Original Research Article

A Descriptive Study to Assess the Quality of Life Among the Cancer Patients Admitted in the Oncology Department of Apollo Hospitals, Bannerghatta, Bangalore

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ABSTRACT

Background: The quality of life among cancer patients receiving adjuvant and palliative chemotherapy at Apollo Hospitals, BG Road, Bangalore had not yet been studied in depth.
Aim: The aim of the research is to assess the quality of life among cancer patients receiving adjuvant and palliative chemotherapy in the oncology department at Apollo Hospitals, BG Road, Bangalore
Design: This study was conducted at Apollo Hospitals, BG Road, Karnataka Region. Information about quality of life among cancer patients were obtained using a well-structured online questionnaire based on Quality-of-Life Tool for Cancer Patients (QOL-CSV) formulated by FACT – G version 4 (Google forms).
Tools: Online Questionnaire (Google forms)
Results: Around 100 patients took part in the online questionnaire, 50 patients in each group adjuvant and palliative chemotherapy group, the quality of life parameters sub-divided under physical, social, functional and emotional well-being were assessed, the overall quality of life was better in the patients who were on adjuvant chemotherapy.
Conclusion: Overall quality of life was better among cancer patients in adjuvant group over cancer patients in palliative group of chemotherapy. Hence it was concluded that early diagnosis and initiation of treatment had a better impact among cancer patients.

Keywords: Quality of life, cancer patients, adjuvant treatment, palliative treatment, chemotherapy

INTRODUCTION

Cancer is the main health issue in the community across the world. Cancer is a one of the major public health problem both in developed and developing countries around the globe. Quality-of-life (QOL) of a cancer patient before and after the treatment is an important issue especially for the cancer survivors, their families, and the care providers. [1] In cancer prospective, Quality-of-life can be defined as a sense of well-being, it is a multidimensional perspective that includes dimensions such as physical, psychological, social, and spiritual, changes in one QOL dimension can influence perceptions in other dimensions also. Globally, cancer is one of the most common causes for morbidity and mortality.

As per the GLOBOCAN 2012 cancer report estimates in India, the five most common cancers among both the genders were breast (14.3%), cervix (12.1%), mouth (7.6%), lung (6.9%), and colorectal (6.3%) cancers. Death due to these five cancers is 302,124. The cancer patients experience a variety of

symptoms. [2] Inadequate management of symptoms might hamper the performance of the daily activities of an individual. The treatment of symptoms will help relieve the suffering and improve the quality of life (QOL). The symptoms have a major impact on QOL among the patients with breast cancers. Greater symptom load has been associated with the higher levels of emotional suffering and poor physical and societal functioning and global QOL. [3] Thus, effective management of symptoms can improve the QOL in breast cancer patients.

Cancer is emerging as a formidable challenge in low income countries that have limited logistic to protect the health of citizens. In developing countries, the burden of Ca overlaps with the magnitude of infectious diseases including HIV/AIDS, tuberculosis, hepatitis virus, and human papilloma virus which can contribute to the pathogenesis of Ca. The lack of early detection and timely treatment would aggravate the situation in these nations. Therefore, the present study is aimed to investigate cancer patient's health related quality of life at Apollo Hospitals, Bangalore.

AIM
The aim of the research is to assess the quality of life among cancer patients receiving adjuvant and palliative chemotherapy in the oncology department at Apollo Hospitals, BG Road, Bangalore.

OBJECTIVES OF THE STUDY
1. Assess the QOL among the cancer patients using QOL questionnaire
2. Find the association between the QOL of cancer patients with their demographic details and disease – related variables (Adjuvant vs palliative chemotherapy).

ASSUMPTIONS – There will be a strong association between QOL of cancer patients, and their disease – related variables.

METHODOLOGY
- **Research approach:** Qualitative Approach
- **Research design**: Descriptive design

Research variables used: Dependent variable- QOL (form enclosed), **Independent variables** include sociodemographic characteristics of the patient including age and gender, functional status, symptom scales, grade of cancer and type of chemotherapy.

