%) of our respondents over age 65, however, reported CAT use. Furthermore, in the current study, 68% of veteran patients who reported using CATs indicated that they discuss this use with their health care provider. When compared with rates of 18% reported in 1993 and 16% reported in 1998 by Eisenberg and colleagues, 1,2 this finding suggests encouraging and effective processes of health communication between veteran patients and VA providers. This notion is supported by a 2002 study by Ly and colleagues, in which 64% of elderly veterans at one VAMC reported informing their

health care providers about their use of dietary supplements.⁸

There are several possible reasons for this apparent difference between VA patients and the general U.S. population. Many patients who presented to our primary care clinic on the day of the survey were

there for chronic, difficult-to-treat conditions—which seem to be the most common conditions for which people seek CATs. In fact, as noted in the 1999 VA report, chronic conditions that haven't responded well to conventional treatments and may respond to CAT modali-

ties (such as arthritis, chronic pain, and spinal cord injury), are prevalent among VA patients.⁴ The report also identified a strong conceptual match between the VA's definition of medical need, which includes psychological and sociologic services, and the wellness

Table 2. Use of specific complementary and alternative therapies (CATs)
among patients surveyed at the VA Eastern Colorado Health Care System

<u> </u>						
	All responden	its (n = 27)	Respondents over age 65 (n = 7)			
CAT	Have used or currently using	Interested in using	Have used or currently using	Interested in using		
Chiropractic	12	6	3	2		
Massage therapy	9	11	1	1		
Biofeedback	6	4	1	0		
Nutritional therapy	6	7	0	1		
Relaxation techniques	6	5	0	0		
Vitamin therapy	5	4	1	2		
Meditation	5	4	1	0		
Herbal therapy	5	5	1	1		
Magnets	5	5	0	0		
Acupuncture	4	14	1	2		
Movement therapy	4	5	1	2		
Spirituality and prayer	4	4	1	1		
Hypnosis	3	6	0	1		
Imagery	3	1	0	0		
Aromatherapy	2	14	1	2		
Chinese medicine	2	3	0	0		
Healing touch/Reiki	2	4	0	0		
Music/toning	2	3	0	0		
Therapeutic touch	2	6	0	0		
Yoga	2	4	0	0		
Reflexology	1	3	0	0		
Native American healing	0	3	0	0		

Continued on page 51

Continued from page 48

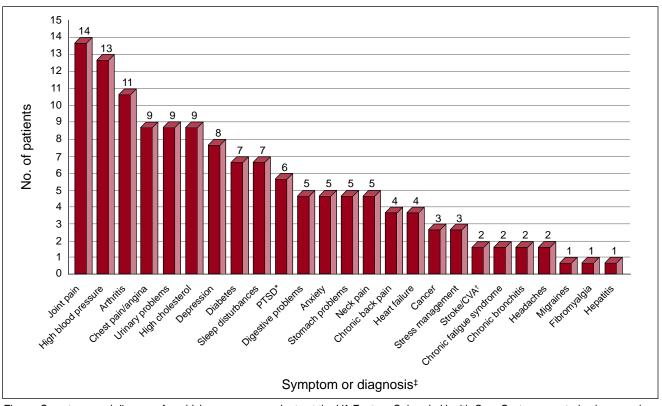


Figure. Symptoms and diagnoss for which survey respondents at the VA Eastern Colorado Health Care System reported using complementary and alternative therapies. *PTSD = posttraumatic stress disorder. †CVA = cerebrovascular accident. ‡No patients reported multiple sclerosis, chronic renal failure, or chronic obstructive pulmonary disease.

orientation of CATs—which is consistent with the motivations for CAT use reported by Astin in 1998.

In addition, providers at our VAMC have noted anecdotally that their patients, especially older veterans, tend to be direct with them. Having seen health care providers come and go over the years, these primarily long-term patients may perceive nothing to lose and much to gain by being straightforward with their providers.

Provider openness to discussing CATs is also an interesting point of speculation. CAT topics increasingly are cropping up in professional literature and seminars. At the VA Eastern Colorado Health Care System, a number of institutional and regional changes may play a role, including the addition of

NaturalData.com to the online resources available to providers at the facility who wish to learn about nutraceuticals: the variety of educational opportunities offered at the local collaborating university for health care providers to learn about diverse CATs; an increase in the use of CATs in local community hospitals and clinics; an increasing emphasis on questions about CAT use in medical history and physical examinations, particularly in areas of pain management; and the presence of many schools in the state that teach CAT techniques.9

Overall, our findings offer continued support for the conclusion that VA patients are comparable to the general public in their interest in CATs—but suggest important differences between the populations

that require further inquiry.⁴ Additional research is needed not only to deepen our understanding of CAT usage patterns in the general veteran population and specific subpopulations but also to explore the meaning, scope, and clinical implications of potentially enhanced communication between veteran patients and providers with respect to CAT use.

