

# Factors Affecting Mammography Behavior and Intention Among Korean Women

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**Purpose/Objectives:** To understand factors that influence the mammography experience and intention to receive mammography among Korean women using the Health Belief Model and subjective norm of the Theory of Reasoned Action.

**Design:** Cross-sectional.

**Setting:** Two university hospitals and one general hospital in Korea.

**Sample:** A convenience sample of 310 women aged 30 years and older who visited participating hospitals during the data collection period.

**Methods:** Self-administered questionnaire.

**Main Research Variables:** Perceived susceptibility and severity, perceived benefits and barriers, self-efficacy, normative beliefs, and motivation to comply.

**Findings:** Age, self-efficacy, and perceived susceptibility were significantly associated with participants' mammography experience, whereas knowledge, self-efficacy, perceived susceptibility, perceived barriers, subjective norm, and income were significant in predicting women's intention to receive mammography.

**Conclusions:** The combined model synthesizing the Health Belief Model and the Theory of Reasoned Action was more effective in predicting mammography intention than in explaining mammography experience.

**Implications for Nursing:** Tailored health education and health promotion programs to promote mammography screening among Korean women should be developed based on women's perceptions and norms.

Cancer is the leading cause of death among Koreans, constituting 25.6% of all deaths in the country (Korea National Statistical Office, 2003). Breast cancer is the most common cancer among Korean women and accounts for 7.1% of all cancer diagnoses. Breast cancer is responsible for 16% of all cases of cancer among women, and the percentage continually is increasing (Korea Ministry of Health and Welfare, 2002). The breast cancer mortality rate has increased by 280% since 1983.

Although some of the risk factors that increase women's chances of developing breast cancer are known, most causes of breast cancer still are unknown. Because the process of how some known risk factors cause cells to become cancerous has not been established, no specific method exists to prevent the disease (American Cancer Society [ACS], 2005); therefore, early detection of breast cancer is important because the death rate as a result of the disease could be reduced if more women engaged in early detection activities, such as a breast self-examination (BSE), clinical breast examination, and mammography.

## Key Points . . .

- ▶ Perceptions and motivations are dynamic and changeable; therefore, those measured at one point in time are more congruent with future intention than past experience.
- ▶ Women's perceptions and norms may change during or after mammography screening; therefore, healthcare professionals should try to make use of mammography screening events as an opportunity to positively impact women's perceptions and norms.
- ▶ Women's mammography experiences tend to be associated with personal factors (i.e., age, self-efficacy, perceived susceptibility). In addition to personal factors, women's intentions to receive mammography were influenced significantly by social and environmental factors (i.e., subjective norm, income, perceived barriers).

ACS (2005) recommends yearly mammograms for every woman beginning at age 40 and continuing for as long as she is in good health to improve the chances that breast cancer is diagnosed at an early stage and treated successfully. Likewise, clinical breast examination should be part of periodic health examination to be conducted about every three years for women in their 20s and 30s and every year for women aged 40 years and older. In addition, BSE is an option for women that should be initiated in their 20s.

In Korea, breast cancer is most prevalent in women in their 40s; the highest incidence rate is 76.84 cases per 100,000 women aged 45–49 years (Korea Ministry of Health and Welfare, 2005). However, breast cancer is most prevalent in women in their 50s in the United States (ACS, 2005), indicating that the susceptible age is a decade younger for Korean women than American women. Therefore, recommendations for breast cancer screening for Korean women provided by Korean epidemiologists, radiologists, and clinicians differ from those suggested by ACS. In Korea, guidelines suggest that women aged 20 years and older perform monthly BSE, women aged 30–34 years receive baseline mammography,

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