

## Quality Of Life of Cancer Patients Attending a Cancer Hospital, Lumbini Province, Nepal

Asha Panth<sup>1</sup>, Saraswoti Kumari Gautam Bhattarai<sup>2</sup>, Durga Laxmi Shrestha<sup>3</sup>, Ishwori K.C.<sup>4</sup>

<sup>1</sup>Hospital Nursing Administrator, Bheri Hospital, Ministry of Health and Population, Nepal

<sup>2</sup>Associate professor, Maharajgunj Nursing Campus, Institute of Medicine, Tribhuvan University, Nepal

<sup>3</sup>Chief Hospital Nursing Administrator, Bheri Hospital, Ministry of Health and Population, Nepal

<sup>4</sup>Hospital Nursing Administrator, Bheri Hospital, Ministry of Health and Population, Nepal

### Corresponding Author

Asha Panth

Email: [panth.asha@gmail.com](mailto:panth.asha@gmail.com)

<https://orcid.org/0000-0002-8793-4820>

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## ABSTRACT

**Background:** Quality of life is an important aspect and high priority of the cancer patient care. The objective of the study was to find out the quality of life of cancer patients attending a Cancer hospital, Lumbini Province, Nepal. **Methods:** An analytical cross sectional study design based on quantitative approach was used in the study. The study was conducted in Sushil Koirala Prakhara Cancer Hospital, Khajura, Banke which was selected purposively considering only one cancer hospital in province five, Nepal. The entire cancer patients receiving at least one cycle of cancer treatment was included in the study using non probability purposive sampling technique. Semi structured interview based questionnaires was used and European Organization for Research and Treatment of Cancer Quality of Life Questionnaire – C30 (EORTC QLQ- C30) was used for measuring quality of life. The data was collected by the enumerator by face to face interview. The collected data were analyzed by using descriptive and inferential statistics. **Results:** The patients with carcinoma (ca) lungs were in highest proportion (24.5%) followed by ca breast. The transform mean and SD score of Global Health/QoL was 35.84 (16.87), functional scale 36.35(15.54), symptoms scale 53.02 (14.61). Occupation was found to be associated with quality of life at statistically significant level in (p= .000) function score. Site of cancer was found to be associated with quality of life at statistically significant levels (p=.0.009) in symptom score. The patients with stage I and II had high global health score and least in stage IV. There was positive correlation of .610\*\* (p=.000) significant at 0.01 level with functional scales and high negative correlation of -.521(p=-.521\*\*) with symptom scales at (p=.000) level of significance. The overall quality of life of cancer patients was poor. The pain management of cancer patients should be taken into consideration.

## KEYWORDS

Cancer Patients, EORTC QLQ-C30, Quality of Life

## INTRODUCTION

Cancer is a generic term for a large group of diseases characterized by the growth of abnormal cells beyond their usual boundaries that invade adjoining parts of the body and/or spread to other organs. Lung, prostate, colorectal, stomach and liver cancer are the most common types of cancer in men, while breast,

colorectal, lung, cervix and thyroid cancer are the most common among women (World Health Organization (WHO), 2018).

Quality of life (QOL) is an important aspect of cancer patient care. Quality of life emphasis on the social, emotional and physical well-being to those that describe the impact of a person's health on daily life of cancer patients (Lavdaniti and Tsitsis, 2015).

A diagnosis is very stressful for people, affecting all aspects of their being and quality of life. Additional research should be done in this area for improving the quality of life of specific types of cancer patients in Nepal (Pandey, Dhungana, Twi, Byanju, & Khawas, 2015).

People living with cancer experience a variety of symptoms. Cancer patients experience many symptoms that affect their QOL. There is a need to develop interventions for effective management of symptoms that will empower the patients to have a greater sense of control over their illness and treatment and to improve the QOL (Nayak et al., 2017).

Quality of life (QOL) is considered as the primary goal of cancer treatment in patients' survival. There is an overall low QOL among adult cancer patients undergoing chemotherapy treatment. Interventions should focus on both the physical and psychological issues and need to be addressed to improve the QOL of adult cancer patients (Chagani, Parpio, Gul, & Jabbar, 2017).

