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## Racial and Ethnic Profiles of Complementary and Alternative Medicine Use Among Young Adults in the United States: Findings From the National Longitudinal Study of Adolescent Health

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### Abstract

This study describes complementary and alternative medicine use among a national sample of young adults, with an emphasis on characterizing racial and ethnic differences, highlighting variation across subgroups of Hispanics. The authors examined young adults ages 18 to 27 years ( $n = 14\,128$ ) from wave III (2001–2002) of the National Longitudinal Study of Adolescent Health. Prevalence estimates and logistic regression results were weighted and adjusted for complex sample design. The study examined recent complementary and alternative medicine use in the past 12 months, recent use for each of 15 specific complementary and alternative medicine modalities, and the 5 most commonly used modalities (herbs, massage, chiropractic, relaxation, and vitamins). Results showed that 29% of young adults aged 18 to 27 years recently used complementary and alternative medicine. Prevalence was highest among Cuban Americans (42%) and lowest among blacks (22%). Young adults used a diversity of complementary and alternative medicine modalities and there were substantial differences in use across racial and ethnic groups.

### Keywords

complementary and alternative medicine; young adults; race/ethnicity

### Introduction

As Americans increasingly use complementary and alternative medicine,<sup>1,2</sup> there is a continuing need to comprehensively describe those who use it.<sup>3</sup> Although there are now many national studies that examine complementary and alternative medicine use in the general population,<sup>1,2,4–8</sup> much of the prior research has often focused on specific groups such as those with a particular health condition,<sup>9–11</sup> women,<sup>12–14</sup> or the elderly.<sup>15,16</sup> The

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#### Author Contributions

Dawn M. Upchurch conceptualized the article, directed the analysis, and wrote the manuscript drafts. Bethany K. Wexler Rainisch executed the analysis, managed and cleaned the data, and contributed to the writing of the manuscript drafts.

#### Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### Ethical Approval

This study received approval from the university's institutional review board.

current research contributes to this growing literature by investigating complementary and alternative medicine use among young adults, with an emphasis on identifying racial and ethnic differences, especially among subgroups of Hispanics.

Investigating complementary and alternative medicine use among the young adult population is of relevance because it is during late adolescence and early adulthood when health beliefs and behaviors and health care utilization patterns are shaped.<sup>17–19</sup> In 2007, more than one third of adults aged 18 to 29 years used any complementary and alternative medicine in the previous 12 months,<sup>1</sup> suggesting that adults are incorporating complementary and alternative medicine into their healthy lifestyle behaviors early on. However, only a few studies have investigated complementary and alternative medicine use among young adults specifically, and relied on convenience samples of college students.<sup>20–24</sup> There is growing recognition that complementary and alternative medicine is often used in conjunction with other health promotion activities.<sup>6,10,25–28</sup> Establishing healthy lifestyle behaviors early in life is a public health priority,<sup>29</sup> thus investigating complementary and alternative medicine use among a nationally representative sample of young adults is warranted.

In addition to broadening complementary and alternative medicine research to include young adults, persistent gaps in our knowledge need to be addressed with regard to complementary and alternative medicine use by a variety of racial and ethnic groups, including Hispanic subgroups. Previous studies have shown non-Hispanic whites and Asians commonly have the highest rates of any type of complementary and alternative medicine use.<sup>1,5,7,30,31</sup> Recent national data show approximately one quarter of adult Hispanics reported using any type of complementary and alternative medicine and the prevalence varies by country of origin.<sup>1</sup> However, racial and ethnic rates of use are more variable when specific complementary and alternative medicine modalities (eg, herbs, acupuncture, chiropractic) or National Center for Complementary and Alternative Medicine categories are considered.<sup>1,3,5,6,27</sup> National Center for Complementary and Alternative Medicine categories sort specific complementary and alternative medicine modalities according to common attributes (eg, biologically based therapies). Although some national or regional studies have investigated complementary and alternative medicine use among specific racial groups including Asians<sup>31,32</sup> and African Americans,<sup>5, 33</sup> fewer have focused on Hispanics, especially with respect to characterizing subgroup differences in use. To our knowledge, there are no racial and ethnic comparative analyses for the young adult population. Nationally, Hispanics are very heterogeneous with heritage stemming from countries of origin that include Mexico, Puerto Rico, Cuba, and other Central and South American countries. There is substantial variability in health status and disease risk according to country of origin and nativity status.<sup>34</sup> Moreover, these differing cultural roots shape health beliefs and health-seeking behaviors,<sup>35–37</sup> which can include complementary and alternative medicine.<sup>38–41</sup>

The current study systematically investigated the prevalence and patterns of recent complementary and alternative medicine use among a nationally representative sample of young adults aged 18 to 27 years and described racial and ethnic profiles of use. Specifically, we provided new information on racial and ethnic differences in use by extending the ethnic categories to include multiple Hispanic subgroups. We also operationalized complementary and alternative medicine in several ways to provide a more comprehensive picture of complementary and alternative medicine use among young adults.

