



TREATMENT OF POLYCYSTIC OVARIAN SYNDROME WITH ACUPUNCTURE MYTH OR TRUTH SHOW?

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Abstract:

Acupuncture's success in pain management with minor side effects predicts its efficacy in PCOS therapy. More importantly, research shows that acupuncture improves menstrual cycles, lowers LH and testosterone levels, and reduces insulin sensitivity. Acupuncture should be utilised as a vital intervention for treating infertile women with PCOS, based on the sources' trustworthiness. Its efficacy is no longer a myth, as it is supported by empirical and scientific facts.

Keywords: Polycystic Ovarian Syndrome, Acupuncture, PCOS Treatment, PCOS management.

Title:

“Treatment of Polycystic Ovarian Syndrome with Acupuncture Myth or Truth Show?”

Introduction and Background

Polycystic Ovarian Syndrome (PCOS) is a reproductive complication accompanied by light menstruation (oligo-amenorrhoea), fertility, and extreme hair growth (hirsutism). Women with PCOS indicators often experience excessive androgen secretion and some metabolic complications such as diabetes mellitus. Such complications hinder ovulation, making it challenging for the affected women to conceive (Lim et al., 2019, p.10). Scientific evidence indicates that PCOS is a severe reproductive complication as it accounts for about 70 to 90% of ovulatory diseases (Jo et al., 2017, p.1). The prevalence of the disorder is also alarming, depicting the possibility of affecting various women. Data

from the National Institute of Health indicated that the PCOS prevalence rate stood between 6% and 10% in 2012. One study showed that the prevalent PCOS risk level in UK stood at 26%. The prevalence rates in other nations, including Greece, Spain, and Australia, are also over 4% (Lim et al., 2019, p.10). Such huge prevalence rates indicate that PCOS is a severe complication among women that needs immediate intervention. Lack of instant intervention might increase the rates of androgen secretion hence reducing infertility rates among several women.

Substantial interventions have been implemented for first-line therapies in the treatment of PCOS. Oral contraceptive pills (OCPs) have been utilized for treating anti-androgens and reducing luteinizing hormone (LH) levels in PCOS patients. For fertility, letrozole (LE) is used as the initial pharmacological therapy to reclaim the ovulation process. Other drugs, including clomiphene citrate (CC) and gonadotropins, have also played a significant role in reducing PCOS effects (Wu et al., 2020, p.2). However, most of the treatments have inevitable drawbacks; hence, healthcare providers have resorted to new therapies. One of the renowned approaches that have gained relevance in recent years is acupuncture. The approach reduces PCOS effects with convenience and limited adverse effects.

Treatment of PCOS with Acupuncture

Acupuncture was widely used in Asian countries for pain management. However, the approach has gained popularity in endocrinology and infertility management given the convenience it offers. Acupuncture entails introducing needles in designated points referred to as acupoints. Given its efficiency, several clinical and animal tests reveal that acupuncture is a vital intervention for ovulatory dysfunction among women affected with PCOS. Scientific data also points that the approach increases insulin sensitivity, given that PCOS is often characterized by insulin resistance. The ability to decrease testosterone levels in individuals affected with PCOS is another significant benefit of acupuncture (Jo et al., 2017, p.1). It emerges that acupuncture has found value not only in pain management but also in handling reproductive complications. The limited treatment adverse effects portrayed in pain management are also prevalent in treating PCOS with acupuncture.

The effectiveness of the treatment model is often determined by its clinical implications. Apart from providing efficiency in treatment, an intervention should have limited adverse impacts. Notably, acupuncture has offered the convenience of treating PCOS with few adverse effects. A recent review depicted that acupuncture had high evidence levels among 12 different complementary and alternative medicine (CAM) methods for improving infertility results. The model improved patients' clinical symptoms and raised sex hormone levels. On the other hand, it triggers menstrual cycles and shortens reproduction cycles among women with PCOS. Other studies also indicate that combining herbal medicine with acupuncture can improve menstrual cycles, reduce LH levels and total testosterone in the body. Besides, it triggers ovulation hence raising pregnancy rates (Wang et al., 2019, p.2). Such solid evidence points out the efficiency of acupuncture in PCOS treatment. Although there might be contradictions, acupuncture in PCOS treatment is a reality and not a myth.

Body and ear acupuncture are the primary interventions for handling anovulatory women. Body acupuncture entails stimulation of acupoints by needling diverse sizes of sterilized needles. On the other hand, ear acupuncture involves the stimulation of acupoints on the external ears through needles or pellets. In some instances, electro-stimulation or electro-acupuncture might be used. The approach requires stimulation through electrical impulses that resemble the acupuncture needles administered on designated acupoints (Lim et al., 2019, p.10). The techniques are feasible, although the efficiency of a treatment model often depends on its specificity. Therefore, for acupuncture, there should be a mode of selecting acupoints to ensure the therapeutic effectiveness of the model. Although the composition of acupoints chosen can be different, the primary goal is picking points that would activate receptors and the nerves in the skin and muscles. Acupuncture might be effective, although selecting the correct acupoints is essential in addressing reproductive challenges in women with PCOS.

Acupuncture is recognized by general mainstream medicine, given the specificity it offers in the treatment of PCOS. Acupuncture's clinical effects emerge from the activation of receptors and afferent nerves that modulates metabolic, endocrine, and nervous system functions. Therefore, Yu et al. (2016) considered at least 41 acupoints for the acupuncture procedure. After

implementing the exclusion criteria, the researchers identified 10 critical acupoints for PCOS treatment. The findings indicated that “the points of spleen meridian, stomach meridian, and conception vessel are selected frequently when acupuncture therapy is adopted for PCOS treatment” (Yu et al., 2016, p.75). The study predominantly elaborated the need for specificity in treating PCOS through acupuncture. With a proper insertion of needles in the identified acupoints, the approach is likely to address the reproductive challenge effectively. Moreover, such acupoints are located in the abdomen and lower limbs that are directly connected to the reproductive system.

