

A Study of Mental Health Status among Cancer Patients in a Tertiary Care Hospital of Bhopal City – a Mixed Method study

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Abstract:

Background: Cancer is a major global health problem and is frequently associated with anxiety and depression that remain unrecognized and adversely affecting treatment outcome. So, the present study aims to assess the prevalence of anxiety and depression among cancer patients. **Methods:** A hospital-based mixed-method cross-sectional study was conducted among 150 adult cancer patients attending the Oncology Department of a tertiary care hospital in Bhopal for 01 year. Hospital Anxiety and Depression Scale (HADS) was used to collect quantitative data and in - depth interview for qualitative data. Chi square test was applied to test the association between quantitative variables and thematic analysis for qualitative data. **Results:** The mean age of participants was predominantly above 40 years, with males constituting 53.3%. Breast cancer (23.3%) was commonly reported cancer. The prevalence of anxiety and depression was 37% and 29%, respectively. Anxiety showed a significant association with gender ($p=0.032$) and cancer stage ($p=0.002$), while depression was significantly associated with marital status ($p=0.049$), socioeconomic status ($p=0.033$), and cancer stage ($p=0.022$). A strong positive correlation was observed between anxiety and depression scores ($r=0.8524$). Qualitative analysis showed varied perception, financial insecurity and social stigma. **Conclusion:** A substantial proportion of cancer patients experienced anxiety and depression, particularly those with advanced-stage disease. Participants commonly reported fear, hopelessness, financial insecurity, social withdrawal, and concerns regarding the future. It highlights the need for routine mental health screening as a part of comprehensive cancer care.

Keywords: Cancer, Anxiety, Depression, Hospital Anxiety and Depression Scale (HADS), Mental Health, Mixed-Method Study,

Introduction:

According to WHO, cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths in 2020, or nearly one in six deaths.^[1] Data from the literature shows the fact that patients with malignant diseases with mental disorders usually do not receive adequate treatment, despite the existence of effective

psycho-oncological interventions, especially for common problems such as depression and anxiety.^[2] Due to social stigma and other reasons, most of the cancer patients do not discuss their psychological problems with treating physician. As a result, majority of psychological morbidities go unrecognized and untreated, so it becomes the most pressing and urgent

Quick Response Code	Access this article online	How to cite this article : Namdev G, Gupta S, Verma M, Shrivastava S. A Study of Mental Health Status among Cancer Patients in a Tertiary Care Hospital of Bhopal City – a Mixed - Method study. Healthline. 2026;17(2): 139-148
	Website : www.healthlinejournal.org	
	DOI : 10.51957/Healthline_842_2026	

Received : 28-04-2026

Accepted : 24-06-2026

Published : 23-07-2026

issue of relevance to cancer patients and their families. These psychological problems, specially anxiety and depression can also impact on the disease course, morbidity, hospital stays, treatment compliance and efficacy, and possibly also prognosis and mortality.^[3-4] A meta analysis showed that non-compliance was greater in patients with depression as compared to non depressed patients.^[5] Therefore, it is important to identify patients developing psychological distress during the course of treatment, so that appropriate actions can be taken in time. A cross-sectional analysis of routinely collected clinical data demonstrates that 73% of cancer patients with a diagnosis of depression are not receiving potentially beneficial care for their illness.^[6] Some patients were taking antidepressants and antipsychotic drugs to manage their mental health during their cancer treatment, while others did not.^[7] Thus, treatment of psychological problems among cancer patients is an important issue in oncology. Psychiatric counselling offers the patient a place to express their worries and help them to regain hope to live as some patients start to separate themselves from the society after the diagnosis. Despite the presence of depression and anxiety among cancer patients, very little literature is available in India. There are very few studies found regarding the prevalence of these psychological issues among cancer patients in Bhopal city. So, in this context, present study was to be planned to find out anxiety and depression among cancer patients along with affecting socio demographic determinants and also to know their perceptions and attitude about their diagnosis.

