Background: Traditional Chinese Medicine was established more than 3,000 years ago in China. Currently, it is used in most parts of the world and is considered a routine treatment in China, Korea, Japan, and Taiwan (Sierpina & Frenkel, 2005). Traditional Chinese Medicine treatment approaches include acupuncture, herbalism, moxibustion, massage, Tai Chi exercise, meditation and dietary changes (Sierpina & Frenkel, 2005).

Acupuncture is a way of preventing, diagnosing, and treating disease. It uses the insertion of needles at differing profundities and angles in various points throughout the body to produce an effect. While there is still a limited amount of research on acupuncture and its applications, theoretically acupuncture could cure or treat any illness that can be altered by a physiologic process. Acupuncture’s long history in Asia and Western Europe has demonstrated its usefulness in improving human health (Armstrong, 1972). Its increasing acceptance and demand as a treatment for chronic disorders and pain management has spurred an augmentation of scientific research on its validity (Langevin, Churchill, & Cipolla, 2001). Although there has been limited research on acupuncture and its mechanisms of action, its long utilization points to its potential usefulness.

Underlying Philosophy of Acupuncture

The principles of traditional Chinese medicine and the development of acupuncture are based on the oriental philosophy of Yin, Yang, and Qi (Lee, Lariccia, & Newberg, 2004). Yin and Yang refers to the theory that the universe is composed of five elements: wood, earth, fire, water, and metal. This oriental philosophy is based on the importance of maintaining a balance between the opposing Yin and Yang forces (Armstrong, 1972). All natural entities, including organs and senses, have been classified according to these forces. Therefore, traditional Chinese medicine’s techniques aspire to find a balance between the Yin and Yang...
forces in the body. Since disease, according to this philosophy, is caused by an unbalance between these opposing forces, by finding a balance, health can be achieved and disease can be treated or prevented (Lee et al., 2004). As a result of this belief, diseases, acupuncture points, and meridians are classified according to their characteristics with the Yin and Yang (Armstrong, 1972). Diseases can be explained and treated by determining which force is unbalanced. Similarly Qi, the energy of life, circulates through the meridians. Qi needs to be preserved and maintained in the right proportion for health to be maintained. The obstruction of the flow of Qi or an excess of Qi in certain regions of the body is another explanation for disease (Armstrong, 1972). These theories provide an explanation for disease as well as provide the principles on which acupuncture and other traditional Chinese medicine techniques were established.

HEALTHCARE IN CHINA

In 1949, the Chinese Communist Party rose to power in China. It created a healthcare system that was completely regulated by the government. But in 1978, China completely changed its healthcare system. Although the Chinese healthcare system has many issues, it is the only system in the world that incorporates both western medicine and traditional Chinese medicine in every treatment level. In China, traditional Chinese medicine (which includes acupuncture, massage, acupressure, moxibustion, herbal remedies etc.) is approximately 40% the healthcare delivered and is believed to be much higher in China’s rural areas (Zheng & Hillier, 1995). This does not account for all of the self-prescribed Chinese medicine traditions that families commonly make for themselves (Hesketh & Zhu, 1997). This vast use of Chinese medicine illustrates the important value and tradition of its use in China. Both forms of medicine have their own departments of health, medical schools, research institutes, and hospitals. Furthermore, patients have the right to choose whether they receive western, Chinese medicine, or both treatments in approximately 95% of hospitals (Hesketh & Zhu, 1997). This combination allows for maximum effectiveness between the two discourses of medicine, as well as fosters the continuation of Chinese medicine traditions.

ACUPUNCTURE FOR FROZEN SHOULDER

With a prevalence of 2% to 3% across the globe, frozen shoulder or adhesive capsulitis is one of the most frequent explanations for shoulder injury and pain. Frozen shoulder usually consists of an extended loss of shoulder movement and pain, and is most prevalent in women between the ages of 40 and 70. Due to the range of injuries and symptoms, the treatment and prognosis differ between doctors and as a result there is still no clear treatment approach (Sun et al., 2001). Due to this lack of consensus, acupuncture as a possible treatment option has been explored.

