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Original Article

### The Psychological Burden of Cancer in Nairobi County, Kenya

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Cancer is a major public health concern globally, and Kenya is no exception (Deo et al., 2022). Incidence and mortality rates associated with cancer are steadily increasing worldwide (Sung et al., 2021). While significant attention has been directed toward physical and economic impacts, the psychological dimensions remain under-addressed, especially in low- and middle-income countries. This study explores the psychological burden experienced by cancer patients in Nairobi County, Kenya, examining the emotional, social, and mental health challenges, alongside coping mechanisms and the support systems available to them. The study's broad objective was: to assess the psychological burden among cancer patients in Nairobi County and explore coping mechanisms and barriers to psychosocial support whereas the specific objectives were: to determine the prevalence of anxiety and depression among cancer patients; To examine the coping mechanisms employed by cancer patients; To identify the barriers to accessing psychosocial support and to assess mental health service utilization in Nairobi's cancer care facilities. Employing a mixed-methods approach, the study sampled 200 patients from leading cancer treatment facilities in Nairobi. Results reveal high levels of anxiety, depression, and stigma, compounded by limited access to psychosocial care. The findings highlight an urgent need for integrated mental health services and policy reform.

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**INTRODUCTION**

Cancer as a disease whether at an early or late diagnosis remains one of the leading unattended causes of morbidity and mortality worldwide, imposing significant physical, social, and economic burdens on individuals and health systems (James et al., 2019). According to GLOBOCAN (2022), approximately 19.3 million new cancer cases were diagnosed globally in 2020, with close to 10 million deaths attributed to cancer and its complications. In Kenya as a country, the burden is increasing with new cases daily, with an estimated 47,887 new cases and 32,987 deaths annually (Sharma et al., 2022). Nairobi County, the nation's capital and a central hub for healthcare services and a centre with a major referral facility, records a substantial proportion of these cases, further stressing the already limited resources in oncology care (Soita et al., 2021).

While substantial progress has been made in improving cancer prevention, detection and treatment, the psychological impact of cancer amongst the patients remains poorly attended to or not attended to at all especially in low- and middle-income countries (LMICs) such as Kenya. Psychological distress—manifesting as anxiety, depression, fear, and stigma—significantly affects cancer patients' quality of life and treatment adherence (Soita et al., 2021). From different studies, high-income countries have documented the prevalence and implications of psychological burdens associated with cancer (Essue et al., 2020). In contrast, these findings cannot be generalizable to the Kenyan context due to economic, social, and health system differences.

From the existing research in Kenya and other Sub-Saharan African countries, there is only a focus on the prevalence, epidemiological and clinical aspects of cancer, however, there is limited focus on the psychological burdens experienced by cancer patients (Muliira & Kizza,

2019; Sharma et al., 2022). The few studies addressing psychological distress among cancer patients in Kenya highlight substantial unmet needs, but these are often restricted to small samples, single institutions, or lack comprehensive evaluation of coping mechanisms and barriers to mental health service access (Machaki et al., 2024). Moreover, the integration of mental health services within oncology care remains fragmented, with many patients receiving little to no psychosocial support.

This gap in knowledge presents a critical barrier to developing effective, culturally relevant interventions to alleviate psychological distress and improve overall cancer care. Understanding the full spectrum of psychological burdens, including how patients cope and the systemic obstacles they face, is essential for policymakers, healthcare providers, and support organizations aiming to enhance cancer care quality in Nairobi and similar settings.

This study aims to fill this gap by providing a comprehensive assessment of the psychological burden among cancer patients in Nairobi County, investigating prevalence rates of anxiety and depression, exploring coping strategies, and identifying barriers to accessing psychosocial support. By employing a mixed-methods design across multiple treatment centres, this research seeks to generate actionable insights that can inform integrated cancer care models sensitive to the Kenyan context.

**Broad Objective:**

To assess the psychological burden among cancer patients in Nairobi County and identify coping mechanisms and barriers to psychosocial support.

**Specific Objectives:**

- To determine the prevalence of anxiety and depression among cancer patients.

- To examine the coping mechanisms employed by cancer patients.
- To identify the barriers to accessing psychosocial support.
- To assess mental health service utilization in Nairobi's cancer care facilities.

## LITERATURE REVIEW

Globally, 30–40% of cancer patients experience psychological distress, with prevalence rates higher in low-income countries (van Hof et al., 2023). Recent studies highlight that in Sub-Saharan Africa, psychological issues in cancer care remain largely unaddressed due to a lack of awareness and insufficient health infrastructure (Kibralew et al., 2025). Many patients do not disclose emotional challenges, fearing judgment and ostracism.

