Traditional Chinese Medicine and Its Role in Women's Health

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Abstract

This paper is a literature review of traditional Chinese medicine and its role in women's health. A search was performed and a group of 208 articles were initially found using the Liberty Summons search engine. Out of those 208 articles, only 16 were included based on various criteria. The articles were then read and analyzed and compiled into two main themes: maternal health and an "other" category. The findings resulted in strong evidence for some herbal treatments and acupuncture in a select few areas, with inconclusive evidence for other acupuncture treatments and a mixed review of the traditional "Doing a month." Future research is needed in all areas as there is a noticeable lack of rigorous research on the topic.

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Traditional Chinese Medicine and Its Role in Women's Health

Introduction

As technology develops and scientific discovery brings humanity to the edge of wonderous breakthroughs, one ancient method of treatment and health remains a popular alternative to modern medicine. Chinese traditional medicine has been a staple of Chinese culture and health for centuries with roots dating back to the first century BCE (Mainfort, 2004). Its use of herbs, pressure points, and unique healing habits along with the historical and cultural influence entices many who are looking for either a break from modern medicine or simply a way to supplement current methods (Karim et al., 2019). Traditional Chinese medicine can play to religious or philosophical nuances because of its ties to Confucianism and other Eastern philosophical frameworks. Before the reform in China and the great leaps of economic and infrastructural security, traditional Chinese medicine reigned as a go-to plan when sickness or afflictions found their way into Chinese households (Alvarez-Klee, 2019). Even with the medical advances of today, many people, particularly Chinese ethnic groups, continue to practice traditional Chinese medicine.

One area to which researchers dedicate a large portion of their time is the effects and efficiency of traditional Chinese medicine on women's health. Methods and practices of TCM cover a wide array of different sub-specialties such as: maternal health, cancer, obesity, and chronic pain (Wang et al., 2019). One problem, however, is the information published can be hard to wade through and dissect to fully get a complete understanding of traditional Chinese medicine and its role in women's health. As such, this paper aims to collect, consolidate, and analyze a portion of the current literature in an attempt to help readers develop and grow their

understanding of effective methodologies and how to handle cases in the field with positive cultural competency. Effort was made to help colleagues and casual readers alike sort through some alternative medicine fact and fiction.

Materials and Methodologies

To begin, most of the materials and methodologies used in this paper are tailored to an undergraduate thesis and the timeframe which was provided. As a result, a condensed version of a literature review was performed to critique and analyze some of the major themes found in the appropriate publications. After the thesis topic was refined, a search was performed to collect the first group of articles that would be used as samples for the paper. The search engine, Liberty Summons, was used to obtain an initial sample size. Key words such as "traditional Chinese medicine," "women's health," "maternal health," and "China" were used as inclusion criteria. All of the articles had to be written within a 12-month time period, from January 2019 to January 2020. The samples were all written in English and were peer reviewed with full text available to access online. The initial search resulted in a total of 208 articles, all of which coming from different databases included in the Liberty Summons search.

After the initial search was completed, the process of sorting through the remaining 208 articles began. While reading and analyzing the samples, any articles which were not concerned with traditional Chinese medicine were immediately excluded. Papers which talked about herbal medicine or alternative treatment and practices but were not specifically involved with the Chinese variety of alternative medicine were excluded as well. One paper was found to be written in Portuguese while many happened to be concerned with the African continent, leading to exclusion. In general, any article shown to be clearly biased or to have a blaring weakness in

study design (extremely small population group, etc.) was excluded as well. After this process was complete, around 30 articles were remaining.

The final step of elimination involved thorough readings of the articles and evaluation of their relevancy, quality, research design, etc. A few articles were found to be insufficient for this specific research so were excluded with the others. Some topics diverged from traditional Chinese medicine too greatly or did not touch on women's health. After this third step of filtration, a total of 16 articles remained to be included in the study. The articles were compiled, re-read, analyzed, and organized into groups based on the appropriate category. The main categories were maternal health and an "Additional Topics" category which houses three outlying articles.

Categories

Maternal Health

Out of the 16 included articles, 12 are concerned with maternal health. The articles are examined in order based on their relevancy to the pregnancy timeline, beginning with fertility and ending with post-partum treatment and maintenance. The findings and research areas will be highlighted in this section.

Drinking tea and dysmenorrhoea. To begin, the first article, Zhang et al., is addressing the relationship between drinking tea and dysmenorrhoea, which is pelvic pain during menstruation. The tradition of drinking tea can be traced back to China's earliest history.

