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Original Research Article

Health Related Quality of Life of Cancer Patients in Palliative Care in Surat: A Cross-Sectional Study

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ABSTRACT

Introduction: Palliative care seeks to enhance the quality of life (QoL) for individuals facing life-limiting conditions such as cancer. Data on the health-related quality of life (HRQoL) of these patients in India remains scarce. This study aimed to assess HRQoL and identify associated sociodemographic and clinical factors among advanced cancer patients receiving palliative care in Surat.
Methodology: This cross-sectional study conducted from March-2024 to August-2024 at the Lions Cancer Detection Centre (LCDC), Surat. This hospital-based study involved 251 adult patients with stage III or IV cancer, selected through purposive sampling. HRQoL was measured using the EORTC QLQ-C30 (version 3.0) scale. Data analysis was performed with SPSS, applied descriptive statistics and non-parametric tests, with significance level at $p<0.05$.
Results: The participants' mean age was 52.2±11.1 years, with a slight female majority (52.6%). Head and neck cancers were most prevalent (45.8%). The mean Global Health Status score was 45.4±22.0, indicating moderate-to-poor overall health. Functional scales revealed significant impairments, particularly in Social (29.4±19.6) and Role Functioning (34.7±21.6). The more prevalent symptoms were Fatigue (62.0±18.5), Pain (52.2±31.7), and Appetite Loss (48.9±28.9). Poorer physical functioning was significantly associated with female gender, illiteracy, stage IV disease and treatment side effects. Social and role functioning were notably worse in stage IV patients.
Conclusion: The study concludes that advanced cancer patients experience a diminished HRQoL, highlighting an urgent need for integrated, multidisciplinary palliative care that prioritizes symptom control and tailored psychosocial support, especially for vulnerable groups like women, the less educated and those with advanced cancer disease.

Keywords: Health-related quality of life, palliative care, EORTC QLQ-C30

INTRODUCTION

Cancer remains one of the leading causes of morbidity and mortality worldwide, with a substantial and growing burden in low- and middle-income countries. Globally, there were an estimated 20.0 million new cancer cases and 9.7 million cancer-related deaths in 2022, with nearly half of all cases occurring in Asia.(1) In India, the projected number of new cancer cases in 2022 was 14,13,316, with a crude incidence rate of 98.5 per 100,000 population. Oral cancer is the most common type among men, while breast cancer predominates among women.(2)

As cancer treatment modalities advance and survival rates improve, ensuring good quality of life becomes increasingly important, particularly for patients living longer with the disease.(3) However, cancer and its treatments precipitate various adverse effects that significantly impact overall quality of life across physical, psychological, and social dimensions. Previous reports have identified that cancer patients have poorer health-related quality of life (HRQoL), which is attributable to both the disease itself and treatment-associated adverse effects.(4)

Palliative care is a specialized approach designed to improve the quality of life for people facing serious and life-limiting health conditions. It aims to ease suffering by identifying problems early, thoroughly evaluating them and addressing not just physical pain but also emotional, social and spiritual concerns with appropriate care.(5) The American Society of Clinical Oncology (ASCO) acknowledges that traditional oncology care often centers around treatments aimed at directly addressing the disease, frequently without meaningful discussions about their true benefits and limitations, while the role of palliative care in enhancing patient quality of life is often overlooked.(6)

In India, studies related to quality of life in advanced cancer patients receiving palliative care remains scarce. Due to various geographical and cultural differences, the patterns and determinants of HRQoL are likely to differ from those observed in Western populations.(7) Surat, an industrial hub with a growing population, presents unique healthcare challenges, including disparities in palliative care accessibility and varying levels of awareness among patients and caregivers. So, the study was carried out with an aim of assessing health related quality of life of cancer patients in a cancer hospital of Surat.

MATERIALS & METHODS

Study Design and Setting: A descriptive quantitative, cross-sectional study was conducted at Shree Devarajbhai Bavabhai Tejani Cancer Institute (Lions Cancer Detection Centre - LCDC), a tertiary care cancer hospital in Surat, Gujarat, from 5th March 2024 to 31st August 2024.

Study Participants: The study included 251 adult patients (≥18 years) diagnosed with stage III or IV cancer who were receiving palliative care services at LCDC. Critically ill or illiterate patients were interviewed via their primary caregivers. Patients with stage I or II cancer or those unwilling to participate were excluded.

Sampling technique and Sample Size: Participants were selected purposively based on their relevance to the research. All eligible patients availing palliative care services during the 6-month data collection period were included, yielding a final sample size of 251.

