

## Herbal product use in Mexican-Americans

In 1998, Eisenberg et al.<sup>1</sup> reported a 12% rate of use of herbal products in the U.S. population. Few studies have looked at herbal product use among Mexican-Americans, however. Several studies have indicated that HIV-infected patients may use herbal products at a rate higher than that of the general population.<sup>2,3</sup> Again, few if any Mexican-Americans were included in these studies.

We conducted a survey from April to October 2000 to determine the use of herbal products in Mexican-American patients with and without HIV infection. Participants were recruited from the waiting rooms of various hospitals and clinics in our region of West Texas. Trained interviewers conducted semi-structured interviews with a bilingual questionnaire.

A total of 439 HIV-negative and 35 HIV-positive Mexican-Americans participated in the study. The overall rate of herbal product use was 78%. Seventy-nine percent of the HIV-negative and 71% of the HIV-positive patients reported having used herbal products for medicinal purposes in the preceding 12 months. The most frequently used herbal products among the HIV-negative patients were chamomile (13.4%), aloe vera (8.0%), peppermint (6.5%), garlic

(6.3%), lemon (5.8%), oregano (4.8%), mullein (4.1%), cactus (3.5%), corn silk (3.5%), and cinnamon (3.5%). The most popular herbal products among HIV-positive patients were chamomile (19.2%), hibiscus (13.7%), garlic (9.6%), aloe vera (8.2%), mullein (8.2%), lemon (5.5%), cactus (4.1%), corn silk (4.1%), celery (4.1%), and cinnamon (2.7%). A majority of these products were reportedly purchased or obtained locally, and most patients reported using the products in raw dosage forms prepared as teas. Our sample reported using 37 herbal products that could theoretically cause an adverse event. Almost half of these 37 products are not well known outside the Mexican community, and most of the information on them that is available can be found only in the Mexican literature.

Most of the patients reported having received advice about herbal products from relatives and friends. In addition to family and friends, the HIV-positive patients used publications as a source of information related to herbal product use. While most of the patients considered these products to be effective, the HIV-positive patients claimed even higher rates of effectiveness. Most of the patients reported that they had not informed their physician about their use of

these products; the HIV-positive patients had even lower rates of disclosure.

Some herbal products that have been associated with drug interactions include garlic, mullein, chaparral, rue, peyote, ginseng, echinacea, St. John's wort, ginger, kava, saw palmetto, and ma huang. Both St. John's wort<sup>4</sup> and garlic<sup>5,6</sup> appear to alter the pharmacokinetics of indinavir and saquinavir. Still, reliable information about complications associated with herbal product use is difficult to obtain because many of these products are used in raw form, manufacturing standards and standardized dosage forms are generally lacking, and product labeling is not consistent.

It appears that Mexican-Americans in West Texas use herbal products at rates much higher than in the country as a whole.

1. Eisenberg DM, Davis RB, Ettner SL et al. Trends in alternative medicine use in the United States, 1990-1997. *JAMA*. 1998; 280: 1569-75.
2. Fairfield KM, Eisenberg DM, Davis RB et al. Patterns of use, expenditures, and perceived efficacy of complementary and alternative medicine in HIV-infected patients. *Arch Intern Med*. 1998; 158:2257-64.
3. Smith SR, Boyd EL, Kirking DM. Nonprescription and alternative medication use by individuals with HIV disease. *Ann Pharmacother*. 1999; 33:294-300.
4. American College of Clinical Pharmacy. White paper on herbal products. *Pharmacotherapy*. 2000; 20:877-91.



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Letters may be sent via the Internet to [ajhp@ashp.org](mailto:ajhp@ashp.org).

## Letters

- Piscitelli SC, Burstein AH, Chait D et al. Indinavir concentrations and St. John's wort. *Lancet*. 2000; Feb 12:355:547-8.
- Piscitelli SC, Burstein AH, Welden N et al. The effect of garlic supplements on the pharmacokinetics of saquinavir. *Clin Infect Dis*. 2002; 1534:234-8.

