The Use of Traditional Vietnamese Medicine Among Vietnamese Immigrants Attending an Urban Community Health Center in the United States

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Abstract

Objectives: Little is known about Traditional Vietnamese Medicine (TVM) and its use among Vietnamese immigrants in the United States. This study aimed to characterize TVM and improve understanding of its use among Vietnamese outpatients attending an urban clinic.

Methods: This cross-sectional observation study was performed by mailing bilingual surveys to a stratified random sample of 400 Vietnamese adult patients (≥18 years of age) who had visited a community health center in Boston, Massachusetts, at least once in the prior 12 months. The data were analyzed by using descriptive and multivariable regression statistics. The use of TVM and the factors influencing their use were reported.

Results: Among the 216 respondents, 68% reported using TVM. Of those users, the median age was 56 years and 68% were female, 51% had lived in the United States for less than 13 years, and 91% spoke English “not well or not at all.” Among the 89% who reported using TVM of indigenous origin, 62% used “wind scraping,” 35% used herbal pills/products, and 30% used “wind snatching.” Sixty-one percent used therapies of foreign origin; of those, 51% used Asian-originated TVM (herbs, 25%; Eastern massage, 23%) and 38% used Western-influenced TVM (diet supplements, 28%; Western massage, 8%). TVM was mostly used for pain conditions (57%), “staying well” (38%), and cough/colds (27%). Forty-five percent ignored the question on revealing TVM use to providers; of those who answered, 57% said “no.” Fifty-one percent of TVM users reported using Western medicine for the same problem, while 46% used TVM and Western medicine within 2 days of each other. Self-rated health (odds ratio [OR], 2.61; 95% confidence interval [CI], 1.34–5.06), household size (OR, 2.09; 95% CI, 1.04–4.22), and education (OR, 2.65; 95% CI, 1.03–6.80) were associated with TVM use.

Conclusion: TVM is an important component of the healthcare of urban Vietnamese and needs to be further investigated. Healthcare providers need to encourage open discussion to better care for this population.

Introduction

THE VIETNAMESE POPULATION in the United States consists of mostly immigrants who arrived as refugees after 1975. The 2010 U.S. census listed the Vietnamese population at 1.5 million.¹ Little is known about their use of Traditional Vietnamese Medicine (TVM) or whether they adopted foreign complementary and alternative medicine (CAM), whether they discussed this use with their biomedical providers, and the factors associated with this use.

TVM, or *Thuốc Cổ Truyền* in Vietnamese, has a long history in Vietnam. It includes many indigenous folk ther-

apies and herbal medicines and practices that were influenced by contacts with other cultures, such as Chinese and, more recently, European and American cultures.^{2–5}

Many of the indigenous TVM practices are based on the belief that illnesses are caused by “toxic wind” (*Gió Độc*) that enters the body from outside. In addition, Vietnamese (and Cambodian) refugees with post-traumatic stress syndrome frequently interpreted somatic-type anxiety as disorders of “wind.”^{6,7} In fact, “wind syndromes” are now included in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*, as a key culture-bound concept of distress.⁸ At the onset of an acute condition, such as pain

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and/or fainting (often called *Trúng Gió* ["hit by the wind"]), Vietnamese frequently use counterirritant techniques, such as *Dật Gió* ("wind snatching" that uses fingers to pinch and snap away the skin), *Cạo Gió* ("wind scraping," also known as *Gua Sha* in TCM, which involves the use of a coin to scrape the skin), *Giác Hơi* (cupping), *Bấm Huyệt* (finger pressure), and *Cắt Lể* (bloodletting) to expunge the "toxic wind."^{5,9–11} These procedures are usually done by a family member.

For more severe, chronic conditions, the patients are often treated with home-prepared herbal TVM teas/soups prescribed by TVM doctors. For more common problems, patients purchase ready-made manufactured products (in the form of pills, powders, or extracts). To maintain health, Vietnamese also consume raw, dried, and fresh herbs thought to have health protection quality, as well as health tonic products that are mostly herbals, manufactured and packaged, and are claimed to improve general health. In the United States, nearly all of TVM products and foodstuffs can be bought from local grocery stores.

