

Use of Traditional Medicine by Immigrant Chinese Patients

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Background: Chinese immigrants constitute the largest group of foreign-born Asians living in the United States. Knowledge of their use of traditional Chinese medicine (TCM) is limited. A survey was conducted to determine their TCM use and to evaluate physician awareness of these practices. **Methods:** Structured interviews were conducted with 198 Chinese immigrant patients, and a survey was administered to 17 physicians in two federally funded community health clinics. **Results:** Nearly 100% of the patients had used TCM during the previous year, mostly for musculoskeletal or abdominal pain, fatigue, and health maintenance. Self-medication with herbal products was the most common (93% at least once, 43% weekly). A smaller number (23%) had used herbs prescribed by a TCM provider. Use of acupuncture was less common (14%), although higher than the national average. Most patients indicated a preference to consult Western physicians for acute infections. Only 5% reported that their physicians had ever asked about their use of TCM. By contrast, 77% of physicians reported that they "usually or sometimes" asked about TCM use. **Conclusions:** Results suggest that these patients used TCM, primarily self-prescribed over-the-counter herbal preparations, for many health problems. Information about use was not shared with their physicians, nor did patients perceive their doctors as soliciting sufficient information on TCM use. Physician education in this area may be warranted.

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Today there are more than 2.7 million Chinese residing in the United States, the largest foreign-born Asian subgroup.¹ Chinese immigrants brought with them many important customs and traditions, including their traditional medical practices. Traditional Chinese medicine (TCM) includes the use of acupuncture, herbs, massage (*tuina*), therapeutic exercise (*qigong*), diet, and other forms of healing. As an integral part of Chinese culture for thousands of years, TCM has coexisted with Western medicine (WM) in China for well over a century.²

In contrast to WM, which tends to view health as an absence of disease, TCM practitioners view health as a state of balance of the individual's body, mind, and environment. Many ethnic Chinese believe that TCM

treats the underlying causes of disease, leading to more permanent cures or long-term remissions compared to WM. TCM is therefore seen as more effective than WM for managing chronic diseases. Indeed, increasingly well-controlled clinical trials are showing benefits for some TCM acupuncture and herbal treatments for a variety of clinical problems, including pain,^{3,4} irritable bowel syndrome,⁵ cardiovascular diseases,⁶ and dermatologic conditions.⁷ On the other hand, WM is generally viewed by Chinese as more effective in acute situations such as surgery and treatment of infectious diseases.⁸

Until recently, little has been known of the population-specific use of TCM by Chinese Americans. In the past several years, however, due to growing interest in complementary and alternative medicine (CAM), information on the use of CAM in general has increased as has specific information on aspects of TCM use by Chinese. For example, a study by Ahn et al⁹ found that in a sample of 3,258 Chinese and Vietnamese Americans with limited English proficiency, approximately 60% reported that they had used TCM-related CAM therapies.

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Also, a recent 2002 National Health Interview Survey (NHIS) supplement on CAM use reported that 4.1% of the US adult population had used acupuncture at some time, and 1.1% had used acupuncture in the previous year.¹⁰ A secondary analysis of the acupuncture data from the NHIS dataset found that Asian females were significantly more likely to use acupuncture than any other group.¹¹ Although more information is becoming available, use of traditional medicine by Chinese Americans is still not well documented.

Evidence suggests that there is considerable miscommunication or lack of communication between physicians and patients regarding the use of CAM therapies, such as TCM.^{12,13} It is likely that many Chinese American patients use TCM without informing their physicians. This issue may be even more pronounced with non-English speaking immigrant patient populations.⁹ Communication about the use of herbs is important because some of them may present potential risks from possible side effects, interactions, and toxicity.

Despite growing evidence of clinical efficacy, other studies have reported a number of serious adverse drug reactions (ADRs) from some TCMs. For example, in-vitro findings have suggested that some traditional herbal treatments can inhibit human cytochrome P450 2C9, 2C19, 2D6, and 3A4 mediated metabolism.¹⁴ Of 35 Chinese patients admitted to a medical unit for drug interactions, 19 received drugs or folk medicines that could interact with warfarin.¹⁵ In Europe, more than 100 cases of nephropathy had been reported resulting largely from a manufacturer's improper substitution of *Aristolochia fangchi* for *Stephania tetrandra* in a weight-loss formula. *Aristolochia fangchi* contains the known nephrotoxin aristolochic acid.¹⁶ Infants and children may be more susceptible than adults to some adverse effects.¹⁷ Some Chinese topical herbal preparations have also been associated with adverse effects.¹⁸ Although the number of deaths due to TCM ADRs is few in comparison to those estimated for Western medications,¹⁹⁻²¹ there is a need for additional knowledge regarding patient use and provider awareness.

