# Frequency of Depressive Disorder among Patients of Breast Cancer Visiting a Tertiary Care Public Hospital at Karachi

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## ABSTRACT

OBJECTIVE: To determine the frequency of depressive disorder in diagnosed cases of breast cancer visiting a tertiary care public hospital at Karachi.

METHODOLOGÝ: Descriptive Cross sectional study, conducted at Department of Oncology, Jinnah Postgraduate Medical Centre, Karachi from May to November 2015. Total 93 women who fulfilled the inclusion criteria were included in the study. Brief history of breast cancer was taken and then patients were assessed for depression on the basis of Hamilton Rating Scale for depression and cut off score of  $\geq$  7 was marked as women with positive depressive disorder. Data was analyzed on SPSS version 22.

RESULTS: Mean  $\pm$  SD of age was 58.64 $\pm$ 11.26 with C.I (56.32-60.95) years. Mean  $\pm$  SD of duration of breast cancer and Hamilton rating score for depression were 15.86 $\pm$ 5.26 with C.I (14.77-16.94) and 8.23 $\pm$ 7.55 with C.I (6.67-9.78) respectively. Out of 93 women frequency of depressive disorder was found in 54 (58%) patients.

CONCLUSION: The study showed that Depressive Disorder among patients of breast cancer is quite high. For managing breast cancer patients, more care or support should be given to this type of patients as they are at high risk of depression.

KEY WORDS: Depressive disorder, Breast cancer, Malignancy, Frequency.

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### INTRODUCTION

Breast malignancy is a fundamental ailment end among women around the globe, with more than 210,000 new cases and 40,000 deaths for each year<sup>1</sup>. For 2013, it was evaluated that 232,000 new cases of intrusive breast malignant growth threatening development and practically 65,000 new examples of carcinoma in situ (early stage disease) would be examined for women<sup>2</sup>. The evidenced proportion for psychological distress in breast cancer patients is 33% at initial diagnosis, 15% at one-year post conclusion, and 45% after a malignant growth recurrence<sup>3</sup>. In a recent research the predominance for depressive disorder was 19.1% and frequency for anxiety was 24.1% in breast malignant growth patients<sup>4</sup>.

Consolidated effects of depressive disorder and anxiety might be found in 11% to 16% of patients<sup>5,6</sup>. Living with the determination and treatment of any endless medical condition could worsen the wellspring of mental and social burdens. Women with breast disease are exposed to numerous such impacts. They should manage, among others, the stun of finding and its suggestions, the symptoms of treatment, adjustments to real appearance, changes in social role and routine daily life working, and, for a few women, dealing with declining wellbeing, and demise. Under these conditions, it isn't astonishing that numerous women hint at mellow or transient surprise, including feelings of trouble, uneasiness, crabbiness, outrage, fear, misery, just as practices, for example, pulling back from social exercises, interruptions to their associations with family and with friends<sup>7</sup>.

The objective of this study is to identify the actual burden of depressive disorder in cases of breast cancer and also to develop a liaison between the psychiatric services and the Oncology department for creating awareness of mental health issues, early identification and prompt treatment of psychiatric disorders in these patients to improve their quality of life.

### METHODOLOGY

This was a cross sectional study, conducted at Department of Oncology, Jinnah Postgraduate Medical Centre, Karachi during May to November 2015. The sample size of 93 women was taken by standard method with non-probability consecutive sampling technique. All female patients with Breast cancer histologically confirmed with duration of disease ≥4 weeks and disease at all stages were enrolled. Those patients who had previous history of Psychiatric disorder. previous or concomitant malignancy and recent loss of a family member (during last 6 months) were excluded from study. The study was conducted post approval of Institutional Review Board of the institute. The purpose, procedure, risk and benefits of the study were explained, confidentiality was ensured and informed

consent was taken from patients. Diagnosis of

#### Frequency of Depressive Disorder among Patients of Breast Cancer

Depressive disorder was based on International Classification of Diseases (ICD-10) and Hamilton Rating Scale for depression and Hamilton score 7 or greater was taken presence of depression. Hamilton Rating scale for depression is a validated tool used in researches to identify depression.

Data was analyzed on SPSS version 22. Frequency and percentages of depression as per Hamilton Rating scale for depression were presented. Stratification of depression with age group and marital status were carried out. Post stratification Chi square test was applied and  $P \leq 0.05$  was measured as significant.

