

# ORIGINAL ARTICLE

## Depression in cancer patients: One of the major issues to care

Mukul Goyal<sup>1</sup>, Naveen Sharma<sup>2</sup>

<sup>1</sup>Assistant Professor, Department of Medical oncology, National Institute of Medical Science & Research, Jaipur Rajasthan, India;

<sup>2</sup>Assistant Professor, Department of Surgical oncology, National Institute of Medical Science & Research, Jaipur Rajasthan, India

### ABSTRACT:

**Background:** Cancer is associated with mental stress and depression that hinders the treatment of cancer. Hence, screening for depression is very important for proper care of cancer patients. **Objectives:** To assess depression in newly diagnosed cancer patients. **Materials and methods:** 65 newly diagnosed cancer patients were involved in the study. Depression in these patients were screened and quantified using two scales namely HADS and HAM-D. **Result:** On screening with HADS 26.01 %, 26.1% and 47.7% of patients showed normal state, mild depression and symptomatic depression respectively, while with the use of HAM-D, we found that majority of cancer patients presented very severe depression (40%) followed by severe (16.9%) and moderate (15.4%). **Conclusion:** We found that most of the cancer patients undergo moderate to severe depression state, thereby alarming the conditions requiring proper care and management to have beneficial clinical outcomes.

**Keywords:** Cancer Depression, HADS, HAM-D

**Corresponding Author:** Dr. Naveen Sharma, Assistant Professor, Department of Surgical oncology, National Institute of Medical Science & Research, Jaipur Rajasthan, India

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### INTRODUCTION

Depression is an unavoidable state of mind observed in the patients when they are aware of the fact that they have contracted the cancer. Compared to the patients at initial stage, depression has become the critical issue in the palliative care of cancer patients who are at end stage of their life [1]. Therefore, accurate treatment and patient care can improve the quality and prolong life of such patients, since depression as well as its related symptoms inversely affects the compliance of medical therapies thereby reducing survival rates. The patients of depression may also refrain themselves from family and societal support symptoms that further increase the feeling of despair and stress [2]. As per international standards, there should be routine assessment of distress in cancer patients. In clinical setting, commonly used tool to assess depression and anxiety is HADS (hospital anxiety and depression scale). It is valid, reliable and easy practical tool for clinicians to quantify depression [3]. Another screening scale called HAM-D (Hamilton Depression rating scale) is also available that determines severity of depression.

Since depression affects physical and mental health, lower living quality, increases medical burden in cancer patients, proper evaluation and treatment of them is important. Thus in this study we screened the newly

diagnosed cancer patients for depression and determine its severity.

Depression in cancer patients can interfere with treatment and recovery and may subsequently increase their morbidity and mortality [4]. Recognition of depression and determining the appropriate level of intervention, ranging from brief counseling and support groups to medication and psychotherapy is an important aspect of cancer care, which unfortunately is missing in most palliative care settings [5]. There is little published literature based on the psychological profile of cancer patients in India receiving chemotherapy. This study aims to generate information which could later be expanded on to further address this issue.

The rate of depression in cancer patients is thought to be up to three times higher than in the general population [6] Studies using Diagnostic for Statistical Manual of Mental Disorders (DSM) criteria [7] for major depressive disorder (MDD) have identified a variety of prevalences ranging from 2.0-43.5%, [8,9] whilst palliative care wards have documented rates of depression as high as 49.0%. [10]. The wide range of reported prevalences may be due to differences in assessment tools, variation in the types of patients interviewed, varying age groups, varying gender proportions, inpatient status and other factors. A study by Linden et al, [6] and a comprehensive literature

review by Ng et al [11] detailing rates of depression in >9,000 patients, each in a variety of settings and ages, calculated the prevalence as 10.8% and 12.9%, respectively. In addition, a further 16% of patients are reported to have subclinical, yet still damaging, depression [6,12].

