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A Descriptive Study to Assess the Hopelessness and Depression Among Cancer Patients at SMVMCH, Puducherry.

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ABSTRACT
Introduction: *Cancer is a disease in which some of the body's cells grow uncontrollably and spread to other parts of the body. A cancer diagnosis is often a major life stressor that can lead to psychological distress, including feelings of hopelessness, depression, loss of control, and uncertainty. These emotional challenges can significantly affect patients' overall well-being and quality of life, making it important to assess and address mental health concerns in cancer care.*
Statement of the problem: *"A descriptive study to assess the hopelessness and depression among cancer patients at SMVMCH, Puducherry."* ***Objectives:*** *To assess the level of hopelessness among cancer patients. To assess the level of depression among cancer patients. To associate the level of hopelessness and depression among cancer patients with their selected demographic variables.*
Methodology: *A quantitative, non-experimental descriptive research design was adopted for the study. A total of 100 cancer patients were selected using a non-probability convenient sampling technique. Data were collected using a demographic profile, the Beck Hopelessness Inventory to assess hopelessness, and the Major Depression Inventory to assess depression levels among cancer patients. Data analysis was performed using descriptive and inferential statistics.*
Results: *The study findings revealed that 83% of the patients experienced moderate hopelessness, while 17% reported severe hopelessness. None of the patients fell under normal or mild levels of hopelessness. Regarding depression, 89% of the patients experienced severe depression, 7% reported moderate depression, 3% had mild depression, and only 1% showed no or doubtful signs of depression. Significant associations were also found between levels of hopelessness and depression and selected demographic variables.* ***Conclusion:*** *The study concluded that a majority of cancer patients experience moderate to severe levels of hopelessness and severe depression. These findings highlight the urgent need for psychological support, early screening, and appropriate mental health interventions as part of comprehensive cancer care to improve patients' emotional well-being and overall quality of life.*
Key words: *hopelessness, depression, cancer, patients*

I. INTRODUCTION

Cancer is a condition in which abnormal cells grow uncontrollably, forming tumors that may be benign or malignant. It affects individuals across all ages, sexes, and regions, with common types including breast and cervical cancers in women, and prostate and lung cancers in men. Major risk factors include tobacco use, alcohol consumption, unhealthy diet, physical inactivity, environmental pollution, and certain infections. In addition to physical illness, cancer patients often experience psychological distress such as depression and hopelessness, which can range from mild sadness to severe depressive disorders. These mental health issues are closely linked and can negatively influence patients' quality of life and recovery.

STATEMENT OF THE PROBLEM
"A descriptive study to assess the hopelessness and depression among cancer patients at SMVMCH, Puducherry."

OBJECTIVES:
1. To assess the level of hopelessness among cancer patients.
2. To assess the level of depression among cancer patients.
3. To associate the level of hopelessness and depression among cancer patients with their selected demographic variables.

NEED FOR THE STUDY

Cancer is a growing global health concern. According to the International Agency for Research on Cancer (2022), there were about 20 million new cancer cases and 9.7 million deaths worldwide, with projections rising to 35 million cases by 2050, particularly in low- and middle-income countries. In India, the Indian Council of Medical Research highlights a high burden of oral cancer, largely due to tobacco and alcohol use. Additionally, increasing prevalence of depression among cancer patients and its strong association with hopelessness emphasize the urgent need for comprehensive care that includes both medical and psychological support.

II. METHODOLOGY

RESEARCH APPROACH

A quantitative research approach was used for the study.

RESEARCH DESIGN

A non-experimental descriptive design was adopted.

SETTING OF THE STUDY

The study was conducted at SMVMCH, a 975-bedded super specialty hospital.

POPULATION

The population comprised all cancer patients at SMVMCH.

SAMPLE

The sample comprised cancer patients (both inpatients and outpatients) who met the inclusion criteria.

SAMPLE SIZE

The sample size consisted of 100 cancer patients.

SAMPLING TECHNIQUE

Convenience sampling technique was used for the study.

