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## ORIGINAL RESEARCH

# The Psychological Impact Of Breast Cancer On Patients And Families And The Role Of Psychological Support.

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## **ABSTRACT**

Breast Cancer (BC) primarily impacts individuals diagnosed with the condition and, indirectly, their close ones. BC is not only a physical ailment but also a prominent clinical context where psychosocial challenges are prevalent. These individuals may face enduring psychosocial issues, including anxiety, depression, discomfort, and grief, feelings of helplessness, reduced concentration, sleep disturbances, and psychological disorders. When breast cancer is involved, potential psychiatric disorders can influence the disease's prognosis, treatment adherence, treatment success, social and societal functioning, and survival rates. Psychosocial interventions can have a positive impact on both the patient and their family, significantly enhancing the overall family's quality of life.

**Keywords:** Breast Cancer, psychosocial problems, anxiety, depression, psychiatric disorder, psychological intervention

### INTRODUCTION

According to the information provided by the World Health Organization, the worldwide prevalence of cancer has experienced a twofold increase over the past three decades. In the Global Cancer Statistics report from 2015, it was reported that nearly 1.67 million women were affected by breast cancer.<sup>2</sup> Out of these, over 500,000 lost their lives, and breast cancer stood out as the leading cancer in terms of both incidence and mortality among women. Globally, breast cancer is the most frequently diagnosed cancer among women and is the second most common cause of cancerrelated deaths in developed regions.<sup>3</sup> Breast cancer continues to be the most prevalent cancer among women globally.<sup>4</sup> According to the GLOBOCAN data from 2018, approximately 2.1 million cases of breast cancer were diagnosed worldwide, and roughly 630,000 individuals lost their lives to this disease. 5 The incidence of breast cancer is notably higher in high-income nations compared to middle- and low-income countries.<sup>6</sup> Annually, breast cancer affects around 2.1 million women worldwide, <sup>7,8</sup> with 19% of cases occurring in women under the age of 50. <sup>9,10,11</sup> In the year 2020, there were 2.3 million new breast cancer diagnoses worldwide, and approximately 0.5 million people succumbed to metastatic breast cancer annually. The five-year survival rates for breast cancer patients stand at around 90%.<sup>7,12</sup> The risk of breast cancer rises with age, but it's most frequently observed in women aged 50 to 69 years, with only 2% to 7% of cases diagnosed in individuals under the age of 40.<sup>13</sup> Despite the relatively low risk of breast cancer in the third decade of life, which stands at 0.04% per year, it remains the most prevalent malignancy among women under 35 years of age. 14 Breast cancer in young women typically follows a more aggressive course, has a less favorable prognosis, and exhibits poorer survival rates when compared to older individuals. Additionally, treating young patients presents several additional challenges, such as preserving fertility, addressing the possibility of continuing pregnancy after diagnosis, and managing breastfeeding issues.<sup>15</sup>

Due to the increasing incidence of breast cancer, significant progress has been made in the treatment of the disease. Both local treatments and systemic anticancer therapies have led to improved patient survival outcomes, including enhanced disease-free survival and overall survival.<sup>16</sup>

**SIDE EFFECTS:** Based on recent research findings, women facing breast cancer encounter a variety of distressing symptoms that have a profound impact on their mental well-being and, subsequently, on their families. Women grapple with emotional, social, and psychological challenges, with the intensity of these issues amplifying following

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procedures like mastectomy and chemotherapy. 17,18 The study's participants exhibited mixed emotional responses upon receiving their breast cancer diagnosis. Following diagnosis, initial reactions included shock, which was followed by fear, denial, and uncertainty. These emotional responses contributed to feelings of hopelessness, distress, and guilt among the patients. 19 A breast cancer diagnosis has a detrimental effect on the quality of life for women, influencing their relationships, social interactions, work performance, family dynamics, and personal outlook on life. 20,21,22 Moreover, newly diagnosed breast cancer patients commonly experience elevated levels of psychological distress, particularly in the form of anxiety and depression. <sup>23,24</sup>When an individual receives a breast cancer diagnosis, they confront a threat to an organ that symbolizes femininity, aesthetics, motherhood, and sexuality. Consequently, women often perceive a loss of attractiveness, fertility, sexuality, and femininity.<sup>25</sup> Numerous studies have demonstrated a multifaceted decline in the quality of life following cancer. 26,27 The most prevalent symptoms experienced after cancer treatment include fatigue (66.6%), reduced strength (61.6%), sleep disturbances (60%), and fluctuations in weight (57%). These findings align with the National Cancer Institute's report titled "Life five years after a cancer diagnosis", confirming these post-treatment challenges. 28 Advancements in medical treatments that have improved cancer survival rates and reduced recurrences also bring about emotional challenges and enduring posttreatment side effects.<sup>29,30</sup> After completing primary breast cancer treatment without signs of recurrence, approximately 71% of survivors make a successful adjustment to the post-treatment phase. However, a significant proportion experiences elevated levels of distress.<sup>31</sup>Among long-term breast cancer survivors (more than 5 years postdiagnosis), the prevalence of moderate depression is higher than that of healthy individuals. These rates reach at least 15% at the 5-year mark post-diagnosis, in contrast to the 4.5% to 9.3% rates observed in healthy community samples.<sup>32</sup>

