

## Post-Traumatic Stress and Depression in Cancer Patients

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### ABSTRACT:

As the number of cancer survivors increase due to continued improvements in cancer screening and treatment, the quality-of-life of cancer survivors becomes an important concern. Cancer not only affects the physical health; it can also give rise to many psychological problems. Even after successful treatment, the psychological, social, and physical well-being of cancer survivors is challenged by increased risk of depression, cancer-related distress, and fear of recurrence. With the inclusion of “life-threatening illness” as a diagnostic criterion for post-traumatic stress disorder (PTSD) in the Diagnostic and Statistical Manual (DSM)-IV, and DSM-IV-TR (Text Revised), people with histories of cancer are now assessed and considered at risk for post-traumatic stress (PTS) and other related symptoms. Review suggests that PTS has been studied in a variety of cancers, including melanoma, lymphoma, breast cancer, ovarian cancer, and mixed cancers. However, factors associated with the higher prevalence for the development of PTS and PTSD, have not been extensively studied. The present study is an attempt to assess the prevalence of PTSD and Depression among women cancer patients and survivors from the city of Chandigarh with relation to the age of patients at the onset of cancer and their socio-economic status. The findings have been discussed in relation to the factors suggesting which patients might be at increased risk for the development of PTSD and Depression resulting in poor well-being and quality of life.

**Key Words:** Cancer, Stress, PTSD, Depression, Well-being, Women patients.

### INTRODUCTION

There exist many events in life where one comes across stress, trauma, fear but worrying excessively or reliving those horrifying moments time and again can act as a potent catalyst to convert to a disorder entitled post-traumatic stress disorder (PTSD). In simple words, it being frightened during a threatening situation is normal. But in PTSD, this reaction is changed or damaged. People who have PTSD may feel stressed or frightened even when they're no longer in danger and the traumatic event is persistently re-experienced. It develops after a terrifying ordeal that involved physical harm or the threat of physical harm to self or others.

PTSD was first brought to public attention in relation to war veterans, but it can result from a variety of traumatic incidents, such as – rape, torture, being kidnapped or held captive, child abuse, car accidents, train wrecks, plane crashes, bombings, or natural disasters such as floods or earthquakes etc. It can also occur in individuals who have faced life-threatening illnesses, including cancer survivors. As suggested by Kazak et al. (2004) in a research paper entitled ‘*Posttraumatic Stress Disorder (PTSD) and Posttraumatic Stress Symptoms (PTSS) in Families of Adolescent Childhood Cancer Survivors*’, Nir (1985) and Pot-Mees (1989) were the first ones to draw attention to and explain the posttraumatic stress disorder (PTSD) in childhood cancer survivors, and Stuber et al. (1991) published the first quantitative pilot report on PTSD in cancer survivors. PTSD has been studied in a variety of cancers, including melanoma, lymphoma, breast cancer, ovarian cancer, and mixed cancers in recent researches (Chan, Ng, Taib, Wee, Krupat, & Meyer, 2017).

It is vital to mention here that there is a significant change in the Diagnostic and Statistics Manual (DSM)-5 for PTSD being removed from the anxiety disorders category. Extensive research placed in a new diagnostic category named “*Trauma and Stressor-related Disorders*” Indicating a common focus of the disorders in it as relating to adverse events (APA, 2013). The symptoms of PTSD include:

- The person's response involved intense fear, helplessness, or horror.
- The traumatic event is persistently re-experienced in one (or more) of the following ways:
  - recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions.
  - recurrent distressing dreams of the event.
  - acting or feeling as if the traumatic event were recurring.
  - intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
  - physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
- Persistent avoidance of stimuli associated with the trauma.
- Persistent symptoms of increased arousal.
- Duration of the disturbance (symptoms in criteria 2, 3 and 4<sup>th</sup> point above) is more than one month.
- The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

