

# Effectiveness of Cognitive Behavioral Therapy on Depression and Anxiety Symptoms in Breast Cancer Patients and Survivors: A Systematic Review Of Interventional Studies

Marzieh Azizi<sup>1\*</sup>, Hadis Tolomehr<sup>2</sup>, Mohsen Kheiri<sup>3</sup>

<sup>1</sup>Department of Midwifery, School of Nursing and Midwifery, Sexual and Reproductive Health Research Center, Mazandaran University of Medical Sciences, Sari, Iran

<sup>2</sup>Student Research Committee, School of Allied Medical Sciences, Mazandaran University of Medical Sciences, Sari, Iran

<sup>3</sup>Student Research Committee, School of Pharmacy, Mazandaran University of Medical Sciences, Sari, Iran

## OPEN ACCESS

### \*Corresponding Author:

Dept. of Midwifery, School of Nursing and Midwifery, Sexual and Reproductive Health Research Center, Mazandaran University of Medical Sciences, Sari, Iran

### Citation:

Azizi M, Tolomehr H, Kheiri M. Effectiveness of Cognitive Behavioral Therapy on Depression and Anxiety Symptoms in Breast Cancer Patients and Survivors: A Systematic Review Of Interventional Studies. *Iranian biomedical journal. Supplementary* (12-2024): 41.

## ABSTRACT

**Introduction:** Breast cancer (BC) is the most common type of cancer and the second cause of cancer-related death among women. Psychological treatments such as cognitive behavioral therapy (CBT) have been used as an effective method in the treatment of depression and anxiety in BC patients, and their effectiveness has been approved in various studies. The present study aimed to systematically investigate the effectiveness of CBT on depression and anxiety symptoms in BC patients and survivors.

**Methods and Materials:** Electronic databases such as PubMed, Scopus, Web of Science, ScienceDirect, and Google Scholar were systematically searched from "October 2023 to February 2024". The quality of the included studies was evaluated using the Critical Appraisal Skills Programme. In this study, the randomized controlled trials and quasi-experimental studies that assessed the effectiveness of CBT, cognitive behavioral group therapy (CBGT), and the combination of CBT with other psychological studies on depression and anxiety of BC patients and survivors were reviewed.

**Results:** Of the 14 included studies, four used CBT, five used CBGT, and one study used internet-delivered cognitive behavioral therapy. In other studies, a combination of CBT with other psychological interventions was implemented as an interventional program. Among 14 included studies, 12 studies showed that CBT, CBGT, and a combination of CBT with other psychological interventions significantly decreased the anxiety and depression scores among BC patients and survivors ( $p < 0.05$ ), and only in two studies no significant effect was observed.

**Conclusion and Discussion:** As most included studies showed the effectiveness of CBT in decreasing the depression and anxiety scores among BC patients and survivors, this study strongly suggested using CBT as an effective non-pharmacological method for the treatment of psychiatric disorders of BC patients during cancer treatments and also for BC survivors.

**Keywords:** Anxiety, Breast neoplasms, Cognitive behavioral therapy, Depression, Survivors