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# Assessment of psychological impact of breast cancer in women

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#### **ABSTRACT:**

**Objective:** The objective is to identify opportunities for improvements in care for cancer patients and their relatives. **Method:** 53 patients of breast cancer were included in the study. The type of breast cancer was recognized and treatment which is been carried out is studied along with its psychological impact. It was a retrospective observational study. A specially designed patient data collection form has been used which has been prepared with all the requisite features like patient name, demographic information, physical examination, complaints, previous history, diagnosis, investigations, medications and advice to the patients. **Results:** The patients' most frequently reported unmet needs were mainly related to the psychological dimensions. Patients are vulnerable to anxiety, distress and depression under treatment and in the post-treatment period. Distress, anxiety and depression were also factors which characterized patients with unmet supportive care needs. Thus Breast cancer is a psychological challenge. **Conclusion:** The results conclude that the most observed psychological factors in all parameters of study are depression, anxiety, stress and fear of reoccurrence. The treatment regimen can also include depression, anxiety and stress treatment with anti depression and anti anxiety drugs and also proper counseling.

#### 1. Introduction

Breast cancer is a malignant tumour that starts in the cells of the breast. A malignant tumour is a group of cancer cells that can grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body. The disease occurs almost entirely in women, but men can get it, too. The remainder of this document refers only to breast cancer in women.

If the cancer cells have spread to lymph nodes, there is a higher chance that the cells could have also gotten into the bloodstream and spread (metastasized) to other sites in the body. The more lymph nodes with breast cancer cells, the more likely it is that the cancer may be found in other organs as well. Because of this, finding cancer in one or more lymph nodes often affects the treatment plan. Still, not all women with cancer cells in

their lymph nodes develop metastasis, and some women can have no cancer cells in their lymph nodes and later develop metastasis.

The diagnosis of an illness like cancer frequently results in a complex set of issues that the individual must confront (Holland 2003). Cancer treatment causes a lot of health problems and treatment-related symptoms which may persist for a long time and may add distress to patients who are under great pressure to cope with the demands of their disease and treatment (Hack et al., 2004). Family members also are deeply affected when one of their relatives has cancer (Friedman et al., 2006). Relatives are often in conflict between their own suffering and the concern for the patient. Patients and their relatives are also challenged in their interpersonal relationship, dealing with the stress and the demands caused by cancer. The main focus of this work is the

experience of women who live with breast cancer, their supportive care needs and their treatment-related symptoms, as well as the relatives' psychosocial needs. Furthermore, this work investigates the patients' and their relatives' emotional problems and the perception of their interpersonal relationship (Cimprich et al., 1999).

Women with breast cancer experience a situation that changes their lives. They must deal with the emotional and physical consequences of being diagnosed with a life-threatening illness (Vahdaninia., 2010, Ferrell et al., 1997).

They often undergo debilitating aggressive treatment regimens which usually leave them feeling worse than before diagnosis. Cancer also affects family members. The disease, treatment and recovery process can be demanding on patients and their families. Research describing the relationship between breast cancer and overall quality of life does not really identify the issues in which the patients and their relatives recognize their need for help (Carroll-Johnson et al., 2006). A need assessment covering the different phase's through which patients and family members go through after diagnosis is needed to develop rehabilitation and care programs.

