PUBLISHED September 22, 2000 IN Campus

Study: Exercise Has Long-Lasting Effect on Depression

By Duke Today Staff

After demonstrating that 30 minutes of brisk exercise three times a week is just as effective as drug therapy in relieving the symptoms of major depression in the short term, medical center researchers have now shown that continued exercise greatly reduces the chances of the depression returning. Last year, the Duke researchers reported on their study of 156 older patients diagnosed with major depression which, to their surprise, found that after 16 weeks, patients who exercised showed statistically significant and comparable improvement relative to those who took anti-depression medication, or those who took the medication and exercised. The new study, which followed the same participants for an additional six months, found that patients who continued to exercise after completing the initial trial were much less likely to see their depression return than the other patients. Only 8 percent of patients in the exercise group had their depression return, while 38 percent of the drug-only group and 31 percent of the exercise-plus-drug group relapsed. "The important conclusion is that the effectiveness of exercise seems to persist over time, and that patients who respond well to exercise and maintain their exercise have a much smaller risk of relapsing," said lead researcher, Duke psychologist James Blumenthal, who published the results of his team's study in the October issue of the journal Psychosomatic Medicine. The research was supported by grants from the National Institutes of Health (NIH). The researchers are now using a new

$3 million NIH grant to better understand the subtle factors that may explain the positive effects of exercise in a new trial that begins enrolling patients this month. "We found that there was an inverse relationship between exercise and the risk of relapsing - the more one exercised, the less likely one would see their depressive symptoms return," Blumenthal explained. "For each 50-minute increment of exercise, there was an accompanying 50 percent reduction in relapse risk. "Findings from these studies indicate that a modest exercise program is an effective and robust treatment for patients with major depression," he continued. "And if these motivated patients continue with their exercise, they have a much better chance of not seeing their depression return." Researchers were surprised that the group of patients who took the medication and exercised did not respond as well as those who only exercised. "We had assumed that exercise and medication together would have had an additive effect, but this turned out not to be the case," Blumenthal said. "While we don't know the reasons for this, some of the participants were disappointed when they found out they were randomized to the exercise and medication group. To some extent, this 'anti-medication' sentiment may have played a role by making patients less excited or enthused about their combined exercise and medication program." He suggested that exercise may be beneficial because patients are actually taking an active role in trying to get better. "Simply taking a pill is very passive," he said. "Patients who exercised may have felt a greater sense of mastery over their condition and gained a greater sense of accomplishment. They may have felt more self-confident and competent because they were able to do it themselves, and attributed their improvement to their ability to exercise." Once patients start feeling better, they tend to exercise more, which makes them feel even better, Blumenthal said. The greatest risk for these patients, since they are older, would be to suffer an injury or illness that would interrupt their exercise routine, he added. While the researchers enrolled middle-aged and elderly people in their study, Blumenthal said it is logical to assume that the results would hold true for the general population, since older people tend to have additional medical problems or infirmities that might make regular exercise more difficult than for younger patients. Researchers used the anti-depressant sertraline (trade name Zoloft), which is a member of a class of commonly used anti-depressants known as selective serotonin reuptake inhibitors (SSRI). Blumenthal cautioned that the study did not include patients who were acutely suicidal or had what is termed psychotic depression. Also, since patients were recruited by advertisements, these patients were motivated to get better and interested in exercise. The research team included, from Duke, Michael Babyak, Steve Herman, Parinda Khatri, Dr. Murali Doraiswamy, Kathleen Moore, Teri Baldewicz and Dr. Ranga Krishnan. Edward Craighead, from the University of Colorado at Boulder also participated.

Contact: Richard Merritt
Phone: (919) 660-1309

Email: merri006@mc.duke.edu

Tagged with
News Releases & Tips View all tags

---

614 Chapel Drive, Box 90563, Durham, NC 27708-0563
(919) 684-2823

×

Link to this page

Copy and paste the URL below to share this page.

https://today.duke.edu/2000/(
Select URL