Integrating Cognitive Behavioural Therapy in Oncology: A Case Report on Psychological Interventions for a Cancer Patient

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ABSTRACT

Endometrial cancer is a malignancy of the endometrial lining of the uterus. This case presents a detailed account of a 38-year female patient diagnosed with uterine cancer. The complaints reported by the patient were anxiousness, muscle tension, sleep disturbances, difficulty in breathing, excessive worry, fear of transmitting the illness, and uncertainty about her future and children. A comprehensive psychological assessment was conducted, which included a semi-structured interview, subjective rating of symptoms, a worry log (a self--monitoring tool to record the frequency, intensity, and content of worries), and the Siddiqui Shah Anxiety Scale. A management plan comprising cognitive behavioural therapy techniques was implemented. This approach helped the patient reduce her complaints of uncertainty, anxiousness, fear of transmitting illness, and muscle tension significantly.

Key Words: *Endometrial cancer, Cognitive behavioural therapy, Anxiety*.

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INTRODUCTION

Endometrial cancer (EC) originates from the endometrium of the uterus. It is the most frequently diagnosed gynaecologic cancer in women and contributes notably to illness and death.[1] The classification of EC has historically been based on histo-pathological features, dividing it into Type I and Type II forms. Emerging molecular studies suggest that EC represents a more complex and heterogeneous group of diseases.[2] Females with cancer have a higher prevalence of depression and anxiety than males. Various approaches of cognitive behavioural therapy (CBT) can help in reduce symptoms of depression and anxiety in cancer patients.[3]

This report presents the case of a woman diagnosed with EC who experienced significant psychological distress, and her symptoms were managed using CBT.

CASE REPORT

A 38-year female was referred by her oncologist to the Health Counsellor for psychological assessment and intervention. She had uterine cancer and underwent surgery and chemotherapy.

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The primary psychological complaints reported by the patient were anxiousness, muscle tension, sleep disturbances, difficulty in breathing, excessive worry, fear of transmitting the illness, and uncertainty about her future and children. She was diagnosed with cancer at the age of 34 years. She had a family history of cancer; her maternal aunt, who was also her mother-in-law, died five years earlier from breast cancer. Following her diagnosis, the patient became worried, and her family members also expressed significant concern. She experienced a reduced appetite and disturbed sleep patterns due to excessive worry, with difficulty in sleeping at night, persistent stress, and sadness. She reported a loss of pleasure in life and episodes of difficulty breathing due to excessive worry. Muscle tension was also noted during periods of heightened stress related to her medical condition. Her first surgery was performed four years ago, immediately after the initial diagnosis. However, her cancer re-emerged 16-17 months ago, leading to another surgery for tumour removal followed by chemotherapy. This second round of treatment left her feeling weaker and with a reduced appetite, as side effects of chemotherapy. Although the loss of her uterus was a significant occurrence that could naturally trigger grief, her clinical presentation suggested a psychological response that outspread the usual grief reaction. Her symptoms, persistent low mood, loss of pleasure in daily activities, excessive worry, sleep disturbances, difficulty breathing, and muscle tension had persisted over time, causing marked functional decline. These symptoms were more consistent with the diagnostic criteria for an anxiety or depressive disorder rather than general grief. Additionally, her distress was not related to her fertility, as she already had children, but it was affecting multiple areas of her life.

Table I: The patient's symptoms and therapeutic techniques.

Therapeutic techniques	Descriptions	Patient's symptoms
Psychoeducation	Educating the patient about anxiety and coping strategies	Excessive worry and health-related fear
Cognitive restructuring	Challenging and modifying irrational thoughts	Persistent negative thinking, hopelessness
Behavioural activation	Engaging in meaningful activities	Loss of pleasure, inactivity
Stress management	Relaxation techniques, breathing exercises	Muscle tension, breathing difficulty
Problem-solving	Structured approach to deal with stressors	Difficulty coping with a medical condition
Hope building	Enhancing positive future outlook	Feelings of sadness and helplessness

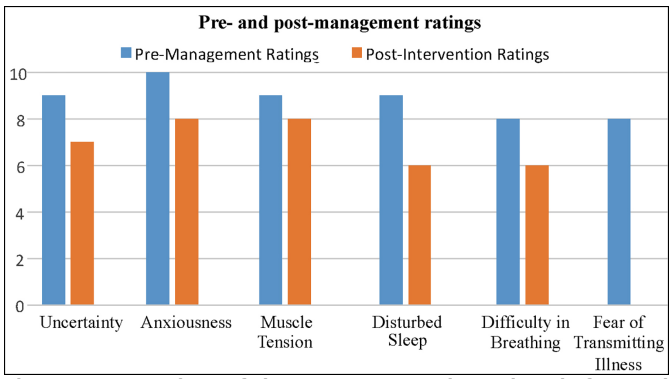

Figure 1: Comparison of the symptom severity ratings before and after management intervention.

