

Emotional health affects exercise patterns in breast cancer patients

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The first study to monitor physical activity in breast cancer patients for five years suggests that patients with greater depressive symptoms and a lower emotional quality of life are less likely to exercise as part of their recovery than are patients reporting less distress.

While the findings may seem intuitive, they also add weight to a growing pool of data supporting the need to concentrate on breast cancer patients' [emotional health](#) soon after they are diagnosed, researchers say.

Overall, the women as a group increased their physical activity during the first 18 months after diagnosis and treatment, but then their physical activity gradually declined over the remaining 3 1/2 years.

Poor physical health also was associated with less physical activity over all five years. On the other hand, family support appeared to slow the decline in physical activity over the last 42 months of the study.

Depressive symptoms can include low mood, low energy, sleep difficulty and a lack of interest in, or withdrawal from, normal activities.

Emotional quality of health is a broad composite measure of social and psychological factors, including mood, tension and the presence or lack of social support.

"This suggests that stress in the form of depressive symptoms is related to actual health behavior over a sustained period of time," said Charles Emery, professor of psychology at Ohio State University and lead author

of the study.

"We know from other studies that exercise is associated with generally better quality of life, usually lower symptom reporting, and enhanced health outcomes in women with breast cancer. These data suggest that depressive symptoms are associated with low exercise activity, providing further evidence in support of the need to evaluate and address depressive symptoms early in the course of illness and treatment."

The study also reinforced the idea that sticking to an exercise plan is not easy, even for those expecting physical activity to aid in recovery from a serious illness.

"These data suggest that the presence of a very significant life-threatening health problem was not enough to encourage maintenance of an exercise program," Emery said.

The research is published in the April issue of the journal *Psycho-Oncology*.

The researchers followed 227 women who had participated in a previous clinical trial in which they were randomized to receive either a year of psycho-educational counseling or standard breast cancer follow-up assessments and treatment.

All of the women had been diagnosed with stage II or stage III breast cancer and surgically treated. They were assessed at the start of the study and 12 additional times over five years to evaluate health status, symptoms, fatigue, health-related quality of life, [depressive symptoms](#), social support and physical activity.

Self-rated physical activity was measured in standard energy expenditure values, or METs. The U.S. Department of Health and Human Services

recommends 150 or more minutes per week of moderate-intensity physical activity for adults, which equals about 23 METs each week.

At the start of the study, 20 percent of participants achieved or exceeded the goal of 23 METs per week of physical activity. At one year, 37 percent of participants had reached that point. By the study's end, just 18 percent were performing the recommended amount of physical activity each week.

In addition to psychological and social factors, medical factors were evaluated as predictors of physical activity. Chemotherapy treatment had a negative effect on exercise activity for the first three years, but that effect diminished later in the study.

Women with higher physical performance status reported higher levels of physical activity at the start of the study, and that association did not change over five years. Similarly, women who reported more physical symptoms reported less physical activity for the duration of the study.

Although family support had a positive influence on physical activity, support from friends did not appear to have the same effect.

"I was a bit surprised that we observed a distinction between family and friends," said Emery, also an investigator in Ohio State's Institute for Behavioral Medicine Research. "We continue to believe it's probably important to find a buddy to exercise with, but these data would certainly suggest that support from family may be even more important. We don't know why, but maybe those were the people who were most consistently available to provide support."

The family support component also suggests that health-care practitioners should encourage social support among family members of [breast cancer](#) patients as a strategy to influence long-term engagement in

physical activity, he said.

As a group, the women's [physical activity](#) patterns were similar across the board, increasing from baseline until about 18 months into the study, then steadily dropping and finally ending below the baseline level at the five-year point.

"It's great that participants report an increase in exercise activity, but the fact that there is a subsequent decline is not a good sign. We need to consider future interventions to minimize this decline," Emery said.

Source: The Ohio State University ([news](#) : [web](#))

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