Ethical Considerations: The study was approved by the Human Research Ethics Committee (HREC) of Government Medical College, Surat (Approval No. GMCS/STU/ETHICS-2/Approval/4567/24, dated 5th March 2024). Written informed consent was obtained from all participants or from their caregivers when applicable, prior to their inclusion in the study. Participant privacy was protected, with no identifying information recorded.

Data Collection Tool and Variables: A pre- designed, pre- tested and semi-structured questionnaire was used, comprised of

Sociodemographic and Clinical Profile: Age, gender, residence, education, occupation, socioeconomic status, addiction history, cancer site/stage, treatment modalities and side effects.

Socioeconomic status was determined using the Modified BG Prasad Classification (updated with All India Consumer Price Index of 143 for March 2025).(8)

Health-Related Quality of Life (HRQoL): Assessed using the EORTC QLQ C30 (version 3.0) scale. The European Organization for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC QLQ C30) is a validated, reliable

instrument widely used in cancer research with good internal consistency (Cronbach's alpha 0.846).(9) This 30 item instrument evaluates five functional scales (Physical, Role, Emotional, Cognitive, Social), nine symptom scales (Fatigue, Pain, Nausea/ Vomiting, etc.) and a Global Health Status/ QoL scale. The raw scores were linearly transformed to a standardized scale ranging from 0 to 100 to facilitate comparison and interpretation across domains. For functional and GHS scales, a higher score indicates better functioning / QoL. For symptom scales, a higher score indicates greater symptom severity.

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Statistical Analysis

Data were entered into Microsoft Excel and analyzed using IBM SPSS Statistics. The descriptive analysis summarized the data using frequencies, percentages, means and standard deviations. The Kolmogorov-Smirnov test confirmed non- normal distribution of quantitative data. Consequently, non- parametric tests (Mann-Whitney U test for two groups, Kruskal-Wallis test for more than two groups) were used for inferential analysis to assess associations between independent variables and HRQoL domain scores. A p- value less than 0.05 suggests the observed result is unlikely to have occurred by chance alone.

RESULT

A. Sociodemographic Profile (Table 1):

Table 1: Baseline Sociodemographic Characteristics of Participants (N= 251)

Characteristic	Category	n	Percentage (%)
Age (Years)	Mean ± SD	52.2 ± 11.1	
	18-30	6	2.4
	31-40	35	13.9
	41-50	66	26.3
	51-60	89	35.5
	61-70	40	15.9
	>70	15	6
Gender	Male	119	47.4
	Female	132	52.6
Education	Illiterate	66	26.3
	Just Literate	25	10
	Primary	83	33.1
	Secondary	54	21.5
	Higher Secondary and above	23	9.2

Occupation	Homemaker	74	29.5
	Semi-skilled worker	40	15.9
	Unskilled worker	39	15.5
	Farmer	38	15.1
	Skilled worker	27	10.8
Socioeconomic Class (Modified B G Prasad)	1	45	17.9
	2	105	41.8
	3	59	23.5
	4	37	14.7
	5	4	1.6
Type of family	Nuclear	136	54.2
	Joint	115	45.8
Addiction History	Yes	126	50.2
	No	152	49.8
Cancer Site	Head and Neck	115	45.8
	Breast	36	14.3
	Cervix	24	9.6
	Others	76	30.3
Disease Stage	3	130	51.8
	4	121	48.2
Treatment side effects	Present	193	76.9
	Absent	58	23.1

B. Health-Related Quality of Life Scores (Table 2):

The mean global health status score was 45.4 ± 22.0. Among functional scales, social functioning was the most impaired (mean: 29.4 ± 19.6), followed by role functioning (34.7 ± 21.6). Cognitive functioning was relatively better preserved (69.7 ± 17.9). Regarding symptom burden, fatigue was the most severe symptom (62.0 ± 18.5), followed by pain (52.2 ± 31.7), financial difficulties (56.4 ± 24.8) and loss of appetite (48.9 ± 28.9).

