# Effects of Exercise on Women with Postpartum Depression: A Systematic Review of the Literature

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## Background

- Postpartum depression (PPD) affects about 10-15% of women in the year after giving birth.
- The efficacy of exercise as an intervention for depression is well recognized.
- There is less research supporting exercise as a treatment for depression during the postnatal period.
- The most common barriers to physical activity at 3 and 12 months postpartum are lack of time and issues with childcare.

## Purpose

The purpose of this study was to evaluate the effectiveness of exercise on women with PPD.

## Methods

### Study Design

- Systematic review
  - Embase, CINAHL, PubMed
  - Search terms included: postpartum depression, yoga, Pilates, exercise, resistance training, swimming, walking, running, jogging, sports, dancing

### Subjects

- Postpartum women (4 weeks – 12 months)
- Clinically diagnosed with PPD or categorized as “depressed” or “displaying clinical signs of depression”

## Results

- Eight studies satisfied the inclusion criteria and were included in the review.
- Effectiveness: 7 of 8 studies demonstrated a reduction in depressive symptoms for exercise intervention groups.

## Conclusions

- Exercise may reduce symptoms of PPD.
- Heterogeneity of methodology makes comparison difficult.
- Additional research with large sample sizes and extended follow-up is advised.

## Clinical Relevance

- Postpartum women may benefit from a screening for signs and symptoms correlated with PPD.
- Medical providers should educate postpartum women on the relationship between PPD and exercise.
- Various forms of exercise have been shown to have positive effects on PPD.

## Study Interventions & Implications for Intervention Group compared to Control Group

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<tr>
<th>Study Interventions</th>
<th>Implications for Intervention Group compared to Control Group</th>
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<tr>
<td><strong>Group Pram Walking</strong></td>
<td>Women displayed increased fitness levels and reduced depressive symptomatology. Armstrong et al. 2004</td>
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<td><strong>Group and Individual Yoga Program</strong></td>
<td>Yoga is a “promising complementary therapy.” Women engaging in yoga displayed a quicker decline in depressive symptomatology compared to controls. Buttner et al. 2015</td>
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<td><strong>Individual Home-based Exercise Program</strong></td>
<td>Women with initially higher depressed mood scores displayed greater reduction in depressive symptoms. Da Costa et al. 2009*</td>
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<td>Exercise can reduce both physical and mental fatigue in women who experience postpartum depression. Dritsa et al. 2008*</td>
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<td>Women who were later in the postpartum period and women with higher depression scores benefited the most from the exercise intervention.* Dritsa et al. 2009*</td>
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<td>*same sample of women was re-analyzed</td>
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<td><strong>Self-Designed Individual Exercise with External Support</strong></td>
<td>Exercising women displayed lower depressive mood scores and higher social support scores. Daley et al. 2015</td>
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<td>No significant difference in decreased depressive symptoms was found between the exercise and non-exercise group. Daley et al. 2008</td>
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<tr>
<td><strong>Group and Individual-Based Exercise Program</strong></td>
<td>Depression scores in both groups decreased significantly. However, women in the exercise group had lower depression scores than their counterparts in the control group. Heh et al. 2008</td>
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## Acknowledgements / References

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Photo Credits: http://www.whattoexpect.com/first-year/postpartum-depression; http://www.evolutionprenatalandfamily.com; http://babbyy.com/2016/03/04/only-child-why-we-only-want-one/