Assessment of the Anxiety, Depression and Coping Strategies in Diagnosed Cancer Patients

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Abstract

Across the world, there are people who suffer from different types of cancers. These patients suffer problems of anxiety and depression as the commonest psychological problems. Therefore, an exploratory study was conducted to assess the anxiety, depression and coping strategies in diagnosed cancer patients in selected hospital of Indore. Samples of 50 patients both males and females were taken for the study using non-probability purposive sampling technique. Assessment of data was done using standardized tools i.e. Hamilton's anxiety scale, Beck's Depression inventory and a set of 5 open ended questionnaire for the patients. Statistical findings revealed that there was no association between the level of anxiety and the socio demographic variables. The findings of the study revealed that majority of the cancer patients suffer from symptoms of anxiety (23 out of 50 patients, 46%) and depression (19 out of 50 patients, 38%) in their daily life. To adapt to these stressful conditions patients can use a wide range of diversional methods or coping strategies. In the study, it was found that patients used different coping strategies like watching television, engaged in spiritual activities and spending time with friends being the commonest methods.

Key Words: Anxiety, Beck's Depression Inventory (BDI), Cancer patients, Coping, Depression, Hamilton Anxiety Scale (HAS).

INTRODUCTION

The year 2010 reported 5.6 lakh deaths due to cancer. Out of this, 3.95 deaths occurred in people aged 39 to 69 years (two lakh men and 1.95 lakh women). Furthermore, the study revealed that the most fatal cancers in men were oral cancers (lips and pharynx-23%), stomach cancer (13%) and lung cancer (11%). For women the leading cause of cancer deaths were cervical cancer (17%) stomach cancer (13%) and breast cancer (10%). Tobacco related cancers represented 42% of male and 18.3% of female cancer deaths.[1]

A study previously reported on the development of a cancer-specific screening instrument for anxiety and depression (Psycho Social Screen for Cancer (PSSCAN). No information on cut-off scores or their meaning for diagnosis was available when PSSCAN was first described. Study computed sensitivity/specificity indices based on a sample of 101 cancer patients who had provided PSSCAN data on anxiety and depression and who had completed another standardized instrument with strong psychometrics. Next, compared mean scores for four samples with known differences in health status, a healthy community sample (n = 561), a sample of patients with a representative mix of cancer subtypes (n = 570), a more severely ill sample of inpatients with cancer (n = 78), and a community sample with a chronic illness other than cancer (n= 85). Sensitivity/specificity analyses revealed that an excellent balance of sensitivity/specificity was achievable with 92%/98% respectively for clinical anxiety and 100% and 86% respectively for clinical depression. Newly diagnosed patients with cancer were no more anxious than healthy community controls but showed elevations in depression scores. Both, patients with chronic illness other than cancer and those with longer-standing cancer diagnoses revealed greater levels of distress than newly diagnosed cancer patients or healthy adult controls. These additional data on criterion validity and community versus patient norms for PSSCAN serve to enhance its utility for clinical practice.[2]

Results hypothesized in another study that patients with advanced disease or a cancer type that has a poor prognosis may be more likely to report anxiety and depressive symptoms after diagnosis; younger age and female gender may moderate these effects. Patients (n=3850) were consecutively assessed with PSSCAN, a standardized, validated tool, at two large cancer centers between 2004 and 2009. Female patients reported more anxiety and depressive symptoms (P=0.003 to P<0.001) compared with men and a healthy comparison group. Older age was associated with fewer anxiety (P=0.033 to P<0.001) and fewer depressive symptoms (P<0.001), but this was not true for lung cancer. Presence of metastases was associated with more anxiety symptoms in patients with gastrointestinal, lung (P=0.011; ), and prostate (P=0.032; ) cancer, but this was not true for breast cancer. Furthermore, early disease stage was associated with fewer depressive symptoms among older prostate cancer patients (P=0.021; ). Men with early lung cancer reported fewer anxiety (P=0.020; ) and depressive (P=0.017; ) symptoms than men with advanced disease or women. As hypothesized, disease stage was directly associated with emotional distress, except for patients with breast cancer. Furthermore, age and gender moderated some of these effects.[3]

According to a study conducted in New South Wales in a selected hospital, out of 716 evaluable patients, 13% had anxiety and 9% had depression assessed on basis of HADS- (Hospital Anxiety and Depression Scale).[4]

The process of understanding and coping with a cancer diagnosis is closely linked to the individual's stages of life. Going through childhood cancers during adolescence has consequences that can affect various dimensions of the young person's life, for example, identity, school and future prospects in adulthood. [5]

Young adults are often faced with challenges related to relationships, employment, housing and emotional development. Experiencing cancer during these times complicates the development process and creates a need for communicating

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According to a study published in the Journal of Clinical Oncology (Volume 20, No. 14, July 15, 2002) 48% of 178 evaluated cancer patients reported to have anxiety disorder, 8% fulfilled the ICD criteria for anxiety.

