

# Barriers to Surveillance Mammography Adherence in Korean Breast Cancer Survivors

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**OBJECTIVES:** To identify barriers to surveillance mammography adherence in Korean breast cancer survivors (BCSs), which is crucial for early detection of recurrence and new cancers.

**SAMPLE & SETTING:** 195 BCSs were recruited from a breast cancer clinic and its support groups at a South Korean hospital.

**METHODS & VARIABLES:** This descriptive study used a cross-sectional design. Participants completed a self-administered multi-instrument survey based on a comprehensive framework for adherence, including individual characteristics, symptoms, quality of life, cognitive appraisal, social support, and healthcare system factors.

**RESULTS:** Having had a mammogram within the past year was considered adherent ( $n = 177$ ), and no mammography within the past year was considered nonadherent ( $n = 18$ ). Logistic regression revealed that longer time since diagnosis ( $p < 0.001$ ), greater depression ( $p = 0.024$ ), and higher health services utilization ( $p < 0.001$ ) were predictors of lower mammography adherence ( $\chi^2 = 76.618$ ,  $p < 0.001$ ,  $R^2 = 58\%$ ).

**IMPLICATIONS FOR NURSING:** This is the first study to identify depression as a barrier to surveillance mammography in BCSs, suggesting that depression screening and treatment may be important for increasing adherence.

**KEYWORDS** adherence; breast neoplasms; cancer care; mammography; survivors; survivorship

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In breast cancer survivors (BCSs), annual surveillance mammography has been shown to promote early detection of cancer recurrence and new cancers, increasing long-term survival (Kalager et al., 2009; Kaplan et al., 2015; Lowry et al., 2022). Annual surveillance mammography is recommended by the National Comprehensive Cancer Network (NCCN, 2024), American Cancer Society, and American Society of Clinical Oncology (Runowicz et al., 2016). However, adherence to these recommendations tends to drop off over time. In the United States, annual mammography surveillance rates decline about 1.5% per year (Lowry et al., 2022). In the first year after treatment completion, 79% of BCSs received mammograms, but by years 7–10, only 63%–66% did so (Wirtz et al., 2014).

In South Korea, breast cancer incidence has been rising since 2002, and breast cancer became the most common cancer in women in 2019 (Choi et al., 2023). The median age at diagnosis is 52.8 years, which is about 10 years younger than in the United States (Choi et al., 2023; Giaquinto et al., 2022). Although the number of survivors is increasing, no studies have focused on the factors influencing mammography adherence among BCSs in South Korea. Two Korean studies have reported factors influencing screening rates in survivors, but they used pooled data for several types of cancer without separately breaking out the data for BCSs (Kim et al., 2019; Yang et al., 2015). The factors associated with lower rates of cancer screening in these pooled groups of survivors included being male, a younger adult, unmarried, and a nondrinker of alcohol, as well as having a lower education and income. Both studies were limited to examination of the standard sociodemographic data contained in the national databases used.