

HEALTH SEEKING BEHAVIOR AMONG CANCER PATIENTS ATTENDING OCEAN ROAD CANCER INSTITUTE, TANZANIA

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Abstract

Objectives: To characterize cancer patients and to determine the associated health seeking behaviours.

Methods: Between September 2005 and February 2006, we collected data using structured and semi-structured interviews among new cancer patients attending the ORCI. Findings are summarized using univariate and bivariate analyses.

Results: There were 330 cancer patients during the study period. The mean age was 48 (SD = 13.5) years ranging between 21 and 84 years. The majority, 205 (62.1%), were females. More than two thirds of all patients, that is 225 (68.2%), presented at the ORCI at advanced stages of disease. Many patients reported to have neither heard, 193 (58.5%), nor to know cancer symptoms, 203 (61.5%). Only 185 (56.1%) of all patients reported their willingness to disclose and a freedom to talk about the disease. Risk factors for cancer staging were sex, patient's education status, awareness and knowledge of disease symptoms.

Conclusions: Interventions targeted to improve health care seeking behaviour among cancer patients need to include health education and sensitization specifically of cancer disease, establish a strong referral mechanisms at primary health level and to start a population cancer registry for monitoring and evaluation purposes.

Key words: Cancer; presentation stage; Tanzania

Introduction

The morbidity and mortality due to cancers has been rising worldwide. Although many sub-Saharan countries of Africa and many other developing countries lack population-based data to have better cancer incidence estimates, it is estimated that the incidence of cancer in Africa is about 60 per 100,000 population (1). For example, in 1995 the WHO estimated the annual cancer incidence rate of 70 per 100,000 population in Tanzania (2).

There are many types of cancers in Africa. The most prevalent cancers among men in Africa include Kaposi's sarcoma, cancer of the liver and prostate cancer while among females common cancers include cervical cancer, cancer of the breast and Kaposi sarcoma (3, 4). Some of the suggested risk factors for all these cancers are lifestyle-related and environmental factors (5).

There have been speculations on cancer types that are preventable (lifestyle- and environmental related) and that are not (maybe genetic) (6, 7). It has been argued that many cancers that are related to lifestyle and environmental factors are potentially preventable (6). For example, although cervical cancer is one of the most common cancers among African women, it is considered totally preventable (8).

Early stage of cancer at clinical presentation has been established as one of the factors for modalities of treatment and survival of patients (9, 10). These are surgery, radiotherapy, chemotherapy (including hormone therapy) or a combination of these. Nevertheless, like for other diseases, many cancer patients in Africa do not seek health care services until the disease has worsened and advanced to a critical condition too complex for treatment and prognosis (11).

Reports indicate that males present themselves more late than women do (12). Possible reasons for late presentation include socio-demographic, economical and cultural factors such as age, ignorance and lack of information, marital status, especially about the disease, poverty, myths, taboos and many others (13-17).

Tanzania lacks a population-based cancer registry. Furthermore, there is no enough information on the magnitude and associated reasons for late presentation. The aim of this study is, therefore, to determine the magnitude of and health seeking behaviour of cancer patients reporting in one urban hospital of Tanzania.

Materials and Methods

This is a hospital-based data collected between September 2005 and February 2006 at the Ocean Road Cancer Institute (ORCI). The ORCI receives patients mainly from the three municipal hospitals (within Dar es Salaam Region) and from the whole country as referral suspected or confirmed cancer cases to undergo radiotherapy and/or chemotherapy procedures. On average, over 50 new cancer patients are registered monthly at the ORCI.

We used structured and semi-structured interviews to new confirmed cancer patients. Main areas in the structured interviews include patient's socio-demographic information, knowledge, perception and attitude toward cancer as a disease, clinical and functional status, laboratory findings and history of use of non modern-therapy and time taken before coming to hospital for treatments.

In the semi-structured interviews, patients were asked of the socio-cultural processes, settings, practices and beliefs about cancer. The tool also collected information about patients' views on modern health seeking behaviours. We also followed-up each patient regularly (four week-intervals) to determine the treatment outcome.