Different brews and combinations are used to treat or prevent a plethora of symptoms or conditions in traditional Chinese medicine. This specific article is mainly looking at green tea, black tea, and oolong tea. The research was designed and based around the Shanghai Birth

Cohort Study (SBC) (Zhang, et al. 2019). Metrics were gathered such as caffeine intake, BMI, sugar intake, and many more variables. Menstrual characteristics were gathered as well to provide information which would later be used during statistical calculations. After the data were collected and the numbers were calculated, the team made some significant observations. For example, people who drank 3-5 cups of tea a day were 51% less likely to report mild dysmenorrhea. As a baseline, the prevalence of dysmenorrhea in the population was 57.8% (Zhang, et al. 2019).

Out of those surveyed, over half of Chinese women experienced dysmenorrhoea. A correlation between specific menstruation characteristics and dysmenorrhoea could not be established. In regards to drinking tea, the study showed a result of dysmenorrhoea relief when participants reported drinking tea every day. A link could not be drawn between those who drank large amounts of tea and an increased effect on lessening dysmenorrhoea. Of the three kinds of tea analyzed, green tea was seen to have the greatest effect, followed by oolong, and then finally black tea. The researchers further investigated by means of a cross-sectional study whether the caffeine was responsible for the noted benefit but determined women with moderate to severe pain were twice as likely to be coffee drinkers. Continuing, catechins was believed to be, in part, responsible for the observed connection between drinking tea and less severe dysmenorrhoea (Zhang et al., 2019). The authors suggest future research be focused toward analyzing the effects of catechins and relieving dysmenorrhoea.

Acupuncture and embryo transfer. Smith et al. performs an analysis on acupuncture during the time of embryo transfer as a means of reproductive therapy compared to controls.

Acupuncture is a form of traditional Chinese medicine which has gained popularity in the

western world as a supplementary treatment for many conditions. The researchers performed a thorough literature review, collected data, and reviewed methodologies and experimentation design. They had a rigorous checks and balances system where multiple readers were required to include an article. After the data had been collected, they divided the articles into subgroups and observed any characteristics that could influence the effects of acupuncture on pregnancy (Smith et al., 2019)

The meta-analysis performed found an increase in pregnancies, live births, and reduced miscarriage when acupuncture was used as a supplemental treatment compared to no supplemental treatment at all (RR 1.32, 95% CI 1.07–1.62, 12 trials, 2230 women). However, no significant differences between acupuncture and placebo procedures were found (Smith et al., 2019). The researchers suggest underlying factors involved with treatments like acupuncture and the sham controls could contribute to an overall net benefit to expecting mothers and should be a focus for future research. They also warranted extended research on women who were experiencing more troubles with fertility, as the ones in most of their studies collected happened to be fertile for their respective age groups.

Mindfulness-based programs. Pan et al. used a randomized control trial to evaluate a health intervention aimed to address the mental health of pregnant women at a specific hospital. The intervention was based on a Chinese meditation practice that has similarities with other meditation practices all over Asia, mindfulness. A group of 74 women were assessed who were all between 13 and 28-weeks gestation. The health program consisted of one class a week for eight weeks and a day of meditation. The classes aimed to help educate expecting parents and

teach them how to incorporate mindfulness into their daily routines. A psychological baseline was taken and then was later assessed again at 3 months post-partum.

As the study continued, the researchers observed significant differences in stress and depression between the control group and the group receiving the health intervention (46% decrease to 69% decrease respectfully). For example, those in the intervention group scored significantly better on the stress and depression scales compared to the control group when analyzed at three months post-partum. Because of the cultural practices of many Chinese women, providing patients with a mental health program such as the one highlighted in this specific article is vital to combating depression and mental illness in recent mothers (Pan et al., 2019). The researchers conclude with noting mindfulness must be practiced before delivery and thus, should be a consideration for incorporation with pre-natal classes so women can be more prepared to combat depression and stress during the post-partum period.

Acupuncture and pain management during pregnancy. Nicolian et al. research the relationship between acupuncture and pelvic girdle and low back pain (PGLBP) during pregnancy by using a randomized control trial. The study was conducted in Europe, so the normal demographics were different from acupuncture studies performed in China itself. Women from five hospitals were grouped into a control and test group, with the intervention being five sessions of acupuncture from a registered midwife. There are already some studies showing the benefits of acupuncture on pelvic girdle and low back pain; however, this particular study was aimed at addressing the cost-effectiveness of including acupuncture treatment in normal obstetrical care (Nicolian et al., 2019). The study took place over two years of observation.

