Research Article

Prevalence of Depression and its Associated Factors among Cancer Patients of Selected Hospital in Urban Area

Jyoti Perke[1], Asif Maniyar[2]

[1]Department of Mental Health Nursing, Maharashtra University of Health Sciences, Institute of Nursing Education, Sir J J Hospital, Mumbai-400008, Maharashtra, India, [2]Department of Operation Theatre, Cancer Hospital, Sambhajinagar-431005, Maharashtra, India

Abstract

Objectives: The aim of the study was to assess the prevalence of depression and its associated factors among cancer patients and to find association between depression prevalence and its associated factors with selected demographic variables of cancer patients.

Methods: The quantitative research approach with cross-sectional survey research design was used. 200 cancer patients who were diagnosed as cancer, above age of 18 years with clear consciousness, and willing to take part in the study were selected as samples using non-probability convenient sampling technique from selected hospital in urban area. Cancer patients who had history of psychiatric disorders were excluded in this study. The data have been collected using becks depression inventory II and self-report checklist.

Results: The assessment of prevalence of depression in cancer patients in urban area indicated that 110 (54.73%) cancer patient had no depression, followed by 36 (17.91%) had moderate depression, 30 (14.93%) had borderline depression, 17 (4.86%) had severe depression, and very few 8 (3.98%) had extreme depression. Among demographic variables, family income was found to be associated with level of depression. Analysis of factors associated with depression indicated change in the job factor showed a significant association with gender, body image dissatisfaction showed a significant association with gender, alcohol intake was found to be significantly associated with gender and occupation.

Conclusion: Effective management of the complicated side effects of cancer requires regular screening and comprehensive assessment for depressive disorders in clients with the disease. All healthcare providers caring for cancer clients including nurses, must emphasize not only the physical challenges but also psychological challenges of cancer.

Keywords: Associated factors, cancer, depression, prevalence

Introduction

Cancer patients must come to terms with a plethora of psychological and social obstacles. Comorbid mental illnesses are one such difficulty; among cancer patients, depression is the most prevalent mental health issue. Cancer is a dangerous disease that can be fatal and has an impact on a patient's and their family's physical and mental health. The diagnosis and treatment of cancer cause social, emotional, and psychological hardship to an infinite number of individuals. Before the right plans are put in place, receiving a cancer diagnosis can have a significant impact on the patient. Patients may experience varied degrees of stress, anxiety about dying, disruptions to their life plans, abnormalities in their perceptions of their bodies and their self-worth, changes in their social roles, changes in their lifestyles, and financial concerns. Cancer patients may experience significant changes in their daily routines, employment, interpersonal interactions, and familial responsibilities. Anxiety and despair

Date of Submission: 30-09-2023
Date of Revision: 12-10-2023
Date of Acceptance: 07-12-2023

Access this article online
Website: http://innovationalpublishers.com/Journal/ijns
ISSN No: 2454-4906
DOI: 10.31690/ijns.2023.v08i04.015

Address for correspondence:
Jyoti Perke, Department of Mental Health Nursing, Maharashtra University of Health Sciences, Institute of Nursing Education, Sir J J Hospital, Mumbai-400008, Maharashtra, India. E-mail: perkejyoti@gmail.com

are two common psychological stressors experienced by cancer patients.[1]

According to data from the World Health Organization, cancer ranks second globally among non-communicable diseases that cause death. Anxiety and depressive symptoms have generally been linked to a terrible course of the illness, which includes a worse quality of life and an increase in symptom load, medical care utilization, and even death.[2]

In terms of life quality, depressive disorders are exceedingly common, costly, and restrictive. They are also strongly linked to mortality, medical comorbidity, and considerably reduced role functioning and quality of life. Significant advancements have been achieved in the last few decades in the study and creation of depression treatments in a variety of contexts, including general care. Many therapeutic techniques, including psychotherapy and antidepressant medication, are currently accessible and have been shown to be successful in numerous randomized trials. Many of these therapies' modalities include treatment guidelines and are widely employed in clinical practice as a result of their notable and beneficial outcomes. Just a small percentage of depressed patients are referred to mental health facilities; the majority of them receive treatment in primary care.[3]

The prevalence of common depressive disorders is up to 25% in cancer survivors. The fundamental trail between cancer and depression remains uncertain, but believable explanations include biological factors, psychological factors, environmental factors, and behavioral factors. Irrespective of the causal mechanism, a higher risk for depression continues at all times after a cancer diagnosis. Insight regarding risk factors of depression may be supportive in the development of strategies for the prevention of depression among cancer patients.[4]