CAM is a term coined in the West for various therapies (e.g., acupuncture, massage, herbal medicine, and deep breathing) that are not traditionally taught in allopathic medical schools^{4,12} and may have origins in different cultures. According to the National Center for Complementary and Integrative Health Medicine, a complete system of theory and practice, such as TVM, that has evolved over time in a different culture and apart from conventional/Western medicine would fall under the umbrella of CAM in the United States as a "whole medical system."¹² TVM applies to the indigenous healing tradition of Vietnam but at this point in its long history also includes practices and theories that have been adopted and integrated from systems that derived from China and other Asian countries (e.g., Japan and India). In this article such borrowed practices are called Eastern-influenced TVM.

Certain Western CAM practices, such as dietary supplements (e.g., minerals, vitamins, fish oils) and chiropractic were introduced into Vietnam in the French colonial period and adopted by the general public. However, they are never considered parts of TVM but are used, like TVM, as alternatives to allopathic medicine. Furthermore, even though different styles

of *Bấm Huyệt* (finger pressure, acupressure), *Giác Hơi* (cupping), and *Cạo Gió* (wind scraping, coin rubbing, coining) are also practiced and shared among other ethnic groups in Eastern Asia, they are nevertheless considered by Vietnamese as being indigenous. Because of the long history of development and the vagaries and turmoil of Vietnamese history, the delineations between indigenous therapy/herbs and foreign-influenced ones can be blurry, even for TVM experts. The unique histories of families and individuals also make an absolute distinction between TVM, foreign-influenced TVM, and Western CAM associated with TVM difficult.

Ahn et al. reported that Vietnamese Americans differed from their Chinese counterparts in healthcare consumption and quality of care assessment.¹³ This and similar studies often did not carefully distinguish Chinese and Vietnamese practices of CAM from Asian practices. In addition, Ahn and colleagues' study did not consider the difference between Vietnamese and Chinese in discussing the willingness to address CAM use with biomedical providers.¹³

The relationship between indigenous TVM and foreign-influenced TVM is illustrated in Figure 1. Full descriptions of various Vietnamese healing techniques are included in the Appendix.

This study sought to understand the types of TVM, both indigenous and foreign-influenced ones, and the factors associated with its use among urban Vietnamese immigrants to address the following hypothetical questions: (1) Are Vietnamese with higher acculturation less likely to use TVM? (2) Are Vietnamese who live in larger households more likely to use TVM? (3) Are indigenous TVM non-herbal therapies, such as wind scraping and wind snatching, used with higher frequency than TVM herbal products? (4) Do Vietnamese patients discuss their use of TVM with their biomedical providers?

Materials and Methods

The survey

This cross-sectional, exploratory study sought to determine the use of TVM by adult Vietnamese patients (age 18 years or older) who had visited a community health center in Boston, Massachusetts, in the prior 12 months.

FIG. 1. Schema of Traditional Vietnamese Medicine (TVM) classifications.

Similar mail surveys have been reported to have rates of response between 45% and 54%.¹⁴ The goal for the current study was a conservative 50% response rate, and the plan was to survey 400 patients via postal mail. The survey included 69 questions about basic demographic and acculturation information, past TVM use (prior 12 months and in Vietnam), and communication with their providers about TVM.

The bilingual survey was created using the standard translation/back-translation process done by different translators. The questionnaire and letter of introduction were created in English by the lead author, who is fluent in both Vietnamese and English and versed in both cultures. They were first translated into Vietnamese, then back-translated into English. The original and the back-translated English versions were then compared for accuracy.

The survey protocol was reviewed and approved by the institutional review boards of Harvard Medical School and Boston University before the start of the project.

Indigenous TVM. The indigenous practice of wind snatching, wind scraping, cupping, bloodletting, and finger pressure were categorized as nonherbal TVM treatments, and all indigenous herbs or herbal products that were usually viewed as traditional Vietnamese herbs were categorized as herbal TVM therapies. Herbal TVM was further divided into “raw herb in tea or food” (TVM raw herb) and “manufactured herbal product” (TVM products) categories.