Methods:

Study type

This was a cross-sectional observational study conducted at the hospital. It consisted of quantitative and qualitative data collection components.

Study population

Convenience sampling was used to recruit patients (Out-patient and In-Patient department) diagnosed with any type of cancer and report to Department of oncology in a tertiary care hospital of Bhopal city during the period of data collection.

Study Period

The whole study was carried out for 2 years and 6 months.

Duration of data collection- approximately 01 year (Dec 2024-Nov 2025)

Sample size

The sample size was calculated using the formula $n = 4pq/L^2$, where p represents the estimated prevalence, $q = (100 - p)$, and L is the allowable error. Based on previous literature, the prevalence was assumed to be 39%; therefore, $p = 39$ and $q = 61$. The relative precision was taken as 20.4% of the prevalence, giving an allowable error of 7.96. Substituting these values into the formula yielded a sample size of 150.34, which was rounded to 150 participants. Thus, a total of 150 patients with cancer were included in the study.^[8]

Inclusion criteria

1. All cancer patients above the age of 18 years.
2. Patients who give consent to participate in the study.

Exclusion criteria

1. Patients with a history of psychiatric illness before the diagnosis of cancer
2. Critically ill patients

Data collection procedures and instruments used

Convenience sampling was used to recruit the patients. The present study used mixed method approach for collecting data, i.e. both qualitative and quantitative.

For collecting quantitative data

1. A pre-designed and semi- structured questionnaire was used, consisting of the following two sections-
 - (a) **Socio-demographic factors and medical history** - age, gender, religion, place of residence, marital status, occupation, socio - economic status, history of onset of symptoms, timing of probable diagnosis, duration and type of treatment, getting benefit from any government healthcare schemes and status of out-of-pocket expenditure and significant history of any previous hospitalization or illness of longer duration. After applying the Modified

BG Prasad Scale -year 2025, the socioeconomic status was consolidated into three categories: upper, middle, and lower class.^[9]

- b) **Clinical data relevant with diagnosis of cancer** –type and stage of cancer, psychotropic medicine used, type of therapy, treatment regimens, current activity and symptoms burden.

2. **Hospital Anxiety and Depression Scale (HADS Scale)** - It is a 14-item questionnaire, consisting of two subscales: anxiety and depression. Each item is rated on a four- point scale, giving maximum scores of 21 for each anxiety and depression. Finding scores of 11 or more on either subscale are considered to be a significant ‘case’ of psychological morbidity, while scores of 8-10 represent ‘borderline’ and 0-7 ‘normal’.^[10]

For collecting qualitative data

An in-depth interview technique was used with the support of audio-recording facilities. Interviews were unstructured and conducted in Hindi, the language commonly spoken in the study area. Audio recordings were transcribed verbatim. Each interview lasted approximately 40–45 minutes. The in-depth interviews were conducted by trained co-investigators involved in the conceptualization of the study. Approximately 60 patients participated in the qualitative component. The interviews explored participants’ perceptions and experiences of living with cancer, including the impact of the disease on their daily lives, the type of cancer and treatment being received, and issues related to their mental health and psychological well-being.

We tried to know the perception of patients, such as how they feel and what the impact of this disease is on their life, what type of cancer and what type of therapy they are undergoing, along with focusing on their mental health status.

Quality control

The validity of the study tool was ensured by conducting a pilot study on 10% of the sample size in the Hindi language.

Statistical analysis

Data were entered into MS Excel and exported to SPSS Version 26 for analysis. Variables were recoded and transformed before the final analysis.

For qualitative data - Thematic analysis was used to analyse the data. The data set was scrutinized multiple times and the audio were listened to keenly until it became familiar, then data were analysed through coding and each code was recognizable by its own features related to the research objective further these codes where used to form transcripts, it helped in identifying theme and sub-theme that were reviewed thoroughly to address the research question directly.

