

Illness perception and posttraumatic stress symptoms in patients with cancer

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ABSTRACT

The objective of this study is to investigate the associations between illness perception and posttraumatic stress symptoms among cancer patients undergoing treatment. A total of 60 participants were interviewed from a private hospital in New Delhi, who have been undergoing treatment for cancer across various stages. The data was obtained by using the Brief Illness Perception Questionnaire and PTSD Symptom Scale. To ascertain the significant associations between illness perception and posttraumatic stress symptoms, correlation and t-test were conducted. By data analyses, it was found that there is significant relationship on the level of illness perception and posttraumatic stress symptoms in both male and female cancer patients. On the other hand, no significant difference was found between the two genders on either illness perception or posttraumatic stress symptoms. However, both the genders are likely to display similar symptoms across all dimensions. In conclusion, it is important for the medical practitioners, as well as mental health professionals to develop strategies in order to maintain a positive illness perception of the patients, so as to not lead them towards developing serious psychiatric conditions like posttraumatic stress disorder.

Keywords: *Illness Perception, Posttraumatic Stress, Cancer, Psycho-oncology*

Cancer is a group of diseases that occur when cells grow abnormally in the body. The human body has a control mechanism that kills off old or damaged cells, whereas in the case of cancer, these cells grow in an uncontrollable fashion which in turn forms atypical cells. These occur due to genetic changes in the body, making these cells develop a mass, known as a tumour. There are more than a hundred kinds of cancers, each stemming in various parts of the body. The most commonly seen cancers are put into five major categories, which are as follows:-

Carcinoma. This is the most common type of cancer seen in humans. It usually starts to stem from the tissues that are lining the inner or outer surface of the body. Carcinomas derive from presumed epithelial cells that have damaged genomes, and they cause these cells to demonstrate abnormal malignancies.

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Sarcoma. This type of cancer begins in the soft, or connective tissues of the body. These tissues have a function that connect, support and surround the body structures, like blood vessels, fats, tendons, muscles, nerves and the lining of the joints.

Melanoma. These cancers originate in the cells known as melanocytes. These cells exist on the upper layers of the skin and produce a substance known as melanin. It is responsible for the colour of the human skin.

Lymphoma. These cancers occur when cells called lymphocytes start to grow in an uncontrolled manner. Lymphocytes are the white blood cells that are a crucial part of the body's immune system, which travel around the lymphatic system and aid the body in fighting off infections.

Leukaemia. It is another form of a blood cancer that originates when the white blood cells of the blood and mainly bone marrow start an abnormal growth spurt.

Healthy individuals have a sense of security and order in their lives, and the image of having a cancer diagnosis is not well made in their minds. No disease has sustained as strong of a negative stigma as cancer (Holland, 2002). The stigma that people hold with cancer tends to exaggerate the intense reactions they have to the diagnosis of cancer. The fears that are associated with a cancer diagnosis have an existential dimension since the issues faced by patients are holistic and complicated, ranging from physical, to psychological to spiritual as well. It is said that cancer is not only diagnosed to the patients but to the caregivers and family as well. They experience similar emotions like shock, disbelief and denial, along with guilt feelings as well. A major illness causes disruption of many family relationships as well, considering how much financial, physical and mental toll it takes on the caregivers. The most typical response of the patients and families regarding all procedures is hope that after the treatment, they will be able to go back to their normal routines and resume their previous roles. They also feel distressed and burnt out due to the constant appointments, admissions and regular procedures. The patients and families use various mechanisms to come to terms with the difficult phase, including normalising the illness and belief that the treatment will successfully eradicate the illness.

“Illness perceptions are the cognitive representations or beliefs that patients have about illnesses and medical conditions. As such, they are an important predictor of how patients will behave during their illness experience and are directly associated with a number of health outcomes.”

There are a lot of factors that influence how an individual feels about or perceives their illness including their socioeconomic status, their age, the stage at which the illness has been diagnosed and more importantly the prognosis of the illness. Illness perception is usually measured across various domains that tell us whether they view their illness as positive or negative.

Posttraumatic stress disorder is a psychiatric condition that is often caused as a result of a traumatic event, including but not limited to being diagnosed with a life-threatening illness, being a victim of attack, assault, or witnessing the same, loss of loved one, etc. In this disorder, the individual finds it unable to overcome the event that has occurred as it manifests in a wide range of serious, often debilitating clinical symptoms. These include re-experiencing symptoms, avoidance symptoms and arousal symptoms.