Frozen shoulder is referred to as “shoulder at the age of 50 years” in traditional Chinese medicine. According to traditional Chinese medicine theory, frozen shoulder indicates a blockage of Qi and blood, deficiency of Yin, and is linked with fragility in the stomach and spleen. The blockage of Qi and blood results in pain and rigidity in the shoulder joints. Traditional Chinese medicine recommends that in order to unblock the Qi and blood, the rigid body part needs to be moved frequently. Through a combination of physical exercise and acupuncture, a balance between the Yin and Yang can be achieved and health restored (Sun et al., 2001).

Historically, acupuncture has been used to treat frozen shoulder. Although further research is necessary to fully evaluate its efficiency, current research demonstrates its potential as a viable treatment option. In a single-blind randomized controlled trial by the University of Hong Kong, thirty-five participants with frozen shoulder were either assigned to an exercise group or an exercise and acupuncture group. Using the Constant Shoulder Assessment, shoulder function was evaluated at baseline, 6 weeks and 20 weeks. This study found that compared to the exercise group, the acupuncture and exercise group improved significantly more (Sun et al., 2001). This shows how the combination of both acupuncture and exercise, like prescribed in traditional Chinese medicine, offers an effective treatment method. Another study also found acupuncture to be beneficial in treating frozen shoulder. While this study did not use a control group, the large improvement in participants suggests that acupuncture can be a beneficial treatment. This study also showed that the quantity of treatments needed for improvement varies from participant to participant. This illustrates how responses to acupuncture treatment vary and as a result velocity of recovery can greatly differ (Tukmachi, 1999). Although there is not enough conclusive research to prove acupuncture can treat frozen shoulder, these findings point to the possibility of its efficiency.

ACUPUNCTURE FOR TENNIS ELBOW

Tennis elbow or lateral epicondylitis is prevalent in approximately 1-3% of the global population with a higher frequency in North America (Fink, Wolkenstein, Karst, & Gehrke, 2002; Trinh, Phillips, Ho, & Damsma, 2004). It affects both genders equally and generally occurs in people 40 years old or older (Johnson, Cadwallader, Scheffel, & Epperly, 2007). Although tennis elbow has a high prevalence, few treatments seem to be beneficial for the long-term. In the past 10 years, acupuncture has become increasingly used as treatment for the pain associated with tennis elbow (Trinh et al., 2004).

Tennis elbow is referred to as “elbow taxation, elbow pain and damaged sinews” in traditional Chinese medicine (Flaws & Sionneau, 2001). According to traditional Chinese medicine theory, a deficiency of blood, lack of Yin, and a lack of Qi causes tennis elbow. This deficiency mainly associated with fragility in the liver causes the tendons to become inflamed. Traditional Chinese medicine treatment options include herbal remedies, moxibustion, rest, and acupuncture that aim to restore balance and allow for a free flow of Qi, blood, and Yin (Flaws & Sionneau, 2001).

There have been many research studies on the effects of acupuncture on tennis elbow. Although further research is necessary, the National Institutes of Health asserts that due to promising research results, acupuncture can be considered a suitable treatment for tennis elbow (National Institutes of Health Consensus Conference, 1998). Although research results show promise, there is still mixed evidence to support acupuncture is effective in treating tennis elbow. Two systematic reviews and a meta-analysis found that acupuncture treatment provides only short-term pain relief that lasts from three days to two months (Bisset, Paungmali, Vicenzino, & Beller, 2005; Trinh et al., 2004; Trudel et al., 2004). Contrastingly, two systematic reviews, acknowledged the possibility of acupuncture’s short-
term benefits, but determined that current research does not provide sufficient evidence to draw a conclusion (Assendelft et al., 2003; Green et al., 2002). In a placebo-controlled single blind clinical trial, 48 participants where either assigned to acupuncture treatment or to placebo acupuncture without any insertion of needles. Although this study didn’t effectively follow-up with its participants, it concluded that traditional acupuncture is more effective at reducing pain than the control group. It also showed that the benefits of acupuncture for tennis elbow are primarily short-term (Molsberger & Hille, 1994).