With the inclusion of 'life-threatening illness' as a diagnostic criterion for post-traumatic stress disorder (PTSD) in the Diagnostic and Statistical Manual (DSM)-IV, and DSM-IV-TR (Text Revised), people with histories of cancer are now assessed and considered at risk for post-traumatic stress (PTS) and other related symptoms. Cancer is a life-threatening disease which not only affects the physical health; it can also give rise to many psychological problems. Even after successful treatment, the psychological, social, and physical well-being of cancer survivors is challenged by increased risk of depression, cancer-related distress, and fear of recurrence. PTSD can be triggered by being simply diagnosed with cancer, also, by having painful tests such as a mammogram or bone marrow biopsy. Remaining still for almost an hour in MRI scanner can act as a trigger. Pain, nausea and shortness of breath associated with the disease can itself elicit post-traumatic stress disorder. As per recent research by Chan et al (2017) it is believed that cancer patients need to adopt a 'warrior mentality' and remain positive and optimistic from diagnosis through treatment to stand a better chance of beating their cancer. It is essential that they need to be more aware that there is nothing wrong with getting help to manage the emotional upheaval -- particularly depression, anxiety, and PTSD -- post-cancer.

Not only does PTSD effects the victims but also concerns their family and caregivers as well. The fact that a loved one has cancer, thoughts like pain, sadness, worry, stress, trauma automatically does not leave caregivers mind as they can empathize really very well with their family and so they may contribute to the development of PTSD symptoms during treatment or years after the person has survived the cancer. A study by Kazak et al. (2004) found that nearly 20% of families with teenaged survivors of childhood cancer had a parent who was experiencing PTSD. Further, research revealed that it is extremely common for parents of children receiving cancer treatment to develop stress-related symptoms.

With advancement in cancer screening and treatment available, the number of cancer survivors increases, therefore, the quality-of-life of cancer survivors becomes an imperative concern. Thus, the present study is an endeavor to assess the prevalence of PTSD and Depression among women cancer patients and survivors with relation to the age of patients at the onset of cancer and their socio-economic status thereby making a humble contribution to Clinical Psychology literature in India.

## **METHOD**

### ***Participants***

The sample consisted of 50 women cancer patients and/or survivors from Chandigarh. The inclusion criterion for the sample of the study was as follows:

- The age range of subjects was from 42-74 years.
- The socio-economic status of the subjects was assessed with the monthly income of the family.

**Instruments**

1. *PTSD Diagnostic Scale for DSM-5 (PDS-5)*– PDS-5 was developed by Foa et. al (2016) to supplement the administration of original PTSD Symptom scale. It is a self-report measure to estimate the severity of a respondent’s PTSD symptoms.
2. *Beck Depression Inventory (BDI- II)*–BDI-II is a revised version developed by Beck et al. (1996). It is a 21-item self-report inventory rated on 4-point scale. It is designed for individuals aged 13 and over, and is composed of items relating to symptoms of depression.

**Analysis**

Frequency analysis was done for High and Low PTS and Depression scores in relation to Age and Socio-Economic status of the patients. Individual profiles were also assessed for items like the fear of recurrence, interference in day-to-day life activities, and duration of symptoms.

**RESULTS AND DISCUSSION**

Table-1 shows the distribution of data of women cancer patients in a dichotomy of low and high PTS and Depression scores. Women patients/survivors scoring low on PTS but high on depression were found to be 7, low on PTS and depression were found to be 14; high on PTS and depression were found to be 18 followed by high on PTS but low on BDI were found to be 11. The results revealed that a large percentage i.e., 36 % of the respondents scored high on Post Traumatic Stress and Depression both, whereas 58% scored high on post-traumatic stress alone, and 50% were found reporting high depression level.

**Table1: Distribution of Data (N=50)**

|                                       |   |
|---------------------------------------|---|
| <b>Low on PTS, High On BDI</b><br>(7) | <b>High on PTS, High on BDI</b><br>(18) |
| <b>Low on PTS, Low on BDI</b><br>(14) | <b>High on PTS, Low on BDI</b><br>(11)  |

Approximately one fourth of the sample (28%) were not affected severely by stress and/or depression post the trauma of cancer. This can be due to various individualistic factors like resilience, strength, age, or sociogenic factors like financial conditions and social support, which are further accentuated in the results below.

Table -2 indicates the distribution of age–wise comparison i.e., cancer patients in their 40’s were more prone to Post Traumatic Stress and Depression with high scores on both the scales as compared to those in late 50’s 60’s, or 70’s and above.

