




The Magnitude of Common Mental Disorders and Associated Factors Among Cancer Patients at Black Lion Specialized Hospital, Addis Ababa, Ethiopia: Cross-Sectional Study

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Abstract

Background: Common mental disorders (CMD) are the most usual reactions following cancer diagnosis causing significant psychological sufferings. Even though research-based evidence is necessary for mental health promotion and intervention activities, there is a scarcity of evidence in Ethiopia to assist policy makers' efforts in reforming mental health care particularly that of cancer patients.

Objective: The main objective of this research is to assess the magnitude of common mental disorders and associated factors among cancer patients who have a follow-up treatment at Black Lion Specialized Hospital, Addis Ababa, Ethiopia.

Method: Institutional-based cross-sectional study was conducted from August 1 to September 30, 2020. A systematic random sampling technique was used to select 396 study participants. A Self-Reporting Questionnaire (SRQ-20) and interviewer-administered structured questionnaire were employed to collect data. Data were analyzed using descriptive statistics and logistic regression. Odds ratios with 95% confidence intervals was used to report the findings.

Result: A total of 396(230 men and 160 women) participants took part in the study. The overall magnitude of CMD among cancer patients was found to be 70.3%, of which the rate was 73.5% among women and 67.8% among men, in the last 4 weeks. Being women (AOR = 1.74; 95%CI: 1.00, 3.02), unemployed (AOR = 3.035, 95% CI: 1.37, 6.72), average monthly income of less than 1600 Ethiopian Birr (AOR = 2.838; 95%CI: 1.58, 5.08), being on cancer treatment for more than 5 years (AOR = 2.653, 95% CI: 1.39, 5.03), poor social support (AOR = 3.618, 95% CI: 1.33, 9.80), and current use of substances (AOR = 6.852; 95% CI: 2.038, 23.034) were the factors significantly associated with CMD.

Conclusion and recommendation: Common mental disorders are one of the major health concerns among cancer patients. Common mental disorders were found to be more common in females and among current users of a psychoactive substance. Therefore, cancer patients need special attention of not only physicians but also that of mental health professionals for possible detection and early treatment of mental disorders. Rendering social and economic support may reduce the negative effects of the illness.

Keywords

magnitude, common mental disorder, cancer, black lion hospital

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Introduction

The notion of CMD characterizes cases that present non-psychotic symptoms, such as insomnia, fatigue, nervousness, headaches, depressive symptoms, irritability, forgetfulness, difficulty concentrating, and non-specific symptoms that lead to functional incapacity but do not meet the requirements of diagnoses listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).¹ Common mental disorders are the most prevalent mental disorders in the world. These disorders are highly prevalent in the population and have negative impact on the mood or feelings of affected persons; their symptoms range in terms of severity from mild to severe and last from months to years in duration. Although common mental disorders are not as severe as psychotic disorders, they can pose a significant public health problem because of their high prevalence and serious effects on personal wellbeing, family, work and use of health services.^{2,3}

Common mental disorders are the most common reactions following cancer diagnosis causing significant psychological sufferings that have effects on physical and emotional wellbeing of patients.^{4,5} According to World Health Organization (WHO) report about 4.4% of the world's population were living with depression and 3.6% were suffering from anxiety disorder in 2015.^{4,6} In low- and middle-income countries, the burden of disease caused by common mental disorders (CMDs), such as depression and anxiety, and non-communicable diseases (NCDs), such as diabetes and cancer, is reported to be high.⁶

According to our search, the prevalence rate of CMD among cancer patients ranges from 10.8% to 67%.^{7,8} A retrospective study conducted in Germany among long-term cancer survivors reported the highest prevalence of CMD 67%;⁹ whereas a study conducted in Kenya reported a lower prevalence 10.8%.⁷

Apart from these, the World Mental Health Surveys and Israel- World Mental Health Survey have shown that the prevalence rates of CMD among active cancer patients were 18.4% and 22.1%, respectively.^{10,11} Another study conducted in Germany among cancer patients with Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) also reported that 30 – 40% of the study participants had mental disorders whereby depression, adjustment and anxiety disorders were the most common diagnosis reported.¹²