PSYCHOLOGICAL EFFECT ON PATIENT: A cancer diagnosis brings forth profound psychosocial challenges for the patient, their family, and society, and it also results in substantial workforce productivity losses. 1 Cancer is a formidable disease that disrupts the patient's psychological equilibrium and is often perceived as a calamity by the patient and their family, causing significant physical and emotional impacts, including feelings of fear, hopelessness, guilt, despair, and isolation. 33 Among women, breast cancer is the most prevalent cancer type and has been extensively studied for its psychological and emotional aspects due to its impact on an organ symbolizing femininity and sexuality.<sup>34</sup> The loss of a breast, which represents motherhood, sexuality, and aesthetics, is commonly viewed as a loss of attractiveness, fertility, sexuality, and overall femininity. 35 Additionally, treatments such as chemotherapy, radiotherapy, and surgery can significantly diminish the quality of life and lead to adverse physical and mental effects, including anxiety, depression, body image concerns, infections, and vomiting. <sup>36,37</sup>It is worth noting that 4 out of every 10 breast cancer patients grapple with elevated levels of anxiety or depression.<sup>38</sup> A research study that evaluated patients both before surgery and at the 3rd and 12th months following surgery revealed that 55% of patients experienced anxiety and/or depression during one or more of these assessments.<sup>39</sup> In another study involving 503 breast cancer patients, the prevalence of anxiety and depression was found to be 45.3% among those with early-stage disease and 37% among those with advanced-stage disease. 40Breast cancer diagnosis typically leads to psychological distress in nearly every patient, giving rise to a range of emotions such as uncertainty, disbelief, despair, anger, fear, concern, and sorrow. 41 Research indicates that each patient's response to their diagnosis is unique and that these emotions play a significant role in their ability to manage the situation and adhere to their treatment.<sup>42</sup>

Table 1: Factors that can affect the quality of life of breast cancer patients

Factors that might deteriorate quality of life	Factors that might improve quality of life
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Adjuvant endocrine therapy-related side effects including	Reduction of radiation-induced skin toxicity using
vasomotor symptoms such as hot flashes	simultaneous integrated boost, accelerated partial
	breast irradiation, and prone positioning
Targeted therapy-related side effects: diarrhoea and skin	Adjuvant chemotherapy and radiotherapy in the elderly
rash in the adjuvantand metastatic settings for HER2+	with solid tumors
breast cancer	
Body image after mastectomy	Oncoplastic breast surgery
Chemotherapy-induced alopecia	Both immediate and delayed breast reconstruction in
	long-term
Disturbances in sexual life	Better preoperative counseling and informed decision-
	making
Less social support and unmet needs	Physical activity interventions such as yoga, exercise,
	physical self-management, complementary exercise, art
	therapies, and mindbody exercisetherapy

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Lymphedema affecting woman's physical, psychological,	Treatment of lymphedema: manual lymphatic drainage
and emotionalwell-being	
Premature menopause, menopausal symptoms, and	Psychoeducational support or receiving social support
infertility	in early stagebreastcancer
Comorbid depression which significantly increases the	Cognitive behavioral therapy
burden of distressand dysfunction	

