

# The Impact of Chemotherapy-Related Cognitive Impairment on Social Roles and Well-Being in Breast Cancer Survivors

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**PURPOSE:** To explore the impact of disruptions in information processing (DIPs) on social roles, well-being, and quality of life (QOL) in breast cancer survivors after chemotherapy.

**PARTICIPANTS & SETTING:** Experiences of DIPs were explored in eight breast cancer survivors aged 53–70 years, 12–60 months post-treatment, referred from a National Cancer Institute–designated cancer center and a nonprofit breast cancer support organization from January 6 to August 31, 2020.

**METHODOLOGIC APPROACH:** This study used a mixed-methods approach. Participants journaled and answered questionnaires sent via mail that asked them about changes in their cognition, QOL, and social roles. Qualitative data were thematically analyzed using constant comparative analysis, and questionnaire scores were compared with qualitative data.

**FINDINGS:** Journals revealed problems with functioning in occupational roles and increased stress, anxiety, and frustration. Women with more DIPs tended to have lower role satisfaction and QOL. Greater role satisfaction was associated with higher QOL and social role participation.

**IMPLICATIONS FOR NURSING:** Mitigating the effects of DIPs on social function may allow women to continue in important roles, which has the potential to affect QOL.

**KEYWORDS** breast cancer; chemotherapy; aging; cognition; social roles

**ONF, 51(2), 153–162.**

**DOI** 10.1188/24.ONF.153-162

Breast cancer is the form of cancer with the highest incidence in women, with more than 80% of new diagnoses occurring in women aged older than 50 years (American Cancer Society, 2022a). Because of the improved effectiveness of current treatment regimens and early detection, there were over four million survivors in the United States in early 2022 (American Cancer Society, 2022b). Because the incidence of breast cancer is highest in women aged older than 50 years, the focus of survivorship care must encompass problems most important to women in this age group, including issues that may lead to early retirement, changes in family responsibilities, and impacts of disease or treatment on social roles.

## Research Problem

### Background

Among the most common complaints of breast cancer survivors are episodes of disruptions in information processing (DIPs), or episodic disruptions in memory, attention, processing speed, language, and executive function. DIPs often persist for years following chemotherapy (Bolton & Isaacs, 2018; Henderson et al., 2019; Lange et al., 2019; Rodríguez Martín et al., 2020). Although many with DIPs describe episodes of forgetfulness and problems finding the right word, the most common hallmark of DIPs is an inability to concentrate, think, and multitask. Like delirium, these cognitive symptoms are described as unpredictable and subtle, but reversible. Because of the transient presentation of these symptoms following chemotherapy treatment, women with complaints of DIPs often have healthy results on neuropsychological tests (Bray et al., 2018), yet find it difficult to engage in activities essential for maintaining roles that contribute to a meaningful life and sense of well-being and quality of life (QOL).