

The Role of Psychosocial Support and Digital Psychosocial Intervention in Empowering Breast Cancer Patients

Dimitrios Charos^{1,2*}, Andriopoulou M³ and Vivilaki V¹

¹Midwifery Department, University of West Attica, Athens, Greece

²General Anticancer-Oncology Hospital AgiosSavvas, Athens, Greece

³"Konstantopouleio" General Hospital of Nea Ionia, Athens, Greece

***Corresponding Author:** Dimitrios Charos, General Anticancer-Oncology Hospital AgiosSavvas, Athens, Greece.

Received: April 19, 2023; **Published:** May 19, 2023

Abstract

The purpose of this review was to investigate the latest studies regarding patient psychosocial support, psychosocial interventions that provide relief for breast cancer patients, and the effectiveness of digital interventions.

The methodology followed was the literature review of recent years through electronic databases (pubmed, scopus, google scholar) regarding the role of psychosocial interventions in breast cancer patients.

A growing number of studies have highlighted the importance of psychosocial interventions for both breast cancer patients and their caregivers. Psychosocial interventions and digital psychosocial interventions are highly effective in improving patients' emotional distress, reducing anxiety, increasing mental resilience, empowering them and improving their quality of life. Digital interventions provide several advantages to breast cancer patients. Especially during the pandemic, breast cancer patients due to the strict restrictions, accessibility to mental health structures was limited. Empowering breast cancer patients reduces emotional distress, increases self-esteem and self-efficacy, enhances disease awareness, adaptation to disease, and treatment and disease management.

Keywords: Breast Cancer; Psychosocial Support; Digital Psychosocial Intervention; Empowerment

Introduction

Nowadays, breast cancer is the most common type of gynecological cancer, and it is the first cause of death in women from cancer. 19% of breast cancer cases concern women under the age of 50 [1-9].

Each year breast cancer affects 2.1 million women worldwide [10,11]. In 2000, 1.5 million new cases of breast cancer were diagnosed worldwide. In 2012, over 1.67 million new cases of breast cancer were recorded. In 2020, there were 2.3 million new cases of breast cancer, representing 11.7% of all cancers. While in 2050 it is estimated that it will reach 3.2 new cases. In the five years between 2015 - 2020, 7.8 million women were diagnosed with breast cancer. In the US 1 in 8 women will develop breast cancer. A study in 40 European countries showed that breast cancer is the main type of death in women. In Greece, every year 4500 new cases of breast cancer are diagnosed and it is the most common cause of cancer. Five-year survival rates for breast cancer patients are approximately 80% - 90% if no metastasis occurs and only 40% for metastatic cancer [7,8,12-14].

Breast cancer is responsible for 25% of all cancer cases and 15% of all deaths in women [15].

Several studies in recent years demonstrate the psychological and emotional dimension of breast cancer in women, especially in younger age groups. Women suffering from breast cancer experience a multitude of painful physical and psychological symptoms that have a significant impact on their mental health and quality of life. Cancer affects women negatively on many levels, such as social, psychological, financial and professional. More comparatively, women experience pain, fatigue, physical problems, emotional distress, anguish, uncertainty, frustration, anger, anxiety, depression, fear of abandonment, fear of recurrence, worry about pain, sexual dysfunction, sleep disturbances, low self-esteem, worry about their self-image, death anxiety, difficulties and dysfunctions with the relationships of significant others and the social environment, concern regarding their career and financial situation, etc [12,16-18].

Therefore, the psychological and psychosocial support of breast cancer patients is considered necessary. Patients are increasingly expressing emotional support needs, and psychosocial support interventions are effective and empowering patients.

Aim of the Study

The purpose of this review was to investigate the latest studies regarding patient psychosocial support, psychosocial interventions that provide relief for breast cancer patients, and the effectiveness of digital interventions.

Results

Contemporary data regarding the psychosocial interventions of patients with breast cancer from the beginning of the diagnosis

Psychosocial support for women suffering from breast cancer has been found to be very useful and effective.

Interventions based on mindfulness, expression of emotions and other psychosocial interventions have a very positive effect on improving the emotional distress of breast cancer patients [12]. Psychosocial interventions aimed at addressing fear of recurrence and emotional distress can improve the quality of life of women with breast cancer [12,20].