**MATERIALS AND METHODS**

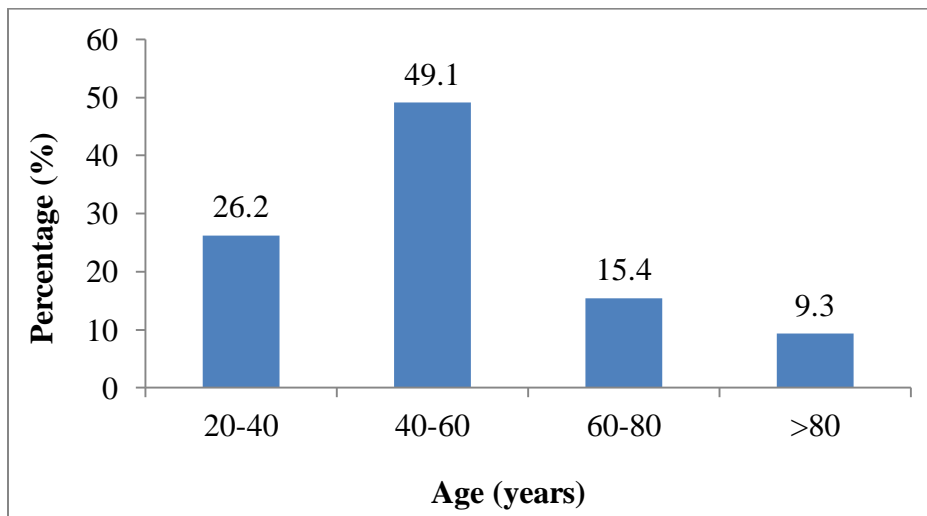
It was a cross sectional study conducted at Department of Medical oncology, National Institute of Medical Science & Research, Jaipur Rajasthan from July 2014 to January 2015. 65 cases of cancer patients newly diagnosed within past one month were recruited. All the patients were screened for the presence of depression using HADS. The patients having depression were further evaluated using HAM-D.

The person suffering from any other psychiatric disorders were excluded from the study. Basic details of patients like age and gender were recorded.

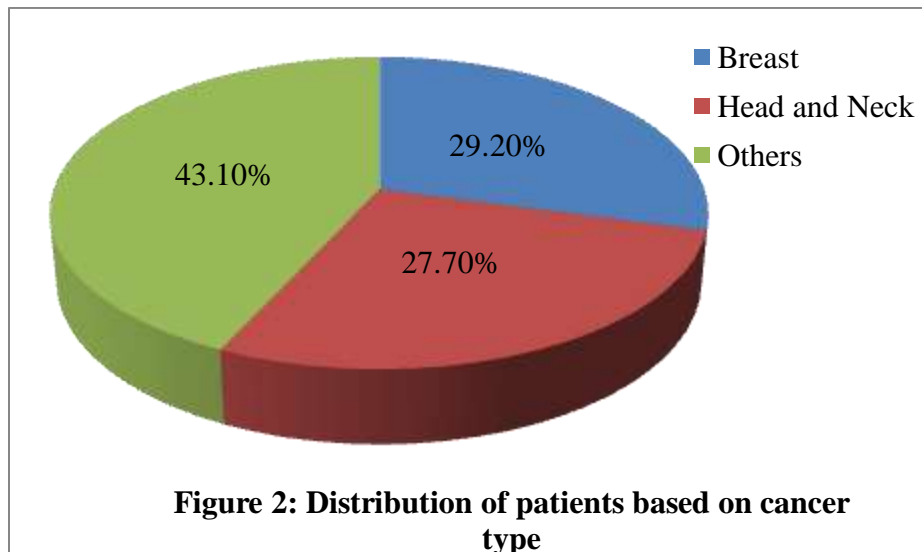
**HADS test**

It consists of 14 subscales, 7 for anxiety and 7 for depression. The patients were asked to choose the suitable options out of 4, which described their feelings more closely in past week. The options have the ratings from 3 to 0 and the total score range is 0-42. On the basis of scores obtained, the patients were further categorized in different groups as normal, mild and symptomatic. The patients on evaluation with HAM-D scale were categorized as normal, mildly depressed, moderately depressed, severely depressed and very severely depressed.

