



## Does Aerobic Exercise Reduce Postpartum Depressive Symptoms? A Systematic Review and Meta-Analysis

### Aerobic Exercise to Reduce Depression in Women after Childbirth

#### Background

- Globally around 13 million women suffer post-partum depression (i.e. after childbirth) annually.
- Depression after childbirth can affect the social and cognitive development of the child(ren).
- Women may be reluctant to take antidepressants following birth, especially if they are breastfeeding due to the possible risks.
- While cognitive behavioural therapy (CBT) is effective, there are often long waiting lists.
- Previous research has shown that exercise can reduce feelings of depression in a general adult population, and group exercise led by a qualified instructor is recommended by NICE.
- However, after childbirth women may face certain physical, practical and psychological challenges.
- This study analysed trials looking at the effect of aerobic exercise on depressive symptoms in women after childbirth.

## Findings:

- A total of 13 randomised controlled trials were brought together, with 1,307 participants.
- All trials looked at interventions to increase level of exercise; six featured group exercise interventions, while seven provided exercise advice and allowed the participants to choose their own exercise.
- Overall, exercise interventions significantly reduced symptoms of depression (standardised mean difference -0.44 [95% CI -0.75 to -0.12]). Significant reductions in symptoms were seen in both women who had possible depression after childbirth and in those who did not.
- When the authors looked at specific types of exercise they found significant effects on reducing depression from **exercise with other interventions, group exercise interventions, and interventions where the women could choose the exercise type.** Exercise-only interventions only had a non-significant effect on reducing depression.
- However, there was a large amount of variation in study outcomes between studies and a high risk of bias in a number of the trials, so some caution should be taken when interpreting these results.

## Reference:

Pritchett RV, Daley AJ, Jolly K. Does aerobic exercise reduce postpartum depressive symptoms? A systematic review and meta-analysis. *Br J Gen Pract.* 2017; **67**(663): e684-91. [[Link](#)]



## Recommendations for Practice

Given the high prevalence of depression after childbirth, and that exercise is low-cost and easily available, then aerobic exercise should be considered, both as management for those with depression and as a preventive measure for all.

### What is NIHR CLAHRC West Midlands?

The Collaboration for Leadership in Applied Health Research and Care (CLAHRC) is a partnership between universities (Birmingham, Warwick, and Keele) and a number of health and social care organisations in the West Midlands. We are funded by the National Institute for Health Research with a mission to undertake high-quality applied health research focused on the needs of patients to improve health services locally and beyond. For further information, visit: [www.clahrc-wm.nihr.ac.uk](http://www.clahrc-wm.nihr.ac.uk)

Views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health.

Funded and supported by



National Institute for Health Research