



Published in final edited form as:

*J Altern Complement Med.* 2006 October ; 12(8): 719–720. doi:10.1089/acm.2006.12.719.

## Women's Reasons for Complementary and Alternative Medicine Use: Racial/Ethnic Differences

MARIA T. CHAO, Dr.P.H.<sup>1</sup>, CHRISTINE WADE, M.P.H.<sup>1</sup>, FREDI KRONENBERG, Ph.D.<sup>1</sup>, DEBRA KALMUSS, Ph.D.<sup>2</sup>, and LINDA F. CUSHMAN, Ph.D.<sup>2</sup>

<sup>1</sup>*The Richard and Hinda Rosenthal Center for Complementary and Alternative Medicine, Department of Rehabilitation Medicine, College Physicians & Surgeons, Columbia University, New York, NY*

<sup>2</sup>*Heilbrunn Department of Population and Family Health, Mailman School of Public Health, Columbia University, New York, NY*

### Abstract

**Objectives**—Although racial/ethnic differences in the prevalence of complementary and alternative medicine (CAM) utilization have been documented, differences in the reasons for using CAM have not been empirically assessed. In an increasingly diverse society, understanding differences in rates of and reasons for CAM use could elucidate cultural and social factors of health behaviors and inform health care improvements. The current study examines reasons for CAM use among women in four racial/ethnic groups.

**Design**—A national telephone survey of 3172 women aged 18 years and older was conducted in four languages. Respondents were asked about their use of remedies or treatments not typically prescribed by a medical doctor. This study focuses on those women who used CAM in the previous year and their reasons for using CAM.

**Results**—Non-Hispanic white women were most likely to cite personal beliefs for CAM use. Cost of conventional medicine was most prevalent among Mexican-American women CAM users. Physician referral, family and friends, and media sources were all equally likely to lead to CAM use in non-Hispanic white women. In contrast, informal networks of family and friends were the most important social influences of CAM use among African-, Mexican-, and Chinese-American women.

**Conclusions**—Racial/ethnic differences in reasons for CAM use highlight cultural and social factors that are important to consider in public evaluation of the risks and benefits of CAM remedies and treatments.

### INTRODUCTION

Epidemiological studies on complementary and alternative medicine (CAM) have included research on use prevalence, demographics of users, and reasons for use. Nearly two thirds of adults in the United States have used CAM in their lifetimes;<sup>1</sup> and more than one third have used CAM in the past year.<sup>2</sup> National estimates indicate racial/ethnic differences in CAM utilization, with higher prevalence among non-Hispanic whites relative to minorities.<sup>2-4</sup> Although reasons for CAM use have been explored in previous studies, racial/ethnic differences have not been examined.<sup>2,5-8</sup> One exception compared reasons for CAM use among Hispanics, non-Hispanic whites, and non-Hispanic blacks.<sup>4</sup> Reasons included in the study were, however, limited primarily to some facet of conventional care, such as cost or

recommendation from a medical professional. We compare reasons for CAM use among non-Hispanic white, African-American, Mexican-American, and Chinese-American women, assessing differences in personal beliefs, dissatisfaction with conventional medicine, and social influences.

## METHODS

Data were gathered as part of a study of the prevalence and correlates of CAM use among women in the United States. Survey development included focus groups among African-American and Hispanic women and a pilot survey in New York City.<sup>9,10</sup> In 2001, a cross-sectional telephone survey was implemented to provide nationally representative data on women's use of CAM during the previous year and estimates of use among women in four racial/ethnic groups. Three sampling strategies were used: random digit dialing (RDD), from which the non-Hispanic white sample is derived, RDD within geo-targeted areas for the African- and Mexican-American samples, and random selection from a surname database for the Chinese-American sample.<sup>3</sup> Using Computer Assisted Telephone Interviews, women aged 18 years and older were interviewed in English, Spanish, Mandarin, or Cantonese. Women were asked about their use of the following CAM domains for health reasons in the previous year: vitamins and nutritional supplements; a special diet such as whole foods, macrobiotic, or vegetarian diet; medicinal herbs or teas; remedies or practices associated with a particular culture (e.g., Chinese medicine, Ayurveda, Native American healing, Curanderismo); homeopathic remedies; yoga/meditation/tai ji; chiropractic treatments; manual therapies (massage or acupressure); energy therapies (Reiki or therapeutic touch); acupuncture; or any other remedy or treatment not typically prescribed by a medical doctor.

