

Anxiety and the patient with breast cancer: a review of current research and practice

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Abstract

Breast cancer is one of the most common cancers worldwide. Statistics reveal that the number of women diagnosed with breast cancer is increasing in South Africa. In particular, there appears to be a growing incidence in younger, black women in urban areas. Family practitioners and oncology healthcare professionals are going to be treating an increasing population of patients with breast cancer. Research has shown that in many instances, the psychological needs of patients with breast cancer are not adequately addressed, and that often the physical crisis is seen as more immediate. Also, healthcare professionals and oncologists may not be aware of the prevalence of co-morbid psychological distress, and thus do not focus on this aspect of the diagnosis. As a result, women who experience psychological distress during and after treatment may not be referred for psychological management. This may have a significant impact on their quality of life during this period and may even affect their compliance with treatment. This ultimately has implications for their ongoing health and survival. This review of the available literature aims to heighten awareness of healthcare professionals to the current situation, with a view of improving the mental health care of South African patients with breast cancer.

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Introduction

Breast cancer is the most common cancer affecting women.¹ Patients with cancer are psychologically vulnerable for many reasons, including the stress of the diagnosis, debilitating treatments and chronic pain. Distress can compromise compliance with treatment and negatively affect prognosis and survival rates,^{1,2} so the significance of patients' psychological status forms an essential element of oncological treatment.^{3,4-7}

Newer treatments make this increasingly important because the disease is now often viewed as curable or chronic.⁸ Distress is often undertreated because of time constraints, the physical crisis taking precedence or patients not volunteering information about their distress.^{2,9}

Psycho-oncology deals with the psychological reactions of patients and families to cancer and treatment, as well as the needs of oncology healthcare professionals. Considerable research documents the psychological problems that patients with breast cancer face. However, it is difficult for busy family practitioners to review the extensive literature.

This article provides a brief, but comprehensive review on the prevalence and management of anxiety in patients with breast cancer in clinical practice.

Cancer in South Africa

According to the National Cancer Registry network,¹⁰ one in 31 South African women will get breast cancer during her lifetime.

Black South African women in rural areas have a low incidence of breast cancer, but figures for the urban population are rising. The suggestion is that protective factors against carcinogenesis, such as late menarche, the early birth of a first child, prolonged lactation and high levels of physical activity, are decreasing in black urban populations.¹¹

Psychological distress and breast cancer

The most prevalent co-morbid psychological conditions are depression and anxiety. Between 62.5% and 85% of patients with cancer meet the criteria for depression and anxiety disorders.^{7,12} A study of Oshwambo Namibian and Sesotho South African patients with breast cancer found high levels of hopelessness following diagnosis that correlated positively with psychological morbidity.¹³ Research into Indian South African patients with breast cancer highlighted depressive symptomatology.¹⁴ A South African cross-cultural analysis of patients with breast cancer showed depression to be a significant variable.¹⁵

Studies confirm the prevalence of these conditions in patients with breast cancer,^{1,16-19} but identify anxiety as the more common.^{20,21} Prolonged anxiety has immunosuppressive effects, compromises the patient, and may impair her level of cognitive functioning when important health decisions must be made.²²

Rising figures of breast cancer diagnoses, increasing survival rates, and the well documented negative effects of distress on survivors, render it important to raise awareness in healthcare professionals in family practice and oncology with regard to the psychological experiences of these patients, and thereby improve diagnostic and treatment rates.¹⁶

In South Africa, a review of the available literature reveals little research on how black patients with breast cancer experience their disease and treatment, and how this might inform their psychological status.