Cancer is associated with major morbidity and mortality. In addition, addressing the unmet needs of these patients and ensuring higher satisfaction rate are recommended to maintain adequate QoL (Abegaz, Ayele, & Gebresillassie, 2018).

## **SUBJECTS AND METHODS**

The setting of the study was Sushil Koirala Prakhara Cancer Hospital in Khajura, Banke. The hospital had a big role to play in cancer treatment in the region. It is only one cancer hospital in province five which was selected purposefully. The sampling population was cancer patients attending in this hospital receiving at least one treatment cycle. Analytical cross-sectional study design based on quantitative approach was used in the study. Face to face interview to the respondents and the record review from the patient's file was done for data collection.

### **Sampling**

Non probability purposive sampling technique was used.

### **Sample Size**

Enumerative method (all the cases) was used to select the sample and all meeting the inclusion criteria during the data collection period were included in the study.

### **Inclusion Criteria**

The selection was based on the criteria who had already received at least one cycle of cancer treatment, age 20 years and above.

### **Exclusion Criteria**

Exclusion criteria were any other chronic co-morbidity condition that could influence their QoL. The most commonly listed medical co-morbidities were diabetes mellitus, hypertension, chronic renal disease, coronary artery disease. Cancer patients who had Eastern Co-operative Oncology Group (ECOG) performance status of 4 (i.e. fully bed-ridden) were excluded from the study.

### **Instrumentation**

A semi-structured interview schedule was developed by the researcher herself based on intensive literature review and consultation with expertise for sociodemographic and disease related information. A validated

European Organization for Research and Treatment of Cancer Quality of Life (EORTC QLQ-C30) questionnaire was used to measure QoL.

Pretesting of instrument was done among 8 participants at Susil Koirala Prakhara cancer hospital for clarity and comprehensibility of the tool and also those involved participants were excluded from the study. On the basis of pretesting, instrument was revised and finalized for use in data collection.

### **Data Analysis Procedure**

The collected information was edited, coded and entered data in excel and transferred to SPSS version 20 for further analysis. Analysis and interpretation of the findings was done with the help of descriptive and inferential statistics.

### **Procedure of Data collection**

Data was collected through face to face interview technique and the record review by the enumerator after getting an authorized letter from the Research division, Tribhuvan University and Permission was taken from hospital authority. The data were collected within duration of March 12, 2020 to May 23, 2020. About 20-25 minutes was taken to collect data from each respondent.

Permission for the study was taken from Institutional Review Committee (IRC) of Institute of Medicine, Tribhuvan University, Maharajgunj, Kathmandu, Nepal (Ref. No. 366/ (6-11)<sup>2</sup>/076/77) and also the permission for the study was taken from the hospital. Each respondent were briefed with the research objectives and written informed consent was obtained from the participants to ensure the right of the subject. Confidentiality was maintained throughout the study. Participants were given liberty to discontinue participating in the study at any time if they wish. Precaution was taken throughout the study in every step to safeguard the right and welfare of all respondents in the study.

### **Validity and Reliability**

The content validity of the test instrument was established by extensive literature review, consulting with subject matter experts, nursing research faculty as well as peer review. The Validated tool European Organization for Research and Treatment of Cancer Quality of Life (EORTC QLQ-C30) questionnaire, which translated in Nepali language, was used in the study. First of all the instrument was developed in English language then translated into the Nepali language and retranslated into English version to retain the same meaning.

## RESULTS

**Table 1 a: Sociodemographic Characteristics of Cancer Patients: Age, Sex, Ethnicity, and Type of Family**

Sociodemographic Characteristics	Number	Percentage
<b>n=53</b>		
<b>Age group (in years)</b>		
20-29	3	5.7
30- 39	5	9.4
40- 49	14	26.4
50- 59	12	22.6
60-69	13	24.5
70 and above	6	11.3
Mean age= 53.02, S.D. =±13.619 Years ,Range=20-82 years		
<b>Sex</b>		
Male	24	45.3
Female	29	54.7
<b>Ethnicity</b>		
Brahmin/Chhetri	25	47.2
Janajati	14	26.4
Dalit	7	13.2
Madhesi	3	5.7
Muslims	3	5.7
Sanyasi	1	1.9
<b>Type of family</b>		
Nuclear	5	9.4
Joint	48	90.6

Table 1 a shows the mean age of cancer patients was 53.02 years and more than half were female. Nearly half were Brahmin/Chhetri and majority (90.6%) were living in joint family.

