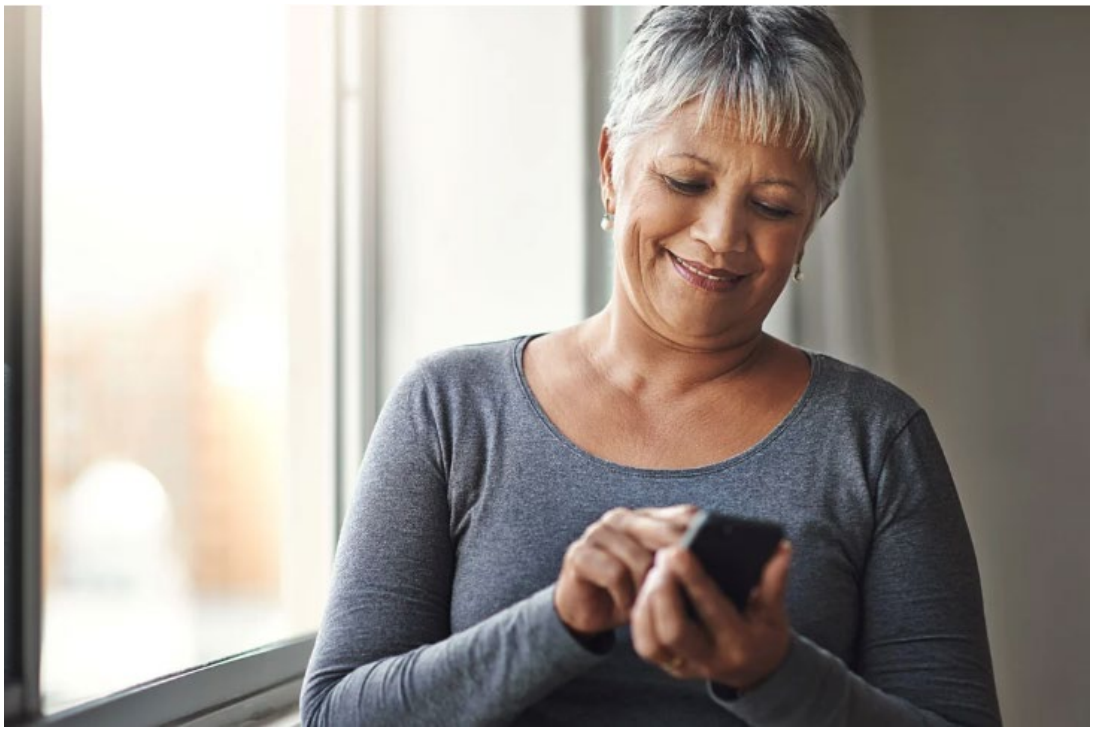
Adaptive, Stepped-Care for Cancer-Related PTSD Symptoms in HCT Survivors: Results from a SMART Trial

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Why We Did This Study

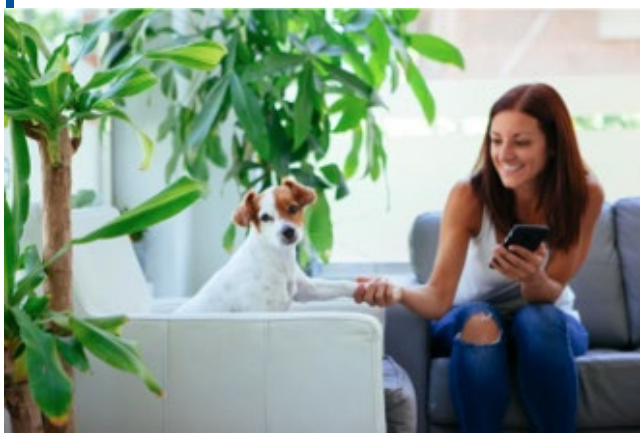
Researchers wanted to find better ways to help people who had ongoing post-traumatic stress symptoms after a hematopoietic cell transplant (HCT), also called a bone marrow or stem cell transplant. Many HCT survivors experience stress, fear, or upsetting memories related to their cancer and treatment. The study tested whether a stepped-care approach could reduce these symptoms. In stepped care, people start with a lower-intensity treatment and receive more intensive care only if needed. Researchers compared several treatment sequences that included usual care, a mobile app, coaching, and therapist-led treatment.

Who Participated in This Study?



The study screened 1,322 survivors. Of these, 662 met criteria for significant PTSD symptoms and 477 adult HCT survivors from three U.S. cancer and national outreach efforts enrolled and were randomly assigned to one of the study groups. Participants were 1 to 5 years after transplant and had symptoms of post-traumatic stress that were either at a probable PTSD level or below that level but still clinically important. The average age was about 53 years, and 37% were men. About 81% were White. Participants had undergone either allogeneic or autologous blood or marrow transplantation for cancers such as leukemia, multiple myeloma, and lymphoma. After enrollment, participants were randomly assigned to begin with either usual care or a mobile app called Cancer Distress Coach.

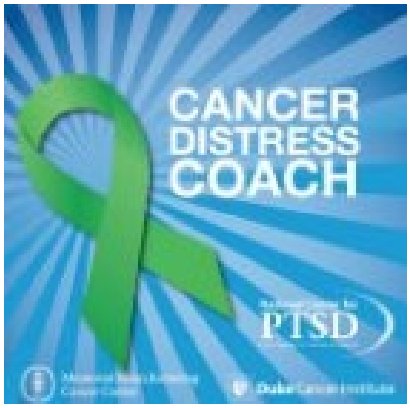
What Were the Results?



Both groups experienced meaningful reductions in PTSD symptoms during the first 4 weeks, and the mobile app did not produce significantly greater improvement than usual care during that period. By month 3 and month 6, results depended on the treatment sequence. Participants who did not meet the study's early response criteria and were subsequently offered therapist-led cognitive behavioral therapy generally experienced larger symptom reductions than those offered coaching.

The greatest improvements were seen in the group that started with the Cancer Distress Coach app and then moved to therapist-led CBT if early improvement did not occur.

What Do These Results Mean?



The study suggests that a stepped-care approach may be helpful for HCT survivors experiencing PTSD symptoms. While the Cancer Distress Coach app did not lead to greater early improvement than usual care, participants who needed additional support appeared to benefit from more intensive therapy, particularly therapist-led cognitive behavioral therapy. These findings support the use of digital tools as a starting point within a stepped-care model that can identify individuals who may benefit from additional treatment.