Differentiating between anxiety and depression

Anxiety and depression are often conflated as psychological distress, but there is a dearth of literature on the differentiation between them. The diagnosis of anxiety or depression in isolation of each another is difficult because symptoms frequently overlap.²³ Studies have found a high percentage of anxiety in oncology populations compared to that of depression, yet the literature on anxiety as a comorbid feature is relatively limited.²⁴ One study found that the prevalence of depression in patients with breast cancer was 19.1%, whereas that of anxiety was 24.1%.²⁵ Patients often experience anxiety prior to treatment, whereas depression only emerges post-treatment,^{25,26} suggesting that anxiety characterises diagnosis, whereas depression is more common after treatment. Anxiety also correlates more with future concerns, such as treatment outcomes.²⁷

Anxiety is defined as an unpleasant subjective response to threat,²⁸ and a diagnosis of cancer is potentially life-threatening.²⁹ Pathological anxiety is more common in women who are diagnosed with breast cancer than in those without disease.^{30,31}

Symptoms

Anxiety is characterised by physiological and psychological symptoms.³² Autonomic overactivity (palpitation and sweating) and anxious behaviour (restlessness and reassurance seeking) feature. Apprehension and poor concentration, as well as muscle tension and fatigue may be present.³³

Anxiety after a cancer diagnosis is not necessarily abnormal, but may become maladaptive. The Diagnostic and Statistical Manual of Mental Disorders diagnostic classification³⁴

requires the presence of core anxiety symptoms to identify pathological anxiety:

- That is disproportionate to the level of threat.
- That is persistent or deteriorating without treatment.
- Makes normal functioning difficult.²⁹

It is problematic to gauge when anxiety is disproportionate to the threat of cancer as this disease is associated with some degree of real threat. The duration of symptoms, usually decisive in diagnosis, is also difficult to apply as anxiety may be labile and situational, making the onset of an episode difficult to define.³⁰

Anxiety disorders

Standardised diagnostic systems classify anxiety disorder as four types:

- *Anxious adjustment disorder*: Anxious adjustment disorder is a quantitatively excessive response that starts within one month of a stressful event.
- *Generalised anxiety disorder*: Generalised anxiety disorder requires more symptoms and persistence for over six months.
- *Panic disorder*: Panic disorder is when anxiety builds up rapidly to a crescendo.
- *Phobic anxiety*: Phobic anxiety arises from a provoking stimulus.

In addition, organic anxiety is abnormal anxiety that is linked to an organic cause,²⁹ and implies a feature of anxiety that is specific to oncology: the difficulty of making a differential diagnosis while the symptomatology presented by cancer therapies is similar. This presents the clinician with symptoms such as fearfulness, restlessness and an inability to concentrate, and associated somatic symptoms such as tremors, palpitations and dyspnoea resulting from the disease or treatment, making definitive diagnosis difficult.³⁵

Somatic processes can cause organic anxiety. Pain, asthenia, nausea and shortness of breath, as well as drug treatments, such as interferon, corticosteroids and morphine, are associated with anxiety. Akathisia is commonly misdiagnosed as anxiety.³⁵

Causes

Disease

Cancer can be construed as life-threatening, and can result in a crisis reaction. Anxiety levels fluctuate over the course of treatment and tend to be highest during diagnostic work-up and towards the end of treatment.^{30,36} Extensive disease and pain are associated with a higher prevalence of anxiety.^{9,30,32}

Treatment

Principal treatment modalities are surgery, chemotherapy and radiotherapy. These involve conflicting psychological elements: the unpleasantness of the process experienced simultaneously with the hope of relief from the disease. Differences in anxiety levels that relate to treatment modalities have been observed.³⁷

Surgery

Generally, anxiety levels heighten before surgery and abate thereafter, implying that patients view surgery as a short-term threat.³⁰ One study found higher anxiety levels in mastectomy patients, compared to those having breast conservation therapy.³⁷ Anxiety appears to be the most common response to mastectomy, probably in relation to pain, disfigurement and body image.^{38,39}

Chemotherapy and radiotherapy

Chemotherapy has unpleasant side-effects, such as alopecia and nausea. After long periods of treatment, these side-effects are significant and lead to psychological distress. Distress ranges from normal feelings of vulnerability and fear, to disabling panic and anxiety. Of these, anxiety is the most common,²¹ and the clinician must distinguish between nonpathological and psychopathological symptoms.³³ Chemotherapy and radiotherapy are both associated with anxiety. The toxicity of chemotherapy co-varies with anxiety, so can present a threat for its duration.⁴⁰ The highest levels of anxiety in the case of inoperable tumours are observed in patients not receiving therapy, probably because of the perception that no treatment implies that decline is inevitable. There is a marked rise in anxiety in patients ending radiotherapy, possibly because of the perception of losing the protective effect of treatment.³⁰ Anxiety appears in all modalities, but is significantly higher in patients undergoing chemotherapy,^{37,41} and is highest before the first infusion.²⁸

