

## **Abstract**

**Background/Objectives:** Exercise has well-established benefits on depression and weight-management in normative populations. However, its effectiveness at postpartum phase remains uncertain. To determine the effectiveness of exercise or physical activity (PA) interventions on postnatal depression (PND) and weight-loss, to identify exercise and PA modalities most effective in reducing PND symptoms and weight.

**Methods:** Systematic review process of RCTs and experimental studies comparing exercise or PA modalities (e.g., flexibility versus resistance training) relative to control groups. Data search included Cochrane Library (CENTRAL), MEDLINE, PsycINFO, EMBASE, CINAHL, Scopus and Science Citation Index.

**Results:** Of 10,136 studies retrieved, nine fulfilled inclusion criteria. Two implemented supervised exercise interventions, one using ‘Yoga & Pilates’ (1x 60 mins/session × 12 weeks) and one using resistance (v flexibility) training focusing on major muscle groups (2/week × 18 weeks). Yoga & Pilates decreased PND and body mass index (BMI); though resistance training did not. Four studies applied unsupervised PA interventions (e.g., walking) with varying duration (i.e., 3-18 months; e.g., 30 mins/session × 1/week) suggesting changes in either of the variables. Two studies showed significant declines in BMI but no changes in PND; while two showed no changes in PND or BMI. One study trialed supervised walking intervention reported decline in BMI but no change in PND. An individualised home-based program compared with control group (124 mins/week × 12 weeks), showed improvements in PND only. One study trialed a low impact aerobic, stretching, and strengthening intervention (50-60 mins × 3days a week × 12 weeks); showed improvement in psychological well-being, but no BMI change.

**Conclusion:** Based on current data available, the effectiveness of exercise or PA interventions on PND and weight-loss are inconclusive.

**Key Terms:** Exercise, Postnatal depression, Weight-loss

**References:** (Ko, Yang, Fang, Lee, & Lin, 2012); (Keller, et al., 2014)