The results of the study stated the combination of standard care and acupuncture treatments were significantly more effective at controlling pain and discomfort compared to traditional treatment alone (Nicolian et al., 2019). Effects were seen ranging from differences in intensity and frequency of pain. In regard to obstetrical and neonatal morbidity, no significance was found between those who underwent acupuncture treatment and the control group.

Continuing, around 30% of patients did experience adverse effects like bruising, fatigue, and dizziness after the acupuncture treatments. When the cost-effective analysis was performed, Nicolian et al. found the control group required more funds and resources than the acupuncture group. This is because the higher costs of acupuncture were offset by the lower indirect costs of absence from work (Nicolian et al., 2019). The authors suggest that as a result of their findings, health insurance could cover acupuncture as a viable means of treatment.

Music interventions and labor anxiety. Lin et al. perform a systematic review on the traditional practice of using music to relieve labor anxiety. They used seven databases to compile their samples without regard to language or time. The team used two researchers as readers who checked inclusion criteria and resolved any inconsistencies through discussion (Lin et al., 2019). The goal was to evaluate the effects of music on lessening the mental and psychological strains of labor, which can have a greatly negative effect on both mother and child. They eventually included 14 samples in their review, most of which came from Asia. All of the patients analyzed in the study were actively listening to music at different lengths and at different points in the labor process. Finally, 9 articles were chosen to perform an analysis based on reported anxiety levels of the mothers.

The study reported a decrease in anxiety levels when patients were exposed to music during labor. The authors suggest music could be a better alternative to a more traditional means of anxiety and pain management like sedation, as music removes the added risks that naturally come with certain treatment options. The choice of music could also play a part in its effectiveness (Lin et al., 2019). If clinicians choose to begin incorporating music therapy, culturally relevant selections are necessary for an appropriate response (Lin et al., 2019). The authors conclude with recognizing their findings correlate with other studies and they suggest future research be dedicated to random control trials and the effects of music therapy.

Yimucao injection for preventing postpartum hemorrhage. Chen et al. analyze the effectiveness of using a supplementary yimucao (traditional Chinese herbal medicine) injection for prevention of postpartum hemorrhages after a cesarean section. Postpartum hemorrhages are one of the most common causes of maternal death worldwide (Chen et al., 2019). The meta-analysis included 48 clinical studies that met strict inclusion criteria. Seven databases were used, and the results were compiled and analyzed specifically noting blood loss at three specific time points: intraoperative, 2 hours after delivery, and 24 hours after delivery.

The outcome of the meta-analysis was an observed significant effect of yimucao injections on blood loss compared to traditional Western medicine alone. During all three specific time points, yimucao injections showed a drastic decrease in blood loss compared to the control group. Some adverse effects of the treatment were analyzed however, including arrythmia, abdominal discomfort, and chest discomfort (Chen et al., 2019). It is important to note no serious health effects were found to be caused by the yimucao injections, and the authors suggest the herbal medicine can actually lower the risk of many adverse health effects.

Suggestions for future research in the field include more randomized control trials and more long-term studies identifying the health benefits of yimucao and what effect it has on the human body.

Motherwort injection for preventing postpartum hemorrhage. Yu et al. use a systematic review to further understand the importance of motherwort (common traditional Chinese medicine) injections in preventing postpartum hemorrhage in mothers who had a natural birth. Care was taken to observe the efficacy and safety of using motherwort injections as a clinical option of treatment (Yu et al., 2019). The herb has been used in China for thousands of years to help treat various women's health issues. No previous studies had been conducted analyzing the use of motherwort in clinical settings, though. The study used 37 random control trials as evidence for their article. The authors noted many of the trials had a moderate to high chance of bias, but because of the limited amount of research in the area, they included the best options available. The research observed three key time periods: 2 hours after delivery, 24 hours after delivery, and postpartum.

The data suggest motherwort injection in combination with oxytocin can have a significant effect on the amount of blood lost during all three periods of observation (RR 0.29, 95% CI 0.21 to 0.39, I²=0%). The researchers state the quality of evidence was very low, so taking strong recommendations from this study should perhaps be cautioned (Yu et al., 2019). A strong takeaway however would be traditional herbal medicines could be a suitable supplementary treatment, and physicians should take care to view alternative medicine in a generally less bias way than before (Yu et al., 2019). One variable not mentioned in the samples analyzed was cost. Further research should be dedicated to more strenuously test motherwort

injections and perhaps analyze the cost-effectiveness of herbal treatment if the results show promise.

