



**A DESCRIPTIVE STUDY TO ASSESS THE LEVEL OF DEPRESSION AMONG  
PATIENTS WITH CANCER IN SELECTED HOSPITALS AT MANGALURU**

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**ABSTRACT**

**Introduction:** Patients with cancer experiences varying level of depression from mild to severe. It is essential to assess the level of depression which helps health care professionals to contribute supportive care. **Objectives:** To assess the level of depression among patients with cancer, To find association of level of depression with various demographic variables. **Methods:** A quantitative approach with descriptive survey design was adopted. The study was conducted in selected hospitals at Mangalore. The variables under the study were depression and patients with cancer. The study sample consisted of 100 patients who were diagnosed with different stages of cancer. The tool used was Demographic proforma and standardized Beck depression inventory. The data was collected and analyzed using descriptive and inferential statistics. **Result:** The study results revealed that maximum percentage(29%) were belongs to the age group of 51 to 60 years, majority (57%) of cancer patients were males, most (44%) of the cancer patients were Hindus, majority (78%) them were married, most (39%) of the patients had primary education, maximum percentage (68%) were working for daily wages, most (57%) of the patients were belongs to nuclear family, majority (76%) of them had monthly income between 10000-20000, majority of the people (54%) were suffering from cancer of gastrointestinal system, and most of the patients (65%) were in the second stage of cancer. This study showed that most (41.0%) of the patients suffering from moderate depression. Around 29 % are suffering from border line clinical depression, only 1% is suffering from extreme depression. **Conclusion:** The findings of the study revealed that majority of the patients are suffering from moderate depression and there was significant association between level depression and age, marital status, occupation, type of cancer and stage of cancer.

**KEYWORDS:** Depression; Cancer.

**INTRODUCTION**

The word cancer creates a dread feeling within the individuals. The patients with cancer may experience several stressors and emotional up and downs. Fear of death, interruption of life plan, changes in body image and self-esteem, changes in social role and lifestyle all important issues to be faced during the course of illness.

Depression in cancer patients may result from situational stress related to investigative process and treatment modalities. A biologically determined depression which is not related to a precipitating event. But several factors have been suggested including the emotional impact of a cancer diagnosis, side effect of treatment, impairment of body images and so on.

More over the prevalence of depression among cancer patients is often underestimated, because many symptoms of depression such as fatigue, weight loss, loss of appetite, or sleep disruption closely mirror the psychological effect of cancer; or the use of certain treatments and other symptom management medication may preclude an appropriate diagnosis. It is very important to know the somatic symptoms of cancer and those due to treatment<sup>1</sup>. The word cancer is still terrific that creeps upon us without warning. Receiving a cancer diagnosis is a catastrophic event. Fear about the future and facing the dread feeling is inevitably present. Depression is a co morbid disorder which will affect the quality of life of the patients with cancer. In the last 10 years, studies reporting the prevalence of depression in

the terminally ill have ranged from 12.2% to 26% in a study of terminally ill cancer patients.<sup>[2]</sup>

A cross-sectional study was conducted to find the prevalence of anxiety and depression among cancer patients at the tertiary care hospital Shifa international hospital Islamabad and nuclear medicine, oncology, and radio therapy institute. 300 patients were interviewed using Aga Khan university anxiety and depression scale. Main outcome measures using a score of 20 and above AKUADS, around 146 (48.7%) patient were suffering from anxiety and depression. The prevalence of anxiety and depression among cancer patients was high showing that importance should be given to screening and counselling for cancer patients for anxiety and depression.<sup>[3]</sup>

An observational cohort study was conducted to assess the prevalence of depression among women with the diagnosis of breast cancer. Sample size for the study was 222 women with a diagnosis of early breast cancer. Tools used for the study was HADS. Results revealed that prevalence of depression and anxiety was 33% at diagnosis, 15% after 1 year and 45% after diagnosis of recurrence.<sup>[1]</sup>

Depression affects 121 million people and is the leading cause of disability worldwide. Untreated depression leads to personal suffering and increased mortality when significant number of mental health professionals began working in oncology settings. They asked oncologist to describe the perception of prevalence of depression in cancer patients. A common response from everyone is depressed, because they have cancer.<sup>[4]</sup>

Many studies showed that patients with cancer are depressed. Everyone with cancer suffers throughout their life. Sadness and grief are normal reactions to the crises faced during cancer. All people will experience these reactions periodically.<sup>[5]</sup> Hence it is significant to identify the depression in cancer patients in order to maintain the quality of life of the patients.

