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The Nature of Sickness and Use of American Health Care Services by Older Chinese Living in St. Louis

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Abstract

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How do elderly Chinese persons living in the United States perceive the nature of sickness, and what do they think about American health care services? A sample of older Chinese people living in St. Louis were asked to explain their conception of sickness through sketching and answering survey questions regarding their use of health care services. Their responses show that Chinese elders rely on family members and church friends for healthcare access, such as transportation, and for language interpretation during physician visits. Moreover, they tend to interpret diseases that involve internal organs as major diseases, which require a clinical visit. Respondents who hold a visitor visa, are insured in China, experience symptoms involving internal structures and have lower English proficiency, are more likely to return to China for hospital visits.

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Introduction

Mainstream western medicine today is founded upon a microscopic view of the human body. Microorganisms, chemical structures, and physiological mechanisms of drugs are keys to diagnose and cure illness. As a result, mainstream medicine requires high technologies such as microscopes and X-ray machines to view inner body organisms and structures. However, people healed sickness before such technologies were developed. How did they do it?

Many years ago in our human history, healers analysed and interpreted disease and sickness in a macroscopic view of the human body. Knowledge was obtained through experimenting. Healers reflected on individual cases of survival and deaths to revise and refine their existing theories. Medical knowledge was passed across generations by mouth and written by healers. As time passed, traditional healing methods slowly emerged into culture and customs of all cultures and became words spoken from our grandparents' mouths and our common sense. In this way, interpretation of diseases and sickness closely relates to culture and customs.

There is a great variety in the types of traditional health practices and consequently different interpretations of illness and treatment methods from one culture to another. This may be a partial explanation for the consistent disparity in the distribution of health, diseases, and access to health care services among ethnic subgroups in the US. [1-5] The current US health care system is based on mainstream western medication, and thus, it may not satisfy the needs of immigrants who are influenced by traditional health beliefs and medicine theories from their culture.

Asian Americans comprise one ethnic category that has diverse perceptions and behaviours regarding diseases and health care practices. [7] Representing more than 20 Asian countries, Asian

Americans in the United States are a large, fast growing and highly diverse minority group.[6] Each ethnic subgroup differs in not only language but also history, culture and customs. However, most studies regarding health disparities aggregate all Asian ethnic subgroups as a single demographic group, and few studies have been done to a specific, ethnic subgroup of the entire Asian population. Since each subgroup has a unique interpretation of sickness and of the health care system, research that combines different ethnicities may lead to conclusions that do not apply to all of those ethnicities.

This research targets elderly Chinese living in the United States to reveal their interpretations of illness and how these interpretations influence their decisions whether to use American health care services or not; when to do so, and to what extent. Chinese immigrants constitute the largest group of foreign-born Asians living in the United States. However, knowledge of their use of the western health care system is limited. This research intends to explore how foreign-born Chinese elders living in US perceive the nature of their body, sickness, and American health care services. It also identifies their traditional values, interpretation of body construction, family and social network, costs of medicine, and severity of sickness as factors that influence their attitudes towards western medicine and health care services. Knowing how foreign-born Chinese patients' understand "minor" (self-treatable) illness provides a better understanding of their decision-making processes regarding their health and helps predict physical health, number of illnesses, and limitations of IADL (Instrumental Activities of Daily Living).[7] It may lead to new ideas to improve culturally competent health care services in the United States, improve immigrant patients' adherence to treatments and their trust in the American health care system.[7]

Traditional Chinese Medicine

Traditional Chinese Medicine (TCM) refers to the use of herbs and/or counselling with a prescription from a trained medical practitioner. TCM defines health as "a harmonious relationship between humans and the cosmos and among humans themselves."[8] In other words, TCM views the body as an open system that interacts with the environment. Within the body, Yin and Yang manifest as Qi (a form of energy that permeates the universe), blood, vital essence, body fluid, and nutrients govern the body's structural components and internal environment, respectively. Health can be achieved if all these elements are in balance.[8]

TCM is an ancient yet continually developing practice in China. The oldest known herbal text in the world is *The Devine Farmer's Classic of Herbalism*. It was compiled by a healer called Devine Farmer, in China about 2000 years ago. [9] In the past century, the mass production of chemically synthesized drugs brought dramatic change to the health care around the world. However, the development and use of Traditional Chinese Medicine have never ceased. Today, traditional medicine accounts for approximately 40% of all health care delivered in China; more than 90% of Chinese general hospitals have units for traditional medicine.[10] A survey conducted in Hong Kong in 2003 reported that 40% of the subjects surveyed showed marked faith in TCM compared to Western medicine.[9]

