## Delivering a Post-Partum Weight Loss Intervention via Facebook or In-Person Groups: Results from a Randomized Pilot Feasibility Trial

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## Abstract

**Background:** Postpartum weight retention contributes to weight gain and obesity. Remote lifestyle interventions may overcome barriers to attending in-person programs during this phase.

**Objective:** We aimed to conduct a randomized feasibility pilot trial of a 6-month postpartum weight loss intervention delivered via Facebook or in-person groups. Feasibility outcomes were recruitment, sustained participation, contamination, retention, and feasibility of study procedures; percent weight loss at 6 and 12 months, exploratory outcomes.

**Methods:** Women with overweight or obesity who were 8 weeks to 12 months post partum were randomized to receive a 6-month behavioral weight loss intervention based on the Diabetes Prevention Program lifestyle intervention via Facebook or in-person groups. Participants completed assessments at baseline, 6 months, and 12 months. Sustained participation was defined with intervention meeting attendance or visible engagement in the Facebook group. Retention was defined as completing follow-up assessments (providing weight or completing the survey). We calculated the percent weight change for participants who provided weight at each follow-up.

**Results:** Among uninterested individuals, 69% (72/105) were not interested in or could not attend in-person meetings and 3% (3/105) were not interested in the Facebook condition. Among individuals excluded at screening, 18% (36/195) were ineligible due to reasons related to the in-person condition, 12% (24/195) related to Facebook and 3% (5/195) were unwilling to be randomized (all preferred Facebook). Randomized participants (n=62) were a median of 6.1 (IQR 3.1-8.3) months post partum with a median BMI of 31.7 (IQR 28.2-37.4) kg/m<sup>2</sup>. Retention was 92% (57/62) at 6 months and 94% (58/62) at 12 months. Overall, 70% (21/30) of Facebook participants and 31% (10/32) of in-person participants attended the last intervention module. Further, 50% (13/26) of Facebook participants and 58% (15/26) of in-person participants would be likely or very likely to participate again if they had another baby, and 54% (14/26) and 70% (19/27), respectively, would be likely or very likely to recommend the program to a friend. Moreover, 96% (25/26) of Facebook participants who said it was convenient or very convenient to log into the Facebook group daily versus 7% (2/27) of in-person participants who said it was convenient or very convenient to attend group meetings each week. Contamination was low, and study procedures were feasible. Average weight loss was 3.0% (SD 7.2%) in the Facebook

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## **IPROCEEDINGS**

condition and 5.4% (SD 6.8%) in the in-person condition at 6 months and 2.8% (SD 7.4%) and 4.8% (SD 7.6%) at 12 months, respectively.

**Conclusions:** Barriers to attending in-person meetings hampered recruitment efforts and intervention participation. While women found web-based groups convenient and stayed engaged in the group, weight loss may be lower. Research is needed to further develop care models for postpartum weight loss that balance accessibility with efficacy.

**Conflicts of Interest:** None declared.

Trial Registration: ClinicalTrials.gov NCT03700736; https://clinicaltrials.gov/ct2/show/NCT03700736

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## **KEYWORDS**

post-partum; weight loss; Facebook; social media; feasibility pilot trial

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