



ORIGINAL RESEARCH PAPER

Nursing

A STUDY TO ASSESS THE DEPRESSION, ANXIETY AND QUALITY OF LIFE (QOL) AMONG CANCER PATIENTS ADMITTED AT MMIMS & AMP;R HOSPITAL MULLANA, AMBALA HARYANA

KEY WORDS: HDRS for Depression, HAM-A for Anxiety & WHO-QOL for Quality of life

Mr. Prakash Jha*

Assistant Professor, Maharishi Markandeshwar college of Nursing, Mullana, Ambala *Corresponding Author

Ms. Shakuntala

Nursing Tutor, Maharishi Markandeshwar college of Nursing, Mullana, Ambala

ABSTRACT

Background: Cancer has an important impact on society all over the world. The magnitude of cancer is increasing day by day. Many cancers can be prevented others can be detected early in their developmental stage and can be treated and cured timely. Aim and Objectives The present study aims to assess the level of depression, anxiety and quality of life among cancer patients. Objectives of the study were to assess and find out association of level of depression, anxiety and quality of life among cancer patients with selected sample characteristics. **Methodology:** A non – experimental research with descriptive survey research design was carried with 125 patients by purposive sampling technique. Data was collected by HDRS, HAM-A & WHO-QOL Bref Questionnaire through face to face interview technique. **Result:** The significant finding of the study was that majority of the patients (52%) had severe depression followed by moderate depression (38.4%) whereas in anxiety 65.6% patients were having severe anxiety and least number (11.2%) were having mild level of anxiety due to which the quality of life of patients were also affected as majority of patients (48.8%) were having poor to fair quality of life. Depression, Anxiety and Quality of Life was having positive correlation as computed r value (0.25) between depression and anxiety was significant (0.005) and computed r value was (-0.28) between depression and QOL that was statistically significant at 0.05 level of significance i.e. (0.001). **Conclusion:** The study inferred that overall patients were having poor quality of life and suffering from depression and anxiety due to cancer.

BACKGROUND

Cancer is to a large extent unavoidable. Cancer is one of the major health problems worldwide. Cancer may be regarded as a group of diseases characterized by an abnormal growth of cells, ability to invade adjacent tissues and eventually death. It has impact on QOL. Cancer treatment may change one's appearance and how he feelings. The causes of cancer are diverse and complex. These factors may act together to initiate and promote carcinogenesis in human body. There are many reasons for developing cancer in human beings some of them are chemicals, cytotoxic agents and radiations. Incidence of depression among cancer patients is 16.2% and anxiety is 26.7 %. Incidence rate among male 94.1/ lakh population and for females 103.6/ lakh population in 2020. The total number of people who are alive within 5 years of cancer diagnose was estimated to be 43.8million in 2018. Chemical, diet, exercise, obesity, radiation, infection, physical agents, hormones or genetic changes are also prime factor. It affects the physical, social, cognitive and emotional life it remains an under recognized and under-treated problem in cancer survivor.¹⁵

MATERIAL AND METHODS:

This study has a descriptive survey research design, which was subjected to quantitative content analysis. In the study purposive sampling technique was used to select samples from population. Sample size was 125 cancer patients admitted at MMIMS&R and Hospital Mullana, Ambala Haryana. The study aimed to assess the level of depression, anxiety and quality of life. Data was collected through Performa for demographic variables, HDRS for Depression, HAM-A for Anxiety & WHO-QOL for Quality of life through face to face interview.

Data Analysis

Data was analyzed with descriptive statistics. Mean, Median & Standard deviation of depression, anxiety and quality of life. Chi square was incorporated to find out association between level of depression, anxiety and quality of life.

Ethical Consideration

Permission for this study was taken from Nursing Superintendent of MMIMS&R Hospital, Mullana, Ambala.

RESULTS

Maximum no of patients (40.8%) were n the age group of 26-50 years where most of the patients (64.8%) were male. majority of the patients (80.8%) were married. Maximum no of patients (75.2%) were from rural area In terms of educational status 1/3rd patients were having secondary education i.e.39.2 %. In occupation 1/3 of the patient was business and self-employed i.e. 32.8 %. Maximum number of patients 43.2 % was having family income > 15,000. More than half of the patients i.e. 65.6% were having illness for about 0 to 1year and 37.6% patients hospitalized due to cancer and getting treatment of chemotherapy i.e. 61.6% majority (78.4%) of patients were having history of no physical activity. 1/3 of Patients were having history of oral cancer i.e. 32.8 %. More than half of the patients 62.4% were having history of co morbid illness.

