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Research article

# A CROSS SECTIONAL STUDY ON PSYCHO-SOCIAL ASPECTS IN CANCER PATIENTS IN A TERTIARY CARE HOSPITAL

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#### ABSTRACT

Cancer is a disease which affects not only patients but also their families physically and emotionally. The purpose of the study was to determine the psycho-social aspects like depression, anxiety, stress, etc., in cancer patients. In this study, a cross sectional approach was used. Data were collected through individual interview by using well designed questionnaire after obtaining proper consent. The study sample comprised of 243 patients. The study findings are grouped under age, gender, and psycho-social aspects such as financial hardship, stress, depression, loss of appearance, loss of interest in usual activities, disease knowledge and its prevention, out of 243 study population 120 were females and 123 were males. Among 243 study population 161 patients were majorly stressed, 66 patients were moderately stressed and 17 patients were suffering from minor stress. Psycho-social aspects in which patients were suffering majorly with stress 74.89%, depression 83.9%, financial hardship 79.83% and misconceptions 52.12%. In our study out of 243 patients, majority of the cancer patients (66.2%) were suffering with psycho-social distress and 77.3% patients were relieved from the distress after obtaining counselling.

**Key Words:**-Psycho-social aspects, distress, cancer, impact of psycho-social aspects, psycho-oncology.

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### INTRODUCTION

Cancer is the uncontrolled growth of abnormal cells anywhere in a body and invades other tissues. Cancer is a group of more than 100 different diseases that are characterized by uncontrolled cellular growth, local

tissue invasion, and distant metastases (Aziz El et al., 2009).

Cancer is one of the leading causes of morbidity and mortality worldwide, with approximately 14 million new cases in 2012. The number of new cases is expected to rise by about 70% over next 2 decades. Cancer is the second leading cause of death globally and was responsible for 8.8 million deaths in 2015 (Alagraa R *et al.*, 2015; Andersen BL *et al.*, 1992).

Psychosocial distress could be considered as one risk factor to take account at someone's risk of surviving a particular cancer. Psychosocial distress predicts the chances of death from certain types of cancer but that don't mean anxiety or depression are direct causes of cancer. The researchers say that only 8% of people with mental distress went to die from colorectal cancer, one of the more common cancers (Arunachalam D *et al.*, 2011).

The incidence of cancer in India is 70-90 per 1,00,000 population and cancer prevalence is estimated to be around 25,00,000 with over 8,00,000 new cases and 55,00,000 deaths occurring in each year. More than 70% of the cases present in advanced stage accounting for

poor survival and high mortality. About 6% of all deaths in India are due to cancers which contribute to 8% global cancer mortality (Akechi T *et al.*, 2000).

According to Indian Council of Medical Research (ICMR) data on site specific cancer burden, in males, the most common cancers of mouth/pharynx, oesophagus, stomach, and lungs/bronchi while as in females, the most common cancers are cervix, breasts, mouth/orophagus and oesophagus. Cancers of oral cavity and lung in males and cervix and breasts in female account for over 50% of all cancer deaths in India. The estimated number of breast cancer in India 2010, 2015 and 2020 will be approximately 90,659; 106: 124 and 123,634 respectively (Barbaret C *et al.*, 2017; Carlson EL *et al.*, 2003; Ernst CJ *et al.*, 2013).

The roles of healthcare professionals in the management of cancer patients can be very diverse. Supportive-care issues, such as nutritional support, pain management, infection and nausea and vomiting, require application of clinical, pharmacologic, and economic principles. Provision of drug information to other healthcare professionals and to patients and their families is another critical role. Experienced healthcare professionals are able to fulfil these roles and to make valuable contributions to patient care in the oncology setting (Fouda ML *et al.*, 2013).

#### **PSYCHO-SOCIAL EFFECTS OF CANCER**

During the past two decades that health and mental health professionals have focused on the psychosocial needs of cancer patients and their families. An increasing awareness of the significant emotional, interpersonal, family, vocational and functional problems such individuals experience and how these problems potentially affect their overall health, quality of life and even health outcome, has led to the creation of the field of psychosocial oncology. The two major areas of interest characterizing this cancer subspecialty are:-

**a.** the impact of cancer on the psychological function of the patient, the patient's family and staff.

**b**. the role that psychological and behaviour variables may have in cancer risk and survival.

More ever, not is psychological distress in and of itself a worthy target to address in treatment but also research has demonstrated that such distress is associated with higher cancer incidence, poorer survival and higher cancer mortality (Faikh R *et al.*, 2018; Grassi L *et al.*, 2015; Goodwin JP *et al.*, 2011; Jivarajani JP *et al.*, 2015).

