

# PREVALENCE OF DEPRESSION IN CANCER SURVIVORS: A REVIEW STUDY

Mansi Dwivedi

Research Scholar, Amity University Uttar Pradesh, Lucknow, 226010

## ABSTRACT

**Depressive disorders are serious illnesses that can negatively affect an individual's quality of life. A study found that 15-25% of cancer patients also suffer from depression. Compared to the general population, this is more than double. According to cancer registry data, the number of new cancer cases in India is estimated to be about 800,000 each year, which is affected by mental health and social well-being. In any given time, there are likely to be three times the number of cases as there are at any given time. For men, tobacco-related cancer accounts for 35 to 50% of all cancers, and for women, it accounts for about 17%. The main objective of the study was to focus on the mood related, physical, behavioural and cognitive symptoms of depression in cancer survivors and to help the patients coping-up with depression.**

**IndexTerms:** *Cancer, Cancer Patients, Depression, Mental Health.*

## I. BACKGROUND OF THE STUDY

People with cancer are highly likely to suffer from depression and anxiety following a cancer diagnosis (27, 37). When cancer is diagnosed without a prior psychiatric history, there is a higher frequency of common mental disorders, resulting in adverse effects on treatment, recovery, quality of life, and survival (40). Psychiatric patients are especially vulnerable to cancer-related mortality after having previously used psychiatric services [16]. While many cancer patients with or without a prior mental health history are monitored for physical health symptoms and side effects during and after treatment, mental health needs are often neglected. In the past few decades, people are now living longer with cancer due to advances in early detection and improved treatments, presenting a significant global challenge. In 185 countries, 43.8 million people die within five years of a diagnosis of a cancer in 36 types (8), and in the United States, the number of cancer survivors is expected to increase exponentially by 2040 from 15.5 million in 2016 to 26 million (31). Among people with cancer, co-morbid depression and anxiety are a growing clinical and policy priority. This article argues that more research must be done on these issues. This paper provides a review of the evidence on common mental disorders among people living with and beyond cancer in order to provide background and support for our argument. Co-morbid depression and anxiety are discussed as well as factors that may increase the chance of experiencing them, as well as possible treatment options and care. Patients experience great distress when diagnosed with cancer, which is a life-threatening disease. When diagnosed with cancer, patients feel more distress than when diagnosed with a non-neoplastic disease that has a poorer outlook (23). When cancer patients experience high levels of mental distress for an extended period of time, they may experience anxiety, depression, or both (20). It is common for cancer patients with depression and anxiety to show mixed symptomatology, with two-thirds showing clinically significant levels of each (9). As a result of depression, patients have lower quality of life (QOL) and poorer outcomes, which leads to a higher risk of mortality from cancer (13, 28). Approximately 39% of patients with minor or major depression have a higher mortality rate as compared to patients with no depression symptoms (30). More than 70% of oncologists and 85% of patients believe that mood affects cancer progression, which is supported by research. Depression is three times more common among cancer patients than among the general population (2). Major depressive disorder (MDD) prevalence has been found to range from 2.0 to 43.5% (26, 31) according to studies using Diagnostic for Statistical Manual of Mental Disorders (DSM) (6), while rates of depression have been recorded as high as 49.0% (12) on palliative care wards. There are varying prevalences reported due to a variety of factors, including the use of different assessment tools, the types of patients interviewed, the age groups and gender proportions of patients, and their inpatient status. Based on data from Linden et al (20) and Ng et al (25) detailing rates of depression in >9,000 patients in a variety of settings and ages, this prevalence can be estimated as 10.8% and 12.9%, respectively. Moreover, 16% of patients report subclinical depression (20,28), which is still damaging. Pancreatic and lung cancers are the sites where depression is most common, whereas invasive skin cancers are the sites where it is least prevalent (20). The prevalence of depression in children and adolescents with cancer does not differ from that in healthy controls (5, 36), whereas in adults with some cancers depression is inversely related to age (20). In some cancer types, female patients are twice as likely as male patients to experience depression (20). A period around the time of diagnosis is associated with the highest levels of psychological stress and depression (20). Cancer survivors, however, experienced depression at a similar rate to the general population, 4% (12) five years after diagnosis. Cancer pain and metastatic disease have also been linked to depression (12). Compared with patients with low pain levels, patients with high pain levels are significantly more likely to experience depression. According to one study, 33% of those suffering from high pain suffer from depression, compared with 13% of those suffering from low pain levels, suggesting pain may be a contributing factor to depression (34). The psychological problems of cancer patients persist and can be burdensome during treatment, causing additional challenges when it comes to managing and controlling them (3, 37), complying with the treatment course (3), extending hospital stay (17, 22), and, ultimately, determining survival rates (32, 33). Depressive disorders are two to three times more prevalent among cancer patients than in the general population (21, 29). Psychological distress has been evaluated in a variety of clinical settings (outpatient clinics, hospitals, and palliative care facilities) and varies according to the stage of the disease (newly diagnosed, recurrence, survivorship, or advanced stages), and treatment phase (10, 18, 24), which ranged from 5.0 to 49.0% (37) in previous studies. According to a previous meta-analysis that included 211 studies (representing more than 82,000

