

Effectiveness of Physical, Psychological, Social, and Spiritual Intervention in Breast Cancer Survivors: An Integrative Review

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ABSTRACT

Factors affecting the health outcomes of cancer patients have gained extensive research attention considering the increasing number and prolonged longevity of cancer survivors. Breast cancer survivors experience physical, psychological, social, and spiritual challenges. This systematic literature review aims to present and discuss an overview of main issues concerning breast cancer survivors after treatment. Treatment-related symptoms as well as psychosocial and spiritual aspects of breast cancer survivors are evaluated. Moreover, the benefits of intervention for emotional, physical, social, and spiritual

needs of the patient during the survivorship are investigated. This review also proposes avenues for future studies in this field and develops a new, integrated, and complete interpretation of findings on the holistic well-being of women with breast cancer. Thus, this study provides clinicians with a more comprehensive source of information compared with individual studies on symptom experiences.

Key words: Breast cancer, psychological, social support, spiritual, symptom, well-being

Introduction

Breast cancer is a worldwide health issue that primarily affects women in developed and underdeveloped countries; this malignancy is the most frequently diagnosed cancer

among women.^[1] Early detection and enhanced treatments for breast cancer have significantly increased the 5-year survival rates of the patients. Over 88% of women

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with different stages of breast cancer survive.^[2] Cancer survivorship remains a challenge because patients do not return to a precancer diagnosis state after completion of active treatment. Diagnosis and treatment of breast cancer are stressful events and may result in various physical, psychological, behavioral, social, and spiritual concerns, which are often experienced after treatment.^[3] Breast cancer survivors need not only medical therapy but also psychological, spiritual, and social support.^[4] Supportive care programs or patients to understand and cope with their symptoms may result in reduced frequency, duration, and intensity of their physical disease and treatment-related symptoms.^[5] A previous study verified the effectiveness of psychospiritual integrative therapy and psychosocial support programs.^[6]

This paper reports the evaluation of most frequently reported, challenging, and disruptive issues associated with breast cancer survivors. These concerns are categorized into physical, psychological, social, and spiritual aspects and are frequently reported during the lives of breast cancer survivors posttreatment.

Methods

Search strategies

Preliminary research indicated that numerous journals contain published articles addressing the effectiveness of physical, psychological, social, and spiritual interventions in breast cancer survivors. Multiple databases, including journals beyond the standard biomedical literature, were investigated to ensure a robust search. Balance between sensitivity and precision was maintained through trial and error by using topic-related search terms within the following databases: Medline, CINAHL, Embase, Web of Science, the Cochrane Library, and Google Scholar, which was used as adjunct to the databases to retrieve references unavailable in conventional biomedical publications.

Inclusion criteria were as follows: Studies published in a peer-reviewed journal; written in English; used a sample of breast cancer patients; focused on outcomes of the effectiveness of physical, psychological, social, and spiritual interventions; and original research. Exclusion criteria were as follows: Nonpeer reviewed journal articles, books, book abstracts, or dissertations; studies reporting on views of nurses, care givers, doctors, members of the general public, and complementary and alternative medicine practitioners; and theoretical articles. Studies were identified by encoding the search strings into each nominated database. Titles and abstracts were first reviewed to identify eligible articles by

one researcher, and the full text was then examined. The reference lists of the selected studies and review articles were scanned, and publications of the listed authors were reviewed to identify papers that were missed in the database search. All authors reviewed the remaining titles, and a final decision on the eligibility of studies was performed. Thirty-seven studies satisfied the eligibility criteria and the scope of the review.