Foreign-influenced TVM. Many TVM practices originated from neighboring Eastern cultures, such as China, India, and Japan. Acupuncture, Eastern massage, *t'ai chi*, *qigong*, yoga, and energy-based therapies were categorized as “Eastern-influenced nonherbal TVM.” Royal jelly, ginseng, green tea, herbal soup mix, reishi mushroom, and *he show wo* (Chinese knotweed, *Polygonum multiflorum*), wolfberry (goji berry, *Fructus licii*), and *dong quai* (female ginseng, *Radix Angeliae sinensis*) were categorized as “Eastern-influenced herbal TVM” because they clearly were borrowed from China (sometimes centuries ago). Western massage, chiropractic manipulation, and dietary supplements (vitamins and fish oils) were categorized as “Western-influenced TVM.”

Data collection

A total of 1540 patients met the inclusion criteria. The list was stratified on the basis of sex, age (young, middle-age, and old), and number of visits (one and two or more), then weighted sampling method was used to select 400 for the study. Each person was mailed a bilingual survey package and followed up 8 weeks later with three weekly reminders to nonrespondents. The information on the returned survey was entered into an Access database (Microsoft Corp., Redmond, WA) and exported to SAS system for analysis (SAS Institute, Carey, NC).

Analysis

Descriptive analysis and multivariable modeling were used to analyze the data. In the multivariable modeling process, missing data were excluded and median and mode were used as thresholds to dichotomize variables such as age, years lived in the United States, language skills, and education levels.

Logistic regression was used to model the respondent's likelihood of using TVM. Age, sex, and self-reported health status were included as independent variables in this model. Bivariable logistic regression was performed on all relevant covariates, and variables with $p \leq 0.20$ were selected for the forward stepwise modeling process. The likelihood ratio (G) test was used to evaluate the interim nested models, and the covariates that improved the model and helped with addressing the hypotheses were retained. To assess collinearity, the models were examined for covariates with large variance proportions and those with condition index >30 . The following are reported: Wald p -values, odd ratios (ORs), and 95% confidence intervals (CIs) of the ratios for each covariate and predictor in the models using the Taylor linearization method to estimate variances. The SAS-callable SUDAAN v10.0 (RTI, Research Triangle Park, NC) analytic software and SAS 9.2 statistical software were used.

Results

Two-hundred and fifty-six surveys were returned ($n=216$). Sixty-four percent of the respondents were female, 71% were 57 years of age or older, and 93% were born in Vietnam. Fifty-two percent lived in a household of four or more, and 59% reported their health as “poor or fair” (more characteristics are in Table 1). Sixty-eight percent of the respondents used TVM. Among them, 89% used indigenous TVM and 61% used foreign-influenced TVM (more uses appear in Table 2). Aging-related problems were the most often cited reasons for TVM use: Health maintenance (38%), muscle and joint pain (32%), and back pain (28%) were the top three (see Table 3 for additional reasons).

Characteristics of TVM users

The majority of TVM users were female (68%) and had been in the United States about 4 years less than the nonusers. TVM users were about 4 years younger and reported poor/fair health more frequently than nonusers. The same ratios of users and nonusers had low English-language ability. However, more users reported a higher level of U.S. education, speaking Vietnamese well, and living in a larger household.

On average, each user used 2.2 types of TVM in the prior year. The 18- to 39-year-old age group had the highest average use of TVM (Table 4, Fig. 2). About half of TVM users reported also using Western biomedical medicine for the same health problem and 46% of users used both within 2 days of each other.

Nearly half (45%) of the respondents declined to answer the question on their willingness to discuss their TVM use. Among those who answered, 57% of TVM users and 75% of the nonusers replied “No.”