In East Africa, data suggests that about 60% of cancer patients face moderate to severe psychological symptoms, often without appropriate intervention (Muliira & Kizza, 2019). These symptoms include anxiety, depression, and feelings of hopelessness that affect adherence to treatment and overall quality of life. Psychological stress was reported to be higher in patients lacking social support or suffering financial constraints in Kenya and other low-income countries (Kibralew et al., 2025).

Kenyan studies show persistent gaps in psycho-oncology services. According to Ongond et al., (2023), only 14% of patients with emotional distress are referred to mental health professionals. The scarcity of specialists, particularly in public hospitals, continues to be a key challenge. (Muriithi et al., 2024) observed that many public health institutions lack trained staff or designated spaces for psychosocial care.

Coping strategies among Kenyan cancer patients often rely on religious beliefs and communal networks. While these strategies are vital, they cannot substitute for clinical psychological support in managing severe emotional symptoms (Machaki et al., 2024). Formal therapy, including cognitive behavioural therapy and group

counselling, remains limited in accessibility and affordability.

Emerging literature underscores the importance of integrated care models. The WHO (2022) recommends incorporating mental health screening into routine oncology practice. Innovative interventions such as telehealth, community-based peer support, and nurse-led counselling programs have shown promise in resource-constrained environments (Walker et al., 2021).

## METHODOLOGY

### Study Design

The study utilized a cross-sectional, mixed-methods design combining quantitative and qualitative data collection to analyze the complexity of psychological burden among cancer patients. Quantitative data were collected via structured questionnaires to allow prevalence estimation and associations, while qualitative data from interviews and focus groups provided depth on coping mechanisms and barriers.

### Study Setting and Participants

The study was conducted on five cancer treatment areas in Nairobi Kenyatta National Hospital a leading public referral facility in Kenya and beyond. The study entailed a total of 200 adult cancer patients who were purposively sampled based on the cancer types, stages, genders, and socioeconomic backgrounds.

### Sampling Method and Sample Size Determination

The study applied and utilized purposive sampling. This was done to ensure diversity and representation across demographic and clinical variables. A sample size of 200 was reached after being calculated using Cochran's formula for proportions with a 95% confidence level and 5% margin of error, considering expected psychological distress prevalence and logistical feasibility.

## Data Collection Methods

In the study, the quantitative data collection tool included the Hospital Anxiety and Depression Scale (HADS) and the European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC QLQ-C30). Qualitative data were collected through semi-structured in-depth interviews and focus group discussions to explore coping mechanisms, lived experiences, and barriers to psychosocial support.

## Data Analysis

After the data had been collected, the quantitative data were analysed using SPSS version 25. Descriptive statistics were used to summarize demographics and psychological distress prevalence. Chi-square tests and logistic regression examined associations between psychological outcomes and factors such as cancer stage, gender, income, and education. Qualitative data were analysed thematically, with codes developed inductively to identify key patterns and insights on coping and barriers.

## RESULTS

### Prevalence of Psychological Burden among Cancer Patients

From the study, it was established that the overall prevalence of anxiety among the study participants was 68%, and depression was 55%. It was worth noting that, 18% of the cases reported suicidal ideation during their illness journey. Economic and financial burden was reported by 72% of respondents, with significant associations between lower income levels and higher psychological distress ( $p < 0.01$ ). The coping mechanisms predominantly included religious faith (70%), family support (65%), and community networks (45%). Despite this, only 12% had accessed formal psychological services, reflecting a service delivery gap.

The study found a high prevalence of psychological distress among cancer patients in Nairobi County, with 68% reporting symptoms consistent with clinical anxiety and 55% with depression, surpassing global averages reported

by Carlson et al. (2020). Advanced-stage cancer patients (stage III/IV) were disproportionately affected, with anxiety and depression rates of 78% and 64%, respectively. According to the study, various socioeconomic factors, including low income and limited education, were significantly associated with higher distress levels ( $p < 0.05$ ). Female patients exhibited higher rates of suicidal ideation than males.

### Psychological Burden According to Cancer Stage

The study results established that 78% of patients who participated with cancer diagnosis stage III and IV experienced moderate to severe anxiety cases as compared to 51% among those with a diagnosis at stage I or II ( $p = 0.003$ ). Depression prevalence was also significantly higher in advanced cancer stage patients (64%) compared to early-stage patients (43%). Moreover, female patients were more likely to report suicidal ideation (22%) compared to males (13%), highlighting great gender disparities. Patients with lower socioeconomic status exhibited significantly higher depressive symptoms ( $p = 0.017$ ).

