Psychiatric Co-Morbidity (Anxiety and Depression) In Patients of Advanced Breast Cancer on Palliative Treatment.

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Abstract

Background: With the growing incidence and prevalence of breast cancer, it's impact on mental health has also gained importance. The diagnosis as well as the type of treatment of breast cancer affects the quality of life of the patient and this has exposed the unmet psychological needs and their relevant psychiatric interventions.

Objectives: The study was carried out to find out the prevalence of psychiatric comorbidity (anxiety and depression) among the female breast cancer patients who were admitted in either Surgery or Radiotherapy units of a tertiary care hospital.

Material & Methods: A total sample of 50 females who were suffering from breast cancer and were on palliative treatment at Government Medical College, Amritsar was taken. After applying the inclusion and exclusion criteria, an informed consent was taken from females aged between 18-60 years. The patients were evaluated by Hospital Anxiety and Depression Scale (HADS) to ascertain the extent of anxiety and depression among them. Further clinical diagnosis was made using ICD-10 (International Classification of Diseases).

Results: The psychiatric co-morbidity (anxiety and depression) was found in 54% of breast cancer patients. As per HADS criteria, out of 50, 16 (32%) patients suffered from Anxiety disorder and 11 (22%) patients suffered from Depression. As per ICD-10, among Depressive patients, Major Depressive disorder (severe) was found to be most common and among anxiety disorders Generalized Anxiety Disorder was found to be the most common. Psychiatric co-morbidity was directly related to advanced stage of cancer older age, less education, less social support and prior history of psychiatric illness.

Conclusions: The results of the study puts the mental health to the forefront as it is one of the factors that is responsible for the overall outcome of the patients. Creating awareness not only among the general public but also among the health care professionals is important. As more general health professionals are educated, more they are likely to screen the patients with mental health conditions and it also helps in establishment of Consultation –Liaison Psychiatry services.

Keywords: Psychiatric Co-morbidity, Depressive disorder, Generalised Anxiety Disorder.

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I. Introduction

Breast cancer is the most common cancer among Indian women with adjusted rate of 25.8%. ¹There has been increase in the survival rates of this cancer with the help of newer treatment regimens that has led to increased number of older patients and long-term survivors. ^{2,3} This leads to increased physical health components as well as increased number of potentially persistent psychosocial problems and psychiatric manifestations. ^{4,5} In today's world with increased priority on mental health issues, these problems have been brought to the forefront and it has been understood that there is a need to pay an equal importance on them as they are known to effect the overall quality of life. Research has shown the significant emotional and social impact of breast cancer and its treatment on patients and their families. ⁵ Previous studies using self-report screening measures have reported distress, anxiety, and depression in, on average, one quarter to one third of breast cancer patients with levels up to 50% following diagnosis and treatment. ⁵⁻¹¹

There are number of risk factors that contribute to risk of developing psychiatric manifestations which include socio-demographic factors as well. Regarding the age, studies have found that younger women have

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high levels of psychological distress but they are more aware of psychological interventions than older counterparts. Other risk factors are fewer personal resources and maladaptive coping strategies, poorly controlled physical symptoms, lack of social support, psychiatric medical history, poor doctor—patient communication, lower educational level, as well as younger or intermediate age. Research has shown that older women and those with lower socioeconomic status are less likely to receive standard treatment and information about breast cancer care. Studies have shown that prevalence of psychological distress among breast cancer patients is high. Depression and anxiety are the two most common psychiatric co-morbidities present among breast cancer patients. It is very important to take early measures to treat these psychosocial problems for breast cancer patients and their partners thus improving their quality of life.

Cancer patients in general encounter several stressors and emotional turmoil. This may include fear of death, interruption of life plans, changes in body image and self-esteem, changes in social role and lifestyle are all important issues to be faced. Among psychiatric illnesses which represent direct reaction to illness are adjustment disorder, major depression and delirium. Others (primarily anxiety disorders, personality disorders and major depressive illness) are pre-existing conditions often exacerbated by the illness. Hence, the treatment of breast cancer patients should also focus on reduction of patient's disturbing psychiatric symptoms such as patient's emotional reactions and potential psychiatric disorders. Addressing these needs not only improves quality of survival, but also may even enhance length of survival from other co-morbid conditions and events.

II. Material and Methods

The present study was carried out in Government Medical College and Hospital Amritsar on fifty female breast cancer patients who were admitted in Department of Surgery and were on palliative treatment. Informed written consent was taken from each and every patient.