A recent study surveyed a sample of limited-English-proficiency Asian American patients to examine patient-provider communication about CAM use. The study found a positive relationship between discussing CAM use with the clinic physician and having a higher overall rating of visit quality. In addition, these patients reported such discussions are typically infrequent.⁹ Given the potential for herb-drug interactions and related concerns, effective patient-provider communication about TCM use with Chinese patients, especially patients with limited education and limited English proficiency, is important. What is needed in the literature is information on the specific use of TCM products and services in this community and on the related patient-provider communication on such usage.

For this reason, we conducted an investigation to (1) assess the prevalence of TCM use among Chinese patients at two federally funded community clinic sites in San Francisco, (2) explore patterns of use of both TCM and WM for a variety of common clinical problems, and (3) to assess the extent to which Western-trained physicians working in this clinic asked patients about TCM use and patients' perceptions of this communication. We hypothesized that TCM use would be common, and patient-provider communication related to use would be limited.

Methods

Setting

The investigation took place at two clinic sites of the largest nonprofit federally funded community health center in San Francisco. The center primarily serves the local Chinese immigrant community with bilingual staff members. They provide affordable (sliding scale, acceptance of many types of insurance, and free service for the homeless), comprehensive health care to a primarily low-income population. Services include primary and specialty medical care. Acupuncture services were provided a half day per week.

Patient Recruitment and Interviews

Data were collected over a 5-week period during the summer of 2003. A convenience sample was obtained by inviting adult patients, including pregnant women, who presented at the clinic to participate in an interview in the dialect of their choice. The purpose of the interviews was explained to patients both verbally and in written form. Interested patients were invited to participate in an individual interview with one of the investigators in a private area adjacent to the waiting room or in an examination room. Since the clinic serves a population of Chinese-speaking patients with very limited English proficiency, interviews were conducted predominantly in Cantonese or Mandarin. Patients were reassured that the degree of participation would not affect their medical care in any way. Institutional Review Board approval for human subject studies was obtained prior to the start of this investigation.

Patient Questionnaire

A 38-question structured interview was used to collect data from patients. The questionnaire contained general demographic questions related to age, educational attainment, ethnicity, primary language, and extent of acculturation. Patients were asked specific questions regarding the use of various TCM methods, including acupuncture, herbal medicines prescribed by a TCM practitioner, and self-medication use of TCM herbal products and topical applications. Questions regarding herb use were general rather than specific to the use of any particular herbs.

Patients were also asked the frequency with which they used each therapy and whether they would elect a TCM or WM treatment (if any) given specific symptoms. The final set of questions asked about the use of WM, including the frequency with which the patient had visited general medical practitioners and specialists within the previous 12 months.

Physician Questionnaire

The investigation also included a questionnaire completed by a convenience sample of physicians at the clinic. This questionnaire inquired about the physicians' familiarity with TCM, how often they asked their patients about TCM use, and how much, if any, they felt TCM needed to be incorporated into the training of Western physicians. Seventeen staff adult care physicians who were available during the 2-day data collection period completed the questionnaire (100% response rate).

Results

Patient Demographics

Of 205 patients invited to participate, five declined and two were unable to complete the questionnaire (96.6% response rate). The demographics of the study population are shown in Table 1. Of the 198 participants, 123 (62%) were female, and 75 (38%) were male. The majority were born in China (78%), followed by Hong Kong SAR (11%), and then countries outside of China such as Taiwan, Malaysia, and also the United States. Age groups were equally distributed among younger, middle-aged, and older adults. Consistent with the demographics within the clinic patient population, 30% of participants had lived in the United States for less than 5 years, 23% between 5 to 10 years, and 47% more than 10 years.

Although Mandarin is the main Chinese dialect in China, the primary language spoken at home by these patients was Cantonese (72%), followed by Mandarin (12%), and other Chinese dialects (eg, Shanghainese, Taishanese) spoken by 16% of the sample. Only 29% reported that they were able to speak English, and none indicated a preference for speaking English (Table 1).

Patients' TCM Use

Almost all (98%) of the participants reported the use of at least one TCM therapy at least once during the previous year, including oral and topical herbal products both prescribed or self purchased, acupuncture, massage therapy, tai chi, and others (Table 2). The most commonly used TCM was self-medication with herbal remedies for musculoskeletal pain, abdominal pain, general malaise, and as a health-promoting tonic (Figure 1). Participants self-medicated with herbal preparations at least once during the previous year (93%), and many did so at least weekly (43%). A smaller

percentage (33%) had also used herbs prescribed by a TCM practitioner (usually for more-chronic and severe health issues), with 23% reporting use of prescribed herbals at least once a week. Self-medication with topical TCM preparations was also common for a variety of symptoms, including dizziness, headache, sinus congestion, and musculoskeletal pains, as reported by 68% of these patients during the previous year. Other forms of TCM were used less frequently than herbs, such as acupuncture (14%).

