

# The Longitudinal Effect of a Prechemotherapy Educational Video on the Treatment-Related Anxiety of Women With Breast Cancer

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**BACKGROUND:** Patients recently diagnosed with breast cancer have a multitude of emotions. Although each patient goes through emotional phases differently, these feelings often manifest as anxiety or fear.

**OBJECTIVES:** The objective is to decrease patient anxiety using a prechemotherapy educational video for newly diagnosed patients with breast cancer.

**METHODS:** A quantitative comparative design, using repeated measures, was conducted with 27 patients with breast cancer who received chemotherapy treatment. An educational video was developed and provided as a part of the prechemotherapy education. Anxiety was measured using the Patient-Reported Outcomes Measurement Information System instrument before and two weeks after initiation, at the end of treatment, and three months after chemotherapy administration.

**FINDINGS:** Anxiety decreased over time, from before chemotherapy started to three months after the chemotherapy treatment was completed.

## KEYWORDS

PROMIS; anxiety; breast cancer; prechemotherapy education; video education

## DIGITAL OBJECT IDENTIFIER

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**ANXIETY IS COMMONLY EXPERIENCED** by women diagnosed with breast cancer, with one in three patients reporting some level of anxiety (Carreira et al., 2021; Hormozi et al., 2019). Carreira et al. (2021) reported that anxiety among women who were diagnosed with breast cancer (30%) was significantly higher than women without a breast cancer diagnosis (18%). Patient anxiety can be related to fear before treatment of the disease, uncertainty about disease progression, and a lack of knowledge about treatment and its side effects (Apor et al., 2018; Ciambella et al., 2019; Gallegos et al., 2019; Villar et al., 2017).

The most recent chemotherapy and biotherapy administration standards from the American Society of Clinical Oncology and the Oncology Nursing Society advocate for prechemotherapy education, so patients feel involved and knowledgeable about their health care (Neuss et al., 2017). Education occurs from diagnosis to survivorship and includes an interprofessional team. Chemotherapy education is often standardized based on the diagnosis and treatment plan, and may be given via one-on-one interactions, a face-to-face class, or asynchronous distribution. Audiovisual materials may be used to supplement prechemotherapy education, providing benefits including greater efficiency, increased knowledge and information retention, and increased satisfaction (Chatterjee et al., 2021; Gallegos et al., 2019; Reza & Johnson, 2019; Sulakvelidze et al., 2019; Tan et al., 2018).

The purpose of this quantitative descriptive study was to measure the effectiveness of a nurse-led and developed prechemotherapy educational video intervention on the anxiety levels of patients in breast cancer treatment. The principal investigator was a chemotherapy infusion nurse and an oncology certified nurse with the assistance of the facility's nursing research department. The project team was initially multidisciplinary with a planned comparison group, but because of the small number of participants and the departure of a coinvestigator shortly after participant recruitment, the project was developed, implemented, and evaluated independently.