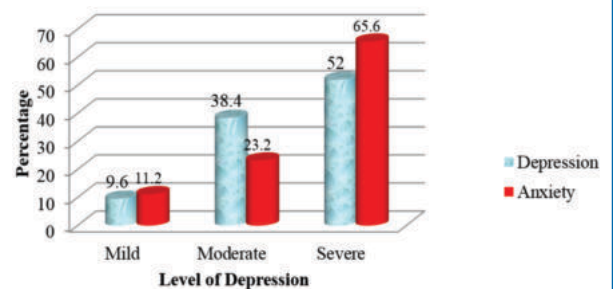


Figure 1 Cylindrical Bar graph showing the Level of Depression and Anxiety



Figure 3 Cylindrical Bar graph showing the level of quality of life score

Table-1 Range, Mean, Standard Deviation and Median in term of Depression, Anxiety and Quality of life scores among cancer patients N=125

| Variable | Actual range | Obtained range | Mean + S.D. | Median |
|-----------------|--------------|----------------|---------------|--------|
| Depression | 0-56 | 18-53 | 39.57 + 9.52 | 45 |
| Anxiety | 0-56 | 13-51 | 41.09 +10.55 | 47 |
| Quality Of life | 26-130 | 38-116 | 64.99 + 20.49 | 61 |

This table reveals mean score of depression is 39.57+ 9.52 and the median was 45 with the range of 18-53, .In anxiety the mean score is 41.09 ± 10.55 and median was 47 with the range of 13-51 And in QOL the mean score is 64.99 + 20.49 and median was 61 with the range 38-116.

Table 2 Mean, Mean Difference, Standard Deviation of difference, Standard Error of Mean Difference and 't' value of Depression, Anxiety, Quality of Life N=125

| Variable | Mean+ SD | MD | SEMD | 't' value | df | p value |
|------------|-------------|-------|------|-----------|-----|---------|
| Depression | 39.57+ 9.52 | 39.57 | 0.85 | 46.45 | 124 | 0.00* |
| Anxiety | 41.09+10.55 | 41.09 | 0.94 | 43.51 | 124 | 0.00* |
| QOL | 64.99+20.49 | 64.99 | 1.83 | 35.56 | 124 | 0.00* |

NS- Not significant (p>0.05) *significant (p<0.05)

This table depicts that mean, mean difference, standard deviation of difference, standard error of mean difference and 't' value of depression anxiety and QOL among cancer patient were it shows that the mean difference score of depression is 39.57, standard error of mean difference is 0.85 and the calculated t value is 46.45 with p value of 0.00* i.e. < 0.05. In Anxiety the mean difference is 41.09, standard error of mean difference is 0.94 and the calculated t value is 43.51 with the p value is 0.00* i.e. <0.05. Were as in QOL the mean difference is 64.99 and standard deviation of difference is 1.83 with t value is 35.56 with the p value <0.05 i.e.0.00*

Table-3 Correlation between Depression, Anxiety and Quality of Score among cancer patients N=125

| Pearson's Correlation | Depression (r and p value) | Anxiety (r and p value) | Quality of life (r and p value) |
|-----------------------|----------------------------|-------------------------|---------------------------------|
| Depression | XX | 0.25 (0.005*) | -0.28(0.001*) |
| Anxiety | 0.25 (0.005*) | XX | -0.26 (0.003*) |
| Quality of life | -0.28 (0.001*) | -0.26 (0.003*) | XX |

NS -Not significant (p>0.05) *Significant (p<0.05)

This table reveals that there was positive relationship between depressions; anxiety and QOL among cancer patients as the calculated p value < 0.05 level of significance.