## SUBJECTS AND METHODS

A quantitative research approach with descriptive survey design was adopted for the study. The study was conducted in selected hospitals at Mangaluru. The variables under the study were depression and patients with cancer. The population under the study were patients with cancer with selected hospitals at Mangaluru. Among those fulfil the sampling criteria 100 patients were selected as the study sample. The tool used for the study was Demographic proforma, Standardised Beck depression inventory to assess the level of depression among the patients with cancer. The tool was validated and reliability calculated. Tool found to be reliable. After obtaining the ethical clearance, informed

consent was taken from study participants. The data was collected and analysed using descriptive and inferential statistics.

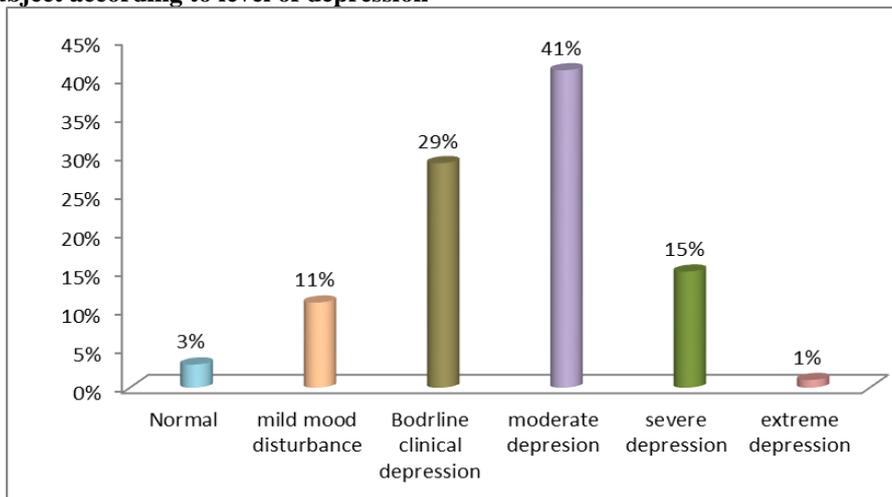
## RESULT

The study results showed that highest percentage (29%) of them were in the age group of 51-60 years. Most of them (57%) were male. Most of them were (51%) Hindu religion. Majority of them (78%) were married. Nearly half percentage (39%) had primary school education. Majority of them (68%) were daily wages. Most (57%) of them belonged to nuclear family. Majority (76%) of them had monthly income of rupees 10000-20000. Most (54%) of them had cancer of gastro intestinal system. Maximum percentage (65%) of them was in 2<sup>nd</sup> stage of cancer.

Data in fig 1 shows that maximum number of subjects (41%) had moderate depression. Few (15 & 11%) had severe and mild mood disturbances respectively. Only a small percentage (1%) had extreme depression and 3% had no depression.

Data in table 1 show that the calculated chi square value for the demographic variables such as Age ( $\chi^2 = 17.60$ ), marital status ( $\chi^2 = 153.52$ ), occupation ( $\chi^2 = 11.46$ ), type of cancer (50.0), stage of cancer ( $\chi^2 = 47.66$ ) was significant at  $p < 0.05$  level. But there was no association of level of depression with selected demographic variables such gender, religion, educational status, type of family, family income.