It is worth noting that a study conducted in Japan on 74 breast cancer patients showed that cognitive therapy through mindfulness (Mindfulness-Based Cognitive Therapy) is quite effective in managing the psychological effects of cancer in women. More specifically, through mindfulness, women's emotional distress, anxiety, depression, fear of relapse and fatigue are significantly reduced, while their well-being and quality of life increases [21,22].

In addition, an intervention program created for the purpose of being performed by nurses for breast cancer patients showed that women significantly improved their depressive and anxiety symptoms, their daily life, their roles, etc [23]. In addition, they manifested fewer physical symptoms, such as pain, nausea, etc [24,25]. Through cognitive techniques, the patient is encouraged to perceive dysfunctional behaviors and distortions to manage anxiety, stress and depressive symptoms [22].

In addition, psychosocial interventions improved significant post-traumatic stress symptoms in women with breast cancer [26].

According to Spiegel and Riba (2015), the effective treatment and management of anxiety, depression and other psychological consequences of breast cancer is achieved by a set of psychosocial interventions, through psychodynamic, cognitive, psychoeducational, interpersonal and existential therapy [22].

According to a meta-analysis, regarding the critical preoperative and postoperative period, psychosocial interventions appear to be quite beneficial in breast cancer patients undergoing mastectomy. More specifically, thirty-two studies highlighted the effectiveness of psychosocial interventions in breast cancer patients after surgery. According to the meta-analysis, psychosocial interventions, such as

counseling, psychoeducation, cognitive technique, supportive therapy, etc. significantly improved anxiety, depression, quality of life, emotional distress, body image, sleep disturbance, sexual function, self-esteem in breast cancer patients after surgery [27].

In addition, group psychosocial interventions (such as psychoanalytic, psychodynamic, cognitive, etc.) are quite effective in breast cancer patients, especially in the management of anxiety and depressive symptoms. Through group psychotherapy, patients are empowered, acquire skills to deal with anxiety and depressive symptoms, enhance social support, emotional expression, family support and finally improve communication between significant others and with health professionals [22].

A meta-analysis of the effectiveness of cognitive behavioral therapy (CBT) in the management of anxiety and depressive symptoms found that cognitive behavioral therapy (CBT) significantly improved anxiety in women with breast cancer. In contrast, depression and quality of life did not show significant improvement over a period of four months and longer [28].

Furthermore, an improvement in sexual function was also observed in women who had undergone cognitive behavioral therapy (CBT) [29]. Psychoeducational interventions, counseling for women who suffer from breast cancer and couples, psychotherapy, group therapy as well as couple therapy demonstrate a significant improvement in sexual mood and positive body image [12,30,31].

In addition, couple therapy is effective because it significantly improves communication between the couple, while at the same time reducing anxiety and negative mood in both patients of breast cancer and their partners [32].

Finally, psychoeducation and counseling support for breast cancer patients strengthens women's resilience and improves their mental health [33]. Psychosocial interventions aimed at solving current problems of breast cancer patients and the management of stress, fatigue, etc. significantly improve their quality of life [34].

In addition, the family environment is not ready and properly trained to manage and adapt to the disease but also to handle all the actions that a patient needs from the moment of diagnosis [11]. Training caregivers in caregiving skills as well as supporting them seems to be very useful both for them and for patients with breast cancer [35].

Intervention, support, and education for families and caregivers of women with breast cancer increased their cancer knowledge and self-efficacy while mitigating the adverse affect and emotional distress of their family members. This fosters a more active participation of caregivers in patient care, a constructive approach, better support for them, an increase in their quality of life and an effective management of their stress and psychological distress [36].

More specifically, psychoeducation and empowerment groups can play an important positive role in stress management, emotion expression, and quality of life among family members of breast cancer patients [10,37,38].

Psychoeducation and support groups appear to be effective and comforting for both breast cancer patients and their family caregivers. Psychoeducation and empowerment groups contribute to the emotional support of patients and their families, the reduction of psychological distress, the management of stress, the increase of self-efficacy and resilience, the expression of emotions and the increase of their quality of life [37,39].