Table 2: HRQoL Domain Scores as per EORTC QLQ-C30 (N= 251)

Domain	Mean score ± SD	Median (IQR)
Global Health Status	45.4 ± 22	41.7 (41.7)
Functional Scales:		
Physical functioning	47.8 ± 19.7	53.3 (26.7)
Role functioning	34.7 ± 21.6	33.3 (33.3)
Emotional functioning	60.4 ± 21.2	58.3 (33.3)
Cognitive functioning	69.7 ± 17.9	66.7 (16.7)
Social functioning	29.4 ± 19.6	33.3 (33.3)
Symptom Scales:		
Fatigue	62.0 ± 18.5	66.7 (11.1)
Financial difficulties	56.4 ± 24.8	66.7 (33.3)
Pain	52.2 ± 31.7	66.7 (33.3)
Anorexia	48.9 ± 28.9	66.7 (33.3)
Insomnia	42.4 ± 26.4	33.3 (33.3)
Dyspnea	21.5 ± 28.3	66.7 (33.3)

C. Factors Associated with HRQoL Domains

1. Age Group:

Patients aged ≥50 years reported significantly poorer physical functioning (p= 0.047) and higher dyspnea scores (p= 0.009) compared to those <50 years. No significant differences were observed in other HRQoL domains.

Table 3: Distribution of participants according to Age group and health related quality of life as per EORTC QLQ C-30 scale. (N= 251)

HRQoL Domain	Median		p value
	Age <50 Years (n=99)	Age ≥50 Years (n= 152)	
Global Health Status	41.7	50.0	0.354
Physical Functioning	60.0	46.7	**0.047**
Role Functioning	33.3	33.3	0.193
Emotional Functioning	58.3	58.3	0.577
Cognitive Functioning	66.7	66.7	0.831
Social Functioning	33.3	33.3	0.909
Fatigue	66.7	66.7	0.620
Dyspnea	0.0	0.0	**0.009**

p <0.05, statistically significant

2. Gender:

Female patients reported significantly poorer physical functioning compared to males (p= 0.020). No significant differences were observed in other HRQoL domains.

Table 4: Distribution of participants according to Gender and health related quality of life as per EORTC QLQ C-30 scale. (N= 251)

HRQoL Domain	Median		p value
	Male (n= 119)	**Female (n= 132)**	
Global Health Status	50.0	41.7	0.079
Physical Functioning	53.3	46.7	**0.020**
Role Functioning	33.3	33.3	0.341
Emotional Functioning	58.3	58.3	0.334
Cognitive Functioning	66.7	66.7	0.288
Social Functioning	33.3	33.3	0.899
Fatigue	66.7	66.7	0.111
Pain	50.0	66.7	0.392

p <0.05, statistically significant

3. Education:

Literacy status was significantly associated with multiple HRQoL domains. Illiterate patients had significantly poorer global health status (p= 0.001), physical functioning (p= 0.025), emotional functioning (p= 0.009), cognitive functioning (p= 0.000) and higher fatigue scores (p= 0.011) compared to literate patients.

Table 5: Distribution of participants according to Education and health related quality of life as per EORTC QLQ C-30 scale. (N= 251)

HRQoL Domain	Median		p value
	Illiterate (n= 66)	**Literate (n= 185)**	
Global Health Status	33.3	50.0	**0.001**
Physical Functioning	46.7	53.3	**0.025**
Role Functioning	33.3	33.3	0.465
Emotional Functioning	50.0	66.7	**0.009**
Cognitive Functioning	50.0	66.7	**0.000**
Social Functioning	33.3	33.3	0.329
Fatigue	66.7	55.6	**0.011**
Pain	66.7	33.3	**0.030**

p <0.05, statistically significant

4. Stage of Disease:

Patients with stage 4 disease had significantly poorer physical functioning (p= 0.013), role functioning (p= 0.003) and social functioning (p= 0.003) compared to those with stage 3 disease. No significant differences were observed in other HRQoL domains.

Table 6: Distribution of participants according to Stage of disease and health related quality of life as per EORTC QLQ C-30 scale. (N= 251)

HRQoL Domain	**Median**		**p value**
	Stage 3 (n= 130)	**Stage 4 (n= 121)**	
Global Health Status	41.7	66.7	0.263
Physical Functioning	53.3	46.7	**0.013**
Role Functioning	66.7	33.3	**0.003**
Emotional Functioning	58.3	58.3	0.853
Cognitive Functioning	66.7	66.7	0.754
Social Functioning	66.7	33.3	**0.003**
Fatigue	66.7	66.7	0.239
Pain	50.0	66.7	0.459

p <0.05, statistically significant

5. Presence of Treatment Side Effects

Patients experiencing treatment side effects reported significantly poorer global health status (p= 0.00), physical functioning (p= 0.004) and higher fatigue scores (p= 0.002) compared to those without side effects.