An ethical clearance was obtained from the Ocean Road Cancer Research Ethical Clearance Committee (ORCREC)

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before commencement of the study. A written informed consent was read to each patient and then asked whether they would agree to participate in the study. They were also informed that those who do not wish to participate have the right to do so and will continue to have treatment like other patients. Once consented, patients were asked to sign the form.

We performed univariate and bivariate analyses to characterize staging of cancer as a proxy indicator for seeking modern health services (dependent variable) and selected socio- demographic features (exposure factors) of the patient and investigating possible association between the dependent variable and independent variables. Patients with stages I or II were categorized as early invasive cancer, while those with stages III or IV were considered late invasive cancer. Furthermore, we calculated the relative risk (RR) and the associated 95% confidence intervals (CIs) to measure the strength of association between presenting at late stage with each of selected exposure variables.

Results

The ORCI registered 330 new cancer patients between September 2005 and February 2006. Among these, 205 (62.1%) were females. The overall average age was 48.3 (SD = 13.5) years, ranging between 21 to 84 years. There were no significant age differences between sexes. Other patients' characteristics are presented in table 1. The recorded number patients presenting themselves at late stages (stages III and IV) were 225 (68.2%). Significantly more males, 103 (82.4%) than females 122 (59.5%), presented themselves late ($\chi^2 = 18.8, p < 0.001$).

Table 1. Characteristics of new cancer patients attending Ocean Road Cancer Institute, Tanzania

Characteristics	n (%)
Sex	
Male	125 (37.9)
Female	205 (62.1)
Age group (years)	
Less than 30	35 (10.6)
30 – 49	142 (43.0)
Over 49	153 (46.4)
Occupation	
Unemployed	269 (81.5)
Employed	61 (18.5)
Education	
None	5 (22.7)
Some primary	199 (60.3)
Above primary	56 (17.0)
Cancer stage	
I	31 (9.4)
II	74 (22.4)
III	128 (38.8)
IV	97 (29.4)

Although about 80% of patients have had formal education, less than half 137 (41.5%), have heard about

cancer as a disease and 127 (38.5%) patients reported to know any cancer symptoms. The majority of patients 184 (55.6%) were not able to tell if cancer is fatal or not and the remaining 113 (34.2%) patients considered cancer as a deadly disease while 33 (10.2%) thought cancer was neither deadly nor harmful.

Some cancer patients, 145 (43.9%) reported to be reserved such that they would not freely talk about their cancer. The main cited reason was stigmatization, 122 (84.1%). However, if necessary, patients would feel more free to talk to their spouses 168 (50.9%), other relatives and children 75 (22.7%) or to friend 21 (6.4%).

The reported initial attempts to seek for treatment are presented in figure 1. One-hundred and one (30.7%) patients initially used herbalist, a traditional healer or did nothing. While among the 322 patients who initially sought some form of treatment, 269 (81.5%) patients were thinking of something not related to cancer and 12 (3.6%) patients thought of charms. Only 41 (12.4%) patients thought of cancer-related disease when they went for treatment.