#### DEPRESSION

Depression is a common experience among cancer patients. Factor associated with greater prevalence of depression are a higher level of physical disability, advanced disease stage and the presence of pain. Also, higher rates of depression have been associated with the side effects of medications and treatment for cancer. Chemotherapy and oncological surgical procedures are a source of possible iatrogenically induced depression in cancer patients because of the negative side effects that may include body image disturbances and physical symptoms (Karabinis G *et al.*, 2015).

Some of the risks identified are premorbid coping skills, social isolation, a personal history of depression, abuse and socioeconomic pressures. The consequences of being depressed in addition to the diagnosis of cancer can be severe (Ohlen J *et al.*, 2005).

#### SUICIDE

Suicidal ideation and the act of suicide are higher among cancer patients than in the general population and other medically ill cohorts. Risk factors for increased suicidal ideation and behaviour among cancer patients include feelings of being a burden to others, depression and hopeless, pain, lack of social support, existential issues and fear of the future (Rai A *et al.*, 2012).

#### **BODY IMAGE PROBLEMS**

Body image is one of the most profound psychological consequences from cancer treatments affecting patients with a variety of disease sites. The scars and physical disfigurement serve as reminders of the painful experience of cancer and its treatment. The stress and depression that may be a result of body image concerns can further affect other areas of the patients and family's life such as sexual intimacy, psychological disorders and self-esteem, loss of hair due to chemotherapy, concerns about gaining weight, poorer mental health, partners problems in understanding women's emotions (Sercekus P *et al.*, 2014).

# PSYCHOSOCIAL ASPECTS THAT AFFECT THE QUALITY OF LIFE

The psychosocial is defined as the combination of psychological and social behaviour. An example of psychosocial is the nature of a study that examines the relationship between a person's fears and how he relates to others in a social setting. Psychosocial aspects like stress, distress, stressful life events, biological, consequences of stress, financial hardship, pain, hostility, depression, hopelessness will affect the patient's quality of life. When a person is diagnosed as cancer it ultimately alters the normal life where the person can't feel the same, can't see the same and can't hear the same which entirely change his or her normal life (https://www.medicinenet.com/cancer/article.html)

#### **PSYCHO-EDUCATIONAL INTERVENTIONS**

Psycho educational interventions aim to reduce uncertainty, feelings of inadequacy, confusion, helplessness and loss of control by supplying information about the disease process, coping with the disease and resources available to the cancer patients. Psycho educational components have also been used in combination with other psychosocial interventions (eg. Psychotherapy) and have been effective in reducing distress when integrated with such interventions (Veerakumar MA *et al.*, 2017).

Psycho educational interventions to be effective in preventing or relieving depression and anxiety in newly diagnosed patients and patients undergoing surgery or chemotherapy; the benefits of psycho educational interventions were probably produced by a reduction in fear through preparation for treatment. As a clinical pharmacist, I would like to reduce the psychosocial distress in cancer patients by interviewing and providing the needful support through counselling during our project. This study may helpful to the physicians and patients while handling the disease condition and it was shown the importance of clinical pharmacist.

The patients assigned with very brief intervention, lasting only 15 to 20 minutes, a description of clinical procedures and general information about clinical operations and a question-and-answer session with an oncology counsellor, reported significantly less anxiety, less depressive symptomatology and significantly greater satisfaction with their care (Sercekus P *et al.*, 2014).

#### METHODOLOGY

A cross sectional study conducted for the period of six months by considering the inclusion and exclusion criteria after obtaining Ethical approval from Institutional Ethics Committee of TVM College of pharmacy, Ballari. The data were collected from oncology department of VIMS Ballari. A total of 243 patients were enrolled in this study. Patients of age 16-75 year and all types of cancer (both male and female) and patients who are willing to participate in this study were included in this study after obtaining the consent from individually. Patients who are unable to communicate (disoriented, comatose, and unstable) were excluded in the study. The data was collected by interviewing the patients using well designed patient data collection form which is prepared by taking reference from Canadian Association of Psychosocial Oncology (CAPO) and Cancer Stigma Scale (CASS). Then patient counselling was given by providing patient information leaflet and feedback was obtained. Finally, the results were calculated by using simple standard mean method and represented in percentage (%), figures, and tables.