Table 7: Distribution of participants according to Presence of Treatment Side Effects and health related quality of life as per EORTC QLQ C-30 scale. (N= 251)

HRQoL Domain	**Median**		**p value**
	Side Effects Present (n= 193)	**No Side Effects (n= 58)**	
Global Health Status	41.7	50.0	**0.000**
Physical Functioning	46.7	60.0	**0.004**
Role Functioning	33.3	33.3	0.081
Emotional Functioning	58.3	58.3	0.273
Cognitive Functioning	66.7	75.0	0.075
Social Functioning	33.3	33.3	0.061
Fatigue	66.7	55.6	**0.002**
Pain	50.0	66.7	0.648

p <0.05, statistically significant

6. Presence of Comorbidities

Patients with comorbidities reported significantly higher dyspnea scores (p= 0.010) compared to those without comorbidities. No significant associations were observed with other HRQoL domains.

Table 8: Distribution of participants according to Presence of Comorbidities and health related quality of life as per EORTC QLQ C-30 scale. (N= 251)

HRQoL Domain	**Median**		**p value**
	Comorbidities Present (n= 193)	**No Comorbidities (n= 58)**	
Global Health Status	41.7	50.0	0.230
Physical Functioning	53.3	53.3	0.551
Role Functioning	33.3	33.3	0.626
Emotional Functioning	58.3	66.7	0.135
Cognitive Functioning	66.7	66.7	0.787
Social Functioning	33.3	33.3	0.450
Fatigue	66.7	66.7	0.853
Pain	66.7	33.3	**0.010**

p <0.05, statistically significant

7. Other factors:

Role functioning was significantly poorer among patients from lower socioeconomic classes compared to those from higher classes (p= 0.039) and unmarried patients (including unmarried, widowed, separated, divorced) had significantly poorer cognitive functioning compared to married patients (p= 0.014).

No significant associations were observed between HRQoL domains and place of residence, type of family, addiction history, duration of disease, mode of treatment or type of healthcare facility.

DISCUSSION

This study provides insights into the health-related quality of life of advanced cancer patients receiving palliative care in South Gujarat, revealing substantial impairments across various domains and identifying vulnerable patient subgroups requiring targeted interventions.

A. Overall Health related quality of life

The mean global health status score of 45.4 ± 22.0 observed in our study indicates moderate to poor overall health among participants. This finding is consistent with the understanding that advanced cancer patients experience significant deterioration in their perceived well-being. In comparison, a study by Deb Barma et al. (2021) in South India reported a mean global health status score of 76.3 among head and neck cancer patients.(10) The substantial difference likely reflects variations in disease stage distribution, as our study included stage 3 and 4 patients only, whereas the earlier study included patients across all stages. Additionally, differences in timing of assessment relative to treatment and variations in palliative care services may contribute to this discrepancy.

The poor global health status observed emphasizes the profound impact of advanced cancer on patients' overall perception of their health. This aligns with findings from Jacob et al. (2019), who reported that advanced cancer patients in Hyderabad experienced significant decrements in overall health status, with financial difficulties emerging as a major contributing factor.(11) The intricate interaction between disease progression, treatment burden and psychosocial factors likely explains the consistently poor global health status reported across Indian palliative care populations.

B. Functional Domains:

1. Physical Functioning:

The mean physical functioning score of 47.8 ± 19.7 indicates that patients could perform only about half of their regular physical activities. This impairment is multifaceted, resulting from both the direct effects of cancer such as cachexia, weakness, pain and treatment-related sequelae including fatigue, neuropathy and reduced mobility.(12)

This study identified several factors significantly associated with poorer physical functioning. Female gender emerged as a significant predictor (p= 0.020), with female patients reporting lower physical functioning compared to males. This gender disparity has been observed in previous studies. Jacob et al. (2019) similarly reported that female cancer patients experienced greater functional limitations, potentially reflecting differences in baseline physical reserve, sociocultural expectations regarding caregiving responsibilities or differential access to rehabilitative support.(11) Women often bear dual burdens of managing their illness while continuing household responsibilities, which may compound physical decline.