Chinese women's experience of "Doing the month." Zheng et al. study how women experience "Doing the month," which is a traditional Chinese practice where a recent mother stays inside and normally in bed for approximately 30 days to help facilitate healing and grow a bond with the child. This practice comes from yin-yang principles in traditional Chinese medicine and seeks to balance out the body's natural energies after a serious event like childbirth. The study uses a questionnaire with open and closed questions to survey women in three hospitals in southern China. The aim is to see how the practice of "Doing the month" affected the mother's health and her parenting skills/style. Previous studies have shown "Doing the month" may have a negative effect on physical and mental health, along with creating complications with the parenting style developed by the mother and some of her family members that participate in "Doing the month" with her (Zheng et al., 2019). Four hundred and thirteen surveys were collected and viable for use.

The results of the surveys show a vast majority of women think "Doing the month" was necessary and chose to purse that option on their own terms. Only a handful of participants stated they were forced to participate because of other family members. These findings correlate with other literature, supporting the prevalence of "Doing the month" in Chinese culture (Zheng et al., 2019). Many were inevitably satisfied with their experience, but those who were not fell into a few key themes. Perhaps most importantly, those who were not satisfied stated the main cause was disagreement both culturally and ethically with other family members, especially the mother-in-law. The authors suggest in order to help women have a better experience "Doing the

month," health care professionals should provide services advising family members to be more supportive during this time of the mother's recovery (Zheng et al., 2019). Further research should be conducted using interviews and/or focus groups to get a better descriptive understanding of the situation.

"Doing the month" and postpartum depression. Ding et al. used questionnaires to determine the relationship between the traditional practice of "doing the month" and postpartum depression. The data were collected between 2013 and 2016 with the study designed after the Shanghai Birth Cohort Study. The researchers addressed six different variables such as outdoor exposure and sleep patterns during the time the participants experienced "Doing the month." The questionnaire to determine postpartum depression was administered six weeks after the women had given birth.

First, the researchers noted a vast majority of women strictly stuck to the traditional practices and expectations of "Doing the month." The presence of postpartum depression in the research subjects was around 11.8% (Ding et al., 2019). The participation in the traditional practice was high, regardless of educational level and where the women lived. Furthermore, the study found a lower prevalence of postpartum depression in women who observed the confinement restrictions place on them by traditional mandates. This observed lower risk of postpartum depression was explained in part by the authors to be partially derived from the large amount of familial support experienced during "Doing the month." Sleep deprivation was shown to increase the risk of postpartum depression in the participants. Continuing, those who did not adhere to the practice of keeping windows and doors shut (i.e. Those who frequently opened windows) should a significant decrease in postpartum depression cases (Ding et al., 2019). The

authors conclude stating that "Doing the month" can have mixed results on women's health based upon adherence patterns and should not be a substitute for medical treatment.

Acupuncture and postpartum depression. Li et al. use a meta-analysis to consolidate and evaluate literature on acupuncture and its effects on treating postpartum depression. A motivating factor for the study was to analyze an alternative means to antidepressant drug use when combating postpartum depression. The team eventually selected 8 studies that were random control trials to be analyzed for their meta-analysis. They compared their results to other literature and another recent meta-analysis. Past literature suggests there is a large beneficial effect of acupuncture on the treatment of postpartum depression (Li et al., 2019). The authors did note that bias could be a problem in the studies they analyzed.

The results from the meta-analysis showed the effects of acupuncture were similar to other treatment methods. Acupuncture was shown to even have a lesser effect than most other antidepressant treatment options (Li et al., 2019). The authors took care to state evidence of depression relief from acupuncture treatment was observed in many of the experiments analyzed. The concluding statements involved acknowledgement that the evidence was inconclusive because of the lack of high-quality research and the possible risk of bias in many of the articles. Future research and more random control trials are necessary to definitively make a statement on acupuncture and its efficacy in treating postpartum depression (Li et al., 2019).

Dietary intake during "Doing the month." Hu et al. allowed participants in their study to keep a journal of their dietary intake during the period of lactation and "Doing the month." The study was aimed at analyzing the dietary habits of women during this traditional Chinese period of rest and evaluating whether or not adequate nutrition was being received. The women

kept three-day-long diaries which were collected five times throughout their period of "Doing the month." The nutritional intake of each mother was charted and then analyzed compared to suggested daily values to see how well the mother's nutritional needs are being met. Both macro and micronutrients were included in the observations.

The dietary intake of the mothers was found to be inadequate in many areas of nutritional health. The authors noted concern that lactating women in Shanghai could be facing widespread issues because of their dietary habits during "Doing the month." Specifically, intake of vitamin A, vitamin C, thiamin, and dietary fiber were of particular concern; furthermore, iron, magnesium, and zinc were also problem areas (Hu et al., 2019). The study could not find evidence of excessive fat and sodium intake. One major limitation of this study was the intake of dietary supplements was not analyzed during this time. Concluding, the researchers suggest more health education for mothers to help them make proper nutritional choices for the sake of breastmilk composition, as well as further research concerning supplement intake.