Logistic modeling of TVM use

After adjustment for age and sex, self-rated health (OR, 2.61), size of household (OR, 2.09), and highest level of education in the United States (OR, 2.65) were significantly associated with TVM use. On the other hand, the following were not associated with TVM use in bivariable models: weekly income, health insurance status, years lived in the United States, U.S. education level, English-language

TABLE 1. CHARACTERISTICS OF USERS AND NONUSERS OF TRADITIONAL VIETNAMESE MEDICINE

<i>Characteristics (n=216)^a</i>	<i>TVM users (n=143 [67.6%^b])</i>	<i>Non-TVM users (n=73 [32.4%^b])</i>
Language of the returned survey		
Vietnamese	121 (84.9)	59 (82.4)
English	22 (15.1)	14 (17.6)
Sex		
Female	96 (68.3)	43 (57.6)
Male	47 (31.7)	30 (42.4)
Age		
Median (Q1, Q3) (y)	56.2 (40.7, 63.8)	60.3 (51.2, 68.2)
<57 y	67 (49.1)	24 (37.4)
≥57 y	71 (50.9)	38 (62.6)
Years lived in United States		
Median (Q1, Q3) (y)	11.5 (4.7, 18.2)	15.2 (4.6, 18.0)
<13 y	68 (51.4)	25 (42.4)
≥13 y	65 (48.6)	35 (57.6)
Need translator for office visits		
Yes	113 (80.5)	53 (74.9)
Language most spoken at home		
Vietnamese	138 (97.2)	62 (92.4)
English/other	4 (2.8)	5 (7.6)
Language most comfortable speaking		
Vietnamese	137 (97.0)	57 (86.6)
English/other	5 (3.0)	9 (13.4)
Highest education level in Vietnam		
None, grade 1–8 or less	84 (59.5)	40 (63.0)
Some high school or higher	58 (40.5)	23 (37.0)
Highest education level in United States		
None, adult, or trade education	114 (82.6)	54 (89.0)
Grades 1–8 or higher	24 (17.4)	7 (11.0)
Ability to speak Vietnamese		
Well or very well	125 (90.5)	53 (80.9)
Not well or not at all	15 (9.5)	13 (19.1)
Ability to read Vietnamese		
Well or very well	111 (78.3)	45 (68.5)
Not well or not at all	30 (21.7)	20 (31.5)
Ability to speak English		
Well or very well	13 (9.4)	6 (9.4)
Not well or not at all	124 (90.6)	57 (90.6)
Ability to read English		
Well or very well	16 (11.7)	5 (8.1)
Not well or not at all	122 (88.3)	58 (91.9)
Weekly income ^c		
<\$600	98 (71.5)	45 (76.5)
≥\$600	38 (28.5)	14 (23.5)
Size of household		
<4 members	64 (44.8)	39 (62.0)
≥4 members	77 (55.2)	25 (38.0)
Self-reported health status		
Excellent, very good, or good	49 (33.3)	30 (47.7)
Fair or poor	93 (66.7)	35 (52.3)
Health insurance		
Yes	117 (83.9)	52 (77.0)
No or unknown	22 (16.1)	16 (23.0)
Need prescription medications		
Yes	49 (34.5)	31 (42.8)
Use of traditional medicine in Vietnam		
Never or sometimes	16 (11.8)	28 (44.0)
Usually or always	124 (88.2)	34 (56.0)
Use CAM of foreign origin	62 (44.1)	11 (14.3)
Reveal to providers if used TVM ^d		
Yes	42 (43.1)	6 (25.6)
No	55 (56.9)	16 (74.4)

Unless otherwise noted, values are expressed as number (percentage of total).

^aNot all questions were answered.

^bPercentages calculated using SAS Crosstab procedure, which takes into account sampling error.

^cIncome question was answered by 195 respondents (90%).

^dForty-five percent of respondents declined to answer this question.

TVM, Traditional Vietnamese Medicine; Q1, Q3, first and third quartiles; CAM, complementary and alternative medicine.

