British Journal of Psychology Research

Vol.4, No.2, pp.1-14, July 2016

Published by European Centre for Research Training and Development UK (www.eajournals.org)

PSYCHOLOGICAL CONCERNS AMONG ADULT CANCER PATIENTS ATTENDING ONCOLOGY CLINIC AT MOI TEACHING AND REFERRAL HOSPITAL, ELDORET, KENYA

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ABSTRACT: *There is an increased chance of developing psychological and psychiatric disorders during Cancer diagnosis. This has consequently impacted on patient's state of health and medical treatment. Psychiatric disorders are experienced by cancer patients at all stages of the disease. There is evidence of growing numbers of people diagnosed with cancer every year, in the developing countries. Kenya among them continues to have this burden growing. A critical part of cancer care is the recognition of the levels of psychological problems that present among patients with cancer and determination of the appropriate level of intervention, ranging from brief counselling or psychological interventions and social support to medication and specific coping styles. This paper aims to determine the psychological issues among adult cancer patients as seen at the oncology clinic of Moi Teaching and Referral Hospital (MTRH), Eldoret. The study took a cross-sectional and descriptive approach focusing on patients diagnosed with cancer. The author used interview guide, designed socio-demographic and clinical questionnaire and the Mini International Neuropsychiatric Interview for adults (M.I.N.I Plus) instrument in data collection. Data analysis was done using Microsoft excel worksheet and Statistical Package for Social Sciences (SPSS) version 16.0. Results were presented in form of tables, charts and graph swith majority of the patients being females as compared to males. Breast cancer and cervical cancer were found to be the most forms affecting the respondents with most patients being diagnosed at the advanced stages. Depression episode, dysthymia and Suicide risk were among others the identified Psychological issues affecting the respondents.*

KEYWORDS: Cancer, Psychological concerns, Quality of Life, Coping, Adjustments, Diagnosis

INTRODUCTION

According to Hanahan and Weinberg (2000), Cancer results from a breakdown of the system that control normal cell growth and cell death leading to over production of cells, destruction of nearby tissues and spread of the disease to other organs of the body (metastasis). Abnormal changes in the cell's genetic material of one single cell take place, leading to the Cancerous cells. Powe and Finne (2003) posit that the genetic changes affect the mechanisms that regulate normal cell growth and cell death leading to uncontrolled cell growth. Cancerous cells proliferate uncontrollably and invading neighbouring tissues and eventually, spreading to other parts of the body (Borboa, 2009). If the spread is not controlled, cancer can result in death.

ISSN 2055-0863(Print), ISSN 2055-0871(Online)

LITERATURE UNDERPINNING

Environment as a causal factor to cancer accounts for 90–95% of cancer cases with only 5–10% genetically caused (Anand *et al.,* 2008). Environmental factors include tobacco (25–30%), diet and obesity (30–35%), infections (15–20%), radiation causing up to 10%, stress, lack of physical activity, among other pollutants (Anand *et al.,* 2008). Viral infection such as Human immunodeficiency virus /AIDS causes Kaposi's sarcoma, Human Papilloma Virus (HPV) causes cervical cancer or Hepatitis B & C causes Liver cancer and lymphomas. Bacterial infections such as Helicobacter Pylori can cause cancer of stomach and parasitic infestations such as schistosomiasis and are likely to also result in cancer of the bladder.

Classification of Cancer

Cancer classifications are either by the type of tissue in which the cancer originates (histological type) or by primary site in the body where the cancer first developed. Depending on the tissue of origin, several types of cancer exist among them Carcinoma; a cancer that begins in the skin or tissues that line or cover organs (epithelial cells). Sarcoma is a cancer that begins in bone, cartilage, fat, muscle, blood vessels or other connective tissue. Leukaemia is cancer that starts in blood-forming tissues such as bone marrow (National Cancer Institute, 2014). Lymphoma and multiple myeloma are cancers that begin in cells of the immune system. Due to its nature, cancer is difficult to treat.

