

# Design and Testing of the Use of a Complementary and Alternative Therapies Survey in Women With Breast Cancer

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**Purpose/Objectives:** To design and test a reliable and valid instrument to determine the frequency of use of complementary and alternative medicine (CAM) therapies among women diagnosed with breast cancer.

**Design:** A descriptive cross-sectional survey.

**Setting:** Women were recruited from the southeastern area and a rural midwestern area of the United States.

**Sample:** 105 predominantly Caucasian women ( $\bar{X}$  = 59 years of age) with a diagnosis of breast cancer.

**Methods:** The Use of Complementary and Alternative Therapies Survey was designed with a content validity index, and reliability was determined with the coefficient alpha. Exploratory factor analysis using a principal components analysis identified primary components (factors) embedded within the survey. Frequency of CAM therapy use was calculated for 33 individual therapies listed on the survey and among three survey-defined subscales of CAM therapies (i.e., diet and nutritional supplements, stress-reducing techniques, and traditional and ethnic medicines).

**Main Research Variables:** Psychometric properties of an instrument to assess frequency of use of CAM among women with breast cancer.

**Findings:** The reported prevalence of use of the individual CAM therapies varied considerably. The coefficient alpha estimate for the total survey was 0.86. Estimates for the individual hypothesized subscales were 0.67 for diet and nutritional supplements, 0.79 for stress-reducing techniques, and 0.80 for traditional and ethnic medicines. The principal components analysis resulted in a two-factor solution with nine items that loaded heavily and uniquely on a factor conceptualized as stress and anxiety reduction and six items that loaded heavily and uniquely on a factor conceptualized as dietary and physical manipulation. The remaining five items (vitamins and minerals, prayer and spiritual healing, massage, reflexology, and aromatherapy) indicated moderate loadings on factors one and two and, thus, were interpreted as equivocal items.

**Conclusions:** Preliminary data indicated that the instrument is reliable and valid. Additional work is needed to improve the range of items and to test the instrument with other populations.

**Implications for Nursing:** Use of CAM by women with breast cancer is believed to be increasing. However, limited data exist on the frequency and predictors of its use in this patient population; therefore, reliable and valid instruments are needed to determine use. If nurses can determine which CAM therapies women are employing, nurses can educate patients with breast cancer on the safe use of these therapies.

## Key Points . . .

- ▶ Complementary and alternative medicine (CAM) use is increasing among women with breast cancer.
- ▶ Few reliable CAM assessment instruments are available for research purposes.
- ▶ After determining which CAM therapies women with breast cancer are using, nurses can provide educational interventions to assist women in achieving optimal outcomes of care.

Many individuals with cancer are seeking complementary and alternative medicine (CAM), and use by women with breast cancer is believed to be increasing. CAM is defined as the methods used in the diagnosis, treatment, and prevention of disease that complement mainstream medicine, as opposed to alternative therapies that are used as a direct substitute for mainstream medicine (Ernst, 1995; Ernst & Cassileth, 1998). Unfortunately, research regarding the patterns and prevalence of CAM use and published, reliable, valid instruments that assess the use of CAM therapies are limited.

Breast cancer increasingly is viewed as a chronic disease rather than an acute illness with predictable mortality. Fears

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