**ACUPUNCTURE FOR CARPAL TUNNEL SYNDROME**

With an approximate prevalence of 1-3% across the globe, Carpal tunnel syndrome is the most frequent entrapment neuropathy (Atroshi et al., 1999). It affects people of all ages with a higher frequency in women (Bland, 2007). Carpal tunnel syndrome leads to pain, muscular dysfunction, paraesthesia and hypesthesis in the hand (Gerritsen et al., 2002; Palmer, Harris, & Coggan, 2006). According to the Bureau of Labor Statistics and US Department of Health and Human services, carpal tunnel syndrome is one of the most expensive and disabling upper-extremity disorders (Huisstede et al., 2010). Since the pathophysiological mechanisms for the pressure increase in the carpal tunnel are not fully understood, treatment and diagnosis are mostly clinically decided (Werner & Andary, 2002; Yao et al., 2012). Although there are many treatment options, none has been completely accepted as effective or ideal (Huisstede et al., 2010). Acupuncture, a common therapy in Asia for treating carpal tunnel syndrome, shows promise of being a possible treatment option (Yao et al., 2012).

According to traditional Chinese medicine, carpal tunnel syndrome is classified as “hand and finger tingling and numbness” and is associated with the liver (Flaws & Sionneau, 2001). A misbalanced Qi and blood deficiency primarily cause carpal tunnel syndrome. This blood deficiency and stagnation is the cause of the wrist pain. As a result, acupuncture and other herbal Chinese remedies can be used to “quicken the blood and dispel stasis” and as a result, reduce the pain and illness (Flaws & Sionneau, 2001).

Currently, there is very limited research on the effect of acupuncture on carpal tunnel syndrome. According to the subjective symptoms improvements reported, acupuncture has short-term benefits in treating carpal tunnel syndrome (Khosravi, Moghtaderi, & Haghighat, 2012). A systematic review and meta-analysis concluded that although there is a possibility that acupuncture is beneficial for carpal tunnel syndrome, the lack of research does not provide sufficient evidence to support that claim (Sim et al., 2011). A randomized controlled trial that evaluated acupuncture compared to steroid treatment found that in the short-term, acupuncture is equally as effective as a low-dose steroid. This was measured through changes in nerve conduction in participants with mild to moderate carpal tunnel syndrome (Yang et al., 2009). However, a study by Yao at the University of California, Davis Medical Center found different results; in a double-blind placebo controlled randomized trial, 41 participants were assigned to either an acupuncture or placebo acupuncture group for 6 weeks. Although both groups improved from baseline, no statistically significant difference in improvement between the control and experimental group was found (Yao et al., 2012). These studies provide mixed evidence; further research is necessary in order to fully evaluate the effectiveness of acupuncture on carpal tunnel syndrome.

**METHODS**

A survey was conducted on a sample of 57 participants who where either receiving acupuncture treatment from Beijing City Haidian District Shuangyushu Community Health Center or at Peking University Third Hospital. Surveys were administered in-person after a doctor from their respective center provided an introduction. All participants provided their written consent, and all questions were answered by the protocol director (after they were translated). All surveys were conducted in Chinese and therefore both the survey, consent form, and survey data were translated. This study, after being approved by Stanford University’s Internal Review Board and granted Human Subject Approval, was conducted over a 2-week period in November-December 2015.