TABLE 2. TYPE AND FREQUENCY OF TVM USE

Type (n = 216)	Users (n = 143 [66.2%]), n (%)
TVM, indigenous, all	127 (88.8)
TVM, nonherbal therapy ^a	103 (72.0)
Wind scraping	89 (62.2)
Wind snatching	43 (30.1)
Cupping	27 (18.9)
Acupressure	14 (9.8)
Blood letting	6 (4.2)
TVM, herbal therapy ^b	70 (49.0)
Herbal pills/products	50 (35.0)
Herbs fresh/dried	35 (24.5)
TVM, foreign origins, all	91 (63.6)
Eastern-influenced TVM ^{c,d}	73 (51.0)
Eastern-influenced herbs ^d	36 (25.2)
Eastern massages	33 (23.1)
<i>T'ai chi</i>	13 (9.1)
<i>Qigong</i> , yoga, and meditation	11 (7.7)
Acupuncture	12 (8.4)
Energy based	4 (2.8)
Western-influenced TVM ^e	54 (37.8)
Diet supplement	40 (28.0)
Western massage	12 (8.4)
Chiropractic and osteopathic manipulation	6 (4.2)

Values are expressed as number (percentage of total).

^aNonherbal TVM therapies include wind scraping, wind snatching, cupping, acupressure, and bloodletting.

^bTraditional Vietnamese herbs and herbal products are herbs or manufactured products found in Vietnamese markets or marketed exclusively through Vietnamese marketing channels.

^cEastern-influenced therapies included Oriental massage, *t'ai chi*, *qigong*/yoga/acupuncture, and energy healing.

^dEastern-influenced herbal products included royal jelly, tiger bone extract, herbs (such as ginseng, green tea, garlic, herbal soup mix, reishi mushroom, and *he show wo*), and herbs that are commonly used in Traditional Chinese Medicine.

^eWestern-influenced category included Western-influenced TVM, such as Western massage, chiropractic manipulation, dietary supplements/fish oils, and the herb acai berries.

ability, need for a translator, Vietnam education level, Vietnamese-language ability, language of returned survey, language spoken at home, language comfortable speaking, region lived in Vietnam, ethnic group (in Vietnam), number of prior medical visits, and communication with providers about TVM use.

In the exploratory analysis, years lived in the United States, a variable that was not significant in the bivariable model, was included in a model to predict the use of TVM. A trend was seen for TVM use in respondents who had lived in the United States longer than 13 years (OR, 2.86; 95% CI, 0.98–8.33; $p=0.054$) and those younger than 57 years of age (OR, 2.17; 95% CI, 1.00–4.73; $p=0.050$). The logistic model is presented in Table 5.

Discussion

This appears to be the first study to report the use of TVM (68%) in urban Vietnamese patients and use multivariable analysis to predict the use of TVM.

TABLE 3. REASONS FOR TVM USE

Reasons (n = 216)	Respondents (n = 143 [67.6%]), n (%)
Age-related	
Health maintenance (to stay well)	55 (38.2)
Energy improvement	18 (12.6)
Memory boosting	17 (11.7)
Hair problem	11 (6.9)
Eye problem	10 (6.7)
Bone loss	6 (3.9)
Sexual problem	2 (1.4)
Pain	
Muscle/joint/rheumatism pain	44 (32.0)
Back pain	41 (28.7)
Headache	26 (18.6)
Lung	
Cough and cold	40 (26.8)
Cough and asthma	6 (3.9)
Cardiovascular	
Blood pressure	29 (19.2)
Cholesterol	27 (17.5)
Gastrointestinal	
Stomach pain	15 (11.1)
Digestive issues	12 (9.1)
Immunity	
Allergy	18 (12.3)
Tumor and cancer	3 (1.6)
Habit/behavior	
Weight control	15 (10.7)
Smoking cessation	11 (7.9)
Alcohol abuse	10 (6.7)
Kidney	
Kidney: others	5 (3.7)
Kidney stone	2 (1.4)
Liver	
Liver cleansing	6 (4.2)
Hepatitis	4 (3.2)
Others	
Insomnia	24 (17.9)
Diabetes	18 (12.7)
Fever	14 (9.2)
Skin	7 (5.1)
Menstruation	5 (3.7)

Values are expressed as number (percentage of total).

Is acculturation associated with less TVM use?