Patients selected in the study will fulfilled the inclusion criteria which were: providing written informed consent, age between 18-60 years of age, diagnosed as breast carcinoma and on palliative treatment. Exclusion Criteria for the study were: patients below and above specified age in inclusion criteria, refusing consent for interview, suffering from severe medical illness which will prevent patient from giving interview, having cancer of any other site than breast, who are mentally retarded, having cognitive impairment or are pregnant or lactating. The sociodemographic data like age, sex, income of family, residence and type of family was recorded in a semi-structured proforma. The patients were evaluated by Hospital Anxiety and Depression Scale (HADS) to ascertain the extent of anxiety and depression among them. Further clinical diagnosis was made using ICD-10 (International Classification of Diseases).

III. Results

Socio Demographic Profile

Regarding the age, maximum number of the patients 24 (48%) were of the age group 51-60 years, followed by 12(24%) of the age group 41-50 years and 8 (16%) were in the age group 30-40 years and minimum 5 (10%) were in age group 61-70 years. With regard to marital status, 49 (98%) were married. Regarding the occupational status, 45 (90%) were housewife, 4(8%) were labourer and 2% were skilled workers. The majority of the patients 21(42%) were illiterate, followed by 15(30%) who studied less than 10th, followed by 8 (16%) who were 10^{th} pass, 4(8%) were 12^{th} pass and only 2(4%) were graduate. 35(70%) patients were living in a joint family while 15(30%) were residing in nuclear family structure. The 18(36%) of the patients were living in urban region while 32(64%) were living in rural region. The majority i.e. 39(78%) of patients were having family income between Rs10000- 20000 per month followed by 9(18%) having family income less than Rs10000, and only 4(8%) of patients were having a family income more than 20000 per month. Out of the fifty participants, 94% were Sikh and rest practiced Hindu religion.

SOCIODEMOGRAPHIC		NUMBER (PERCENTAGE)			
PARAMETERS					
AGE					
•	30-40	•	8(16%)		
•	41-50	•	12 (24%)		
•	51-60	•	24 (48%)		
•	61-70	•	5 (10%)		
•	>70	•	1 (2%)		
MARITAL STATUS					
•	MARRIED	•	49(98%)		
•	UNMARRIED	•	1(2%)		
EDUCATION					
•	ILLITERATE	•	21(42%)		
•	LESS THAN 10 TH	•	15(30%)		
•	10 TH PASS'	•	8(16%)		

•	12 TH PASS	•	4(8%)		
•	GRADUATE	•	2(4%)		
FAMILY					
•	NUCLEAR	•	15		
•	JOINT	•	35		
RESIDENCE					
•	RURAL	•	32		
•	URBAN	•	18		
OCCUPATION					
•	HOUSEWIFE	•	45		
•	SKILLLED	•	1		
•	LABOURER	•	4		

The psychiatric co-morbidity (anxiety and depression) was found in 54% of breast cancer patients. As per HADS criteria, out of 50, 16 (32%) patients suffered from Anxiety disorder and 11 (22%) patients suffered from Depression.

As per ICD-10, among Depressive patients, major depressive disorder (severe) was found to be most common among 8 patients, 2 were suffering from moderate depression and 1 patient had mild depression. Generalized Anxiety Disorder was found to be the most common, seen in 11 patients, adjustment disorder in 3, 1 with acute stress reaction, 1 with panic disorder. Psychiatric co-morbidity was directly related to advanced stage of cancer, older age, less education, less social support, low income and living in a nuclear family.

PSYCHIATRIC ILLNESS	NUMBER (PERCENTAGE)
ANXIETY DISORDERS	16 (32%)
• GAD	• 11(68.7%)
 ADJUSTMENT DISORDER 	• 3(18.7%)
 ACUTE STRESS REACTIN 	• 1(6.25%)
 PANIC DISORDER 	• 1(6.25%)
DEPRESSIVE DISORDERS	11 (22%)
• SEVERE	• 8(72.2%)
 MODERATE 	• 2(18.18%)
• MILD	• 1(9.09%)

IV. Discussion

In our study, majority of patients (50%) belonged to age group 51-60 and mean age of patients was 50.8 years which is near earlier studies by Montazeri et al in 2001 in Tehran, Iran conducted on 56 patients with breast cancer where the mean age was 45.4 years. ²² In study by Kissane DW et al in 2004 the mean age of participants suffering from breast cancer was 49.8 years. ²³