Diagnosis of Cancer

Medical history and physical examination make it possible to find signs and symptoms of cancer respectively. Investigations range from laboratory and radiological findings and histopathology of the tissues. Tumor staging is done by oncology experts for the patient. This helps in planning for the treatment. A multidisciplinary approach is designed to present important clinical information, uniformly screening, diagnosing, staging, determining prognosis and treatment for the patient. Various modes of therapy are used for treatment of cancer that include medical-chemotherapy, surgical, hormonal therapy and radiation therapy (Cancer.Net Editorial Board, 2014). The primary aims of cancer treatment are to cure the patient, prolong life and to improve their quality of life.

Cancer is associated with severity and distress in the treatment process and has perceived mortality rate. Its diagnosis is therefore feared by most people. This causes psychological agony in patients and family members because of the inevitable eventuality of the disease mortality, pain and suffering (Spencer, *et al.*, 1998). Patients diagnosed with cancer portray a picture of fear of interrupted life plans, change in body image, change in life style and fear of death. This is often a true picture of terminal illness although not a complete assessment of the many effects a terminal illness has in an individual (Lilijana & Mojca, 2004).

Patients with cancer are usually exposed to multiple specialists (surgeons, radiation oncologists, medical oncologists) among others; therefore care is often not well coordinated. The patient is not given care by a single, trusted physician. Fragmentation of care among cancer patients increases medical cost, emotional and psychological problems hence it is psychological burden. Outpatient offices and clinics are extremely busy; the length of time doctors can spend with cancer patients is often limited, and the opportunity to bring up psychological problems may be lost. Receiving adequate information and the ability to ask questions in a comfortable way are basic needs for addressing psychological concerns (National Academy of Sciences, 2004).

ISSN 2055-0863(Print), ISSN 2055-0871(Online)

Psychological Concerns

Depressive states exist on a continuum from normal sadness that accompanies life limiting disease to major affective disorder (Passik & Kirsh, 2004; White & Macleod, 2002).When depression sets in, one may withdraw from loved ones. They may stop some daily activities and have fewer everyday pleasures. Majority of these patients report a wide variety of sleep disturbances, after cancer diagnosis, with the three most frequent elevated symptoms being not feeling rested in the morning, difficulty staying asleep, and difficulty falling asleep (Chuman, 1983).Depression is a major cause of impaired quality of life, reduced productivity, and increased mortality.

Anxiety is the response to a perceived threat. It is manifested as apprehension, uncontrollable worry, restlessness, panic attacks, and avoidance of people and of reminders of cancer, together with the signs of the autonomic arousal (White & Macloed 2002). Anxiety can at times affect a person's behaviour concerning his or her health, contributing to a delay in or neglect of measures that might prevent cancer (Lauver, 1993).People with serious terminal illnesses do get palliative care that assists them in alleviating pain, or stress. Palliative care which is care for the terminally ill is appropriate for patients in all disease stages that include those undergoing treatment for curable illnesses and those living with chronic diseases, as well as patients who are nearing the end of life. The palliative care is a multidisciplinary issue. This approach allows the palliative care team to address physical, emotional, spiritual, and social concerns that arise with advanced illness (Jennifer, *et al.*, 2010, Areej El-Jawahri, *et al.*, 2011).

Cancer management in the MTRH Oncology clinic is mainly diagnostic and physical treatment and symptom relieve in nature. Very little if any palliative care and psychological management is provided to these cancer patients. Few if any studies have been done to look at psychological issues among cancer patients at the oncology clinic of the MTRH. This study endeavoured to answer this question and add to the body of knowledge. It provides information to the clinical staff, administration of the hospital and policy makers on the importance of psychological interventions among patients with cancer.

METHODOLOGY

This study used a Cross-Sectional Descriptive approach. The study focused on adult cancer patients attending oncology clinic at Moi Teaching and Referral Hospital (MTRH). MTRH in Eldoret is the second National and referral Hospital in the Kenya. The hospital provides inpatient and outpatient services included and not limited to medical, surgical, gynaecological, psychiatric and paediatrics services. The inpatient has a bed capacity of approximately 800 patients.

