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# EFFECTS OF BREAST CANCER ON PHYSIOLOGICAL AND PSYCHOLOGICAL HEALTH OF PATIENTS

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**ABSTRACT:** *Objectives:*-The breast cancer has great impact on physiological and psychological health of patients. This study was designed to investigate the psychological and physical effects of breast cancer.

**Patients and methods:**-One hundred (100) patients were included in the study sample. All the patients were evaluated with the help of a questionnaire which developed with the help of psychologists.

**Results:-**The results showed that the patient had high distress level at the time of diagnosis and during treatment.80% of patients reported that they do not get enough support by their husbands. Results also showed that treatment of breast cancer severely affects the fertility and no pregnancy was recorded during the treatment of breast cancer.

Conclusions:-The results of the present study showed that the patients involved in CA breast undergo several psychological & physiological changes. During the treatment patient's psychological treatment is must to boost the self esteem & to courage the patient to fight against the disease.

**Key words:**-Breast cancer, psychological changes, self esteem, and support, Husbands, Chemotherapy.

### INTRODUCTION

Psychiatric disorders occur more frequently in patients with advance cancer than in general population (Block,2000) and 20-30 % of patients with advance cancer will have a formal psychiatric diagnosis, the most common being depression (Hoptof et al.,2002). In early cancer it has been found that factors related to patients rather than the disease increases the risk of depression. (Harrison & Maguire., 1994)

Physical symptoms are more likely to correlate with depressive symptoms when they remain uncontrolled, have high severity and numerous, thus adding to patient burden (Martin & Jackson., 1999).

Breast cancer survivors most frequently report experiencing emotional distress (e.g., depression and anxiety symptoms) and intrusion and avoidance (e.g., intrusive thoughts, feelings, and imagery; numbing of responsiveness and avoidance of feelings, situations, or ideas) in relation to cancer and its treatment.

Cancer and its treatment may provoke severe physical and psychological complaints. Breast cancer seems to be more stressful because this disease and its medical treatment can afflict the sense of femininity, perceived sexuality, and fertility of its victims (Irvine et al., 1991).

This study is carried out to determine the impact of diagnosis and treatment of breast cancer on patient, her husband and her family.

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#### **METHOD**

# Study Design

Breast cancer patients referred to BINO were eligible to take part in the study. Base line demographic information was obtained on age, diagnosis; length of time since diagnosis and effects of treatment on physical and psychological health .Patient was asked to complete a questionnaire with 25 items.

# Procedure:-

All patients were required to give written consent prior to participating and full ethical approval for this study was obtained. Patients were also informed of the nature of the study and were told they can participate or leave the study. All the questionnaires were completed by daily visiting the BINO and by personal contacts to the patients in a duration of one year.

# Statstical Analysis:-

With the consultation of statisticians the data collected on all parameters was organized in tabulated form and enter in a statistical software i-e-SPSS for further analysis. Descriptive analysis was done and histograms regarding each parameter were prepared.

# RESULTS

# Reaction of the patient on diagnosis

To record the reaction of the patients on the diagnosis of breast cancer, hundred patients were asked that what their reaction was when they came to know that they were suffering from breast cancer. Out of 100, 80 patients responded that they became very depressed, 16 patients replied that they felt that their death was very near, 3 patients responded that on hearing this news they became upset for a while but decided to fight against the disease, only one patient said that she remained normal on hearing this news (Figure 1).

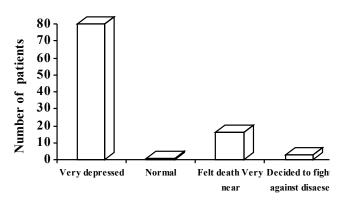


Figure 1. Reaction of the Banetic up of the gasissof CA directes

# Reaction of the patient's husband on diagnosis

Reaction of the husband depends upon his education and awareness about the disease. The response of 100 patients who were asked that what was the reaction of their husbands when they came to know that their wives are suffering from life threatening disease, Breast Cancer. Out of 100, 44 patients replied that on hearing this news their husbands became upset and showed no cooperation, 32 patients responded that their husbands showed cooperation, 22 patients said that their husbands has divorced them and only one patient replied that her husband showed full cooperation and encouraged her to fight against the disease (Figure 2).

