

# Age Differences in Treatment Decision Making for Breast Cancer in a Sample of Healthy Women: The Effects of Body Image and Risk Framing

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**Purpose/Objectives:** To examine the effects of age, body image, and risk framing on treatment decision making for breast cancer using a healthy population.

**Design:** An experimental 2 (younger women, older women) X 2 (survival, mortality frame) between-groups design.

**Setting:** Midwestern university.

**Sample:** Two groups of healthy women: 56 women ages 18–24 from undergraduate psychology courses and 60 women ages 35–60 from the university community.

**Methods:** Healthy women imagined that they had been diagnosed with breast cancer and received information regarding lumpectomy versus mastectomy and recurrence rates. Participants indicated whether they would choose lumpectomy or mastectomy and why.

**Main Research Variables:** Age, framing condition, treatment choice, body image, and reasons for treatment decision.

**Findings:** The difference in treatment selection between younger and older women was mediated by concern for appearance. No main effect for risk framing was found; however, older women were somewhat less likely to select lumpectomy when given a mortality frame.

**Conclusions:** Age, mediated by body image, influences treatment selection of lumpectomy versus mastectomy. Framing has no direct effect on treatment decisions, but younger and older women may be affected by risk information differently.

**Implications for Nursing:** Nurses should provide women who recently have been diagnosed with breast cancer with age-appropriate information regarding treatment alternatives to ensure women's active participation in the decision-making process. Women who have different levels of investment in body image also may have different concerns about treatment, and healthcare professionals should be alert to and empathetic of such concerns.

**B**reast cancer is the most frequently diagnosed cancer among women, with 211,240 new cases (32% of all female cancer diagnoses) expected in 2005 (American Cancer Society, 2005). Although the incidence of breast cancer is increasing, mortality rates are not. Improvements in available treatments allow patients with breast cancer to survive disease-free for many years after diagnosis. In early-stage breast cancer, lumpectomy combined with radiation results in equal disease-free survival time when compared to mastectomy (Early Breast Cancer Trialists' Collaborative Group, 1995; Fisher et al., 1995; Jacobson et al., 1995). Furthermore, lumpectomy may have significant psychological benefits, resulting in less anxiety and depression and fewer sexual problems (Andersen & Jochimsen, 1985; Beckmann,

## Key Points . . .

- ▶ Younger women may be more likely to choose lumpectomy treatment than older women with early-stage breast cancer.
- ▶ Communication of risk information may influence the treatment choices women make by emphasizing the negative or positive aspects of each treatment.
- ▶ Learning more about patient variables and risk communication that affect treatment choices may assist nurses to help women make the most beneficial choices for them.

Johansen, Richardt, & Blichert-Toft, 1983; Kemeny, Wellisch, & Schain, 1988; Margolis, Goodman, & Rubin, 1990; McArdle, Hughson, & McArdle, 1990).

Studies also have revealed that lumpectomy and mastectomy procedures have different effects on body image. Mastectomy patients have significantly worse body image than lumpectomy patients, including less satisfaction with breast appearance, texture, and general appearance and feelings of reduced attractiveness after treatment (Kemeny et al., 1988; Lasry et al., 1987; Mock, 1993; Schain, d'Angelo, Dunn, Lichter, & Pierce, 1994). Studies also have found that patients who underwent mastectomy, with or without reconstruction, reported significantly more negative changes in body image than patients who underwent lumpectomy (Beckmann et al., 1983; Ganz, Rowland, Desmond, Meyerowitz, & Wyatt, 1998). Therefore, because of its functional, cosmetic, and psychological advantages, breast-conserving treatment currently is considered the treatment of choice in early-stage breast cancer.

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