Similarly, a study conducted among cancer patients admitted to oncology units of Kasturba Medical College, Manipal-India reported that the overall prevalence of CMD was 40%.⁸ Moreover, the study conducted in South Africa indicated the prevalence rate of CMD among cancer patients was- 34.9%.¹³

In Ethiopia, we did not come across previous similar studies which report the prevalence of CMDs among cancer patients. Rather, we found only community-based studies done among the general population which report the prevalence of common mental disorders in Butajira, Addis Ababa and Hadiya district being 17.4%, 11.7% and 11.2%, respectively.¹⁴⁻¹⁷

Previous studies have shown that CMD were associated with stress related to family, work, social isolation, chronic physical illness, poor social support and social networks, and lifestyle pressures.^{2,5,18}

A number of factors contribute to psychological distress among cancer patients, including the grief about current and anticipated losses, fear of death, concerns about loved ones, the effect of certain chemotherapeutic drugs on mood, and the biology of the malignancy.¹⁹⁻²² Moreover, fear of recurrence is one of the most prevalent psychological burdens experienced by cancer patients and survivors.^{3,23}

Even though the contribution of common mental disorders to the global burden of diseases is significant, the attention given to mental health is very low across the globe. This is even worse in low-income countries like Ethiopia.⁶ It is vivid that research-based evidences are necessary for mental health promotion and intervention activities. Contrary to this, there is a scarcity of evidence that assists policy makers' efforts in reforming mental health care in Ethiopia, particularly mental health care for cancer patients. Most previous studies about CMD among cancer patients in Ethiopia have been focusing on socio-demographic and substance use correlates.²⁴ However, the present study attempts to fill the existing knowledge gap by exploring potential factors such as clinical factors and social support. Therefore, this study aimed at determining the magnitude of CMD and its associated predictors among cancer patients who have been on follow-up at Black Lion Specialized hospital.

The result of this study will help policy makers and health managers in enhancing mental health initiatives for the utilization of mental health services. It will also pave the way to integrate psychosocial assessment and treatment in the routine clinical evaluation and treatment of cancer patients. Furthermore, the finding of this study may serve as a baseline for further studies.

Materials and Methods

Study Design, Period, and Setting

Institution based analytical, non-experimental, cross-sectional study with quantitative treatment was conducted from August to September 30, 2020.

This study was conducted at Black Lion specialized hospital, Addis Ababa, Ethiopia. Black Lion Specialized Hospital

is one of the tertiary hospitals in Ethiopia and the only cancer center with approximately 800 inpatient beds of which only 18 beds are allocated for cancer treatment.

Study Population and Eligibility Criteria

The study population was all adults of age 18 years and above of both sexes of cancer patients who have been receiving treatment at the oncology unit of Black Lion Specialized Hospital and were available and on follow-up during the data collection period. Cancer patients who were severely ill and unable to communicate were excluded from the study.

Sample Size Determination and Sampling Procedure

Sample size was determined using single population proportion formula by taking all the necessary assumptions for cross-sectional study: 95% confidence level with an assumption of the proportion of CMD 37.4%²⁴ and a maximum discrepancy of 5% between the sample and the underlying population. Finally, by considering 10% for possible non-response rates during the survey, the final sample size was determined to be 396.

A systematic random sampling technique was employed to select 390 study participants. The sampling fraction was determined to be three and every third patient was interviewed after selecting the first participant using lottery method.