Settings of the study – Apollo Hospital BG Road, Karnataka Region

- **Duration of the study-** 3 Month
- **Data collection method-** Online *Questionnaires*
- **Target population -** All cancer patients (>18Years) who are admitted to oncology ward of Apollo hospitals Bannerghatta Road
- **Sample Size** -100 (All the cancer patients will be consecutively included in the study based on the inclusion and exclusion criteria.
- **Sampling Method** – Non-probability sampling type (Purposive Sampling)
- **Inclusion criteria –** Patients who are receiving chemotherapy and are above 18 years old will be included
- **Exclusion criteria –**Those who do not consent for the study, who are all on radiation therapy & unable to respond for the question are excluded.
- **Ethical considerations** – The study was conducted after obtaining permission from the institutional head and ethical consideration.

TOOL USED FOR DATA COLLECTION:
The following are the tools used in the study
A. Socio demographic and disease related variables as mentioned above
B. Quality of life Tool for cancer patients as per FACT – G version 4

The study was conducted after obtaining permission from the institutional head and ethical consideration.

RESULT & DISCUSSION

The objective of this qualitative study attempts to provide a detailed description of Quality-of-Life of cancer patients at the Adjuvant and Palliative stages of treatment. In this regard, the "tenets" associated with the term "Quality-of-Life" as constructed by the study needs to be brought into light. The study looks at Quality-of-Life" as a sense of well-being emphasizing on its multi-dimensional nature which includes psychological, physical, social, and spiritual well-being.

It is an understanding and estimation of the nature of "self" – subject to varied interpretations, the state of mind with regard to oneself and one's surroundings over the course of treatment. Apart from the research study's commitment to understand the "QOL" of the patients undergoing the treatment, the research study also aims to provide a comparative analysis of "QOL" of patients receiving Adjuvant and Palliative stages of treatment.

Some of the limitations of the study before analyzing the data received includes the descriptive and qualitative nature of research work conducted which may not be subject to generalization to the pool of patients receiving treatment. It may reflect individual biases and privileges in turn manifesting the social, economic, and financial realities among the diverse patients.

Secondly, the problem associated with the multi-dimensional meaning attached to the term "Quality-of-Life". Thirdly, the descriptive and comparative nature of study of patients who have consented to take part in the study reflect the convenience adopted in the data collection operating under specific conditions. Lastly, the respondents of the study consist only of individuals receiving Chemotherapy and does not include any others.

The data results from the two groups of patients, one receiving Adjuvant treatment and the other receiving Palliative treatment conspicuously reflect the greater ordeals faced by the patient's receiving treatment for the last stage of Cancer. It emphasizes the journey that they have already been through. For the ones receiving treatment for the first and second stage, it is a journey filled with hope. As we objectively analyze the data in the coming passages, this contention is reflected throughout our analysis.

For the comparative study, the patients receiving Adjuvant and Palliative stages of treatment are identified from the existing patients in the Hospital. Each group consists of 50 patients whose socio-demographic and disease related history are obtained with consent. A comprehensive questionnaire is circulated among this sample population. The questionnaire on "Quality-of-Life Tool for Cancer Patients (QOL-CSV) formulated by National Medical Center and Beckman Research Institute (City of Hope) is used for this purpose.

In the below passages, the data collected is analyzed between the patients receiving Adjuvant and Palliative treatments under the following dimensions – physical, emotional, social and functional well-being measuring the "Quality-of-Life" phenomenon.