The use of TCM is not limited to China. The public interest in natural therapies has increased greatly in the US during the past two decades. According to the 2007 National Health Interview Survey (NHIS), an estimated 3.1 million U.S. adults had used acupuncture in the previous year.[11] Research conducted in San Francisco found that nearly 100% of Chinese patients interviewed had used TCM within one year from the interviewed dates. However, information about use of herbs

was not shared with their medical physicians, nor did patients perceive their doctors as soliciting sufficient information on TCM use. Physician education in this area may be warranted.[12]

Literature review

When compared to other ethnic groups in the United States, Asian Americans generally have higher income and education levels, and thus, they are considered to have more successfully adapted into American society. [4]

This over-generalization may be derived from studies aggregating all generations of Asian immigrants, which understates social needs for older, first generation immigrants. The differences in health behaviours between Asian and non-Hispanic white populations indicates that older Asian Americans also struggle as other ethnic minorities do.[8] Research has found that Asian Americans are less likely to have insurance, less willing to visit a physician, attend screening regularly, and receive lower quality of health services. [1-5] In general, five factors have been found to associate with health beliefs and health behaviours: cultural values, body construction perception, family and social network, costs of medicine, and severity of sickness.

Cultural values

Most immigrants obtained early knowledge of health and medications from their culture and family. "An individual's perspective on illness, health, health beliefs, and health practice is shaped by cultural and community context."[7] In spite of assimilation and acculturation, immigrants' "beliefs and views about health and illness do not change significantly. Patients suffering from serious illness and stress often move towards treatment based on the cultural ideas and beliefs they learned in early life."[7] For example, first generation Chinese immigrants have the highest

prevalence of complementary and alternative medicine (CAM) use among all Asian American subgroups."[13] Moreover, Asian Americans are found to be less compliant to routine doctor visits and cancer screenings and are at higher risks of cancer because they perceive the routine cancer screening as "a response to a specific symptom, rather than tests that are used prior to the development of symptoms."[2, 3] In addition to health beliefs, other cultural variables such as "religion, country of origin, and length of residence" are also significant in predicting health variations.[13]

Body construction

The perception of body construction plays an important role in patients' understanding of mechanisms of action by medicines and thus influences their choices of therapy. Matuk studied the divergence of ancient Chinese and Greek medical illustrations and concludes the main differences of views between Chinese and Western anatomy: Chinese anatomists have a holistic philosophy of health and disease; they concern "the ideas and deductions [that could be drawn from] the locations and appearances of internal organs."[14] Chinese anatomists "based their knowledge of anatomy on metaphor"[15] by comparing the body to their perceived universe, where health was a balance between Yin and Yang (two opposite yet complementary forces) and five phases (earth, water, metal, fire and wood). Conversely, Greek anatomists "were conditioned by the physical aesthetic of their culture to observing the muscles"[14] and thus they focused mostly on muscle and internal organs when dissecting bodies. As a result, eastern traditional medicine studies the human body as an open system and cures sickness by balancing elements not only within the body but also in the universe, whereas western medicine studies the human body in a microscopic view and cures sickness by killing bacteria, removing and replacing body parts.

On the other hand, it is important to note that even with similar body constructions, a large diversity of treatment methods and medical theory could be generated. Other types of Eastern medicine such as Hmong's herbs, Qi-gong, religious and spiritual healing are also based on holistic view and are practiced in different parts of China. However, they are also based on the macroscopic view; they have different theories to interpret cause, diagnosis, cure of illness and different mechanisms of how medicine works in the human body.

Family and social network

Chinese culture values the interdependence between family members, neighbours and friends, and thus Chinese patients often rely on their social network rather than health professionals for health information and health-related decision-making.[15] In the American health care system, patients usually self-evaluate their condition when they are ill. They determine whether their sickness is self-treatable or not. For minor symptoms or conditions, they select appropriate OTC drugs, guided by pharmacists. Pharmacists also play important roles to ensure the patients' evaluation of their condition is accurate. And they refer patients who are not self-treatable to primary care providers, who would further diagnose illness with clinical tests and give appropriate treatments.

