EFFECTIVENESS OF ART THERAPY ON STRESS AMONG PATIENTS WITH CANCER IN A SELECTED HOSPITAL, THANJAVUR

 $\mathbf{B}\mathbf{y}$

Ms. AKILA. A

Reg. No. 30106241



A DESSERTATION SUBMITTED TO THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING

(PSYCHIATRIC NURSING)

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CERTIFICATE

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EFFECTIVENESS OF ART THERAPY ON STRESS AMONG PATIENTS WITH CANCER IN A SELECTED HOSPITAL, THANJAVUR

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ABSTRACT

A study to evaluate the effectiveness of Art Therapy on stress among patients with cancer at selected Hospital in Thanjavur District.

The present study was conducted at Thanjavur cancer centre in Thanjavur. Pre experimental design with one group pre test and post test was used for this study. Permission was obtained from the hospital administrator and data collection was done over a period of 4 weeks. The investigator has selected 40 samples with cancer through convenience sampling technique. Oral consent was obtained from the subjects. In the pre test, 4 point stress assessment rating scale was used for assessing the level of stress. After the pretest, the investigator administered art therapy for 30-45 minutes for 5 consecutive days and then the post test was done after the 5 days of intervention. Descriptive and inferential statistics were used to analyze the findings of the study.

There was a highly significant difference (P<0.01) found between the mean pretest [48.05 (+6.95)] and post test score of stress [33.75 (+7.25)]. There was a significant association (P <0.05) between the level of stress and age at P<0.05 level of significance.

The findings of the study show that art therapy is effective in reducing the level of stress among patients with cancer. So, art therapy can be practiced in hospitals and in any set up to help patients and family members to cope up with stress and to promote stress free healthy life.

CHAPTER -I

INTRODUCTION

Art is a step from what is obvious and well-known

toward what is arcane and concealed."

- Kahlil Gibran

Recent times have seen an increase in the incidence of cancer. This is mainly attributed to urbanization, industrialization, lifestyle changes, population growth and increased life span (in turn leading to an increase in the elderly population). In India, the life expectancy at birth has steadily risen from 45 years in 1971 to 62 years in 1991, indicating a shift in the demographic profile. It is estimated that life expectancy of the Indian population will increase to 70 years by 2021–25. This has caused a paradigm shift in the disease pattern from communicable diseases to non-communicable diseases like cancer, diabetes and hypertension. (Ranjani Mohan, 2009)

Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. If the spread is not controlled, it can result in death. Cancer is caused by both external factors (tobacco, infectious organisms, chemicals, and radiation) and internal factors (inherited mutations, hormones, immune conditions, and mutations that occur from metabolism).

Every day, our bodies are exposed to cancer-causing agents in the air, food and water. Typically, our immune system recognizes those abnormal cells and kills them before they produce a tumor. There are three important things that can happen to prevent cancer from developing - the immune system can prevent the agents from invading in the first place, DNA can repair the abnormal cells or killer T-cells can kill

off cancer cells. Research has shown that stress can lower the body's ability to do each of those things. (**Lorenzo Cohen, 2009**)

Depression, anxiety, stress and other forms of psychological morbidity such as adjustment disorders are common in cancer patients. Research from the USA estimates between 35 and 50% of cancer patients are affected by psychological problems. (European Journal of Cancer Care, 2005)

Stress is defined as a real or interpreted threat to the physiological or psychological and / or behavioral response. It is a bodily or mental tension resulting from factors that tend to alter an existing equilibrium. Stress may be positive or negative. It involves a stressor and a stress response. (Lalitha, 2007)

The National Center for Complementary and Alternative Medicine, (2006) states complementary and alternative medicine (CAM) as " a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine".

Complementary approaches that may be used with cancer treatment are acupuncture, art therapy, aroma therapy, biofeed back, massage, prayer, meditation, music therapy and yoga. Complementary and alternative medicine (CAM) use among cancer patients varies according to geographical area, gender, and disease diagnosis. The prevalence of CAM use among cancer patients in the United States has been estimated to be between 7% and 54%. Most cancer patients use CAM with the hope of boosting the immune system, relieving pain, and controlling side effects related to disease or treatment (**Patrick J. Mansky, 2006**)

Art therapy is the therapeutic use of art making, within a professional relationship, by people who experience illness, trauma or challenges in living, and by people who seek personal development. Through creating art and reflecting on the art products and processes, people can increase awareness of self and others cope with symptoms, stress and traumatic experiences; enhance cognitive abilities; and enjoy the life-affirming pleasures of making art. (**The American Art Therapy Association**, **2007**)

A Cancer diagnosis often leaves patients feeling lost, sad, depressed and full of emotions they need to express. With these emotions in mind, art therapy can provide a creative outlet for patients to share their emotions, Art therapy does not have to be limited to painting or drawing, and other art therapies include drama, poetry, photography and dance. (Rachel Nelson, 2008)

In most art therapy sessions, the focus is on your inner experience (feelings, perceptions, and imagination) While art therapy may involve learning skills or art techniques, the emphasis is generally first on developing and expressing images that come from inside the person, rather than those he or she sees in the outside world. (Marachi, 2006)

Art therapists and other professionals use art-based assessments to evaluate emotional, cognitive and developmental conditions. There are also many psychological assessments that utilize art making to analyze various types of mental functioning. (Betts, 2005)

NEED FOR THE STUDY

Non communicable diseases are the leading killer of today and are on the increase, 36.1 million people died due to non communicable disease, In that Cancer is a leading cause of death worldwide, contributes 7.6 million people death in 2008, Approximately 70% of cancer deaths occurs in low and middle income countries and 30% of can be prevented. Deaths from cancer worldwide are projected to continue to over 11 million in 2030. (World Health Organisation, 2011)

Cancer is responsible for 1 in 8 deaths worldwide. In fact, cancer causes more deaths than AIDS, tuberculosis and malaria. (Otis W.Brawley, 2010)

Cancer prevalence in India is estimated to be around 2.5 million, with over 8,00,000 new cases and 5,50,000 deaths occurring each year due to this disease. More than 70% of the cases report for diagnostic and treatment services in the advanced stages of the disease, which has lead to a poor survival and high mortality rate. (Ranjani Mohan, 2009)

In Chennai, the total cancer burden is predicted to increase by 32% by 2012–16 compared with 2002–06, with 19% due to changes in cancer risk and a further 13% due to the impact of demographic changes. The annual cancer burden predicted for 2012–16 is 6100 for Chennai, translating to 55 000 new cases per year statewide in Tamil Nadu. (National Medical Journal of India, 2011)

American Cancer Society stated that Cancer can cause multiple psychological crises, including loss of control, loss of self efficacy, isolation, decreased self esteem and Grief. A cancer diagnosis always feels urgent to patients and families, after patients learn that they have cancer, life seems out of balance.

Psychological effects of cancer include stress, depression, loss of self esteem and anxiety. Due to the physical and mental changes of cancer treatment leads to these psychological problems. A high level of stress is often attributed to cancer and can be a common psychological effect of cancer.

Stress hormones may play new role in speeding up cancer growth, A study showed that an increase in nor epinephrine, a stress hormone, can stimulate tumor cells to produce certain compounds, These compounds can break down the tissue around the tumor cells and allow the cells to more easily move in to the blood stream. From there they can travel to another location in the body to form additional tumors, a process called metastasis. (Seth Deborah, 2005)

American Cancer Society states that art therapy has not undergone rigorous scientific study to determine its therapeutic value for people with cancer, but many clinicians have observed and documented significant benefits among people who have participated in art therapy. Participating in art therapy or creating art on your own can be an effective form of distraction as well. Thinking about and creating art can help to distract you from focusing on thoughts of pain and anxiety.

Art therapy is considered a mind-body intervention that can influence physiological and psychological symptoms. The experience of expressing oneself creatively can reawaken positive emotions and address symptoms of emotional numbing in individuals with Post traumatic stress disorder. (**Josee Leclerc,2005**)

According to American cancer society, Art therapy enables a patient to relieve fear, anger, stress and anxiety while expressing emotions. Art therapist belives

that the therapy chemically affects the brain as well, releasing feel chemicals in the brain and altering brain waves affecting emotion in brain.

