



Mental Health of Cancer Patients and their Awareness Regarding Cancer: Exploratory Study in Southern Karnataka

M. R. Mythily^{1*}, M. Vinay², B. R. Harish² and S. Deepa³

¹Department of Community Medicine, JSS Medical College, Mysuru - 570015, Karnataka, India; mythilymysore@gmail.com

²Department of Community Medicine, Mandya Institute of Medical Sciences - 571401, Mandya, Karnataka, India

³Department of Obstetrics and Gynaecology, Sri Chamundeshwari Medical College, Hospital and Research Institute, Channapatna, Ramanagara District - 562160, Karnataka, India

Abstract

Cancers are among the leading causes of morbidity and mortality worldwide, with approximately 14 million new cases and 8.2 million cancer-related deaths. Comprehensive patient-centred care in oncology has been prioritized in international guidelines and standards, which includes prevention and early detection, evidence-based medical treatment, rehabilitation and palliative care as a collective approach for reducing morbidity and mortality of cancer. Improving the quality of care requires recognising and addressing patients' psychological distress, mental disorders and supportive care needs during the treatment of cancer. Knowledge regarding cancer i.e. its warning signs, early detection, management of patients with cancer etc., helps in improving the outcome of cancer patients. This one-year cross-sectional study from 1st February 2022 to 31st January 2023 analyzed the mental health of cancer patients and their awareness regarding cancer among patients who report to the Cancer Centre, in a tertiary care hospital in southern Karnataka. The patients were interviewed using a pre-formed, pre-tested, semi-structured questionnaire. Analysis was done using descriptive statistics like percentages, mean, standard deviation, etc., and analytical statistics like chi-square test, student t-test, etc. The awareness regarding various aspects of cancer symptoms, diagnosis, treatment options, etc., was poor. Most of the patients are diagnosed with anxiety and depression requiring further counseling and treatment.

Keywords: Awareness of Cancer, Cancer, Mental Health

1. Introduction

Tumours are among the main sources of morbidity and mortality around the world, with roughly 14 million new cases and 8.2 million disease-related passings¹. In India, it is assessed that around 2.5 million individuals are living with some sort of malignant growth. Every year, the existing burden is increased by over 7 lakh new cases. In India, cancer-related deaths exceed 5 lakh annually². There is a wealth of information available

regarding cancer's causes and treatments. Disease can be decreased and constrained by carrying out proof-based systems for malignant growth anticipation, early discovery of malignant growth and the executives of patients with malignant growth. If caught early and treated appropriately, many cancers can be cured³. Treatment may be curative if cancer can be detected early. Educating people about the disease's early symptoms is one way to achieve this goal^{3,4}. The awareness of cancer patients and their caregivers has a significant impact

*Author for correspondence

on the patient's treatment outcomes. Extensive patient-focused care in oncology has been accentuated in global rules and principles, suggesting malignant growth avoidance and early recognition as well as excellent proof-based clinical treatment, recovery and palliative consideration. Working on the nature of care requires acknowledgement and tending to patients' troubles, mental problems and strong consideration needs during treatment and after care^{5,6}. When a disease's name is mentioned, mental restlessness sets in. Despite present-day progress in getting reduction and conceivable malignant growth fix, it remains an illness which is associated with sadness, torment, dread, and passing. Its determination and treatment frequently prompt mental pressure coming about because of the side effects of the infection and well-established feelings of dread toward a quiet killer⁷. Screening of the emotional wellness of patients determined to have the disease will assist with diagnosing those with the requirement for proper treatment. The purpose of this study was to investigate the mental health and awareness of cancer among cancer patients who present to a tertiary care hospital in southern Karnataka's Cancer Centre.

2. Materials and Methods

It was a cross-sectional study conducted from 1st February 2022 to 31st January 2023 among newly diagnosed cancer patients attending the cancer centre in a tertiary care hospital in southern Karnataka during the study period. The sample size attained was 127. The sampling method used was universal sampling for the selection of study participants. Patients aged >18 years of age, with > 6 weeks of diagnosis of cancer and giving informed consent were included in the study. A history of mental health problems before cancer diagnosis was excluded from the study. Ethical clearance was obtained from the Institutional Ethics Committee in a tertiary care hospital. The data was collected using a semi-structured, pre-tested questionnaire by interviewing the study participants. The questionnaire consisted of 3 parts. The first part consisted of sociodemographic details and diagnosis of cancer. The second part, Mental Health Inventory (MHI-18 item)⁸ was used to assess the mental health of study participants. Evaluating mental health issues such as anxiety, depression, behavioural control and positive affect. The Mental Health Inventory score ranges from

1-100. Scores >81 indicated good mental health, between 61-80 as having better mental health and score <60 as poor mental health. The third part consisted of questions related to awareness regarding causation, and diagnosis of cancer. Data was entered in Microsoft Excel software and analyzed using Statistical Package for Social Sciences (SPSS) software version 25.0 trial version. Analysis was done using descriptive statistics like percentages, mean, standard deviation, etc., and non-parametric tests like the chi-square test were used to find associations between categorical variables.