Table 1: Frequency and percentage distribution of demographic data among patient receiving palliative and adjuvant chemotherapy N=50+50=100

Sl. No	Demographic data	Palliative therapy		Adjuvant therapy	
		f	%	f	%
1	**Age**				
	<25	0	0	3	6
	25-45	10	20	16	32
	45-65	24	48	24	48
	>65	16	32	7	14
2	**Gender**				
	Male	20	40	10	20
	Female	30	60	40	80
3	**Marital status**				
	Married	45	90	42	84
	Unmarried	2	4	4	8
	Widow	2	4	4	8
	Separated	1	2	0	0
4	**Employment status**				
	Employed	11	22	19	38
	Retired	7	14	2	4
	Unemployed	32	64	27	54
	Student	0	0	2	4
5	**Types of cancer**				
	Ca.Breast	17	34	29	58
	Ca.colon	8	16	0	0
	Ca.Abdomen	2	4	0	0
	Ca.Lung	6	12	2	4
	Ca.Breast-Liver	1	2	0	0
	Ca.Urinary Bladder	2	4	0	0
	Ca.Gall bladder	1	2	0	0
	Ca.Ovary	3	6	3	6
	Ca.Pancreas	1	2	2	4
	Ca.Prostate	5	10	0	0
	High grade endom	1	2	0	0
	Metastases RCC	1	2	0	0
	Ca.Periampullary	1	2	0	0
	Ca.Rectum-Liver	1	2	0	0
	Ca.Stomach	0	0	5	10
	Wilms tumor	0	0	2	4
	Ca.Bucal Mucosa	0	0	2	4
	PNET	0	0	1	2
	Ca.Nasopharynx	0	0	1	2
	Ewings sarcoma	0	0	1	2
	Malignant melano	0	0	1	2
	Primary peritone	0	0	1	2
6	**Stages of cancer**				
	Stage 1	0	0	7	14
	Stage 2	0	0	41	82
	Stage 3	9	18	1	2
	Stage 4	41	82	1	2

The data in the table 1 describes that demographic variables of the cancer patients who undergoing adjuvant and palliative chemotherapy. Majority of the cancer patients who belongs to 45-65 years' age group (48%) and female (60%, 80%). With regards to marital status majority of the patients (90% in palliative group, 84% in adjuvant group) married. Maximum of the participants were un employed. With regards to types of cancer Majority of them had breast cancer and they were in stage 4(82%) in palliative group and stage 2(82%) in adjuvant group.

II. Frequency distribution of Quality of life in domain wise among the cancer patients admitted in the Oncology department

A. Physical Well Being - bothered by Side effects
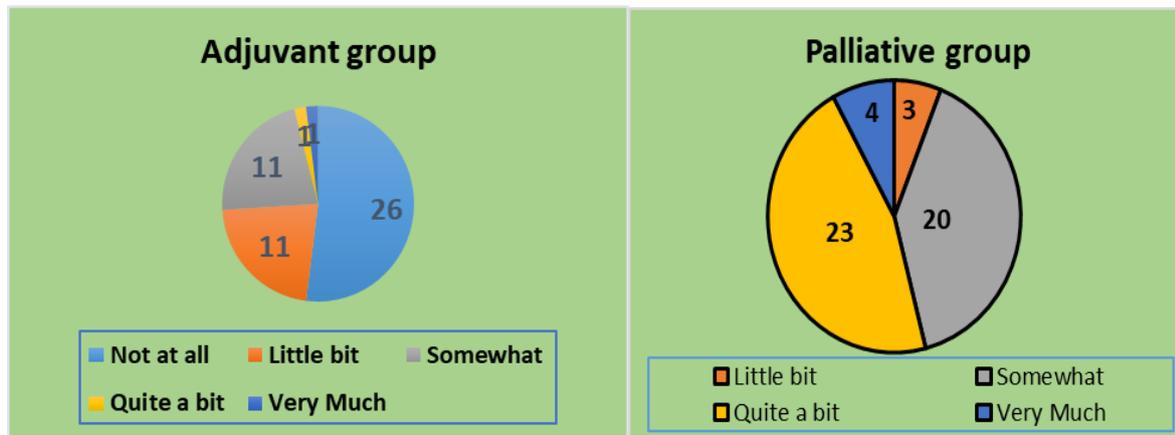
With regards to physical well-being dimension, most of the respondents who undertaking Adjuvant treatment were between 0 to 1 either not at all/little bit. The criterion measured under physical well-being includes Lack of energy, Nausea, physical condition, pain, side effects etc.