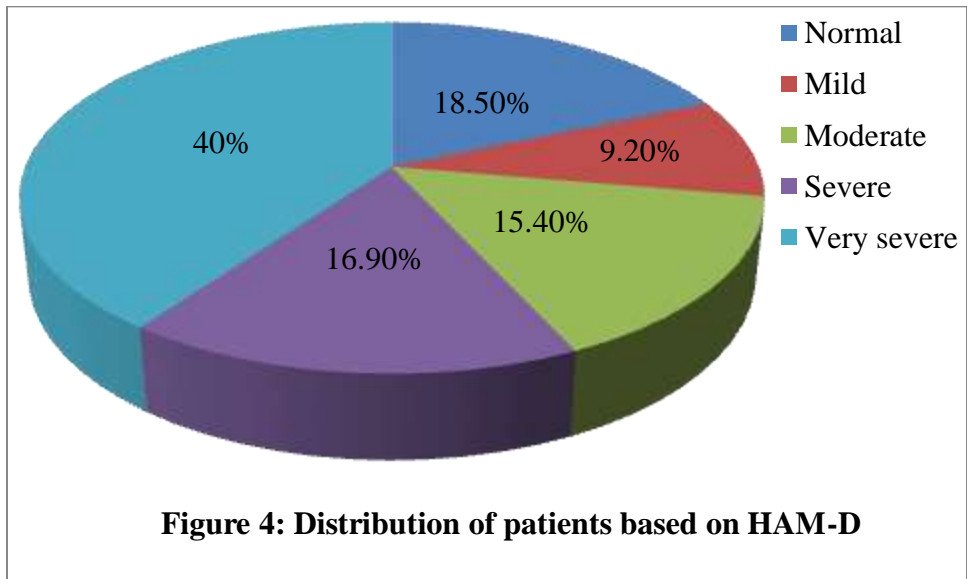
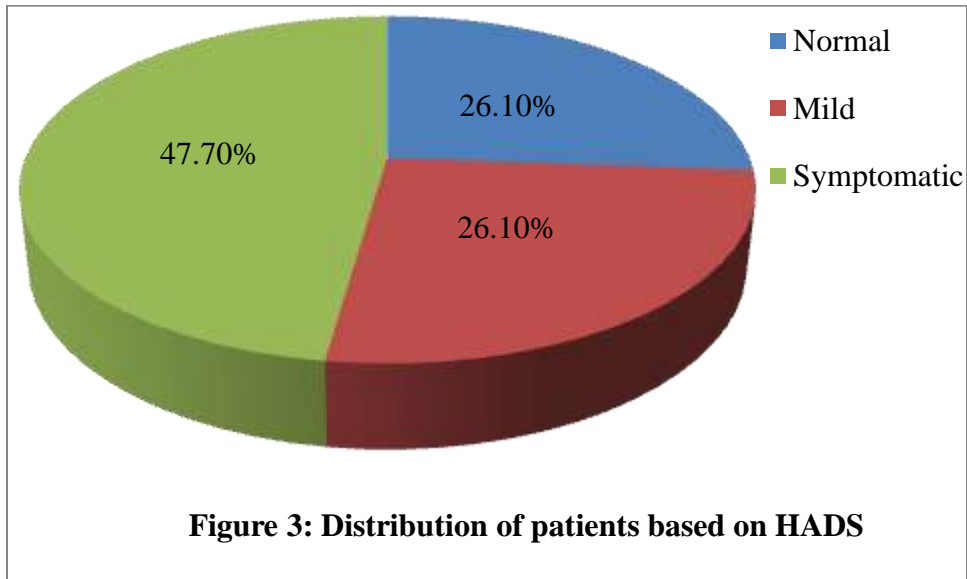
**RESULT AND DISCUSSION**