CRITERIA FOR SAMPLE SELECTION

INCLUSION CRITERIA:

- Cancer patients
- Both male and female patients

EXCLUSION CRITERIA

- Cancer patients who were critically ill

TOOL

Section: A - Demographic variables: This section consists of 10 Demographic variables such as Age in years, Gender, Religion, Educational status, Occupational status, Monthly income, Marital status, Type of family, Dietary pattern and Bad habits.

Section: B - Beck Hopelessness Inventory to assess the level of Hopelessness, which include 20 items to assess the level of hopelessness.

Section: C - Major Depression Inventory to assess the level of Depression: It consists of 10 items to assess the level of depression.

SCORING INTERPRETATION OF THE INSTRUMENTS

Beck Hopelessness Scale:

The **Beck Hopelessness Scale** is a 20-item self-report questionnaire developed by Aaron T. Beck to measure negative expectations about the future. It uses true/false statements to assess feelings, motivation, and beliefs related to hopelessness. Higher scores indicate greater hopelessness and potential risk for depression or suicidal thoughts.

Score Range	Interpretation
0 – 3	Normal
4 – 8	Mild hopelessness
9 – 14	Moderate hopelessness
>14	Severe hopelessness

Major Depression Inventory:

The **Major Depression Inventory (MDI)** is a self-report questionnaire used to assess the **severity of depression**. It consists of **10 items** that evaluate mood, interest, energy, and other depressive symptoms. Scores range from **0 to 50**, with higher scores indicating more severe levels of depression.

Score Range	Interpretation
0 – 20	No or Doubtful depression
21 – 25	Mild depression
26 – 30	Moderate depression
31 – 50	Severe depression

DATA COLLECTION PROCEDURE

Permission to conduct the study was obtained from the concerned authorities. The purpose of the study was explained to the participants, and informed consent was obtained. Data were collected from 100 cancer patients using a non-probability convenience sampling technique based on inclusion and exclusion criteria. The tools used for the study included demographic variables, the Beck Hopelessness Inventory to assess the level of hopelessness, and the Major Depression Inventory to assess the level of depression among cancer patients.

III. ANALYSES

Table 1: Frequency and percentage wise distribution of demographic variables of cancer patients according to Age, Gender, Religion.

N=100

S. No.	Demographic Variables	Number of Frequency	Percentage (%)
1.	**Age in years**		
	a) 19-29 years	15	15
	b) 30-39 years	38	38
	c) 40-49 years	38	38
	d) Above 50 years	9	9
2.	**Gender**		
	a) Male	58	58
	b) Female	41	41
	c)Transgender	1	1
3.	**Religion**		
	a) Hindu	58	58
	b) Christian	22	22
	c) Muslim	17	17
	d) Others	3	3

The above table showed the frequency and percentage wise distribution of demographic variables of cancer patients. In terms of age, 38% are in the 30-39 years and 40-49 years age groups, while 15% are between 19-29 years, and 9% are above 50 years. Regarding gender, 58% are male, 41% are female, and 1% identify as transgender. The majority of respondents (58%) follow the Hindu religion, with 22% Christian, 17% Muslim, and 3% from other religions.

Table 2: Frequency and percentage wise distribution of demographic variables of cancer patients according to Educational Status, Occupational Status, Monthly Family Income.

N=100

S. No.	Demographic Variables	Number of Frequency	Percentage (%)
1.	**Educational Status**		
	a) Illiterate	43	43
	b) High School	26	26
	c) Higher Secondary	15	15
	d) Graduate	16	16
2.	**Occupational Status**		
	a) Unemployed	45	45
	b) Employed	40	40
	c) Self-employed	12	12
	d) Daily Wages	3	3
3.	**Monthly Family Income**		
	a) Above Rs.50,000	11	11
	b) Rs.30,001–50,000	22	22
	c) Rs.10,001–30,000	38	38
	d) Less than Rs.10,000	29	29

The above table showed the percentage-wise distribution of cancer patients based on educational status, occupational status, and monthly family income. Regarding education, 43% of the respondents are illiterate, 26% have completed high school, 15% have higher secondary education, and 16% are graduates. In terms of occupation, 45% of the respondents are unemployed, 40% are employed, 12% are self-employed, and 3% are daily wage workers. With respect to monthly family income, 38% of respondents earn between Rs.10,001–30,000, 29% earn less than Rs.10,000, 22% earn Rs.30,001–50,000, and 11% earn above Rs.50,000.