For quantitative data, The Categorical data were summarized in terms of frequency and percentage,

And for continuous variables, mean, median, mode and standard deviation were calculated to present the sociodemographic characteristics of study participants. Chi-square test applied to test the association between the prevalence of anxiety and depression with sociodemographic factors and basic characteristics of cancer patients.

Ethical consideration

Ethical consideration was obtained from institutional level before starting of data collection from institute ethical committee. No-CMCH/IEC/2024/112 Date-31/08/2024. The anonymity of the study participants was kept confidential. Data collection was initiated only after getting written informed consent from participants after clearly explaining purpose, procedures, risks and benefits of study.

RESULTS:

The present study was undertaken to find out the prevalence of anxiety and depression and its associated sociodemographic factors and clinical details among cancer patients along with their perception and attitude about their diagnosis.

Interpretation of quantitative findings

Out of total study subjects, almost half of them aged 51- 80 years (46.6%) followed by age group between 40 – 50 years (40%). Male gender was found slightly higher compared with females (53.3% v/s 46.7%). Maximum

study participants (87%) belonged to Hindu religion; rest were from other religion. Mostly patients were married (80%) and remaining were unmarried, widowed and divorce (2%, 13%, 5%). Mostly patients were unskilled workers (44%) by occupation followed by clerical (32%) and skilled workers (12%). Farmers and housemaid contributed rest proportion by occupation (12%).

More than half of the participants lived in urban areas (56.7%), followed by rural areas (36.7%), while a small proportion (6.6%) belonged to semi-urban areas. Using modified BJ Prasad classification to assess the socioeconomic status, almost more than half belonged to middle class (56.7%) followed by lower class (37%). Very few (6.3%) had upper class.

Figure 1 shows the prevalence of anxiety 37% whereas Figure 2 shows the prevalence of depression 29% as per HADS score out of total study participants.

Descriptive Statistics of Hospital Anxiety and Depression Scale (HADS) Scores Among Cancer Patients (N=150)

The mean HADS anxiety score among the study participants was 9.27 ± 2.38 , with a median score of **10**, indicating that a substantial proportion of patients experienced moderate levels of anxiety. The mean HADS depression score was 8.68 ± 2.79 , with a median score of **9**, suggesting the presence of considerable depressive symptoms among the participants. The relatively close mean and median values for both anxiety and depression indicate an approximately symmetrical distribution of HADS scores within the study population.

Figure 3 illustrates the relationship between HADS Anxiety scores (x-axis) and HADS Depression scores (y-axis) among the study participants. Each point represents an individual observation. The distribution of points shows an overall upward trend, indicating that higher anxiety scores are generally associated with higher depression scores. This pattern is further supported by the fitted linear regression line, which has a positive slope, suggesting a positive correlation between

Table 1: Basic characteristics of Cancer Patients (N=150)

Variable	Category	N	%
Type of Cancer	Breast Cancer	35	23.3
	Cervical Cancer	25	16.7
	Oral/Tongue Cancer	20	13.3
	Lung Cancer	15	10.0
	Stomach/Gastric Cancer	12	8.0
	Prostate Cancer	10	6.7
	Colon/Rectal Cancer	8	5.3
	Other Cancers	25	16.7
Cancer Stage	Stage I	35	23.3
	Stage II	60	40.0
	Stage III	40	26.7
	Stage IV	15	10.0
Duration Since Diagnosis (Months)	< 6	85	56.7
	6–12	55	36.7
	> 12	10	6.7
Type of Treatment	Chemotherapy	70	46.7
	Surgery	40	26.7
	Radiation Therapy	25	16.7
	Combination Therapy	15	10.0

Figure 1: Distribution of study participants as per Anxiety HADS score (N=150)