Age ≥60 years was significantly associated with poorer physical functioning (p= 0.047). This finding is consistent with the biological reality of age-related decline in physiological reserve, increased prevalence of comorbidities and reduced capacity to tolerate treatment related toxicities.(13) Older adults often present with multiple age related conditions that synergistically interact with cancer to accelerate functional decline. Immanuel et al. (2024) in their nationally representative survey of older adults in India found that increasing age was consistently associated with greater supportive and palliative care needs, particularly in physical domains.(14)

Illiteracy was significantly associated with poorer physical functioning (p= 0.025). This association may be seen due to limited health literacy impairing self-management abilities, reduced awareness of rehabilitation services, socioeconomic constraints limiting access to supportive care and potential delays in seeking care leading to more advanced disease at presentation.(15) Educated patients may better understand and adhere to physical rehabilitation recommendations, communicate more effectively with healthcare providers about symptoms requiring intervention and access resources that support functional independence.

Stage 4 disease was associated with significantly poorer physical functioning compared to stage 3 (p= 0.013). Disease progression typically brings escalating symptom burden, including pain, fatigue and cachexia, which directly compromise physical capacity as observed in study done by Wilkie DJ et al.(16) Patients with metastatic disease often have more extensive tumor burden, greater metabolic demands and more aggressive treatment regimens, all contributing to functional decline.

The presence of treatment side effects was strongly associated with poorer physical functioning (p= 0.004). This finding is clinically insightful, as side effects such as fatigue, pain, weakness and peripheral neuropathy directly impair physical capabilities. Mazzotti et al. (2012) similarly reported that treatment related side effects significantly impacted physical functioning in cancer patients, with fatigue being particularly debilitating.(17) The high prevalence of side effects in our study (76.9%) emphasizes the importance of proactive symptom management to preserve physical function.

2. Role Functioning

Role functioning (mean 34.7 ± 21.6) was reflecting patients' inability to fulfill work, household and leisure responsibilities. This profound impairment likely reflects the combined burden of physical limitations, treatment demands and psychological distress that collectively preclude meaningful engagement in productive activities as observed in study done by Kim et al.(18)

Stage 4 disease was significantly associated with poorer role functioning (p= 0.003). Patients with advanced disease face barriers to perform like physical debility limiting work capacity, frequent hospital visits disrupting schedules and treatment affecting work quality and psychological distress impairing motivation and concentration. This highlights the impact of disease progression on role performance.

Socioeconomic status also significantly influenced role functioning (p= 0.039), with patients from lower socioeconomic classes reporting poorer role functioning. This finding aligns with the concept of "financial toxicity" in cancer care, where the economic burden of treatment interacts with functional limitations to compound role impairment.(19) Patients with limited financial resources may face additional stressors including pressure to continue working despite physical limitations, inability to afford supportive services that facilitate role participation and reduced bargaining power in workplace accommodations.

3. Emotional Functioning

The mean emotional functioning score of 60.4 ± 21.2 indicates that despite the challenges of advanced cancer, many patients maintained some degree of emotional resilience. However, illiteracy was significantly associated with poorer emotional functioning (p= 0.009). The finding by Nolazco et al. suggested that limited education may restrict access to psychological coping resources, impair understanding of illness trajectory leading to heightened anxiety and limit engagement with supportive services.(20)

Additionally, age and gender were not significantly associated with emotional functioning in our study. This contrasts with findings from Maciejewski et al. (2010), who reported that female patients experienced lower emotional well-being in areas of tension, worry, irritability and depression.(21) The discrepancy may reflect cultural factors in the Indian context, where strong family support systems potentially buffer emotional distress across genders or may indicate that in advanced cancer, disease related factors override demographic determinants of emotional well-being.

The relatively preserved emotional functioning compared to physical and role functioning is notable. This may reflect adaptive coping mechanisms, including spiritual practices, family support and acceptance of illness trajectory that are culturally embedded in Indian society. The finding also emphasizes that emotional distress, while present, may be less immediately debilitating than physical symptoms for this population.

4. Cognitive Functioning

Cognitive functioning (mean 69.7 ± 17.9) was the well-preserved functional domain, suggesting that despite advanced cancer, many patients maintained relatively intact cognitive abilities. This finding is consistent with studies reporting that cognitive impairment in cancer patients, while significant, may be less universal than physical impairment, with substantial individual variation.(22)

Illiteracy was strongly associated with poorer cognitive functioning (p= 0.000). This association may reflect the well-established relationship between educational attainment and cognitive reserve, wherein education provides cognitive stimulation that builds neural networks capable of compensating for injury or disease.(23) Patients with limited education may have less cognitive reserve to draw upon when facing cancer related cognitive challenges, including treatment effects, fatigue related concentration difficulties and disease associated cognitive changes.