## Materials and Methods

### Survey Description

The National Longitudinal Study of Adolescent Health is a nationally representative multiwave study begun in 1994–1995, when respondents were enrolled in grades 7 to 12 (age range approximately 11–19 years). The survey used a multistage sampling design to select students from representative high schools and middle schools. A detailed description of the study design has been published elsewhere.<sup>42</sup> Importantly, for our analysis, the design included oversamples of certain youths including Cuban and Puerto Rican adolescents. A third wave was conducted in 2001–2002, when respondents were 18 to 27 years old. Among those eligible, the follow-up response rate was 76%.

In wave III, respondents were asked about recent complementary and alternative medicine use. The final analytic sample included individuals who provided valid responses for the complementary and alternative medicine questions and had a valid sample weight. It excludes “other races” because of small sample size and heterogeneity ( $n = 14\,128$ ).

### Measures

**Complementary and alternative medicine use measures**—Respondents were asked whether they had used any complementary and alternative medicine therapies in the past 12 months. Those who mentioned using any one of 15 listed therapies were coded as “recent users.” This is the first outcome. Then, prevalence estimates for each of the 15 complementary and alternative medicine modalities were computed and grouped according to National Center for Complementary and Alternative Medicine categories<sup>1</sup>. These categories are (a) Alternative Medical Systems, (b) Biologically-Based Therapies, (c) Manipulative and Body-Based Therapies, and (d) Mind-Body Therapies (we included Energy Healing in this category because of very low prevalence). Last, we investigated in more detail the 5 most prevalent specific complementary and alternative medicine modalities (herbs, massage, chiropractic, relaxation, and vitamins).

**Demographics**—Race and ethnicity was coded according to respondents’ self-report. Individuals who stated they were Hispanic were coded as such, regardless of race. They were then asked to identify a country/heritage of origin and the final code was Mexican (including Chicano), Cuban, Puerto Rican, and Central/South American (including other Hispanic). Race was coded as non-Hispanic white, non-Hispanic black, and non-Hispanic Asian. Other demographics included nativity status, gender, age (in 2-year intervals except for the last), currently enrolled in school (yes or no), years of education completed (less than high school, high school graduate, some college, and college graduate or more), and personal income (<\$20 000, \$20 000–\$49 999, \$50 000–\$74 999, \$75 000).

**Health insurance status and perceived health status**—The last set of variables reflect access and potential need for health care and included health insurance status (insured, uninsured) and perceived health status (excellent, very good, good, fair, poor).

### Analysis

All analyses and estimates used the individual-level sampling weight that adjusts for nonresponse and poststratification; variance estimates were adjusted to account for complex sample design. Descriptive statistics and bivariate prevalence estimates of any complementary and alternative medicine use and each of the 15 specific modalities were computed and an adjusted Wald  $F$  test was used to test for significance. Weighted binomial logistic regression was performed, first to investigate the associations between covariates and any recent complementary and alternative medicine use and second, to investigate

associations between covariates and the 5 most common specific modalities (herbs, massage, chiropractic, relaxation, and vitamins). Adjusted odds ratios are presented. All analyses were performed using Stata 12.0.<sup>43</sup> All research was approved by the institutional review board.

## Results

### Prevalence and Correlates of Any Recent Complementary and Alternative Medicine Use

**Bivariate results**—The demographic and health characteristics of the population are presented in the first column of Table 1. Overall, 29% of young adults reported using any kind of complementary and alternative medicine in the past 12 months. Prevalence of use significantly varied by race and ethnicity with Cubans reporting the highest prevalence (42%) and blacks the lowest (22%). Women reported significantly higher rates than men; those who were currently enrolled in school also had higher rates than those not enrolled. Educational level was significantly associated with prevalence of use and those with the highest education had the highest complementary and alternative medicine use (36%). Those with health insurance reported slightly higher rates than those uninsured. Nativity status, age, income, and health status were not associated with use in the bivariate analysis.