The survey inquired about the participant’s diagnosis, age, gender, duration of symptoms, intensity of symptoms (ranked on a scale from zero to five), frequency of pain (categorized by either multiple times a day, once a day, 2-5 times a week, once a month, once a year, or could be written in), medications taken, other treatment and frequency of acupuncture visits. It then asked open-ended questions regarding treatment, such as: Have you found acupuncture treatment to be beneficial? Do you believe your treatment was effective? Have you found acupuncture treatment to be an economic burden? Has your perception on acupuncture changed after receiving treatment? Has your perception on Chinese medicine changed after receiving treatment? Would you recommend acupuncture treatment to others? What made you choose acupuncture? Have you enjoyed the experience of receiving acupuncture? These questions were followed with a comment section that encouraged participants to share any other thoughts. All returned surveys were translated and then reviewed. They were sorted based into categories based on their diagnosis: carpal tunnel syndrome, frozen shoulder, tennis elbow, musculoskeletal disorders, neurological disorders and other. In total, 6 participant’s responses were in the carpal tunnel category, 10 participants in the frozen shoulder category, 7 participants in the tennis elbow category, 8 participants in the musculoskeletal category, 11 participants in the neurological category and 15 participants in the other category.

In addition to the questionnaire component of the study,
interviews were conducted with participants and acupuncture medics.

RESULTS AND DISCUSSION

Based on the data collected from the questionnaires, some trends were identified. In regards to age and gender, the mean age was 52 with a standard deviation of 17.2 and the majority of the participants (70.2%) were female (see Table 1). The small sample size of tennis elbow, carpal tunnel syndrome, and frozen shoulder did not allow for a significant trend to be established between age and gender. But overall, the higher female percentage and average age above 40 matches up with previous estimates. Many external factors could have influenced both the age and gender distribution found. For example, time of data collection could have influenced gender distribution as well as a selection bias as females could be have been more willing to participate in this study. Although these factors could have influenced the data, overall, I observed a higher female percentage in clinics receiving acupuncture. This could be related to female’s being more willing to accept Chinese medicine and use it as a treatment option.

The use of acupuncture as a sole treatment or complementary treatment option was assessed. The data shows that most participants took supplementary medication in addition to their acupuncture treatment. Most participants were either taking western and additional Chinese medicine or solely additional western medicine. Classifying participants by conditions, 16.7% of participants with carpal tunnel syndrome reported to be using another form of Chinese medicine along with acupuncture. Amongst acupuncture participants with frozen shoulder, 30% were taking Western treatment, 20.0% were using additional Chinese medicine techniques, and 10.0% were using both. Contrastingly, all participants with tennis elbow reported not taking any additional medication to acupuncture.

Chinese medicine has been around for more than 3,000 years in China. As the only healthcare system that incorporates both traditional Chinese medicine and western medicine, people in China view Chinese medicine in a different ways. The older generation, that grew up with predominately Chinese medicine tend to view it differently than the current generation. The data collected shows this trend, as a higher percentage of participants over the age of sixty indicated that they have always believed in Chinese medicine (Table 3). This, combined with the study's average participant age, points to the fact that older people tend to be more willing to get Chinese medicine treatment. This is further emphasized by interviews conducted where many of the older participants would remark how Chinese medicine is the only medical treatment that they perceive as effective. They were also all very excited that someone was studying it and repeated the importance of never doubting Chinese medicine as a treatment option. This strong view on the validity of Chinese medicine is not seen in the younger generation, where none of the participants between the ages of 18 to 30 indicated that they have always