Table 3: Frequency and percentage wise distribution of demographic variables of cancer patients according to Marital Status, Type of Family, Dietary Pattern.

N=100

S. No.	Demographic Variables	Number of Frequency	Percentage (%)
1.	**Marital status**		
	a) Single	32	32
	b) Married	58	58
	c)Unmarried	10	10
2.	**Type of family**		
	a) Nuclear family	46	46
	b) Joint family	42	42
	c) Extended family	12	12
3.	**Dietary pattern**		
	a) Vegetarian	32	32
	b) Non- vegetarian	68	68
4.	**Bad Habits**		
	No bad habits	19	19
	Smoking	50	50
	Alcoholism	18	18
	Tobacco chewing	13	13

The above table showed the frequency and percentage wise distribution of demographic variables of cancer patients. Regarding marital status, 58% are married, 32% are single, and 10% are unmarried. Family structure is predominantly nuclear (46%), followed by joint families (42%) and extended families (12%). In dietary patterns, 68% of respondents are non-vegetarian, while 32% are vegetarian. Lastly, 50% of respondents smoke, 18% struggle with alcoholism, 13% chew tobacco, and 19% report no bad habits. The data reveals that the majority of respondents (50%) are smokers, while 18% suffer from alcoholism, 13% chew tobacco, and 19% report no bad habits.

Table 4: Level of hopelessness among cancer patients.

N=100

S. No.	Level of Hopelessness	Frequency (n)	Percentage %
1.	Normal	0	0
2.	Mild Hopelessness	0	0
3.	Moderate Hopelessness	83	83
4.	Severe Hopelessness	17	17

The above Table represents the frequency and percentage -wise distribution of the level of hopelessness among cancer patients. The data reveals that 83% of the patients experience moderate hopelessness, indicating a significant proportion of the sample dealing with moderate emotional distress. Additionally, 17% of patients report severe hopelessness, while no patients fall under the normal or mild hopelessness categories. This distribution highlights the considerable emotional challenges faced by cancer patients, with the majority-exhibiting moderate to severe levels of hopelessness.

Table 5: Level of depression among cancer patients.

N=100

S.No	Demographic Variables	Number of Frequency	Percentage (%)
1.	**Level of Depression**		
a)	Doubtful depression	1	1
b)	Mild depression	3	3
c)	Moderate depression	7	7
d)	Severe depression	89	89

The above table showed the frequency and percentage-wise distribution of cancer patients according to their level of depression. The data reveals that the majority of respondents (89%) experience severe depression, while 7% report moderate depression, 3% have mild depression, and only 1% show no or doubtful signs of depression. The findings also reveal that there is a significant association between age, monthly family income, and bad habits with the level of hopelessness among cancer patients.

Table 6: Association between the level of hopelessness among cancer patients with their selected demographic variables. N = 100