Table- 4 Chi square showing association of Depression among Cancer Patients N=125

| S.No | Sample Characteristics | Depression | | | χ ² | df | p value |
|------|------------------------|-----------------|----------------------|-------------------|----------------|----|--------------------|
| | | Mild depression | Mode rate depression | Severe depression | | | |
| 1. | Age in years | | | | | | |
| 1.1 | <25 | 2 | 7 | 13 | 2.87 | 6 | 0.82 ^{NS} |
| 1.2 | 26-50 | 5 | 17 | 29 | | | |
| 1.3 | 51-75 | 4 | 16 | 15 | | | |
| 1.4 | >76 | 1 | 8 | 8 | | | |
| 2. | Gender | | | | 0.65 | 2 | 0.72 ^{NS} |
| 2.1 | Male | 8 | 33 | 40 | | | |
| 2.2 | Female | 4 | 15 | 25 | | | |
| 3. | Marital Status | | | | 4.98 | 4 | 0.28 ^{NS} |
| 3.1 | Married | 8 | 36 | 51 | | | |
| 3.2 | Unmarried | 1 | 2 | 1 | | | |
| 3.3 | Widow(er) | 13 | 10 | 17 | | | |

| | | | | | | | |
|------|---|------|----|---------|------|----|--------------------|
| 4. | Native Place | | | | | | |
| 4.1 | Urban | 3 | 11 | 17 | 0.15 | 2 | 0.92 ^{NS} |
| 4.2 | Rural | 9 | 37 | 48 | | | |
| 5. | Educational status | | | | | | |
| | | 8.14 | 8 | 0.42 NS | | | |
| 5.1 | No formal education | 4 | 21 | 23 | | | |
| 5.2 | Primary | 4 | 6 | 8 | | | |
| 5.3 | Secondary | 4 | 19 | 26 | | | |
| 5.4 | Higher secondary | 0 | 2 | 5 | | | |
| 5.5 | Graduation or above | 0 | 0 | 3 | | | |
| 6. | Occupation | | | | | | |
| 6.1 | Unemployed | 3 | 13 | 21 | 3.81 | 8 | 0.87 ^{NS} |
| 6.2 | Private | 2 | 11 | 13 | | | |
| 6.3 | Government | 1 | 1 | 2 | | | |
| 6.4 | Business /self employed | 5 | 14 | 22 | | | |
| 6.5 | Retired | 1 | 9 | 7 | | | |
| 7. | Family income in rupees | | | | | | |
| 7.1 | <5000 | 4 | 8 | 13 | 4.74 | 6 | 0.57 ^{NS} |
| 7.2 | 5001-10000 | 3 | 10 | 17 | | | |
| 7.3 | 10001-15000 | 0 | 9 | 7 | | | |
| 7.4 | >15000 | 5 | 21 | 28 | | | |
| 8. | History of pre morbid Lifestyle | | | | | | |
| 8.1 | Smoking | 4 | 17 | 25 | 5.19 | 8 | 0.73 ^{NS} |
| 8.2 | Substance abuse | 0 | 3 | 1 | | | |
| 8.3 | Alcohol consumption | 3 | 6 | 9 | | | |
| 8.4 | Both Alcohol & smoking | 1 | 5 | 3 | | | |
| 8.5 | No any | 4 | 17 | 27 | | | |
| 9. | Duration of illness in years | | | | | | |
| 9.1 | 0-1 years | 8 | 32 | 42 | 2.18 | 4 | 0.70 ^{NS} |
| 9.2 | 2 years to 4 years | 4 | 12 | 15 | | | |
| 9.3 | More than 5 years | 0 | 4 | 8 | | | |
| 10. | Duration of stay in hospital due to disease | | | | | | |
| 10.1 | Less than 1 day | 3 | 19 | 25 | 4.16 | 4 | 0.38 |
| 10.2 | 1-7 days | 3 | 18 | 25 | | | |
| 10.3 | More than 7 days | 6 | 11 | 15 | | | |
| 11. | Duration of treatment for cancer | | | | | | |
| 11.1 | 0-6 months | 8 | 30 | 39 | 1.93 | 6 | 0.92 ^{NS} |
| 11.2 | 2 months- 1 years | 3 | 11 | 17 | | | |
| 11.3 | 2 year- 4 years | 1 | 2 | 6 | | | |
| 11.4 | More than 5year | 0 | 4 | 3 | | | |
| 12. | Type of treatment for cancer | | | | | | |
| 12.1 | Chemotherapy | 2 | 26 | 49 | 24.1 | 8 | 0.00* |
| 12.2 | Surgery | 1 | 0 | 1 | | | |
| 12.3 | Target therapy | 0 | 1 | 0 | | | |
| 12.4 | Radiation therapy | 8 | 20 | 11 | | | |
| 12.5 | Immune therapy | 1 | 1 | 4 | | | |
| 13. | Physical activity at previous days | | | | | | |
| 13.1 | No physical activity | 7 | 41 | 50 | 9.90 | 6 | 0.12 ^{NS} |
| 13.2 | Exercise | 4 | 3 | 7 | | | |
| 13.3 | Cooking | 0 | 2 | 6 | | | |
| 13.4 | Others | 1 | 2 | 2 | | | |
| 14. | History of Site of cancer | | | | | | |
| 14.1 | Oral | 9 | 19 | 13 | 23.2 | 12 | 0.02* |
| 14.2 | Lungs | 0 | 6 | 15 | | | |