**Description of subject according to level of depression**



**Fig. 1: Description of subject according to the level of depression.**

**Table 1: Association between level of depression and selected demographic variables n = 100.**

| Sl. No. | Demographic variable         | Above median (≥31) | Below median (≤31) | $\chi^2$ | df | p value |
|---------|------------------------------|--------------------|--------------------|----------|----|---------|
| 1       | Age                          |                    |                    | 17.60    | 4  | 0.001*  |
|         | 30 – 40                      | 1                  | 14                 |          |    |         |
|         | 41 – 50                      | 5                  | 20                 |          |    |         |
|         | 51 – 60                      | 2                  | 27                 |          |    |         |
|         | 61 – 70                      | 5                  | 20                 |          |    |         |
| 71 – 80 | 2                            | 4                  |                    |          |    |         |
| 2       | Gender                       |                    |                    | 0.76     | 1  | 0.38    |
|         | Male                         | 7                  | 50                 |          |    |         |
|         | Female                       | 8                  | 35                 |          |    |         |
| 3       | Religion                     |                    |                    | 4.74     | 2  | 0.09    |
|         | Hindu                        | 5                  | 39                 |          |    |         |
|         | Christian                    | 2                  | 24                 |          |    |         |
|         | Muslim                       | 8                  | 22                 |          |    |         |
| 4       | Marital status               |                    |                    | 153.52   | 3  | 0.0001* |
|         | Single                       | 0                  | 15                 |          |    |         |
|         | Married                      | 15                 | 63                 |          |    |         |
|         | Widow/widower                | 0                  | 5                  |          |    |         |
|         | Divorcee                     | 0                  | 2                  |          |    |         |
| 5       | Educational status           |                    |                    | 2.13     | 3  | 0.54    |
|         | No formal education          | 4                  | 34                 |          |    |         |
|         | Primary                      | 8                  | 31                 |          |    |         |
|         | Secondary & higher secondary | 2                  | 17                 |          |    |         |
|         | Graduation and above         | 1                  | 3                  |          |    |         |
| 6       | Occupation                   |                    |                    | 11.46    | 3  | 0.009*  |
|         | Daily wages                  | 7                  | 61                 |          |    |         |
|         | Private employee             | 2                  | 16                 |          |    |         |
|         | Government employee          | 0                  | 1                  |          |    |         |
|         | Others(specify)              | 6                  | 7                  |          |    |         |
| 7       | Type of family               |                    |                    | 0.92     | 2  | 0.62    |
|         | Nuclear family               | 9                  | 48                 |          |    |         |
|         | Joint family                 | 6                  | 32                 |          |    |         |
|         | Extended family              | 0                  | 5                  |          |    |         |
| 8       | Income                       |                    |                    | 2.22     | 3  | 0.52    |
|         | <20000                       | 11                 | 65                 |          |    |         |
|         | 20001-30000                  | 4                  | 13                 |          |    |         |
|         | 30001-40000                  | 0                  | 4                  |          |    |         |

| Sl. No. | Demographic variable   | Above median ( $\geq 31$ ) | Below median ( $\leq 31$ ) | $\chi^2$ | df | p value |
|---------|--|----------------------------|----------------------------|----------|----|---------|
|         | >40000   | 0                          | 3                          |          |    |         |
| 9       | Type of cancer<br>GI system<br>Respiratory system<br>Reproductive system<br>Others (specify) | 7<br>0<br>7<br>1           | 47<br>16<br>16<br>6        | 50.000   | 3  | 0.0001* |
| 10      | Stage of cancer<br>Stage I<br>Stage II<br>Stage III  | 2<br>10<br>3               | 9<br>55<br>21              | 47.66    | 2  | 0.0001* |

\*Significant  $P < 0.05$

Table 1: Association between level of depression and selected demographic variables.

## DISCUSSION

Highest percentage (29%) of them were in the age group of 51-60 years. Most of them (57%) were male. Most of them were (51%) Hindu religion. Majority of them (78%) were married. Nearly half percentage (39%) had primary school education. Majority of them (68%) were daily wages. Most (57%) of them were belongs to nuclear family. Majority (76%) of them had monthly income of RS/<20000. Most (54%) of them had cancer of gastro intestinal system. Maximum percentage (65%) of them were in II stage of cancer.

The study was supported by a cross-sectional study conducted in POF Hospital Wah Cantt, DHQ Hospital Rawalpindi and NORI Islamabad. This study reported that majority of the patients with cancer (58%) experiencing depression belonged to male category.<sup>[6]</sup>

In the present study result revealed that maximum number of subjects (41%) had moderate depression. Few (15 & 11%) had severe and mild mood disturbances respectively. Only a small percentage (1%) had extreme depression and 3% had no depression.

This study finding are compatible with the findings of a study conducted in Ganni Subba Lakshmi Trust Cancer Hospital and Research Centre Rajahmundry .which showed that none of the patients were suffering from very severe depression.<sup>[7]</sup>

The calculated chi square value for the demographic variables such as Age ( $\chi^2 = 17.60$ ), marital status ( $\chi^2 = 153.52$ ) occupation ( $\chi^2 = 11.46$ ), type of cancer (50.0), stage of cancer ( $\chi^2 = 47.66$ ) was significant at  $p < 0.05$  level. But there was no association of level of depression with selected demographic variables such gender, religion, educational status, type of family, family income.

## CONCLUSION

The present study has shown that patients with cancer manifest with varying level of depression that is mild moderate and severe. Majority of the patients is suffering from moderate depression and there was

significant association between level depression and age, marital status, occupation, type of cancer and stage of cancer. The depression has a negative impact on the quality of life of cancer patients. Thus standardised Beck depression inventory had been useful tool for assessment of level of depression.

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