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Original Research Article

DEPRESSION AND DEATH ANXIETY AMONG ONCOLOGY PATIENTS: THE ROLE OF DEMOGRAPHICS AND THEIR INTERRELATIONSHIP

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ABSTRACT

Background: The the differences in demographics related to depression and death anxiety in oncology patients and evaluates how depression predicts the formation of death-related fear. **Methods and Results:** Data were also collected using descriptive-comparative, cross-sectional design, and 180 cancer patients based on age, gender, and residential background. The Hamilton Rating Depression Scale (2015 adaptation) was used to measure psychological distress and the Death Anxiety Scale (Dhar-Mehta Version). Mann-Whitney U tests demonstrated that depression and anxiety about death were significantly larger in older people, females, and patients who were not of tribal origin, and urban/non-tribal residents, which means that the demographic factors played a significant role in the emotional well-being. Correlation analysis demonstrated a moderate positive relationship between depression and death anxiety ($r = 0.439$, $p < 0.001$), with regression results confirming depression as a significant predictor, explaining 19.2% of the variance. **Conclusions:** The findings indicate that earlier psychological screening, culturally-specific counselling, and customised interventions are required to serve vulnerable groups of patients. Incorporations of mental-health care within the oncology practice may improve the overall quality of life, level of treatment adherence, and coping.

INTRODUCTION

Cancer remains among the greatest health problems in the world, and the recent global estimates indicate that it has seen a drastic increase in incidence and emotional burden in patients.[1,2] The growing cancer rate has increased the necessity to learn its psychological effects especially in some countries such as in India where the psycho-oncology support machinery is still developing.[3] Depression is one of the most prevalent psychological challenges that oncology patients face, including the adherence to treatment, the emission of emotional strength, and the quality of life.[4,5] Past experiences of Indian populations also reveal a great psychosocial distress and particularly in women, which implies that demography is a critical determinant of emotional reaction during cancer therapy.[6]

Death anxiety is another significant psychological issue that is a profound fear of death and dying that affects the perception of illness and the emotional processing.[7] The current evidence indicates that cancer patients and their caregivers still have a high level of death anxiety that depends upon the stage of the disease, their suffering, and sociocultural backgrounds.[8] The psycho-therapeutic interventions were proved to decrease the death-related fears, which proves the necessity to comprehend the aspects of the impact of this emotional reaction.[9] International surveys also confirm that pain, depression, and anxiety often occur together in groups of cancer patients, which speaks to the fact that emotional distress are interconnected.[10,11] Other sociocultural and psychological causes like the sense of coherence, meaning-making, and perceived support are also important contributors to death anxiety.[12]

Cognitive-behavioral therapy has been proposed as one of the psychological interventions that significantly decrease depression and anxiety in cancer patients.[13] Complementary treatment approaches such as yoga have also been discovered to elevate mood, biological stressful indicators, and emotional health levels in patients under medication.[14] Also, there are strong evidences of early palliative care to lessen suffering and improve

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emotional results in advanced cancer.[15] The literature in the field of psycho-oncology cites increasing trends in full-scale psychological care and future-oriented practice in the field of oncology.[16] Although a lot of work has been done worldwide, little has been done on the Indian side concurrently relating the difference in demographic variations on depression and death anxiety as well as their interactions. This study fills this gap by considering demographic differences and finding out whether depression plays a significant role in predicting death anxiety among the oncology patients.

Objective and Hypothesis

This study aims to examine how demographic factors—age, gender, and residence—are associated with depression and death anxiety among oncology patients and to determine whether depression significantly predicts death anxiety. Based on previous evidence, it is hypothesized that demographic categories will show significant differences in depression and death anxiety, and that depression will be positively and significantly associated with death anxiety, with higher depression predicting higher death anxiety levels.

MATERIALS AND METHODS

Sample: The study design was a descriptive-comparative cross-sectional research design to measure depression and death anxiety in oncology patients. A total of 180 patients participated. They were stratified according to age (18–30 years: 90; 31–60 years: 90) and gender (female: 85; male: 95) and place of residence (rural/tribal: 90; urban/non-tribal: 90).

Inclusion criteria were: confirmed diagnosis of cancer, current treatment, age between 18 and 60 years, and the capacity to comprehend questionnaires, and willingness to take part. Severely psychiatrically ill patients, those who are cognitively impaired or have no possibility to communicate were not included.