When ill, elderly Chinese immigrant patients tend to ask for health advice from family or people from their social network because they are familiar with their health condition and preference of treatment. The elderly parents who live in senior apartments or those who do not have immediate family members look for help from neighbours and friends because they share similar health beliefs. Their family, neighbours, and friends give elderly patients health advices and help elderly patients with translation and transportation. Elderly immigrants are reluctant to

seek help from physicians and pharmacists because they consider them as outsiders.[15] Consequently, whether to visit physicians or pharmacists depends upon patients' own judgement regarding their conditions and suggestions from their supportive network such as family members, friends, and neighbours, which are greatly influenced by their traditional culture.[7] Since patients or people of their supportive network are usually not trained health professionals, these elderly immigrant patients are at higher risks of misdiagnosis, delay of treatment and worsening of state of illness.

Costs of medicine

Costs are one of the major concerns of many immigrant patients. Asian Americans are "far less likely to have health insurance or use health care services than both US-born Asians and non-Hispanic Whites: about 17% of Asian Americans and 16% of Chinese Americans are uninsured."[4] Uninsured Asian Americans are less likely to visit physicians and "less likely to have a regular source of care."[1] On the other hand, TCM is not covered by most insurance plans. As a result, Chinese patients tend to self-medicate with herbal preparations.[12] Due to the complexity of insurance programs and the health care system, they do not seek medical care services unless absolutely necessary.[16]

Severity of sickness, symptoms and signs

Patients determine their severity of sickness by evaluating their symptoms and signs. Research in San Francisco found that patients interviewed use Traditional Chinese Medicine mostly for musculoskeletal or abdominal pain, fatigue, and health maintenance.[12] Chinese immigrant patients tend to self-treat various minor symptoms, including dizziness, headache, sinus congestion, and

musculosketal pains, runny nose, cough, headache and fever, with TCM products. For serious symptoms such as chest pain or acute infections, most patients interviewed prefer western medicine over TCM.[12]

In-group favouritism

Social identity theory suggests that "an ethnic group whose members share a similar cultural membership has a tendency to remain with, support, and favor those individuals with a similar culture and ethnicity"[17] in an intercultural context. Immigrants tend to "maintain and develop in-group contact and interactions and express in group-favoritism in order to share their own cultural elements."[17] Older Korean immigrants and Chinese graduate students in the US are both found more likely to engage in activities with others who have same ethnic and cultural background. Such activities are believed to provide an opportunity for Korean immigrants to experience social, cultural, and psychological benefits[17].

Method

Respondents for this investigation were older Chinese people (age≥45 years old) who regularly attend programs at the Evergreen Chinese Church* is St. Louis, Mo and its affiliated community center. Evergreen opened its doors as a mission to the Chinese community in the year 2000. It holds bi-lingual worship services every Sunday. The founding pastor moved to the United States from Taiwan. Many members at the church are first generation Chinese immigrants or long-term visitors from China. They create their own world in the church, in which Chinese norms and values are appropriate. The pastor usually incorporates news of China

* A pseudonym

and Taiwan while preaching to engage the audience. The church sponsors a Chinese community center, which is operated by the pastor's wife, an American who speaks fluent Chinese and is familiar with Chinese culture. Social programs provided by the center include monthly free health clinics, entertainments such as a Chinese choir and dance class, monthly trips, birthday parties for members, free law and financial counselling. These services meet basic needs of the Chinese people living in the United States. Congregants of the Evergreen Chinese church tend to ask for help from the church and its affiliated community center rather than other community centers run by westerners. Organizations in the larger community usually reach out to the Chinese population through the church. In this case, the community center and the church serve as a shelter for Chinese people, minimizing their contacts with the larger western community; on the other hand, it also serves as a bridge that connects its Chinese members with the larger western community.

The data collecting process consisted of two parts: 1) a sketching session followed by 2) a private interview or survey. The data was collected during two separate research visits. The sketching session asked participants to respond to a stimulus prompt: *how do you understand sickness*? Then respondents were asked to explain their responses to the investigator. The sketching questions are designed to engage respondents and allow them to express their perception of illness freely. Transcription was analysed by **NVivo**[18] to identify common themes[†]. During the second part, the respondents were asked to choose either participating in a private interview or completing a survey independently. Questions for the interview and survey are identical. Respondents represented a range of language fluency. The investigator is bi-lingual in English and Chinese and was able to engage interview respondents at their level of comfort.

[†] Detailed analysis will be addressed in a separate report.