Previous reports indicated that ethnic CAM use by immigrants abates as people acculturated into the mainstream society.^{13,15,16} For the current study, the hypothesis was that the longer Vietnamese live in the United States, the higher education level they will achieve and the less likely they will be to use TVM.

Although the logistic model did not show age as a significant factor in TVM use, the data (Table 4) suggest that younger users tend to use TVM more than older ones. An explanation may be that younger patients perhaps have less serious illness than older ones that can be treated by TVM.

TABLE 4. DISTRIBUTION OF TVM USE BY AGE GROUP

Age group (y)	Average no. of TVM types used $\pm$ SD	Maximum no. of TVM types used	Total no. of TVM types used	Respondents (n)
Unknown	1.75 $\pm$ 0.50	2	7	4
18–39	2.62 $\pm$ 2.52	13	68	26
40–64	2.26 $\pm$ 1.44	6	158	70
65–74	1.90 $\pm$ 1.08	4	55	29
>74	1.82 $\pm$ 1.33	5	20	11

SD, standard deviation.

The “average” users (those whose demographic characteristics are defined by the medians), despite having lived in the United States for less time than the nonusers, felt more comfortable speaking Vietnamese and more often have achieved higher education in the U.S. than the non-users. It may be that the more acculturated Vietnamese are the more they may want to connect to their heritage. Or it may be a case of having more expendable income and not having to rely on the free care for conditions that cannot be satisfactorily addressed by Western cures. Another possibility is that this finding is due to confounding among the included variables and other yet unidentified ethnic characteristics. More research may help clarify this result.

Overall, the data analysis seems to counter the hypothesis and suggest the conclusion that, in this population, Vietnamese who live longer in the United States are more likely to use TVM. Such Vietnamese may have more discretionary income.

Is larger family size associated with more TVM use?

Even though a study of African Americans reported that smaller household was associated with CAM use,¹⁷ the current study hypothesized to the contrary and found that Vietnamese respondents who lived in a household of four or more were twice as likely to use TVM as those who did not.

The contrary finding probably stemmed from the cultural and background differences between the two populations.

FIG. 2. Average TVM use by age group.

Some immigrants in the United States live in crowded housing,¹⁸ and many view their “large” families as part of a social network of support that helps them adjust to the new environment.^{19,20} The large family size of the respondents is somewhat similar to the size of the traditional extended household in Vietnam and thus motivates the preservation of traditional values that become “social capital,” which is critical for the successful adaptation to the new society.²¹ These traditional values, in the authors’ opinion, include the use of traditional, “tried-and-true” therapies intimately performed by members of one’s own family in the vulnerable time of illness. The findings seem to confirm the hypothesis.

TABLE 5. LOGISTIC MODEL OF TVM USE

Independent variables ($p < 0.001$)	Odds ratio (95% confidence interval)	p-Value
Age ^a		0.268
< 57 y	1.52 (0.72–3.21)	
≥ 57 y	1.00	
Sex		0.209
Female	1.54 (0.78–3.02)	
Male	1.00	
Health status ^a		0.005
Fair or poor	2.61 (1.34–5.06)	
Excellent, very good, or good	1.00	
Size of household		0.040
≥ 4 members	2.09 (1.04–4.22)	
< 4 members	1.00	
Highest education in United States		0.043
Grade 1–8, high school, or higher	2.65 (1.03–6.80)	
None, adult, or trade education ^b	1.00	

^aIn the sensitivity analysis, “highest education in United States” was replaced with “years lived in United States,” “Age” became significant (odds ratio [OR], 2.17; 95% confidence interval [CI], 1.00–4.73; $p = 0.050$), and other variables remain unchanged in significance. Respondents who had lived longer than 13 years in the United States were more likely (OR, 2.86; 95% CI, 0.98–8.33; $p = 0.054$) to report TVM use than those who did not.

^bUnlike in the general U.S. population, among the Vietnamese population, adult education and trade schools (mostly English-language and training programs such as nail technician schools) are primarily attended by adults with little or no English-language ability.