In addition, studies support that the burden of caregivers of breast cancer patients can be reduced with appropriate psychosocial interventions, thereby increasing caregivers' well-being and quality of life. The organization of psychosocial support and psychoeducation programs contributes to reducing the burden and discomfort of caregivers and improving the quality of life of patients. Finally, it teaches patients and caregivers strategies for managing stress and emotions [10,13,40,41].

Supportive care is very important for both breast cancer patients and family caregivers and should be affordable and available to all. Aiming in this way to ensure and improve the quality of life of patients and the family environment [42,43].

In addition, targeted interventions regarding increasing mental resilience in families of women with breast cancer, improve adaptation to the disease, quality of life of themselves and caregivers [44]. Interventions to strengthen family resilience also significantly improve post-traumatic stress symptoms experienced by families after breast cancer. Family caregivers play a vital role in patient treatment, and interventions to enhance resilience are equally important [45].

Healthcare professionals should include the whole family in breast cancer care, so that they assess the needs of the family and ensure that psychosocial interventions are provided by the interdisciplinary community and psycho-oncology [46,47].

Finally, the programs and strategic interventions are mostly supportive for both patients and their families, aimed at expressing and managing their emotions, managing stress, gaining meaning after illness, adherence to treatment, adaptation to illness and self-negotiation, timely information, etc [48].

The role of empowerment in patients with breast cancer

The empowerment of patients and caregivers has brought about very significant benefits in enhancing the treatment of oncology patients and at the same time in reducing the burden on caregivers. Empowerment is informing patients and caregivers about their illness and treatment [49,50]. Patient empowerment aims to provide an individualized plan of care where patients are not passive recipients of their care and develop appropriate skills, confidence and knowledge to respond to their illness and treatment [50].

Empowerment can be achieved by enhancing the patient's health knowledge, respecting the patient's needs and personality, cultivating a climate of trust through active listening, creating motivation, providing psychological support, developing skills, ensuring participation of patients in the decision-making process. The aim of empowerment programs is to reduce psychological distress, manage patients' anxiety and depressive symptoms, positive attitude and adaptation to treatment and acceptance of their illness, manage fear of recurrence of cancer, the limitation of social isolation, the improvement of relationships and the quality of life of patients [50].

Empowerment is related to the increase in self-esteem, self-perception and self-efficacy of patients, to better awareness and adaptation to the disease, to compliance with treatment, to emotional maturity, to satisfaction and to an increase in the quality of life of patients [50].

An intervention program to enhance the empowerment of women with breast cancer is self-help groups where women regain control of their disease, the belief that they can manage difficulties and the expectation to cope with the negative accompanying symptoms of their disease [51].

Finally, the empowerment of caregivers is carried out in the information of caregivers, in their psychological support, in strengthening their role, in communication, in the management of emotional distress, in the strengthening of their self-esteem and self-efficacy, in the expression of emotions and at the same time, they improvement in the quality of their lives [50].

The need to develop digital interventions for breast cancer patients

In recent years, the outbreak of the COVID-19 pandemic crisis has resulted in people being confined to their homes, which has also made it quite difficult to provide psychosocial support to breast cancer patients.

The impact of the pandemic on women with breast cancer has been significant, increasing patients' emotional distress, anxiety and depression. Therefore, it is deemed necessary to have a different support framework for breast cancer patients during the pandemic cri-

sis, such as digital interventions. First of all, to take advantage of online interventions that can be implemented remotely and are effective in managing the anxiety and emotional distress of breast cancer patients. Web conferencing can prove to be a satisfactory solution for the psychological support of patients, reducing their emotional discomfort, fear, social isolation, anxiety and the accompanying effects of cancer and the pandemic. In addition, the contribution of online support groups is instrumental in increasing social support and increasing patients' quality of life. Likewise, telephone supportive care [52-58].

Online support groups have significant advantages because people from remote areas who are socially can use them excluded, they are easy to use, they are flexible and can be joined more easily by people with mobility difficulties, they are easier for people who have social anxiety, are just as effective as lifelong support groups. For example a study by Winzelberg., *et al.* (2003) showed that online support groups offer relief from anxiety, depression and post-traumatic stress [59]. Similarly, a comprehensive systematic review in 2016 showed that online interventions can meet the needs of breast cancer patients [60].

