



## SCREENING AND ASSESSMENT OF DEPRESSION IN CANCER PATIENTS ATTENDING ONCOLOGY OPD AT KAMSRC.

### Oncology

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### ABSTRACT

Cancer being the most stressful events, depression is one of the most commonly diagnosed psychiatric illness. Depression may interfere with cancer treatment. Screening and assessment of depression in cancer patients is necessary for good cancer care. The main aim of this study is to screen and assess for depression in newly diagnosed cancer patients attending the oncology OPD at KAMSRC. Patients who gave their informed consent were recruited and screened for depression using the Hospital Anxiety And Depression Scale (HADS). The positively screened subjects were further assessed using Hamilton Depression Rating Scale (HAM-D). In the study sample age and illiteracy were the factors frequently affecting depression.

### KEYWORDS

Depression, Cancer, HADS, HAM-D

#### INTRODUCTION:

Depression is seen in many cancer patients. A common reaction by the physician considering the possibility of depression in a cancer patient is to say, "of course the patient is depressed, who wouldn't be depressed?," and then discounting the importance of the depression or its treatment as being secondary to the ominous prognosis and risky treatment regimens the patient faces. It is an especially important issue in palliative care, as depression can be more common in patients who are at the end of life. Accurate assessment and treatment can have a powerful impact on improving a patient's quality of life<sup>1</sup>. All patients who face a life-threatening diagnosis experience a normal albeit painful emotional reaction, but a substantial minority will become clinically depressed<sup>2</sup>. Clinical depression is a relatively common, and yet frequently overlooked. Depression and its associated symptoms diminish quality of life, adversely affect compliance with medical therapies, and reduce survival. They may also withdraw from family or other social support systems. This in turn may result in increasing stress and feelings of despair<sup>3</sup>. Routine screening for distress is internationally recommended as a necessary standard for good cancer care<sup>4</sup>. Hospital Anxiety and depression scale (HADS) is a useful instrument for screening anxiety and depression in clinical settings. It was developed by Zigmond and Snaith in 1983. Its purpose is to provide clinicians with an acceptable, reliable, valid and easy to use practical tool for identifying and quantifying depression<sup>5</sup>. Hamilton depression rating scale (HAM D) was used to assess the severity of depression.

As depression can have profound negative effects on the functional status, quality of life, duration of hospitalization and even medical outcome of cancer patients, evaluation and treatment of these disorders are important.

This study can help the patients in achieving better mental health.

#### AIMS AND OBJECTIVES:

- To screen for depression and to assess the severity of depression in newly diagnosed cancer patients at KAMSRC.

#### INCLUSION CRITERIA:

- New cases diagnosed with cancer within past one month.
- Age group more than 18 years.

#### EXCLUSION CRITERIA:

- Patients with other co morbid psychiatric disorders.
- Patients who are on antidepressants, antipsychotics and anxiolytics.

#### METHODOLOGY:

##### Sampling technique and data collection:

This study was a cross sectional study conducted at oncology OPD at KAMSRC from July 1<sup>st</sup> to August 31<sup>st</sup> 2017. We have collected all the newly diagnosed cancer cases within the past one month of diagnosis. 87 cases were identified. Out of these, two cases did not give consent. So, data of 85 cases with informed consent was collected administering a semi structured proforma.

Every patient was screened for depression using the HOSPITAL ANXIETY AND DEPRESSION SCALE [HADS]. Patients diagnosed with depression were further evaluated to assess the severity using the HAMILTON DEPRESSION RATING SCALE (HAM D). Patients were further referred to psychiatric department for evaluation and treatment.

##### Data entry and statistical analysis:

Data collected was cleaned and edited manually. Results have been analysed and statistical analysis was done in order to know the significance of factors.

