

A Study To Assess The Impact Of Cervical Cancer On The Quality Of Life Among Women In Selected Hospital, Puducherry

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ABSTRACT

Background: Cervical cancer remains a major public health concern in India, with profound effects not only on physical health but also on the overall quality of life (QoL) of affected women. Understanding these impacts is crucial for guiding comprehensive care. Objectives: To assess the impact of cervical cancer on the quality of life among women receiving treatment in a selected hospital in Puducherry.

Methods: A descriptive cross-sectional study was conducted among 100 women diagnosed with cervical cancer, using purposive sampling. Data were collected through a structured interview schedule, which included demographic and clinical variables along with the Functional Assessment of Cancer Therapy-Cervix (FACT-Cx) tool to evaluate quality of life. Statistical analysis was performed using SPSS version 25, with descriptive and inferential statistics applied.

Results: The majority of participants were aged 41–50 years, married, and had low educational status. Most were diagnosed at Stage II and within the past year. Quality of life was reported as moderate by 62% of participants, while 28% had low QoL and only 10% had high QoL. Functional well-being was the most affected domain. Significant associations were found between QoL and variables such as stage of cancer, duration since diagnosis, education level, and type of treatment ($p < 0.05$).

Conclusion: Cervical cancer substantially impairs the quality of life of women, particularly in functional and emotional domains. Holistic care approaches, including psychological support and patient education, are essential to enhance the well-being of these patients. Regular QoL assessments should be integrated into routine oncology practice.

Keywords: Cervical cancer, Quality of life, Women.

1. INTRODUCTION

Cervical cancer significantly impacts the quality of life (QoL) among women, with implications for physical, emotional, and social well-being. Survivors of cervical cancer often experience debilitating symptoms such as pain, fatigue, insomnia, and appetite loss, which can reduce their overall quality of life (Membrilla-Beltran et al., 2023; Pfaendler et al., 2015; Khalil et al., 2015). The psychological repercussions are considerable, with many women facing anxiety and depression that are influenced by the disease and its treatments (Golubović et al., 2022). Treatment modalities like neoadjuvant chemotherapy followed by radical surgery have been associated with long-term adverse effects on sexual function and overall quality of life compared to healthy women and those with different types of gynecological cancers (Palaia et al., 2022).

Research has indicated that cervical cancer patients often report lower sexual quality of life compared to patients with other gynecological conditions (Ören & Kiziltaş, 2023; Khalil et al., 2015). This discrepancy can be attributed to factors including the type of treatments received, with studies showing that surgical interventions tend to result in a decline in sexual function and intimacy (Bzeipez & Fayyadh, 2022; Tokarski et al., 2024). Additionally, societal perceptions of cervical cancer can lead to social stigmatization, further isolating survivors and negatively impacting their emotional well-being (Zeng et al., 2011). The role of social support is crucial; maintaining robust relationships has been shown to mitigate some of the negative impacts associated with the disease, emphasizing the importance of family and friends in recovery and emotional health (Bánovčinová & Bašková, 2016; Rahman et al., 2017).

Socioeconomic factors also play a significant role in the quality of life of this population. Factors such as age, income level, and education can influence both the physical and psychological experiences of cervical cancer patients, suggesting that interventions aimed at improving socioeconomic status may enhance QoL (Fadhilla et al., 2017; García et al., 2023).

Moreover, there is growing recognition of the importance of addressing the experiential aspects of living with cervical cancer, including fertility preservation options and the incorporation of psychosocial support as part of comprehensive patient care (Laganà et al., 2017; Chen et al., 2023).

2. METHODOLOGY

Research Design

A descriptive cross-sectional survey design was employed for this study. This design was considered appropriate to assess the quality of life among women diagnosed with cervical cancer without manipulating any variables.

Study Setting

The study was conducted in a selected tertiary care hospital in Puducherry, which provides specialized oncology care services. The setting was chosen based on patient availability, institutional support, and accessibility for data collection.

