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RESEARCH ARTICLE

The Role of Socioeconomic Conditions in Shaping Multidimensional Quality of Life Outcomes for Hospitalized Cancer Patients

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ABSTRACT

Increase in cancer incidences, morbidity and complications of cancer poses serious problems for India. It is reported that in an Indian context, the socio-demographic variables of patient and his family play significant role in all aspect of patient life, experience of suffering, caregiver burden, coping etc. Due to delayed diagnosis, financial problems and poor mental health in patients with cancer, their quality of life is getting diminished with less social contact among patients. The objectives of the present study were to assess the Quality of Life (QOL) among people with cancer, to identify the relation between selected socio-demographic variables and Quality of Life among people with cancer. Descriptive research design was employed, and Study was conducted in an urban oncology center at Tiruchirappalli, TamilNadu. Census techniques were adopted and all the eligible cancer patients attending the center were recruited. Data were collected using WHOQOL 1995, and semi structured interview schedule. Data was analyzed using Descriptive and inferential statistics like independent t test, chi-square test and one-way ANOVA. Majority of the respondents experience poor QOL in physical domain (60%), Psychological domain (56%), Distress-related domain (60%), Spiritual domain (54%). Ages, Number of children showed significant relationship with the Quality of Life among people with cancer.

Keywords: Cancer, Quality of Life, Oncology, Well-being, Socioeconomic Status.

INTRODUCTION

Rapid and increasing incidence of cancer cases in a developing nation like India- projected new cases of cancer are anticipated to raise from 1.46 million in 2022 to 1.57 million in 2025 in India- hence the mortality rate would surely continue to grow with diagnosis delayed and treatment postponed (Sathishkumar et al., 2022). A person's prognosis and their physical health are both influenced by the presence of a disease like cancer- their Quality of life is impacted, and it is also

physical, social and psychological. The family members also suffer in terms of their personal relationships. Physical difficulty that cancer treatment imposes: pain, discomfort resulting from cancer treatment such as symptoms of pain, fatigue, nausea, immobility, and an inability to perform activities of daily living properly (Ferrell et al., 1995; World Health Organization [WHO], 2024). Psychological distress: physical status brings on various fears and anxieties such as the notion of nearing death, fear of the recurrence of the disease, future related fears, Anxiety and

Depression (Zabora et al., 2001; National Cancer Institute, 2024). A person feels detached from family members and close friends; has issues forming satisfactory relations with loved ones and is often characterized by Social stigma and the absence of social support (Ashing-Giwa, 2005). High OOE: Most dreaded difficulty remains the sheer cost of cancer and its treatment. It gives rise to severe Financial Burden on patient as well as on families, leading to catastrophic health expenditure; with the outcome that the maximum number of cancer patients opt out of crucial life-saving treatment they deserve (Pramesh et al., 2014; World Health Organization, 2021).

Quality Of Life OF individual reflects their life position in the framework of their culture and their system of values, in relation to their goals, expectations and standards and to their involvement with the environment (World Health Organization Quality of Life Group 1995). Especially for cancer patients particularly Indian patients and even more so for the ones in the state of Tamil Nadu, it is imperative that a true understanding of the quality of life of cancer patients be the focal point for providing holistic care along the whole process of their life process (Aaronson et al. 1993). Quality of Life includes; Physical wellbeing physical functioning is related to the effect of the illness, such as pain, fatigue and limited mobility etc. Pain in cancer patients and the treatment can affect their Quality of Life negatively (Aaronson et al. 1993). Psychological wellbeing, such as emotions like fear, and depression, coping strategies become intensified with economic hardship and the role reversal that can occurs with cancer and in turn also with economic challenges and the ever-looming fear of the death of the deprived patient (Zabora et al. 2001). Physical wellbeing has also got to do with physical interaction of man as such as the interaction with society, community and interaction with family and their social support networks. Due to the stigma on cancer in some societies, it results in isolated behaviour (Ashing-Giwa, 2005). Spiritual wellbeing consist of the value and belief that person holds such as the personal value, convictions and spiritual values which allows them to find meaning in their life, to be able to cope with life's tribulations; For instance, In Tamil Nadu culture the patient feels comfort and solace through the practice of spiritualism which helps them to reconcile with their cancer. Therefore, the present study seeks to study Quality of Life perceptions among the cancer patients and to determine the improving and

influential aspects for Quality of Life of the cancer patients.

