

THE SOCIAL ISSUES AMONG ADULT CANCER PATIENTS ATTENDING ONCOLOGY CLINIC AT MOI TEACHING AND REFERRAL HOSPITAL, ELDORET, KENYA

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ABSTRACT: *Cancer diagnosis is associated with increased chance of developing social issues that impact on patient's health state and medical treatment. The number of people diagnosed with cancer is on the increase every year in the developing countries with no exception of Kenya. The burden of cancer continues to grow. However, as much as social issues among adult cancer patients are well documented in the rest of the world, Kenya has little amount of data in place. A critical part of cancer care is the recognition of the levels of social problems that present among patients with cancer and determination of the appropriate form of intervention, ranging from brief counselling or social interventions and social support to medication and specific coping styles. This paper sought to determine the social issues among adult cancer patients seen at the oncology clinic of Moi Teaching and Referral Hospital (MTRH), Eldoret. Focus was on the social issues that are associated with cancer diagnosis and socio-demographic characteristics and clinical state of the patients diagnosed with cancer. This was a cross-sectional and descriptive study. The respondents included patients diagnosed with cancer who were enrolled and interviewed using researcher designed socio-demographic and clinical questionnaire and the Mini International Neuropsychiatric Interview for adults (M.I.N.I Plus) instruments. A total of 138 respondents participated in the study. The participants were assessed upon an informed consent and ethical approval from Institutional Research and Ethics Committee (IREC) Moi Teaching and Referral Hospital (MTRH) Moi University and Ethics and Research Committee Kenyatta National Hospital/ University of Nairobi. Microsoft excel worksheet and Statistical packages for social sciences (SPSS) version 16.0 were used for analysis. Females represented a higher number of cancer patients than male. Breast cancer and cervical cancer were the most common forms of cancer with most participants being in the advanced stages; between stage III and IV. Social phobia, obsessive compulsive disorder, generalised anxiety disorder, hypomanic episodes and manic episodes were the most observed social disorders.*

KEYWORDS: Social Support, Cancer, Adjustment, Medical-Chemotherapy, Surgical, Hormonal Therapy, Radiation Therapy

INTRODUCTION

Cancer is a disease that 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) (Hanahan & Weinberg, 2000). Cancer arises from one single cell following abnormal changes in the cell's genetic material. The genetic

changes affect the mechanisms that regulate normal cell growth and cell death leading to uncontrolled cell growth (Powe & Finne, 2003). Cancerous cells proliferate uncontrollably and invade neighbouring tissues and eventually, spread to other parts of the body (Borboa, 2009). If the spread is not controlled, cancer can result in death.

LITERATURE UNDERPINNING

Cancer is caused by interaction between genetic and environmental factors (Travis *et al.*, 2010). Environmental factors account for 90–95% of cancer cases with only 5–10% being due to genetics (Anand *et al.*, 2008). Environmental factors include tobacco (25–30%), diet and obesity (30–35%), infections (15–20%), radiation causes up to 10%, stress, lack of physical activity, and environmental pollutants among others (Anand *et al.*, 2008). Viral infection include Human Immunodeficiency Virus /AIDS that causes Kaposi's sarcoma, Human Papilloma Virus (HPV) that causes cervical cancer or Hepatitis B & C that causes Liver cancer and lymphomas. There are bacterial infections such as Helicobacter Pylori that can cause cancer of stomach and parasitic infestations such as schistosomiasis which may be responsible in causing cancer of bladder.

Cancers are classified in two ways, by the type of tissue in which the cancer originates (histological type) and by primary site in the body where the cancer first developed. There are several types of cancer depending on the tissue of origin. Carcinoma is the 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.

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, prolongation of life and to improve quality of life.

Social Aspects of Cancer

Cancer diagnosis is the most feared condition because of the severity and distress associated with the disease, treatment process and perceived mortality. 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). Diagnosed patients with cancer do give 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 though not a complete assessment of the many effects a terminal illness has on an individual. The physical challenges of a terminal illness are clearly seen, but the psychological, emotional, and mental disturbances are not. People diagnosed with incurable diseases that are conscious of impending death deal with greater questions than '*will this treatment make me sick?*' '*Am I going to die?*' The fear can become more intense if they

are told that the cancer has spread or has come back (Weisman & Worden, 1977). Shock, anxiety, uncertainty and for some people, depression may set in. They may have disbelief, or numbness. As time goes on they may feel angry, resentful, frightened, sad, or overwhelmed. They may also feel guilty about having these feelings (Lilijana & Mojca, 2004).