#### **RESULTS AND DISSCUSSION**

A total no. of 243 patients has been participated during the study period.

#### **Distribution of Patient According To Age**

Out of 243 majorities of patients belong to the age group of 46-60 years, followed by 61-75 years, 31-45 years and 16-30 years.

#### **Distribution of Patient According To Gender**

A total of 243 subjects were covered during the study period. Out of 243 subjects 123 were males and 120 were females. Men are more susceptible to cancer due to their social and personal life. A study conducted by Jivarajani J. P. et al. on major sites of cancer occurrence among men and women in Gandhinagar district, India has shown the similar results.

#### **Distribution Based on Type of Cancer**

Out of 243 patients, 51 were breast cancer, 29 were cervical cancer, 22 were lung cancer and 141 were suffering with other cancers. A study conducted by Jivarajani J. P. et al. on major sites of cancer occurrence among men and women in Gandhinagar district, India has shown the similar results.

#### **Distribution Based on Disease Knowledge**

Out of 243 patients, 180 know that they were suffering from cancer, 61 know they were suffering from some disease and remaining patients were not aware of disease.

#### Distribution Based on Psychosocial Aspects Trouble in keeping mind

Among 243 patients, 150 were having trouble in keeping mind on what they are doing; it may be due to patients of experiencing a poor quality of life. Current study resembles with the study conducted by Arunachalam D et al. on Quality of life in cancer patients with disfigurement due to cancer and its treatment.

#### Lost interest in usual activities

Out of 243 patients, 157 have lost interest in their usual activities.

#### **Restless sleep**

Out of 243 patients, 204 were having restless sleep majorly due to chemotherapy. A similar study was done by Fakih R et al. on prevalence and severity on sleep disturbances shown the same results

#### Whether the cancer is completely curable or not

Out of 243 patients, 57 thought that cancer is curable disease, 52 thought that it is not curable, 72 were not knowing either curable or not and remaining patients know that they were suffering from some disease but not cancer, which may be due to lack of knowledge about cancer and its treatment. Current study results similar to the study concluded by Rai A. et al. on knowledge of cancer patients with regard to disease and medical care.

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#### Why disease for me only

Out of 243 patients, 203 feels that why disease only for me.

#### **Financial hardship**

Out of 243 patients, 194 were having financial hardship due to cost of treatment, mode of transport, poor quality of life. A study conducted on financial distress in patients with advanced cancer by Barbaret C. et al. shown similar results.

#### Loss of appearance

Out of 243 patients, 181 feels that they lost their appearance due to cancer treatment and its side effects. A study conducted by Arunachalam D et al. on quality of life in cancer patients with disfigurement due to cancer and its treatments showing similar results.

#### Do you feel depressed

Out of 243 cancer patients, 204 were suffering from depression.

# Cancer and its treatment interfere with family or social life

Out 243 patients, 190 feel that the cancer and its treatment interfered with their family and social life, it may be due to lack of knowledge, misconceptions about cancer and treatment cost. A study on Benefits of psychosocial oncology care: Improved quality of life and

# medical cost offset by Carlson E.L. et al. is similar to our study.

#### Difficulty in coping with the stress

Out of 243 patients, 182 patients were having difficulty in coping with stress.

#### Suicidal ideation

Out of 243 patients, 79 were having suicidal ideation because depression is the major risk factor. The study conducted by Akechi T. et al. on suicidal ideation in cancer patients with major depression is similar to our study.

#### Cancer is preventable or not

Out of 243 patients, 120 thought that cancer is preventable, 96 thought that it is not preventable due to lack of knowledge about disease and its treatment. And the results were similar to the study conducted by Veerakumar A. M. et al. on Awareness and perceptions regarding common cancers among adult population in a rural area of Puducherry, India.

Out of 243 patients, 188 say that they are benefited by counselling. More than 75% of the patients were benefited by counselling. so, the overall impact of counselling was beneficial to the patients. A study on interventional/supportive counselling by Ohlen. J et al. is similar to our study..