REVIEW OF LITERATURE

(Fanakidou, et al., 2018) analysed the relationship between three domains of mental health namely stress, anxiety, depression; loneliness and illness perception with the health related quality of life in young patients with breast cancer, who had a mastectomy within one year of the study. The results demonstrated that breast reconstruction was a crucial factor in showing better health related quality of life, and an improved mental health. Poor health related quality of life was related with negative illness perceptions in both the groups alike. (D'Urso, A., Kirby, A., Mastroyannopoulou, K. & Meiser-Steadman, R., 2018) assessed the posttraumatic stress symptoms in children who were diagnosed with cancer and their siblings along with the posttraumatic stress disorder model of Ethel and Clark in a British population. The results demonstrated that more than one fourth of the sample scored above the average on Impact of Events Scale-R and there was no difference in the scores of the siblings and patients on the PTSS scale. In the overall results of PTSS, the predictors of unique variance were maladaptive appraisals and age, and the rate of PTSS was relatively high in all sixty participants. (Muscara, F., et al., 2018) analysed acute and posttraumatic stress symptoms in parents of children with life-threatening illnesses, to know the transient patterns of their PSS and recovery over a stipulated time period and investigate the psychosocial, demographic and illness factors associated with the membership. 33% of the parents fell into the resilient category and displayed low distress responses across the whole period, and 52% fell into the recovery category and displayed very high distress during diagnosis which was reduced after a few months. (Hong-Yi, T., Yu-Hua, L., Chia-Chan, K. & Fen-Shu, W., 2018) evaluated the relationship between symptom-related distresses, posttraumatic stress symptoms and depression in women who have gynaecologic cancers. The results showed a positive correlation between the frequency of PTSS, its severity, symptom distress and depressive symptoms. (Tang, et al., 2017) evaluated the correlation between quality of life, physical variables and psychological variables in Chinese women having breast cancer. The results showed the association of low global quality of life with these variables: high somatic symptom severity, depression, anxiety, low sense of illness coherence, negative illness perception demonstrated a strong canonical correlation with a significantly low physical, social and emotional functioning.

Objectives

1. To study the relation between illness perception and posttraumatic stress symptoms among male cancer patients undergoing treatment.
2. To study the relation between illness perception and posttraumatic stress symptoms among female cancer patients undergoing treatment.
3. To measure the difference on the level of illness perception among male and female cancer patients undergoing treatment.
4. To measure the difference on the level of posttraumatic stress symptoms among male and female patients undergoing treatment.

Hypotheses

1. There will be significant relationship between the nature of illness perception and posttraumatic stress symptoms among male cancer patients undergoing treatment.
2. There will be significant relationship between the nature of illness perception and posttraumatic stress symptoms among female cancer patients undergoing treatment.
3. There will be significant difference on the level of illness perception among male and female cancer patients undergoing treatment.
4. There will be significant difference on the level of posttraumatic stress symptoms among male and female cancer patients undergoing treatment.

METHODOLOGY

Sample

A total of 60 patients from a private hospital in New Delhi participated in the study, who have been undergoing treatment for cancer across various stages. The participants aged from 25 to 75 years with the mean age being 53.8 years. There were 30 males and 30 females who participated in the study.

Instruments

Two tools were employed for the purpose of data collection for this study. The tools are as follows:

- Brief Illness Perception Questionnaire:** the BIPQ was developed in 2005 by Broadbent, Petrie, Main & Weinman to assess the illness perception of patients that have a chronic or terminal illness that puts a significant impact on their lives. It has 9 items, concerned with different dimensions namely cognitive perceptions, emotional aspects, understanding of illness and the causes that the patients think may have caused their illness.
- PTSD Symptom Scale:** this scale was developed in 1993 by Foa, Riggs, Dancu, & Rothbaum to assess the posttraumatic stress symptoms in people who have gone through one or more traumatic events including a life-threatening illness. It has 17 items, concerned with different dimensions namely arousal symptoms, avoidance symptoms, re-experiencing symptoms, etc.