Use of herbal products by breastfeeding mothers. As the final article analyzed under maternal health, Zheng et al. use a systematic literature review to identify a health worker's role regarding the safe use of herbal products by breastfeeding mothers. The study analyzed 22 articles published since 2013 in their review. The study found three major themes in the literature, including breastfeeding women's expectations, current healthcare provider practices, and enabling factors for better care given to patients regarding herbal products (Zheng et al., 2019). The research team identified gaps between the mother's expectations of healthcare providers and the current practices.

The study discovered breastfeeding mothers were receiving a significant lack of treatment in regard to herbal medicine and direction on its use from healthcare professionals. The authors propose a collaborative effort to help enable better communication and treatment between mothers and their health care providers because of the numerous variables in play (Zheng et al., 2019). The team took particular care to note a mother's stress level should be observed, and healthcare providers should be more sensitive to the emotional state of their patients. Further research should be done in the area, and health care providers should take more care to provide mother's with current scientific data regarding herbal medicine and its usage (Zheng et al., 2019). Again, collaboration between many professions is stressed as an important factor to resolving issues around the use of herbal products and breastfeeding mothers.

Additional Topics

Three of the included articles of this study were related to women's health and acupuncture in a broader sense. The articles are examined in no particular order but are lightly organized based on subject matter. The findings and research concerning general women's health will be highlighted in this section.

Acupuncture for urinary retention after radical hysterectomy. Xiang et al. use a randomized control trial and divided 64 patients into three groups to determine if acupuncture, navel acupuncture, or a combination of both have an effect on patients that had to undergo a radical hysterectomy because of cervical cancer. Spontaneous urination, residual urine volume, and urinary catheter dependence were all observed and collected as data for the experiment (Xiang et al., 2019). Time increments of three days, six day, and nine days were used as a data collection timeline. The researchers developed parameters to determine if and to what extent

someone experienced an effect from the treatment. Trained and certified professionals were used to administer acupuncture treatment.

The experiment found the combination of navel and normal acupuncture was statistically significant in effectively helping patients control their urinary patterns (P<0.01). The dependence on catheter use also declined noticeably in the group which received the combination therapy. The residual urine volume was also stated to be lower in the combined therapy group as well, again with statistical significance. All three groups in the study experienced recurrences. The authors concluded by stating the combination of navel and traditional acupuncture therapy had a statistically significant positive impact on those who received a hysterectomy because of cervical cancer.

Kuntai capsules and hormone therapy in patients with premature ovarian failure.

Liu et al. use a literature review to look at kuntai capsules and hormone therapy as a treatment option for those who suffer from premature ovarian failure. Kuntai capsules are a traditional Chinese herbal medicine that originate from the third century (Liu et al., 2019). They have been used for centuries to help deal with problems women may frequently suffer.

Premature ovarian failure is normally classified as ovarian failure in any woman before the age of 40. Premature ovarian failure (ovarian dysfunction in women aged <40 years) does not currently have many treatment options, so this team of researchers dedicated their time to look at alternative medicine as a possible means of treatment (Liu et al., 2019). The team collected sample from multiple search engines up until October 2018, and eventually eliminated their results to 12 articles. All of the articles were written in Chinese. The team stated there was a low risk of publication bias after examination.

The findings suggest kuntai capsules and hormone therapy have a significantly greater effect on restoring ovarian function than hormone therapy alone. Although, a lack of high-quality evidence from China is reported. The team hypothesize the estrogen-like effects of the kuntai tablets help them make a big impact on recovery. Adverse short-term effects were noted in most of the samples collected, but long-term effects are still unknown. Further research is suggested in the area, with better randomized control trials and a focus on the side effects caused by using kuntai tablets. As of now, the benefits still remain inconclusive because of the lack of research (Liu et al., 2019).

Differences in the composition of vaginal microbiota. Traditional Chinese medicine lists spleen-deficiency syndrome and damp-heat syndrome as two of the most common syndromes of vaginitis (Lin et al., 2019). Lin et al. recruited a total of 32 participants to analyze the differences in the composition of vaginal microbiota based upon their medical history (i.e. spleen-deficiency syndrome, damp-heat syndrome, or healthy individual). The team used two Chinese medical professionals to diagnose patients with the respective syndrome. All of the patients provided permission to obtain vaginal secretion samples for collection. The samples were then taken to a lab and the resident bacteria's DNA was sequenced. The aim of this study was to see if there was a correlation between diagnosis and vaginal microbiota as well as decide if traditional Chinese medicine can help supplement clinical diagnosis, too.