| | | | | | | | |
|------|--|----|----|----|------|---|--------------------|
| 14.3 | Thyroid | 0 | 7 | 6 | | | |
| 14.4 | Breast | 1 | 8 | 11 | | | |
| 14.5 | Kidney | 0 | 2 | 9 | | | |
| 14.6 | Prostate | 0 | 1 | 4 | | | |
| 14.7 | Uterus | 2 | 5 | 7 | | | |
| 15. | History of exposure to (chemical , radiation & cytotoxic agents) | | | | | | |
| 15.1 | Yes | 0 | 3 | 10 | 4.01 | 2 | 0.90 ^{NS} |
| 15.2 | No | 12 | 45 | 55 | | | |
| 16. | Any co morbidity illness | | | | | | |
| 16.1 | Yes | 7 | 31 | 40 | .20 | 2 | 0.90 ^{NS} |
| 16.2 | No | 5 | 17 | 25 | | | |

NS -Not significant (p>0.05) *significant (p ≤ 0.05)

This table depicts that depression is only associated with type of treatment ($\chi^2 = 24.11, p = 0.00$) and history of site of cancer ($\chi^2 = 23.27, p$ equal to 0.02).

Table- 5 Chi square showing association of Anxiety among Cancer Patients N=125

| S No. | Sample Characteristics | Anxiety | | | χ^2 | df | p value |
|-------|-----------------------------------|--------------|--------------------|------------------|----------|----|--------------------|
| | | MILD ANXIETY | MODE RATE ANXIE TY | SEV ERE ANXI ETY | | | |
| 1 | Age in years | | | | | | |
| 1.1 | <25 | 0 | 1 | 21 | 14.9 | 6 | 0.02* |
| 1.2 | 26-50 | 7 | 13 | 31 | 9 | | |
| 1.3 | 51-75 | 4 | 13 | 18 | | | |
| 1.4 | >76 | 3 | 2 | 12 | | | |
| 2. | Gender | | | | | | |
| | Male | 10 | 20 | 51 | 0.73 | 2 | 0.69 ^{NS} |
| | Female | 4 | 9 | 31 | | | |
| 3. | Marital status | | | | | | |
| 3.1 | Married | 10 | 20 | 71 | 6.11 | 4 | 0.19 ^{NS} |
| 3.2 | Unmarried | 1 | 2 | 1 | | | |
| 3.3 | Widow (er) | 3 | 7 | 10 | | | |
| 4. | Native place | | | | | | |
| 4.1 | Urban | 3 | 6 | 22 | 0.52 | 2 | 0.76 ^{NS} |
| 4.2 | Rural | 11 | 23 | 60 | | | |
| 5. | Educational Status | | | | | | |
| 5.1 | No Formal education | 7 | 13 | 28 | 7.20 | 8 | 0.51 ^{NS} |
| 5.2 | Primary | 2 | 2 | 14 | | | |
| 5.3 | Secondary | 5 | 10 | 34 | | | |
| 5.4 | Higher secondary | 0 | 2 | 5 | | | |
| 5.5 | Graduate/Above | 0 | 2 | 1 | | | |
| 6. | Occupation | | | | | | |
| 6.1 | Unemployed | 3 | 7 | 27 | 6.83 | 8 | 0.55 ^{NS} |
| 6.2 | Private Service | 1 | 8 | 17 | | | |
| 6.3 | Government Service | 1 | 0 | 3 | | | |
| 6.4 | Business/Self employed | 7 | 11 | 23 | | | |
| 6.5 | Retired | 2 | 3 | 12 | | | |
| 7. | Family Income per month in rupees | | | | | | |
| 7.1 | <5000 | 2 | 7 | 16 | 2.20 | 6 | 0.90 ^{NS} |
| 7.2 | 5001-10,000 | 2 | 8 | 20 | | | |
| 7.3 | 10,001-15,000 | 2 | 3 | 11 | | | |
| 7.4 | More than 15,001 | 8 | 11 | 35 | | | |
| 8 | History of Pre-Morbid Lifestyle | | | | | | |
| 8.1 | Smoking Habits | 7 | 11 | 28 | 27.8 | 8 | 0.00* |
| | | | | | 5 | | |