Procedure

The initial steps to this research involved discussing the purpose and methodology with the medical oncologists in order to obtain consent for the same. The patients were also told the aim behind the study one by one, and consent was taken from the patients and families as well. The patients were then given the two forms namely Brief Illness Perception Questionnaire and PTSD Symptom Scale. The responses were taken in a span of 15 days and the scales were scored individually afterwards. Statistical analysis was conducted thereafter.

RESULTS

Table 1 Correlation value for Illness Perception and Posttraumatic Stress Symptoms for male cancer patients

	N	r	p
Illness Perception	30		
Posttraumatic Stress Symptoms	30	0.65	Sig***

*** Significant at .01 and .05 levels

Table 2 Correlation value for Illness Perception and Posttraumatic Stress Symptoms for female cancer patients

	N	r	p
Illness Perception	30		
Posttraumatic Stress Symptoms	30	0.48	Sig***

*** Significant at .01 and .05 levels

Table 3 Mean and t-score for Illness Perception in male and female cancer patients

	N	Mean	Standard Deviation	t	p
Male	30	42.1	14.7		
Female	30	46.3	12.9	0.245	Insig

Insigificant at .01 and .05 levels

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Table 4 Mean and t-score for Posttraumatic Stress Symptoms in male and female cancer patients

	N	Mean	Standard Deviation	t	p
Male	30	10.5	7.2	0.001	Insig
Female	30	19.2	10.7		

Insignificant at .01 and .05 levels

DISCUSSION

Table 1 shows the correlation between Illness Perception and Posttraumatic Stress Symptoms for male participants who have been undergoing treatment for cancer. The number of responses on both the BIPQ and the PTSD Symptom scale were 30 each (n=30). Pearson's r was calculated which came out to be .65. The p value was significant at .01 and .05 levels. Hence, the correlation .65 is significant at .01 and .05 levels, which indicate a statistically significant relationship between both variables among male cancer patients.

Table 2 shows the correlation between Illness Perception and Posttraumatic Stress Symptoms for female participants who have been undergoing treatment for cancer. Pearson's r was calculated which came out to be .48. The p value was significant at .01 and .05 levels. Hence, the correlation .48 is significant at .01 and .05 levels, which indicate a statistically significant relationship between both variables among female cancer patients.

Table 3 shows whether there is a difference on the level of Illness Perception among male and female participants who have been undergoing treatment for cancer. 30 males and 30 females completed the BIPQ, after which mean, standard deviation and t-scores were calculated. The mean score for male participants on BIPQ was 42.1, which indicates a neutral viewpoint of the illness (neither negative nor positive), and the SD for male participants was 14.7. The mean score for female participants on BIPQ was 46.3, which indicates a slightly more negative perception than the male population, yet lying on the neutral spectrum of the scale (neither negative nor positive), and the SD for female participants was 12.9. The overall t-score came out to be 0.245. The p value was insignificant at .01 and .05 levels, which indicate a statistically insignificant difference among male and female patients.

Table 4 shows whether there is a difference on the level of Posttraumatic Stress Symptoms among male and female participants who have been undergoing treatment for cancer. 30 males and 30 females completed the PTSD Symptom Scale, after which mean, standard deviation and t-scores were calculated. The mean score for male participants on PTSD Symptom Scale was 10.5, which indicates sub-threshold posttraumatic stress symptoms, and the SD for male participants was 7.2. The mean score for female participants on PTSD Symptom Scale was 19.2, which indicates a slightly increased prevalence of posttraumatic stress symptoms than the male population, lying on the mild spectrum of the scale, and the SD for female participants was 10.7. The overall t-score came out to be 0.001. The p value was insignificant at .01 and .05 levels, which indicate a statistically insignificant difference among male and female patients.

CONCLUSION

Through analyses of data, it was found that people who are more likely to have a perception about their cancer are more likely to exhibit posttraumatic stress symptoms. On the other hand, both the genders are likely to display similar symptoms across all dimensions. The average score of all sixty participants on the BIPQ indicates that most cancer patients do not

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view their illness as threatening in the long run. The average score of all sixty participants on the PTSD Symptom Scale indicates subclinical to mild posttraumatic stress symptoms in patients having cancer. The factors that influence these scores include time since diagnosis, age of the patient, gender, type of cancer and its stage. It was seen that older people had a more positive belief about their illness, as well as sub-threshold prevalence of posttraumatic stress symptoms than younger people, or people who were diagnosed more recently.

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Conflict of Interest

The author declared no conflict of interest.

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