Art therapy can be a useful tool to distract cancer patients from their painful medical treatments. The creative act of drawing can itself be healing because it can reduce anxiety by helping to release suppressed emotions. Also, drawing therapy can allow therapists to learn more about the inner workings of cancer patients, especially children, who sometimes draw what they cannot say. (Elizabeth catanese, 2007)

As per the above prevalence the investigator felt the need to assess the level of stress among patients with Cancer. Hence, an evaluative study was adopted to elicit the effectiveness of art therapy on stress among patients with cancer.

STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of Art Therapy on Stress among patients with Cancer at selected Hospital in Thanjavur District.

OBJECTIVES

- To assess the level of stress among patients with cancer before and after art therapy.
- 2. To evaluate the effectiveness of art therapy on stress among patients with cancer.
- 3. To associate the post test level of stress with selected demographic variables among patients with cancer.

HYPOTHESES

- H₁: There will be a significant difference in the level of stress before and after Art therapy among patients with cancer at P<0.05 level of significance.
- H₂: There will be a significant association between the post test level of stress and selected demographic variables among patients with cancer at P<0.05 level of significance.

OPERATIONAL DEFINITION

> Effectiveness

It refers to the statistically significant changes in the level of stress among patients with cancer after the administration of art therapy.

> Art Therapy

It is an expression of the thoughts, emotions and feelings of the patients with cancer through their drawings, for 30-45 minutes for 5 days.

> Stress

It is the expression of patients with cancer about physiological, emotional, cognitive and personal discomfort as measured by 4 point stress assessment rating scale.

> Patients with cancer

People who are diagnosed to have any type of cancer aged between 20-60 years in a selected setting.

ASSUMPTIONS

- 1. Clients who were diagnosed to have cancer may experience stress.
- Art therapy may bring the change in the level of stress among patients with cancer.

DELIMITATION

- The Study was limited to patients with cancer in Thanjavur Cancer Centre,
 Thanjavur.
- 2. Data collection period was limited to 4 weeks.

CONCEPTUAL FRAME WORK

A conceptual frame work is an interrelated concept or abstractions that are assembled together in some rationale scheme by virtue of their relevance to common theme (Polit and Hungler 1995).

The conceptual frame work adopted for this study is J W Kenny's open System Model (1969), It consists of Input, Throughput, Output and feedback. All living systems are open in that there is a continual exchange of matter energy and information, open systems have varying degree of interaction with the environment from which the system receives input and gives back. Output in the form of matter energy and information for survival. All system must receive varying types and amount of matter, energy and information.

Input

Information, energy or matter that enters a system to work well, Input contribute to achieve the purpose. In this study it refers to samples demographic data, Preparation of 4 point stress assessment rating Scale and conducting pretest.

Throughput

Occur at the same point between input and output process which enables the input to be transferred as a output in such a way that it can be readily by the system, Here implementation of art therapy is a throughput.

Output

Effectiveness of art therapy to change in the level of stress. This information thus acquired could be a feedback to the system.

Feedback

Information of environment responses to the system's output. So the information thus acquired could be a feedback to the system which could help in maintenance and improvement of the system.

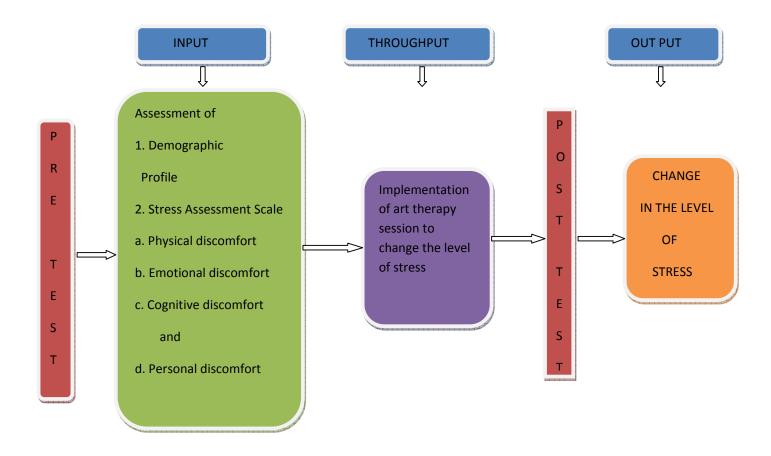


FIGURE -1.1: CONCEPTUAL FRAMEWORK BASED ON J.W.KENNYS OPEN SYSTEM MODEL(1969)

CHAPTER -II

REVIEW OF LITERATURE

A review of literature is an eventual aspect of scientific study. It involves the systemic identification, location, serving and summary of the written material that contains information on a research problem. It broadens the views of the investigator regarding the problem under investigation, helps in focusing on the specially conserving the study.

It is essential step, it can be done before and after selecting the problem. It can help to determine what is already known about the topic (A.P. Jai,2005)

- 1. Literature related to Art therapy
- 2. Literature related to Cancer and Psychological distress
- 3. Literature related to Art therapy and Cancer

1. Literature related to Art therapy:

Ricci- Boyer L, Schiltz, Spitz E. (2010). Conducted a study on Evaluation in the interest in Arts psycho therapy of alcoholics for a weaning process. The Study was conducted among 50 Alcoholic population met in the Weaning Department of the General Hospital in USA and the art psycho therapy session was given for 2 weeks. The results of the study showed that significant improvement in weaning process of Alcoholics.

Anya Beebe. (2010). Conducted study on Art therapy's effectiveness in pediatric asthma in National Jewish Health, 22 children, ages 7 to 14, with persistent asthma were randomized to either an active art-therapy group or a control group. The children in the art-therapy group received 60-minute art-therapy sessions once a week for 7 weeks. Art-therapy sessions were designed to encourage discussion, expression

and problem-solving in response to the emotional burden of chronic illness. Children in the control group completed evaluations and not participated in art therapy. Those receiving art therapy show significant improvements in problem solving, communication, quality-of-life, anxiety and self-concept scores. At six months the active group maintained positive changes in anxiety and quality-of-life scores relative to those in the control group.

Bender. (2009). Conducted a case study regarding psychotropic medication treatment and family communication patterns in art therapy treatment and noted the importance of understanding art therapy in conjunction to medication treatment in USA. The art intervention was given for more than a month and report stated that art therapy facilitated communication regarding medication between the client and therapist, and perhaps assisted the client in processing the effects of using or not using medication to improve her mood and everyday functioning. It also allowed the client to feel safe enough to disclose her past history of suicidal ideation and self injurious behavior that she had not previously disclosed during the intake session or thereafter.

Diaz. (2009). Conducted a study on evaluating the effectiveness in dually diagnosed case of addiction and bipolar disorder in a Los Angeles based drug rehabilitation center, Art therapy sessions were provided continuously till the client discharge from the hospital, After a few months, the client throughout the process of art therapy, he became more aware of the existence of these two sides of himself, and was able to identify them as "two separate entities of his personality"

Stefanatou A. (2008). Conducted a study on use of drawings in children with pervasive developmental disorder during hospitalization, the sample consisted of 25 hospitalized children aged 5-12 years. Children were asked to make the drawing of a

person in hospital. The drawings were evaluated by hoppitz's emotional indicators. With the drawings of the children the investigator concluded that Punishment and persecution were the main cognitive constructs of children in order to explain hospitalization.

Lamont S, Brunero S, Sutton D. (2008). Conducted a study of Art therapy in a consumer diagnosed with borderline personality disorder who has difficulty in communication and experiencing difficulty in expressing inner feelings in Prince of Wales hospital, Australia. In this case study 11 sessions of Art therapy was provided to the consumer. The Results of the study stated that Art therapy was helpful in expressing the inner feelings of the consumer.

Knudson.(2007). Conducted a study to find the effectiveness of Art Therapy in reducing symptoms of post traumatic stress disorder among pediatric trauma patients. Although statistical significance was not demonstrated in their trauma measure between experimental and control groups, the art therapy treatment group showed a reduction in all Diagnostic Statistical Manual of mental illness -IV (DSM-IV) post traumatic stress disorder criteria (avoidance) symptoms at 1 week and a sustained decrease at 1-month follow-up.

Gussak. D.(2007). Conducted a study on effectiveness of art therapy in reducing depression in prison populations in United States. 100 Prisoners were asked to participate in the art making classes for 5 weeks. Beck inventory Scale was used to measure the depression before and after the Art therapy sessions. The results reflected a significant decrease in depressive symptoms in those inmates who participated in the program.

Perry C, Thurston M, Osborn T.(2007). Conducted a study to find the effectiveness of art therapy in reducing post natal depression in London. 30 women with post natal depression were selected for this small scale qualitative study, 8 week session was provided along with the medications. The Results showed that the Art therapy was helpful in providing relaxation and reduced the level of depression among the 80% of post natal depression women.