FIG. 3. Wind scratching and wind snatching.

Is nonherbal TVM technique used more often than herbal TVM?

Nonherbal TVM use surpassed herbal TVM use by a large margin (72% vs. 49%). The main reason for this, perhaps, is the convenience of nonherbal TVM practices, which do not require much beyond the basic knowhow and use of one's hands and simple tools. Herbal TVM use requires more knowledge and preparation. TVM manufactured products, although more expensive than TVM raw herbs, required no preparation and were used more often.

Do Vietnamese patients discuss their use of TVM with their biomedical providers?

Half of the users (51%) reported using both TVM and biomedical drugs for the same health problem, and nearly all of them (46%) used them within 2 days of each other. This concurrent use poses potentially serious drug interaction and allergy issues.

In a previous report, few Asian users of CAM (8%) discussed their CAM use with their providers.¹³ In the current study, about 22% of the respondents indicated a willingness to discuss their TVM use; although the survey was assured to be anonymous, 45% declined to answer the question. This unusually large number of respondents declining to answer begs for an explanation. Given the cultural tendency of Vietnamese refugees to avoid confrontation, it is possible that this 45% group did not answer the question to avoid saying "no." Overall, the survey results seem to suggest a level of distrust between the Vietnamese patients and their healthcare providers regarding their use of traditional medicine.

Given the high level of TVM use among Vietnamese patients, the lack of information about TVM and their use of TVM may lead healthcare providers to make incorrect clinical decisions. Examples include wrongly accusing

family members of physical abuse²² for markings on the patient's body that were caused by normative use of TVM practices (Figs. 3 and 4), unknowingly prescribing medicine that might have a severe reaction with the TVM, and misdiagnosing the cause of a patient's unusual symptoms.^{23–25} To fully address this issue, further studies are needed to (1) identify the types of TVM that have potentials for harm; (2) identify the reasons why Vietnamese patients do not reveal their TVM use; and (3) determine the cultural, social, and knowledge barriers and ways to overcome them.

Limitations

This study has some limitations. Perhaps the questionnaires should have been more careful about making the distinction between indigenous and foreign-originated TVM. However, it would be likely that the respondents may have been confused by being asked to make this distinction. The study surveyed Vietnamese living in a metropolitan area with cultural and commercial communities for social support²¹; thus, we cannot comment on Vietnamese living in the rural United States. Additionally, the sample includes Vietnamese patients of an underserved community health center who are mostly older, are in poor health, and have low income.

The 50% return rate might bias the response toward older, stay-at-home responders, who tend to have less educational and work experience in the United States. Thus, the conclusion might not be generalized to Vietnamese who live in more affluent community, have higher income, and are healthier. Furthermore, the CAM modalities popularly used among other U.S. ethnic groups may have been introduced to Vietnamese U.S. residents and, therefore, may have induced some bias on the relationship between TVM use and acculturation found here. Even though the respondents included many write-in answers, the results are constrained by the therapies and practices listed on the survey. Although patients were assured of the confidentiality of their answers, this concern might still prevent them from answering question regarding their care providers.

Conclusions

TVM use is prevalent in Vietnamese immigrants in the Boston area, especially among those who report poor or fair health. The likelihood for this use seems to increase with the household size or with a U.S. education. Concurrent use of TVM with biomedical drugs is an issue of concern. Although Vietnamese patients are reluctant in revealing their use of TVM, it is important for providers to include TVM in their discussion with Vietnamese patients. More research on TVM and how it is used is warranted to provide better and safer care for this patient population.

FIG. 4. Cupping performed by a family member.

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Author Disclosure Statement

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Appendix

Wind snatching (*Dật gió*) involves the use of the finger tips, frequently the thumb and index or middle finger, or the second phalanges of the index and middle fingers, to pinch the skin, jerk away, and let the skin slip off the pinched fingers and rebound to its original shape. For headache, it is usually done in between the eyebrows or in the temple; for neck pain, cough, or nausea, it is done in a horizontal row on the neck or the dimple above the sternum (the supra-sternal, or jugular, notch) (Fig. 3).