**Table 2: Age wise Distribution**

| Age -> | 40-50 Years | 50-60 Years | 60 & above |
|--------|-------------|-------------|------------|
| Scores |             |             |            |
| PTS    | <b>HIGH</b> | <b>LOW</b>  | <b>LOW</b> |
| BDI    | <b>HIGH</b> | <b>LOW</b>  | <b>LOW</b> |

It shows that age is a significant factor in studying the impact of life-threatening diseases on psychological health. In the young adulthood the responsibilities of the person have not been completed, children are either studying or haven't settled yet, as well there are ageing ailing parents too, to be taken care of. This whole additional burden of responsibilities makes the patients more vulnerable to mental health issues.

**Table 3: Socio Economic Status Distribution**

| <b>High Income Group</b>        | <b>Average Income Group</b> | <b>Low Income Group</b>          |
|---------------------------------|-----------------------------|----------------------------------|
| <b>N = 12</b>                   | <b>N = 31</b>               | <b>N = 7</b>                     |
| <b>Low on Stress/Depression</b> | <b>Mixed Response</b>       | <b>High on Stress/Depression</b> |

Table 3 bifurcates the data on the basis of socio-economic status of the subjects assessed through their annual family income. The results revealed that those who were from high income group (N=12) scored low on PTS and depression, whereas the low-income group patients were found scoring high on both PTS and depression. Almost 60 % sample which fall in middle income group gave mixed responses. Since treatment of cancer is quite exorbitantly high, for people having poor financial conditions, where challenges of meeting day to day expenses in itself is a taxing issue, arranging finances for the treatment is nerve-wracking and certainly puts an additional stress on them.

The findings revealed that the fear of recurrence was also observed more in subjects at lower age of the onset of cancer. Also, interference in day-to-day life activities was observed more in respondents having higher PTS and Depression score. Further, it was seen that the duration of PTS symptoms reported by respondents was more than one month, hence can be attributed as acute.

The results of the present study certainly support the research literature concerning cancer and PTSD. According to Cordova, Andrykowski, & Kenady (1995), the factors associated with the risk for the development of PTS and PTSD have not been dwelled upon extensively; however, one study of women with early-stage breast cancer found an association with PTSD-like symptoms in patients with the characteristics such as younger age, lower income and fewer years of formal education.

Mehnert & Koch (2007) carried out a study which evaluated patients with breast cancer for PTSD and ASD. The findings revealed that patients with lifetime PTSD (8.7%) were much more likely to experience cancer-related ASD or PTSD (odds ratio, 14:1). Also, Swartzman et al. (2016) conducted a study on 120 samples from 110 sources reporting a proportion of cancer survivors with PTSD. A random effects meta-analysis estimated the odds ratio as 1.66 (95% confidence interval (CI): 1.09-2.53) for PTSD in cancer survivors compared to controls.

More recently, Chan et al. (2017) carried out a study on 469 adults with various cancer types within one month of diagnosis at a single oncology referral center. Patients underwent additional testing after six months and again after four years. Clinical evaluations revealed a PTSD incidence of 21.7% at 6-months follow-up, with rates dropping to 6.1% at 4-years follow-up. Although overall rates of PTSD decreased with time, roughly one-third of patients initially diagnosed with PTSD were found to have persistent or worsening symptoms four years later.

*The researcher puts forth the following suggestions and limitations for the present study.* The first limitation being that no major generalization can be made on the basis of the above data as the sample selected was small due to paucity of time. Secondly, a further study with larger sample shall be continued to reach any concrete conclusions. Suggestions incorporate that PTSD is not solely related to trauma of cancer in all patients. Also, there may be many other underlying factors like personality types of the concerned persons and the social support of family and friends also makes a difference.

Since the size of sample was small, and was not normally distributed, the low and high-income group subjects were very few in the sample. The responses of average income group were also mixed; hence no reliable statement can be made with reference to the SES and prevalence of PTS in the cancer patients.

## CONCLUSION

Talking in terms of the results of the study, women who are exposed to such disease be given a lot of support both emotionally and socially. They should be taught to learn to cope with psychological stress. Psycho-educational, programs can play a pivotal role in helping to recognize those signs which trigger the problem and also it is imperative to explore efficient and meaningful services like relaxation, cancer awareness and education programs, physical regime and medications. Thus, counselling can help in numerous ways from holding a positive self-image to considering optimistic and healthy lifestyle.

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