Here we report on the subsample of women who reported using at least one of these CAM domains. Participants were asked whether each of eight statements was a reason for their CAM use in the past year (yes/no). Previous studies of CAM use<sup>5</sup> and pilot research we conducted in preparation for the parent study informed our questions about reasons for use.<sup>9,10</sup> Each reason was assessed by race/ethnicity, with those who responded "don't know" treated as missing and excluded from analysis. All measures were categorical, and data were analyzed using cross-tabs and chi-square tests in SPSS version 11.5 for Windows.

## RESULTS

Sociodemographic characteristics of the study sample are reported in Table 1. Women CAM users in this study were an average of 42 years of age; the majority of them were currently employed, married, and had health insurance in the previous year. Non-Hispanic white and Chinese-American women CAM users had the highest levels of education and household income. Mexican-American women CAM users were the least likely to be employed or have health insurance. African-American women CAM users had the highest rates of employment and the lowest rates of marriage.

Possible reasons for using CAM included personal beliefs, dissatisfaction with conventional medicine, and social influences. Data are presented in Table 2. Reasons associated with personal beliefs were most common across all four groups. This was particularly true for non-Hispanic white women, with more than 60% attributing their CAM use to wanting a natural approach to treatment and/or consistency of CAM with their beliefs. More than half of Mexican-American women also cited each of these two statements as reasons for CAM use, and a majority of African-American women sought natural approaches to health care.

More than one third of CAM users cited either ineffectiveness or side effects of conventional medicine as reasons for CAM use (data not shown). Among non-Hispanic white, African-

American, and Chinese-American women who used CAM, ineffectiveness or side effects of conventional medicine were more common reasons for CAM use than inability to afford conventional medicine (Table 2). For Mexican-American women, however, cost of conventional medical treatment was more likely to be a reason for CAM use compared to other reasons in this category.

For minority women, use of alternative remedies by family members when growing up was a common reason for CAM use, as indicated by nearly half of Mexican-American women (48%) and 42% of African- and Chinese-American women (Table 2). Nearly one third of non-Hispanic white, African-American, and Mexican-American women reported a recommendation from their doctor as a reason for using CAM. Reading or hearing something on the media was cited most frequently by African-American women (42%) and least by Chinese-American women (18%).

## DISCUSSION

Consistent with prior research,<sup>5,11</sup> women in this study were more likely to attribute CAM use to personal health beliefs than to dissatisfaction with conventional medicine, regardless of race/ethnicity. Our findings that 14% of female CAM users cited the cost of conventional medicine and 26% cited a physician recommendation as reasons for using CAM corroborate with rates reported by Barnes et al. (13% and 26%, respectively) for men and women.<sup>2</sup> That more than one quarter of CAM users received a doctor's recommendation suggests that more discussion between conventional providers and their patients occurs than has been previously documented or that a considerable number of physicians are referring to CAM. That one quarter of women tried CAM because conventional medical treatment did not work is not surprising because many conventional treatments work only for a proportion of patients and/or are not evidence-based (although this is not commonly acknowledged).<sup>12</sup> Patients and their health care providers often try a variety of treatments with different risk/benefit ratios in order to find individual solutions to persistent problems or to find the best approach to health for each patient. Certainly treatment failure within the conventional system and recommendation by a physician are logical reasons for trying CAM treatments.

Our study also draws attention to important racial/ethnic differences in reasons for CAM use. Mexican-American women were most likely to cite the cost of conventional medicine and growing up with family members who use CAM as reasons for use. Not surprisingly, economic barriers to conventional health care, such as low rates of health insurance or lower socioeconomic profiles, create an additional incentive for Mexican-American women to utilize CAM as a form of health care that is accessible and familiar. The expense of conventional medicine as a reason for CAM use being more prevalent among Hispanics is also noted by Graham et al.<sup>4</sup> In contrast, non-Hispanic white women were most likely to cite personal beliefs and least likely to cite family as motivating reasons for CAM use. Non-Hispanic white women chose to use CAM based on personal philosophies, perhaps supported by education that enables them to actively seek health information and by more disposable income to pay for CAM therapies. Of the four racial/ethnic groups, Chinese-American women were least likely to cite six of the reasons for CAM use included in this study. A highly integrated system of medicine has developed in China, and medical pluralism has migrated to the United States and is reflected in the health care available in Chinese ethnic enclaves. It may be challenging to assess reasons for CAM use in a population for which Traditional Chinese Medicine is part of the standard of care rather than an "alternative." African-American women were most likely to read or hear something on the radio or television that persuaded them to use CAM. Because the reliability of media sources is in question, this raises a public health concern about ensuring that African-American women have access to quality information about health care choices.