Depression affects 121 million people worldwide. It can affect a person's ability to work, form relationships and destroy their quality of life. In its most severe form depression can lead to suicide and is responsible for 8, 50,000 deaths every year. Disorders are common form of mental illness often causing significant distress and leading to a reduced quality of life. Science daily, 26th July, 2011.

Lilijana Sprah and Mojca Sostaric (1977)[7,9] conducted this review to present common psychosocial problems in cancer patients and their possible coping strategies. And revealed that cancer patients are occupied with many psychosocial problems, which are only partially related to their health state and medical treatments. They are faced with a high social pressure, based on prejudices and stereotypes of this illness. Involvement of cancer patients in spiritual activities and other activities like music, cooking, gardening etc helped them get relief from stress.

During the clinical posting in the cancer unit, the investigator found that patients suffering from cancer exhibited varied levels of anxiousness and depressive symptoms related to the disease and the treatment modules. This encouraged the investigator to find out the level of anxiety and depression faced by cancer patients and to find out the different coping strategies used by them to de stress themselves. So that further steps may be taken to develop better living in patients with the disease.

Therefore, an exploratory study to assess the level of anxiety, depression and coping strategies in diagnosed cancer patients in selected hospitals of Indore in the year 2012 was conducted by the researcher.

OBJECTIVES:
- To assess the level of anxiety in diagnosed cancer patients.
- To find out the degree of depression in diagnosed cancer patients
- To associate the level of anxiety with selected demographic variables.
- To associate the level of depression with selected demographic variables
- To evaluate the coping strategies among diagnosed cancer patients.

MATERIALS AND METHODS

Research design:
The research design selected for the study was non-experimental - exploratory research design. The study was completed with a sample of 50 patients (males and females both). Assessment of anxiety, depression and coping strategies was done using Hamilton's Anxiety Scale, Becks Depression Inventory, and an open-ended questionnaire.

Target population:
All diagnosed cancer patients.

Sample:
In this study, the sample comprised of total 50 patients including males and females both with diagnosis of different types of cancers by oncologist attending outpatient department of Choithram Hospital and Research center.

Sampling technique:
Non-Probability purposive sampling technique with some predetermined criteria was used to select samples.

Tool:
In this study tool comprised of 4 sections

Section I: Socio Demographic data: it consisted of demographic variables (11 items) viz; age, sex, religion, education, marital status, occupational status, family type, history of any psychiatric illness in the family, history of any cancer disease in the family and the duration of the cancer.

Section II: Beck's depression inventory to assess the level of depression.

Section III: Hamilton's anxiety scale to assess the level of anxiety.

Section IV: Open ended Questionnaire to assess coping strategies used by selected cancer patients.

Ethical Issues:
- Beneficence- Patients were not subjected to any risk or harm as discomfort during the study. They were assured that the information provided by them will not be used against them in any way.
- The patients were given right to refuse to give any information, withdraw from the study and the right to ask questions. A written consent was obtained from the patients at the beginning itself.
- The patients were given full right to fair treatment and right to have privacy.
- Confidentiality of the patient's data was well maintained.

Data Collection Procedure:
This study was conducted in Choithram Hospital and Research Centre, Indore. Written consent from the hospital authorities was taken to conduct the research and the patients were assured that the confidentiality will be well maintained. During the data collection, Sundays were excluded. The investigator assessed 50 patients diagnosed as having cancer by oncologist, who fulfilled the inclusion criteria. The patients were well explained about the aim of the study. Data collection was done from 11/6/12 - 26/6/12.

Patients were given instructions to fill each questionnaire comprising of a Beck's depression inventory, Hamilton's anxiety scale and open-ended questions on coping strategies. Each patient took about 25 minutes to fill the questionnaire completely. Beck's depression inventory was filled in about 10 minutes, Hamilton's anxiety scale was filled in about 10 minutes and open-ended questions were answered in about 5 minutes.

RESULTS

Section I: Socio demographic variables:
Study revealed that the majority of the patients 26 out of 50 (52%) were in the age group 46 to 60 years of age. Both male and female sexes were equally affected i.e. 25 (50% each) with the disease. Majority of the patients were primary school pass outs, 15 out of 50 (30%) and similar numbers of patients were with high
school, 11 (22%) were qualified up to higher secondary and graduation respectively and only 2 (4%) of the patients were postgraduates. Majority of the patients, 44 (88%) were married, while only, 4(8%) were unmarried. Nearly half of the patients, 16 (30%) belonged to the service group whereas others belonged either to the business class 11(22%) or were homemakers 19,(34%) and only a minor number of patients i.e. 5(10%) were unemployed. Majority of the patients, 47 of them (94%) did not have any history of psychiatric illness in the family and only 3, (4%) of them had such history. 9 (82%) of the patients did not have a history of cancer in their family while 41, (18%) of them had a positive history of cancer.