The results of the experiment show a possible relation between the various vaginal microbiotas and what syndrome is diagnosed by a traditional Chinese medicine professional. The authors state the variance in vaginal microbiota could help explain and support the traditional Chinese medicine theory of syndromes such as damp-heat and spleen-deficiency. They conclude

saying the vaginal microbiota composition can be used as a biomarker to help with diagnosis in the traditional Chinese medicine realm (Lin et al., 2019). Future research is suggested to include a larger sample size for increased validity.

Findings

After analyzing the above articles, there seems to be a mixed consensus in the literature for traditional Chinese medicine. Some articles for example, concluded with acknowledgement of statistically significant health benefits concerning women's health from acupuncture. Other articles, however, ended with inconclusive results. The difference in content area may explain these conclusions, as acupuncture may be beneficial in one sense/field of research but neutral in another. Benefits may also lie in some herbal treatments for problems such as postpartum hemorrhages. Many robust articles seem to point toward some sort of relief and aid derived from herbal supplementation alongside western medical treatment. One of the largest areas of focus found in the literature was "Doing the month." Many of the articles examined the health benefits and adverse effects of practicing this century old tradition. A combination of both positive and negative effects seems to be the combined conclusion of the articles. If provided a strong support system and enough sleep along with some fresh air, the traditional Chinese period of rest may be extremely beneficial to most mothers. However, if provided a weak support system and inadequate nutritional intake, the period may be detrimental not only to the mother but also her parenting skills which inevitably affects the child later down the road. Overall, further research needs to be performed in many of these areas to help solidify and validate many of the findings. Traditional Chinese medicine does show promise of offering alternative treatment methods and medication that may be of benefit to women in today's modern society.

Discussion and Recommendations

The articles analyzed provided a wide spread of information and recommendations on proper practices and the efficacy and side effects of traditional Chinese medicine. Most of the research was conducted in China, but a few cases were in Europe or other parts of Asia. The first aspect of note is the observation of a large gap in adequate literature dealing with alternative medicine. Many of the articles were excluded because of the poor study design or high incidence of bias. Even some included articles could have been performed with increased scientific rigor but made it into the sample size because of guidelines provided for this literature evaluation. The lack of proper research could perhaps be explained by the cultural divide between the two opposing parties: western medicine and alternative medicine. Without some of the scientific evidence to support alternative medicine, some clinicians may discredit all findings as quackery, while others may go as far as introducing bias when trying to protect this historical area of medicine.

Continuing, the articles that are of good quality hold interesting conclusions for those that approach the debate with an open mind. Many areas of women's health could be affected by the discovery of new treatment methods. So much so the time and effort put into studying alternative medicine could be worth the benefit of finding scientifically proven benefits from natural ingredients and traditional methods. Especially in today's health atmosphere of increasing antibiotic resistance and viral superbugs, returning to century old methods may provide an opportunity for medical advancement that would otherwise be overlooked but is very much needed.

Based on the articles analyzed in this review, recommendations could perhaps be carefully given in regard to approaching traditional Chinese medicine and alternative medicine in general with an open mind. Some of these findings look promising for the future of herbal medicine and traditional cultural practices. The evidence is strong enough for some of these topics that it may warrant a conversation with your health professional to talk about other options to supplement western medicine if you are inclined to do so.

Limitations and Strengths

This literature review has a few limitations. Firstly, the initial search was performed only on one search engine (although expansive) to help reduce the burden of analyzing such a large portion of literature in the time frame allotted. Also, as a singular researcher performed the critique of inclusion and exclusion criteria, some articles may have been overlooked or erroneously included. The sample size of articles was moderately decent; however, the quality of articles may have been overall low. The amount of solid research on the topic of traditional Chinese medicine is scarce and eliminating studies with a heavy influence of bias makes them even more so.

A strength of this study is all of the articles are recent and many of the studies are metaanalysis or randomized control trials. Time and care were taken to ensure as well as possible the included articles were of the highest integrity possible given the other limitations. Furthermore, both positive and negative effects of traditional Chinese medicine was taken into consideration and included in the study.

