"Evaluate the effectiveness of Art therapy on stressamong patients with cancer in selected hospitals of Udaipur, District, Rajasthan."

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Abstract:

Background: Stress is considered a major precipitating psychological issue in cancer patients from diagnosis, through treatment and prognosis, even after the disease duration is long gone and affect the persons and family member. The psychological, physiological and personal impact on cancer patients and their families results in profound change in their living standard. Cancer patients are often stressed with the uncertainty, disease severity, physical difficulties, medical treatments, psychological state, and family issues and personal discomforts. Researcher conducted A study to "Evaluate the effectiveness of Art therapy on stress among patients with cancer in selected hospitals of Udaipur, District, Rajasthan."

Materials and methods:It included the Quantitative Evaluative research approach, pre experimental one group pre–test and post-test research design, variables under study were Art therapy as independent variable, stress among patient with cancer dependent variable. Research used general system model by Ludwig Von Bertalanffy in 1968. Selected Hospital of Udaipur District as research setting, total 60 samples, and non-probability convenient sampling techniques was used. The nursing intervention Art therapy was used for this study and tool used for data collection were socio-demographic data and 4-Point stress assessment rating scale. The data obtained were analyzed and interpreted in the light of objectives and hypothesis using both descriptive and inferential statistical in terms of frequency, percentage and chi-square.

Results:Result revealed that calculated t value (9.24) is found highly significant at the level of P=0.05.it shows there is significant relationship between effect of Art therapy and stress score among patients with cancer Hence research hypothesis H_1 is proved and accepted.In experimental group Age in years $\chi^2 = 19.59$ andOccupational status $\chi^2 = 20.32$ were found to be significantly associated with Pre-test level of stress score at 0.05 level So there is a significant association between the pre-test level of stress and selected socio-demographic variables among patients with cancer. Hence Research hypothesis H_2 is accepted.

Conclusion:The main focus of the study was to "Evaluate the effectiveness of Art therapy on stress among patients with cancer in selected hospitals of Udaipur, District, Rajasthan." The mean post- test score for stress among experimental group Mean=35.25was lower than the mean pre- test stress score 48.05 and the calculated 't' value is t= 9.24 greater than the table value. The finding shows that the art therapy was highly effective in reducing the level of stress among patients with cancer. Hence, research hypothesis H_1 accepted.

Key Words: Evaluate, Effectiveness, Art therapy, Stress, Patients with Cancer

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I. Introduction

Stress is considered a major precipitating psychological issue in cancer patients from diagnosis, through treatment and prognosis, even after the disease duration is long gone and affect the persons and family member.[1]

Cancer is a group of cells that grows out of control, taking over the function of the affected organ. Cancer cells are described as poorly constructed, loosely formed, and without organization. cancer is not a disease, but many diseases with different causes, manifestations, treatments, and prognoses.[2]In India, around 2.0–2.5 million people are living with one or another type of cancer menace, over and above 7–8 million new cases added every year to the existing burden of the scenario.[3]

Art therapy helps adolescents, and adults explore their emotions, improve self-esteem, manage addictions, relieve stress, improve symptoms of hysteria and depression, and deal with a physical illness or disability of the person. Art therapy is very useful in reducing stress of cancer patients.[4] The PMC journal 2018 reported cancer prevalence at national level and its distribution across socioeconomic groups by rural and urban

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areas is presented. Overall, the cancer prevalence is estimated to be 83 per 100,000 persons with a greater prevalence reported in urban population 110 per 100,000 persons.[5]

II. Materials and Methods

Quantitative Evaluative research approach was used for the presentstudy. This approach would help the researcher to evaluate the effectiveness of Art therapy on stress among patients with cancer in selected hospitals of Udaipur, District, Rajasthan.

Research design - Pre-experimental one group pre-test and post-test research design.

Research Settings: The study was conducted in the oncology ward in Geetanjali Hospital, Udaipur Rajasthan.

Study duration: 01/02/2020 -28/02/2020.

Sample Size: 60 patients with cancer.

Population: The target Accessible population comprised of all patients with cancer. In this present study the sample consisted of 60 patients with cancer who admitted in the oncology ward.

Sampling Technique: Non-Probability convenient sampling technique.

Inclusion criteria:

1. Patients who are diagnosed to have any type of cancer.
2. Patients who are aged between 20-60 years.
3. Patients who speak and understand Hindi and English.

Exclusion criteria: -

1. Patients who are unconscious and terminally ill.
2. Patients who are physically and mentally handicapped.
3. Patients who are not willing to participate in this study.
4. Patients who are already exposed to art therapy.

Procedure Methodology: Researcher obtained informed written consent from the study participants; confidentiality of the study subject was assured. The data collection was done after obtaining a written consent from the participants. During the data collection period, the patients who met the inclusion criteria were selected by using non probability convenient sampling techniques. The pretest was conducted by using the 4 - point stress assessment rating scale. The duration of the administration of the scale was about 20-30 minutes. From that day onwards, the researcher administrated an art therapy to each sample for one hour for 7 days. The patients were encouraged to express their thoughts, feelings and emotions through drawing and there is no limitation in drawing. The post test was conducted after completion of art therapy. The collected data were analyzed based on the above-mentioned objective using the descriptive and inferential statistics.

