

TOPIC 6 • STRESS, ANXIETY & FERTILITY

What we really know about psychological distress, infertility and IVF outcomes — without the message 'just relax and you'll get pregnant.'

Why 8 core sources?

Eight is the ideal number here: enough to represent the genuine scientific debate and evolution of the evidence without repetition. The selection includes recent meta-analyses, two influential prospective meta-analyses challenging the idea that distress causes ART failure, a stage-by-stage IVF review, prevalence data, ESHRE and HFEA.

The evidence in context

Infertility and IVF can cause substantial stress, anxiety and depression; this is well documented. Far less certain is the reverse proposition: that a woman's distress causes infertility or IVF failure. Some newer analyses report associations between anxiety/depression and outcomes, while large prospective meta-analyses and official sources find no conclusive evidence that stress reduces treatment success. The responsible position is therefore twofold: distress deserves serious support because it affects quality of life and the treatment experience, while women should not be made to feel that failure occurred because they did not manage to 'relax.'

1. Zhang et al. (2025)

Effects of emotions on IVF/ICSI outcomes in infertile women: a systematic review and meta-analysis

[Original source](#)

What it studied → A meta-analysis of 29 studies examining depression, anxiety and perceived stress in women undergoing IVF/ICSI.

What it found → Higher anxiety and depression were associated with a lower likelihood of successful pregnancy, whereas perceived stress did not show a statistically significant negative association.

What it means in practice → Different forms of emotional distress are not interchangeable. Associations exist, but this does not prove that anxiety causes IVF failure.

Limitations → Observational evidence, heterogeneous measures and inability to establish causality.

2. Palomba et al. (2024)

Effect of Stress on Each of the Stages of the IVF Procedure: A Systematic Review

[Original source](#)

What it studied → A systematic review of 36 studies examining acute/chronic stress and biomarkers across different stages of IVF.

What it found → The strongest negative association appeared around oocyte retrieval; associations with fertilization were weaker and with pregnancy rate weak.

What it means in practice → Stress may relate to individual biological or procedural stages without determining the final IVF outcome.

Limitations → Substantial heterogeneity in stress definitions, measurement and endpoints.

3. Meta-analysis, ART mental health (2025)

Prevalence of psychological problems among individuals and couples during assisted reproductive technology treatment

[Original source](#)

What it studied → A meta-analysis of 40 studies involving 16,042 participants assessing prevalence of anxiety, depression and stress during ART.

What it found → Women showed high pooled symptom prevalence: anxiety 48.0%, depression 35.6% and stress 52.2%, with particularly wide uncertainty for stress.

What it means in practice → Whether or not stress changes pregnancy rates, the psychological burden of ART is clinically important in its own right and merits support.

Limitations → High heterogeneity, varying screening tools, and prevalence estimates do not necessarily equal clinical diagnoses.

4. Nicolero-SantaBarbara et al. (2018)

Just relax and you'll get pregnant? Meta-analysis examining women's emotional distress and the outcome of assisted reproductive technology

[Original source](#)

What it studied → A meta-analysis of 20 prospective studies involving 4,308 women examining distress before/during ART and pregnancy outcomes.

What it found → Pre-treatment anxiety, depressive symptoms and perceived stress were not associated with poorer ART outcomes; neither were anxiety/depression during treatment.

What it means in practice → This is a key source against the burdensome message 'just relax and you'll get pregnant.' Women should not feel emotionally responsible for treatment outcome.

Limitations → No eligible studies assessed perceived stress during treatment, and the evidence remains observational.

5. Peaston et al. (2022)

The impact of emotional health on assisted reproductive technology outcomes: a systematic review and meta-analysis

[Original source](#)

What it studied → A systematic review/meta-analysis of pre-treatment anxiety, stress and depression in relation to ART outcomes.

What it found → No significant association was found between women's pre-treatment emotional health and live birth, clinical pregnancy, chemical pregnancy, oocyte retrieval, embryos transferred or fertilization.

What it means in practice → It reinforces that psychological care matters for well-being, not because women must 'fix' their emotions to make IVF work.

Limitations → Available studies were observational and varied in measures and populations.

6. Boivin et al. (2011)

Emotional distress in infertile women and failure of assisted reproductive technologies: meta-analysis of prospective psychosocial studies

[Original source](#)

What it studied → A meta-analysis of 14 prospective studies and 3,583 women examining pretreatment emotional distress and pregnancy after one ART cycle.

What it found → Pretreatment emotional distress was not associated with achieving pregnancy.

What it means in practice → A historically important study that helped challenge the idea that emotional distress before ART predicts failure.

Limitations → Focus on a single treatment cycle, varying pregnancy definitions and evidence of publication bias.

7. ESHRE Guideline Group (2015)

Routine psychosocial care in infertility and medically assisted reproduction – a guide for fertility staff

[Original source](#)

What it studied → A European guideline addressing psychosocial needs across infertility/MAR and how fertility professionals can detect and address them.

What it found → ESHRE treats psychosocial care as an important component of quality fertility care, emphasizing patient needs, preferences and well-being.

What it means in practice → Emotional support does not need to be justified as a way to increase pregnancy rates; it has independent value within patient-centred care.

Limitations → A guideline rather than an individual RCT; it is older and should be read alongside newer evidence.

8. HFEA (2025)

Complementary and alternative therapies / statement on stress and fertility treatment outcomes

[Original source](#)

What it studied → Official UK fertility-regulator information addressing stress, complementary therapies and treatment outcomes.

What it found → HFEA states that there is no conclusive evidence that higher stress reduces the chance of having a baby from fertility treatment.

What it means in practice → An excellent patient-facing framing: stress management can be valuable for well-being, but should not be sold as a proven method of increasing success.

Limitations → A regulatory/patient-information source rather than primary research; it summarizes the evidence base.

Library conclusion

The Holistic Fertility® message should be explicit: we do not say 'stress is stopping you from getting pregnant.' We say that infertility can become profoundly stressful and that reducing this burden has value for the woman herself, her functioning, relationships and treatment experience. Any relationship between stress and reproductive outcomes remains complex, heterogeneous and without a simple causal conclusion.

Template for future maintenance

Every update should distinguish: (1) prevalence/mental-health burden, (2) association with reproductive outcomes, (3) causality, and (4) effectiveness of stress-reduction interventions. A new meta-analysis should not change website copy until we identify exactly what it measured: perceived stress, anxiety, depression, biomarkers, clinical pregnancy or live birth.