TOPIC 2 · REFLEXOLOGY IN FERTILITY, PREGNANCY AND WELLBEING

What the evidence really tells us about conception, ovulation, anxiety, pain, and support during pregnancy and labour.

Why 8 core sources?

For this topic, eight is the ideal starting number — not ten. Direct fertility-specific reflexology research is extremely limited, and it would not be scientifically responsible to fill the page with indirect or weakly relevant studies. These eight sources cover the real evidence landscape: the key sham-controlled anovulation trial, a reproductive-medicine review, two contemporary pregnancy systematic reviews/meta-analyses, two RCTs on stress/pain/labour, a broader systematic review, and the official NCCIH perspective.

The evidence in context

The picture is clearer than commercial descriptions often suggest. There is currently insufficient evidence to claim that reflexology increases fertility, induces ovulation, improves implantation or reduces miscarriage risk. The direct randomized anovulation trial did not demonstrate a specific benefit over sham treatment. In contrast, more recent pregnancy and labour research provides interesting signals for supportive outcomes such as anxiety, pain, low-back/pelvic symptoms, labour duration and satisfaction with the birth experience. The scientifically defensible position is therefore: reflexology as a complementary wellbeing and symptom-support practice, with limited direct evidence for fertility outcomes.

1. Holt et al. (2009)

The effectiveness of foot reflexology in inducing ovulation: a sham-controlled randomized trial

Original source

What it studied → A sham-controlled randomized trial in 48 women with anovulation attending an infertility clinic. Participants received eight sessions of genuine or sham reflexology over 10 weeks. The primary outcome was ovulation assessed by serum progesterone.

What it found → Ovulation occurred in 11/26 women (42%) in the true-reflexology group and 10/22 (46%) in the sham group. Pregnancy occurred in 4/26 versus 2/22, respectively. The authors concluded that no clinically relevant specific effect on ovulation was demonstrated.

What it means in practice → This is the most important direct fertility-specific reflexology trial and does not support the claim that reflexology induces or restores ovulation. Pregnancy numbers were too small for meaningful conclusions.

Limitations → The trial did not reach its planned sample of 104 women and was therefore underpowered. Sham treatment involved gentle massage and may have had nonspecific effects. IVF, live birth and other infertility diagnoses were not studied.

2. Smith, Armour & Ee (2016)

Complementary Therapies and Medicines and Reproductive Medicine

Original source

What it studied → A review of complementary therapies used during preconception, infertility care and pregnancy. It places the limited fertility-specific reflexology literature within the broader evidence on complementary reproductive-health approaches.

What it found → The authors note that, despite frequent use of complementary interventions, evidence for efficacy, effectiveness and safety is lacking for many modalities and study quality is variable. Direct infertility evidence for reflexology remains particularly limited.

What it means in practice → It helps position reflexology accurately: as a complementary practice used in reproductive care, not as an established infertility treatment.

Limitations → A narrative review rather than a new clinical trial or modern meta-analysis. Published in 2016, it does not include newer pregnancy and labour research.

3. Liang et al. (2023)

The effects of reflexology on symptoms in pregnancy: a systematic review

Original source

What it studied → A systematic review of reflexology for pregnancy- and labour-related symptoms and outcomes, including labour pain and duration, anxiety, low-back/pelvic-girdle pain, fatigue, sleep, constipation and oedema.

What it found → The review concluded that reflexology was probably beneficial for labour pain, labour duration and anxiety in pregnancy. Evidence for low-back/pelvic-girdle pain, fatigue, sleep quality, constipation and oedema was insufficient. The authors emphasized that strong overall supportive evidence is still lacking.

What it means in practice → The strongest reflexology signal appears to concern supportive outcomes—anxiety, pain and the labour experience—rather than fertility outcomes. This is the area in which claims can be framed most responsibly.

Limitations → Variable quality across included studies, small samples and heterogeneous protocols. The review mainly concerns pregnancy/labour and does not establish effects on conception or miscarriage.

4. Yang et al. (2024)

Effects of foot reflexology massage on pregnant women: a systematic review and meta-analysis of randomized controlled studies

Original source

What it studied → A systematic review and meta-analysis of 13 randomized studies involving 1,189 pregnant women. Outcomes included anxiety, pain, duration of labour, birth satisfaction and physiological measures.

What it found → The pooled analysis reported reductions in anxiety and pain, shorter labour duration, greater birth satisfaction and favourable changes in some vital signs. The authors described the intervention as non-invasive and supportive.