Wallace et al;(2006). Conducted a study to evaluate the effectiveness of art therapy to detect depression and post-traumatic stress disorder in pediatric and young adult renal transplant recipients in United States". 64 renal transplant recipients, 6-21 yr of age, were evaluated using self-report measures (CDI and Davidson) and art-based assessments. Subject art was analyzed by art therapists using seven of the 14 elements of the (FEATS), to assess depression. Unlike CDI and Davidson self-report testing, all patients were able to complete the art-based directives. When self-report measures and art-based assessments were combined, 36% of the study population had testing results consistent with depression and/or post-traumatic stress. Sensitivity for FEATS and CDI were 22 and 50% respectively. This suggests that while art therapy may be of utility in the identification of pediatric and young adult transplant recipients who are suffering from depression.

Walsh SM. (2005). Conducted a study on Art intervention among the B.Sc students, were to provide an opportunity for students to participate an experimental research study and test the effectiveness of art intervention on Student's level of stress, anxiety and emotions, 100 students were participated for art intervention and The intervention significantly shows reduction in stress and anxiety levels and increased positive emotions in this population.

Pizarro. (2004). Conducted a study on the use of art and writing therapy for increasing positive outcomes after traumatic experience. 66 samples were interviewed, therapy was provided for 4 weeks and The Results indicated that participant satisfaction was greater for those who used art while those who used writing experienced overall negative affect after the first session(though they had significant increase in social dysfunction).

Munley's. (2002). Conducted the study on the use of art therapy in identifying symptoms of Attention Deficit Hyperactive Disorder (ADHD) in children. Munley used the Draw a Person Picking an Apple from a Tree (PPAT) test and measured expressive qualities using Gantt's Formal Elements Art Therapy Scale (FEATS). These rating instruments were used to compare the art work of boys diagnosed with ADHD who were not being treated with psychotropic medication and a control group without any learning/behavioral disorders to determine whether or not formal elemental differences would be observed in the artwork created between the two groups. Formal elemental differences were observed, including "less Prominence of Color," "fewer details of objects and environments" and "reduced control of Line Quality" all formal elements found in the drawings of children diagnosed with Attention Deficit Hyperactive Disorder (ADHD). This suggests that the application of the Person Picking an Apple from a Tree (PPAT) and Gantt's Formal Elements Art Therapy Scale (FEATS) could be used to assess and confirm Attention Deficit Hyper Disorder (ADHD) diagnoses and further predicted the usefulness of the PPAT and FEATS in measuring a child's pharmacological response, while also allowing the child to participate in his or her own medication evaluation.

2. Literature related to cancer and psychological distress (symptoms):

Tang p et al; (2010). Conducted a study for the assessment of the symptom of distress in cancer patients before and after radiotherapy. This study aimed to evaluate the change in symptom distress in cancer patients after radiotherapy and its predisposing factors. A longitudinal design was conducted on 164 cancer patients who underwent radiotherapy at a medical center in Southern Taiwan. The structured questionnaire included sections on demographics, medical conditions, and a symptom distress scale. Cancer patients, 35.9% reported an increase in the overall figures of symptom distress after radiotherapy.

Skaali .(2010). Conducted a study on psychological distress in men recently diagnosed with testicular cancer associated with their neuropsychological test performance in The Norwegian Radium Hospital, Norway. 135 Testicular cancer patients were completed the Impact of Event Scale (IES) as a measure of Cancer Related Distress at a median of 37 days after diagnosis. They also completed the Hospital Anxiety and Depression Scale (HADS) and the Positive and Negative Affect Schedule (PANAS). Among 135 Testicular Cancer Patients, 131 were interviewed and 129 were also tested with a neuropsychological battery. All investigations were done after orchidectomy, but before any additional treatment. The results showed that 24 % of the patients are experiencing cancer related distress.

Sanzo M. (2010). Conducted a study on Stress as a possible mechanism in melanoma progression in Italy and The negative effects of chronic stress have been evaluated epidemiologically in patients with breast and prostate cancer. In particular, the effects of stress mediators, namely, catecholamines have been studied on various human malignancies, including melanoma and have highlighted a significant increase

of progression-related molecules. As such, this could be the starting point for a new approach in the treatment of advanced melanoma, in which the negative effects of stress are reduced or blocked.

Hahm B J.(2009). Conducted a study on Psychological distress as a negative survival factor for patients with hematologic malignancies who underwent allergenic hematopoietic stem cell transplantation in Large tertiary care teaching hospital, South Korea. The Design for the study is Retrospective cohort study.77 patients (aged ≥ 15 yrs) with hematologic malignancies who underwent allo-SCT between january 2000 and august 2007; 20 patients with distress history were matched in a 1:3 ratio with 57 patients without distress history and the results showed that A history of psychological distress before allo-SCT, after adjusting for other patient- and disease-related prognostic factors, had a significant influence on early death in the first year after transplantation. So the psychological distress influences the survival rate of the patients undergoing stem cell transplantation.

Chen Am. (2008). Conducted a study on Prospective study of psychosocial distress among patients undergoing radiotherapy for head and neck cancer. 40 patients were interviewed for this study. The prevalence of mild to severe pre-radiation therapy depression was 58% and 45% by using the Hospital Anxiety and Depression Scale-D and Beck Depression Inventory-II scale, respectively. The prevalence of severe pre-radiation therapy anxiety was 7%. The depression levels, as determined by the Hospital Anxiety and Depression Scale and Beck Depression Inventory-II instrument increased significantly during radiation therapy and remained elevated at the first follow-up visit (p < 0.001 for both). The variables that were significantly associated with post-radiation therapy depression included a greater pre-radiation

therapy depression level, employment status (working at enrollment), younger age (<55 years), single marital status, and living alone (p < 0.05, for all).

Yang HC et al;(2008). Conducted a study on Stress and quality of life in breast cancer recurrence, moderation or mediation of coping in Columbia. Breast cancer patients recently diagnosed with recurrence of 65 subjects were assessed shortly after the diagnosis and 4 months later and the results showed that Engagement coping moderated the effect of symptom stress on mental health Quality of Life, whereas disengagement coping mediated the effects of both traumatic stress and symptom stress on mental health Quality of Life.

Harmer M.(2007). Conducted a study on psychological distress and cancer mortality in London. Data were collected from a community-based sample of 15,453 men and women (including 295 people with cancer history), Psychological distress was assessed using the 12-item version of the General Health Questionnaire and findings showed that there were 425 incidents of cancer deaths, Psychological distress was associated with increased cancer mortality in participants with cancer history [age, gender, social status, marital status, body mass index, smoking, alcohol, and physical activity) than non cancer persons.

Antonj MH. (2005). Conducted a study on reduction of cancer-specific thought intrusions and anxiety symptoms with a stress management intervention among women undergoing treatment for breast cancer in USA. A 10-week group cognitive behavior stress management intervention that included anxiety reduction (relaxation training), cognitive restructuring and coping skills training was tested among 199 women newly treated for stage 0-III breast cancer. They were then followed for 1 year after recruitment and the findings showed that structured, group-

based cognitive behavior stress management may ameliorate cancer-related anxiety during active medical treatment for breast cancer and for 1 year following treatment. So the group-based cognitive behavior stress management is a clinically useful adjunct to offer to women treated for breast cancer.

3. Literature related to Art therapy and Cancer:

Forzoni S, Perez M, Martignetti A, Crispino S.(2010). Conducted a study on the effectiveness of Art therapy among cancer patients on psychological wellbeing during Chemo therapy sessions in United states. 54 patients were randomly interviewed, The art therapy session was given for 3 weeks and the results showed that the Art therapy is 94.4% useful in supporting the patients during the chemotherapy sessions in order to fulfill the 3 needs (relaxation, self-narrative, discovering new meaning).

Jack Lindh.(2010). Conducted a study among women having radiation treatment for breast cancer in Sweden. 41 patients were randomly assigned in to an experimental group who received one hour art therapy for 5 sessions and to an control group who didn't receive art therapy. Study participants completed surveys addressing their quality of life and self-image before beginning radiation, two months after radiation treatment began, and six months after the beginning of treatment. By six months, the researchers found, women who had participated in art therapy showed significant improvements in their overall quality of life, general health, physical health, and psychological health, while the control group only showed improvements in psychological health. Finally the investigator concluded that the art therapy group showed specific improvements in their body image and perspectives on the future.