Future Research

The field of future research lies ripe for exploration on the topic of traditional Chinese medicine. Many interest areas have not been touched by research, and those that have are ridden with biased and informal experimentation. Many of the topics mentioned in this literature review require further research in the area to help solidify statements and provide conclusive results. Without future research on these topics, vital discoveries could be overlooked, and new treatment methods could be disregarded as unscientific hearsay. New articles lay the foundation for method design and future research that can be emulated by others seeking to wet their feet in these deep waters (Zhai et al., 2019; Stener-Victorin et al., 2019).

Care must be taken to respect cultural traditions and see this as an opportunity to learn not only about an ancient medical tradition, but also about a culture and people group. Future research could also be done in areas apart from medical fields. Research in sociology and psychology and history could be performed with traditional Chinese medicine as a background. Even areas such as linguistics could learn about and research traditional Chinese medicine further. Whatever the case, hope lies in others finding an interest in this ancient practice and dedicating some time to learning more about the mysteries it holds.

Conclusion

With alternative medicine on the rise across the world, it would only be practical to research the effects of one of the most ancient and popular alternative medicine areas today, traditional Chinese medicine. Used by millions of people across the world, despite its popularity, traditional Chinese medicine suffers from an extreme lack of solid research and is surrounded by bias and mysticism. One of the major focus areas of traditional Chinese medicine is women's

health. Maternal health in particular houses numerous herbal remedies and ancient customs all aimed at taking care of the mother and her baby. Acupuncture is one of the most widely researched areas of traditional Chinese medicine, but even it suffers from poor research design and unintended bias. Current studies show many methods of traditional Chinese medicine may hold promise, and future research in the area is highly encouraged.

The literature reviewed provided some fascinating insight into the role traditional Chinese medicine plays in women's health. Some articles praised the benefits while others highlighted some negative effects and consequences. All of the studies were from 2019, showing research is developing on the topic and more people are interested in rigorous study design and testing concerning traditional Chinese medicine. Some of the findings are strong enough they allow at least the curious to further talk with professionals and seek treatment as a supplement to modern western medicine. Other fields of study could find excitement and new adventure analyzing traditional Chinese medicine, and efforts could be made to set this historic tradition in the hearts and minds of people for years to come. With all the mystery and magic it holds, traditional Chinese medicine has a bright future in scientific research and discovery.

References

- Alvarez-Klee, R. (2019;2018;). China: The development of the health system during the maoist period (1949-76). *Business History*, 61(3), 518-537. doi:10.1080/00076791.2018.1480611
- Chen, S., Xie, B., Tian, H., Ding, S., & Lu, C. (2019). Traditional chinese medicine yimucao injection combined with western medicine for preventing postpartum hemorrhage after cesarean section: A systematic review and meta-analysis. *Evidence-Based Complementary and Alternative Medicine : ECAM*, 2019, 7475151-13.

 doi:10.1155/2019/7475151
- Ding, G., Niu, L., Vinturache, A., Zhang, J., Lu, M., Gao, Y., . . . Shanghai Birth Cohort Study.

 (2019). "doing the month" and postpartum depression among chinese women: A shanghai prospective cohort study. *Women and Birth : Journal of the Australian College of Midwives*, doi:10.1016/j.wombi.2019.04.004
- Hu, R., Fei, J., Zhai, Y., Feng, Y., Warren, J., Jin, Y., . . . Li, J. (2019). The dietary intake of two groups of lactating women in shanghai during the puerperium. *Asia Pacific Journal of Clinical Nutrition*, 28(1), 106-115. doi:10.6133/apjcn.201903_28(1).0015
- Karim, F., Dilley, J., & Cheung, E. (2019). A review of acupuncture in obstetrics and gynaecology. *The Obstetrician & Gynaecologist*, 21(3), 209-214. doi:10.1111/tog.12574
- Li, W., Yin, P., Lao, L., & Xu, S. (2019). Effectiveness of acupuncture used for the management of postpartum depression: A systematic review and meta-analysis. *BioMed Research International*, 2019, 6597503-8. doi:10.1155/2019/6597503

- Lin, H., Chang, Y., Chou, H., Chang, C., Huang, M., Liu, S., . . . Yeh, T. (2019). Effect of music interventions on anxiety during labor: A systematic review and meta-analysis of randomized controlled trials. *Peerj*, 7, e6945. doi:10.7717/peerj.6945
- Lin, W. X., Du, X., Yang, L. L., Chen, S. Y., Qiu, W. Y., Wu, H. W., . . . Gao, J. (2019).