Statistical analysis: The obtained data were analyzed in terms of objectives of the study using descriptive and inferential statistics. The plan for data analysis was as follows Organization of data in master sheet. Obtained data were analyzed in terms of frequencies and percentages. Description Statistics: Description of demographic characteristics. Mean, median, SD and mean percentage is used to describe the pre-test and post-test stress score of the respondent regarding Art therapy. Inferential Statistics: Chi-square is used to find out the association between the pre-test level of stress with selected socio-demographic variables.

III. Results

Section A: Assessment of Pre - test and Post - testlevel ofstress among patients with cancer.

Section B: Effectiveness of Art therapy on stress among patients with cancer.

Section A: Assessment of Pre - test and Post - testlevel ofstress among patients with cancer.

Table 1: Assessment of Pre - test and Post - testlevel ofstress among patients with cancer.

N= 60

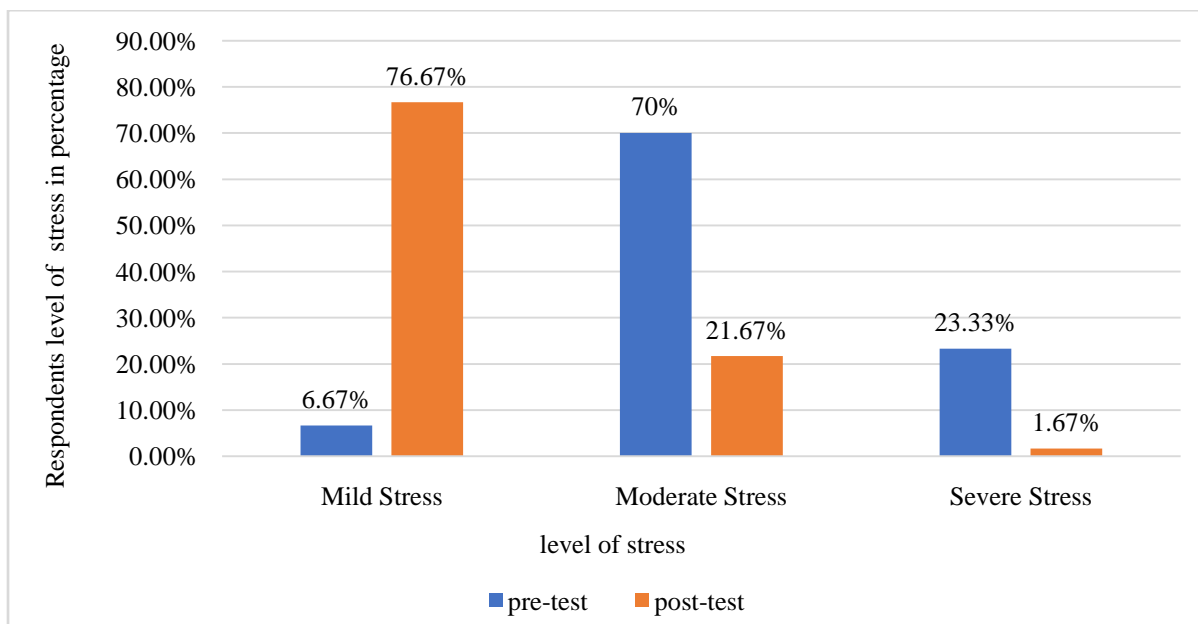| Level of stress	Mild Stress		Moderate Stress		Severer Stress	
	No.	Percentage	No.	Percentage	No.	Percentage
Pre-test	04	6.67	42	70	14	23.33
Post-Test	46	76.67	13	21.67	01	1.67

Figure 1: Percentage distribution of Pre-test and Post-test level of stress.

Table 1 and Figure 1:projected that in the pre-test, majority of the respondents 70 % had moderate level of stress, 23.33 % had severe stress and 46.67 % were had mild level of stress before the art therapy, whereas in the post-test, majority of the respondents 76.67 % had mild level of stress, 21.67 % respondents had moderate level of stress and 1.67 % had severe level of stress after an art therapy. Hence,it shows that after the art therapy level of stress among patients with cancer was reduced.

Section B: Effectiveness of Art therapy on stress among patients with cancer.

Table 2: Effectiveness of Art therapy on stress among patients with cancer.

N=60

	Mean	Mean Percentage (%)	SD	Enhancement	Enhancement percentage (%)	df	t-value	Inference
Pre-test	48.5	66.66	9.65	13.25	17.66%	59	9.24	S*
Post-test	35.25	47.00	8.6					

S* = Significant

NS=Non-Significant

Table-2: Projected that the pre-test mean score of stress among patients with cancer was 48.5 with S.D 9.65 and the post-test mean score of stress was 35.25 with S.D 8.5. The data further represent that the estimated 't' value for the level of stress is 9.24, which is significantly higher than the table value 2.0010 at P<0.05 level. There is a significant difference in the level of stress before and after Art therapy among patients with cancer.Hence research hypothesis H_1 was accepted.