Cancer patients frequently experience depression. Its impact on patients is evident, yet it remains underdiagnosed and inadequately treated. There are numerous reasons for this, including the underappreciation of depression symptoms, their pervasiveness in the setting of illness, and the interaction between depression symptoms and those related to cancer and cancer therapy. Beyond the fact that depression, despite its often overwhelming nature, results in unrecognized mental pain, this condition has a significant effect on morbidity and death.[5]

Numerous evaluations of the literature found that depression is more common in cancer patients who are female, have a history of depression, drink alcohol during the first stages of their illness, are in advanced stages of the disease, and have low family support. Cancer stage, health behaviors such as drinking or smoking, physical symptoms such as pain or exhaustion, and individual traits such as age, sex, work status, or less education are risk factors for depressive disorder in cancer patients. Limited research has been done comparing depression and its risk variables in cancer patients.[4]

Methods

Study type and setting

A cross-sectional survey design was conducted to assess the depression and its associated factors in cancer patients of selected hospital of urban area.

Sampling

Two hundred cancer patients undergoing treatment at selected hospital who met the sampling criteria and available at the time of data collection were selected as subjects in the study using non-probability convenient sampling technique.

Inclusion criteria

The following criteria were included in the study:

1. Diagnosed cancer patients for 3 months and more who were on treatment at the time of the study
2. Above 18 years of age
3. Samples who were willing to participate in the study
4. Samples with clear consciousness.

Exclusion criteria

The following criteria were excluded from the study:

1. Participant had a history of psychiatric disorders
2. Participants who were participated in the pilot study
3. Participants who participated recently in the same type of study.

Data collection tool and technique

The data have been collected utilizing Becks depression inventory (BDI) II and Self- report checklist. BDI is considered to be most relevant for the assessment depression in clinical practice. BDI is self-report scale consisting of 21 items. Each item has four statements. The scoring pattern was as 0, 1, 2, 3 total minimum score can be 0 and maximum can be 63. Self-report checklist consisted of 10 items such as family support, pain, alcohol intake, change in job, anxiety, personal conflicts, feeling of redundancy, body image dissatisfaction, social isolation, and fear of recurrence was utilized to assess associated factors of depression in cancer patients.

Data analysis

After collection of all the data entry was performed in Microsoft Excel. Data were organized and presented by applying principles of descriptive statistics. BDI II and demographic variables were analyzed using frequency and percentage. The calculated data were presented in the form of graphs and tables. The association between prevalence and demographic variables was analyzed using the Chi-square test.

Results

Table 1 indicates the sample was consisted of 200 cancer patients. The study result showed that majority of 120 (60%) respondents were male. Sixty (30%) from the age group 41–50 years, 132 (66%) were Hindu, 67 (33.5%), majority of participants were graduate, 73 (36.5%) business class, and 72(36%) were from 11,000 to 30,000 monthly income group.

Prevalence of depression in cancer patients

The assessment is done by BDI II and the overall responses were categorized into different levels of depression.

Table 2 depicts that the overall assessment of depression in cancer patients of selected hospitals of the urban area showed. Majority of 109 (54.5%) cancer patients had no depression, followed by 36 (18%) had moderate depression, there were 30 (15%) had Borderline depression, 17 (8.5%) had severe depression, and very few 8 (4%) had extreme depression.

Table 3 reveals the distribution of factors associated with depression as often, sometimes, and never. Majority of cancer patients reported 127 (63.50%) often supported by family, 136 (68%) had pain sometimes, 121 (60.50%) reported that they never had alcohol intake, 170 (85%) never had a job change, Maximum 109 (54.50%) had anxiety sometimes, 103 (51.50%) never had personal conflicts, most of 129 (64.5%) cancer patients responded; they never had a feeling of redundancy, The majority of 123 (61.59%) of cancer patients reported that they never had body image dissatisfaction, 140 (70%) responded that they never had social isolation, and 127 (63.50%) reported that they never had fear of recurrence.

Table 4 indicates that the Chi-square test was conducted to find out the significant difference between groups of above mentioned demographic variables with respect to the level of depression. *P*-value of demographic variable monthly family income was found to be <0.05 thus, there was a significant association of the level of depression with monthly family income.