Geue.K.(2010).Conducted a study on Concept, structure of art therapy interventions, methodological procedure and research results in the field of psychooncology and this study stated that the art therapy benefits the Cancer patients in various ways including improving their Mental Health.

Gotze, Geue, Buttstadt and Schwarz.(2009). Conducted an experimental study to evaluate the effectiveness of Art therapy in terms of decreasing psychological distress and increasing coping skills in cancer patients in Leipzig University, Germany. Participants levels of psychological distress and coping skills were assessed using Hospital Anxiety Depression Scale (HADS) and participants were quantitatively evaluated before (t1) and after (t2) the intervention. After the completion of the course mean of the participants (n=18) had significantly decreased from 11.06 to 9.33 (p<0.004) anxiety mean (5.51). In depression no significant change was observed (t1=6.94, t2=6.22;p<0.32). Result revealed that the art therapy can make an important contribution to the psychological well being of cancer patients.

Bar –Seala G, Atid L, Danos S, Gabay N. (2007). Conducted a study to evaluate the effectiveness of art therapy among cancer patients with chemotherapy in the improvement in anxiety, depression and fatigue. 60 patients were participated and 19 patients who participated in 4 or more than 4 sessions were evaluated as an intervention group, and 41 patients who participated in 2 or less than 2 sessions comprised the participant group, Hospital anxiety and depression scale(HADS) and the Brief fatigue inventory (BFI) were completed before every session, relating to the previous week, The Results found that the Brief fatigue inventory(BFI) score was higher in the participant group(p=0.06). In the intervention group, the median Hospital anxiety and depression scale (HADS) score for depression was 9 at the

beginning and 7 after the fourth appointment (p=0.021). The median BFI score changed from 5.7 to 4.1(p=0.24). So the art therapy is helpful in reducing the depression, anxiety and fatigue.

Monti, C Peterson, Kunkel (2006). Conducted a study on Mindfulness based art therapy in reducing the distress among female patients with variety of Cancer in united states, 111 cancer patients were interviewed, Ninety-three participants (84%) completed both the pre- and post-study measurements The Art therapy intervention was given to the patients for 8 weeks. As compared to the control group, the Mindfulness Based Art therapy group demonstrated a significant decrease in symptoms of distress (as measured by the Symptoms Checklist-90-Revised) and significant improvements in key aspects of health-related quality of life (as measured by the Medical Outcomes Study Short-Form Health Survey). The results reported that this Art therapy demonstrated the significant reduction in distress and improvement in quality of life.

Ana Puig Ph.D.et al;(2006). Conducted a study on the efficacy of creative arts therapies to enhance emotional expression, spirituality, and psychological well-being of newly diagnosed Stage I and Stage II breast cancer patients in United states. 39 women with Stage I and Stage II breast cancer were randomly assigned to an experimental group who received individual creative arts therapy interventions or a control group of delayed treatment. 4 weeks session was given to intervention group. A series of analyses of covariance were used to analyze the results, which indicated that participation in the creative arts therapy intervention enhanced psychological well-being by decreasing negative emotional states and enhancing positive ones of experimental group subjects. The results of the analysis indicate that there are

statistically significant differences between treatment and control groups on tension—anxiety.

Nancy Nainis. (2006). conducted a study on relieving symptoms in Cancer with the innovative use of art therapy in Northwestern Memorial Hospital at Chicago. A quasi-experimental design was used, The Edmonton Symptom Assessment Scale (ESAS) and the Spielberger State-Trait Anxiety Index (STAI-S) were used prior to and after the art therapy to quantify symptoms, while open-ended questions evaluated the subjects perceptions of the experience. 50 participants were recruited from the inpatient oncology units at a large urban academic medical center over a 4 month period. Patients were included in the study if their diagnosis was cancer, were 18 or older, Daily one hour Art therapy session was provided to the subjects for 30 days, There were statistically significant reductions in eight of nine symptoms. Subjects overwhelmingly expressed comfort with the process and desire to continue with therapy. Based on the perception of the Art therapy 45(90%) patients says that art therapy provides comfort and focused their attention on something positive during the session.

Magnussoon, Karui Egberg (2005). Conducted a study to assess the effectiveness of an art therapy in reducing the level of stress in United States. Among 41 women with cancer who underwent individual art therapy for 1hr/week in both groups. Significant differences were seen between the study and control groups on the second and third occasions. Results revealed that an art therapy session increases the coping ability.

Judith Paice. (2004).Conducted a study on effectiveness of Art therapy among Cancer patients in terms of overall wellbeing in United States, In this quantitative study 50 cancer patients were selected in a random basis, four months of art therapy (painting, drawing, jewelry making, collage or pottery) resulted in significant effects on the level of tiredness (4.4 to 2.9 using a scale of 1-10) and anxiety (3.1 to 1.8). Patients also reported less pain, depression, drowsiness, loss of appetite and breathlessness, with symptoms all decreasing between six and 10 per cent immediately after art therapy sessions; overall well-being increased from 2.7 to 3.7.

Walsh SM et.al; (2004). Conducted a study to test the effectiveness of Art classes for family members of patients with cancer in the United States. The Pre test and Post test quasi experimental research design was used and the convenience sample of 69 family members was aged 18-81 years were selected. The setting of the study was a Residential Care Facility near tertiary treatment centers in the southeastern United States. Demographic data and Bech inventory scale was used to assess the Anxiety and Saliva cortisol was collected for measuring the level of stress, 2 hours art class was delivered to the samples for 2 weeks. The post test included a repeat Beck Anxiety Inventory and second Saliva Sample and The findings showed that the anxiety and Stress were reduced 55% after the art classes.

CHAPTER -III

RESEARCH METHODOLOGY

This Chapter explains the research methodology adapted to evaluate the effectiveness of art therapy on stress among patients with Cancer in a selected Hospital at Thanjavur.

Research Approach

Quantitative evaluative approach is used in this study to find the effectiveness of Art Therapy on the level of stress among patients with Cancer.

Research design

A Pre experimental design with one group pre test and post test was used in this study.

O1 X O2

O1: Pre test on level of stress

X: Independent variable (Art therapy for 30-45 minutes for 5 days)

O2: Post test on level of stress

Variables

The variables for the study were:

Independent variable: Art therapy

Dependent variable: Stress

Study Setting

The setting of the main study was conducted in Thanjavur Cancer Centre at Thanjavur. The Cancer centre is a 50 bedded hospital in Thanjavur which is 235 kms

away from Sara nursing college. The Hospital provides chemotherapy, radiation therapy and surgical treatment to cancer patients. Every day 3- 5patients were admitted in this hospital. In the out patients department 30- 35 patients used to visit every day.

Population

Population of this study was patients with cancer.

SAMPLING

Sample

The sample of this study was patients with cancer who are receiving treatment in the selected cancer hospital at Thanjavur during the study period and those who met inclusion criteria.

Sample Size

The investigator has selected 40 subjects with cancer admitted in Selected Hospital at Thanjavur.

Sampling technique

Convenience sampling technique was used to select the Sample.

Criteria for Sample Selection

The samples were selected based on the following inclusion and exclusion criteria.

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 Tamil and English

Exclusion Criteria

- 1. Patients who are unconscious and terminally Ill.
- 2. Patients who are physically handicapped and / mentally handicapped.
- 3. Patients who are not willing to participate in this study.

RESEARCH TOOL AND TECHNIQUE

The data collection tool is presented with 2 sections:

Section A: Demographic profile of Patients with Cancer

It comprised of demographic data of the patients with cancer such as age, gender, religion, type of family, education, occupation, marital status, family Income, duration of illness, site of cancer, modality of treatment, duration of treatment and habits. No score was allotted for this section and it was used for descriptive analysis.

Section B: 4 Point Stress Assessment Rating Scale

It helps to assess the level of stress for the patients with cancer and it consists of 25 items, which measures physical discomfort, emotional discomfort, cognitive discomfort and personal discomfort. The scale was translated in Tamil. The accuracy of the translation was confirmed by back translation. This scale score ranging from 0-3(0-never, 1-rarely, 2-frequently and 3-always). The total score of each subject was calculated and converted in to percentage. The level of stress was divided in to 3 categories as follows:

50 % and below - Mild stress

51% to 75% - Moderate Stress

76% and above - Severe stress

Content validity

The tool was evaluated by 6 experts (3 from the department of Psychiatric nursing, 1 from psychiatrist, 1 from oncologist and 1 from psychologist), The suggestions were incorporated.

