

EXPLORING THE HORIZON OF CULTURALLY-ATTUNED MOBILE TECHNOLOGY ASSISTED MENTAL HEALTH INTERVENTIONS AMONG PREGNANT AND POSTPARTUM WOMEN: AN EQUITY FOCUSED SYSTEMATIC REVIEW

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Background: The psychological stressors of pregnancy increase women's risk of developing common mental disorders (CMDs) such as depression and anxiety. This population, however, lacks equitable access and uptake of culturally relevant mental health services. Mobile technology-assisted interventions carry the potential to improve mental health care and outcomes.

Objectives: The aim of this equity-focused systematic review [1] is to examine the effectiveness and equity impact of mobile interventions targeting the prevention and management of common mental health disorders and stress among pregnant and postpartum women.

Methods: We systematically searched MEDLINE, EMBASE, and 4 other databases (June 26, 2020) and screened randomized and non-randomized controlled trials. We analyzed effectiveness evidence using pooled and narrative synthesis methods, and examined equity by mapping and analyzing evidence using patient-important PROGRESS+ characteristics [2]. We critically appraised all included studies and assessed the certainty of findings using GRADE methodology.

Results: Out of n=6148 records, we included n=18 randomized and non-randomized controlled trials. Our findings suggest that mobile interventions prevented depression (OR=0.51; 95% CI 0.41 to 0.63; p<.001) and reduced symptom severity throughout pregnancy and postpartum. Their impact on the severity of anxiety was found early in pregnancy, but attenuated with time. Mobile cognitive behavioural therapy (CBT) was also effective in managing postpartum depression. However, other interventions had no added benefit compared to standard care. Inter-ethnicity differences highlighted the increased equity impact among East Asian women, whereas being of young age attenuated that impact.

Implications: COVID-19 continues to increase our need for reliable and culturally relevant virtual mental health care. Mobile technologies may present a solution to bridging the gap of social injustice and addressing common mental health disorders among pregnant and postpartum women. Developing and implementing these interventions, however, require cultural considerations of patients' ethnicity and age.

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Learning Objectives

At the conclusion of this presentation, participants will be able to:

1. Participants will be able to acquire knowledge on mobile interventions that target mental health among pregnant and postpartum women
2. Participants will be able to identify the equity considerations of using technology-assisted interventions to address common mental health disorders among pregnant and postpartum women

References

[1] Welch VA, Petkovic J, Jull J, Hartling L, Klassen T, Kristjansson E, Pardo JP, Petticrew M, Stott DJ, Thomson D, Ueffing E. Equity and specific populations. *Cochrane Handbook for Systematic Reviews of Interventions*. 2019 Sep 23:433-49.

[2] O'Neill J, Tabish H, Welch V, Petticrew M, Pottie K, Clarke M, Evans T, Pardo JP, Waters E, White H, Tugwell P. Applying an equity lens to interventions: using PROGRESS ensures consideration of socially stratifying factors to illuminate inequities in health. *Journal of clinical epidemiology*. 2014 Jan 1;67(1):56-64.