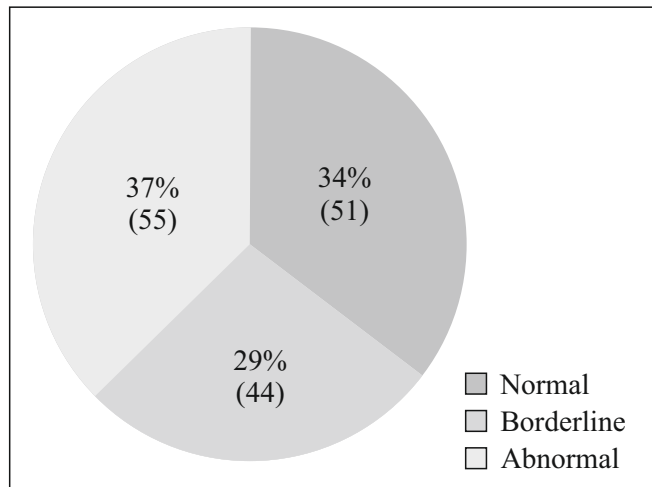


Figure 2: Distribution of Study Participants as per Depression Levels (N=150)

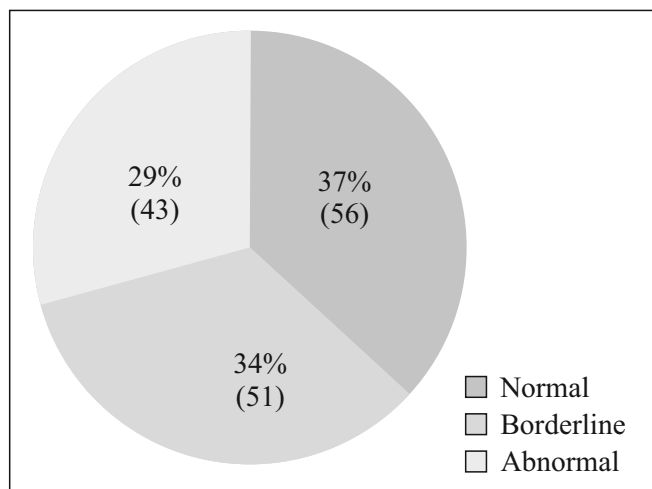
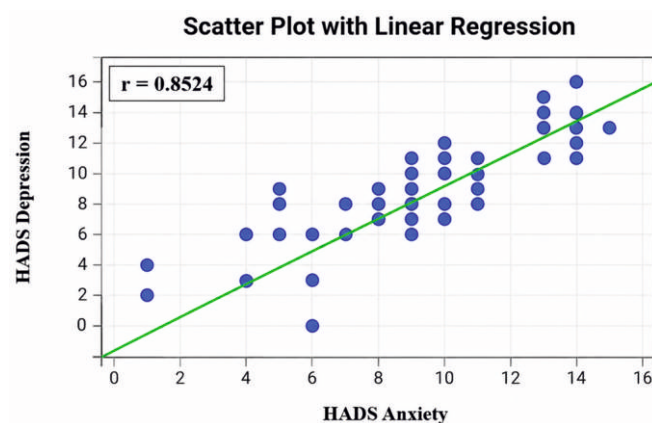


Figure 3: Correlation diagram between anxiety and depression (N=150)



the two variables. Most data points are clustered between anxiety scores of 6–12 and corresponding depression scores of 6–12, indicating that moderate levels of anxiety are commonly associated with moderate levels of depression. A few points lie slightly away from the main cluster, but there are no extreme outliers significantly deviating from the trend. Overall, the plot demonstrates a moderate to strong positive linear relationship between anxiety and depression levels in the study population, with a correlation coefficient ($r = 0.8524$).

Age ($p = 0.306$), marital status ($p = 0.250$), and education ($p = 0.277$) were not significantly associated with outcome. However, only gender ($p = 0.032$) showed statistically significant associations with outcome. A higher proportion of abnormal outcomes was observed among females (30.0%), unemployed individuals (40.0%), and participants belonging to the upper socioeconomic class (33.3%), whereas no abnormal cases were reported among those from the lower socioeconomic class.