### RESULTS

In this study, 93 diagnosed cases of breast cancer patients were enrolled to assess the frequency of depressive disorder. All patients with mean age of 58.64 years and standard deviation of 11.26 years. Among total patients 8(8.60%) were unmarried, 35 (37.63%) were married, window 24(25.80%) and 26 (27.95%) were divorced. Mean duration of breast cancer illness was 15.86 with SD 5.26 years. Age groups of patients were 25 to 50 years were 51 (54.83%) and 51 to 75 years were 42 (45.16%). Depressive disorder was present among 54(58%) and score on Hamilton Rating Scale for depression was as 8 to 13 were 32 (34%), 14 to 18 were 10 (11%), 19 to 22 were 8 (9%) and 23 to 30 were 4 (4%) as shown in Table I. Statistically Depressive disorder was significantly associated with age group with p value of less than 0.05 as shown in Table II. Stratification with marital status was also significantly associated with depressive disorder as shown in Table III.

TABLE I: DESCRIPTIVE STATISTICS OF HAM-D SCORES (n = 93)

Ham-D Score	Frequency	Percentage
0-7	39	42%
8-13	32	34%
14-18	10	11%
19-22	8	9%
23-30	4	4%

### DISCUSSION

The frequency of depressive disorder among patients suffering from breast cancer in this study was 54 (58%). Previous studies have also evidenced that the frequency of mental health related illnesses among cases of breast cancer is high and they are at higher danger to develop depressive disorder<sup>8</sup>. In a study conducted by Ariza-Garcia A et al<sup>9</sup> showed the prevalence of anxiety and depressive disorder was 31.7% and 22.0% respectively, the difference could be of reasons that they measure both anxiety and

# TABLE II: STRATIFICATION OF DEPRESSIVE DISORDER WITH AGE (n= 93)

Age Group -	Depressiv	P-value	
	Yes	No	r-value
25-50	13	38	0.046
51-75	19	23	

TABLE III: STRATIFICATION OF DEPRESSIVE DISORDER WITH MARITAL STATUS (n= 93)

Marital Status	Depressive Disorder		P-value
	Yes	No	P-value
Unmarried	2	6	0.046
Married	7	28	
Widow	9	15	
Divorced	14	12	

depression and we sought out only depressive disorder, methodology could be another reason. Another research conducted by Aylward A et al found that 38.4%<sup>10</sup> of the patients experienced severe depression, while in current study severe depression is of 11% while total depression including mild and moderate with very severe is 58%. One investigation on an expanded sample of breast malignancy patients detailed that the commonness of depression among survivors was about 32.8%<sup>11</sup>. In our research, dominant part of patients had age gather 25-50 years (54.83%) trailed by age aggregate 51-75 years (45.16%) ladies demonstrates the most astounding commonness of breast malignancy, in another study it is up to 69.4% of depression have been reported<sup>12</sup>.

The findings upheld by the examination led by Boehm K 2014<sup>13</sup> and The National Malignant Growth Library 2003<sup>14</sup>, which demonstrates that the commonest time of breast disease is between 40 to 49 years with mean age of 50 years of age. In our study, training dimension of most ladies with positive breast malignant growth had higher than matric. For the effect of psychiatry grimness because of educational level, pervasiveness of depression was more in women with Ignorant or low educational dimension as contrasted and high instruction level (optional or school/college). In a study conducted by Bogaarts MP et al<sup>15</sup> discovered lower educational level has been observed to be an indicator of mental comorbidity in patients with breast cancer. This by one way or another may be clarified by the way that patients with higher education have a more noteworthy chance to know about their depression and its related viewpoints. Married women were found to be with the highest frequency of breast cancer. For the impact of psychiatric morbidity due to marital status, single or married women were found to have similar prevalence

Anil Kumar Wadhwani, Wamiq Ali, Muhammad Ilyas Jat

of anxiety respectively. However those who were single showed much higher prevalence on depression rather than of married women. In our opinion married women are more depressed because they have families to take care which is the biggest commitment to their life while single women are more anxious as they might afraid of need of partner or friends to take care during illness.

Feel of low confidence in the wake of having surgical procedure may add to the psychiatry bleakness. Since the impression of breast malignant growth as a lethal ailment, they are progressively stressed over their life and their future. In current study, marital status was significantly associated with depressive disorder but not for anxiety. Although a study conducted by Borreani C et al<sup>16</sup> and Borstelmann NA et al<sup>17</sup> demonstrated that neither the patient's polite status (married, widowed, single) nor their circumstance of (living alone or with accomplice) as altogether identified with the predominance ofanxiety and depression. Economic status plays a vital role in term of cancer treatments. Correspondingly, an assessment from the U.S. shown that women with breast cancer had lower scores of anxiety and depression at 3 months post-therapy<sup>18</sup> recommending that psychological interventions in breast cancer patients decrease morbidity. Hence, to anticipate psychological distress, there is a need to recognize the problem throughout the course of the disease and its treatment and if occurred manage disorders appropriately.

### CONCLUSION

The study showed that Depressive Disorder among patients of breast cancer is quite high. For managing breast cancer patients, more care or support should be given to this type of patients as they are at high risk of depression.

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### **AUTHOR CONTRIBUTIONS**

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#### Frequency of Depressive Disorder among Patients of Breast Cancer

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