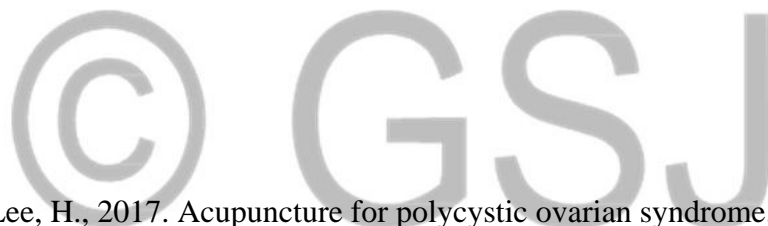
Effectiveness of Acupuncture in PCOS Treatment

Acupuncture is recognized as a safe treatment approach. The fact that the technique has fewer treatment adverse effects in pain management predicts that it can portray the same effectiveness in PCOS treatment. Adverse effects accompanied by medication involve skin bruising, bleeding, and pain. However, reports of transient adverse effects involved in acupuncture are rare. “One observational study including more than 200,000 participants who received acupuncture for pain found an adverse event rate of 8.6%. Another similar study estimated that the serious adverse event rate was between 0 and 1.1 per 10,000 treatments” (Lim et al., 2019, p.10). Given that medications such as LE, CC, and gonadotropins have depicted adverse effects in treating PCOS, acupuncture is likely to be more effective. Limited adverse effects illustrate that the approach would serve a vast population, reducing infertility challenges triggered by PCOS.

Empirical evidence also depicts that acupuncture is an effective strategy for PCOS management. Wu et al. (2020) steered a systematic review and meta-analysis to determine acupuncture efficiency in assisting reproductive-age women affected with PCOS. The researchers used 22 sources with a total participant population of 2315. A pooled analysis depicted recovery of menstrual periods after acupuncture. Besides, there was a significant reduction in LH levels among reproductive-age females subjected to acupuncture. Finally, testosterone levels reduced substantially among the acupuncture group (Wu et al., 2020, p.6). The research used credible sources hence illustrating its ability to elaborate the effectiveness of acupuncture. However, the quality of evidence for most of the sources was low to very low. Such aspects affect the credibility, reliability, and validity of the study. Despite the limitations, the study successfully elaborated on how acupuncture can reclaim menstrual periods and reduce LH and testosterone levels among women affected by PCOS.

Another randomized controlled trial by Wang et al. (2019) also elaborated the impact of manual acupuncture (MA) among infertile females affected with PCOS. The researchers recruited 86 females aged between 20 and 40 years with a diagnosis history of PCOS. Respondents were allocated to MA and sham acupuncture groups. Participants in the groups received herbal medicine twice a day, while those in the MA group received real acupuncture. On the other hand, the sham group was subjected to placebo acupuncture. Findings predicted that a combination of acupuncture with herbal medicine was effective in reducing reproductive complications like infertility. Ovulation rate was reclaimed while insulin resistance was reduced. Moreover, sex hormones were controlled, increasing the possibility of pregnancy among the participants (Wang et al., 2019, p.7). The effectiveness of this research relied on its sample selection procedure and the inclusion criteria. The researchers selected a large sample size with a diagnosis history of PCOS. Such a study group provides first-hand information on the effectiveness of the treatment model. Therefore, this research illustrates that acupuncture intervention for PCOS is a reality, and the effects are evidence through a reduction in infertility challenges among PCOS victims.

The use of acupuncture in PCOS management appeared as a myth, given the limited evidence supporting the intervention. However, the success of acupuncture in pain management with minor adverse effects predicts its efficacy in PCOS management. More importantly, empirical evidence suggests that acupuncture recovers menstrual periods, reduces LH and testosterone levels and insulin resistance. Given the credibility of the sources, acupuncture should thus be used as a critical intervention for assisting infertile women with PCOS. Its effectiveness is no longer a myth and is backed by credible empirical and scientific evidence.



Bibliography

- Jo, J., Lee, Y. and Lee, H., 2017. Acupuncture for polycystic ovarian syndrome. *Medicine*, 96(23), pp.1-10.
- Lim, C., Ng, R., Cheng, N., Zhang, G. and Chen, H., 2019. Acupuncture for polycystic ovarian syndrome. *Cochrane Database of Systematic Reviews*, (7), pp.1-63.
- Wang, Q., Deng, H., Cheng, K., Huang, Z., Yin, X., Zhou, Y., Yang, Y., Shen, W., Zhao, L. and Shen, X., 2019. Manual acupuncture for the infertile female with polycystic ovary syndrome (PCOS): study protocol for a randomized sham-controlled trial. *Trials*, 20(1), pp. 1-9.
- Wu, J., Chen, D. and Liu, N., 2020. Effectiveness of acupuncture in polycystic ovary syndrome. *Medicine*, 99(22), pp.1-10.
- Yu, C., Kong, L., Ma, C., Shen, F., Yao, G., Xiong, Y. and Zhou, H., 2016. The rules of acupuncture selection of acupuncture for polycystic ovary syndrome based on data mining. *World Journal of Acupuncture-Moxibustion*, 26(3), pp.73-78.