**Table 1 b: Socio-demographic Characteristics of Cancer Patients: Education, Occupation, Religion, Family Income Status, marital status**

Socio-demographic Characteristics	Number	Percentage
<b>Marital Status (n=53)</b>		
Unmarried	1	1.9
Married	52	98.1
<b>Educational level(n=38)</b>		
Just read and write	15	28.3
Primary level	9	17.0
Secondary level	7	13.2
Higher secondary level	6	11.3
Higher education	1	1.9
<b>Occupation (n=52)</b>		
Agriculture	12	23.1
Homemaker	28	53.8
Business	8	15.4
Service	3	5.8
Student	1	1.9
<b>Religion (n=53)</b>		
Hinduism	48	90.6
Muslim	4	7.5
Christianity	1	1.9
<b>Family Income Status (n=53)</b>		
Enough for less than six months	2	3.8
Enough for less than one year	40	75.5
Enough for one year and surplus	11	20.8

Table 1b shows that most (71.7%) of patients were literate and only (28.3%) were illiterate. Among literate, 28.3% were capable of Just read and write and only (1.9%) were higher education. Likewise, more than half (53.8%) of the patients were homemaker. Similarly, majority of the patients (90.6%) were Hindu followed by 7.5% Muslim. Majority (75.5%) had household income enough for less than one year. Likewise, nearly all (98.1%) of patients were married.

Table 2: Information on Patient's Disease Condition

Variables	Number	Percentage
<b>Site of Cancer</b>		
Lungs	13	24.5
Oral cavity, Gastroesophageal junction, base of tongue	3	5.7
Breast	10	18.9
Cervix, endometrium, ovary,	11	20.8
Stomach, Colon, Rectum, Caecum	6	11.3
Urinary bladder	1	1.9
Gall bladder	4	7.5
Prostate	1	1.9
Others	4	7.5
<b>Distant metastasis</b>		
Present	22	41.5
Absent	31	58.5

Table 2 shows that patients with carcinoma (ca) lungs were in highest proportion (24.5%). Others include scalp, seminoma, testes, and Ewing's sarcoma. Similarly, distant metastasis was present in 41.5% of patients.

**Table 3: Information on Duration, Stage of Disease and Treatment Modality**

Duration of disease since diagnosis	Number	n=53
		Percentage
Less than 6 months	26	49.1
6 months -1 year	14	26.4
1 to 2 years	9	17.0
More than 2 years	4	7.5
<b>Stage of disease</b>		
Stage I	2	3.8
stage II	5	9.4
stage III	7	13.2
stage IV	8	15.1
unknown	31	58.5
<b>Past treatment modality</b>		
Chemotherapy	26	49.1
Radiotherapy	4	7.5
Surgery	15	28.3
Chemotherapy and surgery	4	7.5
Radiotherapy and surgery	2	3.8
Radiotherapy, chemotherapy and surgery	2	3.8
<b>Present treatment modality</b>		
Chemotherapy	52	98.1
chemotherapy and Palliative care	1	1.9

On the basis of duration of disease since diagnosis, nearly half (49.1%) of them were receiving treatment since last six months and rest were undergoing treatment since more than six months. A few (7.5%) had even undergone treatment longer than two years. Likewise, 58.5% of patient's stage of disease was unknown followed by 15.1% in stage IV. Regarding the past treatment, nearly half (49.1%) of them had received chemotherapy followed by 28.3% surgery and in case of present treatment, almost all of them had come for chemotherapy (Table 3).