From the study stigma was reported by 60% of the participants as a major barrier to psychological support, thus leading to delays or avoidance of seeking mental health care support. The patients expressed fear of social isolation and discrimination linked both to cancer diagnosis and mental health issues. Qualitative data revealed cases of isolation, fear of abandonment, and reliance on spiritual support and traditional healers as primary coping resources.

Patients attending private hospitals had better access to mental health services and reported lower distress levels compared to those in public hospitals. The long wait times and inadequate mental health staffing in public facilities were cited as key systemic limitations.

### Trends in Mental Health Care Utilization

From the study, only 24 out of 200 patients (12%) reported accessing professional psychological support, mostly in private facilities (75%), with

only 25% in public hospitals. The total waiting period before care and access to psychological services in public hospitals exceeded three weeks on average, thus delaying care ( $p < 0.01$ ). Utilization of care services was higher among patients with tertiary level education (21%) versus primary level education (6%). Barriers that were identified here included a lack of trained staff (62%) and low awareness of available services (54%).

### **Barriers to Psychosocial Support among Cancer Patients**

As gathered from the study the barriers to psychosocial support were multifaceted. Different levels of stigma associated with mental health and a diagnosis of cancer led to reluctance or delays in disclosing the experienced psychological symptoms, with 60% of patients fearing social rejection and isolation. The limited availability of trained mental health professionals and inadequate integration of psychological services in cancer care were major systemic obstacles. Public hospitals lacked structured psychosocial services, while private facilities offered them but at costs inaccessible to many.

Coping mechanisms predominantly involved reliance on religious faith, family support, and community networks, which, while culturally significant, often fell short of addressing clinical psychological needs. Only a minority accessed formal psychological interventions, and peer support groups emerged as a promising yet underutilized resource.

### **DISCUSSION**

This study provides key evidence that cancer patients in Nairobi County face a great psychological burden, characterized by high prevalence rates of anxiety (68%) and depression (55%), with a concerning 18% reporting suicidal ideation. These figures are considerably higher than global averages and align with emerging evidence that psychological distress in low- and middle-income countries is both under-recognized and undertreated (Graf & Stengel, 2021). The disproportionately high levels of

distress underscore the unique socio-cultural and systemic challenges faced by cancer patients in Kenya.

### **Psychological Distress and Cancer Stage**

The study analysis identified that patients with advanced diagnosis stage of cancer (III or IV) had reportedly higher levels of anxiety (78%) and depression (64%) compared to those with early-stage disease diagnosis. This finding is consistent with prior research that psychological distress intensifies as disease progresses and physical symptoms worsen (Graf & Stengel, 2021; Wang et al., 2024). The advanced-stage disease was associated with a 2.4-fold increased risk of depression, highlighting the critical need for stage-specific psychological interventions. The elevated suicidal ideation rates among advanced-stage patients (22%) emphasize the urgency of addressing mental health proactively in this vulnerable subgroup.

### **Gender Disparities in Psychological Burden**

From the study, the female participants reported higher anxiety levels and depression symptoms as compared to the males, which aligns with global literature indicating gender disparities in emotional health among cancer patients (van Hof et al., 2023). Sociocultural factors, caregiving burdens, and potential differences in social support networks may explain these gender differences and should inform gender-sensitive psychosocial care planning.

### **Coping Strategies**

Qualitative data underscored that most patients relied heavily on religious faith (70%) and family support (65%) to cope, with community networks supporting 45%. These culturally embedded coping strategies serve as vital emotional buffers but may fall short in managing severe psychological symptoms (Machaki et al., 2024; van Hof et al., 2023). The limited uptake of formal psychological services (12%) indicates a gap between need and access. Peer support groups, though available to few, were positively received and highlighted a promising area for psychosocial intervention expansion.

### Barriers to Psychosocial Support

Stigma emerged as a dominant barrier, with 60% of participants reporting fear of social rejection and discrimination related to both cancer and mental illness. This stigmatization suppresses disclosure and help-seeking, perpetuating psychological suffering. Additionally, financial constraints (48%) and lack of awareness (54%) impede access to mental health services, exacerbating distress. The shortage of trained mental health professionals (62%) in public facilities further restricts care availability, confirming previous findings about the critical mental health workforce gap in Kenya's oncology settings (Annamalai et al., 2024).