 Differences in the composition of vaginal microbiota between women exhibiting spleen-deficiency syndrome and women with damp-heat syndrome, two of the most common syndromes of vaginitis in traditional chinese medicine. *Evidence-Based Complementary and Alternative Medicine*, 2019, 1-11. doi:10.1155/2019/5456379
- Liu, W., Nguyen, T., Tran Thi, T., & Zhou, S. (2019). Kuntai capsule plus hormone therapy vs. hormone therapy alone in patients with premature ovarian failure: A systematic review and meta-analysis. *Evidence-Based Complementary and Alternative Medicine:*ECAM, 2019, 2085804-9. doi:10.1155/2019/2085804
- Mainfort, D. (2004). The physician-shaman: early origins of traditional Chinese medicine. *Skeptic* [Altadena, CA], *11*(1), 36+. Retrieved from https://link-gale-com.ezproxy.liberty.edu/apps/doc/A119898793/BIC?u=vic_liberty&sid=BIC&xid=13a5 5b0c
- Nicolian, S., Butel, T., Gambotti, L., Durand, M., Filipovic-Pierucci, A., Mallet, A., . . .

 Dommergues, M. (2019). Cost-effectiveness of acupuncture versus standard care for pelvic and low back pain in pregnancy: A randomized controlled trial. *PloS One, 14*(4), e0214195. doi:10.1371/journal.pone.0214195
- Pan, W., Chang, C., Chen, S., & Gau, M. (2019). Assessing the effectiveness of mindfulness-based programs on mental health during pregnancy and early motherhood a randomized

- control trial. *BMC Pregnancy and Childbirth*, *19*(1), 1-8. doi:10.1186/s12884-019-2503-
- Smith, C. A., Armour, M., Shewamene, Z., Tan, H. Y., Norman, R. J., & Johnson, N. P. (2019).

 Acupuncture performed around the time of embryo transfer: A systematic review and meta-analysis. *Reproductive BioMedicine Online*, *38*(3), 364-379.

 doi:10.1016/j.rbmo.2018.12.038
- Stener-Victorin, E., Zhang, H., Li, R., Friden, C., Li, D., Wang, W., . . . Qiao, J. (2019).

 Acupuncture or metformin to improve insulin resistance in women with polycystic ovary syndrome: Study protocol of a combined multinational cross sectional case-control study and a randomised controlled trial. *BMJ Open*, *9*(1), e024733. doi:10.1136/bmjopen-2018-024733
- Wang, L., Huang, W., Wei, D., Ding, D., Liu, Y., Wang, J., & Zhou, Z. (2019). Mechanisms of acupuncture therapy for simple obesity: An evidence-based review of clinical and animal studies on simple obesity. *Evidence-Based Complementary and Alternative Medicine :*ECAM, 2019, 5796381-12. doi:10.1155/2019/5796381
- Xiang, J., 向娟, Li, X., 李旭红, 周艳华, Zhou, Y., . . . Xie, F. (2019). Therapeutic observation of acupuncture plus navel acupuncture for urinary retention after radical hysterectomy for cervical cancer. *Journal of Acupuncture and Tuina Science*, *17*(4), 245-252. doi:10.1007/s11726-019-1123-x
- Yu, J., Cai, Y., Su, G., & Li, Y. (2019). Motherwort injection for preventing postpartum hemorrhage in women with vaginal delivery: A systematic review and meta-analysis of

- randomized evidence. *Evidence-Based Complementary and Alternative Medicine : ECAM*, 2019, 1803876-9. doi:10.1155/2019/1803876
- Zhai, J., Li, Y., Lin, J., Dong, S., Si, J., & Zhang, J. (2019). Chinese herbal medicine for postpartum constipation: A protocol of systematic review and meta-analysis. *BMJ Open*, *9*(1), e023941. doi:10.1136/bmjopen-2018-023941
- Zhang, X., Zhang, R., Chen, D., Huang, R., Tian, Y., Zhang, P., . . . Shanghai Birth Cohort.
 (2019). Association of tea drinking and dysmenorrhoea among reproductive-age women in shanghai, china (2013–2015): A cross-sectional study. *BMJ Open*, 9(4), e026643.
 doi:10.1136/bmjopen-2018-026643
- Zheng, T., Yao, D., Chen, W., Hu, H., Ung, C. O. L., & Harnett, J. E. (2019). Healthcare providers' role regarding the safe and appropriate use of herbal products by breastfeeding mothers: A systematic literature review. *Complementary Therapies in Clinical Practice*, 35, 131-147. doi:10.1016/j.ctcp.2019.01.011
- Zheng, X., Watts, K., & Morrell, J. (2019). Chinese primiparous women's experience of the traditional postnatal practice of "Doing the month": A descriptive method study. *Japan Journal of Nursing Science*, 16(3), 253-262. doi:10.1111/jjns.12232