#### Table 1.

AGE	TOTAL NUMBER(n=243)	PERCENTAGE
16-30	10	4.1%
31-45	63	25.9%
46-60	99	40.7%
61-75	71	29.2%

#### Table 2.

GENDER	TOTAL NUMBER(n=243)	PERCENTAGE
Males	123	50.61%
Females	120	49.39%

#### Table 3.

TYPES OF CANCER	TOTAL NUMBER(n=243)	PERCENTAGE
Breast Cancer	51	20.98%
Cervical Cancer	29	11.93%
Lung Cancer	22	9.05%
Oesopharyngeal cancer	16	6.58%
Oral cavity cancer	16	6.58%
Liver Cancer	14	5.76%
Stomach Cancer	8	3.29%
Larynx	10	4.11%
Intestinal cancer	14	5.76%
Tongue Cancer	8	3.29%

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Bladder cancer	9	3.70%
Prostate Cancer	8	3.29%
Ovarian Cancer	6	2.46%
Multiple myeloma	4	1.64%
Tonsil cancer	2	0.8%
Pancreas	2	0.8%
Pharynx	2	0.8%
Neck cancer	2	0.8%
Colon cancer	2	0.8%
Thyroid cancer	1	0.1%
Upper lip cancer	2	0.8%
Vaginal Cancer	1	0.1%
Myeloid leukemia	1	0.1%
Chronic myeloid	1	0.1%
Throat cancer	1	0.1%
Clavicle	1	0.1%
Pyriform cancer	1	0.1%
Rectal cancer	1	0.1%
Supraglottis	1	0.1%
Inguinal cancer	1	0.1%
Peritoneal cancer	1	0.1%
Presacral cancer	1	0.1%
Liver and Lung	1	0.1%
Penis Cancer	1	0.1%
Squamous cell carcinoma	1	0.1%
Anaplastic cancer	1	0.1%

# Table 4.

DISEASE KNOWLEDGE	TOTAL NUMBER(n=243)	PERCENTAGE
Cancer	180	74.07%
Some disease	61	25.10%
Not aware	2	0.82%

# Table 5.

TROUBLE IN KEEPING MIND	TOTAL NUMBER(n=243)	PERCENTAGE
Yes	150	61.72%
No	91	37.44%
Not known	2	0.82%

# Table 5.1.

LOST INTEREST	TOTAL NUMBER(n=243)	PERCENTAGE
Yes	157	64.60%
No	85	34.97%
Not known	1	0.41%

# Table 5.2.

RESTLESS SLEEP	TOTAL NUMBER(n=243)	PERCENTAGE
Yes	204	83.95%
No	39	16.04%

# Table 5.3.

CURABLE OR NOT	TOTAL NUMBER(n=243)	PERCENTAGE
Not known	72	29.62%

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Not applicable	62	25.51%
Yes	57	23.45%
No	52	21.39%

#### Table 5.4.

DISEASE FOR ME ONLY	TOTAL NUMBER(n=243)	PERCENTAGE
Yes	203	83.53%
No	40	16.46%

# Table 5.5.

FINANCIAL HARDSHIP	TOTAL NUMBER(n=243)	PERCENTAGE
Yes	194	79.83%
No	49	20.16%

# Table 5.6.

LOSS OF APPEARANCE	TOTAL NUMBER(n=243)	PERCENTAGE
Yes	181	74.48%
No	61	25.10%
Not known	1	0.41%