Data Collection Instrument and Procedure

A semi-structured questionnaire was used to collect socio-demographic and substance use data. Substance use is classified as current users and ever users. Current substance user are defined as when the respondent uses a specified substance (for non-medical purpose) in the last three months, whereas ever user is when the respondent uses a specified substance (for non-medical purpose) even once in their life time.²⁵ Self-reporting questionnaire (SRQ-20) was used to classify whether a common mental disorder was present or not in the last one month.²¹ SRQ has been previously translated into Amharic, validated and subsequently used for epidemiological studies in clinical and community settings in Ethiopia and a cut-off point of 8 was recommended for general clinical setting. It consists of 20 items with 'yes' or 'no' responses. The reliability of the self-reporting questionnaire was assessed using Cronbach's Alpha. The internal consistency of the SRQ was found to be high, with Cronbach's Alpha of .92. A specificity of 83% and sensitivity of 89.5% SRQ were reported previously.^{17,21,22}

Emotional and social support was assessed using an adapted shortened version of the Oslo Social Support Scale (OSSS). The OSSS-3 consists of three items assessing the level of social support. The first item has 4 responses, whereas the second and third items have 5 responses recorded on a Likert scale. The sum score for OSSS-3 ranges from 3 to 14,

with high values representing strong levels of social support and low values representing poor levels of social support.^{25,26}

Data Quality Assurance

Data were collected using pre-tested, interviewer-administered questionnaire and patient's card review. A two-days training was given by the principal investigator for data collectors on the following topics: purpose and intended value of the study, reviewing of the individual items in the survey, ethical issues, ensuring high interview quality, avoiding bias, and conducting interview in private settings. Every session of the data collection process included supervision by the investigator and a regular meeting was held in between sessions to discuss any difficult issues that came up during the interviews. Errors were also promptly discussed and fixed. The collected data were reviewed and checked for completeness before data entry.

The questionnaire was translated into Amharic and the Amharic version was administered to collect data. The translation had followed recommended guidelines and involved forward and back translations. Three BSc. Nurse data collectors and one MPH supervisor were recruited for the survey. They all are fluent Amharic speakers and all have prior experience in data collection.

Ethical Approval and Consent to Participate

Ethical approval was obtained from the Institutional Review Board of Rift Valley University with a Ref. No, RVU/306/2020 (see the attached supplement letter). Support letter was secured from the administration of Black Lion Specialized Hospital. Formal permission was obtained from the oncology unit of the hospital. Verbal informed consent was obtained from all the participants during data collection after informing them about the aims of the study, its contribution to the future development of the health system particularly to mental health services of the country. Full right was given to the study participants to refuse, stop, and withdraw from participation at any time during data collection without losses of any privilege. Confidentiality of respondents was maintained by using anonymity strategies particularly during data collection and reporting. For those respondents who reported suicidal ideation brief advice was given by the principal investigator and were provided referral sheets to contact mental health professionals. Apart from these, the finding of this study was communicated with the designated department to trace those study participants who were suffering from CMDs for further treatment consideration.

Data Processing and Analysis

Data were checked, coded and entered to Epi data 3.1 and was exported to SPSS (Statistical Package for Social Sciences) version 25 for analysis. Associations between risk factors and

Table I. Socio-demographic characteristics of respondents at Black Lion Specialized Hospital, 2020 (n = 390).