The calculated *P*-value of demographic factors gender, age. religion, education, and occupation was more than 0.05 thus, there is no significant association between level of depression and demographic variables gender, age, religion, education, and occupation.

Among 10 associated factors of depression, alcohol intake was found to have a significant association with gender and occupation among selected demographic variables. Change in a job and body image dissatisfaction was also found to be having a significant association with gender among selected demographic variables.

Table 1: Frequency distribution of samples according to sociodemographic data. *n*=200

S. No.	Variable	Groups	Frequency	Percentage
1	Gender	Male	120	60
		Female	80	40
2	Age (years)	18–30	38	19
		31–40	49	24.5
		41–50	60	30
		50 and above	53	26.5
3	Religion	Hindu	132	66
		Islam	44	22
		Christian	6	3
		Other	18	9
4	Education	Primary education	56	28
		Secondary	65	32.5
		Graduate	67	33.5
		Post graduate	12	6
5	Occupation	Employee	37	18.5
		Business	73	36.5
		Unemployed	19	9.5
		House wife	71	35.5
6	Family income (monthly)	<10000	55	27.5
		11,000–30,000	72	36
		31,000–50,000	59	29.5
		>51,000	14	7

Discussion

The purpose of this study was to ascertain the prevalence of depression and related factors among cancer patients at a particular metropolitan hospital, as well as any

Table 2: Frequency and percentage distribution of level of depression among cancer patients. *n*=200

S. No.	Level of depression	Score	Frequency	Percentage
1	These ups and downs are considered normal	1–16	109	54.5
2	Borderline clinical depression	17–20	30	15
3	Moderate depression	21–30	36	18
4	Severe depression	31–40	17	8.5
5	Extreme depression	Above 40	8	4

Table 3: Frequency and percentage distribution of factors associated with depression. *n*=200

S. No	Factors Associated with depression	Characteristics					
		Often	%	Sometime	%	Never	%
1	Family support	127	63.50	51	25.50	22	11.00
2	Pain	49	24.50	136	68.00	15	7.50
3	Alcohol intake	40	20.00	39	19.50	121	60.50
4	Change in job	0	0.00	30	15.00	170	85.00
5	Anxiety	10	5.00	109	54.50	81	40.50
6	Personal conflicts	18	9.00	79	39.50	103	51.50
7	Feeling of Redundancy	9	4.50	62	31.00	129	64.50
8	Body image dissatisfaction	15	7.50	62	31.00	123	61.50
9	Social isolation	8	4.00	52	26.00	140	70.00
10	Fear of Recurrence	1	0.50	72	36.00	127	63.50

Table 4: Association between level of depression among cancer patients with selected demographic variables. *n*=200

S. No	Variable	Groups	Level of depression		Chi-square	d.f.	*P*-value	Significance
			Below median	Above median				
1	Gender	Male	71	49	2.104	1	0.146	Not significant
		Female	39	41				
2	Age in years	18–30 years	19	19	0.483	3	0.923	Not significant
		31–40	28	21				
		41–50	34	26				
		50 and above	28	24				
3	Religion	Hindu	75	57	7.34	3	0.061	Not significant
		Islam	25	19				
		Christian	6	2				
		Other	4	12				
4	Education	Primary education	29	27	1.01	3	0.799	Not significant
		Secondary	35	30				
		Graduate	38	29				
		Postgraduate	8	4				
5	Occupation	Employee	25	12	7.55	3	0.061	Not significant
		Business	43	30				
		unemployed	6	13				
		House Wife	36	35				
6	Family income monthly	<10000	23	32	10.79	3	0.015	Significant
		11,000–30,0000	38	34				
		31,0000–50,000	37	22				
		>51,000	12	2				

associations between these variables and specific cancer patient demographics.

The findings of the prevalence of depression among cancer patients are comparable and consistent with the study conducted in Lukasa, Zambia. Reported that 80% of samples had encountered negligible criteria of depression in cervical cancer patient.[6] The study conducted in Suhag university testified; nearly half of subjects had anxiety and depression among patients with breast cancer. Taylor manifests anxiety scale and BDI-II was used as data collection tool.[7] Another study conducted among cancer patients undergoing chemotherapy in general hospital Kualua Lumpur reported, 15% of participants had borderline depression, 18% had moderate depression, 8.5% had severe depression, and 4% had extreme depression.[8]