For the persons undergoing Palliative treatment, the response mostly was between 3 and 4 (Quite a bit and very much). These experiences of the patients reflect that the quality of life for the people undertaking Adjuvant treatment is far better than that of the persons undergoing Palliative treatment.
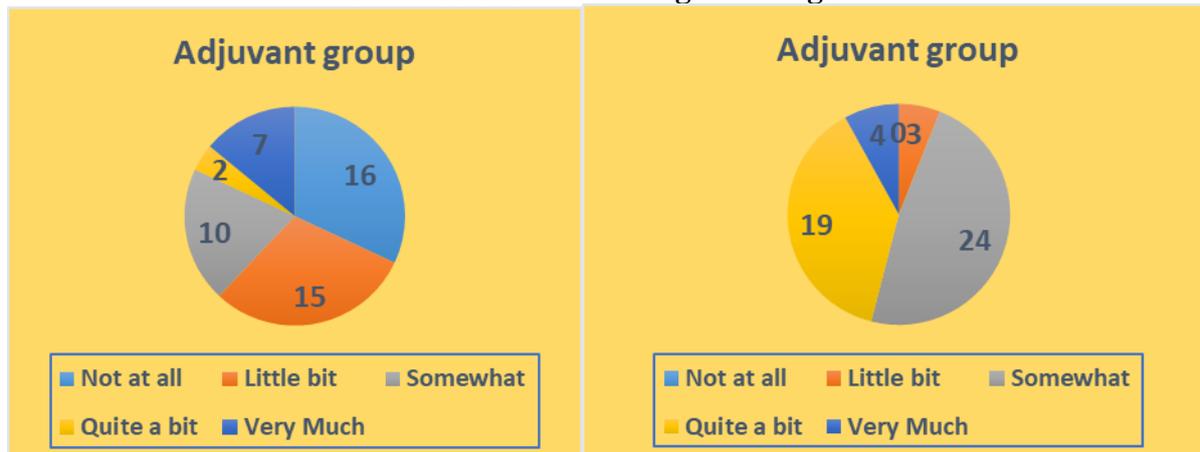
B. Social Well Being – Family Support
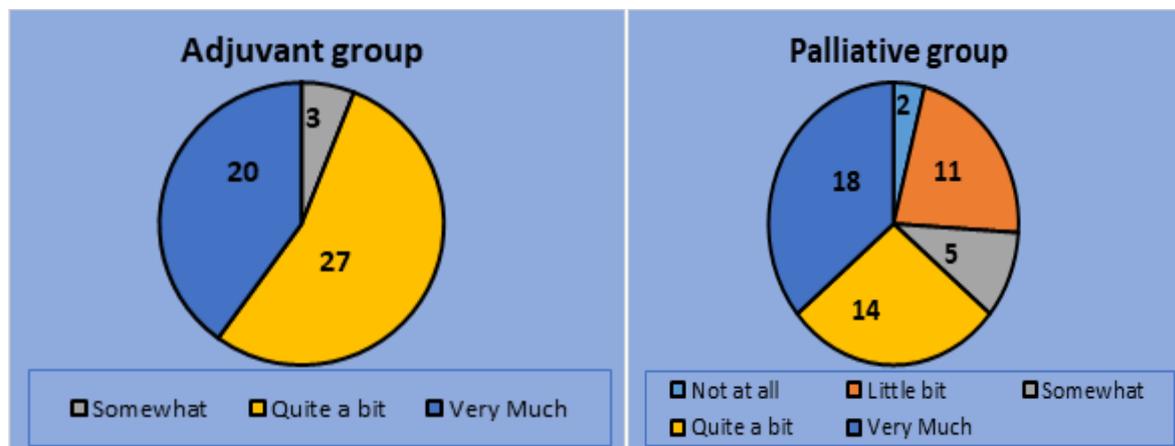
In terms of social/Family well-being dimension, the answers of the respondents undertaking Adjuvant treatment were between 4 and 5 (Quite a bit and very much). The questions include in this dimension, the patient's relationship with the immediate family members and analyzing the role of support system around them. Similar case, can be reported of the patients undergoing Palliative treatment whose responses were between 4 and 5.