Our findings should be interpreted with study limitations in mind. Telephone surveys tend to have higher refusal rates relative to face-to-face interviews and may be less representative of certain segments of the population, including minorities, lower income households, and non-English speaking households. Oversampling of minority populations and the availability of multilingual interviewers in this study minimized these limitations.

## CONCLUSIONS

With a significant proportion of the U.S. population using complementary and alternative medicine, and evidence of racial/ethnic differences in prevalence of use, it is important to understand the reasons for these differences. Reasons for use of any medical treatments or practices for health and well-being are nuanced, especially across racial/ethnic groups. A more detailed understanding of these reasons may contribute to improving patient-practitioner dialogue and hence, public health. Racial/ethnic differences, such as variations in the source of health information and affordability of health care, highlight cultural and social factors that are important to consider in public education efforts about the risks and benefits of CAM remedies and treatments.

## ACKNOWLEDGMENTS

This work was funded by National Institutes of Health (NIH) National Institutes for Child Health and Development (NICHD) grant R01 HD 37073, with additional support from the National Center for Complementary and Alternative Medicine (NCCAM). Support for preparing this paper was provided to the first author by NIH/NCCAM grant F31AT0001401-01. The content of this paper is solely the responsibility of the authors and does not necessarily represent the official views of the NIH or NICHD or NCCAM.

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Characteristics of Study Sample: Women Complementary and Alternative Medicine (CAM) Users by Racial/Ethnic Group

Table 1

	All CAM users	Non-Hispanic whites	African-Americans	Mexican-Americans	Chinese-Americans
N (weighted)	1595	389	406	383	417
Region of residence*					
Northeast	17.5%	19.0%	19.5%	1.3%	29.0%
Midwest	17.1%	29.0%	19.5%	4.7%	14.9%
South	34.4%	29.8%	55.9%	26.6%	24.9%
West	31.0%	22.1%	5.2%	67.4%	31.2%
Age (mean in years)*	42.2	46.2	41.2	37.5	43.8
Level of education completed*					
Less than high school	19.6%	5.7%	14.1%	43.5%	16.0%
Completed high school	25.8%	31.6%	24.5%	28.0%	19.4%
2-year or some college	23.6%	31.4%	35.4%	18.8%	9.0%
College graduate or more	31.1%	31.4%	26.0%	9.7%	55.7%
Currently employed*	60.6%	65.6%	68.9%	48.7%	59.0%
Married or living with partner*	58.5%	60.1%	32.8%	64.6%	76.3%
Household income in 2000*					
<\$20,000	24.0%	14.9%	24.9%	35.9%	19.6%
\$20-40,000	31.3%	25.6%	36.3%	38.7%	19.0%
\$40-60,000	17.6%	21.1%	18.3%	11.4%	20.7%
>\$60,000	27.0%	38.4%	21.1%	14.0%	40.8%
Income not reported*	25.3%	13.6%	11.1%	17.8%	57.1%
Any health insurance*	78.9%	88.1%	85.7%	64.1%	77.2%

CAM, complementary and alternative medicine.

\*  $p < 0.001$ .

Table 2

## Women's Reasons for CAM Use by Race/Ethnicity

	All CAM users	Non-Hispanic whites	African-Americans	Mexican-Americans	Chinese-Americans	p value*
N (weighted) <sup>d</sup>	1595	389	406	383	417	
Personal beliefs						
Using these types of remedies and treatments is consistent with my beliefs.	51.1%	61.2%	48.2%	55.4%	40.6%	<0.001
I wanted a natural approach to treatment.	54.7%	62.9%	58.7%	52.5%	45.0%	<0.001
Dissatisfaction with conventional medicine						
Couldn't afford conventional medical treatment.	14.2%	8.0%	16.8%	27.3%	5.7%	<0.001
Tried a conventional medical treatment and it didn't work.	23.3%	24.5%	26.4%	25.2%	17.4%	0.01
Tried a conventional medical treatment and it had side effects that I didn't like.	29.6%	29.0%	31.7%	22.3%	34.5%	0.002
Social influences						
When I was growing up, family members or other people who were close to me used these types of remedies.	41.0%	31.4%	42.4%	48.3%	42.4%	<0.001
My doctor recommended it.	26.3%	30.6%	30.5%	32.6%	12.2%	<0.001
I read something or heard something on TV or on radio that convinced me to use them.	29.8%	31.3%	42.2%	28.1%	17.6%	<0.001
CAM, complementary and alternative medicine.						

<sup>a</sup> Only one interview was completed in each sample household even when multiple eligible respondents resided there. Analyses are weighted to account for the probability of selection within households.

\* p value based on chi-square test for comparisons of categorical variables.