<table>
<thead>
<tr>
<th>Category:</th>
<th>Mean Age (SD)</th>
<th>Female: n (%)</th>
<th>Male: n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Participants</td>
<td>52 (17.2)</td>
<td>40 (70.2)</td>
<td>17 (29.8)</td>
</tr>
<tr>
<td>Carpal tunnel syndrome</td>
<td>43 (23.4)</td>
<td>3 (50.0)</td>
<td>3 (50.0)</td>
</tr>
<tr>
<td>Tennis elbow</td>
<td>51 (13.4)</td>
<td>4 (57.1)</td>
<td>3 (42.9)</td>
</tr>
<tr>
<td>Frozen shoulder</td>
<td>52 (13.3)</td>
<td>6 (60.0)</td>
<td>4 (40.0)</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>54 (14.2)</td>
<td>7 (87.5)</td>
<td>1 (12.5)</td>
</tr>
<tr>
<td>Neurological conditions</td>
<td>52 (28.6)</td>
<td>8 (72.7)</td>
<td>3 (27.3)</td>
</tr>
<tr>
<td>Other</td>
<td>55 (14.2)</td>
<td>12 (80.0)</td>
<td>3 (20.0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>All Participants (n=57)</th>
<th>Carpal tunnel syndrome (n=6)</th>
<th>Tennis elbow (n=7)</th>
<th>Frozen shoulder (n=10)</th>
<th>Musculoskeletal conditions (n=8)</th>
<th>Neurological conditions (n=11)</th>
<th>Other (n=15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Additional Treatment: n (%)</td>
<td>34 (59.6)</td>
<td>1 (16.7)</td>
<td>0 (0.0)</td>
<td>6 (60.0)</td>
<td>6 (75.0)</td>
<td>9 (81.8)</td>
<td>12 (80.0)</td>
</tr>
<tr>
<td>Additional Western Treatment</td>
<td>12 (21.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>3 (30.0)</td>
<td>1 (12.5)</td>
<td>3 (27.3)</td>
<td>5 (33.3)</td>
</tr>
<tr>
<td>Additional Chinese Medicine</td>
<td>9 (15.8)</td>
<td>1 (16.7)</td>
<td>0 (0.0)</td>
<td>2 (20.0)</td>
<td>2 (25.0)</td>
<td>1 (9.0)</td>
<td>3 (20.0)</td>
</tr>
<tr>
<td>Additional Western and Chinese Medicine Treatment</td>
<td>13 (22.8)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>1 (10.0)</td>
<td>3 (37.5)</td>
<td>5 (45.5)</td>
<td>4 (26.7)</td>
</tr>
<tr>
<td>Not Using Additional Treatment: n (%)</td>
<td>23 (40.4)</td>
<td>5 (83.3)</td>
<td>7 (100)</td>
<td>4 (40.0)</td>
<td>2 (25.0)</td>
<td>2 (18.2)</td>
<td>3 (20.0)</td>
</tr>
</tbody>
</table>

Table 1. Age and gender distribution amongst research participants.

Table 2. Shows percentage of participants using additional treatment besides acupuncture. That percentage is then broken up to show what type of additional treatment they were using.
believed in Chinese medicine. This does not mean that younger participants do not use traditional Chinese medicine; rather, these results imply that they do not see it as a sole treatment option and often view western medicine as more accurate.

In an interview with a doctor that conducts acupuncture, I asked whether they considered acupuncture to be an alternative form of treatment. They answered that they view acupuncture as complementary treatment that should be integrated with other treatments. This view highlights the Chinese healthcare system’s perspective on effective treatment, a combination of western and Chinese medicine.

In regards to the benefits of acupuncture, most participants viewed acupuncture to be beneficial but a smaller percentage (although still majority) perceived acupuncture to be effective. An equal percentage of participants with carpal tunnel syndrome, tennis elbow, and other viewed acupuncture to be effective and beneficial (Table 4). Contrastingly, participants with frozen shoulder, musculoskeletal conditions, and neurological conditions perceived acupuncture to be beneficial but not as effective. This finding illustrates that there are other reasons besides effectiveness that people receive acupuncture treatment. For example, a lot of participants commented that acupuncture might not be as effective as Western medicine but has zero side effects and that acupuncture is a traditional form of medicine in China. This combined with the inherent relaxing value in acupuncture could explain the difference in the perception between effectiveness and beneficial. But overall, the majority of participants viewed it as both effective and beneficial, indicating how people are overall content with acupuncture as a treatment option.