Breast cancer patients' and their relatives' supportive and psychosocial needs are the main focus of this work. A purpose is to meet the patients' needs and activities of nursing take place within the territory of basic human needs. Therefore, the concept of needs is also the main focus of the theoretical framework of this work. Needs can be viewed as a theoretical construct which consists of general principles of human existence. A need is an internal state or condition, a lack of something that is necessary for well-being and motivates behaviour (Carver & Scheier 2008). Some needs are based in the biological nature (needs for food, water, air, sexuality and pain avoidance). Psychological or social needs are secondary needs (Schlatter et al., 1989). Needs work through motives (Carver & Scheier 2008). Motives refer to internal states that arouse and direct behaviour toward specific objects or goals. A motive is often caused by a deficit, by a lack of something. Motives differ from each other in type, amount and intensity, depending on the person and her or his circumstances. Motives are based on needs and propel people to perceive, think, and act in specific ways. A disease such as cancer represents a threat to the patient's continued ability to reach her or his goals. All goals are threatened by a cancer diagnosis. The most salient goal is the continuation of one's life. Other goals are the desire to maintain the self-image of a healthy person, the desire to continue being engaged in a wide range of specific activities, and the ability of the patient to live out his or her future with loved ones (Carver 2005). However, according to their individual differences in personality, people have different needs which may vary in intensity (Carver & Scheier 2008). The threats which are most salient to a person in case of cancer vary with each patient (Carver 2005).

#### 2. Materials and Methods

53 patients of breast cancer were included in the study. The type of breast cancer was recognized and treatment which is been carried out is studied and its psychology impact is studied.

#### 2.1 Study site

The study was conducted in the Department of Oncology, Yashoda Hospital, which is a 600 bedded multispecialty teaching hospital.

#### 2.2 Study period

The study was proposed to be conducted for 6 months i.e., from December 2013 to May 2014.

### 2.3 Study design

It was a retrospective observational study.

#### 2.4 Tools used

A specially designed patient data collection form has been used which has been prepared with all the requisite features like patient name, demographic information, physical examination, complaints, previous history, diagnosis, investigations, medications and advice to the patients

#### 2.5 Subjects criteria

# 2.5.1 Inclusion criteria:

- Patients who were diagnosed with BREAST CANCER.
- b) Patients between the age group of 20-80 years.
- c) Patients from outpatient and inpatient department.
- Those who understand verbal and written form.

# 2.5.2 Exclusion criteria:

- Patients below and above of 15 and 80 years respectively.
- b) Pregnant women.
- c) Patients with other severe diseases.

### Procedure

A field study has been conducted on patients suffering with breast cancer.

A data collection form was designed to collect patient data which includes patient's personal details (name, age, sex, height, weight, marital status) family history, past medical history, lifestyle modifications, investigations, diagnosis and therapeutic management.

Institutional Ethics Committee approval has been obtained.

54 patients diagnosed with breast cancer attending oncology service at Yashoda Hospital, Malakpet, Hyderabad were included from the outpatient department. All patients consented for the study. Patients in good performance status and communicable were included. All the patients who were diagnosed breast cancer were taken and were asked the questions in the Performa in sequence and their response was marked by the interviewer. Data from the laboratory biochemical reports and scan reports were analyzed. The type and therapy of breast cancer is studied from the data acquired from the patient, all the aspects were studied considering the aims and objective of this work. The psychological impact of patients and relatives is analyzed. The needs for breast cancer patients and its relatives is studied and reported to increase the betterment in treatment.

#### 3. Results

# 3.1 Distribution of no of patient's age wise

We categorized the data with respected to patient's age. Out of 53 patients, majority of the patients were under the age group of 40-49 years (32.07%), then 50-59 years (24.52%), then 60-69 years (20.75%), then 30-39 years (15.9%) and the least is in between 20-29 years (3.77%) and 70-79 years (3.77%).

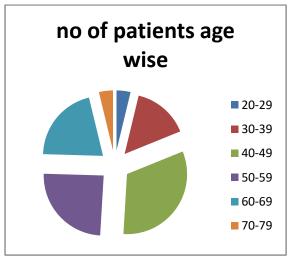


Figure 1: Distribution of No of patient's age wise

### 3.2 No of patients undergoing with type of treatment

Out of 53 patients, majority of patients data is on patients undergoing with chemotherapy i.e.; 16 patients (30.18%), next majority of data is on patients with newly diagnosed with breast cancer and undergoing with surgery i.e.; 15 patients (28.30%), next is hormonal therapy i.e.; 12 patients (22.64%) and radiation therapy patients were 08 (15.09%) and the least data was on neo adjuvant therapy i.e.; 2 patients (3.77%).