REVIEW OF LITERATURE

Across studies, cancer treatment such as chemotherapy, radiotherapy, and surgery was shown to negatively impact physical and emotional functioning-particularly among breast cancer patients receiving combined therapy. (Sathishkumar K., et al., 2022) Cervical cancer patients would maintain relatively good QoL despite physical difficulties, although sexual functioning was significantly reduced after chemo radiotherapy. Additional findings showed that age, income, education, and healthcare facility type were major predictors of QoL in breast cancer patients with persistent anxiety, depression, and fatigue affecting functioning (Sutradhar S., et al., 2024). Global evidence similarly indicated that poorer physical and mental QoL was associated with low education, low income, and non-white ethnicity (Pangestu S., et al., 2023). Studies from South India highlighted that advanced disease stages, older age, and lower socioeconomic status resulted in poorer health outcomes and greater psychological distress (Somanna SN., et al., 2022). Financial hardship had a moderate negative association with QoL (Pangestu S., et. al., 2023) Emotional distress represents a significant but under-recognized economic impact of cancer (Essue BM., et al., 2020). Overall quality of life in cancer patients is shaped by the treatment effects and socio economic factors. Financial strains worsen well-being while social support helps to improve it, and understanding these influences is key to providing holistic care.

The studies shown people who are with lower income, illiterate, unemployed, without a health insurance policy, health care facility, type were performing worst Physical and Psychosocial functioning and have no social participation compared with others who belongs from higher income group (Meng et al., 2022; Maxwell et al., 2023, Stradhar et al., 2024). Financial constraints restrict them from receiving medical screening, diagnosis, and treatment promptly and even receiving other supportive services which is eventually damages their future recovery and long-term quality of life.

Economic disadvantage increases negative health impacts resulting from multiple chronic conditions. Thus, studies anticipate achieving good outcome for the patients from better socio-economic conditions (Almutairi et al., 2025; Kangas et al., 2025). The second strong and

evidence-based fact is the protected support from their family member and other relations. Those who are experiencing strong emotional and tangible family support are often coping best in quality of life during care and treatment phase of their life and even cope best under any condition whether resilience and other coping skills are available or not (Firouzbakht et al., 2020). In contrast, feeling of loneliness and low support will lead to greater distress and poor treatment experience, especially for elderly people and from poorer socio-economic class (Jamshidi et al., 2025). Therefore spirituality also plays role in improving their quality of life indirect way by improving psychological quality and reinforcing support networks (Meng et al., 2022.).

Likewise important to be aware of the part played by psychosocial health in the cancer patients' mental health. From various research papers the Southern part of India found that stage of the disease was worse for patients with advanced stages of cancer, those older age and low economic level were worse off in terms of health outcome and psychological distress. There are so many issues associated with the patients having cancer like anxiety, depression, death related fear, disease related fear recurrence, loss of body image, low self esteem and social stigma which is in turn causing stress, not only mental but has effect on taking treatment in routine basis, sleep problems, conflicted relationships, and health outcome and it require timely intervention to provide better quality of life. (Murariu et al., 2025; Jamshidi et al., 2025; Aquil et al., 2021; Pangestu et al., 2023 and Somanna SN., et al., 2022 and Essue et al., 2020).

Additional finding is noted, that having adequate access to medical facilities and supports also vital to promote quality of life of cancer patient, whereas the global finding also reported low education level, low income level, non -white ethnic status is associated with poor quality of life of physical and psychological health status (Pangestu S., et al., 2023). Patient navigational programs, collaboration among multidisciplinary health care providers, specific support services (such as counseling, meditation, diet and any therapies) can significantly improve psychosocial health status and well -being (Haroen et al., 2026; Dyer et al., 2022; Spagnoletti et al., 2022). Most studies included populations from the older population to generate significant findings regarding the provision of cancer care due to its chronic nature of illness, also it is highlighted the role of health – related quality of life in the maintenance of

physical health, functional independence, community engagement, financial stability and access to care (Siqueca et al., 2022; Sun et al., 2023). Healthy lifestyle practices in the older generation enable maintenance of functional and individual mobility but, unfortunately, people with the multiple comorbidities have the poorest quality of life. This study supports that quality of life is complex, multi –dimensional concept which is related to the biological, psychological, social and environmental context (Rony et al., 2024; Kangas et al., 2025). Findings showed that treatments including chemotherapy, radiotherapy, and surgery reduced quality of life in terms of physical and emotional performance among the study population in specific for breast cancer undergoing combined therapies (Sathishkumar K., et al., 2022). The holistic quality of life in cancer patients is directly affected by the impact of treatment and sociodemographic, economic status and financial strains, however, social support is of importance in this aspect

METHODS

The researcher's intentions were to characterize the cancer patients with non intervention of any variables and used descriptive research design to make the study. Sample Size and Sample Characteristics-The researchers approached 50 cancer patients, attending an urban oncology centre in Tiruchirappalli, Tamil Nadu for this study and it shows that this study is site specific but gave a better understanding of patients life.

