

# A Path Analysis: A Model of Depression in Korean Women With Breast Cancer—Mediating Effects of Self-Esteem and Hope

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**T**he survival rate of breast cancer in South Korea is 90% at five years postdiagnosis (National Cancer Information Center, 2010). However, since 2005, the prevalence of breast cancer increased 11%, and the death rate increased 54% from 1996 (Ha et al., 2008; Korean Institute for Health and Social Affairs, 2010). In South Korea, breast cancer is diagnosed most often in women who are 40–49 years old, which is younger than the average age of diagnosis in Western countries. Korean women suffer many emotional problems, particularly the fear of cancer recurrence as they age (Ha et al., 2008; Korean Breast Cancer Society, 2008). During the time following treatment, many Korean women with breast cancer experience physical as well as psychological distress symptoms (e.g., depression, hopelessness), which are related to uncertainty of prognosis, guilt, damage to self-identity, and fear of recurrence (Lee et al., 2007).

The Korean male-centered system may foster unfairness in terms of support, home and work responsibilities, financial equity, health, and women's daily lives (Park & Lee, 2009; Shin, 2001; Sung, 2002). The rate of depression in Korean women is twice that of Korean men (Lee, 2005). Cho and Lee (2003) found that the rate of depression in a group of healthy middle-aged women was three times that of men in same age group. Korean women also have higher rates of depression than Western women (Nam & Choi, 2000). Therefore, when examining models of depression in Korean women with breast cancer, models developed for Western women may not be applicable. Establishing the relationships of direct and indirect factors that contribute to depression in Korean women with breast cancer is important for the development of effective nursing management of depression. In this article, the authors will suggest and test a model of depression of Korean women following treatment for breast cancer.

**Purpose/Objectives:** To test a hypothetical model of depression in Korean women with breast cancer and to test the mediating effects of self-esteem and hope.

**Design:** Cross-sectional design.

**Setting:** Participants were recruited from three general hospitals and one cancer hospital in Busan, South Korea.

**Sample:** 214 Korean women diagnosed with breast cancer (stages I–III).

**Methods:** All participants completed questionnaires (e.g., Zung Self-Rating Depression scale, Herth Hope Scale, Rosenberg Self-Esteem Scale, Health Self-Rating Scale in Health and Activity survey, Kang's Family Support Scale). Based on the literature, Mplus, version 3.0, was used to determine the best depression model with path analysis.

**Main Research Variables:** Depression, self-esteem, hope, perceived health status, religious beliefs, family support, economic status, and fatigue.

**Findings:** Self-esteem was directly affected by perceived health status, religious beliefs, family support, economic status, and fatigue. Hope was directly affected by family support, self-esteem, and how patients perceived their health status. Depression was directly affected by self-esteem and hope. The path analysis model explained 31% of the variance in depression in Korean women with breast cancer.

**Conclusions:** A model of depression in Korean women with breast cancer was developed, and self-esteem and hope were mediating factors of depression.

**Implications for Nursing:** Self-esteem and hope must be considered when developing services to reduce depression in Korean women with breast cancer.

## Background

### Depression in Korean Women With Breast Cancer

The development of depression in women is influenced by various physical, emotional (e.g., low self-esteem), and sociocultural factors. Fifty percent of American