

Usage of Mobile Health Applications for Weight Management in Postpartum Mothers



Background

Pregnancy, labor, and postpartum are transformative experiences for mothers, with postpartum being a critical period for physical and emotional well-being (Enders et al., 2016).

- Challenges in Managing Weight:** After pregnancy, time, energy, and motivation may be limited as individuals try to manage post-pregnancy weight.
- Importance of Healthy Habits:** Establishing and maintaining healthy habits during postpartum is crucial for the mother's well-being and family care.
- Impact of Excessive Weight Gain:** 48% of women in the U.S. exceed recommended weight gain during pregnancy (Centers for Disease and Prevention, 2022). This can contribute to postpartum weight retention and obesity, highlighting the significance of aiming for a healthy weight before pregnancy (Enders et al., 2016). Failing to lose pregnancy weight can increase the risk of excess weight in subsequent pregnancies, leading to potential adverse outcomes (Enders et al., 2016).
- Role of mHealth/telehealth:** Mobile health applications offer flexible interventions that address barriers to postpartum weight management and provide client-centered care (Lambermon et al., 2021). Thus, mHealth/telehealth can play an important role in postpartum care.

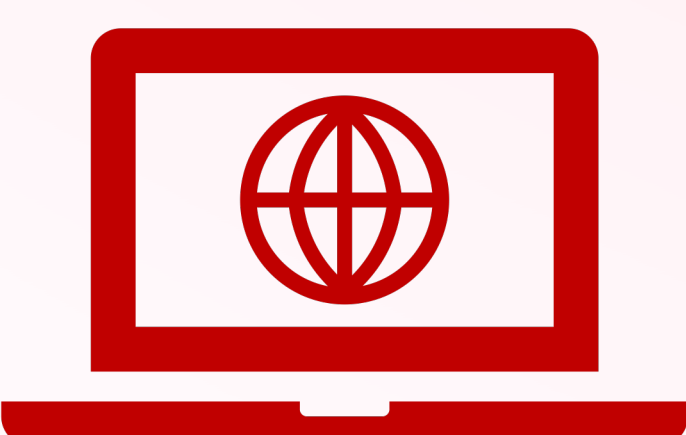
Methods

Within 12 months of postpartum, does the usage of mobile/online health applications improve weight management in mothers compared to exclusive face-to-face approaches?

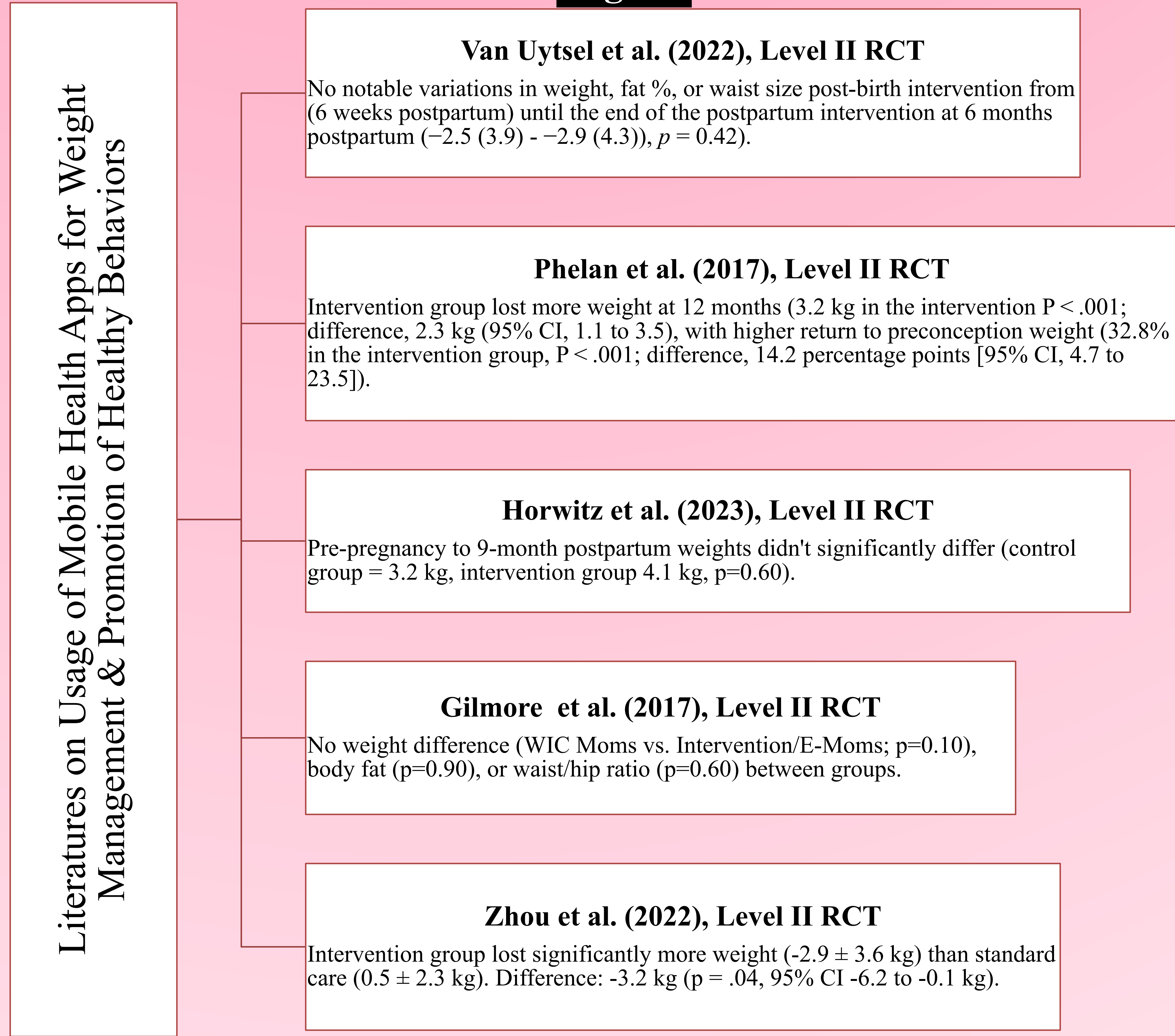
The initial literature search employed PICO question-related phrases, uncovering 12 findings on OneSearch and four on PubMed. After applying criteria such as publication dates (2016-2023), study design (randomized controlled trials), and peer-reviewed status, eight relevant articles were identified. A more focused second search, using terms like "obesity," "postpartum," "telehealth," and "application," produced 5 results on PubMed and 9 on OneSearch. This refined search strategy resulted in the identification of 8 articles that met the specified criteria. Ultimately, five articles were chosen for inclusion in the literature review based on their direct relevance to the PICO question.