For symptoms such as runny nose, cough, headache, fever, and dizziness, there was a tendency toward self-medication either with TCM or WM, rather than to consult with any kind of practitioner (Figure 1). For joint and abdominal pain, there was a preference for self-medication with TCM. For chest pain, on the other hand, there was a strong preference to see a WM doctor (71%). There was a tendency to not seek any treatment for depression (73%). Overall, there appeared to be a preference to see Western MDs rather than TCM providers (average of 53% versus 28%). When asked if any Western MD had ever inquired about the use of TCM within the last year, 95% indicated that they had not been asked.

Table 1
Patient Characteristics, n=198

<i>Characteristics</i>	<i>Findings (%)</i>
Gender, male/female	38/62
Age, years	
19–44	34
45–64	35
≥ 65	31
Education	
Elementary, 0–5th grade	27
Junior high school, 6th–8th grade	20
High school, 9th–12th grade	31
College	22
Place of birth	
China	78
Hong Kong SAR	11
Others (One US-born participant)	11
Years spent in United States	
< 5	30
5–10	23
> 10	47
Fluent in English	29
Uninsured	45

Table 2

Traditional Chinese Medicine Uses by Patients
in the Previous Year

Modalities	Past Year (%)
Any (n=198)	98*
Herbal products, self-medication	93
Herbal topicals, self-medication	68
Herbal medications, prescribed	33
Acupuncture	14
Massage therapy	12
Tai Chi	11
Herbal topicals, prescribed	7
Others (including qigong, moxibustion, and other forms of unspecified exercises)	12

* Because patients were allowed to give multiple responses, column does not total this figure.

Physician Demographics

Of all eligible staff physicians working at the clinic, 17 physicians completed the questionnaire (100% response rate). Of these, 16 were ethnic Chinese (94%), 13 were born overseas (76%), and 12 (71%) attended medical school in the United States. The physicians were predominantly male (71%) and ranged in age from 31 to 57 (Table 3).

Physician Attitudes and Knowledge of TCM

The clinic physicians reported that at least 75% of their patients were Chinese. In response to asking, "How important do you think TCM is to your Chinese patients?" the majority of physicians reported that it was "somewhat" to "quite important" (score 3–4 on a 5-point scale, with 1 indicating "not all that important" to 5 indicating "very important"). Using a similar 5-point scale, about 25% of the physicians reported that they never or rarely (score 1–2) asked their patients about the patient's use of TCM during the previous year. The majority, however, stated that they sometimes or usually asked (score 3–4). None of them always asked every patient. The majority (71%) reported that they never or rarely encouraged their patients to use TCM. When asked how often physicians themselves used

Figure 1

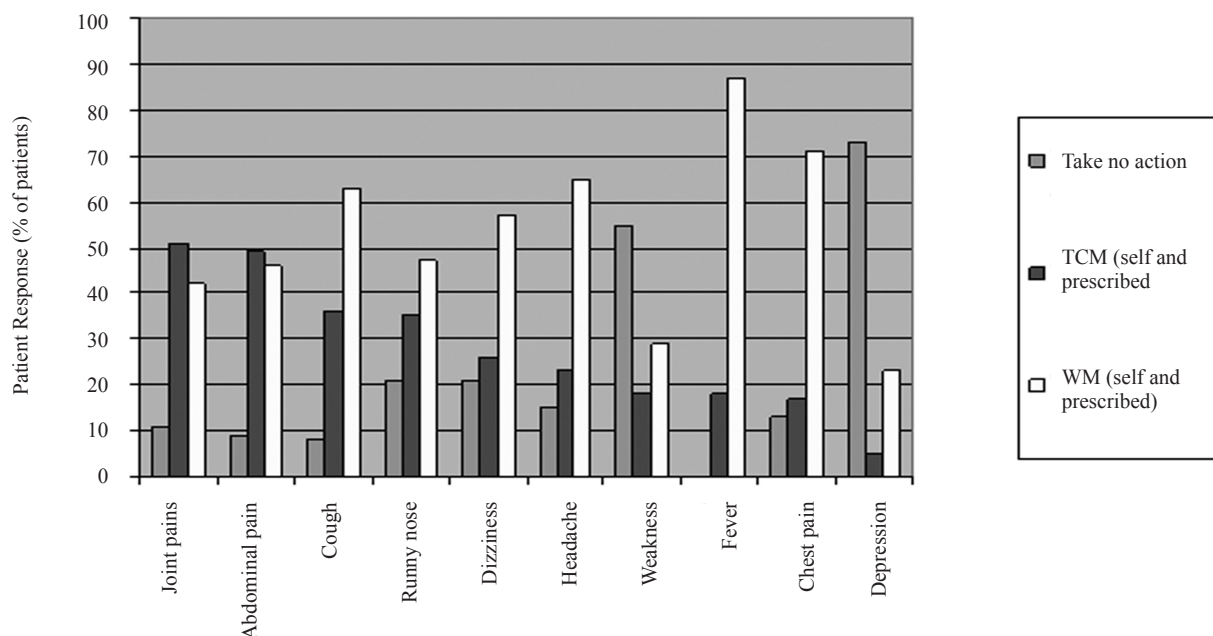
Therapy Choice for Common Symptoms: Traditional Chinese
Medicine (TCM) Versus Western Medicine (WM)