| | | | | | | | |
|------|---|----|----|----|-------|----|--------------------|
| 8.2 | History of substance abuse | 1 | 1 | 2 | | | |
| 8.3 | History of alcohol consumption | 2 | 5 | 11 | | | |
| 8.4 | History of smoking/alcohol consumption | 3 | 6 | 0 | | | |
| 8.5 | No any | 1 | 6 | 41 | | | |
| 9. | Duration of illness in years | | | | | | |
| 9.1 | 0-1 year | 9 | 14 | 59 | 11.71 | 4 | 0.02* |
| 9.2 | 2-3 years | 3 | 8 | 20 | | | |
| 9.3 | 4-7 years | 2 | 7 | 3 | | | |
| 10. | Duration of stay in hospital due to disease | | | | | | |
| 10.1 | Less than 1 day | 1 | 8 | 38 | 20.64 | 4 | 0.00* |
| 10.2 | 1-7 day | 4 | 10 | 32 | | | |
| 10.3 | More than 7 day | 9 | 11 | 12 | | | |
| 11. | Duration of treatment for cancer | | | | | | |
| 11.1 | 1-6 months | 8 | 14 | 55 | 18.64 | 6 | 0.00* |
| 11.2 | 7months – 1 year | 2 | 6 | 23 | | | |
| 11.3 | 2 years -4 years | 3 | 4 | 3 | | | |
| 11.4 | >5 years | 1 | 5 | 1 | | | |
| 12. | Type of treatment | | | | | | |
| 12.1 | Surgery | 0 | 0 | 0 | 13.39 | 8 | 0.09 ^{NS} |
| 12.2 | Chemo therapy | 7 | 20 | 50 | | | |
| 12.3 | Target therapy | 1 | 0 | 0 | | | |
| 12.4 | Radiation therapy | 6 | 9 | 24 | | | |
| 12.5 | Immunotherapy | 0 | 0 | 6 | | | |
| 13. | Physical activities at previous days | | | | | | |
| 13.1 | No physical activities | 9 | 21 | 68 | 4.27 | 6 | 0.6 ^{NS} |
| 13.2 | Exercise | 2 | 4 | 8 | | | |
| 13.3 | Cooking | 2 | 2 | 4 | | | |
| 13.4 | Others..... | 1 | 2 | 2 | | | |
| 14 | History of site of occurrence of cancer | | | | | | |
| 14.1 | Oral | 7 | 13 | 21 | 16.56 | 12 | 0.1 ^{NS} |
| 14.2 | Lungs | 2 | 4 | 14 | | | |
| 14.3 | Thyroid | 1 | 6 | 6 | | | |
| 14.4 | Breast | 1 | 2 | 17 | | | |
| 14.5 | Kidney | 0 | 1 | 10 | | | |
| 14.6 | Prostate | 1 | 0 | 4 | | | |
| 14.7 | Uterus | 1 | 3 | 10 | | | |
| 15 | Do you have any exposure to radiation, chemical, cytotoxic agents | | | | | | |
| 15.1 | Yes | 0 | 3 | 10 | 1.90 | 2 | 0.38 ^{NS} |
| 15.2 | No | 14 | 26 | 72 | | | |
| 16 | Any Co morbid illness | | | | | | |
| 16.1 | Yes | 10 | 20 | 48 | 1.54 | 2 | 0.46 ^{NS} |
| 16.2 | No | 4 | 9 | 34 | | | |

NS -Not significant (p>0.05) *significant (p ≤ 0.05)

This table depicts that anxiety is only associated with age in year ($\chi^2 = 14.99, p = 0.02$), History of pre morbid life style ($\chi^2 = 27.85, p = 0.00$), History of duration of illness ($\chi^2 = 11.71, p = 0.02$), Duration of stay in hospital due to disease condition ($\chi^2 = 20.06, p = 0.00$), Duration of treatment for cancer ($\chi^2 = 18.64, p = 0.00$).