Table 4: Scores of the Respondents on Various Quality of Life Scales

Scale	Raw score Mean (SD)	Transformed score Mean (SD)	Minimum score	Maximum score
<b>n=53</b>				
<b>Global health/QoL</b>				
Global health status	3.15(1.09)	35.84(16.87)	8.33	83.33
<b>Functional scales</b>	2.90(0.46)	36.35(15.54)	.00	88.89
Physical functioning	2.26(0.68)	57.98(22.78)	.00	86.67
Role function	2.70(0.70)	43.08(23.44)	.00	100.00
Emotional functioning	3.55(0.56)	14.77(18.75)	.00	91.67
Cognitive functioning	3.04(0.77)	31.76(25.99)	.00	100.00
Social functioning	3.30(0.57)	23.27(19.15)	.00	83.33
<b>Symptom scales</b>	2.59(0.43)	53.02(14.61)	20.51	79.49
Fatigue	2.98(0.58)	66.24(19.36)	11.11	100.00
Nausea and vomiting	1.7(0.95)	23.89(31.770)	.00	100.00
Pain	3.36(0.49)	78.93(16.39)	33.33	100.00
Dyspnea	2.20(1.21)	40.25(40.48)	.00	100.00
Insomnia	3.16(0.77)	72.32(25.93)	.00	100.00
Loss of appetite	2.8(1.04)	61.63(34.83)	.00	100.00
Constipation	1.39(0.81)	13.20(27.22)	.00	100.00
Diarrhea	1.32(0.72)	10.69(24.26)	.00	100.00
<b>Financial difficulties</b>	3.60(0.59)	86.79(19.97)	33.33	100.00

Table 4 shows that the mean scores for all major scales and subscales of the Quality of life (QoL) instrument, the transform mean and SD score of Global Health/QoL was 35.84 (16.87). Similarly the functional scale was 36.35(15.54). Among the functional scale the highest score is in physical functioning 57.98(22.78) and lowest 14.77 (18.75) in emotional functioning .Regarding symptoms scale the transform mean and SD score is 53.02 (14.61) which also indicate more symptomatic. Among the symptoms scale, pain was the most annoying symptom78.93(16.39), which indicates that high level of problems was with pain for cancer patient followed by insomnia 72.32(25.93). The financial difficulty was the major problem for cancer a patient that is transform mean 86.79 (19.97).

**Table 5: Quality of Life Scores according to Sociodemographic Characteristics; Sex, Ethnicity, Educational Status**

n=53

<b>Sociodemographic characteristics</b>	<b>Global health/QOL†</b>	<b>Functional scales†</b>	<b>Symptom scales†</b>
<b>Sex</b>			
Female	34.48(15.38)	34.25(14.04)	53.05(11.89)
Male	37.50(18.71)	38.88(17.13)	52.99(17.63)
<b>p-value</b>	.522	.284	.989
<b>Ethnicity</b>			
Brahmin/Chhetri	37.00(18.80)	37.42(15.39)	50.66(14.26)
Janajati	32.73(16.81)	33.01(16.78)	58.05(16.51)
Dalit	36.90(16.56)	31.42(19.47)	57.87(13.55)
Madhesi	38.88(17.34)	43.70(2.56)	46.15(11.17)
Muslims	33.33(8.33)	46.66(6.66)	49.57(11.84)
Sanyasi	41.66(.)	37.77(.)	38.46(.)
<b>p-value</b>	.974	.647	.440
<b>Educational status</b>			
Illiterate	29.44(12.54)	32.88(17.17)	53.84(13.90)
Literate	38.37(17.81)	37.71(14.87)	52.69(15.05)
<b>p-value</b>	.082	.313	.80
<b>Education level</b>			
Just read and write	37.22(14.03)	30.81(12.08)	54.52(12.23)
Primary level	35.18(23.48)	40.74(20.54)	49.85(18.04)
Secondary Level	28.57(6.55)	36.19(7.55)	58.24(10.95)
Higher Secondary level	55.55(18.00)	50.00(10.20)	42.30(17.37)
Higher education	50.00(.)	51.11(.)	74.35(.)
<b>p-value</b>	.065	.062	.166

† Mean (SD) of transferred Scores; \*P value at 0.05 level of significance

Table 5 reveals that males were having better quality of life in both global and function score and least symptom scores and then females. Madhesi, literate with education up to higher secondary level had high global health score and least symptom scores.