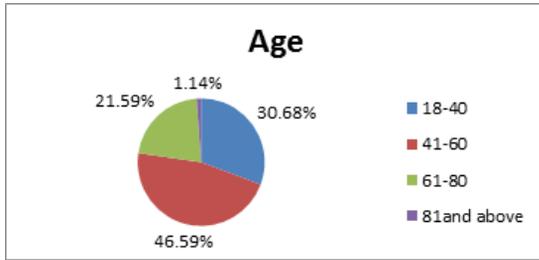
A presumptive diagnosis of depression was based on a four point 14-item Hospital Anxiety and Depression Scale (HADS). HADS has two subscales for anxiety (seven items) and for depression (seven items). For each item, the respondents were asked to indicate which of the 4 options (rated from 3 to 0; score range, 0-42) comes closest to describing how they have been feeling in the past week. The score of 0-7 means without clinical symptoms of depression, 8-10 mild depression and 11-21 symptomatic depression. The spectrum of depression means cumulation of symptomatic plus mild depression. The positively screened patients were further assessed using HAM-D scale which categorized the subjects into normal, mild depression, moderate depression, severe depression and very severe depression.

The data collected was analyzed using R programming language. Linear regression method was used to get the p values for the variables. With the help of the Anova table, significance between the variables was found and correlation was used to find the relationship between the variables.

**DISCUSSION AND RESULTS:**

Eighty five cases with a recent diagnosis of breast, cervical, esophagus, lung or post cricoid cancer have been included in the study.

Twenty six (30.68%) cases were In the age group 20-40 years. Forty cases (46.59%) were between 41-60 years, eighteen (21.59%) were between 61-80 years and one(1.14%) was greater than 80 yrs. The mean age of the patients was 59.04±14.34 (range of 18-80) years. Sixty (72%) cases were females and twenty five (28%) were males which is similar to Talia R. Weiss Wiesel et al study which showed the percentage of females as 56.2%.<sup>6</sup> Educated and uneducated were 32 (37.6%) and 53 (62.35%) cases, respectively which is similar to the European study which showed breast cancer being the most common.<sup>7</sup> Among the patients interviewed most cases were breast cancer 25 (29.25%),24(28.08%) cancer cervix and those with other cancers were 36 (42.12%). 35(40.95%)were undergoing radiotherapy,30(35.1%) chemotherapy, 11 (12.87%)were radio and chemotherapy and 10 (11.76%) were undergoing surgery.



**HOSPITAL ANXIETY AND DEPRESSION SCALE :**

HADS (Depression Score)	No. of patients	Percentage
1. Normal	23	27.06
2. Borderline	21	24.71
3. Abnormal	41	48.24
Total	85	100.00

Screening of the patients for depression using HADS-D scale, 41(48.24%)were with abnormal scale, 23 (27.06%)were normal, 21 (24.71%) were borderline.

**HAMILTON DEPRESSION RATING SCALE:**

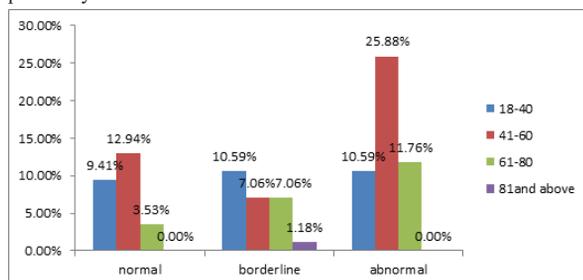
HAM - D	No. of patients	Percentage
1. Normal	16	18.82
2. Mild Depression	8	9.41
3. Moderate Depression	13	15.29
4. Severe Depression	14	16.47
5. Very Severe Depression	34	40
Total	85	100

Among the screened patients for depression, 34(40%) were with very severe depression,16 (18.82%) were normal, 14(16.47%) were with severe depression,13(15.29%) were with moderate depression, 8 (9.41%) were with mild depression.

**AGE IN RELATION WITH HADS:**

25.88% with abnormal scale were in 41-60yrs age, 11.76% were in 61-80 yrs, 10.59% were in 20-40 yrs,0.00% were above 81yrs. The mean age of the present study was 54.09 which is comparable to Talia R. Weiss Wiesel et al study in which the mean age was 73.1 yrs.<sup>9</sup>

p value >.05, Age is not significant with HADS (Depression), Correlation between age and HADS (Depression) is 0.133055. It is positively correlated.