Patients with cancer usually see multiple specialists (for example; surgeons, radiation oncologists, medical oncologists) thus 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 becomes a 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 psychosocial problems may be lost. Receiving adequate information and the ability to ask questions in a comfortable way are basic needs for addressing psychosocial concerns (National Academy of Sciences, 2004). There is reluctance in discussing psychosocial concerns with the busy oncologist. More so, stigma associated with seeking or using mental health services, physicians' failure to ask patients about distressing emotional symptoms and the lack of simple, rapid instruments for screening for psychosocial distress are barriers to the symptoms receiving appropriate recognition, diagnosis and treatment by supportive and psychosocial services.

Social and familial challenges occur in terminal illness. The effect of such a diagnosis reaches every facet of life including work, family, the will to live (or die), and one's coping mechanisms which limit interaction in cancer patients. This may make one not to interact with others on the same level as before his or her diagnosis. An individual diagnosed with advanced cancer may worry of financial concerns, anxiety about death, and emotional welfare of family members (Kristjanson & Aoun, 2004). Some individuals choose to continue working as long as physical conditions allow, others choose to live out remaining days at home with family, and still others consider hastening death (Westaby & Versenyi, 2005). The mental, emotional, and psychological processes that arise from a terminal diagnoses are complex (Report of a joint working party of the Royal College of Physicians and the Royal College of Psychiatrists, 2003).

The domestic and working lives may be interfered. Some patients with cancer experience problems with daily living, finances and employment. The fear for patients with cancer is that they may lose their independence and dignity. That is the person's belief that the essence of who they are is still intact, despite the illness. Street and Kissane (2001) stated that "dignity is a subjective experience, perceived individually; that each person has their own view about what is dignified for themselves and others". Duarte Enes (2003) identified four themes to dignity; in relationship and belonging, having control, being human, and being heard and understood.

Palliative care

People with serious terminal illnesses do get palliative care that assists them in alleviating pain, or stresses. 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. The approach includes patient care that rely on input from physicians, pharmacists, nurses, chaplains, social workers, psychologists, and other allied health professionals in formulating a plan of care to relieve suffering in all areas of a patient's life. This approach allows the palliative care team to address physical, emotional, spiritual, and social concerns that arise with advanced illness (Jennifer *et al.*, 2010).

World Health Organization describes palliative care as “an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain among other problems, physical, psychosocial and spiritual (WHO, 2002). Most physicians have traditionally concentrated on trying to cure patients. The treatment of cancer has got to extend beyond the physical complaints to include psychosocial factors that significantly affect the patient’s quality of life. Clinicians therefore must always care for the person wholly. Although the physician’s initial therapeutic goal is to cure the disease, cancer is often incurable. Psychological treatment is part of palliative care that is given to patient with cancer so as to make them be able to deal with their unique problem individually and as a family (Areej *et al.*, 2011).

Purpose of the study

The purpose of the study was to find out the social issues of adult patients with cancer seen at the oncology clinic at Moi Teaching and Referral Hospital, Eldoret.

In East Africa, there were an estimated 175,000 persons living with cancer, and that number has dramatically increased (Mutuma, 2003). Unfortunately, as the threat of early death and disability from chronic diseases like cancer grows in sub-Saharan Africa, it is clear that countries like Kenya have very little in place to meet this challenge. It has also been noted that cancers of the breast and cervix represent a large proportion (43.3%) of all reported cancers in female (Mutuma G.Z, Korrir A.R, 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 C.N *et al.*, 2009). Therefore, this brings in the fact that Moi Teaching and Referral Hospital is handling many patients with cancer. Apart from the hospital set up they also have satellite clinics in North Rift and Western Kenya where they follow up and treat patient with cancer on specific days.

There is stigma associated with seeking mental health services for cancer patients (Jimmie C. H, 2002). They feel bad that they have to expose themselves physically and psychologically and socially to their families, community and the health workers and consider their illness as a sign of weakness. When these patients are referred to a psychiatrist to seek help, they feel traumatised to be associated with mental illness. They may want to keep their issues to themselves not to be exposed to be too sick or weak (Charmaz K., 2000).