Finally, telephone psychosocial interventions improve anxiety and depression as well as quality of life according to an intervention study [61].

Discussion and Conclusion

Breast cancer patients experience emotional distress, affecting the quality of life of both patients and their caregivers.

This review aimed to highlight current psychosocial interventions that are effective in breast cancer patients.

A growing number of studies in recent years highlight a significant number of psychosocial interventions that are effective in managing patients' illness and emotional distress. Psychosocial support relieves breast cancer patients, empowers them and improves their quality of life. The empowerment of women is considered necessary so that they respond effectively to their treatment, to the management of the disease and the adaptation of the patients to the disease and finally, to the improvement of their functionality, especially of the patients of the reproductive period.

Especially with the outbreak of the pandemic crisis, the need for remote psychological support for breast cancer patients emerged. In general, digital psychosocial interventions have been shown to be as effective as in-person interventions, capitalizing on the significant advantages they provide.

Therefore, it is deemed necessary to create specialized psycho-oncological support centers for breast cancer patients, made up of suitably qualified personnel to meet the needs of breast cancer patients and their caregivers. The creation of digital intervention or tele-consultation centers will enable the accessibility of more patients, especially patients in remote areas where access is impossible.

Availability of Data and Materials

Not applicable.

Funding Support

This study was funded by the special account for research grants of the University of the West Attica

Competing Interests

The authors declare that they have no competing interests.

Bibliography

1. Altun H., *et al.* "Evaluation of Emotional and Behavioral Problems in School-Age Children of Patients with Breast Cancer". *The Turkish Journal of Oncology* 34 (2019): 12-20.

2. Bray F, *et al.* "Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries". *CA: A Cancer Journal for Clinicians* 68 (2018): 394-424.
3. Kauffmann R, *et al.* "Addressing psychosocial needs of partners of breast cancer patients: a pilot program using social workers to improve communication and psychosocial support". *Support Care Cancer* 24 (2016): 61-65.
4. Lagiou A. "Epidemiology and prevention of breast cancer". *Archives of Hellenic Medicine* 25.6 (2008): 742-748.
5. Miedema B and Easley J. "Barriers to rehabilitative care for young breast cancer survivors: a qualitative understanding". *Support Care Cancer* 20 (2012): 1193-1201.
6. Momenimovahed Z and Salehiniya H. "Epidemiological characteristics of and risk factors for breast cancer in the world". *Breast Cancer* 11 (2019): 151-164.
7. Fasoi- Barka GG, *et al.* "Study for the change of health related quality of life in women with early stage breast cancer, one year after the diagnosis". *To Vimatou Asklipiou* 9 (2010): 76-99.
8. Sung H, *et al.* "Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries". *CA: A Cancer Journal for Clinicians* 71.3 (2021): 209-249.
9. Charos D, *et al.* "Breast cancer and social relationship coping efficacy: validation of the Greek version". *Women and Health* (2021).
10. Nimekari MM, *et al.* "Correlation between Supportive Care Needs of Women with Breast Cancer and Quality of Life of their Family Caregivers". *The International Journal of Community-Based Nursing and Midwifery* 7 (2019): 300-308.
11. Noveiri MJS, *et al.* "Coping Assessment Tools in the Family Caregivers of Patients with Breast Cancer: A Systematic Review". *Breast Cancer: Targets and Therapy* 12 (2020): 11-26.
12. Runowicz C, *et al.* "American Cancer Society/American Society of Clinical Oncology Breast Cancer Survivorship Care Guideline". *CA: A Cancer Journal for Clinicians* 66 (2016): 43-73.
13. Michailides A and Constantinou C. "Integration of longitudinal psychoeducation programmes during the phases of diagnosis, management and survivorship of breast cancer patients: A narrative review". *Journal of Cancer Policy* (2020).
14. <https://www.who.int/news-room/fact-sheets/detail/breast-cancer>
15. Torre LA, *et al.* "Global Cancer Statistics, 2012". *CA: A Cancer Journal for Clinicians* 65 (2015): 87-108.
16. Stein KD, *et al.* "Psychical and psychological long-term and late effects of cancer". *Cancer Supplement* 112 (2008): 2577-2592.
17. Baucom DH, *et al.* "Men's psychological functioning in the context of women's breast cancer". *Journal of Marital and Family Therapy* 38 (2012): 317-332.
18. Baqutayan SMS. "The Effect of Anxiety on Breast Cancer Patients". *Indian Journal of Psychological Medicine* 34.2 (2012): 119-123.
19. Champion VL, *et al.* "Comparison of younger and older breast cancer survivors and age-matched controls on specific and overall quality of life domains". *Cancer* 120 (2014): 2237-2246.
20. McGinty HL, *et al.* "Relationship of threat appraisal with coping appraisal to fear of cancer recurrence in breast cancer survivors". *Psycho-Oncology* 21 (2012): 203-210.