S. No	Demographic Variables	LEVEL OF HOPELESSNESS						X^2 value
		Mild		Moderate		Severe		
		N	(%)	N	(%)	N	(%)	
1	**Age in years**							X^2 =18.149 Df =3 P= 0.000 **(S)***
	a) 19-29 years	0	0	7	7	8	8	
	b) 30-39 years	0	0	32	32	6	6	
	c) 40-49 years	0	0	35	35	3	3	
	d) Above 50 years	0	0	9	9	0	0	
2	**Gender**							X^2 = 1.340 Df = 2 P= 0.512 (NS)
	a) Male	0	0	50	50	8	8	
	b) Female	0	0	32	32	9	9	
	c)Transgender	0	0	1	1	0	0	
3.	**Religion**							X^2 = 2.154 Df =3 P= 0.541 (NS)
	a) Hindu	0	0	46	46	12	12	
	b) Christian	0	0	20	20	2	2	
	c) Muslim	0	0	14	14	3	3	
	d) Others	0	0	3	3	0	0	
4	**Educational status**							X^2 = 4.494 Df = 3 P= 0.213 (NS)
	a) Illiterate	0	0	36	36	7	7	
	b) High school	0	0	20	20	6	6	
	c) Higher secondary	0	0	15	15	0	0	
	d) Graduate	0	0	12	12	4	4	
5	**Occupational status**							X^2 =2.177 Df =3 P= 0. 536 (NS)
	a) Unemployed	0	0	38	38	7	7	
	b) Employed	0	0	31	31	9	9	
	c)Self employed	0	0	11	11	1	1	
	d) Daily wages	0	0	3	3	0	0	
6	**Monthly Family income**							X^2 = 12.474 Df =3 P= 0.006 **(S)***
	a) Above Rs.50,000	0	0	5	5	6	6	
	b) Rs.30,001- 50,000	0	0	19	19	3	3	
	c) Rs. 10,001- 30,000	0	0	33	33	5	5	
	d) Less than Rs.10,000	0	0	26	26	3	3	

*** Significant at P≤ 0.05 level**

The above table showed that there is a significant association between age and monthly family income with the level of hopelessness, and there is no significant association between gender, religion, occupational status, and educational status with the level of hopelessness among cancer patients.

Table 7: Association between the level of hopelessness among cancer patients with their selected demographic variables. N = 100

S.No.	Demographic Variables	LEVEL OF HOPELESSNESS						X^2 value
		Mild		Moderate		Severe		
1.	Marital status							
	a) Single	0	0	23	23	9	9	$X^2 = 5.278$ Df =2 P= 0.071 (NS)
	b) Married	0	0	50	50	8	8	
	c)Unmarried	0	0	10	10	0	0	
2.	Type of family							
	a) Nuclear family	0	0	36	36	10	10	$X^2 = 3.193$ Df =2 P= 0.203 (NS)
	b) Joint family	0	0	35	35	7	7	
	c) Extended family	0	0	12	12	0	0	
3.	Dietary pattern							$X^2 = 10.068$ Df =1 P= 0.002 (NS)
	a) Vegetarian	0	0	21	21	11	11	
	b) Non- vegetarian	0	0	62	62	6	6	
4.	Bad habits							**$X^2 = 9.048$ Df =3 P= 0.029 (S)***
	a) No bad habits	0	0	12	12	7	7	
	b) Smoking	0	0	42	42	8	8	
	c) Alcoholism	0	0	18	18	0	0	
	d) Tobacco chewing	0	0	11	11	2	2	

*** Significant at P≤ 0.05 level**

The above table showed that there is a significant association between bad habits and the level of hopelessness, and there is no significant association between marital status, type of family, and dietary pattern with the level of hopelessness among cancer patients.

Table 8: Association between the level of depression among cancer patients with their selected demographic variables.

N=100

S. No.	Demographic Variables	LEVEL OF DEPRESSION								X^2 value
		No or doubt		Mild		Moderate		Severe		
		N	%	N	%	N	%	N	%	
1.	**Age in years**									$X^2 = 13.075$ Df=9 P= 0.159 (NS)
	a) 19-29 years	1	1	0	0	0	0	14	14	
	b) 30-39 years	0	0	0	0	2	2	36	36	
	c) 40-49 years	0	0	3	3	4	4	31	31	
	d) Above 50 years	0	0	0	0	1	1	8	8	
2	**Gender**									$X^2 = 0.941$ Df= 6 P= 0.988 (NS)
	a) Male	1	1	2	2	4	4	51	51	
	b) Female	0	0	1	1	3	3	37	37	
	c)Transgender	0	0	0	0	0	0	1	1	
3.	**Religion**									$X^2 = 4.253$ Df= 9 P= 0.894 (NS)
	a) Hindu	1	1	2	2	5	5	50	50	
	b) Christian	0	0	1	1	0	0	21	21	
	c) Muslim	0	0	0	0	2	2	15	15	
	d) Others	0	0	0	0	0	0	3	3	
4.	**Educational status**									**X^2=21.083 Df= 9 P= 0.012 (S)***
	a) Illiterate	0	0	3	3	0	0	40	40	
	b) High school	0	0	0	0	2	2	24	24	