In regards to the acupuncture practitioners’ views on the effectiveness of acupuncture, during an interviews, they explained that the effectiveness of acupuncture varies by condition. They further explained that the effects of acupuncture can also vary by

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Age: 18-30 (n=6)</th>
<th>Age: 30-40 (n=8)</th>
<th>Age: 40-60 (n=19)</th>
<th>Age: 60+ (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Additional Treatment: n (%)</td>
<td>4 (66.7)</td>
<td>6 (75.0)</td>
<td>12 (63.1)</td>
<td>11 (64.5)</td>
</tr>
<tr>
<td>Additional Western Treatment</td>
<td>0 (0.0)</td>
<td>2 (25.0)</td>
<td>7 (36.8)</td>
<td>1 (5.9)</td>
</tr>
<tr>
<td>Additional Chinese Medicine</td>
<td>0 (0.0)</td>
<td>4 (50.0)</td>
<td>2 (10.5)</td>
<td>5 (29.3)</td>
</tr>
<tr>
<td>Additional Western and Chinese Medicine Treatment</td>
<td>4 (66.7)</td>
<td>0 (0.0)</td>
<td>3 (15.8)</td>
<td>5 (29.3)</td>
</tr>
<tr>
<td>Not Using Additional Treatment: n (%)</td>
<td>2 (33.3)</td>
<td>2 (25.0)</td>
<td>7 (36.9)</td>
<td>6 (35.5)</td>
</tr>
<tr>
<td>Always believed in Chinese Medicine: n (%)</td>
<td>0 (0.0)</td>
<td>3 (37.5)</td>
<td>4 (21.0)</td>
<td>9 (52.9)</td>
</tr>
<tr>
<td>Have not always believed in Chinese Medicine: n (%)</td>
<td>6 (100)</td>
<td>5 (62.5)</td>
<td>15 (79.0)</td>
<td>8 (47.1)</td>
</tr>
</tbody>
</table>

Table 3. Shows the percentage of participants using additional treatment and their beliefs towards Chinese medicine.

<table>
<thead>
<tr>
<th>Category</th>
<th>Perceive Acupuncture to be Beneficial: n (%)</th>
<th>Perceive Acupuncture to be Effective: n (%)</th>
<th>Perception of Acupuncture Changed after Treatment: n (%)</th>
<th>Perception of Chinese Medicine Changed after Treatment: n (%)</th>
<th>Always Believed in Chinese Medicine: n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Participants (n=57)</td>
<td>54 (94.7)</td>
<td>51 (89.4)</td>
<td>41 (72.0)</td>
<td>31 (54.4)</td>
<td>14 (24.5)</td>
</tr>
<tr>
<td>Carpal tunnel syndrome (n=6)</td>
<td>5 (83.3)</td>
<td>5 (83.3)</td>
<td>5 (83.3)</td>
<td>2 (33.3)</td>
<td>2 (33.3)</td>
</tr>
<tr>
<td>Tennis elbow (n=7)</td>
<td>4 (57.0)</td>
<td>4 (57.0)</td>
<td>3 (42.9)</td>
<td>2 (28.6)</td>
<td>1 (14.3)</td>
</tr>
<tr>
<td>Frozen shoulder (n=10)</td>
<td>10 (100)</td>
<td>7 (70.0)</td>
<td>7 (70.0)</td>
<td>6 (60.0)</td>
<td>1 (10.0)</td>
</tr>
<tr>
<td>Musculoskeletal conditions (n=8)</td>
<td>8 (100)</td>
<td>6 (75.0)</td>
<td>5 (62.5)</td>
<td>3 (37.5)</td>
<td>1 (12.5)</td>
</tr>
<tr>
<td>Neurological conditions (n=11)</td>
<td>7 (63.6)</td>
<td>5 (45.5)</td>
<td>8 (72.7)</td>
<td>5 (45.5)</td>
<td>4 (36.4)</td>
</tr>
<tr>
<td>Other (n=15)</td>
<td>13 (86.7)</td>
<td>13 (86.7)</td>
<td>7 (46.7)</td>
<td>7 (46.7)</td>
<td>5 (33.3)</td>
</tr>
</tbody>
</table>

Table 4. Shows the distribution of beliefs in acupuncture and Chinese medicine.
patient and can depend on the area applied. But after many years of conducting acupuncture, they witnessed that acupuncture is the most beneficial on facial paralysis, pain in limbs, sprain, insomnia, headaches, and gynecological diseases.

