BF RESEARCH

Exercise as a Treatment for Depression in New Mothers: It's as Effective as Medications

Kathleen Kendall-Tackett, Ph.D., IBCLC

A growing body of research indicates that exercise is an effective treatment for depression, with efficacy comparable to that of medications. Traditionally, exercise has been recommended for people with mild-to-moderate depression. But as two clinical trials from Duke University Medical Center have found, exercise can also alleviate major depression as effectively as medications. Exercise can also be safely combined with other modali-

EXERCISE FOR DEPRESSED PEOPLE

Several recent studies have demonstrated that exercise improves mood. Many of these studies are of older adults, who are sometimes at higher risk for depression. For example, in a large population study from Finland (N=3,403), exercise lowered depression, and helped with feelings of anger, distrust and stress. Two to three times a week was enough to achieve this mood-altering effect (Hassmen et al. 2000). In another study, older adults were randomly assigned to either exercise classes or health education for 10 weeks (Mather et al., 2002). All participants were depressed and on medications, but medications were not adequately controlling their depression. At the end of treatment, 55% of the exercise group was less depressed vs. 33% of the education group.

Most of the participants in the previously cited studies had mild-to-moderate depression. But Babyak et al.'s (2000) study demonstrated that exercise can be helpful for major depression as well. In this clinical trial, depressed older adults were randomly assigned to one of three groups: exercise alone; sertraline alone; or a combination of exercise and sertraline. After four months, all the patients improved, and there were no differences between the groups. People in the exercise-only group did as well as people in the two medication groups. In addition, people in the exercise-only group were significantly less likely to relapse. Six months after completion of treatment, 28% of the exercise-only group became depressed again vs. 51% of the medications-only and medications-exercise groups.

This same group of researchers recently replicated their findings (Blumenthal et al., 2007). In the more recent study, 202 adults with major depression

were randomized to one of four conditions: sertraline, exercise at home, supervised exercise, or a placebo control. After four months of treatment, 41% of the patients were in remission and no longer met the criteria for major depression. Efficacy rates by treatment were as follows: supervised exercise=45%, home-based exercise=40%, medication=47%, and placebo=31%. The exercise condition was 45 minutes of walking on a treadmill at 70% to 85% maximum heart rate capacity, three times a week, for 16 weeks. The efficacy of exercise was comparable to medications for major depression.

Exercise to Achieve an Antidepressant Effect

For mild-to-moderate depression

• Frequency: 2 to 3 times a week

• Intensity: moderate

• **Duration:** 20 to 30 minutes

For major depression

• Frequency: 3 to 5 times a week

• Intensity: 60% to 85% maximum capacity

• Duration: 45 to 60 minutes

EXERCISE AND BREASTFEEDING

So exercise is good for treating depression, but will it negatively impact breastfeeding? Only a few studies have specifically addressed this topic. A recent Cochrane Review found that neither diet nor exercise for weight loss appeared to impact breastfeeding adversely (Amorin, Linne, & Lourenco, 2007). However, the authors noted that there was very little research on this topic. An Australian study (Su et al., 2007) examined the relationship between 587 mothers' exercise, initiation and duration of breastfeeding, and exercise's effect on infant growth. At 6 to 12 months, exercise had not decreased breastfeeding duration. At 12 months, exercise had no significant impact on infant growth. This applied to both women who were fully breastfeeding and those who did "any" amount of breastfeeding. The researchers concluded that their study should reassure health care providers that exercise while breastfeeding is safe and important for maintaining health.

Those studies demonstrate that exercise is generally safe for breastfeeding mothers, but does exercise cause lactic acid to build up in mothers' milk so that babies won't breastfeed? A study of 12 lactating women sought to answer this question (Quinn & Carey, 1999). Quinn and Carey found that in women with an adequate maternal caloric intake, moderate exercise did not increase lactic acid in breastmilk nor cause babies to reject it. When women exercised in the "hard" range (using the perceivedexertion scale), lactic acid increased. The authors recommended exercise in a moderate range because it neither increases lactic acid accumulation in breastmilk nor alters babies' willingness to breastfeed.