Variables	CMD		Total frequency (%)
	Yes Frequency (%)	NO Frequency (%)	
Sex			
Men	156 (40.0)	74 (19.0)	230 (59)
Women	118 (30.3)	42 (10.8)	160 (41)
Total	274 (70.3)	116 (29.7)	390 (100)
Residence			
Urban	125 (32.1)	72 (18.5)	197 (50.5)
Rural	149 (38.2)	44 (11.3)	193 (49.5)
Total	274 (70.3)	116 (29.7)	390 (100)
Marital status			
Single	52 (13.3)	33 (8.5)	85 (21.8)
Married	144 (36.9)	61 (15.6)	205 (52.6)
Divorce	54 (13.8)	12 (3.1)	66 (16.9)
Widowed	24 (6.2)	10 (2.6)	34 (8.7)
Total	274 (70.3)	116 (29.7)	390 (100)
Religion			
Christian	172 (44.1)	73 (18.7)	245 (62.8)
Muslim	102 (26.2)	43 (11.0)	145 (37.2)
Total	274 (70.3)	116 (29.7)	390 (100)
Income status			
≤1600	136 (34.9)	74 (19.0)	210 (53.8)
>1600	138 (35.4)	42 (10.8)	180 (46.2)
Total	274 (70.3)	116 (29.7)	390 (100)
Ethnicity			
Amhara	82 (29.9)	47 (12.1)	129 (33.1)
Oromo	115 (29.5)	49 (12.6)	164 (42.1)
Tigris	49 (12.6)	10 (2.6)	59 (15.1)
Gurage	22 (5.6)	8 (2.1)	30 (7.7)
Silte	6 (1.5)	2 (.5)	8 (2)
Total	274 (70.3)	116 (29.7)	390 (100)
Educational status			
No formal education	132 (33.8)	48 (12.3)	180 (46.2)
Primary school	36 (9.2)	14 (3.6)	50 (12.8)
Secondary school	83 (21.3)	32 (8.2)	115 (29.5)
Higher education	23 (5.9)	22 (5.6)	45 (11.5)
Total	274 (70.3)	116 (29.7)	390 (100)
Age			
18–30	41 (10.5)	21 (5.4)	62 (15.9)
31–50	124 (31.8)	57 (14.6)	181 (46.4)
>50	109 (27.9)	38 (9.7)	147 (37.7)
Total	274 (70.3)	116 (29.7)	390 (100)
Occupational status			
Government employed	50 (12.8)	32 (8.2)	82 (21.0)
Self employed	158 (40.5)	53 (13.6)	211 (54.1)
Unemployed	66 (16.9)	31 (7.9)	97 (24.9)
Total	274 (70.3)	116 (29.7)	390 (100)
With whom do you live?			
Family	199 (51.0)	83 (21.3)	282 (72.3)
Alone	75 (19.2)	33 (8.5)	108 (27.7)
Total	274 (70.3)	116 (29.7)	390 (100)

*Christian: include (orthodox, protestant and catholic).

Table 2. Clinical characteristics of study participants at Black Lion Specialized Hospital n=390).

Variables	CMD		Total frequency (%)
	Yes Frequency (%)	NO Frequency (%)	
Family history of mental disorder			
Yes	138 (35.4)	14 (3.6)	152 (39.0)
No	136 (34.9)	10 (26.2)	238 (61.0)
Total	274 (70.3)	116 (29.7)	390 (100)
Duration of cancer			
<1 Year	67 (17.2)	45 (11.5)	112 (28.7)
>=1 year	207 (53.1)	71 (18.2)	278 (71.3)
Total	274 (70.3)	116 (29.7)	390 (100.0)
Stage of cancer			
1 st stage	38 (9.7)	22 (5.6)	60 (15.4)
2 nd stage	141 (36.2)	51 (13.1)	192 (49.2)
3 rd stage	40 (10.3)	24 (6.2)	64 (16.4)
4 th stage	55 (14.1)	19 (4.9)	74 (19.0)
Total	274 (70.3)	116 (29.7)	390 (100)
Other chronic disease			
Yes	80 (20.5)	8 (2.1)	88 (22.6)
No	194 (49.7)	108 (27.7)	302 (77.4)
Total	274 (70.3)	116 (29.7)	390 (100)
Age of onset			
<45 years	125 (32.1)	66 (16.9)	191 (49.0)
=>45 years	149 (38.2)	50 (12.8)	199 (51)
Total	274 (70.3)	116 (29.7)	390 (100)
Side effect of treatment			
Yes	92 (23.6)	31 (7.9)	123 (31.5)
No	182 (46.7)	85 (21.8)	267 (68.5)
Total	274 (70.3)	116 (29.7)	390 (100)
Duration of treatment			
<=5 years	194 (49.7)	98 (25.1)	292 (74.9)
>5 years	80 (20.5)	18 (4.6)	98 (25.1)
Total	274 (70.3)	116 (29.7)	390 (100)

CMDs were analyzed using bivariate and multivariate logistic regressions. Statistical significance of the results was tested using the *P*-value, confidence interval and judged at the 5% level. The variables which fulfill the minimum criteria ($P < .2$) were considered for inclusion in the multivariate logistic regression analysis. Only the associations in the multivariate analysis which are statistically significant (P -value $< .05$) were included in the final results.

