

DIGITAL MATERNAL MENTAL HEALTH

Accessibility, effectiveness, and user experiences of technology-based interventions for common maternal mental health disorders: scoping review
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Accessibility

Enhanced accessibility, reduced barriers, and increased anonymity

Background

Depression and anxiety affect around 15%-20% of women during the perinatal period, with a higher prevalence among low socioeconomic groups and women from migrant backgrounds. Mental health issues often go undetected or untreated in these populations. Digital technologies may offer an innovative approach to assist healthcare professionals in identifying perinatal mental health concerns and addressing disparities in the treatment and management of mental health problems.

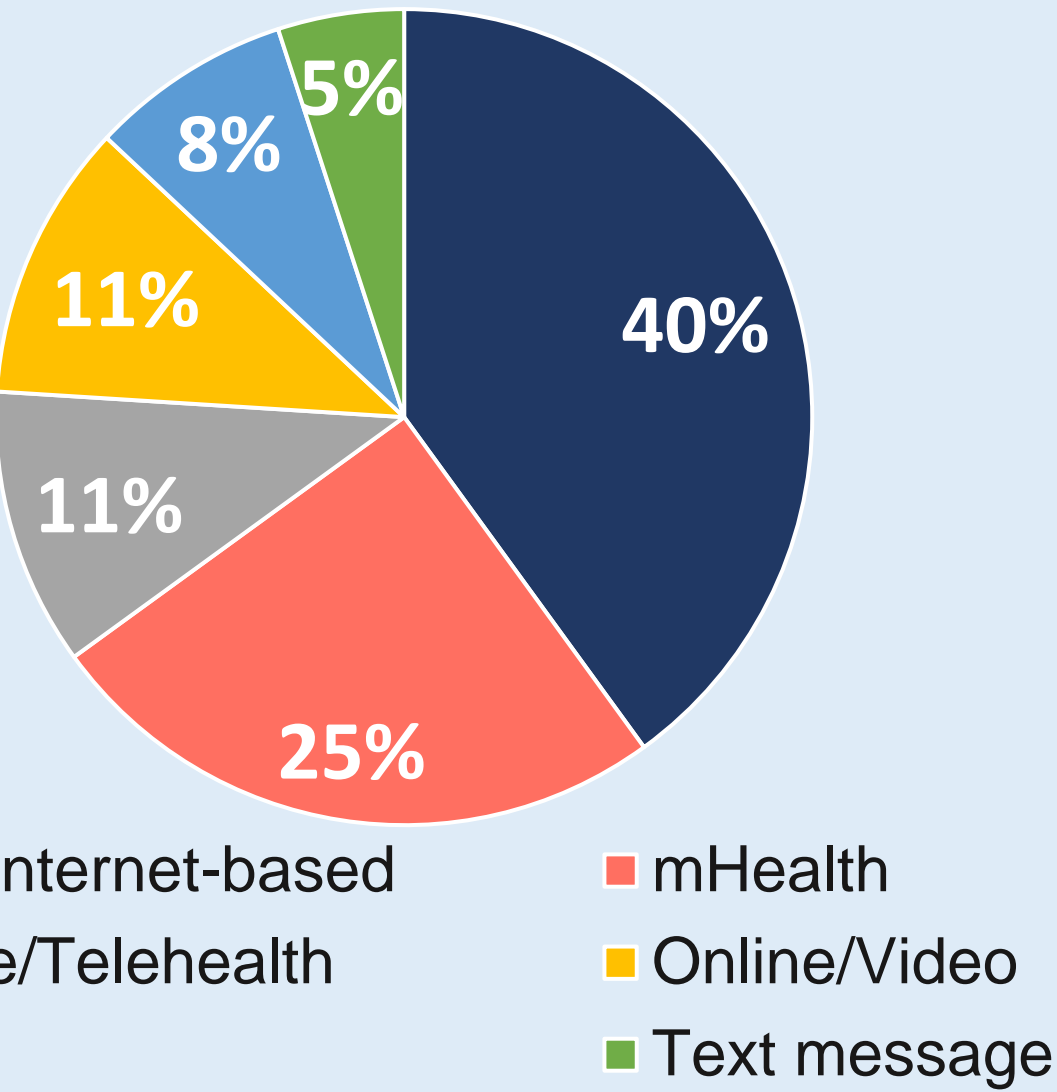
Methodology

6 electronic databases were systematically searched, generating 1628 results. 75 articles met inclusion criteria: peer-reviewed publications focused on women who were pregnant or up to 2 years postpartum. Interventions delivered via different modalities (e.g. mHealth, web-based/Internet-based, online/ video conferencing, phone, text messages).

Objective

Map evidence regarding the accessibility, effectiveness, and user experiences of digital mental health interventions for the prevention, screening and treatment of common maternal mental health issues (e.g. depression and anxiety) during 1001 critical days.