Evidence Summary

- Mobile/Online Apps in Postpartum Management:** Studies indicated the value of mobile/online apps in postpartum management (Gilmore et al., 2017; Horwitz et al., 2023; Ven Uytsel et al., 2022).
- Study Variability:** These studies exhibited commonalities and differences in addressing postpartum weight management, with variations in participant inclusion criteria, adherence to intervention protocols, and data collection methods while maintaining similar participants, lengths, and collaboration of healthcare providers.
- Role of Personalized Approaches and Support:** Personalized approaches, accessibility, and support from healthcare professionals play a significant role in postpartum weight management, emphasizing the need for tailored programs and addressing adherence challenges (Herring et al., 2014; Horwitz et al., 2023).
- Call for Further Research and Long-Term Study:** Each study had promising results, but more research is needed to fully understand the sustained effect on health behaviors in diverse populations.



Figure



RCT: Randomized Controlled Trial
Levels determined using JHNEBP Model Rating

Implications for Nursing Practice & Clinical Nurse Leader (CNL) Role

- Telehealth in Postpartum Care:**
 - Telehealth, including mobile health applications, reaches individuals unable to seek direct care.
 - Mobile health applications should supplement, not replace, conventional in-person healthcare.
- Quality of Care and Personalized Approaches:**
 - Implementation of mobile/online health applications in clinical practice empowers mothers to make informed health choices through personalized approaches while also considering co-morbidities, socioeconomic status, and cultural background.
- Communication and Coordination:**
 - Mobile/online health applications facilitate telehealth communication and collaboration between postpartum mothers, healthcare providers, and other interdisciplinary teams. As care coordinators, CNLs ensure effective two-way communication, monitoring, and follow-ups with the integration of technology bridges
- CNL Advocacy and Role in Monitoring:**
 - CNLs can monitor and evaluate the impact of mobile/online health applications on patient outcomes while advocating for the adoption of these applications in postpartum care.

Summary & Conclusions

Literature Review on Mobile/Online Health Applications:

- The five studies used in the literature review addressed postpartum weight management among low-income & minority populations were analyzed and explored.
- Even though the results varied, the literature suggested potential strategies such as online coaching meetings, personalized text messaging, and activity/diet monitoring can all help manage health behaviors (Gilmore et al., 2017; Horwitz et al., 2023; Van Uytsel et al., 2022; Herring et al., 2014).

Importance of Personalized Approaches and Support:

- There was an evident role of personalized approaches, accessibility, and support in postpartum weight management (Herring et al., 2014; Horwitz et al., 2023).

Future Interventions and Research Needs:

- Tailoring programs to individual needs and addressing adherence challenges is crucial to reach postpartum mothers.
- Strategies that focus on improving participant adherence and longer follow-up should be investigated to assess sustained effects and lasting lifestyle changes.

Informing Future Practices:

- The findings from the studies could influence future healthcare interventions and policies due to their focus on reaching and caring for postpartum mothers through nontraditional means.
- Support and resources are crucial for postpartum mothers' self-care and wellbeing, this will help set the stage for a healthier season after giving birth.

Reference List



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