Table 6: Quality of life Scores according to Socioeconomic Characteristics

Socioeconomic Characteristics	Global health/QOL†	Functional scales†	Symptom scales†
<b>n=53</b>			
<b>Type of family</b>			
Nuclear	41.6667(27.63)	42.22(15.23)	48.71(17.85)
Joint	35.24(15.68)	35.74(15.60)	53.47(14.38)
<b>p-value</b>	.423	.380	.494
<b>Occupation</b>			
Agriculture	30.55(16.41)	35.55(14.02)	53.84(17.66)
Homemaker	33.6310(15.12)	31.66(14.38)	53.84(11.71)
Business	37.50(11.78)	40.2778(14.38)	56.08(13.31)
Service	61.11(19.24)	54.81(4.62)	44.44(25.93)
Student	75.00(.)	88.88(.)	20.51(.)
<b>p-value</b>	.005	.000	.173
<b>Religion</b>			
Hinduism	36.11(16.87)	35.87(15.77)	53.04(15.06)
Muslim	39.58(14.23)	46.66(5.44)	50.00(9.70)
Christianity	8.33(.)	17.77(.)	64.10(.)
<b>p-value</b>	.242	.201	.697
<b>Economic Status</b>			
Household income only for less than six months	29.16(5.89)	46.66(9.42)	53.46(13.80)
Household income enough for less than 1 year	35.20(15.73)	34.27(13.82)	52.68(18.32)
Household income enough for 1 year and surplus	39.39(22.07)	42.02(20.69)	53.02(14.61)
<b>p-value</b>	.660	.220	.792

† Mean (SD) of transferred Scores; \*P value at 0.05 level of significance

Table 6 reveals that occupation was found to be associated with quality of life at statistically significant levels in (p=.005) global and (p= .000) function score. People living in nuclear family, Muslim and whose economic status was enough for one year and surplus have high global score.

Table 7: Quality of Life Scores according to Site of Cancer

Site of Cancer	n=53		
	Global health/QOL†	Functional scales†	Symptom scales†
Lungs	30.77(20.24)	32.14(14.25)	58.19(12.45)
Oral cavity, Gastro esophageal junction, base of tongue	33.33(22.05)	41.48(4.63)	59.83(10.68)
Breast	40.83(11.42)	40.00(7.03)	46.41(11.30)
Cervix, endometrium, ovary,	32.58(17.26)	31.31(19.94)	50.82(13.51)
Stomach, Colon, Rectum, Caecum	27.78(6.80)	31.85(12.06)	62.82(8.07)
Urinary bladder	50.00	51.11	74.36
Gall bladder	35.42(10.49)	38.33(5.84)	56.41(21.55)
Prostate	50.00	31.11	48.72
Others	47.92(27.53)	53.33(29.31)	31.41(11.35)
<b>p-value</b>	0.536	0.319	0.009*

† Mean (SD) of transferred Scores; \*P value at 0.05 level of significance

Regarding the site of cancer, the people with urinary bladder and prostate had high global health score 50 and others (scalp, seminoma, testes, Ewing's sarcoma) had high function score 53.33 and low symptom score 31.41. Site of cancer was found to be associated with quality of life at statistically significant levels (p=.0.009) in symptom score (Table 7).

Table 8: Quality of Life Scores according to Disease Condition

Disease Condition	n=53		
	Global health/QOL†	Functional scales†	Symptom scales†
<b>Stage of cancer</b>			
I Stage	41.66(11.78)	40.00(3.14)	34.61(1.81)
II Stage	41.66(13.17)	38.66(5.11)	51.28(11.60)
III Stage	36.90(22.49)	36.82(14.84)	55.31(17.44)
IV Stage	33.33(19.92)	29.44(27.67)	51.28(16.04)
Unknown	34.94(16.16)	37.41(13.28)	54.42(14.28)
<b>p-value</b>	.899	.759	.444
<b>Distant Metastasis</b>			
Present	30.30(16.57)	33.03(19.86)	55.71 (16.10)
Absent	39.78(16.20)	38.70(11.34)	51.11(13.40)
<b>p-value</b>	.043	.193	.264
<b>Duration of diagnosis</b>			
Less than 6 months	41.02(19.98)	41.36(17.29)	50.09(17.75)
6 months -1 year	33.92(12.85)	34.44(11.81)	56.59(11.12)
1 to 2 years	26.85(6.94)	30.12(10.60)	54.13(8.15)
More than 2 years	29.16(14.43)	24.44(15.81)	57.05(14.25)
<b>p-value</b>	.118	.077	.538