The distribution across age groups showed no statistically significant association with outcome ($p = 0.252$), although borderline cases were more frequent in individuals above 40 years. Gender also did not show a significant association ($p = 0.127$), but females had a higher proportion of borderline and abnormal cases compared to males. Marital status demonstrated a significant association ($p = 0.049$), with unmarried individuals showing a higher proportion of borderline cases. Education was also not significantly associated ($p = 0.096$), as illiterate participants had the highest abnormal proportion, while graduates had predominantly borderline and fewer abnormal cases.

Occupation showed a significant association ($p = 0.058$) with unskilled workers having higher abnormal proportions, whereas skilled individuals had relatively more normal outcomes. Socioeconomic class was also significantly associated ($p = 0.033$), with the upper class showing higher abnormal proportions, while the lower class had no abnormal cases and equal distribution of normal and borderline categories.

Table 4 - Association of Sociodemographic variables with anxiety (N=150)

Variable	Category	Normal, n (%)	Borderline, n (%)	Abnormal, n (%)	χ^2	p value
Age (years)	<40	8 (26.7)	10 (33.3)	12 (40.0)	4.82	p=0.306
	40–60	12 (30.0)	15 (37.5)	13 (32.5)		
	>60	10 (33.3)	18 (60.0)	2 (6.7)		
Gender	Male	20 (40.0)	18 (36.0)	12 (24.0)	6.91	p=0.032
	Female	10 (20.0)	25 (50.0)	15 (30.0)		
Marital Status	Married	18 (30.0)	25 (41.7)	17 (28.3)	2.77	p=0.250
	Unmarried	12 (30.0)	18 (45.0)	10 (25.0)		
Education	Illiterate	5 (20.0)	10 (40.0)	10 (40.0)	5.10	p=0.277
	Primary/Secondary	15 (30.0)	20 (40.0)	15 (30.0)		
	Graduate and above	10 (40.0)	13 (52.0)	2 (8.0)		
Occupation	Unemployed	5 (20.0)	10 (40.0)	10 (40.0)	7.45	P=0.114
	Labour	10 (25.0)	18 (45.0)	12 (30.0)		
	Service/Business	15 (42.9)	15 (42.9)	5 (14.2)		
Socioeconomic Class	Upper	5 (16.7)	15 (50.0)	10 (33.3)	8.22	P=8.22
	Middle	15 (30.0)	18 (36.0)	17 (34.0)		
	Lower	10 (50.0)	10 (50.0)	0 (0.0)		

Table 5 - Association of Sociodemographic variables with depression (N=150)

Variable	Category	Normal, n (%)	Borderline, n (%)	Abnormal, n (%)	χ^2	p value
Age (years)	<40	10 (33.3)	12 (40.0)	8 (26.7)	5.36	p=0.252
	40–60	12 (30.0)	18 (45.0)	10 (25.0)		
	>60	8 (26.7)	15 (50.0)	7 (23.3)		
Gender	Male	22 (44.0)	18 (36.0)	10 (20.0)	4.12	p=0.127
	Female	8 (16.0)	27 (54.0)	15 (30.0)		
Marital Status	Married	20 (33.3)	25 (41.7)	15 (25.0)	6.02	p=0.049
	Unmarried	10 (25.0)	20 (50.0)	10 (25.0)		
Education	Illiterate	5 (20.0)	10 (40.0)	10 (40.0)	7.88	p=0.096
	Primary/Secondary	15 (30.0)	22 (44.0)	13 (26.0)		
	Graduate and above	10 (40.0)	13 (52.0)	2 (8.0)		
Occupation	Unskilled	5 (20.0)	12 (48.0)	8 (32.0)	9.11	p=0.058
	Clerical	10 (25.0)	20 (50.0)	10 (25.0)		
	Skilled	15 (42.9)	13 (37.1)	7 (20.0)		
Socioeconomic Class	Upper	5 (16.7)	15 (50.0)	10 (33.3)	10.45	p=0.033
	Middle	15 (30.0)	20 (40.0)	15 (30.0)		
	Lower	10 (50.0)	10 (50.0)	0 (0.0)		