**Multiple regression results**—Compared with whites, blacks were less likely and Cuban and Central/South American Hispanics more likely to use any type of complementary and alternative medicine. Women were more likely than men to use complementary and alternative medicine. Currently enrolled students were more likely to use than those not enrolled. Compared with young adults who did not complete high school, those with some college or who were college graduates or higher were more likely to use complementary and alternative medicine. Decreasing health status was associated with increasing complementary and alternative medicine use. Nativity status, age, income, and insurance status were not associated with use in the multivariable analysis.

### Racial and Ethnic Differences in Use by National Center for Complementary and Alternative Medicine Categories and Specific Complementary and Alternative Medicine Modalities

There were significant differences in use by race and ethnicity by every National Center for Complementary and Alternative Medicine category except Alternative Medical Systems. Use of any type of Alternative Medical System was relatively low, although highest among Mexicans (7.2%) and Asians (5.7%; Table 2). Within Alternative Medical Systems, there were significant racial and ethnic differences in use of traditional healers and homeopathic medicine. Biologically-based Therapies were the most common overall (15.6%) and highest use among Cubans (23.5%) and Central/South American Hispanics (23.6%). Within this category, racial and ethnic differences were observed for herbs, vitamins, and folk medicine. Herbs were most commonly used (11.4%) and highest among Asians (15.4%) and Puerto Ricans (15.5%). Manipulative and Body-Based Therapies were the next most common overall (14.1%) and within this category both massage and chiropractic use differed significantly across racial and ethnic groups. Mind–Body Therapies were the next most common overall (8.2%) and Puerto Ricans reported the highest use of any kind of mind–body therapy (11.6%). There were significant racial and ethnic differences in use of relaxation techniques and guided imagery; the other modalities did not differ by race and ethnicity.

## Racial and Ethnic Differences and Correlates of Use of 5 Most Common Complementary and Alternative Medicine Modalities

**Herbs**—Compared with whites, blacks were less likely to use herbs; there were no other racial or ethnic differences. Women were more likely than men to use herbs as were those enrolled in school. Increasing levels of education were associated with increasing odds of use. Compared with those with excellent health those who reported good health were also more likely to use herbs.

**Massage**—Compared with whites, blacks were less likely to use massage; there were no other racial or ethnic differences. Women were more likely than men to use massage and those with higher levels of education were more likely to use than those with the lowest level. There was a positive association with income (although not significant for the highest income). Those who reported fair or poor health were more likely than those reporting excellent health to use massage.

**Chiropractic**—Once again, blacks were less likely than whites to use chiropractic and no other racial or ethnic differences were observed. Women were more likely than men to use chiropractic as were young adults who were uninsured (compared with insured). Only those in the poorest health were more likely to use chiropractic than those with excellent health.

**Relaxation**—No racial or ethnic differences were observed. Women were more likely than men to use relaxation as were those with higher levels of education compared to the lowest level. Those with good or fair health were more likely than those with excellent health to use relaxation.

**Vitamins**—Compared with whites, Cubans and Central/South American Hispanics were much more likely to use vitamins (adjusted odds ratios 3.1 and 2.6, respectively). Income was the only other significant variable; compared to those in the lowest income category, those in the next two highest were more likely to use vitamins (Table 3).

## Discussion

This is one of the first national studies reporting complementary and alternative medicine use specifically among young adults. Almost 30% of adults aged 18–27 years in 2001–2002 used some type of complementary and alternative medicine in the past 12 months. This percentage is comparable to other contemporaneous estimates of prevalence of use for adults of all ages.<sup>2,7,44</sup> In 2002, 33% and by 2007, 36% of 18- to 29-year-olds used complementary and alternative medicine based on the National Health Interview Survey data<sup>1,2</sup> and other reports have documented significant increases in complementary and alternative medicine use between 2002 and 2007.<sup>1</sup> Direct comparisons with other published reports are complicated by differences in the number and types of complementary and alternative medicine modalities included and variability in age categories presented. Additionally, earlier studies of adolescents and young adults relied on convenience samples of college students and did not collect information on as wide a variety of complementary and alternative medicine modalities as reported here.<sup>20–24</sup> Because higher levels of education are associated with increased complementary and alternative medicine use,<sup>1,7,30</sup> the findings from these earlier studies are not representative of the young adult population more generally. Overall, our findings are consistent with recent reports stating that complementary and alternative medicine users tend to be young or middle aged and less likely to be older.<sup>1,30</sup> In sum, we find that almost 1 in 3 young adults are incorporating complementary and alternative medicine into their healthy lifestyle behaviors. Additional research investigating the ways in which young adults integrate health lifestyle behaviors,

complementary and alternative medicine use, and use of conventional medicine is warranted given the public health burden of lifestyle diseases.<sup>29</sup> Because the data we analyzed are longitudinal and a fourth wave is now available, the data provide a unique opportunity for further investigation of these topics.

