

A randomized controlled trial of internet-based cognitive behavioral therapy (iCBT) and EMDR-flash technique (iEMDR-FT) for improving mental health in breast cancer patients

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Abstract

This study aims to compare the effectiveness of internet-based Cognitive Behavioral Therapy (iCBT) and internet-based Eye Movement Desensitization and Reprocessing (EMDR) Flash Technique (iEMDR-FT) in reducing fear of cancer recurrence, traumatic stress, anxiety, depression, and increasing the quality of life among patients diagnosed with breast cancer. A randomized controlled trial was conducted with a sample of patients, equally divided into two treatment groups. The iCBT program was administered over 7 weeks, while the iEMDR-FT was delivered in three sessions in three days. The participants were given a sociodemographic data form, Posttraumatic Stress Disorder

Control List DSM-5 (PCL-5), Fear of Cancer Recurrence Scale, Depression-Anxiety-Stress 21 scale (DASS-21), and World Health Organization Quality of Life Scale Short Form. Participants were assessed before, immediately after, and three months post-intervention. The mean age of the participants was 43.79 (7.45) years. In comparing the two groups, a statistical difference was found only in the age variable ($p = 0.025$). As a result, there was no significant difference between the two groups when sociodemographic and cancer-related ratings were compared ($p > 0.05$). It was determined that the change in iEMDR-FT scores in all scales was not statistically significantly different compared to the iCBT group ($p > 0.05$). Initial analysis indicates that both iCBT and iEMDR-FT resulted in notable decreases in traumatic stress, fear of cancer recurrence, anxiety, and depression among breast cancer patients. However, this therapeutic improvement is similar in both applications. This result supports the argument that two methods with similar effectiveness can be used as alternatives to each other in treatment.

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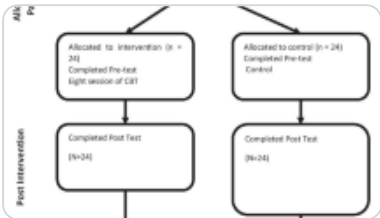
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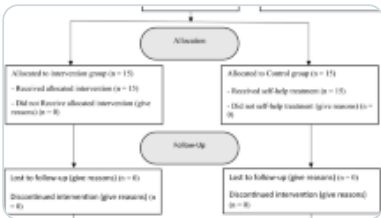
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Data availability

The data on which the present results are based are available upon request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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Contributions

All authors have read and approved the final version of the manuscript. All authors have read and approved the final version of the manuscript. Conceptualization: SE, YAB, KÖ, KÇ; Data Curation: Gİ; Formal Analysis: Gİ; Investigation: SE, YAB; Methodology: Gİ, KÖ, SE, YBA, KÇ; Project Administration: SE, YBA; Intervention: SE, YAB, KÖ, KÇ; Resources: KÇ, SE, Gİ; Supervision: KÖ, SE, YBA; Visualization: Gİ, KÇ, SE; Writing—original draft: Gİ, KÇ, SE, KÖ; Writing—review & editing (all authors).

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Ethics declarations

Ethics approval

The study was approved by the Istanbul Okan University Research Ethic Committee (decision number 180/2024). Informed consent was obtained from all individual participants included in the study. The research was conducted in accordance with the Declaration of Helsinki.

Consent to participate

Written informed consent for publication of their details was obtained from the study participants.

Trial registration

This trial was registered at ClinicalTrials.gov (Identifier: NCT06810830).

Conflict of interest

The authors declare that they do not have any conflict of interest.

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