METHODOLOGY

This was a Cross-Sectional Descriptive Study among adult cancer patient attending oncology clinic at Moi Teaching and Referral Hospital (MTRH). MTRH in Eldoret is the second National and referral Hospital in the Kenya. It is a teaching and Referral hospital dealing with all sorts of range of medical conditions. The hospital serves patients from Western Kenya, North rift and South rift regions. The hospital provides both inpatient and outpatient services. It handles all emergencies in the accident and emergency unit and has all specialities. These include medical, surgical, gynaecological, psychiatric, paediatrics services among others. The inpatient has a bed capacity of approximately 800 patients. The study was carried out among cancer patients attending the oncology clinic in MTRH. Participants were estimated to range from

100-150 patients in a week translating 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.

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, 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.

At Moi Teaching and Referral Hospital, cancer patient are seen at the oncology clinic between Monday and Friday. The head of the clinic was given an explanation of the procedures, objectives and ethical issues in order to assure them that the interest of the patients is taken care of. Daily registration and triage of patients is done. Patients were introduced to the authors by a nurse, and made themselves known to the patient and checked if the patient's met the inclusion criteria too. Consent was sought and those patients who conformed signed the consent form. Purposive sampling technique (Maxwell, 1997) was used to select the patients. 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 as well from other sources. Both new and old adult patients attending the oncology clinic who met the criteria for recruitment were interviewed. At the end of the interview the researcher thanked the patient; identified those who needed help and referred them to the counseling team and the department of oncology for further management.

Data was obtained from a sample 138 patients from the oncology clinic. The study instruments included socio-demographic questionnaire and clinical questionnaire. 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 diagnosis. 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. This instrument has been validated and used in several studies. It can be used by clinicians, after a brief training session. The researcher has been trained on how to use the tool. Permission to use the M.I.N.I tool has been obtained from the developers of the tool in Paris. 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.

To analyze the data descriptive statistical methods was employed. Analysis was done using 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. The study was developed and approval sought from University of Nairobi (UoN) and Institutional Research and Ethics Committee (IREC) Moi Teaching and Referral Hospital/ Moi University Ethics and Research Committee Kenyatta National Hospital/ UoN before conducting study. Informed Consent was sought from patients who met the inclusion criteria before being included in the study.

RESULTS

Socio-demographic results

From the total of 138 respondents, majority were females at 71.7% (99) compared to males who were 28.3% (39). Majority of the respondents were aged between 41 – 48 years represented by 25.4% (35) followed by ages 49 – 56 years at 18.1% (25) and 33 – 40 year with 57 – 64 years tied at 16.7% (23) each. Only 1 respondent 0.7% fell between 73 – 80 years. The highest number of participants were Christians mainly the Protestants 65.9% (91) followed by Catholic at 30.5% (42). Only one participant was a Muslim at 0.7% while other denominations were represented by 2.9 % (4).

It was established that many of the respondents were from Uasin Gishu County 25.3% (35) followed by Bungoma and Nandi County at 17.3% (24) and 8.5% (12) respectively. From the findings, more than a half of the respondents 66.5% (92) were married. 15.9% (22) were widowed, single were 12.3% (17), separated were 3.6% (5) and only 1.4% (2) of the respondents reported to have divorced. Most of the respondents lived with their spouses at the time of study and it accounts for 66.7% (92), 22.5% (31) lived with their children while 10.1% (14) lived with their parents.

Most of the respondents had formal education. Respondents with primary education were 35.6% (49); secondary level of education at 33.3% (46); college level at 21.7% (30) and 6.5% (9) respondents had university level of education. A few respondents 2.9% (4) did not have formal education. This explains how most respondents had the knowledge of what they were being treated for.

Most of the respondents, 39.1% (54) earned a monthly income of between kshs.3000/= and 10,000/=. This was followed by the ones who earn below Kshs. 3000/= at 34.1% (47). A paltry 8.7% (12) earned between Ksh. 10,000/= and 20,000/=. The final group whose income was above kshs. 20,000 accounted for 19.4% (25).

Clinical results

Cancer site Majority of the respondents (34.8%) had breast cancer as shown in figure 1. This was followed by cancer of the cervix at 12.3%. Cancer of head and neck accounted for 9.5% (13); musculoskeletal cancer was at 8.7% then uterine cancer at 7.2%. 5.8% had hepatobiliary cancer; colorectal cancer accounted for 5.1% (7). Cancer of the ovary was 4.3%; urinary cancer accounted for 2.9%. Blood, abdomen and skin cancer each had equal number respondents at 2.2% whereas cancer of the lungs and oesophagus had 1 respondent each at 0.7%. Respondents with gynaecological cancer that is cancer of the cervix, uterus and ovary together with breast cancer respondents account for 58.7%. The forms of cancer identified are female related thus explains the demographic finding that majority of the patients were females.