patients) on the prevalence of depression among cancer patients, there was a difference in prevalence rates of depression depending on the type of instrument, the type of cancer, and the phase of treatment (18). Depressive disorders were also more prevalent among cancer patients with genitourinary cancer at 5.6% than lung cancer at 13.1% (38). In addition, depression is more likely to occur in patients with severe illnesses and advanced stages of cancer (14, 15). The results of a previous critical review, which included 11 previous systematic reviews and meta-analyses, that identified depression risk factors among cancer patients, revealed that depression is caused by a wide range of factors, in addition to biological factors (type of cancer, stage of disease, and treatment-related factors) (10). Factors such as family history, mental illness, and personality characteristics are as important as interpersonal and social factors (such as loneliness, social isolation, low socioeconomic status, and lack of social support). In order to detect patients who need help and further assessment and, therefore, follow-up care, psychological distress among cancer patients needs to be assessed. It is becoming increasingly evident that depression is a significant problem among cancer patients. As of 2018, Jordan's population was 9,903,798 and there were 10,898 new cancer cases diagnosed. According to age-standardized rates, 157.8 incidents occurred per 100,000, and 89.7 deaths occurred per 100,000. In terms of cancer prevalence, breast cancer, lung cancer, colorectal cancer, bladder cancer, and leukemia (39) were the top five most prevalent. There is little attention paid to depression, despite its role as a significant complication of cancer (11). Cancer patient depression and anxiety are rarely studied in the Middle East, due to a small sample size and the restriction of studies to specific types of cancer and clinical settings (1, 2, 4). A primary goal of this study is to describe the prevalence and risk factors of depression and anxiety symptoms among cancer patients, both inpatients and outpatients. Identifying cancer patients with depression and anxiety will allow us to treat them more effectively. To improve a cancer patient's clinical outcome, mental and medical support can be provided to those who are at higher risk. When depression symptoms are identified early, they can be managed efficiently and better adherence to treatment can be achieved.

## II. DEPRESSION

In the course of coping with cancer, patients and their families may experience feelings of depression. Feeling sad and grieved is normal. There may be uncertainty about dreams, plans, and the future. However, if someone has been depressed for a long period of time or has difficulty carrying out daily activities, there is cause for concern. There are many types of depression, including mild, temporary, and lasting depressions. It is often referred to as clinical depression or major depression when it is more severe. In the case of severe or clinical depression, a person has difficulty functioning and following his or her treatment plan. The condition affects about one out of four cancer patients, but it is treatable. When a person is diagnosed with cancer, they are more likely to suffer depression. During, after, or before cancer treatment, some people may experience depression. A mood disorder such as depression is a type of mental illness. Treatment for cancer may be more difficult because of it. Making decisions about your health may also become more difficult. It is therefore important to identify and treat depression during cancer treatment.

### WHAT TO LOOK FOR

After depression is diagnosed or at any time during or after treatment, symptoms may appear. There is a wide range of severity among these symptoms. When a person suffers from severe depression, their relationships and everyday lives are negatively affected. The condition is known as major depressive disorder. If the patient experience any of the following symptoms for more than two weeks, he/she should talk with his/her doctor.