The prevalence of depressive symptoms, anxiety symptoms, and perceived stress were 68.6%, 73.3%, and 78.1% respectively. Moderate to severe anxiety, depression, and stress were more prevalent among advanced disease patients, patients who underwent surgery, married patients, patients who were living in rural areas, illiterate, and those without satisfactory income.¹⁹

The results our study were consistent with studies of Mehnert and Koch ¹⁰ and Burgess et al. ¹¹ which showed that the prevalence of psychological distress among breast cancer patients is high, and they are at higher risk of developing severe anxiety and depression. The results of the present study(32%) were less than those of Allam et al with their major depressive disorder reaching 42.5%. ²⁴ Our results were similar to that of the results of a study conducted by Hassan et al. ²⁵ who found the prevalence of anxiety and depression were 31.7% and 22.0% respectively. Also, another study conducted by Vahdaninia et al. ²⁶ who found 38.4% of their breast cancer patients experienced severe anxiety and 22.2% had severe depression. Overall, high levels up to 38% for moderate to severe anxiety and up to 22% for moderate to severe depression have been found independently from time since initial breast cancer diagnosis. ^{5,27,28}

In another study by Atesci FC et al, 28.7% of cancer patients were found to have a DSM-IV Axis I diagnosis. ²⁹ It is somewhat similar to the result observed in studies by El-Hadidy MA et al in 2012 which found that 38.8%, 29.6%, and 9.2% of the patients had major depressive disorder, generalized anxiety disorder, and panic disorder, respectively. ³⁰

This study puts into focus that psychiatric comorbidity is prevalent in cancer patients and end stage cancer with palliative treatment has greater risk for that. Results of the study puts the mental health to the forefront as it is one of the factors that is responsible for the overall outcome of the patients. Creating awareness not only among the general public but also among the health care professionals is important. As more general health professionals are educated, more they are likely to screen the patients with mental health conditions and it also helps in establishment of Consultation –Liaison Psychiatry services.

Therfore, more studies need to be carried out in this regard so that more awareness regarding psychological interventions can be carried out which will definitely improve the quality of life of these patients,.

References

- Gesellschaft der epidemiologischen Krebsregister in Deutschland e.V. und das Robert Koch Institut. Krebs in Deutschland. 5. [1]. überarbeitete, aktualisierte Ausgabe. Saarbrücken, 2006.
- [2]. Kamangar F, Dores GM, Anderson WF. Patterns of cancer incidence, mortality, and prevalence across five continents: defining priorities to reduce cancer disparities in different geographic regions of the world. J Clin Oncol 2006;24:2137-50.
- [3]. Brenner H. Long-term survival rates of cancer patients achieved by the end of the 20th century: a period analysis. Lancet 2002;360:
- Hewitt M, Herdman R, Holland J. Meeting psychosocial needs of women with breast cancer. Washington (DC): The National [4]. Academies Press; National Cancer Policy Board, 2004.
- Knobf MT. Psychosocial responses in breast cancer survivors. Semin Oncol Nurs 2007;23:71-83. [5].
- Aapro M, Cull A. Depression in breast cancer patients: the need for treatment. Ann Oncol 1999;10:627-36. [6].
- [7]. Zabora J, BrintzenhofeSzoc K, Curbow B, Hooker C, Piantadosi S. The prevalence of psychological distress by cancer site. Psychooncology 2001;10:19-28.
- [8]. Morasso G, Costantini M, Viterbori P, et al. Predicting mood disorders in breast cancer patients. Eur J Cancer 2001;37:216-23.
- Osborne RH, Elsworth GR, Hopper JL. Age-specific norms and determinants of anxiety and depression in 731 women with breast [9]. cancer recruited through a population-based cancer registry. Eur J Cancer 2003;39:755-62.
- [10]. Burgess C, Cornelius V, Love S, Graham J, Richards M, Ramirez A. Depression and anxiety in women with early breast cancer: five year observational cohort study. BMJ 2005;330:702-6. [12] Mehnert A, Koch U. Prevalence of acute and post-traumatic stress disorder and comorbid mental disorders in breast cancer patients during primary cancer care: a prospective study. Psychooncology 2007:16:181-8
- Mehnert A, Koch U. Prevalence of acute and post-traumatic stress disorder and comorbid mental disorders in breast cancer patients [11]. during primary cancer care: a prospective study. Psychooncology 2007;16:181-8.
- https://www.researchgate.net/publication/5477345 Psychological_comorbidity_and_health-[12]. related quality of life and its association with awareness utilization and need for psychosocial support in a cancer registe r-based sample of long-term breast cancer
- [13]. Baider L, Andritsch E, Uziely B, et al. Effects of age on coping and psychological distress in women diagnosed with breast cancer: review of literature and analysis of two different geographical settings. Crit Rev Oncol Hematol 2003;46:5-16.
- [14]. Clough-Gorr KM, Ganz PA, Silliman RA. Older breast cancer survivors: factors associated with change in emotional well-being. J Clin Oncol 2007;25:1334-40.
- [15]. Newschaffer CJ, Penberthy L, Desch CE, Retchin SM, Whittemore M. The effect of age and comorbidity in the treatment of elderly women with nonmetastatic breast cancer. Arch Intern Med 1996;156: 85-90.
- [16]. Silliman RA, Troyan SL, Guadagnoli E, Kaplan SH, Greenfield S. The impact of age, marital status, and physician patient interactions on the care of older women with breast cancer. Cancer 1997;80:1326-34.
- Enger SM, Thwin SS, Buist DS, et al. Breast cancer treatment of older women in integrated health care settings. J Clin Oncol [17]. 2006:24: 4377-83.
- [18]. Macleod U, Ross S, Fallowfield L, Watt GC. Anxiety and support in breast cancer: is this different for affluent and deprived women? A questionnaire study. Br J Cancer 2004;91:879-83.
- [19]. Anxiety, depression and perceived stress among breast cancer patients: single institute experience, H. A. Alagizy, M.R.Soltan, S.S.Soliman, N.N Hegazy, S.F. Gohar, Middle east current psychiatry, vol. 27, 29 (2020).
- Pasquini M, Biondi M. Depression in Cancer patients: a critical review. Clinical Practice Epidemiological Mental Health. 2007;3:2.
- [21]. Lueboonthavatchai P. Prevalence and psychosocial factors of anxiety and depression in breast cancer patients. J Med Assoc Thai 2007 Oct;90(10):2164-74.
- [22]. Montazeri A, Jarvandi S, Haghighat S, Va hdani M, Sajadian A, Ebrahimi M et al. Anxiety and depression in breast cancer patients before and after participation in a cancer support group. Patient Educ Couns 2001;45(3):195-8.

