



PSYCHOSOCIAL DETERMINANTS OF QUALITY OF LIFE IN CANCER PATIENTS: INSIGHTS FROM A CROSS-SECTIONAL STUDY

Public Health

Jeseena K*

Senior Resident, Rajendra Institute of Medical Sciences, Ranchi *Corresponding Author

Sahil Nayan
Rajnish

Senior Resident, Rajendra Institute of Medical Sciences, Ranchi

ABSTRACT

Background: The QOL of cancer patients is greatly impacted by psychosocial aspects, including psychological well-being, self-adequacy, confidence, optimism, outside support, and interpersonal interactions. The aim of this study is to assess the relation between quality of life and psychosocial factors in cancer patients. **Methods:** A cross-sectional analytical study was conducted among 262 cancer patients undergoing treatment at a tertiary healthcare facility. Data were collected using a structured questionnaire assessing six psychosocial domains. Statistical analysis was performed using descriptive statistics and the Chi-Square Test for to determine associations between psychosocial factors and QOL. A p-value < 0.05 was considered statistically significant. **Results:** -Psychological Well-being, confidence in self ability, external support, optimism and belief have significant correlation with QOL ($p < 0.05$) while self adequacy has no statistically significant relation. **Conclusion:** The majority of psychological factors affected cancer patients' quality of life. These results highlight the necessity of interventions such as counseling, social integration programs, and mental health support to enhance the wellbeing of cancer patients.

KEYWORDS

Quality of Life, Cancer, Psychosocial Factors, optimism

INTRODUCTION

One of the hardest things most cancer patients have ever had to cope with is living with the disease. The reason for this is that cancer impacts practically every element of your life and the lives of those around you. Cancer treatment may alter your daily schedule, your ability to work, your physical and mental well-being, and your general standard of living. Psychosocial elements, including psychological well-being, self-adequacy, confidence, external support, optimism, and interpersonal interactions, have been emphasised in a number of studies as having a significant impact on cancer patients' overall quality of life. Psychological well-being is crucial when it comes to living with cancer since patients who are in better mental health are more likely to cope with their condition and retain a positive quality of life [1]. Self-adequacy, or the belief that one can overcome life's challenges, has been associated with resilience and better treatment adherence among cancer patients [2]. Patients are better able to manage stress and maintain emotional stability when they have self-confidence in their abilities to deal [3]. By providing them with emotional, social, and logistical support, friends, family, and medical professionals have been shown to greatly improve the quality of life for cancer patients [4]. Optimism and belief, particularly religious or spiritual outlooks, have also been linked to better psychological adjustment and an overall superior quality of life [5]. Strong interpersonal relationships also enhance emotional support, which reduces cancer patients' psychological suffering and feelings of isolation [6].

Through a statistical analysis of these parameters, this study aims to shed light on how interventions that focus on psychosocial well-being can improve cancer patients' quality of life.

Methodology

This is a cross-sectional study design to assess the relationship between psychosocial factors and the Quality of Life (QOL) of cancer patients. The data was collected from cancer patients undergoing treatment at a tertiary healthcare facility in Jharkhand state of India

Study Population And Sample Size

The study included 262 cancer patients from different age groups, cancer types, and treatment stages. Participants were selected using a convenience sampling method.

Inclusion Criteria

- Diagnosed cancer patients undergoing treatment.
- Patients aged 18 years and above.
- Willing to participate and provide informed consent.

Exclusion Criteria

- Patients with severe cognitive impairment or psychiatric disorders affecting response accuracy.

- Patients unwilling to participate in the study.

Data Collection Method

Data was collected using a structured questionnaire comprising two sections:

1. Socio-demography and clinical characteristics– Age, gender, cancer type, duration of illness, and treatment details
2. Psychosocial Factors and QOL Assessment– A standardized QOL questionnaire. (EORTC-validated in Indian Scenario by vidhubala et al evaluating six psychosocial domains:
 - Psychological well-being
 - Self-adequacy
 - Confidence in self-ability
 - External support
 - Optimism and belief
 - Interpersonal relationships

Scaling Technique

Likert-type four-point rating scale was added to elicit responses from the respondents ranged from 1-4. Example: Do you feel lonely? 1-very much, 2-moderate, 3-a little, 4-not at all.

A few items were scored in reverse so as to make the questionnaire unidirectional and to yield a global QOL score. For example, 'Are you satisfied with your doctors?' If the answer is 'very much,' it will be scored in reverse, i.e., 4 as 1 and 1 as 4 to obtain a positive QOL index. The direct and reverse scoring items are given below.

The responses obtained from the patients were scored as stated in the questionnaire, and QOL was measured on the basis of it.

Interpretation of QOL scale

88 and below = very poor QOL
89-108 = poor QOL
109-132 = average QOL
Above 133 = high QOL

Data Analysis

Statistical analysis was performed using SPSS. Chi-square test has been done to assess the relationship between QOL and psychosocial factors and a p value < 0.05 taken as significant

Ethical Considerations

Ethical approval was obtained from the Institutional ethics committee. Informed consent was obtained from all participants

RESULTS

The study included 262 cancer patients, with demographic characteristics distributed across different age groups, genders, and cancer types. Participants' QOL scores were categorized into four

levels: High QOL, Average QOL, Poor QOL and Very Poor QOL (Table.1). The Chi-Square test was performed to determine the association between psychosocial factors and QOL. The test results showed that A strong and statistically significant relationship exists between psychological well-being, Confidence in self ability, Optimism and belief and external support ($p < 0.05$) and QOL. However Self-adequacy didn't show any significant association with QOL (Table.2)

