



## Perceived symptoms and the supportive care needs of breast cancer survivors six months to five years post-treatment period



K.K.F. Cheng<sup>a,\*</sup>, Rajasegeran Darshini Devi<sup>a</sup>, W.H. Wong<sup>b</sup>, C. Koh<sup>b</sup>

<sup>a</sup> Alice Centre for Nursing Studies, Yong Loo Lin School of Medicine, National University of Singapore, National University Hospital System, Singapore

<sup>b</sup> National University Hospital, Singapore

### A B S T R A C T

#### Keywords:

Symptoms  
Unmet needs  
Supportive care needs  
Breast cancer survivors

**Purpose:** This study characterized the range and levels of perceived symptoms and unmet needs reported by breast cancer survivors in the half-year to five year post-treatment period, and determined whether the symptoms can be a predictor of unmet needs.

**Methods:** In a cross-sectional study, 150 breast cancer survivors (mean age:  $55.1 \pm 8$  years) at the half-year to five year post-treatment period were enrolled for analysis. The measuring scales used included the Memorial Symptom Assessment Scale (MSAS), and the Supportive Care Needs Survey Short Form (SCNS-SF34).

**Results:** 88% of the survivors reported having at least one symptom, while 51% reported at least one unmet need. Lack of energy was the most prevalent symptom (47%), followed by numbness/tingling in hands/feet (41%). Most of the survivors had unmet needs in the Health care system/Information domain (37% reported at least one unmet need for help), followed by Psychological needs (29%). The mean scores for the SCNS-SF34 domains, except for sexuality, were significantly higher in the high-symptom group (mean 17.6–32.2) compared with the low-symptom group (mean 3.5–22.3) ( $p < 0.01$ ). Regression of the SCNS-SF34 domain scores against the MSAS scores revealed an increase in the explained variance of from 14% to 54%.

**Conclusion:** Our results suggest that breast cancer survivors continue to experience a multitude of symptoms, and the burden of symptoms may be associated with unmet needs across a range of domains.

© 2013 Elsevier Ltd. All rights reserved.

### Introduction

Early detection, dose intensification and combinations of chemotherapy, advancement of irradiation techniques and hormonal therapy, as well as the latest advances in target therapies with monoclonal antibodies have significantly improved the survival rate of women with breast cancer worldwide. The five-year disease-free survival rate estimates have now risen to 80% in Singapore and 90% in the United States (Altekruse et al., 2010; Lim et al., 2009). Nevertheless, the completion of primary breast cancer treatment is considered to be the critical juncture at which women make the transition from the diagnostic and active treatment phase into the phase of rehabilitation and survivorship. Addressing the short and long-term impact of cancer and its treatment on the health outcomes to improve the quality of survivorship has become

a top priority. There is growing evidence that cancer survivors continue to experience a multitude of residual and/or late emerging physical, psychological, musculo-skeletal, cognitive and sexual symptoms long after the completion of the treatment (Bower, 2008; Carpenter et al., 1998, 2004; Cheng et al., 2005; Shi et al., 2011). This is acknowledged to be one of the most important aspects that impedes the process of transition (Khan et al., 2012) and can give rise to multiple unmet needs for breast cancer survivors (Rosedale and Fu, 2010; Sanson-Fisher et al., 2000). Restriction of motion in the upper extremities and arm pain, peripheral neuropathy, lymphedema, fatigue and problems with sleeping are well-documented special concerns reported by breast cancer survivors (Binkley et al., 2012). A previous study indicates that more than 80% of women in the five to eight years following primary cancer treatment reported at least one persistent symptom (Mast, 1995). These ongoing symptoms can compromise the survivors' daily activities and capacity to work, thus affecting family and psychosocial functioning (Cappiello et al., 2007; Cleeland 2007; Janz et al., 2007). The literature also indicates that many breast cancer survivors continue to experience psychological morbidity

\* Corresponding author.

E-mail addresses: [karis\\_cheng@nuhs.edu.sg](mailto:karis_cheng@nuhs.edu.sg), [kariskwong81@yahoo.com](mailto:kariskwong81@yahoo.com) (K.K.F. Cheng).

including feelings of uncertainty about the future and fear of the cancer recurring, triggered by the unanticipated residual and/or late emerging symptoms and the side effects of the treatment, which can complicate post-cancer treatment rehabilitation (Breaden, 1997; Cleeland, 2007; Kim et al., 2012).

Cancer survivors experience high levels of unmet needs, but the type and extent of the needs varies for different types of cancer (Harrison et al., 2011). Breast cancer survivors often report an unmet need for information and for interventions to minimize the side effects of the cancer treatment. They had hoped to receive continuing support from the healthcare professionals in dealing with their symptoms and health problems and quality of life issues, as well as information and emotional support to help them to cope with the transition. However, there is discordance between the needs perceived by breast cancer survivors and the support being provided by the healthcare professionals (Sansom-Fisher et al., 2000; Thewes et al., 2004). Mallinger et al. (2005) studied the level of satisfaction in this respect of 182 women who had completed treatment for breast cancer at least 3 months previously. They found that the survivors were less than satisfied with the information provided concerning the long-term physical, psychological and social sequelae of the disease and its treatments.