CREATING AN OPEN ATMOSPHERE

Numerous CAT modalities can serve as inexpensive strategies to enhance patients' quality of life by either augmenting conventional therapies or decreasing the need for potentially expensive or risky allopathic procedures, resulting in positive short- and long-term health benefits. One example is yoga,

which increases flexibility, balance, and mind-body awareness, thus improving coordination and decreasing the risk of falls or other injuries. Another example is massage, which can reduce stress, improve quality of sleep, and decrease pain. In addition, various psychosocial mind-body therapies have been found to be effective adjunctive treatments for a number of common clinical conditions.¹⁰

Providers must be aware, however, that CAT use is not without risk or contraindication and that the current regulatory climate for quality and safety of CATs is relatively permissive. ^{11,12} For example, the potential for adverse interactions between nutritional and herbal supplements and allopathic medications is great. St. John's wort—

which is used commonly in oral preparations for mild to moderate depression and, less frequently, in topical preparations to promote wound and burn healing and improve neuralgia—uses the same metabolic pathway as acetaminophen, diltiazem, erythromycin, and other medications. It must be used cautiously in conjunction with sedatives or antidepressants, and it has been implicated in acute heart transplantation rejection. ^{13,14}

Vitamin E, garlic, and ginko can benefit patients through antioxidant action, cholesterol control, and improved cognition and vascular flow, respectively, yet all three interfere with clotting.^{8,13} It's not hard to imagine a case in which an elderly patient taking these three supplements is prescribed aspirin,

warfarin, or a nonsteroidal antiinflammatory drug; an antihypertensive medication; and, perhaps, an antihyperglycemic. It's also not hard to foresee for this patient a drop in blood pressure or blood glucose followed by dizziness, a stumble or a fall, and subsequent significant or fatal bleeding.

Ly and colleagues found that, of 124 elderly patients at a VAMC, one quarter took dietary supplements—and over half of those had at least one combination of prescription medication and a supplement that could cause an interaction. Given this situation, creating an open, nonjudgmental atmosphere in which patients feel free to discuss CAT use is as important for providers as being knowledgeable about CAT modalities. It is essential