3. Results

Of the 127 study participants, 71 (55.9%) were males. 42 (33.1%) were 61-70 years and 34 (26.7%) were 51-60 years of age (Table 1). 96 (75.6%) were from rural areas. 74 (58.3%) study participants belonged to poor socioeconomic status. The majority of men 60 (84.5%) were diagnosed to have oral cancer. Among females, 28 (50%) were diagnosed with cervical cancer and 12 (21.4%) with breast cancer.

The mean MHI score of study participants was 45.29 (± 11.46). Poor mental health was seen in 108 (85%) patients, 19 (15%) had better mental health and none had good mental health and the difference was found to be statistically significant ($p < 0.005$). The mean Anxiety score was 50.43 (± 13.43), the mean depression score was 52.74 (± 13.13), the mean behaviour control score was 44.88 (± 12.47) and the mean positive affect score was 32.52 (± 12.24). Poor mental health was 33 (30.8%) in the 61-70 years age group followed by 26 (24.3%) in the 51-60 years of age and the difference between different age groups was not statistically significant ($p = 0.998$). 61 (56.5%) males and 47 (43.5%) females had poor mental health and the

Table 1. Age and sex-wise distribution of study subjects (n=127)

Age group (yrs)	Males (%) (n= 71)	Females (%) (n= 56)	Total
≤ 40	2 (22.2)	7 (77.7)	9
41- 50	9 (31.1)	20 (68.9)	29
51- 60	19 (55.9)	15 (44.1)	34
61- 70	30 (71.5)	12 (28.5)	42
≥ 71	11 (84.6)	(15.4)	

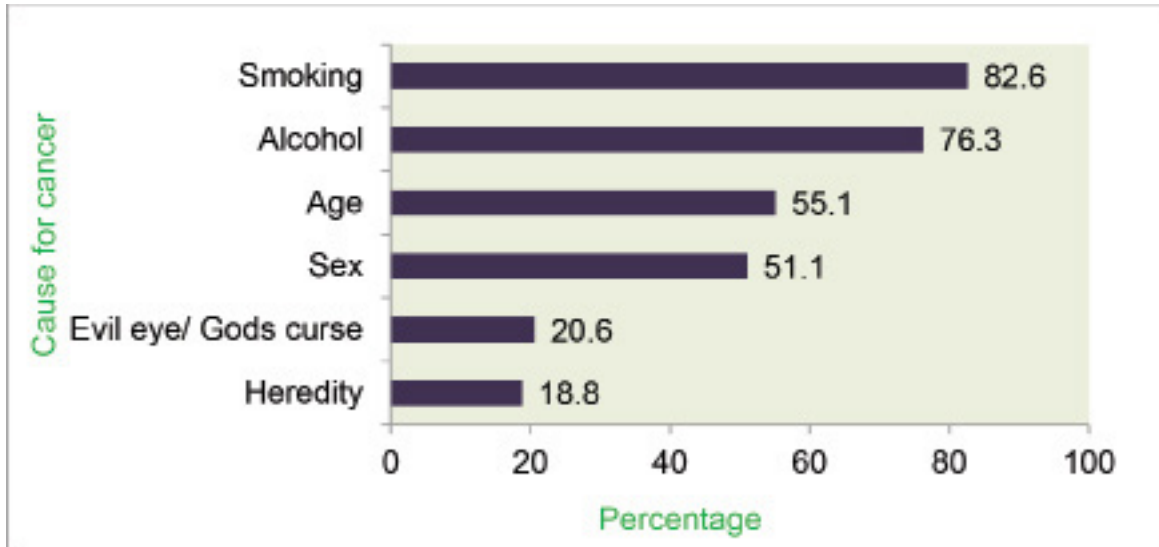


Figure 1. Awareness regarding the cause of cancer (n = 127).