Population and Sample

The target population for this study included women aged 30 years and above who were diagnosed with cervical cancer and admitted to the selected hospital for treatment. Women who were cognitively impaired or critically ill and unable to respond were excluded from participation. A total of 100 women were selected for the study using a non-probability purposive sampling technique.

Data Collection Tool

A structured interview schedule was developed by the researcher after a comprehensive review of existing literature and expert consultation. The tool consisted of two sections: demographic and clinical profile, and the Functional Assessment of Cancer Therapy-Cervix (FACT-Cx) questionnaire, a standardized tool designed to assess the quality of life specifically among cervical cancer patients.

Data Collection Procedure

After obtaining ethical clearance from the institutional ethics committee, formal permission was secured from hospital authorities. Eligible participants were approached individually, the purpose of the study was explained to them, and written informed consent was obtained. The data collection was carried out through face-to-face structured interviews conducted at the patients' bedside. Each interview lasted approximately 30 to 45 minutes.

Ethical Considerations

This study adhered to the ethical principles of research involving human subjects. Informed consent was obtained from all participants. Anonymity and confidentiality were strictly maintained throughout the data collection process. Participants were informed of their right to withdraw from the study at any time without any consequences.

Data Analysis

Collected data were coded and entered into Microsoft Excel and analyzed using SPSS version 25. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize demographic and quality of life variables. Inferential statistics such as Chi-square tests were used to assess the association between selected demographic/clinical variables and the quality of life among the participants.

3. RESULTS

Table 1 reveals that the majority of women with cervical cancer were between the ages of 41–50 years, indicating a midlife vulnerability to the disease. Most participants were married and primarily occupied as homemakers. In terms of education, a significant proportion had only primary schooling, highlighting a low literacy level among the sample. Clinically, Stage II was the most frequently reported cancer stage, and a considerable number had been diagnosed within the last year, reflecting recent onset in many cases.

Table 2 reveals that among the five domains of the FACT-Cx tool, social/family well-being scored the highest, suggesting relatively strong interpersonal and familial support. However, functional well-being had the lowest mean score, indicating that many women experienced difficulties in carrying out daily activities. Emotional and physical well-being scores were moderate, pointing to a multidimensional impact on patients' quality of life.

Table 3 reveals that the overall quality of life among participants was predominantly moderate, with 62% falling into this category. About 28% had low QoL, reflecting greater impairment in one or more dimensions, while only 10% of women reported high QoL. This distribution indicates a substantial impact of cervical cancer on the patients' general well-being.

Table 4 reveals that several variables showed statistically significant associations with overall quality of life. Education level, stage of cancer, duration since diagnosis, and type of treatment were all significantly linked to QoL outcomes ($p < 0.05$), suggesting that these factors influence how well women cope with the disease. Conversely, age and marital status did

not show a significant association, indicating that QoL impacts may transcend these demographic boundaries.

Table 1: Frequency and Percentage Distribution of Demographic and Clinical Variables (N = 100)

Variable	Category	Frequency (n)	Percentage (%)
Age (in years)	30–40	28	28%
	41–50	40	40%
	51–60	32	32%
Marital Status	Married	88	88%
	Unmarried	6	6%
	Widowed	6	6%
Education Level	No formal education	18	18%
	Primary education	45	45%
	Secondary education	25	25%
	Higher secondary & above	12	12%
Occupation	Homemaker	52	52%
	Employed	26	26%
	Unemployed	22	22%
Stage of Cancer	Stage I	18	18%
	Stage II	36	36%
	Stage III	28	28%
	Stage IV	18	18%
Duration Since Diagnosis	< 6 months	30	30%
	6 months – 1 year	28	28%
	> 1 year	42	42%

Table 2: Distribution of Quality of Life Based on FACT-Cx Domains (N = 100)