#### **DEPRESSION**

Numerous breast cancer patients undergo significant stress throughout their treatment journey, often resulting in feelings of fear, worry, anger, uncertainty about the future, and concerns about their body image. <sup>43</sup> Among breast cancer survivors, depression is among the most frequently diagnosed psychiatric conditions. Its prevalence can range from 5% to 40%, with many studies reporting rates between 10% and 25%. <sup>44</sup> Furthermore, the side effects of long-term hormone therapy or chemotherapy, including menopausal symptoms, pain, and insomnia, can also contribute to the development of depression. <sup>45,46</sup> Depression can exacerbate feelings of discomfort and may lead to unfavorable outcomes. <sup>47,48</sup> Persistent depression has been linked to poorer cognitive function, family dynamics, treatment adherence, increased physical distress, and a higher likelihood of tobacco or alcohol use, all of which contribute to a diminished quality of life. <sup>49</sup> As for the relationship between marital status and depression, findings are somewhat inconsistent. <sup>50</sup> Some studies suggest that being single or divorced may be more likely to be associated with depressive disorders. <sup>51</sup> However, it's important to note that Pumo et al. reported that married breast cancer patients had a higher prevalence of depression. <sup>52</sup>

**ANXIETY:** Research indicates that breast cancer patients often experience a significant incidence of psychological distress, making them more vulnerable to the emergence of severe anxiety and depression.<sup>53</sup> The experience of cancer can give rise to psychiatric disorders, particularly in women with breast cancer, impacting both the patients and their family members.<sup>54</sup> Among breast cancer patients, the most frequently encountered psychiatric comorbidities are depression and anxiety.<sup>55</sup> Allam et al.<sup>56</sup> observed that anxiety was present in 15–25% of the female breast cancer patients they examined. Hassan et al.<sup>57</sup> reported a higher prevalence of anxiety, at 31.7%, in patients with breast cancer. Among the patients, married women made up the largest proportion (73.4%). When considering the impact of psychiatric morbidity based on marital status, married women (71.4%) exhibited a significantly higher prevalence of anxiety compared to single women (28.6%). One possible explanation for this heightened anxiety in married women is their added responsibility of caring for their families, which represents a substantial commitment in their lives.<sup>58</sup>

PSYCHOLOGICAL EFFECT ON FAMILY: The family caregivers, who were either blood relatives or related through marriage, were recognized by the patients as the primary providers of informal and unpaid care.<sup>59,60</sup> Nowadays, the early and accurate detection and diagnosis of breast cancer, combined with appropriate treatment, have contributed to the gradual increase in women's survival rates. Women diagnosed with breast cancer require immediate support and care, with their families often assuming this responsibility. 61 These family caregivers bear a substantial care burden, which impacts their physical, emotional, and mental well-being and gradually diminishes their functional abilities. 8.62 Caregivers play an incredibly demanding role that has a significant impact on their mental and physical well-being.<sup>63</sup> Numerous studies have highlighted an array of stressors that detrimentally affect the health and quality of life of family caregivers, encompassing aspects like social well-being, mental functioning, and physical health. <sup>64,65</sup> Furthermore, these caregivers tend to neglect their own well-being, often forgoing exercise and proper rest while dedicatedly caring for breast cancer patients.<sup>65</sup> Remarkably, studies have revealed that caregivers, much like the cancer patients themselves, are at risk of experiencing psychological challenges. 59,66 Additionally, research employing a validated assessment tool has shown that roughly 42% of caregivers for cancer patients exhibited symptoms of depression. This elevated prevalence of depression likely exerts a negative impact on the quality of life (OOL) experienced by these caregivers.<sup>67</sup>Numerous studies have demonstrated that both patients and their family members encounter increasing levels of stress as they adapt to the new situation. This often leads to conflicts among family members as they redefine their priorities and daily routines. Partners of women with breast cancer, in particular, frequently exhibit signs of distress, anxiety, depression, and reduced communication. 10,61,68 The diagnosis and treatment of breast cancer can be experienced as a traumatic event, impacting not only the individual involved but the entire family system and its members, in line with systemic theory. Consequently, the transition may not be as smooth for all family members as it ideally should be. <sup>61,69,70</sup> Particularly for children and adolescents, their mother's breast cancer diagnosis can be a profoundly distressing event. It can increase the likelihood of them developing various psychological and behavioral challenges, including feelings of fear, uncertainty, anxiety, depression, confusion, social withdrawal, distress, aggressive behavior, reduced academic performance, and an increased need for closeness to their