Wind scraping (*Cạo gió*), also known as coining, similar to *Gua Sha* in Chinese medicine, is the practice of rubbing the skin with oils (usually medicinal oils, or in some situations, kerosene, or water) before scraping the area with the side of a coin the size of a quarter; sometimes it is done with a spoon or even the top side of the thumb's or index finger's nail. Wind scraping is not to be done over bony areas. For general malaise, back pain, or stomach pain, scraping is usually performed on the back, with downward motion on both the meaty parts on either side of the spine and diagonal motion, from the spine outward in the direction of the ribs. For cough or chest pain, it is done on the chest, in a wheel-spoke pattern from the top of the sternum. For cough and nausea, it is done at the jugular notch, down the sternum, and/or in the fossa above and below the clavicles (Fig. 3).

It is believed that when the patient caught "bad winds," he or she would not feel the pain or the tickle sensation caused by the scraping or snatching and the site would become deeper red, instead of pinkish. The deeper the redness, the more severe the bad winds and the more of the bad wind was removed. However, the procedure leaves ecchymosis or streaks of red hematoma that eventually turn yellow and last up to 10 days. Wind scraping on the front of the body is often done by the patients themselves, while scraping on the back side, or hard-to-reach areas, is done by friends or relatives. This is occasionally done in traditional medicine clinics in Vietnam.

Cupping (*Giác hơi*) involves the use of partially vacuumed glass cups or large bamboo tubes on the skin to "suck out" the bad wind. The therapist creates a vacuum inside the cup or tube by waving flaming alcohol-laden cotton balls inside them or, in the case of test tube-sized bamboo tubes (5 cm long and 1.5 cm in diameter) by boiling them in water, before applying them to the affected area. To relieve pain and malaise, cupping is done frequently on the back and chest or, much less frequently, on joints. The cup or tube is left in place for 5–10 minutes before being snapped off, creating a popping sound. Sometimes, the cup is dragged along the back or arms and then snapped off the skin to enhance their therapeutic effects. Cupping leaves circles of dark red marks caused by broken capillaries

that remain for weeks. Cupping is usually done by a paid, experienced person in the patient's home or a formally trained practitioner in a traditional medicine clinic. In rare cases, it is done by a family member. Blisters, burns, and thrombocytopenia have been reported to be associated with cupping.^{26,27} Many medical traditions, including Western, have used cupping but the Vietnamese consider this a Vietnamese practice.²⁸ (See Fig. 4.)

Bloodletting (*Cắt lể*) is the practice of pinching and making small cuts, 2–5 mm long, on the skin with a shard of glass or a razor blade and removing a few drops of blood from each site. The cutting instrument is usually seconds. A few drops of blood are usually extracted from each site by squeezing the incision between the thumb and fingers. Sometimes, boiled, hot bamboo tube or vacuumed glass cup was put over the incisions to extract more blood to enhance the effect. This practice sometimes leaves permanent scars and, occasionally, serious infections.¹⁰ Again, this practice can be found in many cultures and historical periods, but the Vietnamese consider it indigenous.²⁹

Acupressure (*Bấm Huyệt*) practice is rooted in acupuncture and reflexology but is done without the use of needles. It involves primarily the use of the tips of the thumb or index finger to press at acupressure points on the body to regulate and rechannel the *qi* energy to the affected areas. In techniques such as *Điện chẩn* (facial acupressure), special tools with smaller tips and contact surfaces 2–3 mm in diameter are used in addition to the thumb and finger tips to stimulate the points on the face and head. Some therapists even use modified hot hair-curling irons to simulate the effect of moxibustion or small electric vibrators to stimulate the pressure points. Acupressure is usually done on the hands and arms, face and head, more frequently on the back and the chest, and sometimes legs and feet, to treat many types of illnesses. Acupressure was usually done by hired, trained experts in a home or clinic setting. No serious side effects were found to be associated with the practice of acupressure.³⁰ While ideas concerning acupuncture are undoubtedly originally from China, Vietnamese consider acupressure an innovative, indigenous practice.

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