Applied behaviour analysis (ABA), a single case design was employed. In phase A, a psychological assessment was conducted, which included a semi-structured interview and the Siddiqui Shah Anxiety scale (SSAS) to assess her issues. Cronbach's alpha reliability of the SSAS was 0.90. It was published in Pakistan.[4] In phase B, therapy was given to her that included the implementation of a treatment plan, which involved a cognitive and behavioural approach (Table I). A total of twelve therapeutic sessions were conducted, with each session lasting 40-45 minutes. Psychoeducation was done, and the patient was told about how negative beliefs impact the mental and physical health of the person. Different symptoms were discussed that were the basic root cause of the anxiousness. She was told about the treatment plan and prognosis. The family was psycho-educated on how their support can help her in overcoming the negative symptoms related to her physical and mental health. Deep breathing as well as progressive muscle relaxation exercises were practised in the sessions to make her relaxed and calm. Cognitive restructuring was used to reframe the worrisome negative thoughts that she experienced from time to time. It included identifying negative automatic thoughts, replacing them with rational beliefs, and evaluating the restructuring process. As the client was feeling so stressed about her medical condition, the double standard technique was used for positive and compassionate self-talk.[5] The mirror technique is an activity for building self-esteem, confidence, and self-belief. It works by standing in front of the mirror each day, looking directly into the eyes, engaging in healthy breathing techniques such as deep breaths, and repeating positive affirmations to herself. Together, we selected specific affirmations for her to repeat daily. The client was taught how she can use the mirror technique to increase her confidence regarding her health. She was encouraged to practice this technique consistently every day. Another technique called thought stopping was also utilised to reduce her mental rumination. It is a strategy that involves blocking unwanted, distressing thoughts. The technique is sometimes used in CBT as a way to halt or disrupt negative thoughts. She was advised to say stop loudly or in her mind whenever she got an intrusive thought and keep practising this technique until she could manage her stressful, intrusive thoughts. She was told she should do some kind of physical exercise and take meals at the proper time. Physical exercise and scheduled meal intake will promote her better health. This will help her in preventing physical and mental health issues.[6] The client was also advised to practise sleep hygiene to improve the quality of her sleep. Different activities that were taught to the client were: avoiding caffeine near bedtime, dimming lights in the room, keeping the room quiet and comfortable, maintaining regular sleep and wake time, avoiding napping in the daytime, and avoiding large meals before bedtime. She was told that by following the recommended practices, she could overcome her sleep problem. She had a fear that her cancer could be transmitted to her family, but she was educated regarding this issue. It was explained to her that cancer cannot be transmitted by sitting with a cancer patient. She was reassured about a great social support in her life, such as the support of her husband, which can help her cope with such a stressful condition.

From pre- and post-assessment, it was evident that a significant reduction in symptoms occurred in the patient, such as decreased worries and better sleep than before. She was also feeling more relaxed and had less muscle tension. There was a reduction in the severity of symptoms after intervention (Figure 1). Her post-intervention rating according to SSAS was also reduced from severe to moderate, indicating the effectiveness of CBT.

DISCUSSION

Several factors contribute to the patient's psychological distress. One of the factors that might have predisposed her to her cancer was the family history of cancer, as indicated by the fact that her maternal aunt had the disease. The genetic link increased her chances of developing cancer herself. Additionally, her sensitive

temperament also served as a predisposing factor for the depressive symptoms she was experiencing. She was quite prone to begin overthinking about her illness, which contributed to both anxiety and depression. According to the big five personality traits, the patient had a high level of neuroticism, which was making her more vulnerable to stress. Neuroticism and low extraversion may act as third variables, partially accounting for the associations between emotional disorders and life stress. The precipitating factor in this case was the death of her maternal aunt, who was also her mother-in-law. Her cause of death was also cancer. Her death made her more vulnerable to stress and made her more worrisome. The correlation between stressful life events and psychiatric illness is stronger than the correlation with medical or physical illness.[7] The relationship of stress with psychiatric illness is strongest in neurosis, which is followed by depression.

Perpetuating factors that were maintaining her anxious and depressive symptoms related to her health were poor financial conditions, as well as her poor coping skills. She reported that her husband is a labourer and their financial conditions worsens day by day due to the increasing expenses of her treatment. Stressful environmental conditions can contribute to physical and mental health symptoms in individuals.[8]

The patient reported that she becomes sad and quiet when something negative happens in her life. She was using ineffective coping skills that exacerbated her stress regarding her health.[9] When a person isolates themselves and does not share their suffering with anyone, it can worsen their mental health. Social isolation is one of the key predictors of depression. Isolation from friends and family can increase psychological distress.[10]

The protective factor in this case was the support provided by the patient's husband. He was with her without any hesitation throughout her treatment period. A positive family environment can benefit the mental health of the person.[11] Emotional support from parents, family, and friends for the individual dealing with depression helps in earlier recovery from depressive symptoms. Another protective factor in this case was the adherence to the treatment despite the financial conditions.[12] Recent evidence indicates that patients who adhere to treatment have better health outcomes than poorly adherent patients.

It is concluded that due to the genetic vulnerability and psychosocial factors, the patient was at high risk of developing psychological distress. The presence of certain protective factors contributed to a better prognosis. Furthermore, a comprehensive therapeutic plan, based on a cognitive and behavioural approach, showed improvement in the patient's symptoms.

PATIENT'S CONSENT:
Informed consent was obtained from the patient for the publication of the data concerning of this case.

COMPETING INTEREST:
The authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:
FG: Conceptualisation of the study, literature review, drafting of the manuscript, and final editing.
MAN: Supervision and critical revision of the manuscript.
Both authors approved the final version of the manuscript to be published.

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