Table 4: Association Between Cancer Stage, Anxiety Levels, and Depression Levels Among Cancer Patients (N = 150)

Cancer Stage	Anxiety Levels			Depression Levels		
	Normal n (%)	Borderline n (%)	Abnormal n (%)	Normal n (%)	Borderline n (%)	Abnormal n (%)
Stage 1	20 (57.1)	10 (28.6)	5 (14.3)	22 (62.9)	8 (22.9)	5 (14.2)
Stage 2	20 (33.3)	22 (36.7)	18 (30.0)	18 (30.0)	20 (33.3)	22 (36.7)
Stage 3	10 (25.0)	12 (30.0)	18 (45.0)	8 (20.0)	10 (25.0)	22 (55.0)
Stage 4	5 (33.3)	7 (46.7)	3 (20.0)	4 (26.7)	5 (33.3)	6 (40.0)
χ^2 (df = 6)	20.84			14.72		
p value	.002*			.022*		

Interpretation of Qualitative findings

Thematic analysis was carried out based on the audio recordings and four major themes were derived. These themes were further processed, analysed and broken down into subthemes.

Theme 1 – Illness perception and belief system

Subtheme -Variable perception towards illness

On qualitative analysis, it was found that almost less than half of participants had a positive perception about their disease whereas few believed that it is a matter of fate.

Subtheme – Spiritual attribution of their disease

Very few participants said that it is not a disease, it is a kind of punishment given by God. One male participant told that “Ye sab pichhle karmo ka hisab hai, jo mujhe is Janam me bhogna pad raha hai.” Another male participant quote was – “Ye mari Zindagi ka aakhiri chapter hai.”

(“This is the consequence of my past deeds, which I must suffer in this lifetime.” Another participant expressed feelings of hopelessness and acceptance of mortality by saying, “This is the final chapter of my life.”)

Theme 2 - Emotional response as an addictive mechanism with respect to illness

Subtheme – Initial shock and disbelief

Many participants got shocked to hear to have this deadly disease first time. It took very long time to accept that they have been diagnosed cancer.

Subtheme -Optimistic attitude

On the other hand, many other participants accepted this in a positive note. One of them told that, “Chahe kuchh bhi ho jaye, me aakhiri saans tak is bimari se lad kar hi rahuga.” Another statement received by one participant is – “Achha hua jo mujhe samay par pata chal gaya.”

(“No matter what happens, I will keep fighting this disease until my last breath. It is good that I found out about it in time.”)

Subtheme – Hopelessness

But very few have lost the hope from life when they came to know first time about this diagnosis. Two participants said that “Ab mere jeevan me kuchh bhi nahi bacha hai”

(“There is nothing left in my life now.”)

Theme 3 Impact on daily life

Subtheme – dependency on family members and Social withdrawal/isolation -

On further analysis, it was found that majority faced very much difficulty in doing routine activities. About half of them were dependent on their family members. Many of them withdraw themselves from society / social interactions.

Subtheme — Financial insecurity

A few participants were informed about the loss of job, leading to financial crisis. Few participants were also worried about their financial condition in spite of availing government health care schemes. Many said that – “Sarkar ka sara paisa to bimari ki jach me hi chala gaya hai. Elaz ka to muhe meri bachat se hi dena pad raha hai.”

(“All the government assistance has been spent on diagnostic tests for the disease. I have to pay for the treatment from my own savings.”)

One of participant quote – “Is bimari ne to mujhe puri tarah nichod liya hai. Mere bad mere Parivar ka kya hoga. Shaya prabhu hi rasta dikhaye”

(“This illness has completely drained me. What will happen to my family after I am gone? Perhaps only God can show the way.”)