21. Park S., *et al.* "Mindfulness-Based Cognitive Therapy for psychological distress, fear of cancer recurrence, fatigue, spiritual well-being, and quality of life in patients with breast cancer: A randomized controlled trial". *Journal of Pain and Symptom Management* 60.2 (2020): 381-389.
22. Spiegel D and Riba MB. "Managing anxiety and depression during Treatment". *The Breast Journal* 21.1 (2015): 97-103.
23. Kim YH., *et al.* "A psychological intervention programme for patients with breast cancer under chemotherapy and at a high risk of depression: A randomised clinical trial". *Journal of Clinical Nursing* 27 (2018): 572-581.
24. Antoni MH., *et al.* "Reduction of Cancer-Specific Thought Intrusions and Anxiety Symptoms with a Stress Management Intervention Among Women Undergoing Treatment for Breast Cancer". *The American Journal of Psychiatry* 163 (2006): 1791-1797.
25. Zahedian E., *et al.* "Group meta-cognitive therapy and depression in women with breast cancer: a randomized controlled trial". *BMC Women's Health* 21 (2021): 111.
26. Nordin K., *et al.* "Design of the study: How can health care help female breast cancer patients reduce their stress symptoms? A randomized intervention study with stepped-care". *BMC Cancer* 12 (2012): 167.
27. Matthews H., *et al.* "The efficacy of interventions to improve psychosocial outcomes following surgical treatment for breast cancer: a systematic review and meta-analysis". *Psychooncology* 26.5 (2017): 593-607.
28. Sun H., *et al.* "The efficacy of cognitive behavioral therapy to treat depression and anxiety and improve quality of life among early stage breast cancer patients". *Integrative Cancer Therapies* 18.1 (2019): 1-9.
29. Boswell EN and Dizon DS. "Breast cancer and sexual function". *Translational Andrology and Urology* 4.2 (2015): 160-168.
30. Taylor S., *et al.* "Interventions for sexual problems following treatment for breast cancer: a systematic review". *Breast Cancer Research and Treatment* 130 (2011): 711-724.
31. Charos D and Vivilaki V. "Sexual dysfunction in women with breast cancer: The role of community midwives in early detection". *European Journal of Midwifery* 6 (2022): 70.
32. Steiner JL., *et al.* "Depressive Rumination Mediates Cognitive Processes and Depressive Symptoms in Breast Cancer Patients and their Spouses". *Families, Systems and Health* 32.4 (2014): 378-388.
33. Tadayon M., *et al.* "Investigating the relationship between psychological hardiness and resilience with depression in women with breast cancer". *Gulf Journal of Oncology* 1.28 (2018): 23-30.
34. Merluzzi TV., *et al.* "Discerning critical stressors and resources in the lives of cancer patients: A multivariate analysis of targets of intervention for enhancing cancer care and quality of life". *Psycho-Oncology* (2022): 1-10.
35. Vahidi BM., *et al.* "Other Side of Breast Cancer: Factors Associated with Caregiver". *Asian Nursing Research* 10 (2016): 201-206.
36. Marshall CA., *et al.* "Un Abrazo Para La Familia: Providing low-income Hispanics with education and skills in coping with breast cancer and caregiving". *Psycho-Oncology* 22 (2013): 470-474.
37. Cipolletta S., *et al.* "The effectiveness of psychoeducational support groups for women with breast cancer and their caregivers: A mixed methods study". *Frontiers in Psychology* 10 (2019): 288.

