

A Study On Prevalence Of Anxiety And Depression Among Cancer Patients: A Cross Sectional Study

¹Dr. Sakshe Jain, ²Dr. Archana Javadekar*, ³Dr. Bhushan Chaudhary, ⁴Dr. Suprakash Choudhury

1. Resident, Department of Psychiatry, Dr D.Y. Patil Medical College, Hospital and Research Centre, Dr D.Y. Patil Vidyapeeth, Pimpri, Pune, India 411018.
2. Professor, Department of Psychiatry, Dr D.Y. Patil Medical College, Hospital and Research Centre, Dr D.Y. Patil Vidyapeeth, Pimpri, Pune, India 411018.
3. Professor, Department of Psychiatry, Dr D.Y. Patil Medical College, Hospital and Research Centre, Dr D.Y. Patil Vidyapeeth, Pimpri, Pune, India 411018.
4. Professor, Dr D.Y. Patil Medical College, Hospital and Research Centre, Dr D.Y. Patil Vidyapeeth, Pimpri, Pune, India 411018.

*** Corresponding Author:**

Dr. Archana Javadekar, Professor, Department of Psychiatry, Dr D.Y. Patil Medical College, Hospital and Research Centre, Dr D.Y. Patil Vidyapeeth, Pimpri, Pune, India 411018.

Email Id – archanajavadekar@gmail.com

Abstract

Introduction: People who have been diagnosed with cancer have a significantly increased risk of suffering from depression and anxiety. The purpose of this research was to evaluate the levels of depression and anxiety that was found in cancer patients.

Material and Methods: Patients who had just been diagnosed with breast, colorectal, stomach, oesophageal, lung, or thyroid cancer and were planned for surgery, chemotherapy, radiotherapy, or combination therapy were evaluated as part of the study from the years 2020 to 2023. Ethical clearance was obtained and informed consent was obtained for initiation of study. Patients who have a previous diagnosis of a psychological condition were not allowed to participate in the trial. The size of the sample was determined to be 150 cases (based on an estimation of 30 percent anxiety or depression in cancer patients with a significance level of 0.05 and a standard deviation value of 0.20).

Results: During the course of the study, there were a total of 150 participants who had recently been diagnosed with breast, colorectal, stomach, oesophageal, lung, or thyroid cancer. Eighty-one (54%) patients had no clinical symptoms of anxiety, 44 (29.3%) mild anxiety, 25 (16.7%) with symptomatic anxiety and these rates were seen in 78 (52%), 40 (26.7%), 32 (21.3%) for depression, respectively.

Conclusion: Those suffering from cancers of the breast and stomach had the highest prevalence of anxiety and depression compared to patients suffering from other types of cancer.

Keywords: Cancer, Anxiety, Depression, Treatment

Introduction

People who have been diagnosed with cancer have a significantly increased risk of suffering from depression and anxiety. Cancer is one of the most stressful experiences that a person

may go through, which is one of the common triggers that can set off feelings of despair and anxiety.

These diseases have the potential to make cancer therapy more difficult. For instance, a patient who is suffering from untreated depression or anxiety may be less likely to take his/her cancer treatment medicine or maintain healthy behaviours due to feelings of exhaustion or a lack of drive. They might also pull away from their families or other social support systems, which means they won't ask for the help, both emotionally and financially, that they require to deal with the effects of cancer.

As a consequence of this, one may experience growing levels of stress as well as sentiments of hopelessness.¹

Screening patients on a regular basis to assess their level of distress is advised on a global scale as an essential component of quality cancer care.²

The Hospital Anxiety and Depression Scale, is a helpful instrument for screening patients in clinical settings for anxiety and depression. Zigmond and Snaith were the ones that came up with the idea in 1983. It is designed to give doctors with a practical tool that is acceptable, reliable, valid, and easy to use.

This test's objective is to identify and quantify symptoms of anxiety and depression. In spite of the fact that screening for depression and anxiety in cancer patients is extremely important, there has been no previous research done on the prevalence of these psychological disorders among cancer patients in Indian setting.

As a result, the purpose of this research is to evaluate the levels of depression and anxiety that are present in cancer patients.

Material and Methods

Patients who had just been diagnosed with breast, colorectal, stomach, oesophageal, lung, or thyroid cancer and were planned for surgery, chemotherapy, radiotherapy, or combination therapy were evaluated as part of the study from the years 2020 to 2023.

Ethical clearance was obtained and informed consent was obtained for initiation of study. Patients who had a previous diagnosis of a psychological condition were not allowed to participate in the trial.

The size of the sample was determined to be 150 cases (based on an estimation of 30 percent anxiety or depression in cancer patients with a significance level of 0.05 and a standard deviation value of 0.20).

On the basis of a 14-item scale with a maximum score of four points, the Hospital Anxiety and Depression Scale was used to provide a provisional diagnosis of anxiety and depression .

The Hospital Anxiety and Depression Scale is divided into two subscales: one for anxiety (consisting of seven items), and another for depression (seven items).³

The participants were asked to identify, for each item, which of the four possibilities (ranked from 3 to 0; score range, 0-42) comes the closest to reflecting how they have been feeling over the course of the past week.

If you score 0-7, it indicates that you do not have any clinical symptoms of anxiety or depression. If you score 8-10, it indicates that you have moderate anxiety or depression. If you score 11-21, it indicates that you have symptomatic anxiety or depression.

The term "spectrum of anxiety" refers to the accumulation of "symptomatic plus moderate anxiety," while the term "spectrum of depression" refers to the accumulation of "symptomatic plus mild depression."