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lesterol goal attainment and to assess medication adherence.

The patients were predominantly female (72%), Hispanic (61%), and English speaking (72%) (table). Overall, 48% of patients attained their ATP II LDL-cholesterol goal and 39% attained their ATP III goal. Nearly all patients (99%) were receiving hydroxymethylglutaryl-coenzyme A reductase inhibitors. There was a trend toward better goal attainment among non-Hispanic patients (45% versus 35%) and English-speaking patients (43% versus 29%).

The percentages of patients with existing CHD (39%), diabetes mellitus (50%), and hypertension (68%) indicate the potential importance of an integrated management approach. Such an approach might include physicians, pharmacists, dietitians, exercise specialists, nurses, the patient, and the patient's family. In a study by Brown and Cofer,<sup>3</sup> other institutions incorporating a multidisciplinary approach to cholesterol management reported goal-attainment rates as high as 71%.<sup>3</sup> In that study, nurses trained in lipid management and education saw the patients immediately after an interview with the medical director. Patients were seen regularly by a

## Evaluation of lipid-lowering therapies at an ethnically diverse clinic

A major modifiable risk factor for coronary heart disease (CHD) that continues to be poorly controlled is hyperlipidemia.<sup>1,2</sup> Practice has evolved from screening patients on the basis of total cholesterol to aggressive lowering of low-density-lipoprotein (LDL) cholesterol in patients with atherosclerotic cardiovascular disease to improved assessment of risk in patients without existing CHD.

Maricopa Integrated Health System (MIHS) comprises 14 family health centers, a tertiary care center, an acute care psychiatric facility, and a long-term-care pharmacy. The managed care division administers two Medicaid plans, one managed care Medicare supplement plan, one Maricopa County employee plan, and one long-term-care plan. MIHS serves an ethnically and culturally diverse patient population throughout Maricopa County. Multilingual providers and translation services are available to assist patients who do not speak English.

Information was collected from four family practice physicians and a family nurse practitioner about the management of 90 randomly selected patients who received their primary care services at one of the family health centers. Medical charts and pharmacy claims data were used to collect all patient-specific infor-

mation. The patients' primary language was determined by intake assessment forms and provider documentation. Our main objective was to assess attainment of the LDL-cholesterol goals established by Adult Treatment Panels (ATPs) II and III of the National Cholesterol Education Program.<sup>1,2</sup> We also sought to identify potential demographic barriers to cho-

### Patient Demographics and Clinical Characteristics (n = 90)

Characteristic <sup>a</sup>	Value
No. (%) male	25 (28)
Mean ± S.D. age, yr (range)	60 ± 13 (31–93)
No. (%) Caucasian	31 (34)
No. (%) Hispanic	55 (61)
No. (%) speaking English	65 (72)
No. (%) not speaking English	21 (23)
No. (%) with unknown primary language	4 (4)
No. (%) current smokers	19 (21)
No. (%) with family history of CHD	26 (29)
No. (%) with secondary prevention of premature CHD	35 (39)
No. (%) with LDC-cholesterol conc. <sup>b</sup>	
<100 mg/dL	64 (71)
<130 mg/dL	19 (21)
<160 mg/dL	7 (8)
No. (%) with diabetes mellitus	45 (50)
No. (%) with hypertension <sup>c</sup>	61 (68)
No. (%) with hypothyroidism <sup>c</sup>	17 (19)
Most recent mean ± S.D. fasting lipid conc., mg/dL (range)	
Total cholesterol	215 ± 46 (108–400)
Triglycerides	275 ± 250 (74–861)
Calculated LDL cholesterol	114 ± 43 (19–294)
Calculated HDL cholesterol	47 ± 22 (25–90)

<sup>a</sup>CHD = coronary heart disease, LDL = low-density-lipoprotein, HDL = high-density-lipoprotein.

<sup>b</sup>Goals of Adult Treatment Panel III.<sup>2</sup>

<sup>c</sup>Determined from medical charts.