† Mean (SD) of transferred Scores; \*P value at 0.05level of significance

Table 8 shows that the patients with stage I and II had high global health score and least in stage IV followed the similar pattern in functional scale and lower symptom score in stage I of the disease. Likewise, the patients with distant metastasis had low 30.30(16.57) global health score, functional score 33.03(19.86) and higher symptom score. The result of distant metastasis had shown to be statistically significant in global health scales by the p-value ( $p = .043$ ). Regarding duration since diagnosis, the global health/QoL and functional score is high in those whose duration of diagnosis is less than six months.

**Table 9: Quality of Life Scores according to Past Treatment Modality**

Past Treatment Modality	Global health/QOL†	Functional scales†	Symptom scales†
Chemotherapy	37.17(20.84)	38.29(18.62)	50.88(15.66)
Radiotherapy	31.25(14.23)	34.44(4.25)	57.05(6.41)
Surgery	39.44(12.38)	38.37(12.80)	53.33(16.53)
Chemotherapy and surgery	25.00(6.80)	27.77(11.11)	60.89(13.62)
Radiotherapy and surgery	29.16(5.89)	31.11(.00)	53.84(3.62)
Radiotherapy, chemotherapy and surgery	29.16(5.89)	22.22(15.71)	53.84(3.62)
<b>p-value</b>	.654	.594	.857

n=53

† Mean (SD) of transferred Scores; \*P value at 0.05 level of significance

Table 9 shows that the patients undergoing surgery had the highest global health scores 39.44(12.38) and functional score 38.37 (12.80). Regarding symptom scale, least 50.88(15.66) was present in chemotherapy.

**Table 10: Pearson’s Correlation between Different QOL Scales and Overall QOL in the Patients**

Scale	Correlation	p-value
Global health status/QOL	1	-
Functional scales	.610**	.000
Symptom scales	-.521**	.000

n= 53

\*Correlation is significant at the 0.05 level (2- tailed); \*\* Correlation is significant at the 0.01 level (2-tailed)

Table 10 shows that there is positive correlation of .610\*\* (p=.000) significant at 0.01 level with functional scales and high negative correlation of -.521(p=-.521\*\*) with symptom scales at (p=.000) level of significance.

## DISCUSSION

In this study regarding the transform mean and SD score of Global Health/QoL was 35.84; the functional scale was 36.35 and the symptom scale of 53.02. This indicates that the quality of life of cancer patients was poor. Among the functional scale the highest score is in physical functioning 57.98(22.78) and lowest 14.77 (18.75) in emotional functioning. Likewise, a prospective hospital based study conducted in Ethiopia by Abegaz et al. (2018) on patients attending cancer treatment showed that the rate of QoL was 52.7. The highest functional status was emotional functioning. In contrast to the study, the study conducted in B.P. Koirala Memorial Cancer Hospital, Bharatpur, Chitwan by Pandey et al. (2015) on 245 cancer patient showed that the QoL scores for different scales as global health/QoL (85.54), functional (77.03), and (16.14). Among the symptoms scale, pain was the most annoying symptom 78.93 (16.39), which indicates that high level of problems is with pain for cancer patient. This is supported by the study conducted at the Nepal Cancer Hospital and Research Center showed that improving quality of life; better pain control should be done (Shrestha et al., 2017). In contrast to the study, the study conducted in Ethiopia showed that nausea and vomiting (43.3) were the most annoying symptom (Abegaz et al., 2018).