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mother. <sup>10,71</sup>Husbands of women with breast cancer may also undergo emotional distress, anxiety, sleep disturbances, depression, difficulty in expressing their emotions, professional and financial hardships, and concerns about their wife's health and the well-being of their children. These difficulties can lead to a decline in the quality of communication, the quality of their intimate life, and their overall quality of life. <sup>18,68,72,73</sup> The relationship between breast cancer patients and their families appears to have a significant impact on their physical and mental well-being. Family members can offer crucial psychological support, reinforcement, and encouragement to breast cancer patients. <sup>74</sup> Additionally, family members often play a vital role not only in providing care to most cancer patients but also in making challenging decisions about the patient's treatment. <sup>75</sup>Regrettably, despite the high prevalence of distress, it often goes unrecognized, resulting in inadequate support and care for caregivers. The psychological issues experienced by caregivers are linked to a negative impact on their quality of life. <sup>66</sup>

**PSYCHOLOGICAL SUPPORT:** When individuals grapple with psychological problems and their psychosocial adaptation is compromised, it can have adverse effects on the progression of the illness and the patient's response to treatment. Consequently, healthcare providers should regard psychosocial support as an essential component of holistic patient care and incorporate psychosocial dimensions into the treatment plan. <sup>76,77</sup> Cancer patients encounter three critical phases that can disrupt their adaptation to the illness and its treatments: the initial diagnosis, instances of recurrence or metastasis, and the commencement of new treatments. <sup>78,79</sup> Psychological interventions have demonstrated noteworthy effectiveness in mitigating fatigue following the conclusion of cancer treatment. <sup>80</sup>

FAMILY SUPPORT: Support from family members appears to be linked with favorable psychological outcomes for women with breast cancer, yet the quality of life of family caregivers may suffer as a result. Both patients and their partners may undergo substantial emotional distress. 9 Additionally, a study revealed that factors related to the family predict post-traumatic growth.81 The family environment often lacks readiness and proper training to navigate the new situation and fulfill all the patient's needs from the time of diagnosis.8 Caregivers' training in developing caregiving skills appears to offer benefits for both caregivers and patients.<sup>82</sup> Effective psychosocial interventions have the potential to alleviate the negative psychosocial impacts of a breast cancer diagnosis on family members.<sup>83</sup> Psychoeducational support has shown effectiveness in enhancing breast cancer symptoms and emotional well-being among breast cancer patients.<sup>84</sup> A supportive family environment plays a crucial role in providing emotional, social, and financial support to patients. It offers security, encouragement, empathy, care, and active involvement in treatment-related decision-making, ultimately contributing positively to women's well-being. 62,74 Effective, open, and constructive communication within the family is a vital component of disease treatment and management. Such communication enhances their quality of life and reduces stress.85 Numerous studies have explored the impact of family resilience on the quality of life of patients and the burden on caregivers. High levels of family resilience benefit not only the patient but also the family caregivers. Family resilience appears to boost individual resilience and alleviate the burden on caregivers. 11, 69, 86

**SOCIAL SUPPORT:** A cancer diagnosis profoundly impacts not only an individual's psychological state but also their cognitive, emotional, spiritual, and social aspects. Both the diagnosis and the treatment process can alter self-esteem, body perception, quality of life, daily activities, sexual life, personal and social roles, as well as the patient's family and environment. In response to these changes, there is an increased need for social support. <sup>77,87</sup> As previously noted by numerous researchers, social support provided by healthcare professionals, healthcare institutions, and society at large has a positive influence on the well-being of cancer patients and reinforces their coping strategies. <sup>88</sup> In the literature, it is underscored that an individual's level of education has a positive correlation with their health comprehension. Higher education often leads to greater personal responsibility in health matters, improved knowledge acquisition, and the utilization of more effective strategies for symptom management. This, in turn, facilitates a more adept handling of the challenges posed by the disease and contributes to better overall adjustment. <sup>89</sup> While not statistically significant, it was observed that patients with higher educational levels exhibited superior psychosocial adjustment. <sup>90</sup>

#### **CONCLUSION**

Women's breast cancer can be experienced as a crisis in the family affecting its functionality and the dynamics change; the roles, rules, routines, and balances, as well as the emotions and functionality of the patient and family members are affected. Not only the breast cancer patient but the family members are emotionally, psychologically, socially, financially, and professionally burdened. It can be concluded that Social support is beneficial for both patients and family members. Psychosocial support helps reduce discomfort, better manage illness and stress and, ultimately, increase quality of life.

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