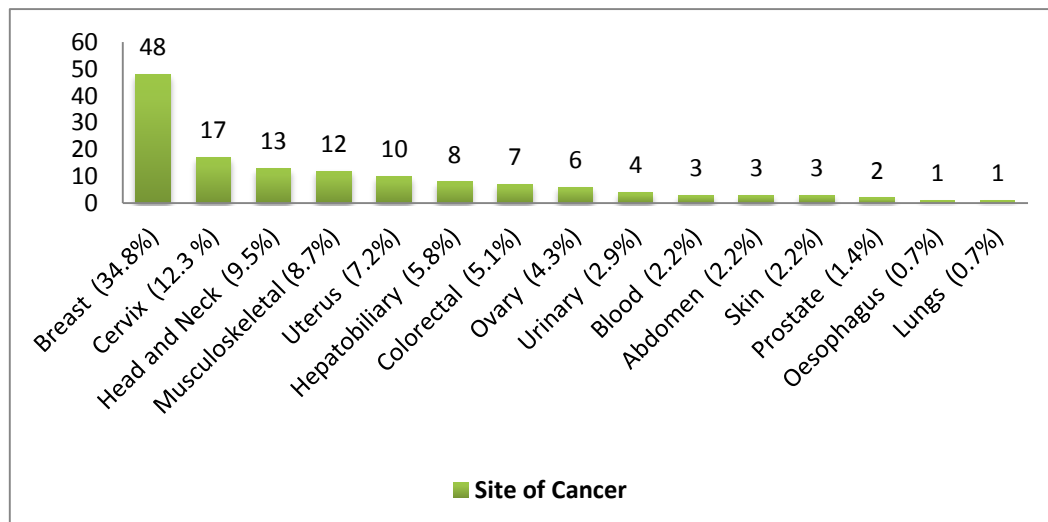


Figure 1: Forms of Cancer Identified

Stage of cancer

As shown in table 1, 39.1% of the respondents were at stage IV while Stage III cancer accounted for 33.3%. Patients at Stage II accounted for 18.8% where as stage I represented 5.8%. Most respondents were diagnosed late with a total of 91.2% of respondents having been diagnosed between stages II - 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. They had (4) respondents at 2.9%.

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

A total of 215 different treatment types were received by the 138 respondents. Table 2 shows that majority of the respondents were on chemotherapy treatment 57.2% followed by palliative care at 20.9%. 18.1% (39) respondents had undergone surgery. Only 3.7% reported to have received radiotherapy treatment. This concurs with the report that most respondents were diagnosed late and are between stage II and IV hence on chemotherapy.

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

Table 3 indicates that 92.1% of the respondents had not been referred for psychological or social care while 7.9% reported to have discussed the psychological and social concern with the care givers.

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 (98.6 %) of the patients had information about their illness. Only 1.4 % was not aware of the diagnosis of cancer as shown in table 4.

Table 4: Awareness about cancer diagnosis by the respondents

Knowledge of cancer diagnosis	Frequency	Percent
Yes	136	98.6
No	2	1.4
Total	138	100.0

Time elapsed (in months) since the patient knew that they have cancer

Majority (68%) of the patients knew their cancer diagnosis between 1 and 6 months while 15% knew within 7 – 12 months. Those who knew their diagnosis in less than 1 month was represented by 9% and 7.9% knew their diagnosis over 12 months.

Table 5: Time elapsed (in months) since the patient knew that they have cancer

How long they knew disease suffered from	Frequency	Percent
<1	13	9.4
1-6	94	68.1
7-12	20	14.6
>12	11	7.9
Total	138	100.0

The Informant on the cancer diagnosis

Majority (88.4%) of the respondents were informed of the diagnosis by the doctor, nurses had informed 5.1% while 2.9% had been informed by relatives. A 3.6% of the respondents had been informed through other sources which included patient having suspected she/he has cancer or being told by a friend or other people other than the ones mentioned above.