Table.1.Psychological Factors and QOL scoring

Psychosocial Factor	High QOL	Average QOL	Poor QOL	Very Poor QOL
Psychological Well-being	74	70	52	19
Self-Adequacy	71	62	62	67
Confidence in Self-Ability	39	72	92	59
External Support	80	93	62	27
Optimism and Belief	95	88	45	34
Interpersonal Relationships	100	93	42	27

Table.2.Relation of Psychological factors with QOL

Psychosocial Factor	Chi-Square Value	P-Value
Psychological Well-being	35.07	<0.05
Self-Adequacy	0.87	0.8326
Confidence in Self-Ability	22.73	<0.05
External Support	37.57	<0.05
Optimism and Belief	42.58	<0.05
Interpersonal Relationships	60.78	<0.05

Except self adequacy all factors had a significant association with QOL ($p < 0.05$)

DISCUSSION

This study evaluated the relation between cancer patients' Quality of Life (QOL) and psychosocial factors. The findings shows that while self-adequacy did not correlate significantly with QOL, psychological well-being, optimism, external support, and confidence in one's abilities do. The results complement previous studies and emphasise the vital role that psychosocial therapies play in cancer therapy. QOL and psychological well-being QOL and psychological well-being were found to be strongly associated in the current research ($\chi^2 = 35.07$, $p < 0.05$). Emotional stability is crucial for managing cancer, as evidenced by the improved QOL reported in patients with better mental health. This result is in accordance with research by Reich et al. (2008), who observed that cancer patients' quality of life significantly decreased when they experienced more psychological distress [1].

Confidence In Self-ability And QOL

The study revealed a strong correlation between QOL and confidence in self-ability suggesting that patients who had faith in their capacity to control their condition had higher QOL. Costanzo et al. (2007) observed that cancer patients who had higher levels of self-efficacy were more likely to be emotionally stable and follow their treatment plans, which supports this finding [3]. Furthermore, those who believe they can overcome obstacles are more resilient in stressful circumstances, according to Bandura's theory of self-efficacy, which also holds true for cancer patients [8].

External Support And QOL

The connection between external assistance and QOL was highly significant. Patients' quality of life was higher when they had strong social support from friends, family, and medical professionals. The meta-analysis by Northouse et al, which found that social support therapies enhanced cancer patients' psychological and physical well-being, is consistent with these findings [4]. Emotional and practical assistance also had a direct impact on health outcomes, lowering stress and increasing survival rates, according to Uchino [6]. In light of these results, peer support groups and family-based therapies may greatly improve patient wellbeing in cancer treatment.

Optimism And Belief In QOL

Optimism and QOL were shown to be strongly correlated, suggesting that patients who had an optimistic perspective had higher QOL. These findings are consistent with those of Schroevers et al. who reported that spiritual beliefs and optimism were important indicators of cancer patients' emotional well-being [5]. Furthermore, optimistic cancer patients experienced less stress and were better able to cope with their illness, according to a study by Carver et al.[9]. Based to the above

results, cancer patients' overall quality of life may be enhanced by encouraging a positive outlook through mindfulness, spirituality-based therapies, and motivational counselling.

Self-Adequacy And QOL

In contrast to other psychosocial characteristics, there was no significant correlation between self-adequacy and QOL ($\chi^2 = 0.87$, $p = 0.83$). Slevin et al. found that self-perceived adequacy was a powerful predictor of emotional well-being in cancer patients [2], which is in contradiction to this conclusion. Cultural disparities in the sense of self-adequacy or variances in sample characteristics may be the cause of the disparity. To ascertain its effect on QOL, future research should investigate this component in greater detail.

CONCLUSION

The findings emphasize the need for integrated psychosocial interventions in cancer care, including mental health support, self-confidence-building programs, and social support systems. Addressing these factors can improve both emotional and physical well-being.

Future research should explore long-term psychosocial changes and cultural influences on QOL. A holistic approach to cancer care that includes psychological and social support is essential for enhancing patient outcomes.

REFERENCES

- Reich M, Lesur A, Perdrizet-Chevallier C. Depression, quality of life and breast cancer: A review of the literature. *Breast Cancer Res Treat.* 2008;110(1):9-17.
- Slevin ML, Nichols SE, Downer SM, Wilson P, Lister TA, Arnott S, Maher J, Souhami RL. Emotional support for cancer patients: What do patients really want? *Br J Cancer.* 1996;74(8):1275-9.
- Costanzo ES, Lutgendorf SK, Mattes ML, Trehan S, Robinson CB, Tewfik F, et al. Adjusting to life after cancer treatment: The role of self-efficacy and social support. *Psychooncology.* 2007;16(11):1062-71.
- Northouse LL, Katapodi MC, Song L, Zhang L, Mood DW. Interventions with family caregivers of cancer patients: Meta-analysis of randomized trials. *CA Cancer J Clin.* 2010;60(5):317-39.
- Schroevers MJ, Ranchor AV, Sanderman R. The role of social support and self-esteem in the relationship between optimism and depression in chronic disease: A study among cancer patients. *Psychooncology.* 2003;12(6):556-66.
- Uchino BN. Social support and health: A review of physiological processes potentially underlying links to disease outcomes. *J Behav Med.* 2006;29(4):377-87.
- Vidhubala E, Latha; Ravikannan R, Mani CS, Muthuvel R, Surendren V, John Paul FU. Validation of cancer institute quality of life questionnaire version II for cancer patients in India. *Indian J Cancer.* 2011 Oct-Dec;48(4):500-6. doi: 10.4103/0019-509X.92257. PMID: 22293268.
- Bandura A. Self-efficacy: The exercise of control. New York: Freeman; 1997.
- Carver CS, Pozo-Kaderman C, Price AA, Noriega V, Harris SD, Derhagopian RP, et al. Concern about aspects of body image and adjustment to early stage breast cancer. *Psychosom Med.* 2010;62(5):696-705.