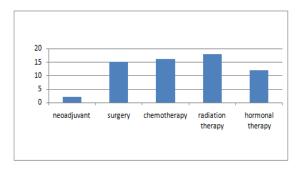


Figure 2: No of patients undergoing with type of treatment

# 3.3 Psychology of breast cancer patient undergoing surgery

The data is collected from the out patients department where the patients visits the oncologist with symptoms and diagnosis reports.

Total number of patients who were newly diagnosed with the breast cancer and who were undergoing with surgery were studied.

To study on the psychological aspects the scores were classified into three categories (Table 1), namely

Mild: - +
Moderate: - ++
Major: - +++

The collected data in Figure 3 gives the psychological impact of patients undergoing with the breast cancer surgery. Here the most observe psychological factor is depression, anxiety, distress and body changes.

As in this phase of treatment, pain and insomnia is managed with appropriate treatment.

Table 1: Psychological factors of breast cancer patients

No 0f patients	Stress	Anxiety &depression	Body image concern	Vulnerability	Isolation	Menopausal symptoms	Sex & marital life	pain	Fear of reoccurren ce
1	+++	+++	++	++	+	++	++	++	++
2	+++	+++	++	++	+	++	++	++	++

3	+++	+++	++	++	+	++	++	++	++
4	+++	+++	++	++	++	++	++	+	++
5	++	++	++	++	++	++	++	+++	+
6	+++	+++	++	++	+	++	++	+	+
7	++		+++		+	++	+	++	+
8	++	+++	+++	++	++	++	+	++	++
9	+++	++	+++	++	+	++	++	+	++
10						+			
11	+++	++	+++	+	++		++	++	++
12	+++	++	+++	+	+	++	+++	++	++
13	+++	+++	++	+	++	+	+	++	++
14	+++	+++		++	+	+			
15	+++	+++	+++	++	+	+	++	++	+
	+++	+++	++	+			++	++	
16 17	++	+++	+++	++	++	++	++	++	++
18	++	+++	+	++	++	++	++	++	+
19	+++	+++	+	++	+	+++	++	+	+++
20	++	+++	+	++	++	+	++	+	+
20	++	++	+	+	++	++	+	+	+
21 22	+++	++	+	+	+	++	+	++	+
23	+++	+++	+	+	+	+	+	+	+
	+++	+++	++	+	++	+	++	+	++
24	+++	+++	++	+	+	+	+++	++	++
	+++	+++	+	+	+	++	+++	++	++
26 27	++	+++	+	++	++	++	+++	+	++
28	++	+++	+	++	++	++	++	+	+
29	+++	++	++	++	++	++	++	+	++
	+++	+++	++	++	++	+	+	+	+
30	+++	+++	+	+	+	+	+	+	+
31	++	++	+	+	+	+	+	++	++
33	++	+++	++	+	+	++	+	++	+++
34	++	+++	+	+	+	+	++	+	+++
35	+	++	+	+	++	+	++	++	+++
	+	++	+	++	+	++	+++	+	++
36	++	++	+	+	+	++	+++	+	++
38	+++	++	+++	++	+	++	++	++	+++
39	+	+++	+++	++	++	+	+	++	+++
40	+++	+++	++	++	+	+++	+++	+	+++
41	+++	+++	+	+	++	+++	+	+	+
42	+++	+++	+	+	+	+++	++	++	+
43	+++	++	++	+	+	+++	+	+	+
44	+++	++	+++	++	+	+++	++	+	+
45	++	++	++	++	++	+++	++	++	+
45	++	++	+	+	++	+++	++	++	++
47	++	++	++	++	+	++	+	+	+
48	++	++	+++	+	++	+++	+	+	+
49	+++	+	+++	+	++	+++	++	+	++
50	+++	+	+	+	++	+++	+	+	++
51					+		+	+	
52	+++	+++	++	++	+	+++	+	+	++
53	++	+++	+++	++	++	++	++	++	+
33	TT	177	FTT	1 T	FT	17	TT	TT	٦

