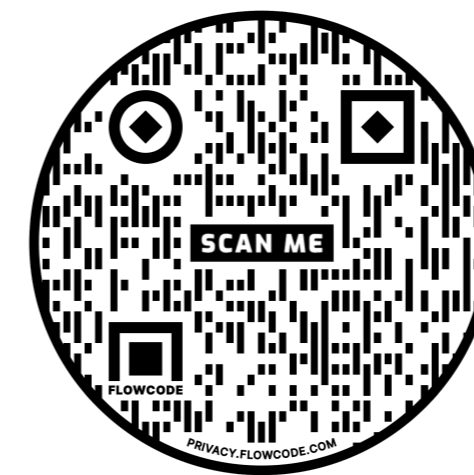# The Effectiveness of Online Psychotherapy Interventions for Perinatal Mental Health Disorders: A Systematic Review

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Introduction

Maternal mental health can have an impact on the infant both antenatally and throughout the life course, with social, emotional and cognitive consequences (Goodman, 2019). Perinatal mental health (PMH) disorders have been found to be the leading cause of suicide in pregnancy and in the first year after birth with suicide in this period accounting for between 5-20% of maternal deaths in high income countries (Khalifeh et al, 2016; Knight et al, 2019).

The recent impact of the global COVID-19 pandemic has emphasised the importance of individuals being able to safely access therapy remotely.
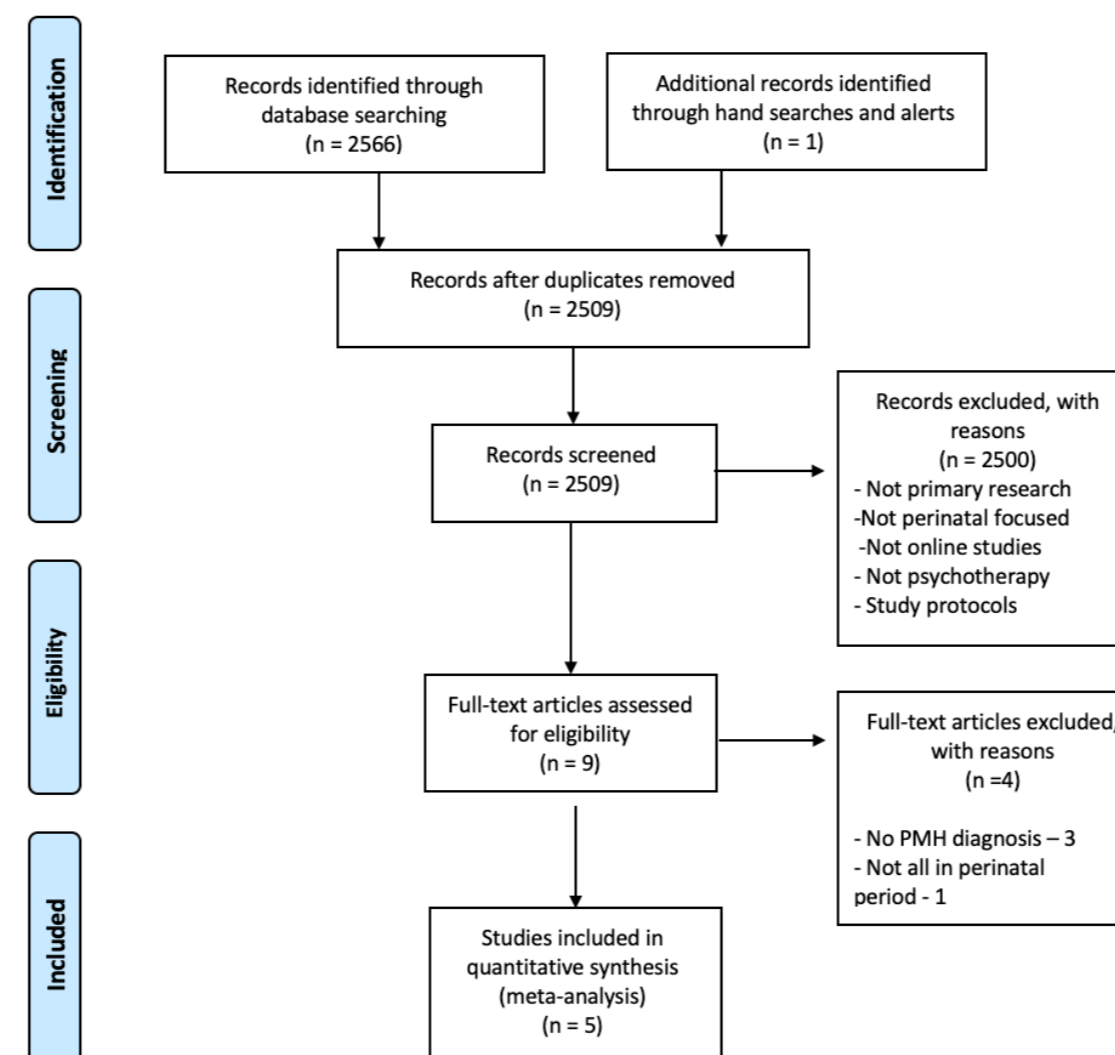
Methods