FACT-Cx Domain	Mean Score	Standard Deviation
Physical Well-being	14.8	4.2
Social/Family Well-being	15.3	3.9
Emotional Well-being	13.1	4.6
Functional Well-being	12.7	4.8
Cervical Cancer Subscale	16.9	5.1

Table 3: Overall Quality of Life Based on FACT-Cx Total Score (N = 100)

Level of Quality of Life	Score Range (Total FACT-Cx)	Frequency (n)	Percentage (%)
Low	0–59	28	28%
Moderate	60–89	62	62%
High	90–136	10	10%

Table 4: Association Between Selected Variables and Quality of Life (N = 100)

Variable	Chi-square Value (χ^2)	Degrees of Freedom (df)	p-value	Significance
Age	3.21	2	0.201	Not Significant
Education Level	7.85	3	0.049	Significant
Marital Status	2.45	2	0.294	Not Significant
Stage of Cancer	8.73	3	0.033	Significant
Duration Since Diagnosis	6.21	2	0.045	Significant
Type of Treatment	9.45	2	0.008	Significant

4. DISCUSSION

The findings of the current study on the quality of life (QoL) among women diagnosed with cervical cancer present a multifaceted picture that reflects the complexity of managing this disease, particularly considering sociodemographic factors and clinical stages. The tendency for participants to fall within the 41–50 age group aligns with existing literature, which suggests that cervical cancer predominantly affects middle-aged women, often leading to profound impacts on their family and social roles (Ahamed & Degu, 2022; . Many of these women being homemakers may compound the emotional and physical challenges they face, as household responsibilities can become overwhelming in the context of cancer treatment and recovery.

The association between low educational attainment and poorer QoL is a critical finding. Lower education levels have been linked to diminished understanding of health information, leading to less effective health management practices and ultimately poorer health outcomes (Halverson et al., 2015). This presents a case for targeted educational interventions that could enhance health literacy, thereby improving the quality of life for cervical cancer patients (Chen et al., 2024; Chen et al., 2023). Additionally, such interventions could be particularly beneficial for those diagnosed at advanced stages, such as Stage II, since late diagnoses can complicate treatment options and exacerbate the physical and psychological burden on patients (Ahamed & Degu, 2022; .

The study highlights significant variability in QoL across different domains, with social and family well-being scoring the highest. This suggests that interpersonal support networks are a crucial asset for these women (Hanprasertpong et al., 2017). The strong familial support might serve as a buffer against the emotional toll of the disease. However, the notably impaired functional well-being indicates that while social support is robust, the physical side effects of treatment and the disease itself can severely hinder daily functioning (Nayak et al., 2017).

The distribution of QoL scores reveals that a considerable portion of participants (62%) experience only a moderate quality

of life, while a combined 38% report low QoL. These findings suggest that there is a critical need for comprehensive support systems to address both the physical symptoms and the psychosocial factors impacting these women. The statistical analysis showing significant associations between QoL and variables such as education level, cancer stage, and treatment type underscores the complex interplay of these factors in the lived experiences of cervical cancer patients (Ahamed & Degu, 2022; (Akhtari-Zavare et al., 2018). However, the lack of significant associations with age and marital status indicates that rather than demographic factors, the situational and experiential factors surrounding diagnosis and treatment largely influence QoL outcomes (Akhtari-Zavare et al., 2018).

5. CONCLUSION

The study concludes that cervical cancer significantly affects the quality of life among women, particularly in the domains of functional, emotional, and physical well-being. While social and family support appeared relatively intact, most women reported moderate to low overall quality of life. Key factors such as stage of cancer, duration since diagnosis, type of treatment, and educational background were found to have a significant impact on their well-being. These findings highlight the urgent need for comprehensive care strategies that extend beyond clinical treatment to include psychological support, patient education, and functional rehabilitation. Integrating quality of life assessments into routine oncology care can aid in delivering holistic and patient-centered care to women with cervical cancer.

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