#### psychological factors of patients undergoing with breast cancer surgery

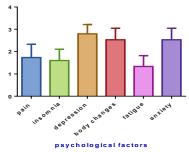


Figure 3: Psychology of breast cancer patient undergoing surgery

# 3.4 Psychological factors of patients undergoing chemotherapy

Chemotherapy is a systematic therapy that uses drugs to kill cancer cells both at the original site and any other sites in the body to which they may have spread. A complete chemotherapy treatment is made up of several cycles. One cycle entails a treatment period (could be one day, a few days in a row or every other day for a set period) followed by a recovery period during which no treatment is given. The number of cycles in a regimen and the duration of each regimen vary depending on the drugs used, but most take 3-6 months to complete (Love et al., 1989).

The 16 patients' data shows the most observe psychological factors in patients undergoing with chemotherapy is depression, anxiety and distress.

Depression is due to the physical side effects i.e.; hair fall, improper food intake, other side effects of chemotherapy and mainly due to the concern about future (Buick et al 2000).

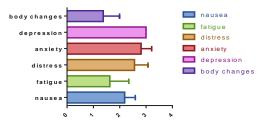


Figure 4: Psychological factors of patients undergoing chemotherapy

The above data shows the most observe psychological factors in patients undergoing with chemotherapy is depression, anxiety and distress.

Depression is due to the physical side effects i.e.; hair fall, improper food intake, other side effects of chemotherapy and mainly due to the concern about future.

# 3.5 Psychology of patients undergoing Radiation therapy

A study was conducted on radiation therapy treatment. Patients waiting to receive treatment completed the survey and chemotherapy which included questions about psychology and disease characteristics.

Radiotherapy works by using high-energy beams of radiation to destroy the DNA of cells in its path (Schnur et al., 2011). This radiation damages, slows or stops the growth of the cells. Radiation therapy has an important role in treating all stages of breast cancer because it is so effective and relatively safe according to the 8 patients collected data and here in this treatment the most psychological factor observe is the fear of reoccurrence and depression (Munro et al., 1996, Dow et al., 2000).

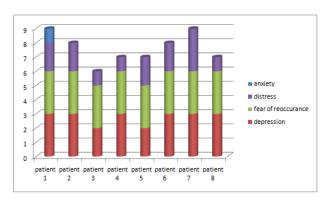


Figure 5: Psychology of patients undergoing Radiation therapy

According to the above collected data and study here in this treatment the most psychological factors observed is the fear of reoccurrence and depression

# 3.6 Psychological issues with patient undergoing Hormonal therapy

Hormone therapy for Breast Cancer, also called Anti-Oestrogen therapy, works in two ways: to lower the amount of oestrogen in the body, and/or to block the action of oestrogen at the breast tissue by blocking the hormone receptors. Therefore, hormone therapy will only work on cancers which are hormone receptor positive.

From the 12 patients data we can conclude that the higher number of patients undergoing with hormonal therapy for breast cancer suffers from the menopausal symptom management, stress, anxiety and depression.

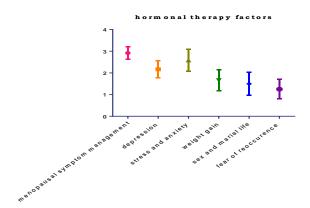


Figure 6: Psychological issues with patient undergoing Hormonal therapy

From the above data we can conclude that the higher number of patients undergoing with hormonal therapy for breast cancer suffers from the menopausal symptom management, stress, anxiety and depression.

#### 3.7 Psychology of patients Age wise:

An interesting finding of the present study was that older age predicted lower levels of side effects (conversely, younger age predicted higher levels of postsurgical side effects), regardless of whether the outcome was pain, nausea or fatigue.

