

Virtual Mind–Body Fitness Classes Show Unexpected Benefit in People with Cancer

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For people being treated for cancer, participating in virtual mind–body fitness classes may have important benefits, such as reducing the risk of being hospitalized for treatment-related problems, according to results from a clinical trial.

In the trial, people who were randomly assigned to participate in the classes were [less likely to be hospitalized, and had shorter stays when they were hospitalized](#), than people who weren't assigned to take part.

Some of the classes taught participants movement-based activities such as yoga, [tai chi](#), and dance therapy; other classes taught meditation-based practices, such as [music therapy](#) and mindfulness.

Earlier studies have suggested that mind–body fitness practices can help reduce common side effects of cancer treatment, such as fatigue, anxiety, and depression, noted the trial's lead researcher, Jun Mao, M.D., MSCE, chief of Integrative Medicine at Memorial Sloan Kettering Cancer Center (MSKCC).

In the trial, Dr. Mao and his colleagues tested a program they developed called Integrative Medicine at Home (IM@Home). The program offers more than 20 live classes, delivered over Zoom. The trial's 200 participants were receiving chemotherapy, [immunotherapy](#), or [radiation therapy](#) at MSKCC.

Participants in the IM@Home group reported less fatigue, less depression, and fewer physical symptoms related to treatment, Dr. Mao reported on October 28 at the American Society of Clinical Oncology Quality Care Symposium in Boston.

The researchers also noticed some unanticipated differences in the use of hospital and medical services. In addition to having fewer unplanned hospitalizations and shorter hospital stays, IM@Home participants had fewer visits to urgent care centers than trial participants who did not

take part in the program.

“We were surprised to learn that participating in the program actually reduced the number of hospitalizations and also the likelihood to be hospitalized,” said Dr. Mao. And although the program did not help reduce the likelihood of having at least one visit to urgent care, it may have helped reduce the [median](#) number of these visits that patients may have, he added.

“These are promising results,” said Farah Zia, M.D., of NCI’s [Division of Cancer Treatment and Diagnosis](#), who co-leads an NIH-wide committee on integrative medicine and was not involved in the trial.

“This trial demonstrates that a virtual mind-body fitness program can be delivered successfully in the cancer care setting,” said Dr. Zia, adding that there has been limited research on ways to make such programs accessible to people with cancer.

Dr. Zia cautioned that a larger study with a longer [follow-up](#) period is needed to confirm the results, which have not been published in a scientific journal. Dr. Mao said his team is planning to undertake such a study.

“I do want to caution that the current trial was designed as an early-phase trial, so we would like to do a larger study with longer follow-up to confirm our results before we are completely confident in the findings,” he said.

Delivering a virtual mind-body fitness program to people with cancer

Research on mind-body practices for people with cancer and those treated for the disease in the past has expanded in recent decades. One recent study, for example, found that yoga helped [improve symptoms and the quality of life in men with prostate cancer](#). Another showed that [mindfulness meditation reduced depressive symptoms in younger women with breast cancer](#).

Such findings have led [oncology groups to recommend using some of these practices](#) to help treat anxiety and depression among people with cancer.

Some large cancer centers already incorporate mind-body practices in cancer care. “The techniques are often part of an approach to caring for patients called whole person health, which acknowledges that social and emotional well-being are as important as physical well-being,” said Dr. Zia.

Because the optimal ways to deliver these techniques to people with cancer have not been known, the IM@Home trial addressed an important gap in the research on mind-body practices in cancer care, noted Dr. Zia. The study had its origins during the COVID-19 pandemic, when Dr. Mao and his colleagues converted much of their mind-body fitness programming for people with cancer to virtual formats.

“As challenging as the pandemic was, it allowed us to find a way to reach more patients in the comfort of their homes,” Dr. Mao explained. His team previously demonstrated the [feasibility of delivering a mind-body fitness program virtually](#).

Empowering patients to keep their minds and bodies active

To evaluate IM@Home in a clinical trial, Dr. Mao and his colleagues recruited people with various types of cancer who had reported moderate or greater levels of fatigue. Each was randomly assigned to participate in IM@Home or to receive enhanced [standard care](#), which consisted of the standard care their doctor might provide plus access to prerecorded online meditation resources.

Participants were asked to rate their levels of fatigue during the trial, allowing the researchers to develop and compare fatigue scores. The researchers used electronic medical records to track the participants’ use of hospital services during the 3-month study period.

Those in the IM@Home group could choose from a variety of exercises and practices. That flexibility was critical, Dr. Mao said, because on some days, such as after a chemotherapy treatment, people might not have the energy for activities that they would on other days.

“We thought that giving patients the opportunity to choose from a range of options would empower them to stay active to the degree that they could,” he said. “Some might want to take more aerobic strength training, while others might prefer something more sedentary, such as mindfulness meditation.”

The IM@Home program allows participants to join group video chats during classes. “Patients can build a sense of community with others who are on a similar journey,” Dr. Mao said. “Today’s post-COVID world can be quite isolating for some patients, and these social connections may have some beneficial effects.”

The median age of participants was nearly 60 years, and most participants were female (91%) and White (78%).

The differences in hospitalization rates between the two groups were substantial. Of those in the virtual mind-body fitness group, for example, only 5% were hospitalized during the study period, compared with 14% of those in the enhanced standard care group.

And, when people were hospitalized, the lengths of stays also differed (medians of 5 days versus 9 days). The total number of hospitalization days in the virtual mind-body fitness group was 17, compared with 130 in the enhanced standard care group.

There were also fewer visits to urgent care centers among people in the virtual mind-body fitness group: 11 versus 30.

Learning more about mind-body fitness in people with cancer

The reasons for the reduced number of hospital stays and urgent care visits are not clear, the researchers said.

Previous studies have suggested that people with cancer who have certain levels of fatigue and related symptoms [may not fare as well as those who do not have these symptoms](#), Dr. Mao noted. In the future, he plans to examine how these types of symptoms may drive hospitalizations in their trial.

Dr. Zia praised the trial's design, noting that the use of randomization increases confidence in the results.

These results raise the possibility that one day all patients could have access to “effective and safe nonpharmacologic treatments [that reduce complications of cancer treatments] from the comfort of home,” she said.

Dr. Mao and his colleagues also plan in future studies to explore further whether this program helps patients stay on treatment for their cancer. And if the answer is yes, the researchers would like to know whether these patients live longer than they otherwise might.

“The current study is just the beginning of what we hope to learn,” he added.

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