Table 6 Chi square showing association of Quality of life among Cancer Patients N=125

| S No. | Sample Characteristics | Quality of Life | | | χ^2 | df | p value |
|-------|------------------------|-----------------|----------|----------|----------|----|--------------------|
| | | POOR QOL | FAIR QOL | GOOD QOL | | | |
| 1 | Age in years | | | | | | |
| 1.1 | <25 | 10 | 11 | 1 | 7.96 | 6 | 0.24 ^{NS} |
| 1.2 | 26-50 | 28 | 20 | 3 | | | |
| 1.3 | 51-75 | 15 | 12 | 8 | | | |
| 1.4 | >76 | 8 | 7 | 2 | | | |
| 2. | Gender | | | | | | |
| | Male | 42 | 30 | 9 | 0.94 | 2 | 0.62 ^{NS} |

| | | | | | | | |
|------|---|----|----|----|------|---|--------------------|
| | Female | 19 | 20 | 5 | | | |
| 3. | Marital status | | | | | | |
| 3.1 | Married | 51 | 42 | 8 | 6.29 | 4 | 0.17 ^{NS} |
| 3.2 | Unmarried | 1 | 2 | 1 | | | |
| 3.3 | Widow (er) | 9 | 6 | 5 | | | |
| 4. | Native place | | | | | | |
| 4.1 | Urban | 19 | 8 | 4 | 3.50 | 2 | 0.17 ^{NS} |
| 4.2 | Rural | 42 | 42 | 10 | | | |
| 5. | Educational Status | | | | | | |
| 5.1 | No Formal education | 24 | 17 | 7 | 6.10 | 8 | 0.63 ^{NS} |
| 5.2 | Primary | 9 | 8 | 1 | | | |
| 5.3 | Secondary | 21 | 22 | 6 | | | |
| 5.4 | Higher secondary | 4 | 3 | 0 | | | |
| 5.5 | Graduate/Above | 3 | 0 | 0 | | | |
| 6. | Occupation | | | | | | |
| 6.1 | Unemployed | 17 | 16 | 4 | 7.69 | 8 | 0.46 ^{NS} |
| 6.2 | Private Service | 14 | 10 | 2 | | | |
| 6.3 | Government Service | 2 | 0 | 2 | | | |
| 6.4 | Business/Self employed | 20 | 17 | 4 | | | |
| 6.5 | Retired | 8 | 7 | 2 | | | |
| 7. | Family Income per month in rupees | | | | | | |
| 7.1 | <5000 | 12 | 9 | 4 | 1.93 | 6 | 0.92 ^{NS} |
| 7.2 | 5001-10,000 | 15 | 13 | 2 | | | |
| 7.3 | 10,001-15,000 | 9 | 5 | 2 | | | |
| 7.4 | More than 15,001 | 25 | 23 | 6 | | | |
| 8. | History of Pre-Morbid Lifestyle | | | | | | |
| 8.1 | Smoking Habits | 21 | 19 | 6 | 13.7 | 8 | 0.08 ^{NS} |
| 8.2 | History of substance abuse | 2 | 2 | 0 | | | |
| 8.3 | History of alcohol consumption | 9 | 7 | 2 | | | |
| 8.4 | History of smoking/alcohol consumption | 2 | 3 | 4 | | | |
| 8.5 | No any | 27 | 19 | 2 | | | |
| 9. | Duration of illness in years | | | | | | |
| 9.1 | 0-1 year | 42 | 33 | 7 | 2.65 | 4 | 0.61 ^{NS} |
| 9.2 | 2-3 years | 15 | 11 | 5 | | | |
| 9.3 | 4-7 years | 4 | 6 | 2 | | | |
| 10. | Duration of stay in hospital due to disease | | | | | | |
| 10.1 | Less than 1 day | 21 | 22 | 4 | 5.21 | 4 | 0.26 ^{NS} |
| 10.2 | 1-7 day | 22 | 20 | 4 | | | |
| 10.3 | More than 7 day | 18 | 8 | 6 | | | |
| 11. | Duration of treatment for cancer | | | | | | |
| 11.1 | 1-6 months | 42 | 28 | 7 | 6.66 | 6 | 0.35 ^{NS} |
| 11.2 | 7months - 1 year | 14 | 14 | 3 | | | |
| 11.3 | 2 years -4 years | 2 | 5 | 3 | | | |
| 11.4 | >5 years | 3 | 3 | 1 | | | |
| 12. | Type of treatment | | | | | | |
| 12.1 | Chemo therapy | 42 | 31 | 4 | 16.8 | 8 | 0.03* |
| 12.2 | Target therapy | 1 | 0 | 0 | 4 | | |
| 12.3 | Surgery | 1 | 0 | 1 | | | |
| 12.4 | Radiation therapy | 17 | 14 | 8 | | | |

