

# Women's Health Beliefs and Intention to Use Chemoprevention for Breast Cancer

Kristin G. Keller, PhD, MS, RN, Adetunji T. Toriola, MD, PhD, MPH,  
and Joanne Kraenzle Schneider, PhD, RN

**OBJECTIVES:** To investigate the associations between women's health beliefs and their intention to use chemoprevention.

**SAMPLE & SETTING:** Participants were postmenopausal women (N = 400) aged 50–64 years who were recruited for a study on mammographic breast density.

**METHODS & VARIABLES:** Participants completed a screening mammogram and breast cancer health belief questionnaires. The authors regressed intention to use chemoprevention onto health belief scores (breast cancer fatalism, fear, perceived threat, perceived benefits, barriers, and self-efficacy).

**RESULTS:** Nearly half of the participants indicated that they would be interested in using chemoprevention if they were found to be at high risk for developing breast cancer. Women who reported higher perceived benefits of chemoprevention, higher perceptions of their ability to use chemoprevention (self-efficacy), and fewer logistic barriers to seeking health care had significantly higher intention to use chemoprevention.

**IMPLICATIONS FOR NURSING:** Interventions aimed at reducing logistic barriers to health care may increase the uptake of chemoprevention among at-risk women. In addition, women at the time of mammography and women with higher levels of education may be motivated to consider using chemoprevention.

**KEYWORDS** breast cancer; chemoprevention; health beliefs; mammography

**ONF, 50(5), 611–623.**

**DOI** 10.1188/23.ONF.611-623

Breast cancer presents a major health challenge worldwide. It is the most diagnosed cancer in women. Of all new cancer cases, 25% are breast cancer, and an estimated one out of every eight women (12.4%) will be diagnosed with breast cancer during their life span (Howlander et al., 2020). In addition, the incidence of breast cancer has been steadily increasing since 2005 (American Cancer Society, 2023). Although advances in treatment and early detection undoubtedly contribute to the long-term survival of people with breast cancer, the key to decreasing the incidence of breast cancer is primary prevention (Thorat & Balasubramanian, 2020).

Researchers have estimated that 15% of women in the United States are eligible to use chemoprevention because risk factors place them at increased risk for developing breast cancer (DeCensi et al., 2015). Women who have been determined to have a 20%–25% chance of developing breast cancer based on cancer risk assessment tools are considered to be at high risk. A family history of first-degree relatives with breast cancer, known or suspected *BRCA1* or *BRCA2* variants, familial hereditary cancer syndromes (e.g., Li–Fraumeni), and prior radiation to the chest wall increase women's lifetime risk of developing breast cancer (American Cancer Society, 2022; Thorat & Balasubramanian, 2020; Visvanathan et al., 2013).

Treatment options for women who are considered to have an elevated risk of developing breast cancer include lifestyle modification, genetic counseling, magnetic resonance imaging surveillance beginning at age 20–30 years, and risk-reducing surgeries (bilateral risk-reducing mastectomy, bilateral risk-reducing salpingo-oophorectomy) (Thorat & Balasubramanian, 2020). In addition, some women elect to use chemoprevention as a risk-reducing strategy.