MATERIALS

Data Collection Instruments Used- Semi-Structured Interviews Schedule: The instrument was developed to record data on patient's socio-demographics profile such as age, gender, educational status, income and health status, treatment methods, and cancer. Quality of Life Questionnaire-A tool standardized by WHO was used to assess patients' quality of life. Data Analysis Techniques Used-The study utilized several techniques including Frequency distribution – Helps to understand how many subjects belong to specific categories, inferential Statistics (t-tests, chi square, and ANOVA)- To know the statistical differences between samples to analyse whether variables differ among samples and to determine if variables are correlated or not to the key variable.

RESULTS

Socio-demography

Table 1: Socio-Demographic Variables of the Respondents

S.No	Name of the Variable	Number of Respondents	Percentage of Respondents
1	Age		
	Below 30	5	10.0
	31 to 60	30	60.0
	61 and above	15	30.0
2	Gender		
	Men	32	64.0
	Women	18	36.0
3	Education Status		
	X Standard	7	14.0
	XII Standard	10	20.0
	Graduate	18	36.0
	Illiterate	15	30.0
4	Occupation Status		
	Government employee	13	26.0
	Private employee	15	30.0
	Daily wages	15	30.0
	Home maker	7	14.0
5	Type of Family		
	Nuclear family	36	72.0
	Joint family	14	28.0
6	Number of Children		
	Below 2	22	44.0
	3 – 4	24	48.0
	5 and above	4	8.0
7	Status of Children		
	Studying	18	36.0
	Working	32	64.0
8	Monthly income		
	Below 25000	7	14.0
	26000 to 50000	32	64.0
	51000 and above	11	22.0

The descriptive statistics of the data provided in the Table 1 indicate that more than a quarter (28%) of the sample participants are below 40 years, almost half (42) are between 40-60 years, and a third (30) are above 60 years. The large majority of the respondents (64 percent) are Men, and the larger portion of the respondents (more than a third, 34 percent) are women. In terms of education, only 14% of the respondents have completed the X standard which is one-fifth (20) of the respondents have completed the XII standard, more than a third (36) person has attained graduation, and 30 percent (3) are illiterate. Concerning the employment, over a quarter (26%) are government workers, almost a third (30%)- are workers in the industrial sector or daily wage workers, and just 14% are housewives. The data in

family structure suggests that close to three-fourths (72) of respondents are members of nuclear families, with over a quarter (28) of them being members of joint families. Concerning family size, almost 50 (44) percent of the respondents have less than the two children, almost 50 (48) percent have the three to four child number, and the rest 8 percent have five or more children. With regard to the status of children of the respondents more than one-third (36 percent) are in studying position, and almost two-thirds (64 percent) are on employment. Regarding income, few people, just 14 percent of the respondents make less than Rs. 25,000 per month, almost two-thirds (64) make between Rs. 26,000 and Rs. 50,000, and an excess of one-fifth (22) make more than Rs. 51,000 per month.

Table 2: Cancer Types, Treatment Methods and Approximate Cost of Care

Sl. No	Variables	Number of Respondents (n=50)	Percentage of Respondents
1	Type of Cancer		
	Breast Cancer	18	36
	Lung Cancer	20	40
	Colon cancer	12	24
2	Years of Treatment		
	Below 5 years	19	38
	6 to 10 years	16	32
	10 years and above	15	30
3	Treatment Method		
	Radiotherapy	10	20
	Chemotherapy	22	44
	Harmone Therapy	9	18
	Targeted Therapy	9	18
4	Cost of Treatment (per month)		
	Below 20,000	10	20
	21,000 to 40,000	19	38
	41,000 and above	21	42

It is inferred from the Table 2 that more than one-third (36%) of respondents have Breast cancer, nearly half (40%) of them are affected by lung cancer and nearly one-fourth (24%) of them are affected by colon cancer. More than one-third (38%) of the respondents are undergoing treatment below 5 years, nearly one-third (32%) of the respondents are undergoing treatment between 6 to 10 years and nearly one-third (30%) of them are undergoing treatment for more than 10 years. One-fifth (20%) of them are undergoing

radiotherapy, nearly half (44%) of them are undergoing chemotherapy and nearly one-fifth (18%) of them are undergoing harmone therapy and targeted therapy respectively. One-fifth (20%) of them are spending below Rs.20,000 per month for their treatment, more than one-third (38%) of them are spending Rs.21,000 to Rs.40,000 per month and nearly half (42%) of them are spending more than Rs.41,000 per month for their treatment.