Results and Discussion

Disease and treatment-related concerns

Treatment-related physical issues

Breast cancer survivors are a unique group of patients that face challenges, such as weight gain and changes in body composition related to adjuvant therapy,^[7] side-effects of ongoing hormone therapy (e.g., joint pain or menopausal symptoms), early menopause,^[8] persistent cancer-related fatigue, reduced arm/shoulder mobility,^[9] and psychological challenges associated with alterations in body image. Endocrine symptoms may substantially influence the QoL of the patients when they receive adjuvant endocrine treatment for breast cancer.^[10] Høybye^[11] reported that breast cancer patients ($n = 1051$) suffered from cancer- or cancer treatment-related effects. Many of these patients experienced fatigue (66%), lack of concentration (46%), and joint or muscle pains (49%). Digestive (18%) and urinary functions (11%) were also affected, although less troublesome. The continuing physical challenges after breast cancer treatment may persistently remind the patient of the disease.^[12] Sleep disturbances, fatigue, and pain are commonly reported physical symptoms.^[13] Fatigue is a common universal symptom reported by all cancer patients, not just those with breast cancer. This condition may make it challenging for breast cancer patients to attend to various daily responsibilities necessary during treatment as well as long-term survivorship phases. Carlson and Garland^[13] stated that "Fatigue is a common complaint of cancer patients, and it has also been rated the longest lasting and most disruptive symptom that results from treatment" (p. 279). A systematic review indicated that the prevalence rates of pain in breast cancer patients are 59% during treatment and 33% posttreatment as well as 64% in patients with metastatic disease.^[14] Gore and Russell^[15] stated that "Pain is the most common and feared symptom for cancer patients. Up to 50% of people present with pain at the time of diagnosis, and this increases to 75% of patients with more advanced disease"(p. 23). Sleep disturbance is another common symptom reported by breast cancer patients after treatment and often continues into long-term survivorship.^[16] Sleep disturbances may cause patients to feel irritable, emotionally unstable, and fatigued.^[13] This condition

can be due to various factors, such as anxiety, depression, and pain.^[17] Moreover, 50% and 90% of patients with cancer experience sleep disturbances.^[13]

Other women's health issues relevant to breast cancer survivorship are early menopause, reproductive health, fertility concerns, body image, and sexual health.^[18] Menopausal symptoms and their related sexual dysfunction can be a problem for both pre- and post-menopausal women. These conditions are caused by systemic cancer treatment, such as cytotoxic chemotherapy, hormonal therapy, or manipulation (i.e., ovarian suppression or ablation).^[19-21] Body image concerns also occur after mastectomy or after breast-conserving therapy.^[22]

Psychosocial problems

Psychosocial health of women with breast cancer is affected by self-esteem, social stress, social support, psychological support, sense of control, emotional problems, stage of illness, type of operation, symptoms, physical fitness, perceptions of illness, coping methods, relationships with health staff, and cooperation.^[23] Psychosocial complications related with breast cancer treatment can extend throughout treatments and well into recovery, and even into the possible reoccurrence phases.^[24]

Psychological challenges include various intense psychological problems such as fear, anxiety, depression, and disturbances in social roles.^[15,25] Fear of the future and the threat of cancer recurrence resulting in shortened life are stressful yet realistic concerns for these women even years after the completion of treatment.^[26,27] Fear is frequently reported in every phase of breast cancer experience. Cordova *et al.*^[28] reported that the prevalence of breast cancer patients who experienced fear was as high as 64%. Patients experience fear as a result of physical symptoms, such as pain, the invasive treatments, possible reoccurrence of the cancer, and possibility of death.^[24] Symptom distress and fear of recurrence are predictive of the appraisal of cancer as stressful.^[29] Anxiety is another psychological symptom closely related with fear. Gore and Russell^[15] found that patients are naturally anxious at the point of diagnosis from both unrealistic and realistic beliefs and expectations about cancer and its treatments. This anxiety is compounded by the uncertainty often experienced during and posttreatment.^[30] Distress is another psychological symptom. Stefanek *et al.*^[31] found that on an average, one in three cancer patients experience relatively high levels of depression. This behavior not only produces serious suffering but also worsens the patient's QoL and reduces compliance with treatment. Depression, in some cases, can

even lead to suicide because of the patient's perception of being a psychological burden to the family.