A cross-sectional study to assess the parameters linked to long-term cancer survivorship and the prevalence of depressive disorders. Revealed that 26.1% of cancer patients experienced depression. Physical manifestations of depression include difficulty sleeping, dry mouth, indigestion, discomfort, decreased appetite, and feverish feeling. The findings also suggested that exhaustion could be a stand-in for depression.[9]

In this present study, there was no noticeable prevalence of associated factors of depression found. Among 10 associated factors of depression, alcohol intake was found to have a significant association with gender and occupation. Change in a job and body image dissatisfaction was also found to be having a significant association with gender. A study conducted on the prevalence of depression and its risk factors in Chinese cancer patients showed 66.72% prevalence of depression. Poor performance status, pain, old age, and low-level education were identified as risk factors of depression.[10]

The study results are similar to and in line with those of a 2014 study by Hong and Tian, which sought to determine the anxiety and depression levels of cancer patients' customers and to identify the variables impacting these psychological issues. The study's findings showed that anxiety was found to be 6.49% and depression to be 66.72% common. Anxiety and depression levels vary depending on the tumor site; depression was more common in cases of lung, esophageal, and cervix cancer. Age, low educational attainment, pain, and low-performance status have all been related to an increased risk of depression.

A cross-sectional study by Abuelgasim *et al*. (2016) sought to determine the prevalence of anxiety and depression in patients with hematological cancers as well as its contributing factors. The study's conclusions showed that out of 211 samples, 98 (46.5%) had depression and 47 (22.3%) had anxiety. Anxiety and depression coexisted in 38 (18.1%) cases. A stressful family environment together with a number of comorbidities was projecting anxiety and depression. The study discovered no link between depression or anxiety and gender, income, smoking, or receiving active therapy. The current study's findings are comparable to and found to be consistent with those of this study.[11]

Conclusion

During this study, all participants were seen as interested in the study. The study result revealed that the cancer patients were having borderline to severe depression. The association of level of depression was found significant with family income. To effectively manage the complicated consequences of cancer, it is imperative that clients without cancer undergo routine screening and receive an adequate assessment of depressed

symptoms. All health-care providers caring for cancer patients including nurses, must focus not only the physical challenges but also psychological challenges of cancer.

Conflicts of Interest

None.

Funding

None.

References

1. Berihun F. Prevalence and correlates of anxiety and depression among cancer patients in the University of Gondar Comprehensive Specialized Hospital, Northwest Ethiopia. Arch Depress Anxiety 2017;3:42-8.
2. GBD 2015 Risk Factors Collaborators. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990-2015: A systematic analysis for the Global Burden of Disease Study 2015. Lancet 2016;388:1659-724.
3. Cuijpers P, Quero S, Dowrick C, Arroll B. Psychological treatment of depression in primary care: Recent developments. Curr Psychiatry Rep 2019;21:129.
4. Smith HR. Depression in cancer patients: Pathogenesis, implications and treatment (Review). Oncol Lett 2015;9:1509-14.
5. Dauchy S, Dolbeault S, Reich M. Depression in cancer patients. EJC Suppl 2013;11:205-15.
6. Paul R, Musa G, Chungu MH. Prevalence of depression among cervical cancer patients seeking treatment at the cancer diseases hospital. IOSR J Dent Med Sci 2016;15:2279-861.
7. Aly HY, ElLateef AA, Mohamed AE. Depression and anxiety among females with breast cancer in Sohag University: Results of an interview study. Rem Publ LLC 2017;2:1-7.
8. Yusof S, Zakaria FN, Hashim NK, Dasiman R. Depressive symptoms among cancer patients undergoing chemotherapy. Procedia Soc Behav Sci 2016;234:185-92.
9. Goo AJ, Song YM, Shin J, Ko H. Factors associated with depression assessed by the patient health questionnaire-2 in long-term cancer survivors. Korean J Fam Med 2016;37:228-34.
10. Hong JS, Tian J. Prevalence of anxiety and depression and their risk factors in Chinese cancer patients. Support Care Cancer 2014;22:453-9.
11. Abuelgasim KA, Ahmed GY, Alqahtani JA, Alayed AM, Alaskar AS, Malik MA. Depression and anxiety in patients with hematological malignancies, prevalence, and associated factors. Saudi Med J 2016; 37:877-81.

How to cite this aticle: Perke J, Maniyar A. Prevalence of Depression and its Associated Factors Among Cancer Patients of Selected Hospital in Urban Area. Indian J Nurs Sci 2023;8(4):77-81.