Table 3: Dimension wise distribution of quality of life of the respondents

Sl. No	Variable	Number of Respondents (n=50)	Percentage of Respondents
1	Physical		
	Low	30	60.0
	High	20	40.0
2	Psychological		
	Low	28	56.0
	High	22	44.0
3	Distressing		
	Low	30	60.0
	High	20	40.0
4	Fear		
	Low	26	52.0
	High	24	48.0
5	Social Concern		
	Low	26	52.0
	High	24	48.0
6	Spirituality		

	Low	27	54.0
	High	23	46.0
7	Overall Quality of Life		
	Low	27	54.0
	High	23	46.0

It is understood from the Table 3 that majority of respondents (60%) exhibit a low level of the physical dimension of quality of life, while 40 per cent demonstrated a high level in this dimension. Furthermore, nearly majority (56%) of the respondents reported a low level of the psychological dimension of quality of life, with 44 per cent indicated a high level. Similarly, a majority of the respondents (60%) experience a low level of the distressing whereas 40 per cent reported a high level. In terms of the fear dimension, little more

than half of respondents (52%) had a low level, and 48 per cent had a high level. Additionally, a little more than of respondents (52%) showed a low level of the social concern, while 48 per cent exhibited a high level. Regarding the spirituality dimension, little more than half of the respondents (54%) reported a low level, and 46 per cent indicated a high level and regarding the overall score, little more than half of the respondents (54%) had a low level of quality of life, whereas 46 per cent had a high level.

Table 4: Association between Age, Number of Children and Monthly Income and Various Dimension of Quality of Life

Variable	Physical	Psychological	Distressing	Fear	Social Concern	Spirituality	Overall QoL
Age							
Below 40	$X^2=.417$	$X^2=14.84$	$X^2=10.89$	$X^2=0.034$	$X^2=.321$	$X^2=7.749$	$X^2=5.237$
40 – 60	$P>0.05$	$P<0.05$	$P<0.05$	$P>0.05$	$P>0.05$	$P<0.05$	$P<0.05$
60 and above	NS	S	S	NS	NS	S	S
Number of Children							
Below 2	$X^2=.316$	$X^2=.176$	$X^2=.410$	$X^2=1.271$	$X^2=6.734$	$X^2=3.780$	$X^2=.410$
3 – 4	$P>0.05$	$P>0.05$	$P>0.05$	$P>0.05$	$P<0.05$	$P>0.05$	$P<0.05$
5 and above	NS	NS	NS	NS	S	NS	S
Monthly Income							
Below 25000	$X^2=1.415$	$X^2=3.850$	$X^2=5.298$	$X^2=.279$	$X^2=.279$	$X^2=6.587$	$X^2=.416$
26000 to 50000	$P>0.05$	$P>0.05$	$P<0.05$	$P>0.05$	$P>0.05$	$P<0.05$	$P>0.05$
51000 and above	NS	NS	S	NS	NS	S	NS

***S - Significant**

****NS - Not Significant**

Table 4 indicates the chi-square between the age of the respondents is significantly associated with the psychological, distressing, and spirituality dimensions, as well as the overall quality of life. A similar finding by a study Maheswari (2025) found

the persons aged 60 and above years face heightened mental health vulnerabilities due to isolation and chronic illness like cancer (Maheswari K, 2025) The study is consistent with the study made by Sutradhar et al. in which age,

education, and income were key predictors of physical QoL, while age, income, and the type of healthcare facility were important for mental QoL. The number of children is significantly associated with the quality of life in the social concern dimension. There is a significant association between the respondents' income and their quality

of life in the dimensions of distress and spirituality (Sutradhar S., et al., 2024). The study is consistent with the study made by C. Maxwell et al., 2023 in which 782 cancer survivors across six continents found that lower income, and non-White race were all linked to poorer physical and mental QoL (Maxwell CM., et al., 2024).

Table 5: “t” Test between Gender, Type of Family and Status of Children with regard to Various Dimension of Quality of Life of the Respondents

Variable	Physical	Psychological	Distressing	Fear	Social Concern	Spirituality	Overall QoL
Gender	t=.688 P>0.05 NS	t=.5.603 P<0.05 S	t=.1.659 P>0.05 NS	t=.1.000 P>0.05 NS	t=.240 P>0.05 NS	t=1.098 P>0.05 N	t=.317 P>0.05 NS
Men							
Women							
Type of Family	t=3.757 P<0.05 S	t=000 P<0.05 S	t=.281 P>0.05 NS	t=7.369 P<0.05 S	t=.634 P>0.05 NS	t=2.253 P<0.05 S	t=.608 P>0.05 NS
Nuclear family							
Joint family							
Status of Children	t=.304 P>0.05 NS	t=7.458 P<0.05 S	t=2.928 P<0.05 S	t=4.019 P<0.05 S	t=1.928 P>0.05 NS	t=.969 P>0.05 NS	t=.586 P>0.05 NS
Studying							
Working							