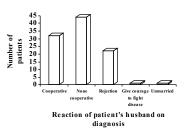


Figure 2. Reaction of the patient's husband upon diagnosis of breast cancer

# Impact of disease on social life of the patient

Man being a social animal prefers to live in social environment. But after the diagnosis of breast cancer some patients withdraw themselves from social activities and restrict themselves to within. In this regard 100 patients were asked that what was the impact of breast cancer on their social life. Out of 100, 72 patients replied that their social life was totally disturbed and 19 patients said they were totally cut-off from the society. Only 9 patients replied that the diagnosis of breast cancer imposed no impact on their social life (Figure 3).

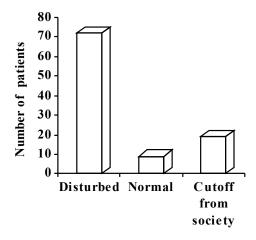


Figure 3. Impact of the breast cancer on patient's social life

# Effects on married life of the patient

Married life of many patients gets disturbed after the diagnosis of breast cancer due to probable procedures of treatment of the disease such as mastectomy which causes the distortion in body image. Along with this expense of treatment, behavioral changes and depression further worsen the relations. In present study, 100 patients were asked the effects of breast cancer on their married life. Out of 100, 80 patients replied that this disease had disturbed their married life, 19 patients said that this disease has no effect on their married life, while one patient was unmarried (Figure 4).

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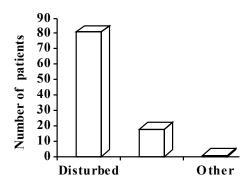


Figure 4 Effects of breast cancer on patient's married life. Behavior of people with the patient after diagnosis

After diagnosis of breast cancer behavior of the people with the patient is changed and mostly people took sympathy for the patient. In present study, 100 patients were asked about the behavior of people with patient after diagnosis of the breast cancer. Out of 100, 93 patients replied that the behavior of people with them after diagnosis became sympathetic, 5 patients said that the behavior of people with them was cooperative and only 2 patients replied that the behavior of the people with them was rejected type (Figure 5).

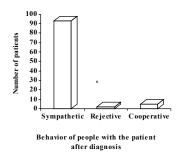


Figure 5. Behavior of the people with CA breast patient after diagnosis.

# Effect of disease on patient's sleep

After the diagnosis of breast cancer the sleep duration of a person is usually affected. To record these information hundred patients were asked about their sleep after diagnosis of breast cancer. Out of 100, 85 patients replied that their sleep was totally disturbed and decreased, 2 patients said that their sleep was increased and 12 patients replied that they sleep normally (Figure 6).

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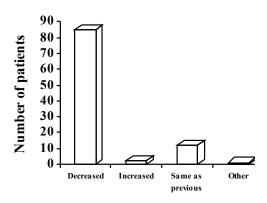


Figure 6 Effect of the CA breast on sleep of the breast cancer patient.

# **Effects on memory**

Breast cancer treatments including chemotherapy and radiotherapy have bad effects on the memory of the patient. It has been observed that in majority of the cases patients with breast cancer get problems in their short term memory. In present study, 100 patients were asked about the effects of treatment on their memory. Out of 100, 87 patients replied that treatment affected their short term memory, 5 patients said that treatment affected their long term memory while 8 patients said that treatment had no effects on their memory (Figure 7).

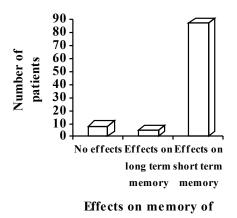


Figure 7. Effects of the treatment memory of CA breast cancer patients. Effects on pregnancy if pregnant during treatment

Breast cancer has so many bad effects on female's sexual life. It has been observed in most of the cases that there is no pregnancy after breast cancer. One reason for this might be that due to the treatment and disturbance in her married life. In present study, 100 patients were asked about the effects of treatment on pregnancy. All the (100) patients replied that they have no pregnancy during the treatment of breast cancer.