Table 6: Person who informed the patient of the cancer

Person who informed the patient of the cancer	Frequency	Percent
Nurse	7	5.1
Doctor	122	88.4
Relative	4	2.9
Others	5	3.6
Total	138	100.0

Whether the patient was accompanied to the hospital by someone

Most (91.3%) of the patient were accompanied to the hospital by a relative; 8.7% of the respondents had not been accompanied by someone to the hospital during the diagnosis of cancer. This is shown in table 7.

Table 7: 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

Sharing of ideas and thoughts on cancer

A larger number (73.9%) of respondents had not discussed their thoughts about cancer diagnosis with anyone, as compared to 26.1% who had discussed their thoughts on cancer diagnosis by a health care provider, friends, relatives or pastors. as shown in table 8.

Table 8: Whether any one has discussed with the respondent their thought on cancer

Discussed their thoughts on the illness	Frequency	Percent
Yes	36	26.1
No	102	73.9
Total	138	100.0

Psychosocial problem before cancer diagnosis

The respondents who had no psychosocial problems prior to diagnosis of the cancer were 62.3%. Some (37.7%) reported to have had other social and psychological problems prior to cancer diagnosis, among which was poor relationship with their spouses at home. Table 9 shows the results.

Table 9: 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 (Social issues)**Social Phobia current**

A few respondents (7.2%) had social phobia that is current. However, 92.8% of the respondents showed no evidence of social phobia in them. On Obsessive compulsive disorder (Current), 4.3% of the respondents had the disorder whereas 95.7% did not have it. Alcohol / Drug abuse and dependence (current) showed results of 2.2% of the respondents having alcohol dependency current and 97.8% were without. On the other hand, 0.7% had alcohol abuse current while 99.3% did not have it. Neither of the respondents reported to have drug dependency nor drug abuse current. The study also sought to establish the existence of Current generalised anxiety disorder which showed results of 12.3% of the respondents having suffered from generalised anxiety that is current while 87.7% did not suffer from the disorder. Finally, antisocial personality disorders life time in the cancer patients showed a larger number of them (98.6%) having never had antisocial personality disorder during their life time. Only 1.4% had had the disorder during their life time. This is shown in table 10 below. Antisocial personality disorders life time presented patients with eating disorders with those who had weight lower than the threshold at 2.9%. The participants with weight above the threshold were represented by 79.7% while 17.4 were missing in the system. None of the respondents suffered from eating disorders. All (100%) the respondents had neither Anorexia nervosa current, Bulimia Nervosa current nor Anorexia nervosa binge.

Table 10: Social Phobia Current

	Frequency	Percent
Social Phobia current		
Yes	10	7.2
No	128	92.8
Total	138	100.0
Obsessive compulsive disorder (current)		
Yes	6	4.3
No	132	95.7
Total	138	100.0
Alcohol Dependence Current		
Yes	3	2.2
No	135	97.8
Total	138	100.0
Alcohol abuse current		
Yes	1	0.7
No	137	99.3
Total	138	100
Drug(s) dependence current		
Yes	0	0
No	138	100

	Frequency	Percent
Social Phobia current		
Yes	10	7.2
No	128	92.8
Total	138	100
Drug(s) Abuse Current		
Yes	0	0
No	138	100
Total	138	100
Current generalised anxiety disorder		
Yes	17	12.3
No	121	87.7
Total	138	100
Antisocial personality disorders life time		
Yes	2	1.4
No	136	98.6
Total	138	100

DISCUSSION

Socio-demographic characteristics

From 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 (Ferlay, 2013-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 (Ferlay, 2013-GLOBOCAN, IARC, 2012).

Cancer is primarily a disease of older people, with incidence rates increasing with age for most cancers (<http://www.cancerresearchuk.org>). More than 36% of cancers in the United Kingdom (UK) in 2009-2011 were diagnosed in people aged 75 and over (UK office national statistics). Even though age-specific incidence rates for all cancers combined generally increase with age in both Africa and the economically developed world, rates are generally lower in Africa (Curado *et al.*, 2007). The incidence rates are higher in the United States than in Uganda except in the 30 to 40 year age groups in which rates are slightly higher in Uganda. The elevated rates for ages 30-40 may reflect the early onset of cervical cancer in women and liver cancer and Kaposi sarcoma in men (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 largest number of participants in the region represented 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 other parts of the country. This is because MTRH is a referral hospital with a wide range of services offered in the facility and it is known in this region. More than a half of the respondents were married. This compares well with what Ndetei *et al.* (2011) while looking at the psychological and social profiles of cancer patients at Kenyatta National Hospital (KNH) who found out that 62.5% of the cancer respondents were married. Most of the respondents lived with their spouses.