Data Analysis

Among 20 Chinese elders who regularly attend programs at the Evergreen church and community center, 14 participants, which include 4 males and 10 females, responded in this research. Their median age is 50 years old. All respondents are foreign born Chinese living in St. Louis area with their family. Their education levels vary from elementary school to college or above. Almost 50% of the respondents (6 out of 14) have completed a college degree or more and have lived in US for more than 5 years. Most participants use both traditional Chinese medicine (TCM) and western medicine.

Sketching results

As shown in Figure 1, most sketching responses were related to general risk factors such as lacking of sleep and aging (57%), followed by symptoms of sickness (29%) rather than pathophysiology (14%). The two respondents who take TCM first when sick have responses related to risk factors. Responses that are related to pathophysiology are from respondents who would use Western Medicine first when sick (N=14).

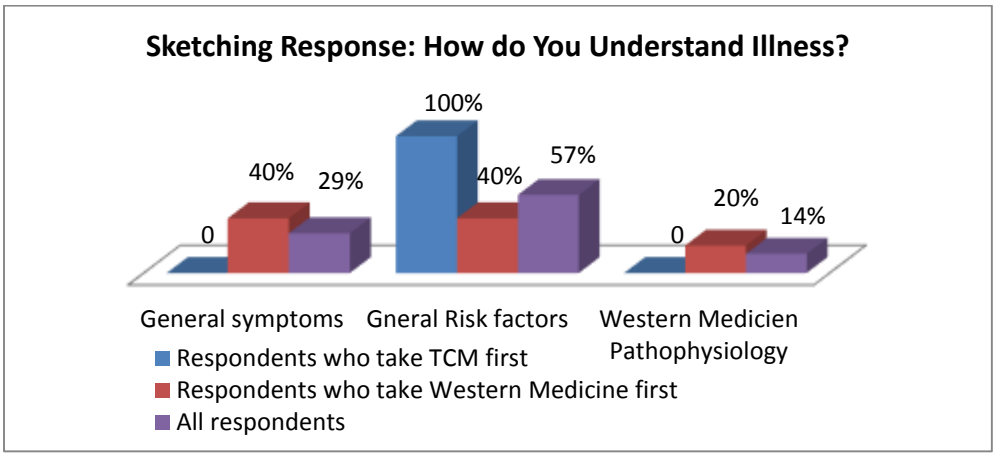

Figure 1. Sketching Response Distribution.

Interview and survey results

Most respondents use both TCM and Western Medicine (57%). All participants use Western Medicine. The majority of participants would use western medicine first when sick (shown in figure 2).

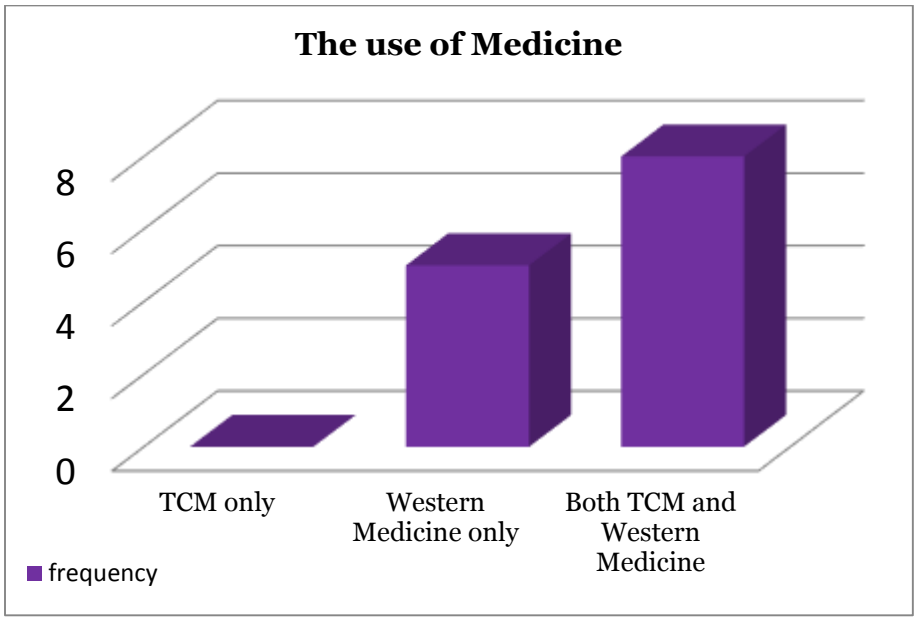

Figure 2. The use of Medicine

Many respondents indicated that Western Medicine works faster than TCM. The majority of respondents, regardless of their preference of medicine, believe a bone fraction is a major illness (Figure 3) while the common cold is a minor illness (Figure 4).