#### *Some Mood-related symptoms*

- A feeling of sadness.
- A feeling of being down.
- A feeling of hopelessness.
- A feeling of irritation.
- A feeling of being numb.
- A feeling of worthlessness.

#### *Some Behavioral symptoms*

- Disinterest in previously enjoyed activities.
- A tendency to cry a lot.
- Refusal to interact with family or friends.
- An inability to motivate yourself to carry out daily tasks.

#### *Some Cognitive symptoms*

- Inability to focus.
- Making decisions is difficult.
- Problems with memory.
- There are negative thoughts in the mind. Often these thoughts include thought of hurting oneself or thinking that life is not worth living.

#### *Some Physical symptoms*

- Tiredness.
- Loss of appetite.
- Sleep disorders, such as insomnia, inability to get to sleep and stay asleep.
- Hypersomnia, a feeling of being exhausted most of the time.
- Issues with sexual desire.

- Cancer and cancer treatments can cause cognitive and physical symptoms. A person with cancer is more likely to be diagnosed with depression if he or she presents mood-related and behavioral symptoms.

### **Risk factors for depression**

These risk factors increase the risk of depression in people with cancer:

Depression or anxiety diagnosis in the past

- Depression or anxiety in the family.
- Family or friends are not supportive.
- Lack of support from friends or family
- Expenses.

### **A depression screening**

It is recommended that people be screened for depression by the American Society of Clinical Oncology (ASCO). It is important to have screenings before, during, and after the treatment of a cancer diagnosis. There is no one-size-fits-all treatment for depression, as it will depend on your symptoms and how often you experience them. Talk openly about depression with your doctor, even if it's hard. The following topics should be discussed:

- The feelings you have.
- Concerns specific to the situation.
- Symptoms of physical illness.
- How it effects your daily life.

Their treatment plan will be based on this assessment.

### **III. TREATMENT OF DEPRESSION**

The treatment of depression usually benefits people with depression. People with moderate to severe depression are often treated most effectively with a combination of psychological therapy and medication. Depressive symptoms may be relieved by talking with a mental health professional for some people with mild depression.

#### ***Psychological Treatment***

Psychologists, counselors, and psychiatrists are among the mental health professionals. By improving your coping skills, developing a support system, and reshaping negative thoughts, they can help you cope more effectively. There are many options for therapy, including individual therapy, couples therapy, and family therapy. Medication can also be prescribed by psychiatrists.

#### ***Exercise***

It has also been shown that exercise can help treat depression, with most studies suggesting exercising at least three times per week. In the aftermath of a cancer diagnosis, the American Cancer Society recommends that you resume exercising as soon as possible, but many cancer patients find this difficult. If you are unsure what's appropriate for you, speak with your health care provider.

#### ***Stick to routines***

The implementation of a routine can help you maintain a sense of accomplishment and control, which can adversely affect your mental health and well-being during cancer treatments and depression treatment. A routine can also motivate individuals to engage in activities they may not otherwise want to do.

#### ***Medications***

Antidepressant medications come in a variety of types. Based on these factors, your doctor will choose the best antidepressant for you.

- Based on your needs.
- An adverse effect may occur.
- Prescription medications
- The history of your health

All your medications and supplements should be discussed with your doctor. Antidepressants may interfere with some types. After starting an antidepressant medication, some people experience improvement after two weeks. A full effect of the medication usually takes 6 to 8 weeks. Major depressive disorder medications are particularly helpful for easing mood and physical symptoms. Positive thinking and low self-esteem can be managed through psychological treatment in conjunction with medication.

### **IV. MANAGING DEPRESSION**

Counseling, medications, or a combination of both may be used to manage depression in people with cancer, as well as other specialized treatments. Cancer patients can benefit from these treatments as they improve their depression, reduce their suffering, and improve their quality of life. In addition to changing life plans, changing self-esteem and body image, disrupting social roles, and facing financial challenges, cancer patients also experience sadness and grief for many reasons. Monitoring your feelings during these changes and challenges is crucial to ensuring that they don't interfere with your day-to-day life or interfere with your medical treatment.