Reliability

Five subjects with cancer who met inclusion criteria were selected to assess the reliability of the tool, Reliability of the stress assessment scale was established by Test-Retest method and the Reliability was r=0.8.

Pilot study

Pilot Study was conducted from 15-06-11 to 21-06-11 among 5 subjects with cancer who met the inclusion criteria were selected by using convenience sampling technique in Erode Cancer Centre at Erode. Data were analyzed and the study was found feasible to conduct.

Method of data collection

Ethical consideration

A formal consent was obtained from the hospital administrator and the oral consent was obtained from the subjects. Assurance was given to the subjects regarding the confidentiality of the data and anonymity was maintained throughout the study.

Period of data collection

The Main study was conducted in Thanjavur cancer centre at Thanjavur for 4 weeks from 29.06.2011 to 28.07.2011.

Data collection procedure

Before conducting the main study, the researcher met the concerned authorities in the Thanjavur Cancer Centre and obtained the permission for the data collection. The objective of the study was explained to hospital administrator, the medical officer, other health professionals and subjects to get the cooperation during the study. The data collection was done after obtaining an oral consent from the subjects. During the data collection period, the patients who met the inclusion criteria were selected by using convenience sampling. The investigator first introduced her to the subjects and developed a good rapport with them. In the 4 weeks of data collection, each week ten patients were selected (total-40). The data collection was done in the morning 9am -12 pm and in the evening 3.30 pm to 5 pm. 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 the next day onwards, the investigator administrated an art therapy to each samples for 30-45 minutes for 5 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.

Plan for data analysis

The descriptive statistics was used for categorical data, Paired 't' test was used to evaluate the effectiveness of art therapy on stress. Chi square test was used to find the association between the post test level of stress and selected demographic variables.

CHAPTER-IV

ANALYSIS AND INTERPRETATION

Analysis is the process of organizing and synthesizing data in such a way that question can be answered and hypothesis tested. (**Polit, D.F; Hungler, 2003**)

This chapter deals with the analysis and interpretation of data to evaluate the effectiveness of art therapy on stress among patients with cancer in a selected Hospital, Thanjavur.

The findings are presented under the following sections:

Section-A:

Distribution of samples according to their demographic variables.

Section-B:

- Distribution of samples according to their level of stress before and after the art therapy.
- ii. Comparison of mean, standard deviation and mean difference in the level of stress among patients with cancer before and after the art therapy.

Section-C:

- i. Effectiveness of art therapy on stress among patients with cancer
- ii. Effectiveness of art therapy on factors of stress among patients with cancer

Section –D:

Association between the post test level of stress and selected demographic variables.

SECTION- A

Table-4.1: Distribution of samples according to their selected demographic Variables.

n=40

S.No	Demographic variables	f	%
1.	Age:		
	a.20-30yrs	8	20%
	b.31 -45 yrs	10	25%
	c.46- 60 yrs	22	55%
2.	Gender		
	a. Male	14	35%
	b. Female	26	65%
3.	Religion		
	a. Hindu	26	65%
	b. Christian	2	5%
	c. Muslim	12	30%
4.	Type of Family		
	a. Nuclear	20	50%
	b. Joint	13	32.5%
	c. Extended	7	17.5%
5.	Education		
	a. Illiterate	12	30%
	b. Primary School	5	12.5%
	c. High School	8	20%
	d. Higher Secondary	6	15%
	e. Graduate	9	22.5%
6.	Occupation		
	a. Unemployee	22	55%
	b. Daily wages/ Coolie	5	12.5%
	c. Technical	3	7.5%
	d. Professional	4	10%
	e. others	6	15%
7.	Marital Status		
	a. Married	32	80%
	b. Unmarried	4	10%
	c. Divorced	-	-
	d. Separated	2	5%
	e. Widow/Widower	2	5%

8.	Family Income		
	a. Less than Rs.3,000	6	15%
	b.Rs.3,001 to 6,000	14	35%
	c. Rs.6,001 to 10,000	8	20%
	d. Above Rs.10000	12	30%
9.	Duration of illness		
	a. Below 1 year	21	52.5%
	b. 1-2 years	9	22.5%
	c. Above 2 years	10	25%
10.	Site of cancer		
	a. Breast	14	35%
	b. Colon/ Rectum	8	20%
	c. Prostate/ uterus/ Cervix	7	17.5%
	d. Head and neck	5	12.5%
	e. Others	6	15%
11.	Modality of treatment		
	a. Chemotherapy	5	12.5%
	b. Radiation	13	32.5%
	c. Surgery	4	10%
	d. Combined a and b	11	27.5%
	e. Combined b and c	7	17.5%.
12.	Duration of treatment		
	a. Less than 6 months	26	65%
	b. 6 months- 1 year	7	17.5%
	c. Above 1 year	7	17.5%
13.	Habits		
	a. Smoking	2	5%
	b. Alcohol	1	2.5%
	c. Tobacco	6	15%
	d. Combined a and b	4	10%
	e. None	27	67.5%

Table-4.1 shows that, Majority of the samples 24 (55%) were between the age group of 46-60years, 26 (65%) samples were female, 26 (65%) samples were Hindu, 20 (50%) of them belongs to nuclear family, 12(30%) samples were Illiterate, 22(55%) samples were un employed, 32(80%) samples were married, 14(35%) families have monthly income of Rs.3,001 to 6,000, 21(52.5%) had below 6 months of illness,14 (35%) samples were had breast cancer, 13(32.5%) samples received radiation therapy as their modality of treatment, 26(65%) were receiving treatment less than 6 months and 27(67.5%) had none of the mentioned habits in the profile.

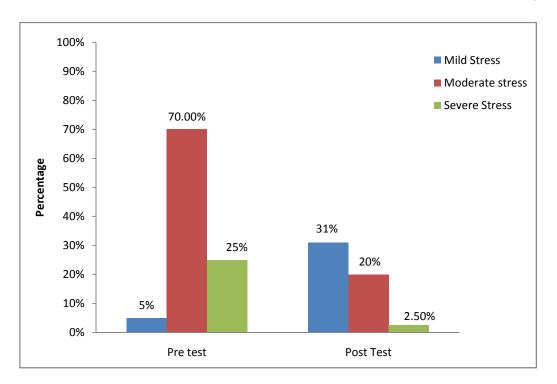


Figure-4.1: Distribution of the samples according to the level of stress before and after art therapy.

Figure-4.1shows that, In the pretest, 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.

Table -4.2: Comparison of mean, standard deviation and mean difference in the level of stress among patients with cancer before and after the art therapy.

n=40

S.	Variables	Maximum	Pre	test	Post	test	Mean
No	Variables	Score	Mean	SD	Mean	SD	difference
1.	Stress	75	48.05	6.95	33.75	7.25	14.3

Table-4.2 shows that the mean pre-test stress score was $48.05(\pm 6.95)$ and post test stress score was $33.75(\pm 7.25)$ with mean difference of 14.3.

SECTION- C

Table – 4.3: Effectiveness of Art therapy on stress among patients with cancer

n=40

S. No	Variables	Maximum Score	Pretest		Pretest		Post test				Mean difference	t value	df
140		Score	Mean	SD	Mean	SD	uniterence	value					
1.	Stress	75	48.05	6.95	33.75	7.25	14.3	22.05**	39				

**(P<0.01), table value - 2.384.

Table 4.3 shows that the estimated 't' value for the level of stress is 22.05, which is significantly higher than the table value 2.384 at P<0.01 level. It shows that the art therapy is highly effective in reducing the level of stress among patients with cancer.

Table- 4.4: Effectiveness of Art therapy on factors of stress among patients with cancer

S. No	Factors	Maximum Score	Pretest		Post test		Mean difference	t value	df
110		Score	Mean	SD	Mean SD		uniterence	value	
1	Physiological								
	discomfort	15	7.8	2.18	5.67	2.92	2.13	13.07**	
2.	Emotional								
	discomfort	15	9.6	2.28	6.72	1.94	2.88	14.19**	39
3	Cognitive								
	discomfort	15	9.1	2.51	6.32	1.95	2.78	11.01**	
4	Personal								
	discomfort	30	21.4	1.59	15.15	3.82	6.25	16.94**	

** (P<0.01); table value-2.384

Table 4.4 shows that the estimated 't' value for the level of stress in Physiological discomfort and Emotional discomfort were 13.07 and 14.19 respectively. The t value of cognitive and personal discomfort were 11.01 and 16.94 respectively at P<0.01 level. It shows that the art therapy is highly effective in reducing the level of stress among patients with cancer.