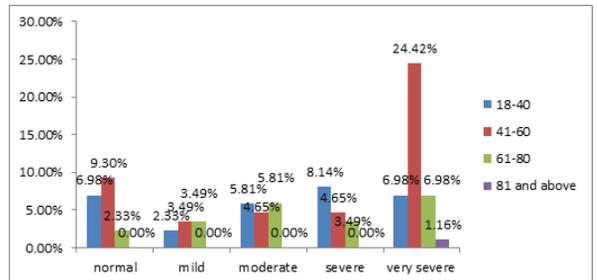
**AGE IN RELATION WITH HAM D:**

In very severe depression, 24.42% were in 41-60 yrs age, 6.98% were in 20-40 and 61-80 yrs, 1.16% were above 81yrs. In severe depression, 8.14% were in 20-40 yrs age. In moderate depression 5.81% were in 20-40 and 61-80 yrs. In mild depression, 3.49% were in 41-60 and 61-80 yrs.

P value=0.541704

Correlation 0.068361 positive correlation (marginal).

The mean duration of diagnosis of cancer of the study was found to be 18.47 days. The average of the HADS-D score was found to be 2.11 and the average of HAM-D score was found to be 1.43.



**AGE IN RELATION WITH EDUCATION AND THE TYPE OF CANCER**

31.82% of the uneducated patients were between 41 to 60 yrs. 15.91% of the educated patients were between 20 to 40 yrs.

In breast cancer, 16.28% were in 41-60 yrs age,8.14 were in 20-40yrs, 4.65% were in 61-80yrs,0.00% were in above 81yrs.

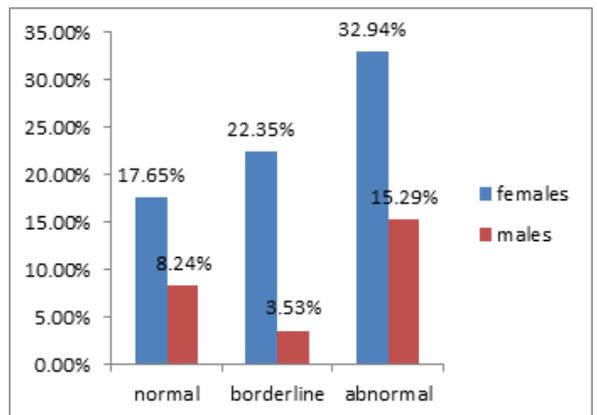
In cervical cancer 12.79% were in 41-60yrs age, 10.47% were in 20-40 yrs , 3.49% were in 61-80 yrs and 1.16% were above 81 yrs.

In other cancers(tonsil, tongue, post cricoid, lung, prostate) 18.60% were in 41-60yrs, 13.95% were in 61-80 yrs, 10.47% were in 20-40 yrs, 0.00 were above 81yrs.

**SEX IN RELATION WITH HADS AND HAM D**

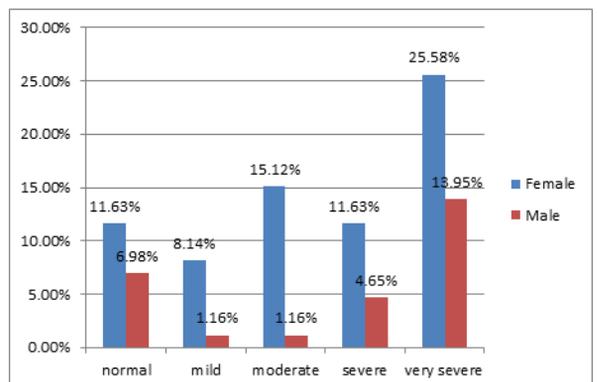
**SEX IN RELATION WITH HADS**

32.94% of females and 15.29% of males were with abnormal scale



**SEX IN RELATION WITH HAM D**

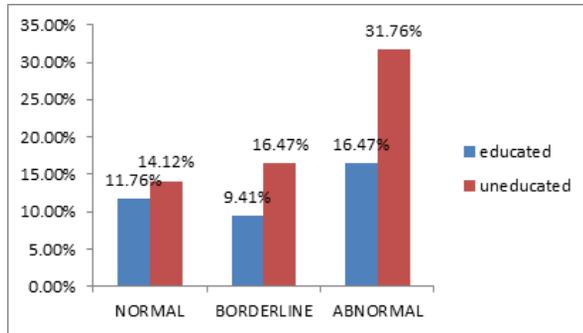
25.5% of females and 13.95% of males were with very severe depression.