***S - Significant**

****NS - Not Significant**

Table 5 analysis reveals a significant gender difference concerning the psychological dimension of quality of life, with the mean values indicated that women exhibited a higher level of psychological quality of life compared to Men. The type of family structure among the respondents significantly convinces various dimensions of quality of life, including physical, psychological, fear, and spirituality aspects. The mean scores indicated that respondents from joint families exhibit higher levels in the physical, psychological, and fear dimensions of quality of life, whereas

those from nuclear families demonstrate a higher level in the spirituality dimension. A significant difference can also be observed in quality of life of the respondents' children more specifically in psychological well-being dimension, distress, fear, and general quality of life. The mean scores revealed that children of respondents who are currently studying exhibit higher levels of psychological well-being, fear, and overall quality of life. In contrast, children of respondents who are employed demonstrate elevated levels of distress.

Table 6: One Way ANOVA between Occupation and Various Dimensions of Quality of Life

Variable	Physical	Psychological	Distressing	Fear	Social Concern	Spirituality	Overall QoL
Occupation							
Between Groups	F=.315 P>0.05	F=..532 P>0.05	F=1.805 P>0.05	F=.363 P>0.05	F=.604 P>0.05	F=2.271 P<0.05	F=.111 P>0.05
Within Groups	NS	NS	NS	NS	NS	S	NS

***S - Significant**

****NS - Not Significant**

Table 6 express that there is a notable variation among different occupational groups of the respondents concerning one aspect of quality of life, specifically spirituality, where the mean value indicated that private employees exhibit a higher level of variance compared to other occupations.

DISCUSSION

Analysis done using the Chi-square, t-test, and ANOVA indicated there was a significance between age and the number of children and quality of life among the respondents to support the research hypothesis.

Social work interventions for improving quality of life for cancer patients should be multidimensioned and focus on their psychosocial and spiritual needs and concerns. As financial needs figure significantly in terms of their association with dimensions of distress and spirituality, financial and spiritual well-being would be an important priority consideration for social work interventions for cancer patients. Financial management planning and referral for benefits and community resources could help in lessening their financial stresses and thus improving their emotional well-being.

Providing emotional support by offering a safe space for the patient to verbalize fears is crucial, regardless of the income being unrelated to mental distress, in order to prevent the deterioration of mental health. Health education about coping and stress management, as well as communication skills, encourages patients and families, while family therapy and support groups improve supportive social relationships.

Physical recovery, symptom control, and supportive therapies in rehabilitation programs

have shown to have a very efficient effect on the general health of patients. They include cardiac rehabilitation, occupational therapy, diet, and psychological support programs designed for each phase of their recovery, from treatment to survival. Rapid recovery programs such as ERAS reduce recovery time and also build the patient's immunity, while a combination of programs tackle complications like swelling of the limbs and neuropathy.

Social workers also play a significant part in collaborating with medical personnel in tailoring physical well-being strategies by encouraging gentle exercises that enhance strength and combat exhaustion. Emotional support through counseling services tackles anxiety, depression, and fears while building trust beyond mere financial concerns.

Coordination of healthcare improves patient confusion and anxiety to enable patient participation in healthcare. Building caregiver capability through education, psychosocial support, and rest periods sustains caregiver performance to increase patient security. Encouraging patient interaction prevents loneliness through communal engagement.

Culturally appropriate practices involving patients' spiritual traditions promote trust and effectiveness of interventions. Advanced care planning and life planning assist patients and families in making decisions about the future and end-of-life care, thus alleviating anxiety and aligning care practices with values. Telehealth care provides continued support through counseling, education, and peer support, thus addressing mobility and transportation limitations.

On the whole, the combination of finance, spirit, emotion, physical, social, and culture in social work practices adds greatly to the improvement in the lives of patients suffering from cancer.

CONCLUSION

Rising incidence and high mortality rates, particularly due to late diagnosis, are also causing cancer to be considered a serious health issue in India. The number of new cases is also expected to rise and reach 1.57 million in 2025. Due to this serious challenge being faced, it is required that cancer control be strengthened. A serious challenge that needs to be faced requires a proper approach from all concerned. There is also a need to reduce the incidence and mortality rates being faced because of cancer and to enhance the lives of patients suffering from cancer.

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