Section II: Assessment of Level of Anxiety:

![Figure No 1: showing the level of anxiety among cancer patients](image1)

![Figure 02: Showing the level of depression in cancer clients](image2)

Figure 1 shows that 23(46%) out of 50 cancer patients had mild and moderate anxiety respectively whereas 2(4%) patients had severe and grossly disabling anxiety respectively.

Section III: Evaluation of Degree of Depression

The findings revealed that most of them, 19 (38%) patients were suffering from cancer had moderate depression and 8 (16%) patients out of 50 had severe depression.

Section IV: Association of level of anxiety and selected socio demographic variables:

Findings revealed that most of the patients use one or more than one coping strategies to divert their minds from stress and tensions. Majority of them used these strategies like watching television, involvement in religious activities and spending time out with friends.

There was no significant association found between the level anxiety and selected demographic variables i.e. age, sex, religion, education, marital status, family type, occupational status, income, history of psychiatric illness and history of cancer in the family at p< 0.05 level. Hence the research hypothesis was rejected.

Section V: Association of degree of depression and selected demographic variables:

There was significant association between the level of depression and type of family at the level of p< 0.05. Hence, therefore, research hypothesis was partially accepted at this level.

Section VI: Assessment of coping strategies used by cancer survivors:

**DISCUSSION**

Assessment of level of anxiety and degree of depression:

The findings of the study revealed that 23(46%) cancer patients had mild and moderate anxiety while 2(4%) patients had severe and grossly disabling anxiety. The findings related to presence of depression revealed that majority 19 (38%) of the patients suffering from cancer had moderate depression and 8 (16%) had severe depression.

Similar findings were obtained in a study conducted in the Ohio State University Hospitals, Columbus, Ohio, USA and results revealed that 23.1% had scores 11 or greater and would be the most likely to have had anxiety (17.7%) or depressive (9.9%) disorders based on DSM-III-R criteria. Patients with active malignant disease and inpatient status were more likely to have higher depression scores. The HADS was an easily administered tool that identified a large proportion of cancer patients as having high levels of anxiety or depression.

Evaluation of Use of coping strategies:

Patients who suffered from cancer used different types of coping strategies in order to cope up with the stressful life they underwent. Different patients shared their personal experiences with the investigator regarding their emotional distress and financial incapability due to high cost of treatment modules. It was seen that the patients generally liked to engage themselves in more of religious and spiritual activities to revive their minds. Watching television and spending time with family and friends were also some commonly practiced methods of stress relief.

Many of the patients used more than one coping styles to handle their day-to-day stress like listening to bhakti geet and reading books etc. Patients also expressed that they had observed certain changes in their food habits and sleeping patterns. They realized that their appetite had become lesser than the pre cancer stage and the sleep has decreased. Certain others did not observe any change in their lifestyle.

**CONCLUSION**

Overall findings of the study revealed that undergoing a phase of disease like cancer is a stressful condition for the patient and the family members. The cancer sufferers undergo a high level of anxiousness and depression during these times. Therefore, there is a need to identify the levels of psychological stress faced by such patients to help them to adapt to the situation as well as to improve the quality of life for a better lifestyle.

In our hospital, there is a nurse run clinic, especially for guidance and counseling of breast cancer patients and survivors. The team consists of a doctor, a nurse, a psychologist and a physiotherapist. Counseling sessions are carried out in different intervals for enabling the patients to cope up with the stressful situation. Patients are taught pre and postoperative exercises, lymph edema management, management of complications related to chemotherapy and radiotherapy, skin care after Radiotherapy, Breast Prosthesis, Breast Self Examination, Diet, and Importance of Follow Up. It is an ongoing education system...
Table no 1: Frequency and percentage of open ended questions answered by each patient in order to understand the type of coping strategy used by them:

| QUESTIONS                                                                 | FREQUENCY | PERCENTAGE |
|---------------------------------------------------------------------------|-----------|------------|
| What do you usually do to relax your mind from stress?                   | 1) Religious and social work 20  
2) Reading books 4  
3) Diverting mind by doing other activities 15  
4) Stay alone 2  
5) Watching TV or talking on phone 9 | 40  
8  
30  
4  
18 |
| What methods do you use to divert your mind from tensions?               | 1) Watching TV 10  
2) Hanging out with friends 4  
3) Listening to music/bhakti geet 27  
4) Go for walks 6  
5) Yoga 3 | 20  
8  
54  
12  
9 |
| What difference do you find between your present and past lifestyle?     | 1) No difference 36  
2) Eating habits 6  
3) Sleep pattern 8 | 72  
12  
16 |
| What knowledge do you expect from nurses and doctors regarding your illness? | Complete and honest knowledge regarding the illness, treatment, and complications 50 | 100 |
| How do you maintain social interactions with your parents, siblings and friends? | 1) Phone calls 26  
2) Visiting relatives 21  
3) Interactions are less now as compared to before 3 | 52  
42  
6 |

for the women suffering from Breast Cancer. Patients attending the clinic on a regular basis are benefitted by the counseling sessions.

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