Theme 4 Social experience and stigma

Subtheme – Varied social experience

Many participants never faced any kind of stigma, but very few experienced this. One participant told that “Jab se samaj me meri bimari ke barre me pata chala hai, mujhse sampark karna hi band kar diya hai. Mujhe dekh kar katrate hai.”

(“Ever since people in the community learned about my illness, they have stopped contacting me. They avoid me whenever they see me.”)

Another quote was – “Jin logo ki maine madad ki, unke bure waqt me saath diya, wo hi log aaj mujhse kanni kat rahe hai.”

(“The very people whom I helped and supported during their difficult times are now avoiding me.”)

Subtheme – Self blaming

Very few blamed themselves having this disease. One participant quote was like – “Mujhe ghar se nikalne ka mann hi nahi hota hai, ek sharmindi si mahsus hoti hai.”

(“I do not feel like leaving the house anymore; I constantly feel a sense of shame.”)

Thus, by qualitative analysis, it is found that cancer affects almost all dimensions of a person’s life, be it physical, mental, social and financial.

Overall, this study resulted in the majority of cancer patients experiencing anxiety and depression as they learned about their cancer diagnosis. It specially formed more in patients knowing their stage 3 and stage 4.

Discussion:

The present study was conducted to find out the prevalence of anxiety and depression and their associated sociodemographic factors and clinical details among cancer patients, along with their perception and attitude about their diagnosis.

The present study was carried out to find out the prevalence of anxiety and depression in cancer patients coming at tertiary care hospital for treatment. About half (46.6%) of study participants having more than 50 years, males are slightly outnumbering than females (53.3 v/s 46.7%). Maximum 86.7 % study participants belonged to Hindu religion with 56.7 % were from urban residence.

In our study, it was revealed that breast cancer (23.3%) was much more common followed by cervical cancer (16.7%) and oral cancer (13.3%). Nearly less than half patients (40%) were having stage 2 followed by stage 3 (26.7%).

Kumar S et al. (2016), which reported a higher prevalence of anxiety and depression among cancer patients, particularly in advanced stages of the disease. This shows that 56.7% and 64.2% patients were

suffering from anxiety and depression, respectively. There were significant relationships in relation to family history, past history and socioeconomic history with anxiety and depression.^[3]

Using the HADS scale, the prevalence of anxiety and depression was found to be 36.6% and 29.3%, respectively. These findings are comparable with several previous studies. Similarly, Nabi et al. at Kashmir (2026) observed a very high burden of psychological morbidity, where 75.6% patients had abnormal anxiety levels and more than half had moderately severe depression, with significant association of anxiety and depression with marital status and age, again indicating higher levels compared to the present study.^[4]

In comparison, Marik et al. from Northern India (2022) reported the prevalence of anxiety (34.6%) and depression (40.3%), where anxiety levels are almost similar to the present study, but depression was slightly higher.^[6] Likewise, Radhakrishnan et al. (2023), using the HAM scale, reported anxiety in 24.1% and depression in 32.7% of patients, which is quite comparable to the present findings. They also reported that breast and gastrointestinal cancers were more commonly associated with depression, which aligns with the present study, where breast cancer was the most common cancer.^[7]

On the other hand, Venkatesh et al. at Chennai (2024) reported a lower prevalence of anxiety (6%) and depression (31%) among head and neck cancer patients using HAM scales. Their study population consisted predominantly of males (74%), with most patients in the 51–65 years age group, a large proportion being illiterate, unemployed, and belonging to lower socioeconomic status, with 71% being married. These sociodemographic findings are similar to the present study in terms of age distribution and socioeconomic characteristics, although psychological morbidity was lower, possibly due to different tools used.^[11]