SUMMARY

In summary, exercise is a highly effective treatment for depression—alone or in combination with other treatments. It appears to have no negative effect on breastfeeding. It can be a viable alternative treatment if mothers refuse medications.

REFERENCES

- Amorin, A. R., Linne, Y.M., & Lourenco, P.M. (2007). Diet or exercise, or both, for weight reduction in women after childbirth. Cochrane Database Systematic Review, July 18.
- Babyak, M., Blumenthal, J.A., Herman, S., Khatri, P., Doraiswamy, M., Moore, K., Craighead, W.E., Baldewicz, T.T., & Krishnan, R.R. (2000). Exercise treatment for major depression: Maintenance of therapeutic benefit at 10 months. Psychosomatic Medicine, 62, 633-638.
- Blumenthal, J. A., Babyak, M.A., Doraiswamy, P.M., Watkins, L., Hoffman, B.M., Barbour, K.A., et al. (2007). Exercise and pharmacotherapy in the treatment of major depressive disorder. Psychosomatic Medicine, 69, 587-596.
- Hassmen, P., Koivula, N., & Uutela, A. (2000). Physical exercise and psychological well-being: A population study in Finland. Preventative Medicine, 30, 17-25.
- Mather, A. S., Rodriguez, C., Guthrie, M.F., McHarg, A.M., Reid, I.C., & McMurdo, M.E.T. (2002). Effects of exercise on depressive symptoms in older adults with poorly responsive depressive disorder: Randomized controlled trial. British Journal of Psychiatry, 180, 411-415.
- Quinn, T. J., & Carey, G.B. (1999). Does exercise intensity or diet influence lactic acid accumulation in breast milk? Medicine and Science in Sports and Exercise, 31, 105-110.
- Su, D., Zhao, Y., Binna, C., Scott, J., & Oddy, W. (2007). Breast-feeding mothers can exercise: Results of a cohort study. Public Health Nutrition, 10, 1089-1093.

BF RESEARCH

Excerpted from: Kendall-Tackett, K.A. (2008).

Non-pharmacologic treatments for depression in new mothers. Clinics in Human Lactation Series. Amarillo, TX: Hale Publishing.

Kathleen Kendall-Tackett is a health psychologist, International Board Certified Lactation Consultant, Research Associate



specializing in women's health at the Family Research Lab, University of New Hampshire. Dr. Kendall-Tackett is a La Leche League Leader, chair of the New Hampshire Breastfeeding Taskforce, and the Area Coordinator of Leaders for La Leche League of Maine and New Hampshire. Her Web sites are www.GraniteScientific.com and www. BreastfeedingMadeSimple.com.

Editor: Janet Rourke Newsletter Design: Dolly Moore Contact: books@hale-publishing.com Medications and More is a monthly newsletter. If you enjoyed this newsletter, please tell your friends about it. Click here to subscribe. If you would like to be removed from our newsletter mailing list, click here to unsubscribe.

Clinics in Huma Lactatio

Clinics in **Human Lactation** Non Pharmacologic **Based Treatments** Kathleen Kendall -Tackett, PhD, IBCLC

Now Available

Pregnant and postpartum women are at increased risk for depression, and the health effects of depression for both mother and baby are too serious to ignore. As important as it is, however, to promptly treat depression, some are voicing concern over whether the risks of antidepressant medications outweigh the benefits. In this monograph, Kathleen Kendall-Tackett describes the various non-drug treatment modalities being used to treat even major depression. In most cases, the non-drug treatments are as effective as medications with far fewer side effects. \$18.95



1712 N Forest St. • Amarillo, TX 79106 • 806-376-9900 • 800-378-1317 To order, go to www.ibreastfeeding.com