The Hospital in collaboration with Moi University and AMPATH formed AMPATH Oncology Institute (AOI) that has an Oncology Centre at the AMPATH Complex within MTRH. The AMPATH Oncology institute has collaboration with North American partners and Pfizer Oncology that runs the Oncology Clinic (fund treatment). The choice of MTRH as the study area was to the advantage since the oncology clinic runs between 8.00am and 2.00pm from Monday to Friday at the hospital, both new and old cancer patient are seen. All types of cancers patients both paediatrics and adult (gynaecological, surgical and medical) patients are attended to in the clinic.

ISSN 2055-0863(Print), ISSN 2055-0871(Online)

The Study population included adult patients attending the oncology clinic at MTRH who meet the criteria for inclusion. The total number of patients with cancer seen per week in the oncology clinic is estimated to range from 100-150 patients in a week. This translates to 400-600 patients in a month. Every fourth patient who met the criteria for inclusion and agreed to sign the consent was selected for the study.Purposive sampling technique was used to select certain cases based on a specific purpose (Tashakkori & Teddlie, 2003). Participants were deliberately selected for the important information they could provide that cannot be gotten from other sources. The author assessed both new and old adult patients attending the oncology clinic who met the criteria for recruitment. A sample of 138 patients from the oncology clinic of MTRH was therefore obtained.

The study instruments used were socio-demographic questionnaire to collect data on their socio-demographic; that is information on age, gender, marital status, occupational status, residence and religion and clinical questionnaire used to collect data on their clinical characteristics which extracted specific information from patient's files. Other clinical questions were answered on interview contact with the client.

Based on responses to the structured diagnostic interview M.I.N.I. Plus (Sheehan *et al.*, 2009), study participants were classified for the presence based on DSM-IV TR criteria (American Psychiatric Association, 2000). Mini International Neuropsychiatric Interview for Adults (M.I.N.I Plus) was used to generate DSM-IV and ICD-10 diagnoses. With an administration time of approximately 15 minutes, it was designed to meet the need for a short but accurate structured psychiatric interview for multi-center clinical trials and epidemiology studies. The Swahili version of the M.I.N.I tool used protocol for the translation being followed.

Inclusion criteria

- All patients diagnosed with cancer 18 years and above.
- Patients with cancer who are attending the oncology clinic at MTRH.
- Patients with Cancer who have given an informed consent.

Exclusion criteria

- Children 18 years and below who were diagnosed with cancer and were attending oncology clinic at MTRH.
- Patients who had not been diagnosed with cancer.
- Patient who were unwilling to give an informed consent to participation in the study.
- Patients who were too sick and unable to participate.

Data analysis was done by descriptive statistical methods. This included use of statistical package for social scientists (SPSS) version 16 to describe each DSM-IV diagnosis of each participant by summing up the 'yes' to responses that met each criterion for DSM-IV disorder. Presentation of results is through descriptive statistics, graphs, tables, pie chart as appropriate.

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RESULTS

Socio-demographic results

A total number of 138 respondents were included in the study. Majority (71.7%) of them were females between the age bracket of 41 – 48 years (25.4%).The highest percentage (65.9) represented Christians mainly the Protestants followed by Catholic (30.5%). Only one (0.7%) participant was Muslim. Most (25. 3%) of the respondents were from UasinGishu County followed by Bungoma and Nandi county at 17.3% and 8.5%respectively. Majority 39.1% of the respondents had formal education and earned an income of between kshs.3000/= and 10,000/=.

Clinical results

Cancer site: Many (34.8%) respondents had breast cancer followed by cancer of the cervix at 12.3 %, Cancer of head and neck accounted for 9.5% , musculoskeletal cancer was at 8.7%, uterine cancer at 7.2% and 5.8%hepatobilliary cancer. Colorectal cancer accounted for 5.1% (7). Cancer of the ovary was 4.3% while urinary cancer accounted for 2.9% (4). Blood, abdomen and skin cancer each had equal number of respondents at 2.2% whereas cancer of the lungs and oesophagus had 1 (0.7%) respondent each at Respondents with gynaecological cancer that is cancer of the cervix, uterus and ovary together with breast cancer respondents account for 58.7%.