The financial difficulty is the major problem for cancer a patient that is transform mean 86.79 (19.97). This is in consistent with the study conducted in BPKIHS which showed transform mean (64.62) (Pandey et al., 2015). Also, the study conducted on quality of life among breast cancer patients undergoing

treatment in National Cancer Centers in Nepal showed that the participants reported severe financial difficulties (Manandharet al., 2014).

### **Quality of Life Scores according to Socio-demographic Characteristics**

The study reveals that males were having better quality of life in both global and function score and least symptom scores than females. This finding is inconsistent with study conducted in Pakistan showed that female were negatively associated with the QoL (Chagani et al., 2017). The study shows that patients with education up to higher secondary level have high global health score and least symptom scores. In contrast to the study, the study conducted in Tehran hospital by MS, Dehkordi, and Dehkordi, (2011) showed that no correlation was found between QoL and the patients' educational status. The study shows that whose economic status was enough for one year and surplus had high global score. This is in consistent to the study conducted in BPKIHS showed that patients able to make extra savings having highest global health (Pandey et al., 2015).

### **Quality of Life Scores according to Site of Cancer and Treatment Modality**

The study shows that the patients undergoing surgery as past treatment had the highest global health scores 39.44(12.38) and functional score 38.37 (12.80). Regarding symptom scale, least 50.88(15.66) was present in chemotherapy. In consistent with the study, the study conducted at state hospital by Stundag and Zencirci (2015) showed that operation, radiotherapy and chemotherapy had worse social wellbeing than mixed treatment.

Regarding the site of cancer, the people with urinary bladder and prostate had high global health score 50 and others (scalp, seminoma, testes, Ewing's sarcoma) had high function score 53.33 and low symptom score 31.41. Site of cancer was found to be associated with quality of life at statistically significant levels ( $p=.009$ ) in symptom score. Similarly, lung cancer was found to be associated with low level of quality of life (Esbensen et al., 2004). The patients with stage I and II had high global health score and least in stage IV followed the similar pattern in functional scale and lower symptom score in stage I of the disease. Likewise, the patients with distant metastasis had low 30.30(16.57) global health score, functional score 33.03(19.86) and higher symptom score.

The result of distant metastasis had shown to be statistically significant in global health scales by the p-value ( $p =.043$ ). Similarly, the study conducted in Ethiopia showed that patients with disease metastasis had low QoL as compared to without metastasis (Abegaz et al., 2018). Regarding duration since diagnosis, the global health/QoL and functional score was high in those whose duration of diagnosis was less than six months. This finding is supported by the study conducted in China which showed that longer duration since the diagnosis of cancer was found to be associated with lower quality of life (Park, Chung, & Lee, 2017).

The study shows that there is positive correlation of .610\*\* ( $p=.000$ ) significant at 0.01 level with functional scales and high negative correlation of  $-.521$ ( $p=-.521$ \*\* ) with symptom scales at 0.01 level of significance. The findings of the study is consistent to the study conducted in BPKIHS in which the global health status/QoL showed the highest correlation with the functional scale (0.962) and negative correlation ( $-0.413$ ) with symptom scale (Pandey et al., 2015).

## **CONCLUSIONS**

It is concluded that overall quality of life of cancer patients was poor. Global Health and functional scale had similar values. Among the functional scale the highest score is in physical functioning and lowest in emotional functioning. Thus, the emotional support is essential for cancer patients. Among the symptoms scale, pain is the most annoying symptom which need to be taken into consideration. The financial difficulty is the major problem for cancer patients. Occupation was statistically significant with quality of life in global and function scores and distant metastasis had shown to be statistically significant in global health

scales. Site of cancer was found to be associated with quality of life at statistically significant levels in symptom score.

## LIMITATIONS

Small samples were selected in this study.

## RECOMMENDATIONS

On the basis of findings, awareness programme should be launched focusing especially to uneducated group of people to improve their quality of life in all scales. Care givers need to fully understand the expectations that the patients have for their care, and provide care that is consistent with those expectations. The health system should be devised to increase quality of life of cancer patients in the health institution and provide patient friendly service.

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## CONFLICTS OF INTEREST

The authors do not have conflict of interest regarding this publication.

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