

## Assessment of the Memory of Patients with Breast Cancer Before and After Chemotherapy

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### Abstract

**Introduction:** Breast cancer (BC) is the second leading cause of cancer death among women. These patients suffer from psychological, emotional, physical and cognitive aspects.

Cognitive problems, including memory impairment, are the most common uncontrollable consequences in patients with BC. Some patients become aware of the changes in their memory when they undergo chemotherapy. Therefore, the present study evaluates the memory of patients with BC before and after chemotherapy.

**Materials and Methods:** The statistical population of this comparative research study included all women referred to Sayyid-al Shohada Hospital in Isfahan. 40 people were selected through a sampling method from the statistical population and they were examined in two stages before and after chemotherapy. They were assessed through the Working memory subscale of Wechsler Intelligence test, Rey visual memory test, Rey Auditory Memory Test and, everyday memory Test. The data was analyzed by Wilcoxon test and SPSS 22 program.

**Results:** The results showed that chemotherapy affects the memory of patients with BC. The greatest effect was on delayed visual memory ( $P < 0.001$ ), hearing impairment ( $P < 0.001$ ), delayed hearing impairment, and subscales of reminder and recognition ( $P < 0.003$ ).

**Conclusions:** According to the results, chemotherapy creates deficiencies in the memory of patients with BC.