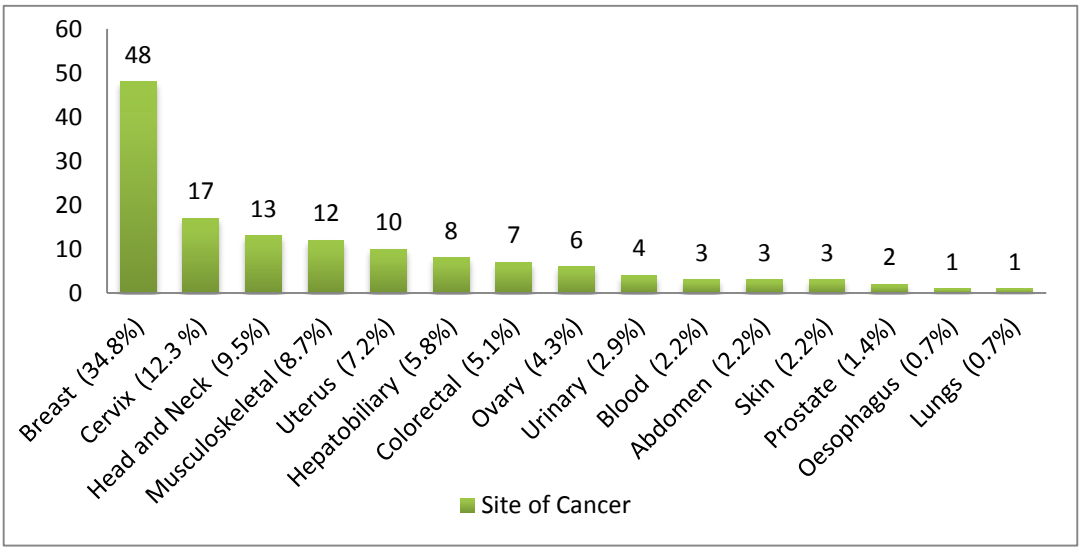

Figure 1: Site of the Cancer

Stage of cancer: Majority of the respondents were at stage IV. The ones with no staging included respondents with cancer of blood or bone marrow like leukaemia, multiple myeloma and choriocarcinoma which do not have a clear-cut staging system.

ISSN 2055-0863(Print), ISSN 2055-0871(Online)

Table 1: Stage of the cancer

Cancer stage of the respondents	Frequency	Percent (%)
Stage I	8	5.8
Stage II	26	18.8
Stage III	46	33.3
Stage IV	54	39.1
No staging	4	2.9
Total	**138**	**100.0**

Treatment modality

About 215 different treatment types were received with a large number of the respondents being on chemotherapy followed by palliative care while a few had undergone surgery. Only 8 reported to have received radiotherapy treatment.

Table 2: Type of treatment received

Clinical treatments for the Cancer patient	Responses	
	N	Percent(%)
Chemotherapy	123	57.2
Surgery	39	18.1
Radiotherapy	8	3.7
Palliative care	45	20.9
Total	**215**	**100.0**

Referral for Psychosocial support-Very few had psychological care support

Table 3: Referral for Psychosocial support

Referred for psychosocial support	Frequency	Percent (%)
Yes	11	7.9
No	127	92.1
Total	**138**	**100.0**

Information on the disease

Most patients had information about the nature of disease. Majority of the respondents were informed of the diagnosis by the doctor, followed by nurses then by relatives and others.

Accompanying respondent to the hospital

Majority were accompanied to the hospital by a relative, and few were not during the diagnosis of cancer.

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Table 4: Patient accompanied to the hospital during the cancer diagnosis

Accompanied at the time of diagnosis	Frequency	Percent (%)
Yes	126	91.3
No	12	8.7
Total	**138**	**100.0**

Discussing the thoughts on cancer: Many respondents had not discussed their thoughts about the cancer diagnosis with anyone but few had talked about it with either health care provider, friends, relatives or pastors.

Table 5: Whether any one has discussed with the respondent their thought on cancer

Discussed their thought of illness	Frequency	Percent (%)
Yes	36	26.1
No	102	73.9
Total	138	100.0

Psychological problem before cancer diagnosis

The respondents had no psychological problems prior to diagnosis of the cancer.