Continued on page 73

STATEMENT OF OWNERSHIP

Publication Title	2. F	Circu	Numi	3. Filing Date					
Federal Practitioner	1	0 7	8	_ 4	4	9 7	9/29/04		
4. Issue Frequency	5.1	Number of	Issue	Publish	ed Ar	nually	6. Annual Subscription Pric		
Monthly Except Two Issues in December	1	3					\$83.00		
7. Complete Mailing Address of Known Office of Publication (Not print	er) (Street, o	city, county	state	, and Zli	P+4)		Contact Person Donna Sickles		
Quadrant HealthCom Inc. 26 Main Street, Ch Morris County, NJ 07928-2402							Telephone 973-701-2763		
8. Complete Mailing Address of Headquarters or General Business Of	fice of Publi	sher (Not)	orinter)					
26 Main Street, Chatham, NJ 07928-2402									
9. Full Names and Complete Mailing Addresses of Publisher, Editor, a	nd Managin	g Editor (E	lo not	leave bl	ank)				
Publisher (Name and complete mailing address)	7000 04	00							
Peter DeYoe, 26 Main Street, Chatham, NJ 0	7928-24	02							
Editor (Name and complete mailing address)									
Maribeth Maher, 26 Main Street, Chatham, N.	J 07928	-2402							
Managing Editor (Name and complete mailing address)									
Cynthia A. Ryan, 26 Main Street, Chatham, N	J 07928	3-2402							
10. Owner (Do not leave blank. If the publication is owned by a corpor names and addresses of all stockholders owning or holding 1 perc names and addresses of the individual owners. If owned by a part each individual owner. If the publication is published by a nonprofit	cent or more nership or o	of the tota	i amo	unt of sti ted firm.	ock. If aive i	rporation not owns is name a	immediately followed by the ad by a corporation, give the and address as well as those		
Full Name		Complete Mailing Address							
ruii Name	Co	omplete M		26 Main Street, Chatham, NJ 07928-2402					
Quadrant HealthCom Inc.			_	et, Cl	hath	am, N	J 07928-2402		
	2	6 Main	Stre				J 07928-2402 c, NY 10022		
Quadrant HealthCom Inc.	2:	6 Main 50 Parl	Stre	enue,	Ne	v Yorl			
Quadrant HealthCom Inc. Quadrant Media Corporation	2:	6 Main 50 Parl	Stre	enue,	Ne	v Yorl	s, NY 10022		
Quadrant HealthCom Inc. Quadrant Media Corporation Walter Grant	2: 4: 8-	6 Main 50 Parl	Stre	enue,	Ne	v Yorl	s, NY 10022		
Quadrant HealthCom Inc. Quadrant Media Corporation	2 4: 84	6 Main 50 Park 41 Nort	Stre	enue,	Ne	v Yorl	s, NY 10022		
Quadrant HealthCom Inc. Quadrant Media Corporation Walter Grant 11. Known Bondholders, Mortpages, and Other Security Holders On-Holding 1 Pecent or More of Total Amount of Bonds, Mortpages,	21 41 84 84 ming or or	6 Main 50 Park 41 Nort	Stre Av h M	enue, ilford	Roa	v Yorl	s, NY 10022		
Quadrant HealthCom Inc. Quadrant Media Corporation Walter Grant 11. Known Bondhidden, Murtagases, and Other Security Holders Ow Holding I Peccent or More of Total Amount of Bonds, Mortagases.	21 41 84 84 ming or or	6 Main 50 Park 41 Nort	Stre Av h M	enue, ilford	Roa	v Yorl	s, NY 10022		
Quadrant HealthCom Inc. Quadrant Media Corporation Walter Grant 11. Known Bondhidden, Murtagases, and Other Security Holders Ow Holding I Peccent or More of Total Amount of Bonds, Mortagases.	21 41 84 84 ming or or	6 Main 50 Park 41 Nort	Stre Av h M	enue, ilford	Roa	v Yorl	s, NY 10022		
Quadrant HealthCom Inc. Quadrant Media Corporation Walter Grant 11. Known Bendholders, Martgagess, and Other Security Holders Own Holding I Pencent of More of Total Amount of Bonds, Mortgages, of Differ Securities In Orse, develop to	21 41 84 84 ming or or	6 Main 50 Park 41 Nort	Stre Av h M	enue, ilford	Roa	v Yorl	s, NY 10022		
Quadrant HealthCom Inc. Quadrant Media Corporation Walter Grant 11. Known Bendholders, Martgagess, and Other Security Holders Own Holding I Pencent of More of Total Amount of Bonds, Mortgages, of Differ Securities In Orse, develop to	21 41 84 84 ming or or	6 Main 50 Park 41 Nort	Stre Av h M	enue, ilford	Roa	v Yorl	s, NY 10022		
Quadrant HealthCom Inc. Quadrant Media Corporation Walter Grant 11. Known Bendholders, Martgagess, and Other Security Holders Own Holding I Pencent of More of Total Amount of Bonds, Mortgages, of Differ Securities In Orse, develop to	21 41 84 84 ming or or	6 Main 50 Park 41 Nort	Stre Av h M	enue, ilford	Roa	v Yorl	s, NY 10022		

13. Publication Title Federal Practitioner			September 2004	14. Issue Date for Circulation Data Below				
15.	Average No. Co		Average No. Copies Each Issue During Preceding 12 Months	No. Copies of Single Issue Published Nearest to Filing Date				
a. Total Number of Copies (Net press run)			35749	36053				
	(1)	Paid/Requested Outside-County Mail Subscriptions Stated on Form 3541. (Include adventiser's proof and exchange copies)	30131	29961				
b. Paid and/or	(2)	Paid In-County Subscriptions Stated on Form 3541 (Include advertiser's proof and exchange copies)	-	-				
Requested Circulation	(3)	Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Non-USPS Paid Distribution	-	1-				
	(4)	Other Classes Mailed Through the USPS	-	-				
		r Requested Circulation I, (2),(3),and (4)]	30131	29961				
d. _{Free} Distribution	(1)	Outside-County as Stated on Form 3541	4491	5506				
by Mail (Samples, compliment	(2)	In-County as Stated on Form 3541	-	-				
ary, and other free)	(3)	Other Classes Mailed Through the USPS	-	-				
(Carriers or	ution	Outside the Mail or means)	92	250				
f. Total Free D	Distrit	bution (Sum of 15d. and 15e.)	4583	5756				
g. Total Distrib	ution	n (Sum of 15c. and 15f)	34714	35717				
h. Copies not	Distri	ibuted	1035	336				
i. Total (Sum	of 15	ig. and h.)	35749	36053				
j- Percent Pai (15c. divide	id ann	d/or Requested Circulation 15g. times 100)	86.8%	83.9%				
		statement of Ownership equired. Will be printed in the October 2004	issue of this publication.	☐ Publication not required.				
		Title of Editor, Publisher, Business Manager, or Owner		Date				
Ma	1	Maker, Editor		9/29/04				
or who omits n (including civil	nateri pena	mation furnished on this form is true and complete. I unde ial or information requested on the form may be subject to alties).						
1. Con	nplet	te and file one copy of this form with your postmaste records.	er annually on or before October 1.	Keep a copy of the completed for				
who or m	m th	s where the stockholder or security holder is a truste te trustee is acting. Also include the names and add of the total amount of bonds, mortgages, or other s e blank sheets if more space is required.	dresses of individuals who are stock	kholders who own or hold 1 percer				
3. Be s	Be sure to furnish all circulation information called for in item 15. Free circulation must be shown in items 15d, e, and f.							
4. Item (2) 6	15h stim	h., Copies not Distributed, must include (1) newssta nated returns from news agents, and (3), copies for	nd copies originally stated on Form office use, leftovers, spoiled, and a	3541, and returned to the publish Il other copies not distributed.				
and	Circ	blication had Periodicals authorization as a general sulation must be published; it must be printed in any issue printed after October.	or requester publication, this State rissue in October or, if the publication	ment of Ownership, Management on is not published during October				
6. In its	em 1	16, indicate the date of the issue in which this State	ment of Ownership will be published	d.				
7. Item	17 1	must be signed.						
			lead to suspension of Periodical					