 Kissane DW, Clarke DM, Ikin J, Bloch S, Smith GC, Vitetta L, et al. Psychological morbidity and quality of life in Australian
- [23]. women with early stage breast cancer: a cross-sectional survey. Med J Aust 1998;169(4):192-6.
- Allam M (2003). Psychological profile and quality of life (QoL). Assessment in cancer breast patients. MD thesis: Supervised by Bishry Z., Saad A., Khalifa A. & Asaad T. Ain Shams University.
- Hassan MR, Shah SA, Ghazi HF, Mujar NMM, Samsuri MF et al (2015) Anxiety and depression among breast cancer patients in [25]. an urban setting in Malaysia. Asian Pac J Cancer Prev 16:4031-4035
- [26]. 26.Vahdaninia M, Omidvari S, Montazeri A (2010) What do predict anxiety and depression in breast cancer patients? A follow-up study. Soc Psychiat Epidemiol 45:355-361
- [27]. Bender CM, Ergun FS, Rosenzweig MQ, et al. Symptom clusters in breast cancer across 3 phases of the disease. Cancer Nurs 2005;28: 219-25
- [28]. Deshields T, Tibbs T, Fan M, et al. Differences in patterns of depression after treatment for breast cancer. Psychooncology 2006:15: 398-406.
- [29]. Atesci FC, Oguzhanoglu NK, Baltalarli B, Karadag F, Ozdel O, Karagoz N et al. Psychiatric disorders in cancer patients and associated factors, Turk Psikiyatri Derg 2003;14(2):145-52. 33. Simpson JSA, Carlson LE, Beck CA, Patten S. Effects of a brief intervention on social support and psychiatric morbidity in breast cancer patients. Psycho-Oncology 2002;11:282-94.
- El-Hadidy MA, Elnahas W, Hegazy MAF, Hafez MT, Refky B, Wahab KMA. Psychiatric morbidity among Egyptian breast cancer [30]. patients and their partners and its impact on surgical decision-making. Breast Cancer: Targets and Therapy 2012;4:25-32. 35.

Bal Jaskaran Singh, et. al. "Psychiatric Co-Morbidity (Anxiety and Depression) In Patients of Advanced Breast Cancer on Palliative Treatment." IOSR Journal of Dental and Medical Sciences (*IOSR-JDMS*), 20(01), 2021, pp. 20-23.