

Cognitive-behavioral stress management in breast cancer

December 1 2015



Mammograms showing a normal breast (left) and a breast with cancer (right).
Credit: Public Domain

Newly published research from a National Cancer Institute-funded randomized trial shows that women who were provided with skills to manage stress early in their breast cancer treatment show greater length of survival and longer time till disease recurrence over eight to 15 years after their original diagnosis.

Michael Antoni, Ph.D., Survivorship Theme Leader of the Cancer Control research program at Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine and Professor of Psychiatry and Behavioral Sciences, and his research team previously found that cognitive-behavioral [stress management](#) (CBSM)—an intervention approach created by Antoni at UM—improves psychological adaptation and lowers distress and inflammatory signaling in circulating cells during [breast cancer treatment](#) and long-term follow-ups. Women receiving CBSM learned techniques like muscle relaxation and deep breathing as well as skills to change negative thoughts and improve coping strategies in 10 weekly group sessions.

This secondary analysis, published online and in the November 2015 issue of *Breast Cancer Research and Treatment*, examined whether [breast cancer](#) patients who received CBSM in the weeks after surgery had improved survival and a greater "disease-free interval" until recurrence.

"Our ongoing work is examining whether the effects of stress management on depressive symptoms and inflammatory biomarkers during the first year of treatment are linked to longer-term [disease recurrence](#) and survival," Antoni said.

Antoni, who is also Professor of Psychology at UM's College of Arts & Sciences, and researchers in the Department of Psychology noted that prior research has showed that distress, negative mood and heightened inflammation during treatment may all facilitate disease progression and poorer health outcomes, thus "we wanted to test whether participating in a program like CBSM could decrease the risk of disease progression and mortality over the long term."

The study is titled "A randomized controlled trial of cognitive-behavioral stress management in breast cancer: survival and recurrence at 11-year follow-up."

Lead author Dr. Jamie Stagl, who was a Ph.D. student in Psychology at UM during the research period, is currently a post-doctoral fellow in Psychiatric Oncology at Massachusetts General Hospital Cancer Center in Boston. Additional authors of the study include Suzanne C. Lechner, Charles S. Carver, Laura C. Bouchard, Lisa M. Gudenkauf, Devika R. Jutagir, Alain Diaz, Qilu Yu, Bonne B. Blomberg, Gail Ironson, Stefan Gluck, and Antoni, who also serves as Director of UM's Center for Psycho-Oncology Research.

The researchers are now testing whether changes in inflammatory gene expression during and after the stress management intervention predict disease outcomes up to 15 years later, and are also developing and testing even shorter versions of the stress management program to see if five-week versions of programs specifically targeting either relaxation training or cognitive behavioral coping skills training are equivalent to the 10-week CBSM program.

Additional versions of stress management interventions that are adapted to meet the needs of specific vulnerable cancer populations - African American women, Latinas, or older women of all races and ethnicities, for example - are also being tested.

"Our work is unique in that more than one-third of the participants were of an ethnic minority, compared to mostly non-Hispanic White women studied in prior research, which means that the findings may be generalizable to the larger population of [breast cancer patients](#)," Antoni said. "Our overarching goal is to improve survivorship and health outcomes by reaching patients early in the cancer treatment process and providing them the tools they need to manage current and future challenges on their journey."

More information: Jamie M. Stagl et al. A randomized controlled trial of cognitive-behavioral stress management in breast cancer: survival and

recurrence at 11-year follow-up, *Breast Cancer Research and Treatment* (2015). [DOI: 10.1007/s10549-015-3626-6](https://doi.org/10.1007/s10549-015-3626-6)

Provided by University of Miami

Citation: Cognitive-behavioral stress management in breast cancer (2015, December 1) retrieved 2 May 2024 from <https://medicalxpress.com/news/2015-12-cognitive-behavioral-stress-breast-cancer.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--