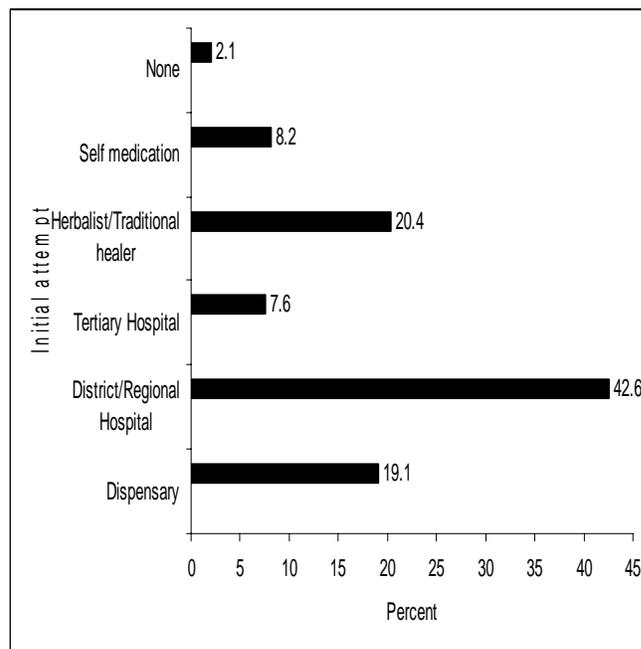


Figure 1. Reported initial efforts to seek help for cancer treatment

On average, symptoms have been persistent for about 14.4 (SD = 11.2) months among 128 patients who had knowledge of symptoms and who reported this experience. There was no significant difference of duration of symptoms between sexes. The average time taken since the beginning of experiencing symptoms and arriving at the ORCI was about 6.4 (SD = 6.9) months. Males insignificantly reported late (7.4, SD = 7.1 months) than female (5.8, SD = 6.7 months) did.

In table 2, we present relative risks of presenting with late stage of cancer at ORCI. The incidence of presenting at late stage disease is significantly higher among males as

compared to females (RR = 1.4, 95% CI = 1.2 – 1.6). Furthermore, education of the patient is associated with the incidence of cancer presentation. The risk was 1.3 (95%CI, 1.0-1.7) and 1.4 (95%CI, 1.1-1.8) higher for age groups 30 to 49 and for patients aged less than 30 years respectively as compared to patients aged more than 49 years. However, the incidence of late cancer presentation is independent of age and employment status of the patient. Both cancer awareness and knowledge of cancer symptoms are significantly associated with the staging of cancer.

Table 2. Relative risk (RR) of presenting with late stage of cancer at ORCI, Tanzania, from selected exposure factors

Predictor	n (%)	RR (95%CI [‡])
Sex		
Male	103 (82.4)	1.4 (1.2 – 1.6)
Female	122 (59.5)	Reference
Age group (years)		
Less than 30	26 (74.3)	1.1(0.9 – 1.4)
0 – 49	95 (66.9)	1.0 (0.8 – 1.2)
Over 49	104 (68.0)	Reference
Occupation		
Unemployed	187 (69.5)	1.2 (0.9 – 1.4)
Employed	38 (62.3)	Reference
Education		
None	56 (74.7)	1.4 (1.1 – 1.8)
Some primary	139 (69.8)	1.3 (1.0 – 1.7)
Above primary	30 (53.6)	Reference
Head of cancer		
Yes	73 (53.3)	Reference
Never	152 (79.2)	1.5 (1.3 – 1.8)
Knowledge of any cancer symptoms		
Yes	64 (50.4)	Reference
No	161 (79.7)	1.6 (1.3 – 1.9)

Discussion

These data show that cancer awareness and knowledge among patients is low. Given that only 41.5% and 38.8% of new cancer patients attending at ORCI were aware and knew symptoms of the disease respectively, may be alarming not only to cancer patients but also to the general population regarding the disease. The problem of low knowledge and lack of awareness for cancer in sub-Saharan Africa have been mentioned before (1, 17). Among other several factors, lack of awareness is a restrictive element for cancer control

and prevention. Lack of information, education and communication on health issues, may attribute to this.

Results have indicated that about 70% of new cancer patients present at a very late stage of disease. This proportion is significantly lower than that indicated in another study from a neighbouring hospital setting that examined only cancer of the cervix (17). Therefore, maybe women with cervical cancer present at a very late stage than all other cancer patients. Analysis has also indicated that males present at a very late stage than females. This fact has been reported elsewhere before (12). In African setting, pain is the most marker of symptom warranting a patient to seek for medical treatment. Since some cancers (especially at early stage) are painless, it may not be surprising few patients reporting to know cancer symptoms; thus, presenting at a very late stage of disease. Data have also shown that presenting late of the disease was independent of age and employment status (employed or unemployed).

Cancer patients present late for treatment at the ORCI. An average of more than six months, reported to be the time of reporting to the ORCI from the start of symptoms is rather too long. Reasons for this behaviour may be multiple and complex. They lack basic knowledge and awareness of the disease. Although modern health services available, accessibility maybe uncertain or lack of health education such that patients would rather first go to the traditional hearers/herbalists to seek health services. Interventions targeted to improve health care seeking behaviour among cancer patients need to include health education specifically of cancer disease, establish a strong referral mechanisms at primary health level and to have a population cancer registry for monitoring and evaluation purposes.

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