Data Collection Procedure: Eligible patients were approached during treatment or consultations. After informed consent was obtained, participants completed standardized questionnaires in a supportive environment. Each assessment took approximately 25–30 minutes.

Tools Used: The researchers used two psychological standardized assessment tools to evaluate emotional distress in oncology patients. The level of depression was measured with the help of the Hamilton Rating Depression Scale (2015 adaptation), which is one of the most validated scales used to determine the severity of depressive symptoms by using clinician-rated questions. To assess fear of mortality, a death anxiety scale (Dhar–Mehta Version) was used and it is specifically aimed at capturing culturally specific manifestations of death-related anxiety in the Indian context. Collectively, these resources offered sufficient and valid data about the psychological conditions of patients, which allowed assessing the connection between depression, death anxiety, and demographic differences accurately.

Statistical Analysis: Data were analyzed using SPSS 25.0. Non-normal distribution ($p < .001$) was used and therefore, Mann–Whitney U tests were used to compare groups. Relationships and predictive effects were evaluated by using Pearson correlation and simple linear regression.

RESULTS

This study aims to describe how certain demographic factors including age, sex, and area of residence, alongside symptoms of depression and death anxiety, influence the inclination to live among patients diagnosed with cancer. The desire to live showed different psychological and demographic characteristics, indicating the desire to live in various and predicting the life-affirming attitudes of this population.

Table 1: Descriptive Statistics for Depression and Death Anxiety (N = 180)

Variable	Minimum	Maximum	Mean	SD (Std Deviation)
Depression Score	9	46	34.68	6.74
Death Anxiety Score	1	10	6.74	2.62

HRDS = Hamilton Rating Depression Scale; DAS = Death Anxiety Scale.

Table 2: Mann–Whitney U Test for Age, Gender & Residence Differences

Variable	Comparison	Mann–Whitney U	Z Value	p-value
Depression	18–30 vs 31–60	2653.50	-4.06	<0.001
Death Anxiety	18–30 vs 31–60	1330.00	-8.28	<0.001
Depression	Male vs Female	2120.00	-5.59	<0.001
Death Anxiety	Male vs Female	3346.50	-2.11	<0.001
Depression	Rural vs Urban	3179.50	-2.53	<0.001
Death Anxiety	Rural vs Urban	2467.50	-4.82	<0.001

U = Mann–Whitney statistic; Z = Standardized comparison score.

Table 3: Correlation and Regression Summary

Analysis	Statistic	Value	p-value
Pearson Correlation (Depression–Death Anxiety)	R	0.439	<0.001
Regression R^2	—	0.192	—
Regression Coefficient (β)	—	0.170	<0.001

R = Correlation Coefficient; R^2 = Explained variance.

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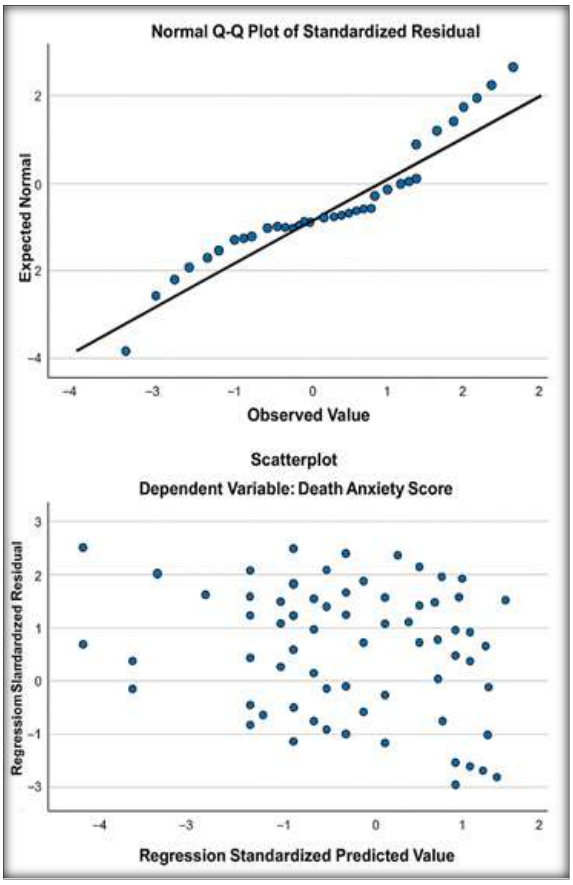
Diagnostic Check

The Q–Q plot shows that the standardized residuals deviate from the reference line at both lower and upper ends, indicating mild non-normality in the regression residuals. The residual scatterplot displays a random distribution without a clear funnel shape, suggesting acceptable homoscedasticity. Overall, despite slight deviations from normality, the regression model assumptions are reasonably met for analysis.