SECTION-D

Table-4.5: Association between level of stress and their selected demographic variables

n=40

			Level of stress						
S. No	Demographic variables	N	Iild	Mod	lerate	Se	vere	Chi- Square	
110		f	%	f	%	f	%	Square	
1	Age:								
	a. 20-30yrs	3	7.5	5	12.5	-	-		
	b. 31 -45 yrs	9	22.5	-	-	1	2.5	14.394*	
	c. 46- 60 yrs	19	47.5	3	7.5	-	-		
2	Gender								
	a. Male	11	27.5	3	7.5	-	-	0.566	
	b. Female	20	50	5	12.5	1	2.5		
3	Religion								
	a. Hindu	22	55	3	7.5	1	2.5		
	b. Christian	1	2.5	1	2.5	-	-	3.985	
	c. Muslim	8	20	4	10	-	-		
4.	Type of Family								
	a. Nuclear	17	42.5	2	5	1	2.5		
	b. Joint	10	25	3	7.5	-	-	4.967	
	c. Extended	4	10	3	7.5	-	-		
5.	Education								
	a. Illiterate	9	2.5	2	5	1	2.5		
	b. Primary School	4	10	1	2.5	-	-		
	c. High School	7	17.5	1	2.5	-	-	3.7076	
	d. Higher Secondary	5	12.5	1	2.5	-	-		
	e. Graduate	6	15	3	7.5	-	-		
6.	Occupation								
	a. Unemployee	17	42.5	5	12.5	-	-		
	b. Daily wages/ Coolie	5	12.5	-	-	-	-	8.8437	
	c. Technical	1	2.5	2	5	-	-		
	d. Professional	3	7.5	1	2.5	-	-		
	e. Others	5	12.5	-	-	1	2.5		

7.	Marital Status							
	a. Married	25	62.5	6	15	1	2.5	
	b. Unmarried	2	5	2	5	-	-	
	c. Divorced	-	-	-	-	-	-	3.528
	d. Separated	2	5	-	-	-	-	
	e. Widow/Widower	2	5	-	-	-	-	
8.	Family Income							
	a. Less than Rs.3,000	4	10	1	2.5	1	2.5	
	b. Rs.3,001 to 6,000	12	30	2	5	-	-	6.4077
	c. Rs.6,001 to 10,000	6	15	2	5	-	-	
	d. Above Rs.10000	9	22.5	3	7.5	-	-	
9.	Duration of illness							
	a. Below 1 year	16	40	4	10	1	2.5	
	b. 1-2 years	7	17.5	2	5	-	-	0.94928
	c. Above 2 years	8	20	2	5	-	-	
10.	Site of cancer							
	a. Breast	11	27.5	2	5	1	2.5	
	b. Colon/ Rectum	6	15	2	5	-	-	
	c. Prostate/ uterus/ Cervix	7	17.5	-	-	-	-	9.0184
	d. Head and neck	2	5	3	7.5	-	-	
	c. Others	5	12.5	1	2.5	-	-	
11.	Modality of treatment							
	a. Chemotherapy	4	10	1	2.5	-	-	
	b. Radiation	10	25	3	7.5	-	-	
	c. Surgery	4	10	-	-	-	-	7.8416
	d. Combined a and b	6	15	4	10	1	2.5	
	e. Combined b and c	7	17.5	-	-	-	-	
12.	Duration of treatment							
	a. Less than 6 months	20	50	5	12.5	1	2.5	
	b. 6 months- 1 year	5	12.5	2	5	-	-	1.55791
	c. Above 1 year	6	15	1	2.5	-	-	
13	Habits							
	a. Smoking	1	2.5	1	2.5	-	-	
	b. Alcohol	1	2.5	-	-	-	-	
	c. Tobacco	3	7.5	3	7.5	-	-	13.3217
	d. Combined a and b	4	10	-	-	-	-	
	e. None	22	55	4	10	1	2.5	

*(P <0.05)

The table 4.5 showed that the association between the post test level of stress and selected demographic variables. There was no significant association between the level of stress among patients with cancer except age. The calculated chi- square value for age is 14.394* which is greater than the table value of 9.488.

CHAPTER-V

DISCUSSION

This Evaluative study was done to evaluate the effectiveness of art therapy on stress among patients with cancer in a selected Hospital at Thanjavur.

Distribution of the samples according to their demographic variables:

Majority of the samples 24 (55%) were between the age group of 46- 60 years, 26 (65%) samples were female, 26 (65%) samples were Hindu, 20 (50%) of them belongs to nuclear, 12(30%) samples were Illiterate, 22(55%) samples were un employed, 32(80%) samples were married, 14(35%) families have monthly income of Rs.3,001 to 6,000, 21(52.5%) had below 6 months of illness, 14 (35%) had breast cancer, 13(32.5%) samples received radiation therapy, 26(65%) were receiving treatment less than 6 months and 27(67.5%) had none of the mentioned habits in the profile.

The first objective of the study was to assess the level of stress among patients with cancer before and after the art therapy.

Before an art therapy, 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. 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 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 the art therapy.

The second objective of the study was to evaluate the effectiveness of art therapy on stress among patients with cancer.

In the pre test before the art therapy, the mean score of stress was $48.05(\pm 6.95)$ and In the Post test after Art therapy the mean score of stress was $33.75(\pm 7.25)$. Paired't' test was used to find the difference between the pre and post test stress score was significant. 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.

H₁: There will be a significant difference in the level of stress before and after art therapy among patients with cancer at P<0.05 level of significance. Therefore Hypothesis 1 was accepted.

The findings are congruent with the study findings of the **Monti DA et.al;** (2006). Conducted a Study on Mindfulness based art therapy in reducing the distress among female patients with variety of cancer in united states, 111 cancer patients were interviewed, Ninety-three participants (84%) completed both the pre- and post-study measurements. As compared to the control group, the MBAT group demonstrated a significant decrease in symptoms of distress (as measured by the Symptoms Checklist-90-Revised) and significant improvements in key aspects of health-related quality of life (as measured by the Medical Outcomes Study Short-Form Health Survey). The art therapy intervention was given to the patients for 8 weeks. The results reported that this art therapy demonstrated the significant reduction in distress and improvement in quality of life.

The third objective of the study was to associate the post test level of stress with selected demographic variables among patients with cancer.

There was a significant association between the level of stress and the age of the patients with cancer, The calculated value of \mathbf{x}^2 =14.394* (9.488) at 0.05 level of significance. Other demographic variables like gender, religion, education, occupation, marital status, type of family, family income, duration of illness, site of cancer, modality of treatment, duration of the treatment and habits doesn't have significant association with the level of stress.

H₂: There will be a significant association between the post test level of stress and selected demographic variable among patients with cancer, Therefore Hypothesis 2 was supported.

Summary

This chapter dealt with the discussion of the study with reference to the objective and supportive studies. All the three objectives have been obtained and the two hypothesis were retained in this study.

CHAPTER-VI

SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

In this chapter, summary, conclusion, implications to nursing practice and recommendations for further study are presented.

SUMMARY

Evaluative approach with Pre experimental design with one group pre-test and post test was used in this study to evaluate the effectiveness of art therapy on stress among patients with Cancer. The Conceptual framework adopted for the study was based on J.W. Kennys Open system model, The study was conducted in Thanjavur Cancer Centre, Thanjavur. The sample size was 40 and the samples were selected by convenience sampling technique. The 4 point stress assessment rating scale was used to assess the level of the stress.

The collected data were analysed using descriptive and inferential statistics,

To test the Hypothesis, Paired 't' test and chi-square were used.

FINDINGS OF THE STUDY

The major findings of the study was summarized as follows,

• Among 40 samples, Majority of the samples 24 (55%) were between the age group of 46-60years, 26 (65%) samples were female, 26 (65%) samples were Hindu, 20 (50%) of them belongs to nuclear, 12(30%) samples were Illiterate, 22(55%) samples were un employeed,32(80%) samples were married, 14(35%) families have monthly income of Rs.3,001 to 6,000, 21(52.5%) had below 6 months of illness,14 (35%) had breast cancer, 13(32.5%) samples received radiation therapy, 26(65%) were receiving

treatment less than 6 months and 27(67.5%) were had none of the mentioned habits.

