

# Comparison of Health-Related Quality of Life Between Adjuvant Breast Cancer Treatment Groups

Eunjung Kim, PhD, ARNP, M. Robyn Andersen, PhD, MPH, and Leanna J. Standish, PhD, ND, FABNO

**OBJECTIVES:** To compare the health-related quality of life (HRQOL) of women who did (receivers,  $n = 372$ ) and did not (intentional nonreceivers,  $n = 46$ ) receive all recommended adjuvant treatments for breast cancer.

**SAMPLE & SETTING:** Women were recruited through integrative oncology clinics and the Cancer Surveillance System registry in western Washington.

**METHODS & VARIABLES:** A cross-sectional and correlational study using secondary data was conducted. Self-reported data included involvement in treatment decision making (TDM) and HRQOL. Registry data included demographics, disease characteristics, and records on recommended treatments as well as receiving/not receiving them. Descriptive statistics,  $t$  tests, chi-square tests, correlations, and analysis of variance were used to compare receivers and intentional nonreceivers.

**RESULTS:** Among women who were “very involved” in TDM and those who reported their involvement as “just right,” intentional nonreceivers scored higher in role-physical, general health, and vitality than receivers after controlling for demographic and disease characteristics.

**IMPLICATIONS FOR NURSING:** Nurses need to be aware that intentional nonreceivers of adjuvant therapy, particularly if assessed as “very involved” and “just right” involvement in deciding to refuse treatment, may report better HRQOL than receivers, which could be attributed to lack of common side effects from adjuvant treatment.

**KEYWORDS** breast cancer; adjuvant treatment; health-related quality of life; decision making  
*ONF*, 46(1), 59-70.

**DOI** 10.1188/19.ONF.59-70

Studies have shown that some women with breast cancer do not receive all conventional treatments recommended by their doctors. For example, a study by Kim, Andersen, and Standish (2018) found that about 11% of women did not receive at least one adjuvant treatment recommended by their doctors after surgery and were very involved in their treatment decision making (TDM). Studies have also found that involvement in TDM among women with breast cancer is an essential factor for better health-related quality of life (HRQOL), which is related to improved prognosis (Andersen, Bowen, Morea, Stein, & Baker, 2009; Montazeri, 2008). However, no information is available on how HRQOL differs between women who receive all recommended treatments and those who do not, and whether involvement in TDM is related to HRQOL in these two groups. In the current article, “receivers” indicates women who received all physician-recommended conventional breast cancer treatments, including surgery, chemotherapy, radiation therapy, and endocrine-manipulation therapy. “Intentional nonreceivers” refers to those who voluntarily did not receive all or part of the physician recommended adjuvant therapy (i.e., chemotherapy, radiation therapy, and endocrine-manipulation therapy) after surgery. Figure 1 depicts the conceptual framework for this study.

The overall aim of this study was to compare relationships between HRQOL in receivers and intentional nonreceivers in relation to involvement in TDM. An additional aim was to compare HRQOL between receivers and intentional nonreceivers in relation to the participation congruence between preferred and actual involvement in TDM.

## Background

An estimated 330,080 new cases of breast cancer were diagnosed in the United States in 2018, and this number has been increasing each year (American Cancer Society, 2018). Breast cancer is a highly