# History of baldness

Baldness is the most common side effect of the chemotherapy, that's why mostly patients get afraid to get chemotherapy treatment. It has been observed that all the patients getting chemotherapy treatment have history of baldness. In present study, 100 patients were asked about the history of baldness during the treatment. Out of 100, 66 patients replied that their hairs were lost while 34 patients replied that they have no history of baldness during the treatment (Figure 8)

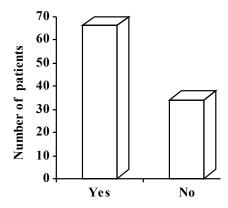


Figure 8 History of baldness in breast cancer patients.

# **DISCUSSION**

Many studies have indicated that post surgical breast cancer patients are facing serious psychological, physical, sexual and interpersonal problems (Irvine et al., 1992). Consequently, most breast cancer patients experience difficulties in their ability to perform normal daily social activities, and a considerable fraction of these patients (20-46%) seem to suffer from moderate to severe emotional morbidity (Irvine et al., 1992; Morris et al., 1997; Plumb et al., 1997). Many patients of breast cancer reported heightened levels of anxiety and illness related worries and reduction of energy and ability to do physical activities (Schag et al., 1993). In present study it was observed that all the breast cancer patients have high level of anxiety at the diagnosis of breast cancer. Many of them said that diagnosis of the breast cancer was a death sentence for them. The patients were worried about the fate of the disease. They were very depressed in thinking that what will happen with their children after their death. The patients belonging to poor families were worried about themselves and about the treatment expenses because they were unable to bear high expenses of treatment of the breast cancer. In present study 80% patients reported that their abilities to do physical activities were reduced after the treatment of breast cancer. They felt loss of energy, fatigue and weakness.

Women diagnosed with breast cancer may experience great emotional distress and develop a variety of psychological problems including insomnia, loss of appetite, excessive alcohol consumption, and suicidal thoughts (Simoneton et al., 1977). The results of the present study revealed that after the diagnosis of the breast cancer in majority of the patients significant decrease in their sleep was reported. This disturbance in sleep might be due their intrusive thoughts about the disease and treatment of the disease as there are several side effects of the breast cancer treatments.

Treatment for cancer has profound impact on patient's appearance and body image (Runsey and Harcourt 2006). Chemotherapy is recognized as having a range of side effects including nausea, fatigue, hair loss, ulcers, which make patient feel ill in a way that actual disease does not ( Fall-Dickson and Rose 1999). Alopecia or hair loss often rated as one of the most common, feared and traumatic aspect of the chemotherapy

(Fall- Dickson and Rose 1999). In present study majority of the patients reported the side effects of their hairs loss, particularly those patients, who received the chemotherapy treatment. It was also noted that most of the breast cancer patients were in severe depression due to loss of their hairs.

To summarize, the findings regarding the association between psychosocial factors and progression of breast cancer are still controversial. Opposite conclusions can arise from differences in the design and analysis of the studies (Goodkin et al 1993). The importance of controlling for clinicopathological prognostic variables such as tumor stage, histopathologic grading and receptor status has been stressed many times by several authors (Fox B 1980). Intervening behavioral variables, such as diet, smoking and use of alcohol, may also be responsible for the inconsistencies in findings across studies (Holland B 1990). In addition, patients may vary in immune system status, which also seems to have value in predicting the course of breast cancer (Herbeman R 1989, Mohanty et al 1991. Therefore, to obtain insights into the association between psychosocial factors and survival in breast cancer patients, it seems reasonable to focus on psychobiologic mechanisms that could mediate such relationships.

The findings of present study it has been observed that the patients involved in CA breast cancer undergo several psychological effects. During the treatment of CA breast cancer patients psychological treatment is must to boost the self esteem and courage of the patient to fight against the disease.

#### Conclusion

Physiological and psychological changes were recorded in patients with breast cancer. Our study suggests that further work is required to determine how psychological effects can be better elicited by early reorganization and treatment i-e psychotherapy. Support from the husband, family and society play a very important role to courage the will power of the patients to fight against the disease. Such kind of awareness is of great significance for decreasing the mortality rate and better prognosis of this disease.

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