| | | | | | | | |
|------|---|----|----|----|------|----|--------------------|
| 12.5 | Immunotherapy | - | - | - | | | |
| 13. | Physical activities at previous days | | | | | | |
| 13.1 | No physical activities | 51 | 38 | 9 | 8.54 | 6 | 0.20 ^{NS} |
| 13.2 | Exercise | 3 | 9 | 2 | | | |
| 13.3 | Cooking | 5 | 1 | 2 | | | |
| 13.4 | Others..... | 2 | 2 | 1 | | | |
| 14 | History of site of occurrence of cancer | | | | | | |
| 14.1 | Oral | 18 | 16 | 7 | 14.2 | 12 | 0.28 ^{NS} |
| 14.2 | Lungs | 10 | 10 | 1 | 6 | | |
| 14.3 | Thyroid | 9 | 2 | 2 | | | |
| 14.4 | Breast | 8 | 11 | 1 | | | |
| 14.5 | Kidney | 7 | 4 | 0 | | | |
| 14.6 | Prostate | 2 | 1 | 2 | | | |
| 14.7 | Uterus | 7 | 6 | 1 | | | |
| 15 | Do you have any exposure to radiation, chemical, cytotoxic agents | | | | | | |
| 15.1 | Yes | 5 | 6 | 2 | 0.68 | 2 | 0.71 ^{NS} |
| 15.2 | No | 56 | 44 | 12 | | | |
| 16 | Any Co -morbid illness | | | | | | |
| 16.1 | Yes | 34 | 32 | 12 | 4.45 | 2 | 0.1 ^{NS} |
| 16.2 | No | 27 | 18 | 2 | | | |

NS -Not significant (p>0.05) * -significant (p ≤ 0.05)
 This table indicated that quality of life is only associated with Type of treatment for cancer ($\chi^2 = 16.84, p = 0.03$).

DISCUSSION

A similar study was conducted by Marrie were Goretti Uwayezu on anxiety and depression among cancer patients at Rawanda referral hospital, New York USA were they found maximum no of patients were in the age group of 44- 61 i.e. (44.7%) and one third of patients (27%) were in the age group of 62-89 years of age and very least no of patients were in the age group of 18-35 i.e. (11.4%) and 36-43 of age i.e. (16.66%). (58.3%) were in Females were as (41.7%) were males patients. in relation to marital status majority of patients (72.9%) were married were as least no patients were single (5.2%) separated and widower (20.9%).more than one half of patients were unemployed i.e. (55.2%) and less than half of the patients were employed (44.8%).

Another study was conducted by Prakash Jha, Srinivasan, Uma Deaver, Jyoti Sarin on Depression and QOL among elderly in Ambala Haryana were majority of participants were having moderate level of depression i.e. (67%) in DMT group and (80%)in PMR group, were as less than half of patients having mild level of depression (33%)in DMT group and (20%)in PMR group. Results also shows that (100%) of patients were having poor QOL in both DMT and PMR group due to depression hence they proved that depression is highly correlated with Quality of life of people.

The findings of study was partially consistent and contradictory to a cross sectional study conducted by Abdullah Y Naser , Noor Mustafa , Hassan Al Wafi on anxiety among cancer patients at department of pharmacology and toxicology, college of medicine ,umm Al-Qura University Mecca ,Saudi Arab shows the result that majority of patients were having minimal anxiety i.e. (55.4%)were as least no patients were having severe (23.2%) to moderate (21.4 %) level of anxiety.

CONCLUSION

The finding of the study shows that there was significant correlation between depression anxiety and quality of life and predominantly depression has a stronger impact on the global QOL of patients than anxiety.

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