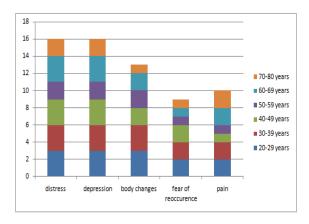


Figure 7: Psychology of patients Age wise

Above data shows the most observe psychological impact is on the younger patients than the older which includes depression, stress and anxiety.

It predicts that younger the patients more psychological impact.

# 3.8 Psychological impact of breast cancer on working women and non working women

Out of 53 patients only 4 patients were educated and working women.

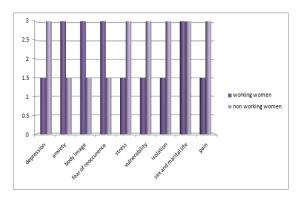


Figure 8: Psychology impact of breast cancer on working women and non working women

The above data shows the psychology of educated and working women and non working women. We observe the psychological factors in working women were anxiety, body image concern, fear of reoccurrence and effect on sexual and marital life

And in non working women, observe psychological factors were depression, stress, vulnerability, isolation, effect on sex and marital life and were more pain sensitive.

Hence the above study shows that working women are more readily accepted and start coping with the disease.

#### 3.9 Psychology of patient's relatives

Based on the interview and questionnaires we noticed patient's relatives with lot of worries, anxiety and with lot of questions regarding the disease and also the concern about finance. The decision making is the most difficult situation that the patient's relative faces.

The most observed psychological factor in all parameters is depression, anxiety, stress and fear of re occurrence

The treatment regimen can also include depression, anxiety and stress treatment with anti depression and anti anxiety drugs and also with proper counseling.

# 4. Copying with the disease

Cancer may change the patients' and their relatives' interpersonal relationships, sexuality, everyday social and work activities and may cause feelings of social isolation. Such unmet *belonging needs* may result in loneliness, rejection, friendlessness, rootlessness and alienation. Patients and relatives have to deal with the health care system. They may need help in obtaining information, counselling and in their adjustment process (Friedman et al., 2006).

# 5. Discussion

The patients' most frequently reported unmet needs were mainly related to the psychological dimension of needs (Eusoma., 2000). Patients are vulnerable to anxiety, distress and depression under treatment period and also in the post-treatment period (de Bock et al., 2012). Distress, anxiety and depression were also factors which characterized patients with unmet supportive care needs (Bonevski et al., 2000). Breast cancer is a psychological challenge. Patients undergo basic changes and have to deal with a new life situation (Fisch et al., 2005). The

overwhelming nature of treatments, the impact and discomfort of treatments and their side effects may be difficult to manage.

These symptoms are also often reported in other studies, as well as lack of concentration, anxiety, depression and mood problems are also reported. Whereas fatigue is often the predominate symptom (Cleeland et al., 2000, Jong et al., 2002).

Patients with body image problems complained about weight gain, perceived changes in their body appearance and felt less feminine and attractive while under treatment and also in post-treatment. Body image problems identified patients with a higher need for help (Fergus et al., 2009). Cancer-treatment, such as surgical treatment of the breast, chemotherapy, radiotherapy and frequent endocrine treatments has an impact on physical appearance as well as on how patients experience their body. Aesthetic changes, disturbance in the menstrual cycle and sexuality or premature menopause, not only affect the patients' body image but often also how they view themselves as women (Holland 2002, Arman et al., 2002). Such self perceptions may cause uncertainty, distress and compromise the patients' stability, their needs for safety and security and may negatively affect their self-esteem and belonging needs (Bonevski et al., 2000).

#### 6. Conclusion

In conclusion, it can be emphasized that most observed psychological factors in all parameters of study is depression, anxiety, stress and fear of re occurrence

The treatment regimen can also include depression, anxiety and stress treatment with anti depression and anti anxiety drugs and also with proper counselling

We evaluated factors which are related to the patients' needs, and may identify patients who are more vulnerable and have unsatisfied psychosocial needs and therefore a higher demand for support.

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