- In pre test, 28 (70%) samples had moderate stress, 10 (25%) samples had severe stress and 2(5%) had mild stress before an art therapy. In post test, majority of the subjects 31(77.5%) had mild stress, 8(20%) had moderate stress and 1(2.5%) had severe stress after an art therapy.
- The mean pre-test stress score was 48.05(±6.95) and the post test stress score was 33.75(±7.25). The paired 't' value at p<0.01 level for stress was 22.05.
 This shows that art therapy is highly effective in reducing the level of stress among patients with Cancer. Hence H1 is retained.
- There was a significant association between the level of stress and the selected demographic variable of age. age group [χ^2 =14.394*(9.488)] at P<0.05 level of significance. There was no association between stress and other variables like gender, religion, type of family, education, occupation, marital status, income, duration of illness, site of cancer, modality of treatment, duration of treatment and habits at P<0.05 level of significance. Hence H2 is retained.

CONCLUSION

The study was done to evaluate the effectiveness of art therapy on stress among patients with cancer. Level of the stress for patients with cancer was moderate and it needs an intervention, Art therapy significantly decreases the level of stress among patients with cancer. The study revealed that there was a significant association between stress and selected demographic variable of age.

NURSING IMPLICATIONS

The findings of this study had implications in various areas of nursing i.e., nursing practice, administration, education and nursing research.

Nursing Practice

- Art therapy can be introduced as an expressing mode of intervention by the nurses for promoting relaxation among the patients suffering from various illness.
- Psychiatric nurses should play a vital role in understanding the psychological problems of the terminally ill clients like cancer.
- Art therapy can be incorporated into routine nursing intervention.
- Art therapy can be given for staff nurses working in multi specialty units to reduce the level of stress.
- Nurses can teach the family members about art therapy and its benefits in order to reduce the stress in the home.

Nursing Education

- Nurse educators must be specially trained to teach art therapy.
- Nurse educators can effectively teach the purposes and benefits of art therapy and it helps the nursing students to gain knowledge regarding art therapy.
- Staff development programme can be arranged, so that the nursing students also know to perform art therapy when they are overwhelmed with stress..
- The nursing students who are specializing in their masters in the field of mental health can be trained specially to give complementary and alternative therapies.

 The nurse educator can create awareness about an art therapy to the family members of terminally ill.

Nursing Research

- This study can be a foundation to conduct research on large population to strongly prove the effectiveness of an art therapy.
- The understanding of this study helps the health professionals and researchers to identify different sources of stress of terminally ill clients in Indian perspective.
- Nurse researcher should compare the effects of other complementary and alternative therapies in reduction of stress.
- Same study can be done on other terminally ill clients like HIV and other
 Psycho physiological disorders like Asthma, Ulcer.

Nursing Administration

- The nurse administrators can motivate the psychiatric nurses to assess the level of stress among the family members of psychiatric illness and can intervene to reduce the level of stress.
- The nurse administrator should arrange for continuous nursing education programme to disseminate the research findings and emphasis about the benefits of art therapy.
- The Nurse administrator can prepare skilled nurses who can spend time with people in solving psychological and physiological disequilibrium in clients.
- Nurse administrator can make arrangements for the practice of art therapy in hospital, So that the staff nurses can provide calm, quiet, clean and safe environment to the patients to practice.

RECOMMENDATIONS

- A similar study can be replicated with larger sample size and in various other settings.
- A longitudinal study can be carried out with different time interval of data collection that is at diagnosis, after 6 months, 1 year and at 2 years.
- A similar study can be conducted among patients with other chronic illness and other psycho physiological disorders.
- A similar study can be conducted to compare the effects of art therapy and any other alternative and complementary therapies.

BIBLIOGRAPHY

Books

- Batia M.S. (2010). Aids of Psychiatry. (2nd Edition), New Delhi, CBS publications.
- Basavanthappa. B.T. (2007). Psychiatric Mental Health. Nursing (1st Edition). New Delhi, Jaypee brothers publication.
- Black M.Joyce.(2001). Medical surgical Nursing. (6th Edition). Baltimose.
 Churchill Livingstone Company.
- Bimalakapoor. (2005). Text Book of Psychiatric Nursing. Volume-II.(2nd Edition). New Delhi.Kumar Publishing House.
- Brunner & Suddarth. (2005). Text Book of Medical Surgical Nursing. (10th Edition). Philadelpia. Lippincott Publishers.
- Denise. F.Polit.(1999). Nursing Research Principles and Methods. Phildelpia.
 Lippincott.
- Gali.W. Stuart Michele.(2005). Principles and Practice of Psychiatric
 Nursing.(7th Edition). Kundrli. Mosby Publication.
- Lalitha K. (2009). Mental Health and Psychiatric Nursing Indian Perspective. (Ist Edition). Bangalore.V.M.G.Book House.
- Lewis Heitkemper. (2004). Medical Surgical Nursing- Assessment and management of Clinial Problems (6th Edition).St.Lovis Missouri. Mosby Publishers.
- Katherine M. fortinash. Patricia A. Holoday worret. (2004). *Psychiatric Mental Health Nursing* (3rd Edition), Missari, Mosby Publications.
- Perry, A.G and Potter. P.A.(2009). Fundamentals of nursing. (7th Edition). Elsvier publication.

- Phipps.Manohan.Sands.(1999). Medical Surgical Nursing- Health and Illness
 Perspectives. (7th Edition) St.Lovis Missouri. Mosby Publishers.
- Sreevani R. (2010). A Guide to Mental Health & Psychiatric Nursing. (3rd Edition), Kolar, Jaypee Publication.
- Sundar Rao P.S.S & Richard. J. (1997). An Introduction to Biostatistics. (3rd Edition). New Delhi: Prentice Hall of India private limited.
- Townsend M.C.(2007). Psychiatric mental health nursing .(5th Edition). New Delhi, Jaypeebrothers publications.

Journals:

- Atid, L. Seala, G.(2007). Effects of art therapy in reduction of depression and fatigue. *Journal of Psychological and social & behavioural dimensions of* cancer, 16(11): 980-984.
- Buttstadt,B, Gotze .C, Geue, A. (2009). Effects of art therapy to psychological distress and coping, *Journal of Psyco-oncology*, 16(1):28-33
- Buttstaedt, Geue K, Gobetz H. (2010). An overview of art therapy interventions
 for cancer patients and the results of research. Complementary therapies,
 18(3): 160-170.
- Castillo LC, Radcliffe Kumar AM, Walsh SM. (2007). A pilot study to test the
 effects of art-making classes for family caregivers of patients with cancer.

 Oncology Nursing Forum, 34(1): 38.
- Crispino S, Forzoni S, Perez M, Martignetti A.(2010) Art therapy with Cancer patients during chemotherapy sessions: analysis of the patients perception of helpfulness. *Palliative Support Care*, 8(1): 41-48.
- Deirdre and Heenan. (2006).Art as Therapy: An effective way of promoting positive mental health. *Journal of Disability & Society*,21(2):179-191.

- Elkins G, Fisher W, Johnson A. (2010). *Mind-Body therapies in integrative oncology*. Current treatment options in Oncology, 11(3): 128-140.
- Gussak D (2007). The Effectiveness of art therapy in reducing depression in prison populations. *International journal offender complementary therapy*, 51(4): 444-460.
- Hoog, C, Visser, F (2008). Effects of art therapy to cope with illness. *Journal of Cancer education*, 23(2): 80-84.
- Hughes E G. (2010). Art therapy as a healing tool for subfertile women. *Journal* of medical Humanitics, 31(1): 27-36.
- Jack lindh P. (2009). Effects of art therapy to psychological distress and coping.
 European journal of cancer care, 25(2): 18-21
- Johnson CM, Sullivan- Marx EM. (2006). Art therapy: Using creative process for healing and hope among African American older adults. *Geriatric Nursing*, 27(5): 309-316.
- Judith paice P. (2004). Effects of art therapy to improve quality of life. *American Journal of pain and symptom management*, 6(2):63-67.
- Lamont S, Brunero S, Sutton D. (2009). Arts psychotherapy in a consumer diagnosed with borderline personality disorder: a Case study. *International Journal of Mental Health nursing*, 18(3): 164-172.
- Looman WS (2006). A developmental Approach to understanding drawings and narratives from children displaced by Hurricane Katrina. *Journal of Pediatric Health Care*, 20(3): 158-166.
- Marlatt GA, Tatarsky A. (2010). State of the art in harm reduction psychotherapy: an emerging treatment for substance misuse. *Journal of clinical psychology*, 66(2): 117-122.