Most cancer respondents had gone to school with most of them having attained formal education. A few did not however have formal education. They were knowledgeable of their disease not aware of the diagnosis of cancer.

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 of all reported cancers in female (Korir & 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).

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 J, *et al.* GLOBOCAN 2012).

It is evident that most of the cancer patients were diagnosed late with between stages II – IV. In Malaysia, Hisham and Yip (2004) reported that over 95% of cancer patients in the African countries are diagnosed at the late- or end-stage of the disease. 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 between the population and the health workers, cultural practices and limited access to specialized care which are usually non-existent in these countries. None of these features were captured in this study but further research if done in this area will capture these features.

Given that only 3.7% reported to have received radiotherapy treatment, it is an implication that there is 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 they undergo when seeking to obtain the same service at the KNH. Others are in private hospitals 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.

There is little psychosocial care being given to cancer patients. 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 and found out that the Oncology health service, Kingston Upon Hull, UK, delivers fully integrated psychosocial support and interventions. The fully integrated Oncology Health Service in Hull was accessed by a more diverse range of patients. Among the findings fifty-six percent of patients accessing the service were female and the mean age of the patients was 61 years. Twenty-two percent

had breast cancer, 21% had colorectal cancer, 16% had lung cancer, and 8% had prostate cancer. The remaining 33% had a range of cancer diagnoses.

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

The findings on this agree reasonably well with a meta-analysis of 94 studies Prevalence of anxiety among cancer patients to be 10.3%. (Mitchell *et al.* 2011). Swai in Dar es Salaam found panic disorders at (4.6 %).

Obsessive compulsive disorders (past month) current

The results on this compares with a survey conducted in the early 1980s by the National Institute of Mental Health (NIMH) which showed that Obsessive Compulsive Disorder affects more than 2% of the cancer population.

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 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. The findings on generalised anxiety disorders in this study 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) published in Lancet Oncology, a meta-analysis of 94 interview-based studies by DSM or ICD criteria in oncological and haematological settings and found the prevalence of anxiety disorders was 10.3% among the cancer patients. This finding agrees reasonably well with this study. The less frequent disorders were hypo manic episodes and manic episodes. Alcohol and drug dependency/ abuse, psychotic disorders, anorexia nervosa and bulimia nervosa each affecting less than 1% of the patients. Antisocial personality disorders accounted for only 1.4% amongst the cancer patients.

Implication to Research and Practice

Moi Teaching and Referral Hospital (MTRH) is the second National and Referral Hospital in Kenya which handles many illnesses. Patients with cancer are seen at the oncology clinic based at AMPATH Centre within the hospital. Cancer management in the hospital Oncology clinic is mainly diagnostic and physical treatment and symptom relieve in nature. Very little if any palliative care and psychosocial management is provided to these cancer patients. Few, if any studies have been done to

look at social aspect among cancer patients at the oncology clinic of the MTRH. In this study only 7.9% reported to have discussed the psychological and social concern with the caregivers and this gives us a 92.1% treatment gap. This study endeavoured to fill this gap and add to the body of knowledge.

The paper may also act as a springboard for other relevant studies to be done among these cancer patients and the resulting issues at the MTRH. This paper may provide information to the clinical staff, administration of hospitals and policy makers on the importance of psychosocial interventions among patients with cancer.

CONCLUSION

The pattern of most cancer experienced in Kenya today is Breast cancer and cervical cancer. Most patients are however diagnosed at advanced stage (stage 2- stage 4.) as opposed to western countries where patients are diagnosed in early stages. Social oncology services for patients and families are minimal.

RECOMMENDATIONS

1. Education of communities on cancer issue will increase early screening and routine check-up and help detect the disease in its early stage which may be eradicated before it is advanced and prevent progression of the illness hence better outcome.
2. In order to reduce the effects of cancer on the society it is important to control risk factors associated with cancer, early detection and offer good care to those affected.
3. Social support services are an important component of modern cancer treatment. A major challenge for all social services is the achievement of access and utilization of the service. Emotional and social support can help cancer patients learn to cope with social issues.
4. Further research is recommended by the author to look into social issues to improve quality of care, increase access to social care for all, fund social related research and to support education and training of social oncology experts.

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