Result

From a total sample size of 396, 390 of the respondents were interviewed with a response rate of 98.4%. Six questionnaires were found to be incomplete and hence excluded from the final analysis. More than half, 230 (59%) of the participants were women and 197 (50.5%) were living in an urban setting. Out of the total study participants, 97 (24.9%) were unemployed and nearly half, 180 (46.2%) had no formal education (Table 1).

Clinical Characteristics of Study Participants

More than one-third, 152 (39.0%) of the respondents had a family history of cancer and about two-thirds, 278 (71.3%) were living with cancer for more than a duration of 1-year (Table 2).

From the total study participants only 5% had reported receipt of strong social support, whereas nearly two-thirds of them had reported poor social support (Figure 1).

Psychoactive Substances Related Factors

Concerning the psychoactive substances, 33 (8.5%) of the study participants used a psychoactive substance at least once in their lifetime (Table 3).

The distribution of data collected using SRQ-20 scores showed a median score of 10. We considered 8(eight) as a cut-off point in a clinical setting to determine the prevalence of CMD in the study. Based on the cut-off point ($SRQ \geq 8$), the overall prevalence rate of CMD was found to be 274 (70.3%);

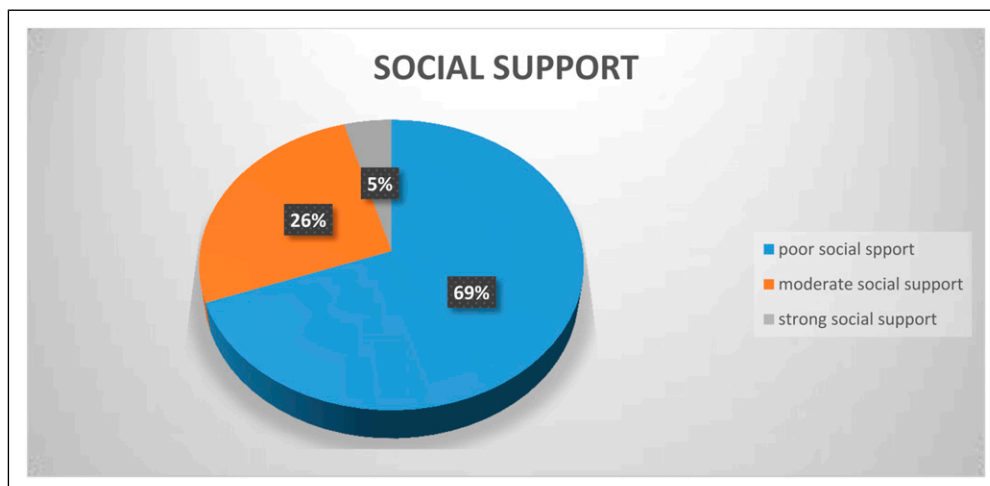


Figure 1. Social support level of study participants among Black lion specialized hospital (n = 390).

Table 3. Psychoactive substance uses of study participants at Black Lion Specialized (n = 390).

Variables	CMD		Total frequency (%)
	Yes Frequency (%)	NO Frequency (%)	
Ever used substance?			
Yes	29 (7.4)	4 (1.0)	33 (8.5)
No	245 (28.7)	112 (28.7)	357 (91.5)
Total	274 (70.3)	116 (29.7)	390 (100.0)
Current use of substance			
Yes	76 (19.5)	17 (4.4)	93 (23.8)
No	198 (50.8)	99 (25.4)	297 (76.2)
Total	274 (70.3)	116 (29.7)	390 (100)

of which the prevalence rate was lower (67.8%) among men and higher (73.5%) among women in the last 4 weeks.

Factors Associated With CMD

In the multivariate logistic analysis, covariates such as sex, occupational status, average monthly income, duration of treatment, substance use, family history of cancer and social support had statistically significant association with CMD at ($P \leq .05$).

Being women was 1.74 times more likely to manifest symptoms of CMD than men (AOR = 1.741; 95% CI: 1.003, 3.021). The likelihood of having a common mental disorder was 3 times higher among unemployed participants compared to employed respondents (AOR = 3.035; 95% CI: 1.370, 6.723).