Figure 3. Cloud Tag of Major diseases listed by respondents

Figure 4. Cloud Tag of Minor diseases listed by respondents

Moreover, as shown in figure 5, participants who prefer returning to China to see physicians have health insurance in China rather than in the United States, hold visitor visas, and have lower English proficiency. In contrast, participants who prefer the US health care services have health insurance in this country rather than in China, hold green cards, and have higher English proficiency.

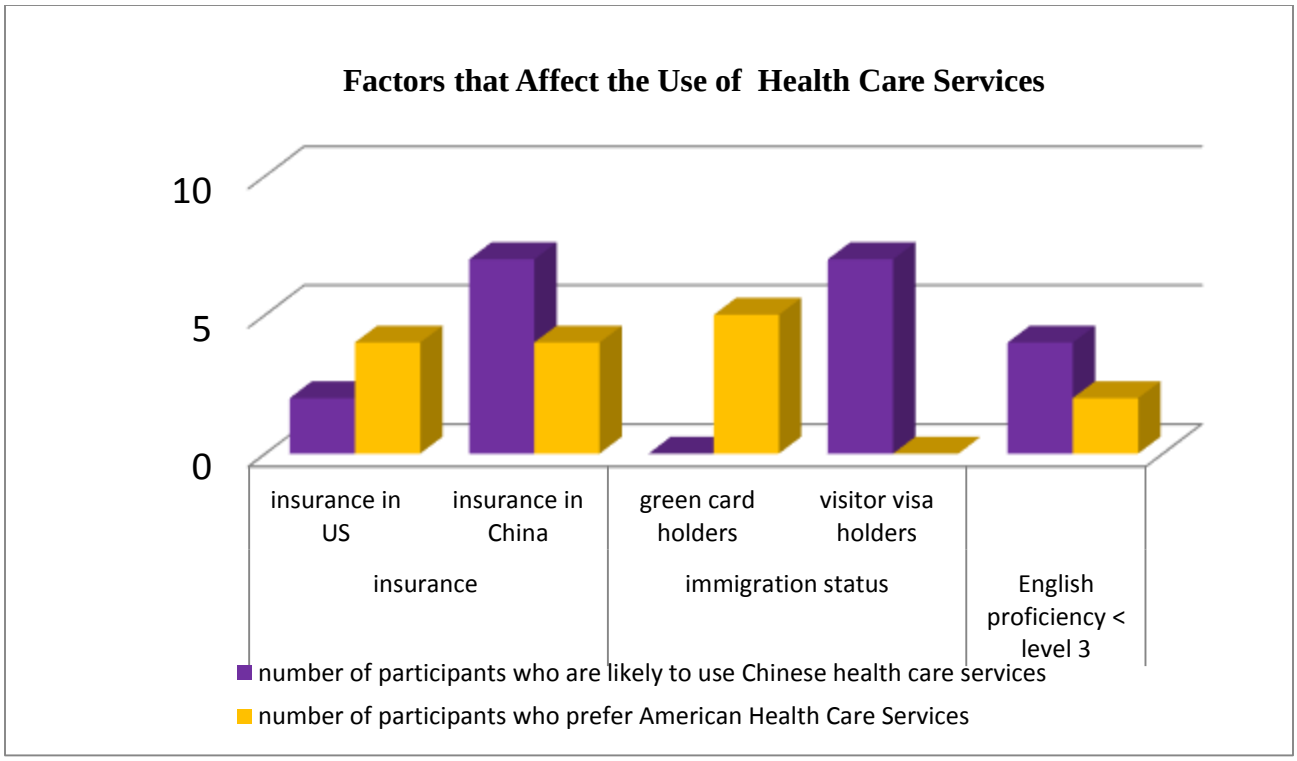

Figure 5. Factors that Affect the Use of Health Care Services.

Discussion

The use of medicine

The sketching responses suggest that respondents place greater emphasis on symptoms and general risk factors of illness rather than the pathophysiology of causes. They tend to understand sickness as the presentations of symptoms and signs, which are unpleasant and painful. On the other hand, most respondents believe that western medicine eliminate symptoms more rapidly than TCM would. In this case, the rapid results of western medicine may explain why most respondents use Western medicine first when sick.