Digital mental health solutions covered in the review

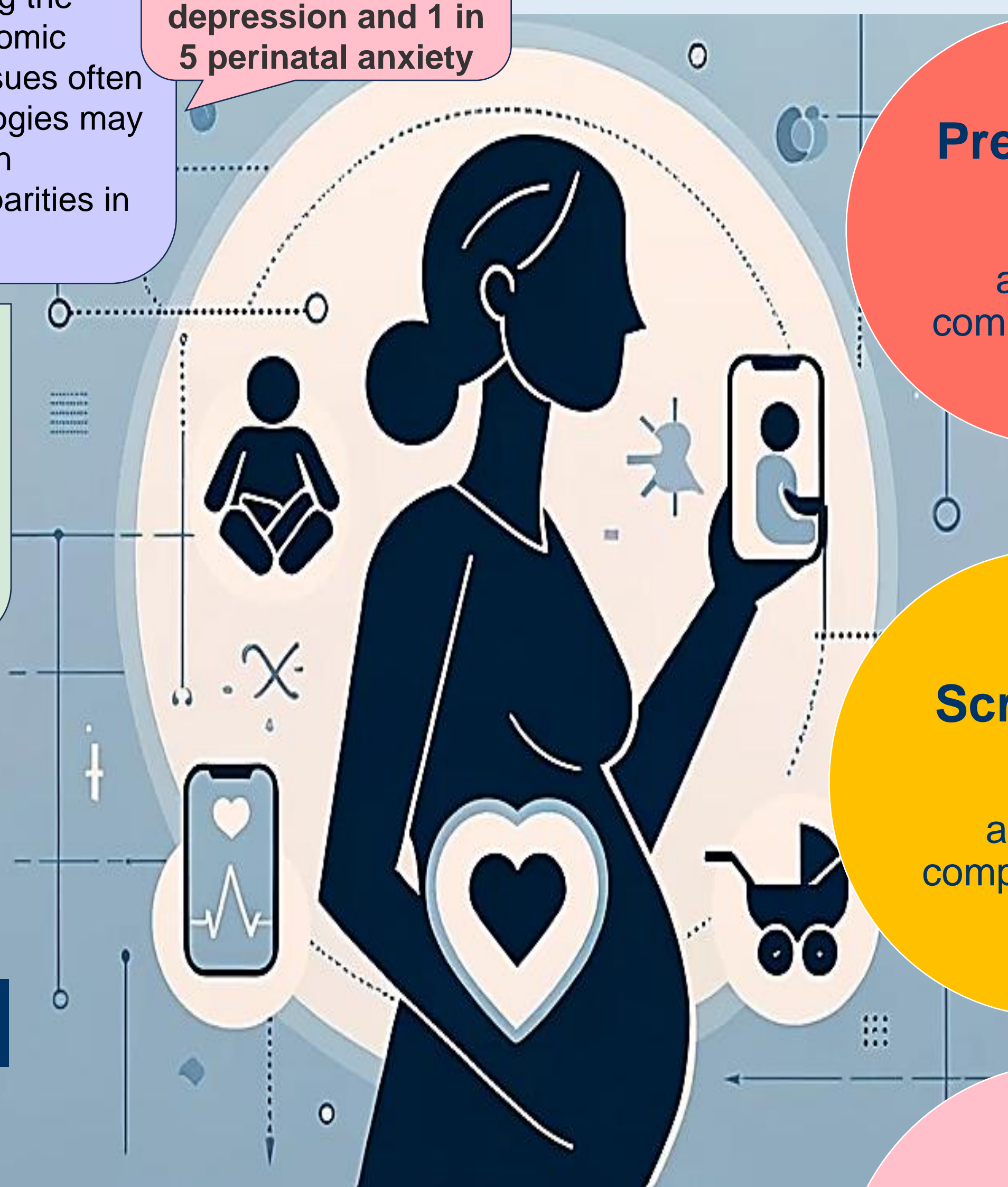


Key literature: Stevenson et al.,(2023); Howard and Khalifeh (2020); Dennis et al.,(2017); Fawcett et al., (2019); Park et al., (2019); Fonseca et al.,(2020); Hanach et al., (2021); Koçak et al., (2021); Mohammad-Alizadeh-Charandabi et al., (2013); Martin-Key et al., (2021); O'Mahen et al., (2013); Loughnan et al., (2019); Zhao et al., (2021); Nair et al., (2018); Milgrom et al. (2021) ; Broom et al., (2015)

Effectiveness

Effective in reducing postpartum depression; inconclusive effect on anxiety

1 in 4 migrant women experiences perinatal depression and 1 in 5 perinatal anxiety



Implications

The review emphasises the need for a user-centred, personalised, culturally sensitive, and flexible approach in the design and implementation of digital interventions for MMH. It highlights the significance of incorporating coaching or therapist support to enhance engagement and adherence. There is a need to explore the impact and experience of digital care on migrant women in the UK. Such research can help to close the equity gap for migrant women with MMH.

Prevention

80%
average completion rate

Screening

67%
average completion rate

Treatment

57%
average completion rate

Experience

Positive perception and high level of satisfaction

Results

Advantages

- Prevent postpartum depression
- High level of satisfaction
- Improve self-esteem
- Enhance abilities to cope with everyday challenges

Facilitators

- Guided support
- Urban residency
- Non-emigrant status
- First-time pregnancy

Disadvantages

- Impersonal
- Limited utilisation
- Inconclusive effect on anxiety

Barriers

- Poor intervention content
- Community beliefs and culture
- Financial constraints

Advantages

- Strong or moderate agreement with paper-based EPDS assessments
- High satisfaction
- Enhance privacy
- Reduce language barriers
- Less time-consuming

Facilitators

- Age (older – higher completion)

Disadvantages

- Impersonal
- Limited utilisation

Barriers

- History of depression or psychiatric medication use
- Cognitive skills
- Poor self-reflection
- Access to Internet

Advantages

- Improve accessibility
- Reduce stigma
- Strong treatment adherence
- High satisfaction

Facilitators

- Guided support
- Pre-existing relationship with the therapist
- Higher 'dosage'

Disadvantages

- Inconclusive effect on anxiety
- Unsuitable for women from some cultures

Barriers

- IT access and IT literacy
- Connectivity problems
- Lack of privacy at home
- Language
- Severity of the condition

Knowledge gaps: acceptability and effectiveness of digital tools among women with migrant backgrounds in the UK (no research on this specific population was identified). Limited information on the acceptability and effectiveness of digital care for maternal mental health during the 1001 critical days (beyond the perinatal stage).