Social problems

Cancer and its treatment alter social roles and limit social activities of patients. Studies on long-term survivors report that perceived reductions in social function extend many years following treatment completion.^[32]

The costs of reduced social function for breast cancer survivors may be connected with long-term physical and emotional health. Studies have found that more social ties and greater social integration are associated with better resistance to illness,^[33] lower mortality, longer survival from myocardial infarction, lower risk of cancer recurrence, and improved cancer survival.^[34]

Spirituality/religiosity problem

Spirituality is an inner resource or aspect of a person that is used to cope with major stressors, such as breast cancer. This state is commonly defined as a construct that includes a meaning component, a faith-based component, and an existential coping component.^[35] Spirituality is increasingly being recognized by cancer physicians and mental health practitioners as an essential component of health and well-being.^[36] The majority of studies stated that involvement in spiritual/religious activities enhances mental and physical health, coping with illness, and medical outcomes. Patients naturally struggle to find causality factors, such as the mechanism of cancer and process of acquiring cancer, and responsibility factors, such as reasons for acquiring cancer, whether they were self-caused, or whether it could have been prevented throughout the cancer process.^[37] An investigation of the spiritual/existential needs of breast cancer patients from the USA showed that these patients wanted help with overcoming fears (51%), finding hope (42%), finding meaning in life (40%), finding spiritual resources (39%), or someone to confide with about finding peace of mind (43%), meaning of life (28%), and dying and death (25%). Breitbart^[38] interviewed almost 300 breast cancer patients and found that many patients needed help to find hope (42%) and meaning (40%) in their lives. These patients are also concerned with issues that caused the most "existential suffering" such as dependency, meaninglessness, hopelessness, being a burden on others, loss of social role, and feeling irrelevant.

Intervention for breast cancer survivors

Physical management

Any symptom in cancer survivors can lead to questions on whether to seek care for that symptom as well as

worry and fear that the symptom is a sign of cancer recurrence.^[38] Most reported interventions were conducted to help patients manage treatment-related symptoms and promote adjustment to breast cancer during treatment.^[39] The majority of studies either focused on the 1st year or 2 years following treatment, on one specific long-term side effect, or had a small sample size.^[40] The most accessible supportive care programs for breast cancer survivors are through conventional psychosocial programs, such as educational programs, cognitive behavioral interventions, individual therapies, and group interventions.^[41] The results showed that women with breast cancer who received an early home-based physiotherapy intervention and benefits exhibited functional well-being, as well as reduced arm morbidity and upper-body disability, on completion of the service at 2 months postdiagnosis. Minimal change was found in any aspect of health-related QoL on completion at approximately 4 months after the diagnosis for women attending a group-based exercise and psychosocial intervention. Ballard-Barbash *et al.*^[42] conducted a systematic review and concluded that physical activities were associated with reduced mortality across all cancers. Breast cancer specific mortality showed the positive influence of exercise interventions. In addition, exercise interventions may improve biomarkers of breast cancer risk among cancer survivor populations, with particular emphasis on disease outcome. Studies on sexual health in breast cancer patients found that surviving for more than 12 months posttreatment was a significant predictor of increased interest in sexual health program.^[43] A systematic review suggested that although some stresses about body changes could diminish with time, specific suggestions and behavioral sexual therapies might produce substantive improvements in sexuality.^[44]

Psychosocial adjustment

A review of literature suggests that the psychosocial adjustment of women with breast cancer is influenced by self-esteem, social support, social stress, psychological support, emotional problems, stage of illness, type of operation, symptoms, physical fitness, perceptions of illness, coping methods, and relations with health staff.^[45] Social support has a direct positive effect on one's physical and emotional health by satisfying basic social requirements such as love, affection, self-esteem, and belonging to a group. These characteristics have been proven to be statistically significant with coping with the facts of life. Much of the evidence in the protective effects of social support on cancer morbidity and mortality have been derived from studies conducted in North America and Europe.^[46,47]

Cinar^[48] maintains that social support is useful for patients with cancer, and emotional support from family members is positively correlated with physical and psychological adjustment to cancer. She also^[48] reported that perceived social support is influential in adjustment. Kocaman *et al.*^[49] found that social support for patients with multiple physical illnesses was effective in the psychosocial adjustment to illness. Salonen *et al.*^[50] showed that providing new knowledge about QoL and social support has significant meaning for breast cancer patients. Falagas *et al.*^[23] demonstrated that the consequences of breast cancer on women were significantly correlated with at least one of the psychosocial variables. Moreover, they reported that social support was one of the parameters significantly affecting the extent to which a patient's cancer prognosis was viewed as good or bad. The participants who received their social support mostly through their families were apparently optimistic, which was believed to be due to the high social support. Social support and health care orientation, as well as extended family relationships, social environment, and psychological state, are correlated. McDonough *et al.*^[51] found that general social support could positively predict changes in subjective well-being, whereas general stress would be a negative predictor of changes in well-being.