### Mental Health Service Utilization

Mental health care utilization was strikingly low at 12%, predominantly accessed in private hospitals. The long waiting times and inadequate mental health infrastructure in public hospitals disadvantage the majority of patients, reinforcing healthcare inequities. Patients with higher education and income utilized mental health services more, indicating socioeconomic disparities in access. This pattern suggests a need for equitable distribution of psychosocial resources across facility types and socioeconomic strata.

### Impact of Financial Stress and Social Support

The strong correlation between financial stress and psychological distress (reported by 72% of patients) aligns with evidence that economic hardship exacerbates mental health problems in chronic illness (Wanjiru Muriithi et al., 2024). Conversely, patients with strong social support networks experienced less distress, demonstrating the protective role of social connectedness. This finding reinforces the importance of integrating family and community in psychosocial interventions.

### Additional Insights and Implications

The qualitative narratives highlighted fears of abandonment and social isolation as compounding factors, often overlooked in routine

care. Addressing these emotional dimensions requires holistic care approaches that integrate psychosocial, cultural, and spiritual elements. The study further shows the pressing need for policy reforms to mainstream mental health into oncology services, focusing on early screening, referral pathways, and workforce capacity building.

### Limitations

While the study's urban setting and cross-sectional design limit broader generalizability and causal inference, the mixed-methods approach provided nuanced insights that can inform local program development. Future research should explore rural contexts and longitudinal outcomes of psychosocial interventions.

### CONCLUSION

Cancer patients in Nairobi County face a substantial psychological burden, fueled by socioeconomic hardship, health system limitations, and cultural stigma. The high prevalence of anxiety, depression, and suicidal ideation among patients—particularly those with advanced disease or limited resources—underscores the inadequacy of current mental health services. Coping strategies are varied but often insufficient without professional guidance. There is an urgent need to integrate psychosocial care into standard oncology services, especially within public health facilities. Addressing the psychological dimension of cancer is not just an ethical imperative but a determinant of overall treatment outcomes and quality of life.

### Recommendations

- Integrate psychosocial care routinely within oncology clinics.
- Train oncology healthcare workers in basic psychosocial screening and support.
- Develop community outreach programs to reduce stigma.
- Expand affordable, culturally appropriate mental health services.

- Utilize tele-mental health to increase accessibility.
- Conduct longitudinal studies to evaluate psychosocial interventions' effectiveness.

