

## Original Research

### Analysis of depression among breast cancer patients

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#### ABSTRACT:

**Background:** Breast cancer is known as the fast enemy that should be treated and destroyed very fast. Various symptoms are frequently reported by patients with cancer during or after treatment. Some of these symptoms are psychological in nature and others are physical in nature. Hence; the present study was conducted for assessing depression among breast cancer patients. **Materials & methods:** A total of 40 breast cancer patients were enrolled. Only those patients were enrolled in which diagnosis was confirmed on histopathologic examination. Complete demographic and clinical details of all the patients were obtained. Psychiatric history was taken and prevalence of depression among the breast cancer patients was recorded. Hamilton depression rating scale (HAM D) was used for evaluation of depression. **Results:** Out of 40 breast cancer patients, depression was found to be present in 57.5 percent of the patients. Out of 23 patients with depression, 5 belonged to upper class, 8 belonged to middle class while the remaining 10 belonged to lower class. Significant results were obtained while assessing the correlation of incidence of depression and socio-economic status. **Conclusion:** Depression is significantly affecting breast cancer patients, patient of low socio-economic status are more affected by depression due to financial deficiencies encountered by them.

**Key words:** Breast cancer, Depression

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#### INTRODUCTION

Breast cancer is known as the fast enemy that should be treated and destroyed very fast. Breast cancer is characterized by the uncontrolled growth of abnormal cells in the milk-producing glands of the breast or in the passages (ducts) that deliver milk to the nipples. When significant numbers of mental health professionals began working in oncology settings, they asked oncologists to describe their perceptions of the prevalence of psychiatric disorders in cancer patients. Anxiety, tension, worry, stress, and strain are all common feelings and it is a part of our life today. Simple worry or stress will not drive us to look for specialist, but when these feelings become chronic and interfere with our lives, we need to do something and look for ways to manage it in order to function well. Anxiety can be defined as an unpleasant subjective experience associated with the perception of real threat; therefore, it is a common symptom in connection with cancer.<sup>1-3</sup>

Various symptoms are frequently reported by patients with cancer during or after treatment. Some of these symptoms are psychological in nature and others are physical in nature. Fatigue, nausea, and pain are among the most common symptoms. Symptoms of anxiety and depression have been found to be common in patients with cancer, frequently occurring around the time of diagnosis and during the period of chemotherapy. High-depression burden has been found at the time when patients experience adverse effects of chemotherapy.<sup>4-6</sup> Hence; the present study was conducted for assessing depression among breast cancer patients.

#### MATERIALS & METHODS

The present study was conducted for analysing the prevalence of depression among breast cancer patients. A total of 40 breast cancer patients were enrolled. Only those patients were enrolled in which diagnosis was confirmed on histopathologic examination. Complete demographic and clinical

details of all the patients were obtained. Psychiatric history was taken and prevalence of depression among the breast cancer patients was recorded. Diabetic and hypertensive patients were excluded and this would have added to the co-morbid condition. Hamilton

depression rating scale (HAM D) was used for evaluation of depression. All the results were recorded in Microsoft excel sheet and were analysed by SPSS software. Chi-square test was used for evaluation of level of significance.

## RESULTS

Out of 40 breast cancer patients, depression was found to be present in 57.5 percent of the patients. Out of 23 patients with depression, 5 belonged to upper class, 8 belonged to middle class while the remaining 10 belonged to lower class. Significant results were obtained while assessing the correlation of incidence of depression and socio-economic status.

**Table 1: Depression among breast cancer patients**

Variable	Number of patients	Percentage
Depression	23	57.5
Total	17	42.5

**Table 2: Correlation of incidence of depression and socio-economic status**

Socio-economic status	Depression		p- value
	Present	Absent	
Upper	5	5	0.00 (Significant)
Middle	8	8	
Lower	10	4	

## DISCUSSION

The improvements in the quality and variety of cancer treatment modalities, coupled with an increase in America's aging population, have also led to significantly higher numbers of breast cancer survivors in the past decade. This progress brings new challenges. More women with breast cancer are living longer with uncertainty about the future, the burden of treatment, and the wide range of emotional, social and psychological difficulties their situation brings. Previous studies have found that 35%-38% of all breast cancer patients experience significant emotional distress, anxiety, and/or depression following their diagnosis. Such co-occurring mental health problems can influence cancer progression, and decrease survival among patients with cancer.<sup>6-10</sup> Hence; the present study was conducted for assessing depression among breast cancer patients.

In the present study, out of 40 breast cancer patients, depression was found to be present in 57.5 percent of the patients. Out of 23 patients with depression, 5 belonged to upper class, 8 belonged to middle class while the remaining 10 belonged to lower class. Chintamani et al evaluated and correlated anxiety and depression levels with response to neoadjuvant chemotherapy in patients with breast cancer. The study also assessed the effects of family support on distress levels. It was a prospective study in a cohort of 84 patients with locally advanced breast cancer. These assessments were done using the Hospital Anxiety and Depression Scale (HADS). Eighty-four patients with locally advanced breast cancer receiving neoadjuvant chemotherapy were included after taking an informed consent and ethical committee clearance. A significant correlation was observed between response to neoadjuvant chemotherapy and depression

levels in breast cancer patients. Joint family and literacy levels also had an impact on the levels of depression observed. A total of 84 patients receiving neoadjuvant chemotherapy for breast cancer were evaluated using HADS. The effect of family support, literacy levels and employment on the psychological status of these patients were also assessed. The response to neoadjuvant chemotherapy had a direct correlation with the levels of depression, the distress levels being lower in responders. This was found to be the most important variable determining the psychological status of the patients. It was also observed that Indian patients in comparison to their Western counterparts react differently to cancer-related stress.<sup>11</sup>

In the present study, significant results were obtained while assessing the correlation of incidence of depression and socio-economic status. Vin-Raviv et al assessed the prevalence of depression and anxiety disorders, and their associations with mortality among hospitalized breast cancer patients. They examined the associations between breast cancer diagnosis and the diagnoses of anxiety or depression among 4,164 hospitalized breast cancer cases matched with 4,164 non-breast cancer controls using 2006-2009 inpatient data obtained from the Nationwide Inpatient Sample database. Conditional logistic regression models were used to compute odds ratios (ORs) and 95% confidence intervals (CI) for the associations between breast cancer diagnosis and diagnoses of anxiety or depression. They also used binary logistic regression models to examine the association between diagnoses of depression or anxiety, and in-hospital mortality among breast cancer patients. Breast cancer patients with a depression diagnosis also had lower mortality (OR=0.69, 95% CI: 0.52-0.89) compared with those

without a depression diagnosis, but there was no significant difference in mortality among those with and without anxiety diagnoses. Diagnoses of depression and anxiety in breast cancer patients were less prevalent than expected based on our analysis of hospitalized breast cancer patients and matched non-breast cancer controls identified in the NIS dataset using ICD-9 diagnostic codes. Results suggest that under-diagnosis of mental health problems may be common among hospitalized women with a primary diagnosis of breast cancer. Future work may fruitfully explore reasons for, and consequences of, inappropriate identification of the mental health needs of breast cancer patients.<sup>12</sup>

## CONCLUSION

Depression is significantly affecting breast cancer patients, patient of low socio-economic status are more affected by depression due to financial deficiencies encountered by them.

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