DISCUSSION

The results of this research will have a full picture of the role of the demographic factors on depression and death anxiety in oncology patients. All the objectives of the research are empirically valid and consistent with the existing literature, indicating similar patterns in various populations.

The findings revealed that patients in Oncology with the age of 31-60 years had a significant higher level of depression and death anxiety than patients of age groups 18-30 years. This result aligns with the previous researches by Bhattacharyya et al,[17] and Soleimani et al,[18] that explained higher levels of emotional vulnerability in the case of older cancer patients. The elders are highly prone to extended period of illnesses, deteriorating physical well-being, the monetary load, and their increased reflection on mortality, which only worsen their mental state.

The younger patients can benefit from better social support, more adaptive ability and prospects of recovery, which can cushion them against the extreme emotional distress. Thus, the result of the study is a significant support of the H1, which is the influence of age on emotional adaptation during cancer treatment.

The female oncology patients were reported to have a high level of depression and death anxiety than the males. This is consistent with most studies conducted in the field of psycho-oncology,[19,20] which also note that women are more open in their expression of feelings, have more caregiving duties, and that social pressure about illness is more imminent. Another factor that might make them more vulnerable is the hormonal variation and cultural norms that demand emotional stability. Females usually have two responsibilities; managing illness while caring for the family, which only exacerbates psychological stress. Such results confirm H2, which proves that gender is a significant variable that affects the psychological well-being of cancer patients.

A strong residential variance was also observed in the study with urban and non-tribal patients reporting much more depression and death anxiety than their rural and tribal counterparts. This trend may be explained by a number of factors, which are interwoven. The living conditions in some urban areas can be characterised by high-stress levels, competitive workplace, hectic living, and relatively weak social connections all of which can increase susceptibility to emotion. Also, patients with urban backgrounds usually possess a larger access to medical information; on the one hand, it is a positive factor, but on the other, it may increase fear, uncertainty, and anticipatory anxiety about the results of sickness. Rural and tribal groups, are likely to have well-knit cultures, intact families, and collectivistic coping strategies that provide emotional buffer systems and stability. Similar results have been identified by previous studies Mathew et al,[21] and Ramamoorthy et al,[22] which also point to the role of traditional belief systems and community support in rural areas in alleviating psychological distress. All these findings are evidence in favor of Hypothesis 3, highlighting the great importance of social environment in determining coping mechanisms and mental health.

The fact that depression had a moderate positive correlation with death anxiety ($r = 0.439$, $p > .001$) shows that the two psychological constructs are strongly associated. Regression analysis demonstrated that depression significantly predicts death anxiety, explaining 19.2% of its variance. This is in line with the existential theories,[23] which explain that the knowledge of mortality leads to hopelessness and despair, which are major symptoms of depression. Research by Berlin and von Blanckenburg,[24] and Brown et al,[25] have established that the more the depressive symptoms are elevated, the more the thoughts of death and dying are accentuated. As such, the findings of the study validate H4, which states that depression is a major determine of death-related fear.

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In all four objectives, the results are very consistent with the research in psycho-oncology in the world. The demographic trends that have been studied in this research highlight the significance of knowing the differences between individuals in terms of emotional reactions in cancer patients. These findings highlight the necessity of individual psychological treatment based on the age, gender, and socio-cultural dependent variables affecting the emotional state.

Recommendations

The study suggests inclusion of regular psychological screening of depression and death anxiety into oncology treatment particularly in older adults, women and urban patients who were more distressed. Psycho-oncology interventions employing culturally sensitive counselling, early intervention, and enhanced social-support methods must be used. Mental-health services that are customized during cancer therapy can boost emotional strength, enhance treatment compliance, and boost the overall patient health.

CONCLUSION

Demographic factors play a powerful role in psychological health of patients, as they define how patients view illness, how they deal with uncertainty, and how they react to challenges related to treatment. The increased susceptibility observed in older adults and female patients indicates that age-related issues, hormonal or social, and caregiving issues could increase tensions to the emotional burden. Early detection of depression and death anxiety, culturally competitive counselling and psychosocial interventions that are personalized are necessary to provide high-risk populations, especially the elderly, women and urban patients with sufficient support.

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