Table 6: Psychosocial problem before cancer diagnosis

Psychosocial problem before cancer diagnosis	Frequency	Percent (%)
Yes	52	37.7
No	86	62.3
Total	138	100.0

The Mini International Neuropsychiatric Interview (M.I.N.I) Plus

Major Depressive Episodes: As shown in table 7, 42% of the patients met the criteria of major depressive episode current while 58% did not. About16% had Major depressive episode past whereas 84% did not have. Finally, where as about 22 % of the patients had Major Depressive Episode with Melancholic features, 78% did not portray this feature.

Table 7: Major depressive episodes

	Yes	**No**
Major Depressive Episode Current	**58 (42%)**	**80 (58%)**
Major Depressive Episode past	**22 (15.9%)**	**116 (84.1%)**

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Major depressive episode with melancholic features	**30 (21.7%)**	**108 (78.3%)**

Dysthymia current: Table 8 shows that majority (85.5%) of the respondents did not have dysthimia current with only 14.5 % portraying this concern.

Table 8: Dysthymia current

Dysthymia		**Frequency**	**Percent (5%)**
	Yes	20	14.5
	No	118	85.5
Total		138	100.0

Suicide risk current: The respondents who had no risk of suicide that is current were 87%. Those who had current suicide risk were 13% among them 3.1% representing those who had high risk suicide current, 2.9% moderate and 8% low risk of suicide that is current.

Table 9: Suicide risk current

Suicide risk current		Frequency	Percent (%)
	Low	11	8.0
	Moderate	4	2.9
	High	3	2.1
	N/A	120	87.0
Total		138	100.0

(Hypo) Manic Episodes

Few respondents had hypo manic episodes.

Table 10: (Hypo) Manic Episodes

(Hypo) Manic Episodes	Yes	No
Hypomanic Episode	7 (5.1%)	131 (94.9%)
Manic Episodes	10 (7.2%)	128 (92.8%)

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Panic disorder /Agoraphobia

Respondents with Panic Disorder without Agoraphobia Current were few. Respondents with Panic Disorder with Agoraphobia current and Agoraphobia without history of panic disorder were also few.

Table 11: Panic disorders / Agoraphobia

Panic Disorder/ Agoraphobia	**Yes**	**No**
Panic Disorder without Agoraphobia Current	3 (2.2%)	135 (97.2%)
Panic Disorder with Agoraphobia current	9 (6.5%)	129 (93.5%)
Agoraphobia without history of panic disorder	12 (8.7%)	126 (91.3%)

Post-Traumatic Stress Disorder

Table 12 shows 13% of the respondents suffered from Post-Traumatic Stress Disorder whereas 87% did not.

Table 12: Post Traumatic Stress Disorder

Post traumatic stress disorder		Frequency	Percent (%)
	Yes	18	13.0
	No	120	87.0
Total		138	100.0

Psychotic disorders: Larger number of the respondents did not have both Psychotic syndrome current and psychotic syndrome lifetime. Only2 respondents had mood disorder with psychotic features.

Table 13: Psychotic Syndrome

	Yes	**No**
Psychotic syndrome current	1(0.7%)	137 (99.3%)
Psychotic Syndrome Lifetime	1 (0.7%)	137 (99.3%)
Mood disorders with psychotic features	2 (1.4%)	136 (98.6%)

ISSN 2055-0863(Print), ISSN 2055-0871(Online)

DISCUSSION

Socio-demographic characteristics

The study had a total of 138 respondents. There were more females than males. This could be due to the type of cancer commonly seen at the Oncology clinic at MTRH, Eldoret. Breast cancer takes the lead followed by cervical cancer. In Africa breast and cervical cancer has been reported to have had the highest incidence rate (Timothy, 2011). This finding compares favourably with worldwide estimated incidence of cancer as reported by the International Agency for Research on Cancer (IARC) where breast cancer takes the lead (GLOBOCAN, 2012). Breast cancer is the most common cause of cancer death among women and the most frequently diagnosed cancer among women in 140 of 184 countries worldwide. It now represents one in four of all cancers in women (GLOBOCAN, IARC, 2012).

