



## Breast Cancer Screening

Breast cancer is a significant public health problem. Although all women are at risk for developing breast cancer, the risk is greater in women as they grow older, especially after the age of 40, and in women with a hereditary predisposition for developing breast cancer. Breast cancer treatment is usually less aggressive and better tolerated when the disease is detected early. Currently, the three primary tools used for the early detection of breast cancer are breast self-examination (BSE), clinical breast examination (CBE) by a healthcare provider, and mammography (National Comprehensive Cancer Network [NCCN], 2005).

Systematic monthly BSE has been recommended since 1933; however, more than 30 nonrandomized trials have produced conflicting results about the efficacy, sensitivity, and specificity of the practice (Austoker, 2003; Havey, Miller, Baines, & Corey, 1997). The effectiveness of BSE is largely dependent on the skill of the woman practicing BSE, and the consensus is that BSE should be used in combination with other breast cancer screening modalities (NCCN, 2005).

Sensitivity for CBE has been reported to range from 40%–69%, and its specificity ranges from 88%–99% (Humphrey, Helfand, Chan, & Woolf, 2002). Trials in which CBE is combined with mammography have demonstrated a mortality reduction of 14%–29% (Humphrey et al.). Like BSE, the sensitivity and usefulness of CBE is related, in part, to the skill of the healthcare provider performing the examination. When CBE is performed prior to mammography, it may be useful in identifying an area of suspicion that might not be readily visible on mammography or provide guidance in selecting additional imaging techniques (Smith, 2003).

The primary evidence for supporting mammography comes from seven large randomized clinical trials that show a statistically significant mortality reduction from breast cancer in women aged 40–69 years who underwent regular mammography screening (Smith et al., 2003). Overall, the trials suggested a 24% mortality reduction associated with mammography use. The sensitivity for annual mammography ranges from 71%–96%, with lower sensitivity seen in younger women who tend to have dense breasts, and specificity ranges from 94%–97% (Humphrey et al., 2002).

### It Is the Position of ONS That

- Oncology nurses should review the scientific basis for each breast screening modality and interpret the data for women. Educational materials need to be culturally competent and appropriate for the literacy and educational level of each woman.
- Risk assessment is a component of regular health care and integral to the cancer screening process. Although general guidelines exist for offering cancer screening tests, they often must be modified based on the presence of significant risk factors. Recommendations for breast cancer screening should be made only after a woman's risk is assessed and interpreted.
- The benefits, risks, and potential limitations of BSE, CBE, and mammography need to be discussed with each woman and tailored to her risk factor assessment.
- Women at higher-than-average risk for breast cancer should be referred to a healthcare provider with expertise in breast cancer risk assessment and cancer genetics for guidance about the appropriate age and frequency for screening.
- Women should have access to comprehensive breast cancer screening.
- Every woman, after having a comprehensive breast cancer risk assessment, has the right to make an informed decision about breast cancer screening.
- Women should be instructed on the strengths and limitations of BSE and be allowed to make a choice about their BSE practice. All women should be offered the opportunity to learn proper BSE technique beginning at age 20. Nurses should use instruction regarding BSE to heighten awareness about the early detection of breast cancer because it provides an opportunity to further educate women about comprehensive early cancer detection and prevention strategies.
- CBE should be performed by a healthcare provider with training and expertise on an annual basis to all women beginning at age 20.
- Women should begin regular, annual mammography starting at age 40. Mammography equipment should be dedicated to breast examinations and meet federal, state, and professional standards for quality and safety. Films should be interpreted by radiologists with expertise in reading mammograms.

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- Oncology nurses need to support legislation that improves access to breast cancer screening.
- Oncology nurses should obtain ongoing continuing education to enhance knowledge and skills, implement risk assessment strategies, and identify factors that promote breast cancer screening.
- Oncology nurses need to conduct and support further and ongoing research on the prevention and early detection of breast cancer.

## References

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