

# Social Support and Psychological and Physical States Among Japanese Women With Breast Cancer Before and After Breast Surgery

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**Purpose/Objectives:** To investigate the relationship of social support and psychological and physical states among Japanese women with breast cancer and to compare the variables before and one year after breast surgery.

**Design:** A prospective longitudinal study.

**Setting:** A general hospital in northern Japan.

**Sample:** 61 Japanese women with breast cancer.

**Methods:** Measures were the Japanese versions of the Interpersonal Relationship Inventory, the General Health Questionnaire, and the Physical States Interview Form. Data were collected at four time points: before (time 1), three months after (time 2), six months after (time 3), and one year after (time 4) breast surgery.

**Main Research Variables:** Social support (support, reciprocity, and conflict), social support network, and psychological and physical states.

**Findings:** Psychological and physical states correlated significantly at all four time points. Significant correlations also were found between psychological states and support at times 2 and 4 and between psychological states and reciprocity at time 4. Repeated measures analysis of variance showed significant differences in support, reciprocity, conflict, and physical states but no significant differences in social support network or psychological states.

**Conclusions:** The results of the study suggest that healthcare professionals need to consider social support as an important factor when helping Japanese women adjust to the diagnosis and treatment of breast cancer.

**Implications for Nursing:** Healthcare professionals need to provide appropriate social support for Japanese women with breast cancer not only at the time of diagnosis of breast cancer but also after breast surgery.

Beck, & Patten, 2002; Wilmoth, Tulman, Coleman, Stewart, & Samarel, 2006), as well as a decrease in psychological distress. Other studies have identified positive influences of social support on the psychological and physical states among older adult women with breast cancer (Avis, Crawford, & Manuel, 2004; Maly et al., 2005). However, those studies focused on the positive effects of social support on stress and health outcomes and, as Dakof and Taylor (1990) pointed out, studies of social support should include its positive and negative aspects.

Cancer has been the leading cause of death in Japan since 1981, and death as a result of breast cancer is increasing, from 7 per 100,000 in 1981 to 15.2 per 100,000 in 2003 (Health and Welfare Statistics Association, 2005). Breast cancer is estimated to become the most common cancer diagnosis among Japanese women by 2020 (Ohshima, Kuroishi, & Tajima, 2004). Despite the increasing incidence among Japanese women, few studies to date have investigated the relationship between social support and the effects on health outcomes among these women (Makabe & Nomizu, 2006; Miyashita, 2005). Social support requires interpersonal relationships, which are influenced by beliefs, values, and behavior (Bourjolly & Hirschman, 2001; Hamilton & Sandelowski, 2004), and studies of social support indicate that the experience of breast cancer differs among cultures (Ashing-Giwa et al., 2004; Davis, Williams, Parle, Redman, & Turner, 2004; Kagawa-Singer & Wellisch, 2003; Makabe & Hull, 2000). One of the studies (Makabe & Hull) was a qualitative study of social support among Japanese women with breast cancer and identified reciprocity as one of the unique components of social support in the population. Reciprocity is related to *giri*, a Japanese term referring to social obligation and to valuing the maintenance of harmonious relationships. Because of this unique cultural characteristic, the results of social support studies conducted in other cultures should be considered with caution for Japanese populations. Thus, a study of social support and health outcomes among Japanese women with breast cancer that considers the cultural issues of social support is needed to help provide a basis for assessment and

Social support is known not only to directly affect stress and health outcomes but also to buffer the effects of stress on health outcomes. Studies of social support in Western cultures have shown positive effects on health outcomes among women with breast cancer (Bloom, Stewart, Johnston, Banks, & Fobair, 2001; Han et al., 2005; Maly, Leake, & Silliman, 2004; Maly, Umezawa, Leake, & Silliman, 2005; Tan & Karabulutlu, 2005), and a longitudinal study of social support among patients with breast cancer found significant negative relationships between social support and psychological distress (Northouse, 1989). In addition, studies of social support for patients with breast cancer have reported significant positive influences of support intervention programs (e.g., telephone support, support groups) on patients' psychological states (Coleman et al., 2005; Northouse, Kershaw, Mood, & Schafenacker, 2005; Simpson, Carlson,

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