Active Living After Cancer program improves physical functioning of breast cancer survivors
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Breast cancer survivors who participated in Active Living After Cancer, an evidence-based 12-week group program, markedly increased their physical activity and ability to accomplish the basic pursuits of daily life, researchers from The University of Texas MD Anderson Cancer Center reported today in Cancer. The results show the program could serve as a model to deliver a community-based physical activity program to minority and medically underserved cancer survivors.

"After a cancer diagnosis, survivors' physical functioning declines much faster than their peers of the same age and gender who don't have cancer, which can ultimately affect their ability to remain independent and mobile," said Karen Basen-Engquist, Ph.D., professor of Behavioral Science and senior author of the paper. "We've shown this evidence-based program can be successfully implemented through a community model to help diverse populations of cancer survivors improve physical functioning after completing cancer treatment."

The program measured changes in participants' six-minute walk and 30-second sit-to-stand test results from baseline to completion of the program. These physical functioning tests measure activities essential to daily life. Mean sit-to-stand repetitions increased 19%, from 12.5 to 14.9; and mean six-minute walk distance increased 10%, from 428 meters to 470 meters. Self-reported physical activity nearly doubled, from a mean of 172.8 minutes of moderate to vigorous physical activity per week at baseline to 344.6 minutes at the 12-week follow-up. Participants also reported an 8% increase in physical quality of life and a 6% improvement in mental health, as measured by a health-related quality of life outcomes questionnaire.

Active Living After Cancer is not a supervised exercise program. Facilitators from community organizations follow a 12-week curriculum that introduces a different low-impact exercise, cognitive/behavioral skill and survivorship resource each week to help participants increase their physical activity at home, learn how to build healthier habits and cope with the challenges of survivorship.

"One reason this model is successful is that we focus on meeting people where they are, teaching them the skills to develop their own goals and allowing them to go at their own pace," Basen-Engquist said. "We know that not everyone is ready for or interested in going to a gym. We need models to deliver these services to all cancer survivors, especially to people with less access."
Active Living After Cancer provides a soft start to get people thinking about how active living benefits them and incorporating physical activity into their everyday lives."

The findings reported in Cancer were based on 127 breast cancer survivors who completed the program between 2014 and 2017. During this time, 34 Active Living After Cancer groups (12-week sessions with the same cohort) were completed at health care organizations, community organizations and churches across the greater Houston area.

The research team focused on recruiting minority and medically underserved cancer survivors because these populations tend to exercise less and have less access to physical activity resources. The program is free and was offered to breast cancer survivors who had completed primary cancer treatment.

The recruitment rate for the program was 45%, similar to other exercise programs for cancer survivors. Of the 187 participants who enrolled in the program, 74% completed at least half the sessions. The 68% who completed the 12-week intervention were included in the outcome analysis.

Participants were all women, with a mean age of 59.6 years, and 65% were minority and/or medically underserved breast cancer survivors. Participants were 30.6% white, 31.2% Black, 26.9% Hispanic and 11.1% other. Some classes were held in Spanish to accommodate the 15.5% of Spanish-speaking participants. Nearly half had private insurance, while 51% were covered by Medicare, Medicaid, Harris County’s Gold Card health care financial assistance program or were uninsured.

Researchers from MD Anderson developed the curriculum, trained facilitators from community organizations to lead the sessions and measured program results.

"It was important to work with community partners to provide a way to disseminate the program more broadly," Basen-Engquist said. "We try to work with organizations that have a track record of working within that community and can make it relevant to the people they serve."

The program builds on a lifestyle physical activity intervention that the team previously tested in a randomized study. Since 2017, Active Living After Cancer has expanded to include survivors of all cancer types and broadened to serve the El Paso, Beaumont and Tyler, Texas communities. Due to the COVID-19 pandemic, Active Living After Cancer has been delivered virtually since March 2020, and more than 1,000 cancer survivors have now completed the program.

"We've learned a lot about exercise and benefits for cancer survivors over the past 20 years, and now our job is to implement that knowledge," Basen-Engquist said. "We hope that Active Living After Cancer will be a model to deliver these services to all cancer survivors, especially to people with less access to resources for healthy living."


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