
How Acupuncture Increases the Success of IVF

Xiaoji Jenny Li B. Acu (China), M. Hs (NZ), PhD Acu (China)

IVF, which stands for "in vitro fertilization" and literally means "fertilization in glass", is a major medical intervention for infertility when other reproductive approaches have failed (Jones, 2003). IVF consists of the following steps:

1. Follicle stimulating injections- to stimulate the development of follicles;
2. Egg retrieval- to take mature eggs from the ovaries for in-vitro fertilization;
3. Embryo transfer- to put the well-developed fertilized egg (embryo) back into the uterus, normally on day 3 or day 5 after fertilization, depending on the cell count of the embryo.

IVF is regarded as the last option in ART (Assisted Reproductive Treatment) after oral medicine and IUI (Intra Uterine Insemination). It has a higher success rate than the other two. However, the success rate is not steady (12.5-31.9%), with a tendency to decline with increasing age (Anderson & Rosenthal, 2013). Moreover, owing to the methodology and utilization of various drugs in IVF, it generates many more side-effects, some of which can be life threatening, such as OHSS (Ovarian Hyper-Stimulation Syndrome). It may also induce a very serious gynecological condition called POF (Premature Ovarian Failure).

Furthermore, because IVF is complex and consists of a series of steps that if applied improperly may not result in conception, women often have to undergo further cycles of treatment to finally achieve a successful pregnancy. Due to the significant stress associated with IVF, for example concern about risks, complications, financial difficulties, ethical considerations, uncertain pregnancy and birth rate, it is advantageous for infertile couples to seek help from complementary medicine to relieve the stress and improve outcomes. Among all natural therapies of

Complementary and Alternative Medicine, Acupuncture is the most common choice to improve fertility as it provides good physical (Moy et al., 2011) and mental support at each step of IVF from start to finish (Balk, 2010).

It is recommended that women have acupuncture to assist the success of IVF, because acupuncture can improve the function of both ovaries and uterus, thus promoting the growth of follicles, enhancing the receptivity of the uterus and regulating hormonal levels to significantly increase the chance of embryo implantation (Ng, 2008). Beyond its specific benefits during IVF treatment, acupuncture can also provide care when preparing for pregnancy by increasing both the quality and quantity of follicles, supporting the attachment of embryos and reducing pregnancy-related complications, during labor and even after birth.

Moreover, scientific research has proven that women undergoing IVF achieve higher pregnancy rates when receiving acupuncture, because of the positive mental effects and sense of well-being that acupuncture creates. The treatment makes them more optimistic and positive, the increased emotional positivity and sense of being in control assist their tolerance of others and they communicate with others more effectively. As a result, their relationships improve. With support from their social environment, women's expectations of the treatment are more balanced and this eases the grief associated with infertility and possible negative outcomes (de Lacey, 2009). The results go beyond merely preparing women for childbirth - they are more comprehensive and ongoing.

In addition to all the benefits acupuncture brings to women's fertility, it has the capacity to boost male fertility by improving the sperm count, increasing sperm mobilization and more importantly, reducing sperm deformities to save women from miscarriages and having disabled or deformed babies.

The nature of IVF demands that it focus on patients' physical bodies intensively, so that in some cases patients feel that the balance of emotional, mental and physical aspects of the body is overlooked during the process. Complementary healthcare can support

them emotionally to maintain balance and wellness. Acupuncture, which embodies the concept of holism, perfectly fills this space. With the comprehensive benefits and holistic improvements acupuncture generates in both women and men, both physiological and psychological, it is much more possible for infertile couples to reach a satisfactory outcome using IVF treatment.

Anderson, B., & Rosenthal, L. (2013). Acupuncture and in vitro fertilization: critique of the evidence and application to clinical practice. *Complementary Therapies in Clinical Practice*, 19(1), 1. doi: 10.1016/j.ctcp.2012.11.002

Balk, J. (2010). The relationship between perceived stress, acupuncture, and pregnancy rates among IVF patients: a pilot study. *Complementary Therapies in Clinical Practice*, 16(3), 154-157. doi: 10.1016/j.ctcp.2009.11.004

de Lacey, S. (2009). Building resilience: a preliminary exploration of women's perceptions of the use of acupuncture as an adjunct to In Vitro Fertilisation. *BMC Complementary & Alternative Medicine*, 9, 11p. doi: 10.1186/1472-6882-9-50

Jones, J. H. W. (2003). IVF: past and future. *Reproductive BioMedicine Online*, 6(3), 375-381. doi: 10.1016/S1472-6483(10)61860-3

Moy, I., Milad, M. P., Barnes, R., Confino, E., Kazer, R. R., & Zhang, X. (2011). Randomized controlled trial: effects of acupuncture on pregnancy rates in women undergoing in vitro fertilization. *Fertility and Sterility*, 95(2), 583-587. doi: 10.1016/j.fertnstert.2010.05.024

Ng, E. H. Y. (2008). The role of acupuncture in the management of subfertility. *Fertility and Sterility*, 90(1), 1-13. doi: 10.1016/j.fertnstert.2008.02.094