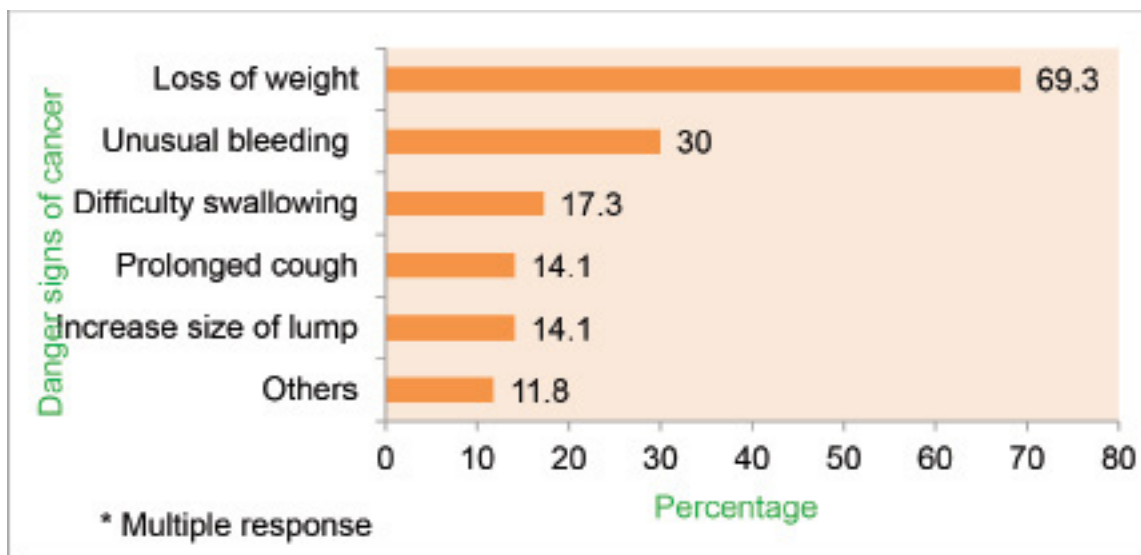


Figure 2. Awareness regarding danger signs of cancer (n = 127).

difference was not statistically significant ($p = 0.712$). The majority were aware that smoking and alcohol can increase the risk of cancer. 20.6% also believed that it was because of the evil eye/God's curse (Figure 1). Loss of weight was thought to be a danger sign of cancer in 69.3%, unusual bleeding 30% and difficulty in swallowing 17.3% (Figure 2). 94 (74.0%) thought cancer is curable. 82 (64.6%) thought cancer is curable if diagnosed early. 76 (59.8%) thought regular health checkups were useful in diagnosing cancer.

4. Discussion

Our study was conducted in a tertiary care centre in the southern part of Karnataka which caters to urban and rural populations as it is the only cancer centre for the district. Males were more in our study which could be attributed to more men coming for treatment compared to women, as the place still has discrimination towards women. The majority of the study participants belonged to the age group of 61-70 years, which goes along with the fact of

increased cancer incidence of cancer after 60 years and as found in other studies^{2,10}. Around 76% of participants were from rural areas, and the majority were from poor socio-economic status, which is similar to Vishma *et al.*,⁹ study. The most common cancer among males was oral cancer and females had cervical cancer which is similar to the national data. In our study poor mental health was seen in 85% of patients, 15% had better mental health and none had good mental health. The prevalence is higher in our study compared to Mishra *et al.*,¹¹ a study showing a 63% prevalence of some psychiatric disorders and Thapa *et al.*,¹² a study with a depression prevalence of 28% and anxiety of 42%. Factors like more representation from rural areas and poor education and socioeconomic status are the possible reasons which would need further research to discover the causes. In our study, Positive affect (72%) was most affected compared to Singh *et al.*,⁷ a study which had 90% with depression. This also could be due to the usage of different scales for mental health assessment in all the studies. However, all the studies used validated questionnaires/scales. Regarding awareness of cancer, our study participants had poor awareness regarding causation of cancer, diagnosis of cancer and availability of treatment. Similar results were found in Pedgaonkar *et al.*,⁴ study. Though awareness was poor, participants believed in evil or God's curse causing cancer and depended on black magic for cancer cure which was of concern as it delays diagnosis, and treatment and thus influences on prognosis of cancer. The study had limitations concerning number of samples for study and the study design.

5. Conclusion and Recommendation

The majority of the participants belonged to poor socioeconomic status. The majority of males had oral cancer and females had cervical cancer. The mental health of the cancer-diagnosed individuals was poor with positive affect the most affected. Awareness regarding cancer was poor. All newly diagnosed cancer patients should be screened for mental health status and necessary counselling and treatment support to be provided for them. Awareness among people should be increased regarding the cause, danger signs and treatment aspects of cancer to promote early diagnosis and treatment to have a better prognosis of the disease.

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