Continued from page 52

that we ask our patients about any exclusive or concomitant use of these modalities and monitor their outcomes.

At present, the internet contains a proliferation of information about CATs, much of which is incomplete, erroneous, or undocumented and may not address potential risks. Patients who are ill informed may delay or fail to use appropriate therapies for treatable medical, surgical, or mental health conditions. ¹⁵ Providers can offer fundamental assistance to these patients by evalu-

ating potential CAT use based on current research and helping them critically evaluate other sources of information about CATs. By the same token, patients who are well informed may enhance providers' knowledge about CATs. Finally, knowing what self-care methods a patient has used or is considering using—and the actual or potential results of these modalities—may offer valuable insight into the patient's support systems and resources, openness to investing in his or her own care, and potential

or actual adherence to providers' therapeutic recommendations.

The opinions expressed herein are those of the authors and do not necessarily reflect those of Federal Practitioner, Quadrant HealthCom Inc., the U.S. government, or any of its agencies. This article may discuss unlabeled or investigational use of certain drugs. Please review complete prescribing information for specific drugs or drug combinations—including indications, contraindications, warnings, and

adverse effects—before administering pharmacologic therapy to patients.

REFERENCES

- Eisenberg DM, Kessler RC, Foster C, Norlock FE, Calkins DR, Delbanco TL. Unconventional medicine in the United States. Prevalence, costs, and patterns of use. N Engl J Med. 1993; 328:246–252.
- 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.
- Kessler RC, Davis RB, Foster DF, et al. Longterm trends in the use of complementary and alternative medical therapies in the United States. Ann Intern Med. 2001;135:262–268.

- Klemm Analysis Group, Inc. Alternative Medicine Therapy: Assessment of Current VHA Practices and Future Opportunities. Washington, DC: Department of Veterans Affairs; 1999. Contract V101(93)P-1500. Task Order 9. Available at: vaww.va.gov/med/patientcare/primary /finalreport.doc. Accessed December 8, 2002.
- Astin JA. Why patients use alternative medicine: Results of a national study. *JAMA*. 1998; 279:1548–1553.
- Nayak S, Matheis RJ, Agostinelli S, Shifleft SC.
 The use of complementary and alternative therapies for chronic pain following spinal cord injury: A pilot survey. J Spinal Cord Med. 2001:24:54-62.
- Foster DF, Phillips RS, Hamel MB, Eisenberg DM. Alternative medicine use in older Americans. J Am Geriatr Soc. 2000;48:1560–1565.
- Ly J, Percy L, Dhanani S. Use of dietary supplements and their interactions with prescription drugs in the elderly. Am J Health Syst Pharm. 2002;59:1759–1762.

- Brown R. Nexus guide to alternative education. Nexus. May/June 2003:20–29.
- Astin JA, Shapiro SL, Eisenberg DM, Forys KL. Mind-body medicine: State of the science, implications for practice. J Am Board Fam Pract. 2003;16:131–147.
- Micozzi M. Alternative or complementary medicine: Opportunities for integration. Skinmed. 2003;2:154–155.
- Witkowski JA, Parish LC. Dermatologic manifestations of complementary therapy. Skinmed. 2003;2:175–180.
- LaValle JB, Krinsky DL, Hawkins EB, Pelton R, Willis NA. Natural Therapeutics Pocket Guide. Hudson, OH: Lexicomp, Inc; 2003.
- Ruschitzka F, Meier PJ, Turina M, Luscher TF, Noll G. Acute heart transplant rejection due to Saint John's wort. *Lancet*. 2000;355:548–549.
- Ernst E. Complementary medicine: Its hidden risks. Diabetes Care. 2001;24:1486–1488.