Table 3

Physician Characteristics, n=17

Characteristics	Findings (%)
Gender, male/female	71/29
Age, years	
25–35	18
36–45	47
46–57	35
Place of birth	
United States	24
China, Hong Kong SAR, Taiwan	35
Vietnam, Burma, Korea, Canada	41
Number of years in United States	
10–20	18
> 20	82
First language learned	
English	18
Cantonese and/or Mandarin	59
Other	23
Location of medical education	
United States	71
Asia	29
Licensed in:	
Primary care	71
Specialty	29

TCM therapies, approximately 80% reported never or rarely. Only two physicians (12%) felt that their medical training in alternative medicine was adequate. Similarly, only two physicians (12%) learned about TCM during their medical training.

Conclusions

Among a population of low-income Chinese immigrants in San Francisco, almost all had used some form of TCM during the previous year, and close to half had used TCM on a weekly basis for primarily musculoskeletal, gastrointestinal, and respiratory symptoms. Self-medication with herbal preparations accounted for most of this TCM use. Use of herbs as a health-promoting tonic was also common in keeping with the cultural belief that TCM promotes balance and the body's intrinsic healing capacity.⁸ Although less-commonly used, acupuncture use during the pre-

vious year was markedly higher in this sample than that reported in the general population in a recent national survey of more than 31,000 respondents (14% in our Chinese population versus 1.1% in our general population).¹ Parenthetically, it should be noted that the clinic offered acupuncture 1 half day per week. This availability may account for some of the higher than average usage, although a related study of Asian Americans similarly found comparatively higher lifetime use of acupuncture.⁹

Limitations

Virtually none of these patients recalled any of their doctors ever having inquired about their use of TCM. Interestingly, about 75% of the physicians reported that they asked sometimes or usually. This discrepancy may indicate limitations of patient recall, or it could also reflect a positive self-reporting bias by the physicians, as has been found in other studies of medical service providers.²² More importantly, from a clinical practice perspective it may represent a miscommunication between providers and patients. Physicians' customary inquiry about "any other drug use" could be inclusive in their minds of TCM preparations. Patients, however, may hear "Western" drugs in that statement or may just not think of TCM herbs as drugs. More work is needed to understand these distinctions more clearly.

Other limitations include the fact that we used a self-selected convenience sample of patients who presented at two regional clinics. This specific group of individuals had relatively low income, lower educational attainment, and typically did not speak English. As such, our sample is not representative of the general population of Chinese Americans, and consequently the results are not generalizable to the greater Chinese community. There are, however, relatively homogenous communities similar to this demographic sample in many cities with large Asian populations, such as New York City, San Francisco, and Los Angeles. It is plausible that the findings obtained in similar communities would approximate those found here.

Conclusions

Our findings are consistent with other studies showing that CAM use is high in the general public,^{13,23} including use by ethnic minorities^{9,24,25} and that physicians and patients may not communicate sufficiently (or specifically) about the use of these CAM therapies.¹² In this sample, a large proportion of Chinese Americans appear to be using TCM with no supervision by either a Western-trained physician or a TCM provider. The majority of patients in this study reported that they were not asked about their TCM use by their doctors, contrary to the doctors' responses to this same question.

These findings suggest a need for physician education to improve the quality (specificity) of culturally appropriate communication about TCM use with Chinese American patients. Doctors routinely treating Chinese patients need to ask their patients about TCM use. This kind of discussion is less likely to be initiated by doctors, however, if they lack knowledge of TCM and other forms of CAM. One solution would be to provide medical students with at least a basic introduction to CAM, instruction that recognizes the culturally contextualized nature of these forms of healing and the best practices for communicating with patients in that light.

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