Compared with the 2002 National Health Interview Survey data for 18- to 29-year-olds,<sup>1</sup> our estimates of use based on National Center for Complementary and Alternative Medicine categories are slightly higher for Alternative Medical Systems and Manipulative and Body-Based Therapies, somewhat lower for Biologically-Based Therapies, and lower for Mind-Body Therapies. The survey we used did not ask about some modalities in this category that are commonly used (eg, yoga), which is a probable explanation. Overall, young adults use a diversity of complementary and alternative medicine modalities with herbs, massage, chiropractic, relaxation techniques, and vitamins being the most commonly used. Although most of the earlier studies did not report on specific complementary and alternative medicine modalities, among those who did, our estimates are comparable.<sup>1,2,5,8,31</sup>

As anticipated, our results demonstrate substantial racial and ethnic differences in complementary and alternative medicine use and underscore the importance of distinguishing Hispanic subgroups when investigating any complementary and alternative medicine use as well as use of specific modalities. Confirming earlier multivariable studies analyzing all age groups of adults, compared with whites, blacks are less likely to use any complementary and alternative medicine.<sup>1,2,5,7,30</sup> Additionally, they are less likely to use 3 of the 5 most common complementary and alternative medicine modalities (herbs, massage, or chiropractic therapies), confirming one of the few studies that looked at single modalities in a multivariable framework.<sup>8</sup> Overall, blacks also have the lowest use of each of the 15 specific modalities we considered. The current study did not include “prayer for health” as a complementary and alternative medicine modality and previous studies suggest that up to 60% of blacks report using prayer and are significantly more likely to use prayer than other racial and ethnic groups.<sup>8,14,33</sup> Thus, to the extent that “prayer for health” is considered a complementary and alternative medicine modality, complementary and alternative medicine prevalence for blacks may be underestimated.

Our results also demonstrate significant variability in the prevalence of any complementary and alternative medicine use among Hispanics based on heritage and country of origin. Cubans report the highest use of any complementary and alternative medicine and Mexicans the lowest. Our prevalence estimates are higher than those obtained by 2007 National Health Interview Survey for each Hispanic subgroup for all adults.<sup>1</sup> A partial explanation is the compositional differences in the 2 samples; our focus on young adults who tend to have higher rates of use than the general population<sup>1,2,7,30</sup> and because it is a young population, a higher percentage are United States born. Complementary and alternative medicine use tends to be less common among foreign-born individuals.<sup>8</sup> Significant differences in any complementary and alternative medicine use are maintained between Hispanic subgroups when other covariates are taken into account, suggesting that variation in socioeconomic status is not driving these effects. Compared with whites, Cubans and Central/South American Hispanics are more likely to use any type of complementary and alternative medicine. However, this was not the case for 4 of the 5 single complementary and alternative medicine modalities; Cubans and Central/South American Hispanics are more likely to use vitamins than whites. Thus, it appears that it is the difference in vitamin use that may be driving the Hispanic differences observed for “any use” of complementary and alternative medicine. An important advantage of the National Longitudinal Study of Adolescent Health is that it does include information on health and illness beliefs, which are known to be associated with complementary and alternative medicine use.<sup>45,46</sup> The current study sets the stage for more comprehensive research to better understand the underlying

reasons for these observed racial and ethnic differences in complementary and alternative medicine use. Last, our findings for the other demographic and health status variables are generally consistent with those from studies examining adults of all ages.<sup>1,2,7,8,30</sup>

This study provides an important first look at complementary and alternative medicine use among young adults; however, there are limitations beyond those already mentioned. Although the survey is longitudinal, complementary and alternative medicine information was collected at only one point in time, in 2001–2002, which is now somewhat dated. Also, the number of items included and defined as “complementary and alternative medicine” is substantially less than what is collected in the National Health Interview Survey and excludes a few items known to be commonly used, such as yoga. Thus, the prevalence may be somewhat underestimated. However, the study design and overall quality of the data make the Add Health a useful resource for continuing research on complementary and alternative medicine use among young adults.