Respondents whose average monthly income is less than 1600 birr were 2.84 times more likely to manifest symptoms of

common mental disorders as compared to those whose earning is greater than 1600 Birr (AOR = 2.838; 95% CI: 1.585, 5.081).

Those respondents who were on treatment for longer than 5 years were two and half times more likely to develop CMD compared to those who spent less than 5 years on treatment (AOR = 2.653; 95% CI: 1.399, 5.031). The likelihood of having common mental disorder is higher among participants who reported poor social support compared to those who had strong social support (AOR = 3.618, 95% CI: 1.335, 9.804).

Current users of substances were 6.85 times more at risk of having symptoms of CMD than non-users (AOR = 6.852; 95% CI: 2.038, 23.034). The odds of having CMD were 5 times higher among respondents who had a family history of cancer than their counterparts (AOR = 5.151; 95% CI: 2.421, 10.959). (Table 4).

Discussion

A total of 390 patients were enrolled in this study and the prevalence of CMD was found to be 70.3%. The prevalence level (70.3%) in the present study was higher than previous findings such as World Mental Health Surveys (WMHS) which is 18.4%, Israel-World Mental Health Survey (22.1%), Kenya (10.8%) and South Africa (34.9%).^{7,10-13} The reason for the difference in prevalence level could be the result of the difference in the diagnostic tool and the period at which the study was conducted. The previous studies used DSM-IV diagnostic tool to determine the prevalence of CMD, whereas our study used (SRQ-20) screening tool to estimate the prevalence of CMD. SRQ-20 questionnaire was subsequently used for epidemiological studies in clinical and community settings in Ethiopia and a cut-off points of 8 was recommended for general clinical setting. Another possible difference for the findings could be the period at which the studies were conducted. More specifically, this study was conducted

Table 4. Predictors of CMD among cancer patients at Black Lion Specialized Hospital (n = 390).

Variables	CMD		COR (95%CI)	AOR (95%CI)
	YES	No		
Sex				
Men	156	74	1.00	1
Women	118	42	1.33(1.333, .852)	1.741(1.003, 3.021)*
Occupational status				
Government employed	50	32	1.00	1
Self employed	158	53	1.908(1.110, 3.280)	3.042(1.576, 5.872)**
Unemployed	66	31	1.363(.736, 2.522)	3.035(1.370, 6.723)**
Average income				
<=1600	136	74	.559(.358, .874)	2.838(1.585, 5.081)**
>1600	138	42	1.00	1
Social support				
Poor	190	72	2.419(1.022,5.727)	3.618(1.335, 9.804)*
Moderate	72	33	2.000(.800,4.999)	2.465(.852, 7.129)
Strong	12	11	1.00	1
Duration of treatment				
<=5 years	194	98	1.00	1
>5 years	80	18	2.245(1.275,3.95)	2.653(1.399, 5.031)**
Current use of substance				
Yes	29	4	3.314(1.138,9.653)	6.852(2.038, 23.034)**
No	245	112	1.00	1
Family hx of cancer				
Yes	138	14	7.393(4.030, 13.562)	5.151(2.421, 10.959)**
No	136	102	1.00	1

CI, confidence interval; OR, odds ratio (adjusted), Hx, history.

*Statistically significant variables (P < .01).

**Statistically significant (P < .05).

during the era of COVID-19, and this is expected to add more burden on mental health than ever before.

The present finding revealed that sex, occupational status, average monthly income, duration of treatment, substance use, family history of cancer and social support had statistically significant association with CMD.