IV. Discussion

The present study has been undertaken to "Evaluate the effectiveness of Art therapy on stress among patients with cancer in selected hospitals of Udaipur, District, Rajasthan." The First Objective was to To assess the level of stress among patients with cancer before and after art therapy.Before an Art therapy, majority of the respondents 42 (70 %) had moderate level of stress, 14 (23.33 %) had severe stress and 4 (6.67 %) were had mild level of stress. It was found that patients who were diagnosed with any type of cancer have moderate level of stress and it revealed that there is a need for relaxation and ventilation of feelings. After an Art therapy, majority of the respondents 46 (76.67 %) had mild level of stress, 13 (21.67 %) respondents had moderate level of stress and 1 (1.67 %) had severe level of stress.

A similar pre-experimental one group pre-test and post-test study was conducted by A. Akilain year 2012 at thanjavur, Chennai, India. In the pre-test, majority of the subjects 28 (70 %) had moderate level of stress, 10 (25 %) had severe stress and 2 (5 %) were had mild level of stress before the art therapy, whereas in the post test, majority of the subjects 31 (77.5 %) had mild level of stress, 8 (20 %) subjects had moderate level of stress and 1 (2.5 %) had severe level of stress after an art therapy.

The Second Objective is to evaluate the effectiveness of art therapy on stress among patients with cancer.In the pre-test before the art therapy, the mean pre-test score of stress among patients with cancer was

48.5 with S.D 9.65 and the post-test mean score of stress was 35.25 with S.D 8.5. The data further represent that the estimated 't' value for the level of stress is 9.24, which is significantly higher than the table value 2.0010 at $P < 0.05$ level. This clearly indicates that after the administration of Art Therapy the post- test level of stress was considerably reduced among patients with cancer and this clearly shows that the art therapy was highly effective in reducing the level of stress among patients with cancer. Hence the research hypothesis H_1 was proved and accepted.

A similar pre-experimental one group pre-test and post-test study was conducted by A. Akilain year 2012 at thanjavur, Chennai, India. Which showed that the 't' value 22.05 is greater than the table value (2.384) at $P < 0.01$ level of significance. Hence the Art therapy is more effective in changing the level of stress.

The Third Objective is to find out the association between the pre-test level of stress with selected socio demographic variables among patients with cancer. There was a significant association between the level of stress with selected demographic variables such as age in years $\chi^2 = 19.59$ andoccupational status $\chi^2 = 20.32$ were found to be significantly associated with pre-test level of stress score at 0.05 level and the rest of the socio-demographic variables such as gender $\chi^2 = 2.64$, type of family $\chi^2 = 7.46$, educational status $\chi^2 = 9.14$, marital status $\chi^2 = 12.04$, monthly family income $\chi^2 = 8.82$, duration of illness $\chi^2 = 14.01$, site of cancer $\chi^2 = 8.49$, modality of treatment $\chi^2 = 13.59$, duration of treatments $\chi^2 = 5.71$ and personal habits $\chi^2 = 12.09$ were not found to be significant with pre-test level of stress score at 0.05 level.

V. Conclusion

The study was conducted on "Evaluate the effectiveness of Art therapy on stress among patients with cancer in selected hospitals of Udaipur, District, Rajasthan." In the present study 60 patients with cancer were selected through non probability convenient sampling technique. Researcher used pre-experimental one group pre-test and post- test research design to assess the stress level among patients with cancer. Data were collected through 4- point stress assessment rating scale and data were analysed through suitable statistical method

References

[1].   Kang DH, Park NJ, McArdle T. Cancer-specific stress and mood disturbance: Implications for symptom perception, quality of life, and immune response in women shortly after diagnosis of breast cancer. ISRN Nurse. 2012; 608039. Available At: PMC article, PubMed, Google Scholar.
[2].   Williams S. Linda, Hopper D. Paula. Understanding medical surgical nursing. 3rd ed. New Delhi: Jaypee brothers' medical publishers (p) Ltd. page no. 146-147.
[3].   Project Proposal. State Health Systems Resource Centre National Rural Health Mission. Department of Health and Family Welfare. Available at: Pbhealth.gov.in/Final%20State%20Proposal.
[4].   Slayton SC, D Archer j, Kaplan F. outcomes studies of art therapy: A review of findings. Journal of the American Art Therapy Association. 2011; 27(3):108-118. Available at: https://www.tandfonline.com/doi/abs/10.1080/07421656.2010.
[5].   Rajpal Sunil, Kumar Abhishek,Joe William. Economic burden of cancer in India: Evidence from cross-sectional nationally representative household survey. PMC Journal. 2018; 13(2).Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5826535/.