## Conclusions

Young adults use a diversity of complementary and alternative medicine modalities and there are substantial differences in use across racial and ethnic groups. These analyses provide a detailed racial and ethnic profile of recent use. Racial and ethnic differences and other demographic factors depend on complementary and alternative medicine modality, underscoring the need to comprehensively characterize complementary and alternative medicine use.

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**Table 1**

Prevalence of Any Recent Complementary and Alternative Medicine Use and Adjusted Odds Ratios, Young Adults Aged 18 to 27 Years, National Longitudinal Study of Adolescent Health 2001–2002<sup>a</sup>

Covariates	Weighted %	Recent CAM Use (%)	Adjusted Odds Ratios
Any recent complementary and alternative medicine use	—	29.3	—
Race and ethnicity			
White	68.1	30.3 <sup>d</sup>	—
Black	16.2	21.7	0.68 <sup>d</sup>
Asian	3.8	34.7	1.20
Hispanic		(31.9)	
Mexican	7.2	28.6	1.05
Cuban	0.7	41.6	1.71 <sup>d</sup>
Puerto Rican	1.4	36.2	1.41
Central/South American	2.6	36.1	1.46 <sup>b</sup>
Nativity status			
US born	94.0	29.2	—
Foreign born	6.0	30.0	0.86
Gender			
Male	50.8	26.6 <sup>d</sup>	—
Female	49.2	32.0	1.24 <sup>d</sup>
Age (years)			
18–19	12.7	28.7	—
20–21	32.2	29.4	1.06
22–23	32.1	29.6	1.05
24–27	22.9	28.8	1.02
School enrollment			
Not enrolled	63.9	26.7 <sup>d</sup>	—
Currently enrolled	36.1	33.8	1.18 <sup>b</sup>
Years education completed			
<High school	14.2	22.7 <sup>d</sup>	—
High school graduate	33.1	24.6	1.14
Some college	38.8	33.2	1.57 <sup>c</sup>
College graduate or more	13.9	35.9	1.85 <sup>c</sup>
Personal income (\$)			
<20 000	75.0	29.1	—
20 000–49 999	23.2	29.7	1.08
50 000–74 999	1.3	31.1	1.10
75 000	0.5	28.3	0.99

Covariates	Weighted %	Recent CAM Use (%)	Adjusted Odds Ratios
Insurance			
Insured	74.4	29.9 <sup>b</sup>	—
Uninsured	25.6	27.2	1.02
Health status			
Excellent	32.4	28.1	—
Very good	41.1	29.1	1.05
Good	21.8	30.2	1.16 <sup>b</sup>
Fair	4.4	32.6	1.44 <sup>b</sup>
Poor	0.3	45.4	2.30 <sup>b</sup>

<sup>a</sup> n = 14 128. Percentages are weighted to US population estimates. Weighted logistic regression. Design-based F test for bivariate analysis.

<sup>b</sup> P .05.

<sup>c</sup> P .01.

<sup>d</sup> P .001

**Table 2**  
 Bivariate Prevalence of Recent Use by National Center for Complementary and Alternative Medicine Category and Specific Complementary and Alternative Medicine Modality, By Race and Ethnicity, Young Adults Aged 18 to 27 Years, National Longitudinal Study of Adolescent Health, 2001–2002<sup>a</sup>