What it means in practice → This is a stronger contemporary synthesis for pregnancy/labour wellbeing. It supports a possible role in symptom and emotional support, not claims that reflexology prevents miscarriage or increases fertility.

Limitations → Included trials varied in timing, treatment duration and reflexology protocols. Many outcomes were subjective and methodological quality was not uniform. Preconception and IVF outcomes were not studied.

5. McCullough et al. (2018)

Reflexology: A randomised controlled trial investigating the effects on beta-endorphin, cortisol and pregnancy related stress

Original source

What it studied → A three-arm pilot RCT of 90 primiparous pregnant women with low-back and/or pelvic-girdle pain. Six reflexology sessions were compared with footbath and usual care, measuring pain, beta-endorphin, cortisol and stress-related outcomes.

What it found → A clinically important reduction in pain frequency was observed with reflexology. Cortisol increased less than in the other groups, while biochemical findings did not follow a simple mechanistic pattern. The authors concluded that reflexology may help low-back/pelvic-girdle pain and associated stress.

What it means in practice → Useful because it examines both subjective experience and biochemical measures. It does not establish that reflexology generally "regulates cortisol" or the endocrine system.

Limitations → A pilot study with substantial attrition (61/90 completed). It was not designed for fertility or pregnancy-success outcomes, and biomarkers do not provide clear mechanistic proof.

6. Levy et al. (2020)

The effectiveness of foot reflexology in reducing anxiety and duration of labor in primiparas: an open-label randomized controlled trial

Original source

What it studied → A randomized clinical trial in primiparous women with moderate-to-severe anxiety, assessing the effect of reflexology on anxiety and duration of labour.

What it found → The study reported lower anxiety and shorter labour duration in the reflexology group compared with usual care.

What it means in practice → It supports the possibility that reflexology may be useful as a non-pharmacological intervention for labour experience and anxiety—a clearly different domain from "enhancing fertility."

Limitations → Open-label design creates substantial risk of performance and expectation bias. Labour outcomes are affected by many clinical factors, and findings cannot automatically be generalized to all pregnant women.

7. Wang et al. (2008)

The efficacy of reflexology: systematic review

Original source

What it studied → An early systematic review of randomized reflexology trials across different conditions, assessing whether evidence supported consistent specific therapeutic efficacy.

What it found → The review did not find convincing overall evidence that reflexology was an effective treatment for any medical condition. Available studies were few and methodologically limited.

What it means in practice → An important counterweight to positive individual trials. It shows why the Library should separate possible symptom relief or relaxation from claims of treating specific organs or diseases.

Limitations → An older review predating several newer RCTs and pregnancy-specific reviews. It pools very different conditions and therefore does not specifically answer fertility or pregnancy-wellbeing questions.

8. NCCIH / NIH (2020 (current page))

Reflexology

Original source

What it studied → Official information from the U.S. National Center for Complementary and Integrative Health (NIH), summarizing the state of reflexology research and distinguishing what has and has not been demonstrated.

What it found → NCCIH states that reflexology applies pressure to specific areas of the feet or hands, but the claim that these points correspond to and heal other parts of the body has not been proven. Evidence is insufficient for most conditions.

What it means in practice → It establishes a safe scientific framework for the website: reflexology can be discussed as a complementary hands-on practice and specific outcomes can be evaluated where evidence exists, without presenting reflex-zone maps as a validated anatomical mechanism.

Limitations → A patient-facing overview rather than a new clinical study. Its reflexology content is marked as last updated in January 2020 and does not incorporate all newer pregnancy-specific reviews.

Library conclusion

Holistic Fertility® can present reflexology as a non-pharmacological, hands-on complementary practice used for relaxation, wellbeing and support of selected symptoms. It should not be described as an established infertility treatment or as a technique proven to activate specific reproductive organs through reflex points. During pregnancy, the evidence is more interesting for anxiety, pain and labour-related outcomes, but it still requires careful wording and coordination with the appropriate healthcare professional.

Template for future maintenance

For each new publication, retain: full citation + link → population and intervention → primary outcome → result → practical meaning → limitations → date last reviewed. For fertility claims, prioritize ovulation, clinical pregnancy, miscarriage and live birth. For pregnancy support, keep symptom/wellbeing outcomes separate from obstetric outcomes. A new robust fertility-specific

RCT or systematic review should trigger reassessment of the overall conclusion, not simply the addition of another card.