Cancer is primarily affects older people, with incidence rates increasing with age for most cancers (http://www.cancerresearchuk.org, UK office national statistics (Curado *et al.,* 2007; Parkin *et al.,* 1999). This may explain why in this study at MTRH the highest age range was between 41 to 48 years followed by ages between 49 to 56 years. The highest number of participants was Christians. This indicates the population in the region were mostly Christians. There were more respondents from Uasin Gishu County where the hospital is situated. This may be due to easy access of the residents in the area. Other respondents came from many parts of the country in order to access services that are offered in the Hospital. This is because MTRH is a referral hospital with a wide range of services offered at the facility and it is known in this region. More than a half of the respondents were married with women being majority. This compares well with what Ndetei *et al.* (2011) found. This finding is not different from the general trend in the country where breast and cervical cancer are the commonest cancers in the country (Nairobi cancer registry, 2006). It has also been noted that cancers of the breast and cervix represent a large proportion (43.3%) of all reported cancers in female (Korrir & Mutuma, 2003). According to Eldoret cancer registry, cancer of the cervix is the most common among females followed by breast and oesophagus. In males cancer of the oesophagus is the commonest and it is followed by cancer of the skin, Non Hodgkin Lymphoma and prostate cancer respectively (Tenge *et al*, 2009; Nuhu *et al.*, 2009 and Ferlay *et al.*, 2010).

GLOBOCAN (2012) in the most recent estimates for 28 types of cancer in 184 countries worldwide reveals striking patterns of cancer in women. An estimated 14.1 million new cancer cases and 8.2 million cancer-related deaths occurred in 2012, compared to 12.7 million and 7.6 million, respectively, in 2008 (Ferlay *et al*., GLOBOCAN 2012).Most of the cancer patients were diagnosed late with a total of 91.2% of respondents having been between stages II – IV. This is in agreement with reports by Hisham and Yip (2004) from Malaysia and other African countries. The delay in presentation of breast cancer was attributed to a strong belief in traditional medicine, the negative perception of the disease, poverty and poor education, coupled with fear and denial. Loehrer, *et al.* (1991) also mentioned that delay in presentation may be due to the low level of cancer awareness, cultural practices and limited access to specialized care which are usually non-existent in these countries. Most of the respondents were on chemotherapy treatment which could be attributed to lack of radiotherapy services at the hospital and in the Country's public hospitals. KNH is the only public hospital in the Country that provides radiotherapy service. This may also explain challenges that patients undergo when seeking to obtain the same service at the KNH. Others are in private hospitals

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which may not be easy for the low income patient to access. Most of these patients earn an income of between 3000 and 10,000 per month.

Referral to psychological care was minimal. The study shows that there is little psychological care being given to cancer patient in this facility. This situation is different from a study by Sharp *et al.*, (2009) in the UK on demographic characteristics of patients using a fully integrated psychosocial support service for cancer patients which found out that the oncology health service, Kingston Upon Hull, UK, delivers fully integrated psychosocial support and interventions. Among the findings fifty-six percent of patients accessing the service were female and the mean age of the patients was 61 years.

Major Depressive Episodes

Ndetei *et al.* (2011) did a study on Psychological and social profile among cancer patients in Kenyatta National Hospital and found that there was a high prevalence of depression disorders among cancer patients. He also found out that most of cancer respondents who had stage 3 and 4 cancers had had severe depressive disorder which goes unrecognized, thus untreated, by healthcare providers. This finding compares with the results at MTRH where 42% of the patient met the criteria of Major depressive episode with 92.1% treatment gap. Swai (2011) also found out those depressive episodes were 28%. These results compares to a study done by Derogatis *et al*, (1983) from three cancer centres. In the UK Sharp *et al.*, (2009) found out that cancer patients use a fully integrated psychosocial support service.

Dysthimia current (past 2 years)

Mehnert and Koch 2007 in a study on Prevalence of acute and post-traumatic stress disorder and comorbid mental disorders in breast cancer patients using structured clinical interviews for DSM-IV (SCID) conducted post-surgery with 127 patients and found out that3.1% had dysthymic disorder. Mitchell *et al.* (2011) found out that prevalence of dysthymia by DSM or ICD criteria was 2·7%. The findings at MTRH are higher than the results probably due to the different instruments used coupled with environmental factors.

Suicide current past month

Compared to a study done on 131 patients admitted at Ocean road Cancer institute in Dar es Salaam Tanzania Swai (2011) found out that suicide was at 38.7%. The high percentage on suicidality could be attributed to the fact that the study was among inpatients who mostly had advanced /complicated cancer as compared to the outpatient who were more stable and able to stay with their families hence obtain social support.