Psychological conditions affect treatment adherence and recovery, as well as exacerbate fears^[52] and the subjective experiences of fatigue, insomnia, and pain.^[53] Peer support and patient and family counseling are the several treatment options for psychosocial problems. Family counseling can assist patients and families adjust to the impact of the disease and treatment. Max^[4] adopted the psychospiritual integration and transformation (PSIT) program that offered breast cancer patients a unique combination of spiritual and psychological resources to improve their psychological, physical, and spiritual well-being. PSIT integrates psychotherapy with a personalized sense of spirituality. This program addresses the patients' worldview, life purpose, and life meaning, which are generally considered to include a spiritual component. Group therapy formats reduce fatigue, pain, anxiety, and fear, as well as improve coping skills, emotional well-being, and adjustment. Mindfulness-based stress reduction (MBSR) encourages a nonjudgmental acceptance and witnessing of internal experiences (i.e., sensations, cognitions, and emotions) and personal patterns that help or hinder the actualization of the life purpose.^[54] MBSR techniques included in PSIT have consistently been found to reduce psychological symptoms, such as stress, anxiety, depression, anger, and confusion; physical symptoms, such as fatigue, sleep disturbances, and pain; and improved overall QoL of breast cancer patients.^[4]

Spiritual coping

Spiritual well-being can not only cultivate meaning, purpose, and comfort in life but also reduce psychological and physical problems. Spirituality could also be a valuable symptom management resource. Increased spiritual well-being has been strongly correlated with various health benefits such as reduced chronic pain, increased coping skills, and higher QoL.^[55] Spiritually-based interventions refer to programs that include exercises that strengthen the meaning, faith, or existential components that compose spirituality.^[56] Cecilia^[57] used PSIT in breast cancer survivors to meet their spiritual needs and increase their psychological, physical, spiritual, and social well-being. Aukst-Maretic^[24] found similar responses when interventions using spiritual resources were offered. This intervention is apparently effective in alleviating many of the psychological, physical, and existential problems that confront women with breast cancer. Sharing a strong interest in spiritual resources and their potential benefit appears to be a valuable strategy for assisting breast cancer survivors. These survivors are given an opportunity to gain better understanding of the relationship among spirituality, physical, and psychological well-being, and posttraumatic growth (PTG).^[57]

Other studies^[24,58] have shown that increased spiritual well-being is also strongly correlated with shortened durations of hospitalization, reductions in anxiety and hopelessness, and improvements in overall health. Cordova *et al.*^[28] increased spiritual well-being by providing a space and a facilitator to assist cancer patients to reevaluate life goals, priorities, and sources of meaning. The functional assessment of chronic illness therapy-spiritual well-being, which was a validated spiritual assessment tool, was used in studies to assess spiritual well-being.^[59] High spirituality scores are associated with higher perceived QoL and satisfaction with doctor-patient relationships.^[60] The Body-Mind-Social-Spiritual group therapy^[61] likely contributes to promoting an active search for meaning in life toward more opportunities for personal growth. This therapy also aids in maintaining stable cortisol responses to everyday life stress of women with breast cancer.

Conclusion

In summary, women with breast cancer often suffer significant treatment-related symptoms, which affect the body (physical) and mind (psychological), which are often interrelated.^[17,62] These conditions may reduce the ability of patients to cope and survive well.^[13,15,30] The literature^[63] shows that spiritual issues may further complicate the

adjustment to breast cancer and deserves increased attention. An integrated intervention provides an expanded view of care that not only focuses on the alleviation of physical and psychological symptoms but also integrates existential distress and spiritual needs of patients as well. Many supportive programs provide maximum support to breast cancer survivors for all reported physical, psychological, social, and spiritual issues. Strong evidence showing that body, psychological, social, and spiritual intervention for breast cancer survivors can positively influence the physical, emotional, functional, and social/family well-being of breast cancer survivors.

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Conflicts of interest

There are no conflicts of interest.

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