**WHAT PATIENTS CAN DO**

- Share your feelings and fears with your family members. You're allowed to feel sad, angry, or frustrated, but don't vent your feelings on others. Listen carefully to one another, decide together what you can do to support one another, and encourage one another to speak but don't force it.
- Counseling and support groups can be helpful.
- Spiritual support can be obtained through mindfulness, prayer, meditation, or other methods.
- Exercises that promote deep breathing and relaxation should be done several times per day. (Start with your toes and relax them up to your head, imagining yourself at a breezy beach or a sunny meadow as you relax).
- To cope with the changes in your life, consider working with a professional counselor.
- If you are depressed, ask about depression treatments.

**WHAT CAREGIVERS CAN DO**

- Encourage the patient to share his or her fears and concerns with you. Make sure the patient is ready to talk before you force them to do so.
- Be attentive to the patient's feelings without judging them. Self-defeating thoughts are okay to point out and disagree with.
- Keep your tone positive and avoid encouraging the person to "cheer up."
- You can support each other by deciding what you can do together.
- If the person is suffering from severe anxiety, fear, or depression, don't try to reason with them. Consult a cancer care team member for assistance.
- Participate in activities that the person enjoys.
- Caregiver depression is also possible. Caregivers may also benefit from all of these suggestions.
- Don't forget to take care of yourself. Engage in activities you enjoy with friends.
- If you need support for yourself, think about joining a group or getting one-on-one counseling.

**CALL THE MENTAL HEALTH PROVIDER OR THE CANCER CARE TEAM IF THE PATIENT**

- Can't stop thinking about death, or has thoughts of suicide.
- You are concerned about their safety because of their behavior.
- For several days, they are not interested in their usual activities and cannot eat or sleep.
- Having difficulty breathing, sweating, or feeling restless.

**V. FOLLOW-UP**

Maintain a detailed record of your visits to your mental health professional and the treatment you receive. Inform them if you are experiencing any new symptoms or how the treatment is going. Following 8 weeks of treatment, if depression symptoms have not decreased, consider the following:

- Alternative treatments.
- Your treatment plan should include counseling.

It may also be necessary to discuss these options with your health care team earlier in the process, if necessary.

**VI. DISCUSSIONS/ CONCLUSION**

Mental health is becoming an important priority in research and clinical practice for people living with and beyond cancer. A number of variables, including the type and stage of cancer, influence the prevalence of anxiety and depression among people with cancer compared to the general population. Support and treatment for psychological problems are often lacking for patients. Mental illness is often under-recognized and under-treated, resulting in inadequate awareness and identification of symptoms, a lack of support, lack of evidence about effective treatments, and stigmatization. In particular, we emphasize the lack of high-quality research on long-term cancer survivors, the potential effects of long-term and late cancer treatments, and the lack of prevention studies. In addition to including young people and populations from low- and middle-income countries in future research, it is crucial to include less common types of cancer as well. As the number of cancer survivors grows, this research is of particular importance.

In cancer patients, depression is an under-recognized co morbidity, which affects patient suffering, mortality, and health care costs. Cancer-related depression has a unique symptomatology and biological etiology that are distinct from depression in healthy individuals. Researchers are hoping to develop novel anti-inflammatory drugs that can provide cancer patients with more rapid and effective relief than current antidepressants. These drugs can target extensive inflammatory pathways and endocrine pathways known to contribute to depression. There is still a need for further research into how psychosocial and pharmacological treatments can be combined most effectively for cancer depression.

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#### **BIBLIOGRAPHY**

**Mansi Dwivedi** is pursuing Ph.D in Psychology from Amity University, Lucknow. She always tries to smile & stay calm in every situation. She loves to write Hindi poetry. Many of her research papers have been published in renowned journals. She has presented her papers in National/International Conferences, and also has been awarded for her paper presentation in an International Conference. As a researcher she focuses on community responses on gender issues and emphasizes improving the community system.

#### **ACKNOWLEDGEMENTS**

The author acknowledges with a deep sense of reverence, her gratitude towards her dear friend Er. Nidhi Tiwari for always being there with her in every phase of her life. Shwet Shikhar Tripathi- Thankyou for your trust, support and the encouragements. Last but not the least my family for making me who I am today as a person.