PICOS	Description
Population	Women in the perinatal period (start of pregnancy to one year postpartum) who have been diagnosed with a perinatal mental health disorder as defined by the ICD-11/DSM-5
Interventions	Evidence-based online (Computer/web-based) psychotherapies to treat mental health issues within the perinatal period.
Comparisons	Face-to-face treatment, treatment as usual (TAU), waitlist, pre-test/post-test outcome results,
Outcomes	Improved clinical outcomes, adverse effects, attrition rates
Study Design	Experimental designs e.g. Randomised Control Trials, pre-post quasi-experimental design

Databases: PsycINFO, Medline, CINAHL Complete, Proquest Dissertations and Theses, Scopus, Google Scholar and The Shapiro Library (before July 2020)

Quality assessment: the Standard Quality Assessment Criteria for Evaluating Primary Research Papers from a Variety of Fields (QualSyst).
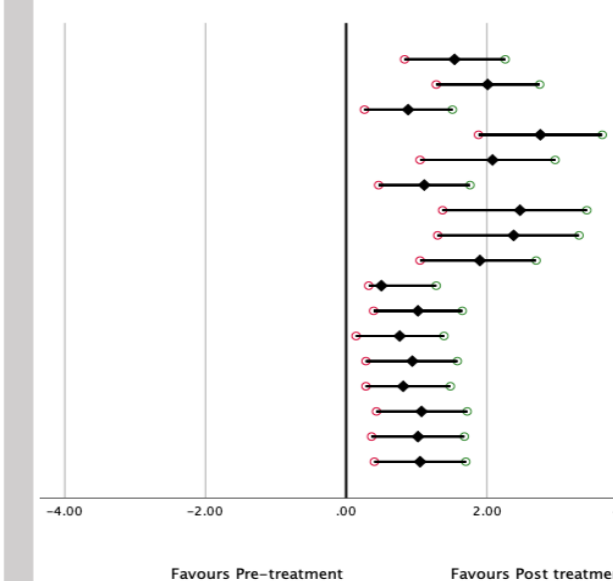
Aim

The aim of this review was to provide a synthesis of current evidence for effective psychotherapeutic interventions delivered via online modalities for women with a perinatal mental health diagnosis.

Findings

Flow diagram:
Identification: Records identified through database searching (n = 2566); Additional records identified through hand searches and alerts (n = 1)
Screening: Records after duplicates removed (n = 2509); Records screened (n = 2509); Records excluded, with reasons (n = 2500) - Not primary research - Not perinatal focused - Not online studies - Not psychotherapy - Study protocols
Eligibility: Full-text articles assessed for eligibility (n = 9); Full-text articles excluded, with reasons (n =4) - No PMH diagnosis – 3 - Not all in perinatal period - 1
Included: Studies included in quantitative synthesis (meta-analysis) (n = 5)

- 3 Targeting postnatal depression and 2 targeting antenatal depression
- CBT based interventions
- High Quality based on QualSyst scores
- Treatment fidelity not reported.
- Attrition rates comparable with other online psychotherapy for non-perinatal populations