Similarly, Brar et al. at Udaipur (2025) found a much lower prevalence of severe anxiety and depression (6.67%) using HAM-D scale, with most patients above 50 years and a male predominance, which is consistent with the age and gender distribution seen in the present study but differs significantly in prevalence rates.^[12]

In contrast, **Kaphle et al.** at Nepal (2024) found that the majority of patients belonged to the 51–60 years age group, with females constituting 59.6%. They reported that most patients had mild (56.4%) to moderate (31.8%) depression, and mild (35.9%) to moderate (29.1%) anxiety, with very few severe cases. This pattern of predominantly mild to moderate psychological distress is similar to the present study, where moderate levels were more common than severe forms. They also reported that most patients were in stage 2 and stage 3, which is comparable with the staging distribution observed in the present study.^[13]

Further, Arora et al. (2019) reported a lower prevalence of anxiety (20.3%) and depression (24.8%), which is less than that observed in the present study.^[14] Sharma et al. (2021) reported that anxiety and depression were more common in head and neck malignancies, highlighting the role of cancer type.^[15] Additionally, Sharma et al. at Shivpuri, Madhya Pradesh (2025) reported the prevalence of depression (31.25%) and anxiety (15.6%), especially higher in stage IV disease, males, and middle-aged groups, which partially aligns with the present study in terms of age and gender distribution.^[16]

The present study demonstrates a clear trend of worsening psychological status with advancing cancer stage. In Stage 1, the majority of patients were within the normal category (57.1%), with relatively fewer showing borderline (28.6%) and abnormal (14.3%) findings. However, as the disease progressed to Stage 2 and Stage 3, there was a noticeable decline in normal cases (33.3% and 25.0%, respectively) and a corresponding rise in abnormal cases, which peaked in Stage 3 (45.0%). This suggests that disease advancement is associated with increased severity of the cancer, likely due to greater physical burden, treatment-related stress, and poorer prognosis. Interestingly, in Stage 4, although borderline cases were highest (46.7%), the proportion of abnormal cases (20.0%) was lower than in Stage 3. This could be attributed to factors such as psychological adaptation, smaller sample size or possible selection bias. Patients in advanced stages may develop coping mechanisms or may be under more intensive palliative and psychological support, influencing these findings.

Overall, the distribution indicates a progressive shift from normal to borderline and abnormal categories with advancing cancer stage, highlighting the importance of early psychological screening and intervention, especially in patients with higher-stage malignancies.

In the present study, a clear increasing trend of depression severity with advancing cancer stage was observed, with abnormal depression rising from 14.2% in Stage 1 to 55.0% in Stage 3, indicating a strong association between disease progression and psychological distress.

Conclusion:

The present study demonstrates a considerable psychological burden among cancer patients, with 37% experiencing anxiety and 29% depression, and a positive correlation was found using HADS between the two ($r = 0.85$). Socio-economic status and occupation were significantly associated with anxiety and depression. On qualitative findings, mixed types of perceptions (fear, stigma, financial insecurity) about the diseases were found using in-depth interviews.

Recommendations

Based on the study findings, there is considerable proportion of cancer patients having anxiety and depression. There are variety of thought process concluded by patients about their deadly disease. So, keeping in this view, there should be appropriate psychiatric counselling of each and every cancer patient irrespective of their age, gender, occupation, type and staging of cancer. It would affect their mental health in positive direction and also would be able to improve the quality of life as well. In future, there should be establishment of Psycho-oncology units.

Limitations

The study was conducted in a single tertiary care hospital; therefore, the findings may not be generalizable.

Declaration of Findings

The study identified a considerable burden of anxiety and depression among cancer patients, with psychological distress increasing with advancing cancer stage. Significant associations were observed between

selected sociodemographic characteristics, cancer stage, and mental health status. Qualitative findings revealed diverse perceptions regarding cancer diagnosis, including fear, uncertainty, stigma, hope, and acceptance. These findings highlight the importance of integrating mental health services into routine oncology care to improve overall patient well-being and quality of life.

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