38. Kraemer LM, et al. "A Longitudinal Examination of Couples' Coping Strategies as Predictors of Adjustment to Breast Cancer". *Journal of Family Psychology* 25 (2011): 963-972.
39. Northouse LL, et al. "Interventions with family caregivers of cancer patients: meta-analysis of randomized trials". *CA: A Cancer Journal for Clinicians* 60 (2010): 317-339.
40. Kusi G, et al. "The experiences of family caregivers living with breast cancer patients in low-and middle-income countries: a systematic review". *Systematic Reviews* 9 (2020): 165.
41. Gabriel IO and Mayers PM. "Effects of a psychosocial intervention on the quality of life of primary caregivers of women with breast cancer". *European Journal of Oncology Nursing* 38 (2018): 85-89.
42. Loibl S and Lederer B. "The importance of supportive care in breast cancer patients". *Breast Care* 9 (2014): 230-231.
43. Choi J, et al. "Caregivers of the chronically critically ill after discharge from the intensive care unit: six months' experience". *American Journal of Critical Care* 20 (2011): 12-22.
44. Liu Y, et al. "Relationships between family resilience and posttraumatic growth in breast cancer survivors and caregiver burden". *Psycho-Oncology* 27 (2018): 1284-1290.
45. Yan Z, et al. "Dyadic effects of family resilience on post-traumatic stress symptoms among breast cancer patients and their primary family caregivers: A cross-sectional study". *European Journal of Oncology Nursing* 53 (2021): 101998.
46. Holst-Hansson A, et al. "Hoping to reach a safe haven - Swedish families' lived experience when a family member is diagnosed with breast cancer". *European Journal of Oncology Nursing* 31 (2017): 52-58.
47. Han JH, et al. "Primary caregivers' support for female family members with breast or gynecologic cancer". *Cancer Nursing* 39.3 (2016): E49-55.
48. Karademas E. "Health Psychology. Athens Edition". *Typothyto* (2005).
49. Johnson MO. "The shifting landscape of health care: Toward a model of health care empowerment". *American Journal of Public Health* 101 (2011): 265-270.
50. Andriopoulou M, et al. "The impact of cancer on patients and their caregivers, and the importance of empowerment". *Archives of Hellenic Medicine* 35 (2018): 601-611.
51. Stang I and Mittelmark M. "Intervention to enhance empowerment in breast cancer self-help groups". *Nursing Inquiry* 17 (2010): 46-56.
52. Massicotte V, et al. "COVID-19 Pandemic Stressors and Psychological Symptoms in Breast Cancer Patients". *Current Oncology* 28.1 (2021): 294-300.
53. Pediconi F, et al. "Breast imaging and cancer diagnosis during the COVID-19 pandemic: recommendations from the Italian College of Breast Radiologists by SIRM". *La Radiologiamedica* 125 (2020): 926-930.
54. Ratnasekera N, et al. "Supportive Care for Oral Cancer Survivors in Covid-19 Lock down". *Psychooncology* 29 (2020): 1409-1411.
55. Swainston J, et al. "COVID-19 Lockdown and Its Adverse Impact on Psychological Health in Breast Cancer". *Frontiers in Psychology* (2020).

56. Ng CWQ., *et al.* "Maintaining breast cancer care in the face of COVID-19". *BJS Bharatiya Jain Sanghatana* (2020).
57. Chan JJ., *et al.* "The impact of COVID-19 on and recommendations for breast cancer care: the Singapore experience". *Endocrine-Related Cancer* 27 (2020): R307-R327.
58. Charos D., *et al.* "Breast cancer and COVID-19: The need for enhanced psychological support for women with breast cancer during the pandemic". *European Journal of Midwifery* 6 (2022): 69.
59. Winzelberg AJ., *et al.* "Evaluation of an internet support group for women with primary breast cancer". *Cancer* 97 (2003): 1164-1173.
60. Post KE and Flanagan J. "Web based survivorship interventions for women with breast cancer: An integrative review". *European Journal of Oncology Nursing* 25 (2016): 90-99.
61. Badger T., *et al.* "Depression and Anxiety in Women with Breast Cancer and Their Partners". *Nursing Research* 56.1 (2007): 44-53.

Volume 12 Issue 5 May 2023

©All rights reserved by Dimitrios Charos., *et al.*