# Table 5.7.

DEPRESSION	TOTAL NUMBER(n=243)	PERCENTAGE
Yes	204	83.9%
No	39	16.1%

# Table 5.8.

INTERFERE WITH FAMILY OR SOCIAL LIFE	TOTAL NUMBER(n=243)	PERCENTAGE
Yes	190	78.18%
No	53	21.81%

# Table 5.9

COPING WITH STRESS	TOTAL NUMBER(n=243)	PERCENTAGE
Yes	182	74.89%
No	61	25.10%

# **Table 5.10.**

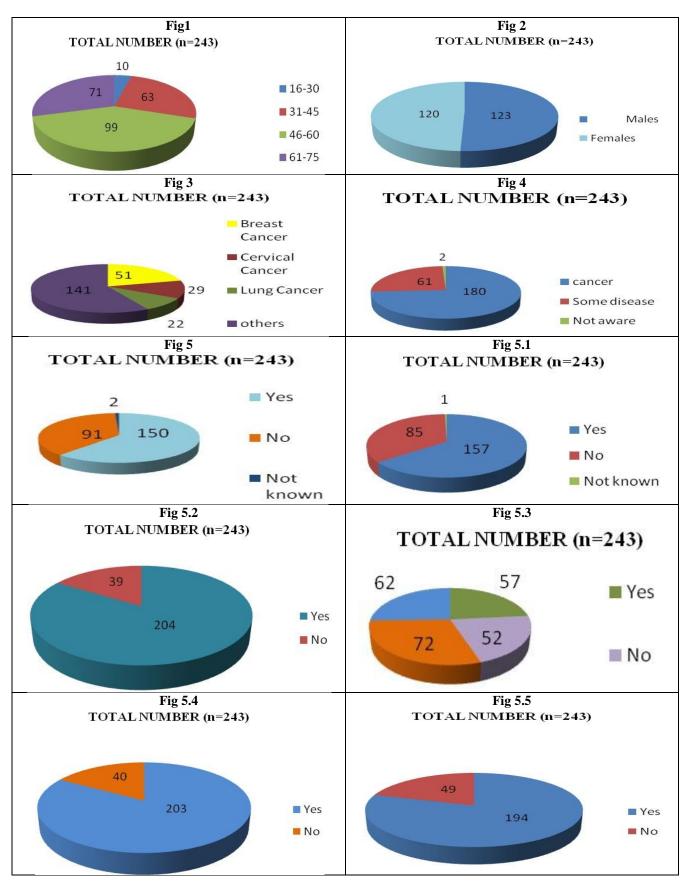
SUICIDAL IDEATION	TOTAL NUMBER(n=243)	PERCENTAGE
No	163	67.07%
Yes	79	32.51%
Not known	1	0.41%

#### **Table 5.11.**

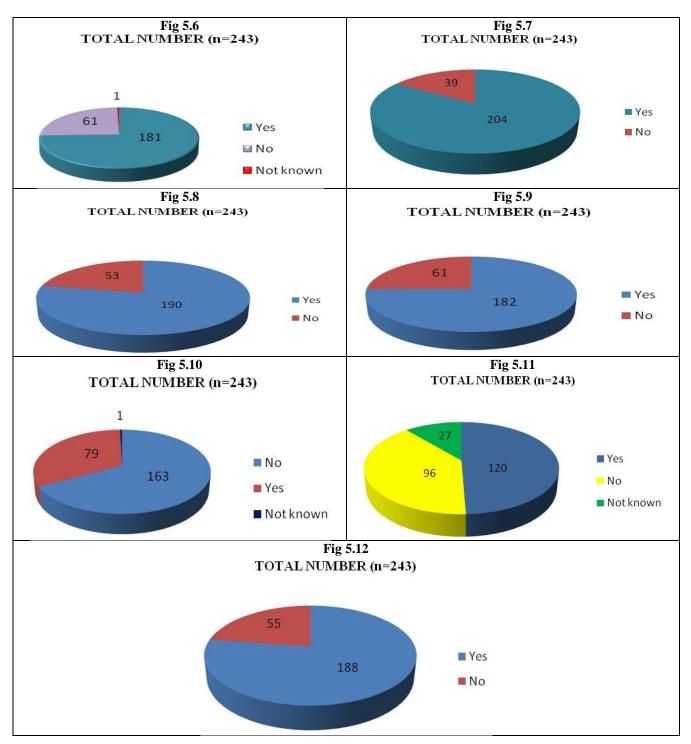
PREVENTABLE OR NOT	TOTAL NUMBER(n=243)	PERCENTAGE
Yes	120	49.38%
No	96	39.50%
Not known	27	11.11%

# **Table 5.12.**

BENEFITED OR NOT	TOTAL NUMBER(n=243)	PERCENTAGE
Yes	188	77.36%
No	55	22.63%



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### CONCLUSION

Our study reveals that among the cancer patients psycho-social aspects have been highly elevated which reduce their quality of life.

Among 243 study population 161 patients were majorly stressed, 66 patients were moderately stressed and 17 patients were suffering from minor stress based on the cancer stigma scale. Psycho-social aspects in which patients were majorly suffering with stress is about 74.89% due to causes of depression, inability to control their problem, misconceptions and financial hardship.

After patient counselling 188 subjects (77.36%) were relieved from the psycho-social distress and benefited thereby remarkably the level of general wellbeing had improved.

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practice, TVM College of pharmacy, Ballari, for the arrangement of facilities to do this project.

#### CONFLICT OF INTEREST No interest

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