	c) Higher secondary	0	0	0	0	4	4	11	11	
	d) Graduate	1	1	0	0	1	1	14	14	
5.	**Occupational status**									$X^2 = 6.410$ Df = 9 P= 0.698 (NS)
	a) Unemployed	0	0	1	1	4	4	40	40	
	b) Employed	1	1	1	1	1	1	37	37	
	c)Self employed	0	0	1	1	2	2	9	9	
	d) Daily wages	0	0	0	0	0	0	3	3	
6.	**Monthly Family income**									$X^2 = 14.855$ Df = 9 P= 0.095 (NS)
	a) Above Rs.50,000	1	1	0	0	0	0	10	10	
	b) Rs.30,001- 50,000	0	0	1	1	4	4	17	17	
	c) Rs. 10,001- 30,000	0	0	1	1	1	1	36	36	
	d) Less than Rs.10,000	0	0	1	1	2	2	26	26	

*** Significant at P≤ 0.05 level**

The above tables show that there is a significant association between educational status and the selected demographic variables, and there is no significant association between age, gender, religion, occupational status, and monthly family income among cancer patients.

Table 9: Association between the level of depression among cancer patients with their selected demographic variables.

N=100

S. No	Demographic Variables	LEVEL OF DEPRESSION								X^2 value
		No or doubt		Mild		Moderate		Severe		
		N	%	N	%	N	%	N	%	
7.	**Marital status**									$X^2 = 3.516$ Df = 6 P= 0.742 (NS)
	a) Single	1	1	1	1	1	1	29	29	
	b) Married	0	0	2	2	5	5	51	51	
	c)Unmarried	0	0	0	0	1	1	9	9	
8.	**Type of family**									$X^2 = 2.814$ Df =6 P= 0.832 (NS)
	a) Nuclear family	0	0	1	1	4	4	41	41	
	b) Joint family	1	1	2	2	2	2	37	37	
	c) Extended family	0	0	0	0	1	1	11	11	
9.	**Dietary pattern**									$X^2 = 7.090$ Df =3 P= 0.045 **(S)***
	a) Vegetarian	1	1	2	2	0	0	29	29	
	b) Non- vegetarian	0	0	1	1	7	7	60	60	
10.	**Bad habits**									$X^2 = 0.779$ Df = 9 P= 0.369 (NS)
	a) No bad habits	0	0	0	0	2	2	17	17	
	b) Smoking	0	0	2	2	2	2	46	46	
	c) Alcoholism	0	0	1	1	2	2	15	15	
	d) Tobacco chewing	1	1	0	0	1	1	11	11	

*** Significant at P≤ 0.05 level**

The above tables show that there is a significant association between dietary pattern and bad habits with the selected demographic variables, and there is no significant association between marital status and type of family among cancer patient.

IV. RESULTS:

- ✓ Majority of cancer patients were aged 30–39 years and 40–49 years (38% each), followed by 19–29 years (15%) and above 50 years (9%). Most participants were male (58%) and Hindu (58%), while 41% were female, 1% transgender, and 22% Christian, 17% Muslim, and 3% belonged to other religions.
- ✓ Most respondents were illiterate (43%), unemployed (45%), and earned Rs.10,001–30,000 per month (38%). Additionally, 26% had high school education, 40% were employed, and 29% earned less than Rs.10,000 monthly.
- ✓ Majority of participants were married (58%), belonged to nuclear families (46%), and followed a non-vegetarian diet (68%). Half of the respondents reported smoking (50%), while 18% consumed alcohol, 13% chewed tobacco, and 19% reported no bad habits.
- ✓ Among the cancer patients, 83% experienced moderate hopelessness, while 17% experienced severe hopelessness. No patients were found to have normal or mild hopelessness.
- ✓ With regard to depression, 89% of the patients experienced severe depression, 7% had moderate depression, 3% had mild depression, and 1% showed no or doubtful signs of depression.
- ✓ Significant association was found between hopelessness like family income and bad habits and depression like educational status and dietary habits among cancer patients with selected demographic variables.