Panic disorders lifetime + current (past month) and (F) agoraphobia

The finding agrees reasonably well with a meta-analysis of 94 studies Prevalence of anxiety among cancer patients to be 10·3%. (Mitchell *et al.*, 2011). Swai (2011) in Dar es Salaam found panic disorders to be at (4.6 %).

Post-traumatic stress disorders (past month) current

In Post-traumatic stress disorder (PTSD), Cancer patients try to avoid thoughts of the illness and studies have reported stress symptoms like avoidant behaviours, intrusive thoughts, and heightened arousal in cancer patients ranges from 3% to 4% in early-stage cancer patients recently diagnosed to 35% in patients evaluated after treatment (Solomon, 1987).The physical

ISSN 2055-0863(Print), ISSN 2055-0871(Online)

and mental shock of having a life-threatening disease, of receiving treatment for cancer, and living with repeated threats to one's body and life are traumatic experiences for many cancer patients. In this study most clients had advanced stages of cancer. It is important therefore that cancer survivors receive information about the possible psychological effects of their cancer experience and early treatment of symptoms of PTSD.

Generalized Anxiety Disorders current (past 3 months)

An anxiety disorder develops when the duration, frequency, number and intensity of anxiety symptoms are significant enough to interfere with ones quality of life and functioning.

In this study 12.3% of the respondents met the criteria of generalised anxiety that is current. This compares with study that demonstrated that anxiety that becomes persistent "more often than not," or is intrusive and uncontrollable is much less common in cancer, occurring in 10-30% of people diagnosed with cancer (Stark & House, 2000; Mitchell *et al,* 2011).This finding agrees reasonably well with the author's finding of 12.3% of anxiety disorders among the cancer respondents at MTRH, Eldoret.

Implication to Research and Practice

Patients with cancer who undergo complex treatments may experience psychological distress, but it is often unrecognized, and if left untreated may contribute to poor health outcomes among patients and their caregivers. The current study highlighted clinical outcomes resulting from distress screening for women in active treatment for ovarian cancer.

The study identified unique phenomena among patients who reported varying levels of distress at baseline, this may be helpful to clinicians who care for this cancer population. Patients with low distress appear to be very open to communicating their needs and concerns, thus able to articulate their needs, they also become active participants in achieving their health goals, as evidenced by the clear reduction are willing to receive services to treat this distress. Valuable assistance in caring for the patients' health during the cancer treatment period through interactions with oncology and psychiatric care givers is required. Several of these patients identified to have psychological conditions worthy of further treatment are to be referred appropriately. Key elements of quality care, including those providing psychological support services and compassionate care to individuals with cancer, are recognized as essential areas in need of improvement.

Although initially focused on primary care, safety net programs may also include care for patients who may not be acutely ill, but require management of chronic conditions or support during times of transition (such as from hospital to home). Psychosocial care, including teaching, guidance, counselling, case management, and appropriate surveillance is essential at this time in order for these services to be recognized as worthy of reimbursement.

CONCLUSION

Breast cancer and cervical cancer are the commonest forms of cancer seen at MTRH, Eldoret. This is the same pattern seen nationwide in Kenya. Majority of the cancer patients seen at MTRH are at advanced stage (stage 2- stage 4). The same picture is seen nationally in Kenya as opposed to western countries where patients are diagnosed at early stages. Psychological

ISSN 2055-0863(Print), ISSN 2055-0871(Online)

oncology services for patients and families were found to be minimal.

RECOMMENDATIONS

1. Patients who show moderate to severe symptoms should be referred to appropriate caregivers, such as a clinical psychologist, social worker, chaplain, or psychiatrist for further management.

2. Healthcare professionals need to perform psychological assessment and manage the patients alongside medical intervention because there are psychological issues among cancer patients that go without being seen.

3. Further research to look into psychological issues need to be done to improve the quality of care, increase access to psychological care for all, fund psychological research and to support education and training of psychological oncology experts.

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ISSN 2055-0863(Print), ISSN 2055-0871(Online)