Statistical analysis

Descriptive statistics were reported as mean (SD) for continuous variables, frequencies (percentage) for categorical variables.

Independent t test was used.

Chi square was used to find the association between categorical variables.

Data were statistically evaluated with IBM SPSS Statistics for Windows, Version 26.0., IBM Corp., Chicago, IL.

Results

During the course of the study, there were a total of 150 participants who had recently been diagnosed with breast, colorectal, stomach, oesophageal, lung, or thyroid cancer.

One hundred forty-six (97.3%) of the cases were married, three (2%) of the cases included single people, and one (0.7%) involved a divorced person.

There were 78 females, making up 52 percent of the total cases, while there were 72 men, making up 48 percent.

In terms of the patients' levels of education, 35.3% of them had less than a high school diploma, 22.3% had a high school diploma or above, 7.4% were illiterate, and 35.3% had a higher level of education than a high school diploma.

The average age of all of the patients was in the range of 22-88. The most of the patients, which amounted to 126 cases (84 percent), were planned to undergo surgery, while the remaining patients were scheduled to undergo chemotherapy or a combination of treatments.

In 139 out of the 142 instances (97.3 percent), there was no history of depression in the patient's family.

Eighty-one (54%) patients had no clinical symptoms of anxiety, 44 (29.3%) mild anxiety, 25 (16.7%) with symptomatic anxiety and these rates were seen in 78 (52%), 40 (26.7%), 32 (21.3%) for depression, respectively.

Table 1: Distribution of anxiety with different types of cancers (N=150):

Sl no	Type of cancer	Mild anxiety N (%)	Symptomatic anxiety N (%)	No clinical symptoms of anxiety N (%)	X ² (df), P
1	Breast	22 (50%)	8 (32%)	16 (19.8%)	28.69 (10), 0.001
2	Colorectal	5 (11.4%)	1 (4%)	18 (22.2%)	
3	Stomach	7 (15.9%)	8 (32%)	25 (30.9%)	
4	Oesophagus	6 (13.6%)	2 (8%)	11 (13.6%)	
5	Lung	2 (4.5%)	5 (20%)	2 (2.5%)	
6	Thyroid	2 (4.5%)	1 (4%)	9 (11.1%)	

Table 2: Distribution of depression with different types of cancers (N=150):

Sl no	Type of cancer	Mild depression N (%)	Symptomatic depression N (%)	No clinical symptoms of depression N (%)	X ² (df), p
1	Breast	21 (52.5%)	9 (28.1%)	16 (20.5%)	26.54 (10), 0.003
2	Colorectal	3 (7.5%)	3 (9.4%)	18 (23.1%)	
3	Stomach	10 (25%)	9 (28.1%)	21 (26.9%)	
4	Oesophagus	3 (7.5%)	5 (15.6%)	11 (14.1%)	
5	Lung	2 (5%)	5 (15.6%)	2 (2.6%)	
6	Thyroid	1 (2.5%)	1 (3.1%)	10 (12.8%)	

Discussion

The spectrum of anxiety, which included symptomatic anxiety as well as mild anxiety, was 46 percent in this study, whereas the spectrum of depression, which included symptomatic anxiety as well as moderate depression, was 48 percent.

According to this study and others, patients with breast and stomach cancer had the highest risk of anxiety and depression.

This finding has both similarities and differences with other studies.⁴⁻¹⁷

It is possible to explain why breast cancer patients have a higher risk of anxiety and depression by looking at the significance of body image and the effect that mastectomy has on it, as well as looking at self-image and the effect that it has on sex desire.

The high rate of anxiety and depression that is observed in patients with cancer of the gastrointestinal tract can be linked to changes brought on by the disease itself or to the influence that various treatments have on the patient's outward appearance.

Common factors that can bring on feelings of anxiety and despondency include weariness, malaise, a loss of weight, and surgical implications such as colostomy.¹⁸

Anxiety and depression were found to have significant associations with the type of treatment in our study, with a high frequency being detected in patients who had chemotherapy as a single treatment, where 66.7 percent had symptomatic depression and 77.8 percent symptomatic anxiety.

This increased incidence of anxiety and despair may be attributed to the fact that the patient is in the terminal stage of the disease and has a poor prognosis, which leads to chemotherapy being chosen as the only treatment choice.

Previous studies have shown that individuals of different ages have distinctive patterns of psychological reaction when confronted with cancer.^{6,10,11,12,14}

According to our research, older persons are more likely to suffer from anxiety and sadness.

Disease can be prolonged by old age, which also raises the risk of cancer metastases and brings about increased disability.

All of these factors contribute to the worry and depression that older people experience.

The absence of clinical structural interviews with patients was a limitation of our research, which led to the Hospital Anxiety Depression Scale based - likely diagnosis of anxiety and depression in patients.

If a structured interview had been done, it is possible that a correct diagnosis would have been reached.

In conclusion, it is recommended that continuous screening for anxiety and depression be performed as a necessary approach for good cancer care.

On the other hand, proper treatment interventions must be performed after the diagnosis of clinically important psychological disorders in order to improve the quality of life in these patients.

Conclusion

Those suffering from cancers of the breast and stomach had the highest prevalence of anxiety and depression compared to patients suffering from other types of cancer. The findings of our study highlight the significance of providing patients with counselling for anxiety and depression as a means of effectively improving the patients' psychological illnesses and, as a consequence, the quality of medical care that is made available in the field of oncology.

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