The symptom experience and supportive care needs of breast cancer survivors is heterogeneous across the survivorship journey (Sansom-Fisher et al., 2000; Gopal et al., 2005). The experience of persistent symptoms and morbidities associated with the cancer and its treatment, as well as the unmet needs, could significantly hamper the survivors' successful transition past the milestone from early survivorship to long-term survivorship. In point of fact, the knowledge-base on the relationship between the symptom burden and the supportive care needs, in particular for Asian women in the 6 month to 5 year post-cancer treatment period, is still limited at present. A thorough mapping of the symptoms and supportive care needs of breast cancer survivors is essential in order to acquire a deeper knowledge of their symptom burden and the problems for which they need help and support. This would also contribute to the creation and application of optimal survivorship programs. This study therefore aims to characterize the range and level of perceived symptoms and unmet needs reported by women who had completed primary breast cancer treatment 6 months to 5 years previously. It also evaluates whether the symptoms can be a predictor of unmet supportive care needs in the first 5 years of the survivorship period after adjustment for demographic and medical factors.

## Methods

This is a cross-sectional study that surveyed a cohort of breast cancer survivors who were aged 21 or above, had completed primary cancer treatment 6 months to 5 years previously, and had not experienced relapse at a regional university affiliated hospital in Singapore. The study was approved by the local Institutional Review Board and was conducted in accordance with the Helsinki Declaration. For this study, we screened all breast cancer patients following the diagnosis and completed primary cancer treatment between 2007 and 2011 for the eligibility via the hospital online record system. The potential subjects were approached and invited by telephone call to participate in the study. For those who had expressed interest in participation, they were face-to-face recruited for the study coinciding with their follow-up appointment. All of the subjects provided written informed consent before enrolling in the study. Demographic including age, marital status and menopausal status were collected from interviews. Clinical data comprising of stage of cancer, cancer treatment modality and time

since completion of the primary cancer treatment were collected from subjects' medical records.

The enrolled subjects were given a set of questionnaires which included the Memorial Symptom Assessment Scale (MSAS) and the Supportive Care Needs Survey (SCNS-34). All the subjects completed the study questionnaires in the hospital.

## Instruments

The symptoms were assessed using the English and Chinese versions of the MSAS (Cheng et al., 2009; Portenoy et al., 1994). The MSAS is a 32-item, multi-dimensional self-report instrument to assess the symptom prevalence, frequency and severity over the past week using a 4-point scale (1–4; with 1 indicating "rarely/slight" and 4 indicating "almost constantly/very severe"). Symptom distress was rated using a 5-point scale (0–4; with 0 indicating "not at all" and 4 indicating "very much"). The physical symptoms (PHYS), psychological symptoms (PSYCH), and global distress index (GDI) sub-scales and total MSAS score (TMSAS) were computed as previously described. A higher score indicates a severe or distressing symptom. Previous validation studies have shown that the Cronbach's alpha of the English version was 0.82–0.88, and the test-retest reliability was 0.7 (Portenoy et al., 1994). The Cronbach's alpha of the Chinese version ranged from 0.79 to 0.87, and the test-retest Intraclass correlation was 0.68–0.79 (Cheng et al., 2009).

Unmet supportive care needs were measured using the English and Chinese versions of the Supportive Care Needs Survey Short Form (SCNS-SF34) (Boyes et al., 2009; Au et al., 2011). The SCNS-SF34 is a 34-item instrument that measures the patient's perceived level of need for help using 34 items divided into five domains: (1) Physical/Daily living needs; (2) Psychological needs; (3) Patient care/Support needs; (4) Health care system/Information needs; and (5) Sexuality. Ratings were obtained for the perceived need for help using a five-point Likert scale to identify "no need", "need met", "low need", "moderate need", or "high need" over the past month. Each domain was standardized on a scale from 0 to 100, with a higher score indicating higher levels of unmet needs. Previous validation studies have shown that the Cronbach's alpha of the English version was 0.88–0.96 (Boyes et al., 2009). The Cronbach's alpha of the Chinese version ranged from 0.75 to 0.92 (Au et al., 2011).

## Statistical analysis

The SPSS software version 20.0 for Windows was used to conduct all data analyses. Pearson's correlation test was performed for the correlations between the MSAS sub-scale/total and SCNS-SF34 domain scores. A hierarchical cluster analysis was used to categorize the subjects into groups with distinct levels of symptoms based on the MSAS symptom scores (low-symptom group vs high-symptom group). Differences in the SCNS-SF34 sub-scale/total scores between the symptom groups were compared using the student *t*-tests. The influence of the most prevalent symptom scores and the MSAS sub-scale/total scores on the subjects' perceived unmet needs was determined by a two-stage hierarchical multiple regression. At the first step, for each participant, the age, marital status, stage of the cancer, cancer treatment modality, target therapy, hormonal therapy and the time since completion of the primary cancer treatment were entered into the regression model as covariates. The MSAS symptom scores were entered into the hierarchical analysis as the second step in order to analyze whether the most prevalent symptom scores and the MSAS sub-scale/total scores influenced the SCNS-SF34 domain scores over and above the influences of the covariates. All tests of significance

Download English Version:

<https://daneshyari.com/en/article/5868737>

Download Persian Version:

<https://daneshyari.com/article/5868737>

[Daneshyari.com](https://daneshyari.com)