This showcases the profound support families have been providing their beloved ones who are undergoing treatment in the hospital. Some of the criterion measured under this dimension include closeness with family and friends, emotional support obtained, acceptance from family and friends, supportive conversations within family in regard to the person's illness and sex life.
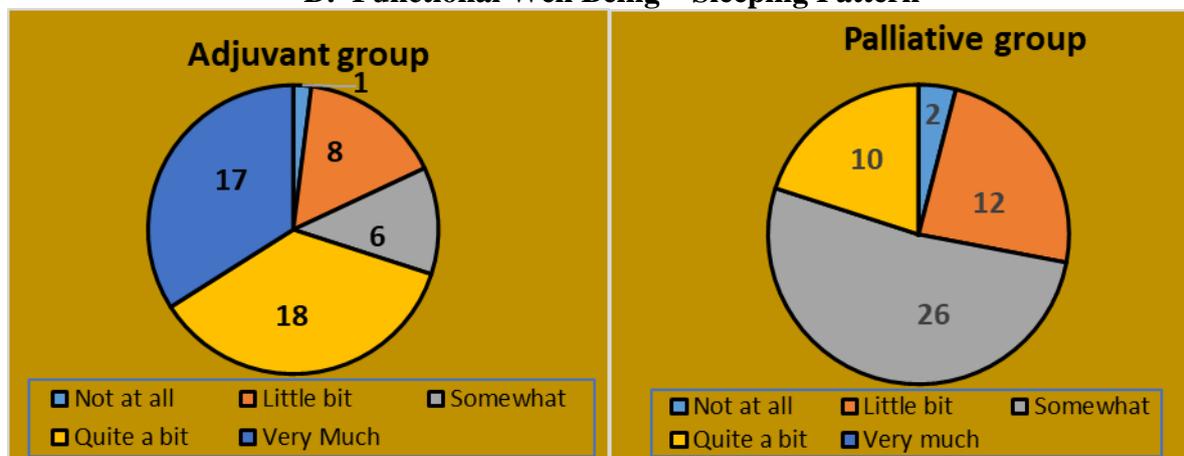
C. Emotional Well Being – Feeling Sad

In response to emotional well-being dimension, the answers of the respondents undertaking Adjuvant treatment were between 1,2 and 3 (Not at all, little bit and somewhat). The questions under this dimension in general included the patient's emotional state of mind – their satisfaction, hope, resilience, anxiety and fear. For patients undertaking Palliative treatment, the responses were between 3, 4 and 5 (Somewhat, quite a bit and very much). This dimension readily captures the emotional state of both the groups of people. Also, there is diverse opinion within a group which showcase the emotional turmoil of every individual who is differentiated by circumstance and nature. The experiences captured tend to throw light on both the optimistic and pessimistic mindset carried by these groups of patients.

D. Functional Well Being – Sleeping Pattern

Under the functional well-being dimension, the answers of the respondents undertaking Adjuvant treatment were between 3 and 4 (Quite a bit and very much). The questions under this dimension in general included the patient's ability to complete their daily chores, professional commitments, ability to enjoy accomplishments, their self-acceptance of the realities they are faced with, ability to sleep and be content in general. For patients undertaking Palliative treatment, the responses were also between 3, 4 and 5 (Somewhat, quite a bit and very much). This dimension readily captures the ability of the patients to go on with their work as usual without compromising on their duties and mission because of the disease. It is to be noted that overall, the patients belonging to the Palliative group has answered positively for this functional dimension questions.