V. DISCUSSION

The findings revealed a high prevalence of psychological distress among cancer patients, indicating that emotional problems are a significant concern in cancer care. The study findings showed that 83% of cancer patients experienced moderate hopelessness and 17% experienced severe hopelessness. None of the participants reported normal or mild levels of hopelessness. This indicates that all cancer patients in the study were experiencing psychological distress. Cancer diagnosis often leads to fear of death, uncertainty about the future, financial burden, and prolonged treatment, which may contribute to feelings of hopelessness. These findings are consistent with previous studies which reported that cancer patients experience emotional distress due to disease burden and treatment challenges. Cancer patients often experience moderate to severe levels of hopelessness due to prolonged treatment, fear of recurrence, and uncertainty regarding survival (Singh et al. (2023)). Similarly, Hegel et al. (2017) reported that hopelessness is strongly associated with poor coping strategies and reduced quality of life among cancer patients.

Regarding depression, the study found that 89% of patients experienced severe depression, 7% moderate depression, 3% mild depression, and 1% doubtful depression. The high prevalence of severe depression may be due to physical suffering, treatment side effects, social isolation, and financial stress. Depression among cancer patients may negatively affect treatment adherence, recovery, and quality of life. These findings are supported by Montazeri et al. (2018), who reported that depression is one of the most common psychological disorders among cancer patients and significantly affects quality of life. Similarly, Penedo et al. (2020) also found that depression and hopelessness are major predictors of poor psychological adjustment in cancer patients.

The study also identified significant associations between hopelessness and age, monthly family income, and bad habits. Younger patients and those with lower income levels experienced higher hopelessness, possibly due to financial concerns and disruption of life goals. Patients with bad habits such as smoking and alcohol consumption also showed higher levels of hopelessness, which may indicate poor coping mechanisms. Furthermore, depression was significantly associated with educational status and dietary pattern. Patients with lower education levels showed higher depression, possibly due to lack of awareness and coping strategies. Poor dietary patterns may also contribute to physical weakness and increased emotional distress.

Overall, the findings highlight that cancer patients experience high levels of hopelessness and depression, emphasizing the need for early psychological assessment, counselling, and integrated mental health care in oncology settings to improve patients' quality of life and treatment outcomes.

VI. CONCLUSION:

The present study findings concludes that majority of the patient's 83% experience moderate hopelessness and 89% of severe depression. There is a significance association between education and dietary pattern with the level of depression among cancer patients.

NURSING IMPLICATIONS:

The findings of the present study have implications related to nursing administration, nursing services, nursing education, and nursing research in managing hopelessness and depression among cancer patients.

NURSING ADMINISTRATION:

Nurse administrators can develop and implement policies and guidelines to identify and manage hopelessness and depression among cancer patients. They can also promote in-service education programs and ensure availability of counselling services and support systems.

NURSING SERVICES:

Nurses play a vital role in assessing psychological distress, providing emotional support, and identifying early signs of hopelessness and depression. They should facilitate timely referrals to mental health professionals and incorporate psychological care into routine nursing practice.

NURSING EDUCATION:

Nursing educators can emphasize the importance of psychological care, including assessment and management of hopelessness and depression.

Students need to be trained in early identification, counselling techniques, and evidence-based interventions to support cancer patients.

NURSING RESEARCH:

The study findings provide baseline data for future research on psychological well-being among cancer patients. Further studies can be conducted to evaluate the effectiveness of interventions aimed at reducing hopelessness and depression in different settings.

RECOMMENDATIONS:

- Conduct studies with larger samples for better generalization.
- Replicate the study in different settings and centers.
- Explore the link between cancer types and psychological distress.
- Assess the role of family support in mental health.

- Study long-term psychological effects and coping outcomes.

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