In this study women were 1.7 times more likely to experience CMDs compared with men. Similarly, different studies showed that women were more likely to develop CMD than men.²⁷⁻²⁹ This increased risk among women could be due to cultural and hormonal factors, negative attitudes towards women, lack of recognitions for women's work, fewer opportunities for women in education and employment, and greater risk of domestic violence for women which can increase the risk of CMD.²⁸ Moreover, there are evidences which reported that progesterone metabolites and estrogen levels typically decrease during the premenstrual phase and remain low through the early follicular phase. These hormones modulate neurotransmitter levels (e.g., serotonin, GABA, dopamine, norepinephrine) that are hypothesized to play an important role in the development and maintenance of psychological disorders, in particular anxiety and depression.^{28,29}

Poor social support level was found to be associated with an increased risk of CMDs. Those respondents with poor social support were three folds more likely to develop CMDs compared to those with strong social support. This finding is in line with different research findings.^{27,30,31} There is an evidence which showed that the impact of better social support on mental health could be as a stress buffer, whereby social support improves the wellbeing of those under stress by acting as a moderator of stress.¹⁷

Low income is reported to have a significant association with common mental disorders. In our study, participants who earn less than 1600 ETB (Ethiopian Birr) per month were twice more likely to develop common mental disorders compared to those who earn more than 1600 ETB. This might be due to the notion that an inadequate income can lead to stressful and insecure situations, which may further elicit CMDs. To this end, reports indicate that people who were experiencing poverty face difficulties to fulfill basic needs, unable to afford treatment costs and it interferes with their abilities to participate in productive activity conditions which eventually increases risk of CMD.¹⁷ Therefore, this finding is consistent with other research findings.^{17,25,31}

The odds of having CMD is three times higher among the unemployed participants compared with those who were employed. This finding is in line with another finding which reported that unemployment is associated with the development and maintenance of common mental disorders.³⁰ This implied unemployment increases the likelihood of the onset of or delayed recoveries from episodes of common mental disorders, and greater subjective financial strains in people who are economically poor or unemployed.

Our finding which disclosed that the odds of having a common mental disorder were six times higher among psychoactive substance users than non-users was consistent with a study among Taiwanese consumers of commercial low-dose computed tomography lung cancer which showed that being a current-user of psychoactive substance is a consistent risk factor for CMD.⁶ The other hypothesis related to the effect of psychoactive use include: barriers to community involvement accommodation difficulties, stigma and shame, the negative effects on appearance and other people, stained fingers and teeth, the smell of tobacco which were additional stress on the individual and potentially increase the risk of CMD.^{32,33}

Respondents who had a family history of cancer were more than five times more likely to develop a common mental disorder. Respondents who were on treatment for longer than 5 years were twice more likely to manifest CMD compared to those who were on treatment for less than 5 years. Treatment side effects and delay of treatment outcomes increase the chance of developing CMD symptoms. The finding of this study is consistent with previous studies.^{10,16,24}

The findings of this study should be viewed with the following limitations¹: since this study was conducted during the era of Covid-19 pandemic, psychological distress and pandemic related depression may have overestimated the findings.² The present study did not explore CMD among the general population in the study area for comparison purpose for more reasonable attributions or explanations in relation to cancer patients.

Conclusion and Recommendation

Conclusion

The findings of this study revealed that common mental disorders are major health problems among cancer patients. The prevalence of CMDs among cancer patients is high. Among cancer patients, CMDs were discovered to be more prevalent among females, current psychoactive substance users, people with a family history of cancer, low social support, people who have been through treatment for more than 5 years, people who make less than 1600 ETB per month, and people who are unemployed.

Recommendation

Based on the results of this study, the following recommendations are made:

- Cancer patients need the special attention of physicians, clinical psychologists, and other healthcare professionals to assess them for possible mental disorders and to provide them with emotional support at the proper time.
- Socio-emotional support from close friends and family members may help to cope with symptoms of distress emerging from common mental disorders.
- It may also be suggested for the need to provide distress screening and management mechanisms at the healthcare level to meet the mental health needs of cancer patients.
- And the need also to improve women's social position, economic status, and social networking of the cancer patients appears important.

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Declaration of Conflicting Interests

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Ethical Approval

This study was conducted in accordance with the statement of ethical principles for medical research as declared by Helsinki. Ethical approval was obtained from the Institutional Review Board of Rift Valley University with a Ref, No, RVU/306/2020 (see the attached supplement letter). A support letter was secured from the administration of Black Lion Specialized Hospital. A formal approval was received from the hospital's cancer department. Each subject provided verbal informed consent prior to data collection.

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