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## **Objectives**

The aim of this study was to investigate a newly developed smartphone problem-solving therapy (PST) application's feasibility and preliminary effectiveness for reducing fear of cancer recurrence (FCR) among breast cancer survivors.

## **Methods**

Female disease-free breast cancer survivors aged 20–49 years who were more than 6 months post-breast surgery participated in the study. The patients received the smartphone PST using an iPhone or iPad for 8 weeks. The feasibility of the intervention program was evaluated using the overall participation rate, the percentage of survivors who expressed interest in the intervention, and the percentage of completion of the study. Patients were also asked to complete the Concern About Recurrence Scale (CARS) as a primary outcome at baseline, 4 weeks, and 8 weeks.

## **Results**

A total of 38 patients participated in this study. The overall participation and completion rates in the study were 47.1% and 97.4%, respectively. The overall fear assessed by CARS was significantly reduced at 8 weeks compared with baseline. A pairwise comparison showed a significant decrease from 4 weeks to 8 weeks and from baseline to 8 weeks.

## **Conclusions**

Smartphone PST, a novel brief intervention to reduce FCR, was well accepted by breast cancer survivors and yielded a favorable effect on FCR. The efficacy of this newly developed smartphone PST needs to be confirmed in a future well-designed randomized controlled trial.