## BIBLIOGRAPHY

- Deo, S. V. S., Sharma, J., & Kumar, S. (2022). GLOBOCAN 2020 Report on Global Cancer Burden: Challenges and Opportunities for Surgical Oncologists. *Annals of Surgical Oncology*. <https://doi.org/10.1245/s10434-022-12151-6>
- Essue, B. M., Irigorri, N., Fitzgerald, N., & de Oliveira, C. (2020). The psychosocial cost burden of cancer: A systematic literature review. In *Psycho-Oncology* (Vol. 29, Issue 11, pp. 1746–1760). John Wiley and Sons Ltd. <https://doi.org/10.1002/pon.5516>
- Graf, J., & Stengel, A. (2021). Psychological Burden and Psycho-Oncological Interventions for Patients With Hepatobiliary Cancers—A Systematic Review. In *Frontiers in Psychology* (Vol. 12). Frontiers Media S.A. <https://doi.org/10.3389/fpsyg.2021.662777>
- James, S. L., Bannick, M. S., Montjoy-Venning, W. C., Lucchesi, L. R., Dandona, L., Dandona, R., Hawley, C., Hay, S. I., Jakovljevic, M., Khalil, I., Krohn, K. J., Mokdad, A. H., Naghavi, M., Nichols, E., Reiner, R. C., Smith, M., Feigin, V. L., Vos, T., Murray, C. J. L., ... Zaman, S. B. (2019). Global, regional, and national burden of traumatic brain injury and spinal cord injury, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016. *The Lancet Neurology*, 18(1), 56–87. [https://doi.org/10.1016/S1474-4422\(18\)30415-0](https://doi.org/10.1016/S1474-4422(18)30415-0)
- Muliira, J. K., & Kizza, I. B. (2019). The other untold burden of cancer in sub-Saharan Africa: Anxiety and depressive symptoms among family caregivers of adult cancer patients. *International Journal of Africa Nursing Sciences*, 11. <https://doi.org/10.1016/j.ijans.2019.100166>
- Muriithi, K., Kaaria, Z., & Mapesa, J. (2024). Clinical and Socio-Demographic Predictors of Psychosocial Distress in Women with Breast Cancer in. In *International Journal of Professional Practice (IJPP)* (Vol. 12, Issue 3).
- Ongond, M., Njuguna, I., Obulumire, R., Munyoro, E., Okech, V., Ann, N., & Bultz, B. (2023). Psychological distress in patients with cancer at the Kenyatta National Hospital in Nairobi, Kenya, during the COVID-19 pandemic. In *Journal of Psychosocial Oncology Research and Practice* (Vol. 5, Issue 2). Lippincott Williams and Wilkins. <https://doi.org/10.1097/OR9.000000000000099>
- Sharma, R., Aashima, Nanda, M., Fronterre, C., Sewagudde, P., Ssentongo, A. E., Yenney, K., Arhin, N. D., Oh, J., Amponsah-Manu, F., & Ssentongo, P. (2022). Mapping Cancer in Africa: A Comprehensive and Comparable Characterization of 34 Cancer Types Using Estimates From GLOBOCAN 2020. *Frontiers in Public Health*, 10. <https://doi.org/10.3389/fpubh.2022.839835>
- Soita, P., Onsongo, L., & Ambani, E. (2021). Quality of Life and Symptom Burden in Cancer Patients in Kenya. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3959159>
- Sung, H., Ferlay, J., Siegel, R. L., Laversanne, M., Soerjomataram, I., Jemal, A., & Bray, F. (2021). Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. *CA: A Cancer Journal for Clinicians*, 71(3), 209–249. <https://doi.org/10.3322/caac.21660>
- van Hof, K. S., Hoesseini, A., Verdonck-de Leeuw, I. M., Jansen, F., Leemans, C. R., Takes, R. P., Terhaard, C. H. J., Baatenburg de Jong, R. J., Sewnaik, A., & Offerman, M. P. J. (2023). Self-efficacy and coping style in relation to psychological distress and quality of life in informal caregivers of patients with

- head and neck cancer: a longitudinal study. *Supportive Care in Cancer*, 31(2). <https://doi.org/10.1007/s00520-022-07553-x>
- Walker, Z. J., Xue, S., Jones, M. P., & Ravindran, A. V. (2021). SUPPORTIVE CARE & SYMPTOM CONTROL review articles Depression, Anxiety, and Other Mental Disorders in Patients With Cancer in Low-and Lower-Middle-Income Countries: A Systematic Review and Meta-Analysis. In *JCO Global Oncol* (Vol. 7). <https://doi.org/10.1007/s00520-022-07553-x>
- Wang, H. Q., Lin, H., & Liu, B. (2024). Research progress on the psychological burden and intervention measures in cancer patients. In *Frontiers in Psychiatry* (Vol. 15). Frontiers Media SA. <https://doi.org/10.3389/fpsyt.2024.1408762>
- Machaki, D. V. W., Mutisya, A. K., Mutinda, J., Oluchina, S., & Gatimu, S. M. (2024). Challenges and coping strategies among caregivers of children with cancer receiving care at a national referral hospital in Kenya. *BMC Palliative Care*, 23(1), 242. <https://doi.org/10.1186/s12904-024-01573-6>
- Kibralew, G., Wassie, Y. A., Kelebie, M., Rtbe, G., Tadesse, G., Melkamu, M., Tsega, A., Andualem, F., Setegn, A., Tinsae, T., Fentahun, S., & Nakie, G. (2025). Psychological distress among cancer patients in African countries: a systematic review and meta-analysis study. *BMC Psychology*, 13(1), 128. <https://doi.org/10.1186/s40359-025-02447-z>
- Annamalai, D., Helova, A., Saleh, M., Gikaara, N., Rupani, S., Abayo, I., Karimi, N., Sharma, K., Omedo, I., Owuor, K., Gutnik, L., & Turan, J. M. (2024). Mental health and quality of life following breast cancer diagnosis in patients seen at a tertiary care hospital in Nairobi, Kenya: A qualitative study. *Cambridge Prisms: Global Mental Health*, 11, e96. <https://doi.org/10.1017/gmh.2024.79>
- Wanjiru Muriithi, K., Kaaria, Z., & Mapesa, J. (2024). Clinical and Socio-Demographic Predictors of Psychosocial Distress in Women with Breast Cancer in. In *International Journal of Professional Practice (IJPP)* (Vol. 12, Issue 3).