Procedures

Magnetic resonance imaging and computed tomography scans are associated with panic attacks and acute anxiety, exacerbated by immobilisation, the duration of the examination and the noise of the machine.⁴² The nature of the anxiety may be variable. Some patients are anxious about being in the scanner, while others focus on the test results.^{32,35,42}

Risk factors

Physically impaired and younger women are more likely to meet the criteria for anxiety disorder^{9,43,44} as are patients from lower socio-economic groups.²⁹ Highly educated women are more likely to become anxious.³¹

Patients who lack social support and good family relationships which moderate the impact of stress caused by the breast cancer are also at risk.^{17,45}

Pain, fatigue and extensive or advanced disease are predictors of anxiety in patients with breast cancer.^{9,17,29}

Management

The effective management of anxiety in patients with cancer aims to improve quality of life, which can strengthen the patient's resolve and may improve prognosis.²

Four instruments for anxiety assessment that were used in the reviewed research were the Hospital Anxiety and Depression Scale,⁴⁶ designed to screen mood disorders in medically ill patients; the State-Trait Anxiety Inventory;⁴⁷ the Hamilton Anxiety Rating Scale,⁴⁸ which provides an overall measure of global anxiety; and the Beck Anxiety Inventory,⁴⁹ developed to discriminate between anxiety and depression.³⁴ Although psychometrically sound, these measures are not intended for patients from different cultures, and require more research on the cognitive, somatic and behavioural components of anxiety cross-culturally in South Africa.

Pharmacotherapy

Anxiety levels appear to be highest early in diagnosis and treatment when the short-term use of benzodiazepine anxiolytics has been successful.² Benzodiazepines, low doses of neuroleptics and certain antidepressants are frequently used for the symptomatic treatment of anxiety in patients with cancer.⁵⁰

Psychosocial interventions

Communication with the patient remains the main diagnostic approach to assessing anxiety. A discussion on the reasons for the patient's anxiety can lead to an understanding of how the patient perceives the disease, how she is coping and to identify symptoms for diagnosis. Cognitive behaviour therapy (CBT) is a useful approach, although any intervention should account for socio-cultural differences within various African oncology settings.^{8,15}

Coping style can mediate positive adaptation to breast cancer. Coping refers to cognitive and behavioural efforts which the patient makes to tolerate external and internal demands.⁵¹ Coping may be active or passive. Active coping refers to confronting problems and deciding on solutions, while passive coping refers to escaping the source of the distress.⁴⁵ A positive behavioural pattern can assist with adaptive function, as opposed to a hopelessness or helplessness style which contributes to poor treatment outcome.⁸

Psychosocial interventions are beneficial for those with a lower quality of life who derive greater benefit from enhanced coping.⁵² CBT has proved to be useful in helping patients to identify cognitive schemata that trigger negative emotions and behaviour, and to analyse and restructure dysfunctional thoughts.⁵³

Suggestions for future research

Little research on South African black patients with breast cancer has been published, and a dearth of instruments exists for the assessment of psychological distress in patients for whom English is not their first language. The identification of distressed patients can never be comprehensive or effective with such difficulties in diagnostics.

Conclusion

Recent research has reiterated the prevalence of anxiety in breast cancer populations and identified subpopulations who warrant closer scrutiny. Because of the documented psychological impact of the disease and the increase in diagnoses of breast cancer in South Africa, further research is essential, as well as the education of oncology healthcare professionals and family practitioners with regard to at-risk patients, and the importance of a psychological work-up within an overall diagnosis. In this way, the shortcomings of the “disease first” approach can be counteracted.

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