**EDUCATION IN RELATION WITH HADS AND HAM D**

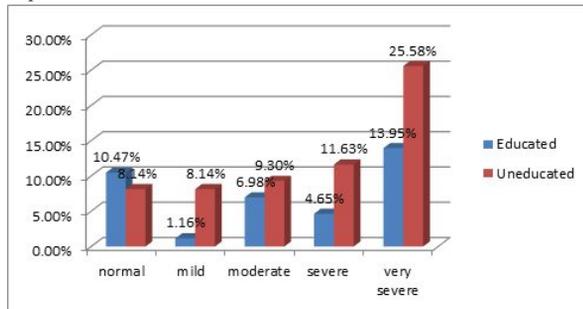
**EDUCATION IN RELATION WITH HADS**

31.76% of uneducated and 16.47% of educated were with abnormal scale.



**EDUCATION IN RELATION WITH HAMD**

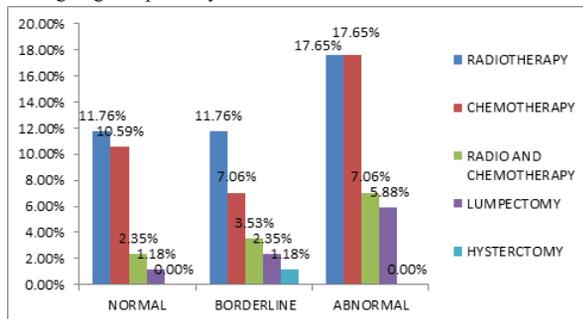
25.5% of uneducated and 13.95% of educated were with very severe depression.



**TREATMENT IN RELATION WITH HADS AND HAMD**

**TREATMENT IN RELATION WITH HADS**

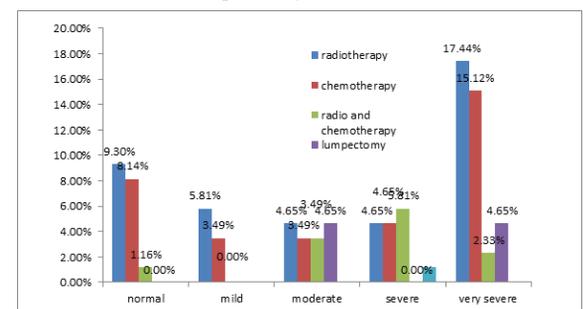
Among the subjects who scored abnormal scale, 17.65% were undergoing radiotherapy and chemotherapy, 7.06% were undergoing a combination of radiotherapy and chemotherapy, 5.88% were undergoing lumpectomy.



**TREATMENT IN RELATION WITH HAMD**

Among the subjects with very severe depression, 17.44% were undergoing radiotherapy similar to Marie-Christine Cordes et al study which showed the effects of radiotherapy on HADS-D<sup>8</sup>, 15.12% were undergoing chemotherapy, 2.33% were undergoing a combination of radiotherapy and chemotherapy, 4.65% were undergoing lumpectomy. P value= 0.403203 it is significant

Correlation 0.091286 it is positively correlated.



**CONCLUSION:**

From the study sample we can infer that depression increases with increasing age. The severity of depression was seen to increase gradually as age increased. Illiteracy and age could be some of the factors affecting depression. The age group 41-60yrs showed highest incidence in Breast, Cervix and Other cancers and also HADS and HAMD scale. Most of the reported cases were females and showed abnormal scale in HADS and very severe depression in HAMD. Similarly, most of the reported cases were uneducated and showed abnormal scale in HADS and very severe depression in HAMD.

A positive correlation was found between the type of treatment and depression. Radiotherapy and Chemotherapy might have added up to the abnormal scale in HADS. Subjects undergoing radiotherapy had very severe depression followed by chemotherapy.

Advanced stage of the disease, repeated sessions with frequent intervals of the treatment, long duration of hospital stay, cost of the treatment, condition of the family, associated side effects of the treatment might have added up to the severity of depression.

Among all the cases, those diagnosed with borderline depression were counseled and those with severe depression were referred to the Psychiatry department.

**LIMITATIONS:**

- As this was a cross sectional study we could not evaluate completely due to time constraints.
- As this was a hospital based study results are not applicable to the general population.

**ACKNOWLEDGEMENTS:**

**Statistician:**

Sreeram Madhav has supported us in the statistical analysis and used all his sources in helping us achieving the targets and completing the task successfully.

**CONFLICT OF INTEREST: NO**

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