**Figure 1: Age based distribution of patients**



**Figure 2: Distribution of patients based on cancer type**



**Table 1: Association of age with HADS**

Age	Depression		
	Normal (%)	Mild (%)	Symptomatic (%)
20-40	8.5	13.5	12.8
40-60	15.6	5.9	28.2
60-80	2.9	5.9	6.7
>80	-	1.1	-

**Table 2: Association of age with HAM-D**

Age	Depression				
	Normal (%)	Mild (%)	Moderate (%)	Severe (%)	Very severe (%)
20-40	5.9	2.3	5.8	8.4	6.8
40-60	10.3	4.4	4.5	4.6	24.4
60-80	3.3	3.9	5.1	3.4	4.9
>80	-	-	-	-	2

**Table 3: Association of gender with HADS**

Gender	Depression		
	Normal (%)	Mild (%)	Symptomatic (%)
Female	15.6	21.4	30.5
Male	10.1	5.3	17.1

**Table 4: Association of gender with HAM-D**

Gender	Depression				
	Normal (%)	Mild (%)	Moderate (%)	Severe (%)	Very severe (%)
Female	10.6	7.4	15.3	11.6	25.3
Male	7.2	2.4	1.6	4.3	14.1

In this study the patients were stratified based on age, gender, HADS, HAM-D score, type of cancer. Age and gender association with depression score was also determined. The patients included in our study were diagnosed with cancer of breast, head and neck, lung, esophagus and colon. Majority of the patients belonged to the age group of 40-60 years (Figure 1). When compared to males, the incidence of cancer was high in females. Further the most commonly diagnosed cancer was breast cancer, followed by head and neck (Figure 2). As per HADS, 26.01%, 26.1% and 47.7% of patients were normal, had mild and symptomatic depression respectively (Figure 3).

Similarly based on HAM-D, majority of the patients had very severe depression (40%) (Figure 4) followed by severe and moderate. Most of the patients in age group 20-40 years had mild depression while for the patients of age groups 40-60 and 60-80 years, they exhibited symptomatic depression. Likewise in case of HAM-D, majority of patients in the age group of 40-60 and 60-80 years were very severely depressed while in the age group of 20-40 years, most of the patients showed severe depression.

On gender wise comparison of HADS and HAM-D, we found that the incidence of depression was profound in case of females compared to males which may be attributed to more physical, mental environment and societal burdens experienced by females. The results of this study were in accordance to that of previous studies [13,14,15]

Long period of treatment, repeated hospitalizations and side effects of chemotherapy exact a toll on the psychological and emotional status of the patient.[16] Cancer patients who had been undergoing chemotherapy for more than 6 months had greater odds of being depressed. This could be attributed to the fact that the long duration of chemotherapy and repeated visits to the hospital having a deteriorating effect on the psychological profile of these patients. Spagnola et al. in their study suggested of a decline in a patient's psychological status through the course of their chemotherapy treatment.[17] Having a co-existent illness is one of the strongest risk factors for having

depression in cancer patients.[18,19] However, the present study revealed that depression among the patients who had other disease conditions was lower (37%) compared to those who did not have other diseases (59.2%). The reason for this remains unknown. Although depression in cancer patients have been dealt with by many authors,[20-23] this is one of the first studies to be done in this part of the country. The findings of this study can be relevant to the health care professionals who can initiate psychological screening at an early phase. However, the small sample size of the study may be the reason for which none of the predictors were found statistically significantly associated with the presence of depression. A larger sample may be needed to quantify the association. Moreover, the cross-sectional nature of the study limits the detection of the alteration of the psychological status over a period in these patients. In addition, self-reporting by the patients may be influenced by specific contexts, situations, and cultures and by a variety of individual and developmental differences.

## CONCLUSION

From this study we conclude that depression especially severe form and very severe form are associated with cancer. It is also associated with age and gender. Depression incidence increased with increase in age and it was very common in females. Depression in cancer patients can be quantified using HADS and HAM D scales and it is also suggested that depressive patients should be handled with great patience and care so that hope of happiness can be developed in them.

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