Within- group pooled effects   **Between- group pooled effects**

Favours Pre-treatment / Favours Post treatment   Favours Control Group / Favours Intervention Group
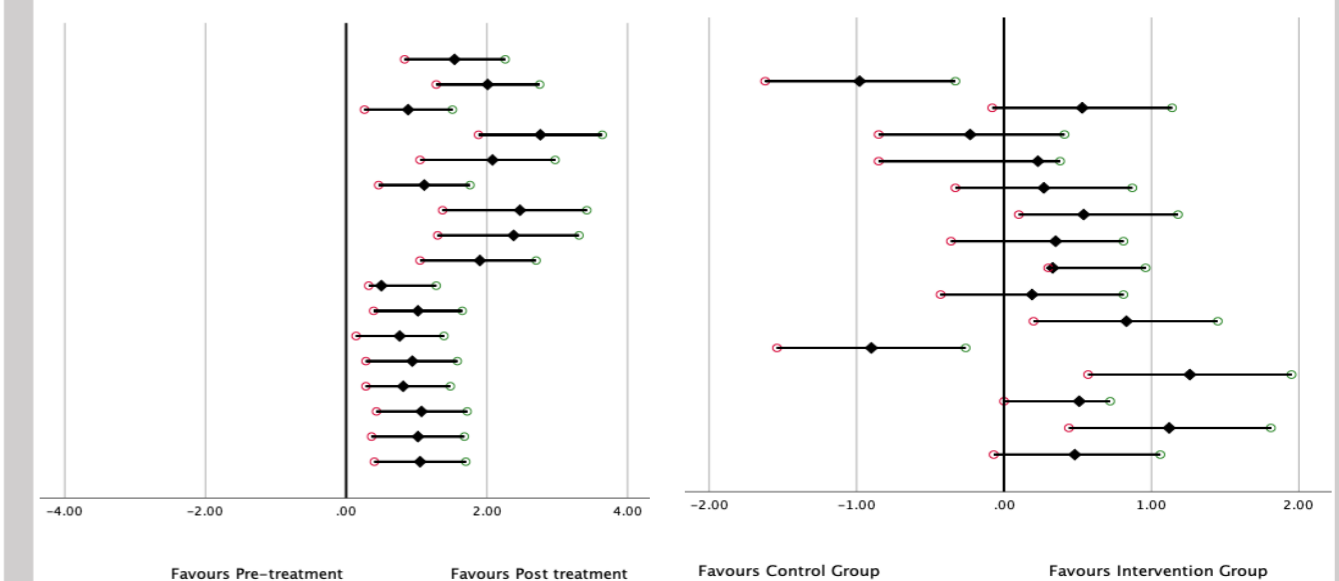
Within Group: large treatment effect for depression, anxiety and stress outcomes ($d = 1.90$; $d = 0.81$; $d = 1.05$).

Between Group: small to medium effect favouring the intervention versus control on reduction of depressive symptoms ($d = 0.48$, 95% CI -0.07, 1.06).

Conclusions

- Online psychotherapy is effective in improving clinical outcomes in perinatal depression and anxiety

- Gap in the research literature for online EMDR interventions and interventions for other perinatal mental health disorders

- Lack of online psychotherapy for perinatal mental health delivered via videoconferencing

Goodman, JH. (2019) 'Perinatal depression and infant mental health', *Archives of Psychiatric Nursing*, 33(3): 217–224; Khalifeh H, Hunt IM, Appleby L, Howard LM. (2016) 'Suicide in perinatal and non-perinatal women in contact with psychiatric services: 15 year findings from a UK national inquiry', *The Lancet Psychiatry*, 3(3): 233–242; Knight M, Bunch K, Tuffnell D, Shakespeare J, Kotnis R, Kenyon S, Kurinczuk JJ (Eds.) on behalf of MBRRACE-UK. *Saving Lives, Improving Mothers' Care - Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2015-17*. Oxford: National Perinatal Epidemiology Unit, University of Oxford 2019.