Overall Quality of life among the cancer patients admitted in the Oncology department

Table 2: Mean, Median and standard deviation of Overall Quality of life among the cancer patients admitted in the Oncology department N=50+50=100

	Mean	Minimum	Maximum	Range	Std. Deviation	Median
Adjuvant group	77.62	60.00	102.00	42	7.417	79
Palliative Group	88.68	79.00	100.00	21	4.812	88

Table 2 depicts that mean of overall quality of life is 77.62 for adjuvant group whereas 88.68 for palliative group. Median shows that 79 for adjuvant group and 88 for palliative group. It shows that majority of them had low quality of life.

It was noted based on the values obtained, quality of life was slightly better in patients receiving adjuvant chemotherapy when compared to palliative therapy.

Association between the QOL of cancer patients with their demographic details and disease – related variables (palliative chemotherapy). N=50

Sl.No	Demographic data	f	Below median 26	Above median24	df	Chi-Square	'p' value
1	**Age**				3	4.076	0.13
	25-45	10	6	4			
	45-65	24	9	15			
	>65	16	11	5			
2	**Gender**				1	0.855	0.355
	Male	20	12	8			
	Female	30	14	16			
3	**Marital status**				3		
	Married	45	23	22			
	Unmarried	2	1	1			
	Widow	2	1	1		0.0026	0.999
	Separated	1	1	0			
4	**Employment status**				2	0.154	0.925
	Employed	11	6	5			
	Retired	7	4	3			
	Unemployed	32	16	16			
5	**Stages of cancer**				1	0.056	0.814
	Stage 3	9	5	4			
	Stage 4	41	21	20			

There was no significant association found between quality of life and selected demographic variables among cancer patients who receiving Palliative chemotherapy

Association between the QOL of cancer patients with their demographic details and disease – related variables (Adjuvant therapy). N=50

Sl. No	Demographic data	f	Below median 28	Above Median 22	df	Chi-Square	'p' value
1	**Age**					7.615	0.054
	<25	3	2	1	3		
	25-45	16	13	3			
	45-65	24	9	15			
	>65	7	4	3			
2	**Gender**				1	1.2987	0.254
	Male	10	4	6			
	Female	40	24	16			
3	**Marital status**						
	Married	42	23	19	2	0.671	0.715
	Unmarried	4	2	2			
	Widow	4	3	1			
4	**Employment status**				3	0.262	0.966
	Employed	19	10	9			
	Retired	2	1	1			
	Unemployed	27	16	11			
	Student	2	1	1			
5	**Stages of cancer**				3	0.6544	0.883
	Stage 1	7	3	4			
	Stage 2	41	24	17			
	Stage 3	1	1	0			
	Stage 4	1	0	1			

There was no significant association found between quality of life and selected demographic variables among cancer patients who receiving adjuvant chemotherapy.

CONCLUSION

With the given data and their further analysis, we can draw the conclusion that, in comparison to Palliative group of patients, the adjuvant group of patients have a better quality of life under the given dimensions of Physical, Social/Family, Emotional and Functional well-being. This is mostly due to the fact that the patients in the adjuvant stage have better chance of cure and thereby timely medical response to help them would prevent any causations. On the other hand, the medical processes and procedures associated with the Palliative treatment causes immense mental toll not only on the patients but on their families as well. Though cases of resilience among the patients in this situation is an inspiring sight to behold, it is not always a fighting ground for manifesting one's fortitude. But is a reality that affects the near and dear ones alike with equal magnitude. Thereby, timely treatment and early detection becomes a necessity as it does influence the quality of life of patients in the long run to lead a better life and have a positive impact on quality of life.

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