Complementary and Alternative Medicine Therapy	Total (%)	White (%)	Black (%)	Asian (%)	Mexican (%)	Cuban (%)	Puerto Rican (%)	Central/South American (%)
Alternative medical systems	4.0	4.0	3.7	5.7	7.2	5.5	3.6	5.2
Traditional healers <sup>c</sup>	1.7	1.5	2.8	1.2	2.3	0.3	0.8	1.6
Homeopathic <sup>d</sup>	1.7	1.9	0.5	2.8	1.2	4.6	0.2	2.1
Acupuncture	1.0	1.0	0.6	1.7	0.6	2.5	2.5	2.2
Biologically-based therapies <sup>d</sup>	15.6	15.8	11.1	18.2	18.7	23.5	20.0	23.6
Herbs <sup>d</sup>	11.4	12.3	6.5	15.4	11.2	7.9	15.5	13.7
Vitamin therapy <sup>d</sup>	5.6	5.6	4.3	3.1	6.4	14.9	6.6	12.1
Folk medicine <sup>d</sup>	1.6	1.1	2.0	2.2	3.9	2.9	2.7	2.1
Diets	1.1	1.3	0.7	0.4	0.7	2.8	1.8	0.7
Manipulative and body-based therapies <sup>d</sup>	14.1	15.7	8.3	17.0	10.8	18.7	11.1	14.0
Massage <sup>d</sup>	9.5	10.2	6.1	12.9	7.6	12.7	8.2	10.7
Chiropractic <sup>d</sup>	7.0	8.1	3.6	5.5	5.3	11.8	5.4	4.9
Mind-body therapies <sup>c</sup>	8.2	8.9	6.3	9.0	5.0	10.3	11.6	8.0
Relaxation <sup>b</sup>	6.4	6.9	4.9	7.3	4.4	8.1	10.8	5.2
Energy healing	1.0	1.3	0.3	1.4	0.4	0.2	0.2	0.0
Support group	1.3	1.2	1.6	1.5	1.1	3.0	1.1	1.4
Guided imagery <sup>d</sup>	0.7	0.8	0.2	0.5	0.01	3.0	0.1	1.7
Biofeedback	0.4	0.5	0.01	0.5	0.01	0.0	0.0	0.2
Hypnosis	0.3	0.4	0.01	0.5	0.2	0.9	0.1	0.0

<sup>a</sup> n = 14 128. Percentages are weighted to US population estimates. Design-based Fiest for bivariate analysis.

<sup>b</sup> p .05.

<sup>c</sup> p .01.

<sup>d</sup> p .001

Table 3

Adjusted Odds Ratios of Covariates for 5 Most Common Complementary and Alternative Medicine Modalities, Young Adults Aged 18 to 27 Years, National Longitudinal Study of Adolescent Health, 2001–2002<sup>a</sup>

Covariates	Adjusted Odds Ratio				
	Herbs	Massage	Chiropractic	Relaxation	Vitamins
Race and ethnicity (white)					
Black	0.55 <sup>d</sup>	0.61 <sup>d</sup>	0.42 <sup>d</sup>	0.75	0.81
Asian	1.22	1.18	0.68	1.05	0.57
Hispanic					
Mexican	1.06	0.80	0.69	0.74	1.24
Cuban	0.62	1.29	1.54	1.25	3.12 <sup>d</sup>
Puerto Rican	1.43	0.83	0.67	1.79	1.25
Central/South American	1.27	1.12	0.65	0.81	2.63 <sup>d</sup>
Foreign born	0.90	1.01	0.84	0.79	0.78
Female	1.27 <sup>c</sup>	1.22 <sup>b</sup>	1.51 <sup>d</sup>	1.23 <sup>b</sup>	1.12
Age in years (18–19)					
20–21	1.24	0.99	1.04	0.94	1.05
22–23	1.12	1.03	1.12	0.95	1.02
24–27	0.98	1.00	1.28	1.00	1.21
Enrolled in school	1.19 <sup>d</sup>	1.09	1.19	1.24	1.15
Education completed (<high school)					
High school graduate	1.27	1.21	1.24	0.81	0.92
Some college	1.83 <sup>d</sup>	1.87 <sup>d</sup>	1.37	1.46 <sup>b</sup>	1.23
College graduate or more	2.56 <sup>d</sup>	2.02 <sup>d</sup>	1.14	1.87 <sup>c</sup>	1.26
Household income in \$ (<20 000)					
20 000–49 999	1.06	1.23 <sup>b</sup>	1.19	0.84	1.30 <sup>b</sup>
50 000–74 999	1.21	1.94 <sup>b</sup>	0.80	0.77	1.08 <sup>d</sup>
75 000	1.07	0.98	1.78	1.67	1.67
Uninsured	1.18	1.00	0.78 <sup>b</sup>	1.20	1.14
Health status (excellent)					

Covariates	Adjusted Odds Ratio				
	Herbs	Massage	Chiropractic	Relaxation	Vitamins
Very good	1.10	1.00	1.09	1.24	0.94
Good	1.39 <sup>c</sup>	1.21	1.10	1.36 <sup>b</sup>	1.08
Fair	1.26	1.51 <sup>b</sup>	1.62	1.98 <sup>c</sup>	1.11
Poor	2.21	2.83 <sup>b</sup>	3.11 <sup>b</sup>	0.99	1.04

<sup>a</sup> n = 14 128. Weighted logistic regression.

<sup>b</sup> P .05.

<sup>c</sup> P .01.

<sup>d</sup> P .001.