Unmarried status was also associated with poorer cognitive functioning (p= 0.014). This finding may reflect the cognitive benefits of social engagement and support provided by a spouse or may indicate that unmarried patients face additional financial and social stressors that impair cognitive performance. In a study conducted by Glantz et al. it was observed that cognitive stimulation from daily interactions with a partner, shared decision making and the emotional security of marriage may all contribute to preserved cognitive function.(24)

5. Social Functioning

Social functioning (mean 29.4 ± 19.6) was the more severely impaired functional domain, highlighting the profound impact of advanced cancer on patients' ability to maintain social relationships and participate in community activities. Stage 4 disease was significantly associated with poorer social functioning (p= 0.003), reflecting the cumulative effect of physical debility, treatment schedules, emotional distress and potential stigma that increasingly isolate patients as disease advances as observed in study done by Giesinger et al.(25)

The impairment in social functioning has important implications for palliative care. Social isolation can exacerbate psychological distress, reduce access to practical and emotional support and diminish quality of life independent of physical symptoms. In the Indian context, where social connectedness is highly valued, this impairment may be particularly distressing for patients and families as observed in study done by Gupta et al.(26)

C. Symptom Burden

1. Fatigue

Fatigue emerged as the most prevalent symptom (mean 62.0 ± 18.5). This finding aligns with the study identifying fatigue as the most common and distressing symptom in advanced cancer.(27) The etiology of cancer related fatigue is multifactorial, encompassing disease-related factors such as cachexia, inflammation, metabolic alterations, treatment related side effects and psychological factors like depression, anxiety and sleep disturbance.(28)

Illiteracy was significantly associated with higher fatigue scores (p= 0.011). This association may reflect poorer symptom management among illiterate patients due to limited understanding of fatigue management strategies, reduced access to educational resources and potential delays in reporting fatigue to healthcare providers. The presence of treatment side effects was also strongly associated with higher fatigue (p= 0.002), consistent with the well-documented relationship between treatment intensity and fatigue severity.(29)

2. Pain

Pain (mean 52.2±31.7) scores indicating moderate to severe burden. Pain management is a cornerstone of palliative care, yet our findings suggest that many patients continue to experience significant pain despite receiving palliative services. This may reflect challenges in pain assessment, inadequate opioid availability, cultural barriers to pain reporting or suboptimal analgesic prescribing patterns as observed by Salins et al.(30)

Literacy was associated with lower pain scores (p= 0.030), suggesting that educated patients may have better access to pain management resources, more effectively communicate pain to providers or possess greater knowledge of pain management strategies. This finding emphasizes the importance of health literacy in achieving optimal symptom control.

3. Anorexia and Insomnia

Anorexia (mean 48.9 ± 28.9) and insomnia (mean 42.4 ± 26.4) were common symptoms, reflecting the systemic effects of advanced cancer and treatment toxicities. Nutritional decline contributes to cachexia, reduced treatment tolerance and diminished quality of life. Sleep disturbance compounds fatigue, impairs cognitive function and exacerbates emotional distress as observed by Bhatia et al.(31)

4. Dyspnea

Dyspnea (mean 21.5±28.3) was significantly more common in older adults (p= 0.009) and patients with comorbidities (p= 0.010). Age related decline in pulmonary reserve, combined with comorbid conditions such as chronic obstructive pulmonary disease, hypertension related cardiac dysfunction and diabetes associated autonomic neuropathy, likely contributes to increased dyspnea burden in these subgroups.(32)

D. Financial Difficulties

Financial difficulties (mean 56.4±24.8) represent a substantial burden. Despite many patients receiving care at a government facility, financial concerns remain significant, likely reflecting indirect costs including transportation, lost wages, caregiving expenses and out-of-pocket expenditures for medications and supportive care not covered by government schemes as observed by Ghoshal et al.(33) This finding highlights the concept of financial toxicity, wherein the economic burden of cancer treatment compounds physical and psychological distress.(34)

CONCLUSION

This study illustrates that advanced cancer patients receiving palliative care in Surat experience substantial impairment across multiple health related quality of life domains. Physical functioning, role functioning and social functioning are more severely affected, with fatigue and pain being the more prevalent symptoms. Vulnerable subgroups including older adults, females, illiterate patients, those with stage 4 disease and those experiencing treatment side effects warrant targeted interventions. These findings emphasize the need for comprehensive, multidisciplinary palliative care that addresses not only physical symptoms but also functional limitations, psychological distress and social isolation. Enhancing health literacy, strengthening financial sup-ort mechanisms and implementing evidence-based symptom management strategies are essential to improving quality of life for this vulnerable population.

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