Cancer is a serious and traumatic event that impacts millions of individuals each year. It is the second biggest cause of death in India, growing at 11 percent annually. There are 2.5 million cancer cases and four lakh deaths a year (Datta, 2010). Cancer has the ability to shake one’s worldview and significantly impact one’s assumption about life. After the diagnosis with cancer, the patient may feel shock, disbelief, fear, anxiety, guilt, sadness, grief, depression, anger, and more. There are many stressors that patients diagnosed with cancer face, including stress of being diagnosed with such a serious illness, fear of possible death, side effect of treatment and other stressors specific to disease and treatment. As the majority of cancers are treated with various approaches for a long duration of time, so assessment of psychological changes and anxiety is important for several reasons as it is widely accepted that cancer impacts on the psychology and behaviour of the patient.

A total of 1,638,910 new cancer cases and 577,190 deaths from cancer are estimated in the United States in 2012 (Siegel, 2012). As for India, the rate of mortality due to cancer in India has been alarmingly high i.e. 819,354 in 2004, which drastically increased to 979,786 in 2010. According to the Health department report on cancer patients prepared by Pt Bhagwat Dayal PGIMS Rohtak, Haryana in October 2012 there are 27,827 cancer patients in Haryana (Das, 2005). Based on a survey conducted in Punjab, the Punjab Health Minister said that 23,874 cases of cancer have been detected and the number of persons complaining of cancer symptoms was 84,453. According to the survey, 33,318 cancer deaths have occurred during last five years out of which 14,682 were in the Malwa region alone. As many as 4,000 of these happened in Ludhiana (Kurugauthi, 2013).

Cancer being a chronic and debilitating illness act as a challenge with a negative impact on the life of the patient himself as well as the family members. So, exploring the anxiety level explains how a patient adapts to the changes occurred during the course of illness and treatment.

Objectives
The study attempted to explore the anxiety among cancer patients, and determine the association of the levels of anxiety with selected variables among cancer patients.

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Methodology

Participants: The study used ‘non-experimental research approach’ and ‘cross-sectional exploratory design’ as its purpose was to explore anxiety among cancer patients; it was carried out between 13 December 2012 to 12 January 2013. The sample consisted of 100 patients (62 male and 38 female) diagnosed with a variety of cancers who were consecutively admitted in the Radiotherapy department of PGIMS, Rohtak (Haryana) with duration of illness for more than 6 months. They entered the study after their acceptance to the questionnaire and willingness to participate.

Data collection: The data collection tools comprised a record sheet on Demographic and clinical characteristics of cancer patients, State-Trait anxiety inventory. Data were collected through face-to-face interviews conducted by researchers in the in-patient unit of radiotherapy department. The researchers explained the material covered in the questionnaire. The average time for completing the questionnaire was 30-40 minutes.

The tools which were used in present study comprised of two sections: Demographic and clinical variables, State-Trait anxiety inventory. Part A consisted of the record sheet which was constructed to collect data on patients' characteristics (age, gender, residence, education, occupation, annual household income, marital status, present position in the family, importance of religious activities). Part B consisted of diagnosis of cancer, duration of diagnosis, stage of disease and on-going treatment.

The State-Trait Anxiety Inventory is a 40-item self-report measure of state and trait anxiety. The reliability of Hindi version of state anxiety was 0.95 and 0.96 for trait anxiety. The trait subscale measures a more stable tendency to experience anxiety whereas the state subscale measures a temporary experience of anxiety or tension. Each item is rated on a 4-point intensity scale i.e. '0'-not at all to '4'-very much so, which tells about the stress of the cancer patient.

Ethical considerations: Ethical approval was obtained from the Institutional Ethical Committee of the University and formal approval was obtained from the Radiotherapy department. Written and oral consent of patients was obtained. The patients were informed about the purpose of the research and assured of their right to refuse to participate in or to withdraw from the study at any stage. Anonymity and confidentiality of subjects’ data was assured.

Statistical analysis: Data was analysed and interpreted by employing descriptive and inferential statistics. SPSS version 16.0 was used to analyse the data, p-value ≤ 0.05 was considered as significant.

Results

About 51 percent of the cancer patients belonged to age group of 48-62 years, 62 percent of the patients were male; most of them (78%) were residing in rural area, 45 percent of them were illiterate. Majority (91%) of patients were self-employed. Most (63%) belonged to income group of Rs 50,001-1,00,000/- per year. The majority of patients (93%) were married and adults (67%). Most of the patients (58%) were those who performed religious activities once a day and 51 percent had a great importance of religious activities; 29 percent of the patients were diagnosed with Ca Cervix and only 3 percent with breast cancer. Most of cancer patients (57%) had duration of diagnosis between 6 months – 1 year, Most (50%) of cancer patients were in stage III of the disease. With regard to the type of treatment received, 51 percent were on chemotherapy. The total score for state-trait anxiety inventory was 92.74 ± 29.94.

Table 1 and Fig 1 reveal that 36 percent and 34 percent of cancer patients were in moderate low state anxiety level in state-trait anxiety inventory respectively and only 6 percent had high state anxiety level while 21 percent of them were having high trait anxiety. Thus, majority of patients were in moderate low stress level in state-trait anxiety.

Table 2 indicates that mean score for state anxiety inventory was 43.82 with SD of ±13.86 and mean % of 54.78. The mean score for trait anxiety inventory was 48.92 with SD ± 16.78 and mean % of 61.15. The mean score for state-trait anxiety inventory was (92.74) with SD as ± 29.94 and mean % at 57.96.
Association of State-Trait Anxiety with selected variables

The state anxiety was found associated with demographic variables that were religious activities (34.15) and importance of religious activities 21.33. Clinical variables were found to be associated with duration of diagnosis (26.23) and stage of disease (27.02) at 0.05 level of significance.

The trait anxiety was found associated with demographic variables (14.13) that were: marital status (10.90) and clinical variables were found to be associated with diagnosis (42.89), duration of diagnosis (27.64) and stage of disease (32.61) at 0.05 level of significance.

Discussion

It was observed that 51 percent of the subjects belonged to the age group of 48 years and above. The findings were similar to those of McPherson, Steel & Dixon (2007) i.e. the incidence of breast cancer increases with age and it is common among the age group of above 40 years.

In trait anxiety it was found that most of female patients were having high stress level (36.84%) which is consistent with the findings of Stark, et al. (2002). Female sex were more associated with anxiety disorder in multivariate analysis.

Implications

Cancer is not only a medical problem, as it also involves psychological, emotional and social problems. State-trait anxiety explores the stress level of cancer patients which is the key component of the pathway to gather more valuable data about the health of the patient and plan the care accordingly.

References