Interpretation of sickness

Major illness seems to be associated with internal and major organs of the body that cannot be seen visually such as the bone and the heart. Abnormalities associated with these structures would require medical technology such as X-ray or MRIs to evaluate symptoms. In this case, patients who suffer from illness of internal, major organs must visit a hospital or specialized facility for evaluations and assessments. On the other hand, minor illnesses seem to be associated with external injury and general symptoms that can be treated by OTC products such as paper cuts and coughing. The body structures associated with these symptoms do not involve the major organs and usually do not require special instruments to evaluate. This may be the reason why respondents tend to self-treat.

The use of American health services

In general, respondents' preference of whether to use American or Chinese health services seems to be influenced by their immigration status, English proficiency and health insurance status rather than their perceived severity of illness. Respondents who are Green card holders or permanent United States citizens tend to use health services in the United States. On the other hand, respondents who hold visitor or scholar visas tend to see doctors in China. Visitor visa or scholar visa holders usually travel between China and the US regularly. They are more likely to have family in China or need to renew their visas. In contrast, green card holders are more likely to have family and jobs in the United States. They are less likely to travel back to China regularly. This may explain why more visa holders than green card holders indicate that they would consider seeing doctors in China. The immigration status may affect sense of belongingness of Chinse elders, which in turn influences their choice of whether to see physicians in China or in the United States. Respondents who hold a green card or US

citizenship tend to perceive themselves as "American," and they are more likely to use US health care services. On the other hand, respondents who hold a visitor visa are still Chinese citizens and can only stay in United States continuously for three months. Although they may spend a longer time in US than in China, they may perceive China as their home and thus, are more likely to see physicians in China.

Moreover, respondents are more likely to use health service in the country where they have health insurance. Many respondents agreed that although American doctors were more responsible, more reliable, and would look into more details when counseling with patients, healthcare services in the United States are more expensive than in China. This may be the reason why they are less likely to use US health services without health insurance. English proficiency also plays an important role in respondents' decision-making process. Being able to communicate with healthcare providers is the key for treatment safety, efficacy, and adherence. This may explain why these respondents prefer seeing doctors in China.

Roles of family

Chinese elders living in St. Louis are likely to gain assistance from their family or friends at the church and Chinese community center. Most respondents live with family (12 out of 14). Moreover, among the 5 respondents who reported that they do not drive, 3 respondents ask their family for transport assistance. About one-half of the respondents reported they needed translators when seeing doctors in United States. All of these respondents rely on their family, usually daughters and sons, for interpretation; however, their family members are not trained as professional interpreters for healthcare services. Many states require that healthcare providers

must assure that their "limited-English proficient patients have access to accurate medical translation of information translated in their language."[19]

Traditional values

Chinese elders tend to keep their traditional values even when living in St. Louis. Many respondents described possible causes and risk factors of illness in their sketching responses, such as physical inactivity, improper diets and bad habits. These responses associate with illness prevention, which is one important belief in Traditional Chinese Medication theory. Moreover, most respondents preferred Chinese diets and speaking Chinese: 12 respondents have Chinese diets and 13 respondents speak Chinese in their daily life.

Conclusion

Findings of this project suggest that English language proficiency and transportation are two main barriers that prevent Chinese elders from accessing U.S. health care services. These respondents tend to rely on family members and church friends for transportation and medical interpretation assistance. Most Chinese immigrants living in St. Louis use both Traditional Chinese Medicine and Western Medicine when sick. Respondents interpret diseases that involve internal organ and structures as major diseases, which require a clinical visit. Respondents who hold visitor visa, are insured in China, and have lower English proficiency, and are more likely to return to China for physician visits.

This research suggests that health related organizations and programs that target the foreign born Chinese population could work with Chinese Churches to provide health care assistances. For example, free health screenings, medical interpreter programs and health insurance programs could be advertised through churches. Community health screenings could

be held near Chinese churches for patients' convenience. Moreover, many screenings for chronic conditions such as diabetes and colon cancer are recommended for the middle age populations. Disease prevention education programs could make the middle-aged Chinese population aware of about health screenings for seniors because Chinese elders tend to maintain a close relationship with their children if they live nearby.

A limitation of this study is that the sample size is relatively small. Further research could interview more respondents to expand our knowledge of the relationship between interpretation of sickness and the choice of medications and health care services. Additional information about family and peer perception of illness and engagement in traditional Chinese culture and in American culture would elaborate basic perception of illness. It would also be interesting to compare the Chinese population in St. Louis with that in other American cities with larger Chinese populations.

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