Similarly, this study also collected data on how people’s perception of acupuncture and Chinese medicine was influenced by treatment. The data indicates that the majority of participants’ perception of acupuncture changed prior to treatment, but a smaller (but still majority) percentage of people’s perception of Chinese medicine changed after treatment. A similar trend is also seen in all conditions.

In China’s healthcare system, people pay by a fee for service method. Due to the shift from a public to private healthcare system, there is a growing disparity between the urban and rural citizens. Since this study was conducted in acupuncture clinics in Beijing, the population that took the survey is not representative of China’s population as a whole. The data collected shows how in cities, for most people acupuncture is not an economic burden due to higher incomes and health insurance access (Table 5). However, some participants were not from the city and indicated that acupuncture did pose a significant economic risk. For example, one of the participants indicated that the reason that acupuncture is a financial burden for him is because he is a farmer in the rural areas of China. As a result, in order to get his treatment at that hospital he would have to pay it completely out of pocket. This illustrates the disparity between rural and urban areas, as rural citizens do not have access to the same benefits, have to travel for high quality care and have to pay for the expensive treatment completely on their own. This creates a disparity in health care and results in higher overall disparities.

In addition, a fee for service health system creates incentives for health professionals to misdiagnosis and provide incorrect but more expensive treatments. This corruption in the health system has created mistrust in health professionals. In one interview, a participant commented that they only trust Chinese medicine, as western medics tend to overprescribe expensive and unnecessary treatments. The mistrust in doctors was further emphasized when I was shadowing a kidney stone removal surgery in a Chinese hospital, and during the surgery the doctors took many photos as well as collected the kidney stones in order to be able to prove to the patient that they actually received the surgery and that it was not a sham. This mistrust in the system and profit-driven incentives is a very big issue in China’s health care as it creates a huge waste of resources, disparities in health, and can be dangerous to patients’ lives.

**LIMITATIONS**

Limitations of the study include selection bias, limited acupuncture centers visited and other external factors. In regards to selection bias, there was no proper randomization. Participants’ selection was based on the doctors’ recommendation and if they were waiting for their treatment. In addition, participants were only recruited at two health centers in Beijing, China. Moreover, this study only recruited participants that were already receiving acupuncture treatment and as a result is unable to conclude anything about the general population’s beliefs on acupuncture or Chinese medicine. Furthermore, all of these participants were receiving acupuncture treatment and as a result already had some thoughts on acupuncture in order to be willing to receive it as a treatment. Other external factors could have included people’s willingness to participate in the study. Also acupuncture, just like any treatment, can range depending on the doctor. Since participants were recruited from a couple of clinics, the differences in doctor’s treatment could have also potentially impacted the data. All of these factors could have affected the study outcome.

**CONCLUSION AND RECOMMENDATIONS FOR FURTHER RESEARCH**

The reviewed evidence suggests that participants and doctors view acupuncture to be effective and beneficial. In addition, after receiving treatment, the majority of participants indicated that their perception of acupuncture changed, although not as many said the same thing about Chinese medicine as a whole. The data indicates that the participants sixty years or older view Chinese medicine differently than the younger generation. Evidence of a health disparity and differing economic burdens between urban and rural citizens was found. Overall, most people would recommend and enjoyed receiving acupuncture.

Although there are several limitations, the survey data, interviews, and current literature indicates that acupuncture can be used as a complementary treatment option for conditions including frozen shoulder, tennis elbow, and carpal tunnel syndrome.

More research in the field of acupuncture and Chinese medicine would help elucidate its validity. Due to China’s unique history with Chinese medicine, large population, as well as current healthcare system, further research in China could help uncover more about the interactions between western and Chinese medicine. Furthermore, more research on the effects of acupuncture and other Chinese medicine remedies on carpal tunnel syndrome would help uncover more about the interactions between western and Chinese medicine.
tunnel syndrome, tennis elbow, and frozen shoulder could help elucidate the validity of acupuncture and Chinese medicine as a treatment option.

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REFERENCES

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Associate Professor, Surgery and Bioengineering (courtesy)
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