- Monti, C Peterson, A.(2006). Effects of mindfulness- based art therapy. *Journal of psycho oncology*, 15(5): 363-373.
- Osborn T, Perry C, Thurston M. (2008). Time for me: the arts as therapy in postnatal depression. *Complemantary therapies in clinical practice*, 14(1): 38-45.
- Walsh. (2004). Efficacy of a creative arts intervention. *Journal of nursing Scholars*, 36(3): 214-219.
- Wethington HR et al; (2008). The effectiveness of intervention to reduce psychological harm from traumatic events among children and adolescents: a systemic review . American Journal of Preventive medicine, 35(3): 287-313.

Net Reference:

- http://preemptivehealing.com,
- www. reuters.com.
- http://www.ehow.com/about 5454528 cancer-patients-art-drawing-therapy
- http://www.stress relief choices.com
- http://www.ehow.com/how 4558374
- http://www.arttherapyblog.com/c/ptsd.
- www.ehow.com > Mental Health,
- http://psychology.jrank.org/pages/45/Art-Therapy
- en.wikipedia.org/wiki/Art therapy.
- www. Chillibreeze.com
- http://www.ehow.com/about_5409457 art-therapy-cancer
- http://hypnotichealth.blogspot.com/

ANNEXURE-A

LETTER REQUESTING PERMISSION TO CONDUCT A RESEARCH PROJECT

SARA NURSING COLLEGE

(Recognised by Govt. of Tamil Nadu, Affiliated to T.N. Dr. M.G.R. Medical University & Approved by Indian Nursing Council)

Palani Main Road, Manakadavu, Dharapuram - 638 673, Tirupur District, Tamil Nadu, South India.

Phone : 04258-244208, Fax : 04258-244254 E-mail : saranursingcollege@gmail.com website : www.saranursingcollege.com

From,

Date:

Lr.No.SNC.90/06/11

The Principal, Sara Nursing college, Dharapuram.

To.

The Medical Director,

Thanjavur Cancer Hospital & Research Centre,

Tanjore.

Respected sir,

Ms. A. Akila is a bonafide student of Sara Nursing College, Dharapuram, doing her M.Sc.(N) Programme in Nursing. She is conducting a research on

"A Study to evaluate the effectiveness of Art therapy on stress among patients with cancer at selected hospital at Tanjore District. The research project is to be submitted to "The Tamilnadu Dr. M.G.R Medical University" as a partial fulfillment of the university requirements for the award of M.Sc(N) Degree .The Researcher is anticipating that this project will be beneficial in reducing the stress among patients with cancer at your esteemed Institution.

As part of the study she needs to evaluate the selected subjects for the effectiveness of Art Therapy among patients with cancer at selected hospital and document the collected data for analysis and report.

Hence I request your kind consent for her to conduct the study from 20th June to 4th August at your esteemed Institution. Further details of the proposed project outcome will be furnished by the researcher in person. The Hospital norms, policies and ethics will be respected and strictly adhered by the researcher throughout the study period.

Thanking You

PRINCIPAL Sara Nursing College, Disarapuram - 655 5/3.

Principal

THANJAVUR CANCER CENTRE



(Unit of JEEVA CENTENARY TRUST)

165/16, By-Pass Road, Mathakkottai, Thulukkampatti, Thanjavur - 613 005 Phone: 04362 - 292233 Cell: 99448 83850 E-mail: jeevacentenarytrust@yahoo.com

CERTIFICATE

Date: 28.07.2011

This is certifying that the project reported entitled.

"A study to evaluate the effectiveness of Art therapy on Stress among patients with cancer at selected Hospital in Thanjavur (2010-2012).

Is a bonafide record of work done by Ms.A.Akila, final year M.sc Nursing Student of Sara Nursing College, Dharapuram- 638673 for four weeks in our Hospital under the guidance of Director of Thanjavur Cancer Centre, Thanjavur- 613005, in Partial fulfillment of her post graduate curriculum.

Hospital Seal

Administrative officer

Jeeva Centenary Trust Tanjavur Cancer Hospital & Res 165/16, Thuiuldkampatti,

Bye-Pass Road, Maathakkottal

Thanlaver-6

ANNEXURE-B

SECTION-A

DEMOGRAPHIC PROFILE

Instructions:

The participants are requested to read the following items given below. Please answer all the question, The Responses will be kept confidential.

DEMOGRAPHIC DATA:

•	Sample No:	Date:	
1. Ag	e		
	a. 20- 30 yrs.		[]
	b. 30- 45 yrs.		[]
	c. 46- 60 yrs.		[]
2. Ge	nder :		
	a. Male		[]
	b. Female		[]
3. Rel	igion		
	a. Hindu		[]
	b. Christian		[]
	c. Muslim		[]
4. Ty	pe of Family		
	a. Nuclear		[]
	b. Joint		[]
	c. Extended		[]

5. Education

	a. Illiterate	L	J
	b. Primary	[]
	c. Secondary	[]
	d. Higher Secondary	[]
	e. Graduate	[]
6. Occ	cupation		
	a. Unemployee	[]
	b. Daily wages/ coolie	[]
	c. Technical	[]
	d. Professional	[]
	e. others	[]
7. Ma	rital status :		
	a. Married	[]
	b. Unmarried	[]
	c. Divorced	[]
	d. Separated	[]
	e. Widow/ Widower	[]
8. Fai	mily Income(per Month in Rs.)		
	a3,000 and below	[]
	b.3,001 - 6,000	[]
	c.6,001-10,000	[]
	d. above 10,000	[]

9. Durati	on of illness		
a.	Below 1 year	[]
b.	1- 2 years	[]
c.	Above 2 years	[]
10. Site o	f Cancer:		
a.	Breast	[]
b.	Colon and / rectum	[]
c.	Prostate / Uterus and /cervix	[]
d.	Head and Neck	[]
e.	others	[]
11. Moda	ality of treatment:		
a.	Chemotherapy	[]
b.	Radiation	[]
c.	Surgery	[]
d.	Combined a and b	[]
e.	Combined b and c	[]
12. Durat	tion of Treatment		
a.	< 6 months	[]
b.	6- 1 year	[]
c.	above 1 year	[]
13.Habits	S		
a.	Smoking	[]
b.	Alcohol	[]
c.	Tobaccco	[]
d.	a and b	[]
e.	None	[]

SECTION-B

4 POINT RATING SCALE ON ASSESSMENT OF STRESS

Instructions:

Please read each statement and circle a number 0, 1, 2 or 3 that indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement. Please answer all the question

S.	Statements	Rating
No		_
I.	PHYSICAL DISCOMFORT:	
01.	I am aware of the action of my heart in the absence of	0 1 2 3
	Physical Exertion (Eg.Sense of heart rate increase, heart	
	missing a beat)	
02.	I experience breathing difficulty frequently	0 1 2 3
03.	I experience loss of sleep	0 1 2 3
04.	I experience tension or tightness in the muscles of my	0 1 2 3
	neck, back and jaw.	
05.	I perspired noticeably (eg. Hands sweaty in the absence of	0 1 2 3
	high temperatures or physical exertion)	
II.	EMOTIONAL DISCOMFORT:	
06.	I found myself getting agitated	0 1 2 3
07.	I feel that I am unworthy	0 1 2 3
08.	I feel sad and depressed	0 1 2 3
09.	I cry frequently due to my disease	0 1 2 3
10.	I am in a state of nervous tension	0 1 2 3
III.	COGNITIVE DISCOMFORT:	
11.	I feel that I am mostly preoccupied with my disease	0 1 2 3
12.	I experience loss of memory now	0 1 2 3
13.	I feel that I am having difficulty in concentrating any	0 1 2 3
	work.	

14.	I fell that my decision making ability has gone down	0 1 2 3
15.	I am experiencing discomfort in perceiving the external	0 1 2 3
	world.	
IV	PERSONAL DISCOMFORT:	
16.	I find difficulty in taking responsibilities	0 1 2 3
17.	I feel difficulty in satisfying Love and affection	0 1 2 3
18.	I am worried about my economic and social security	0 1 2 3
19.	I feel difficulty to take care of my family due to disease	0 1 2 3
20.	I feel difficulty in maintaining Interpersonal relationship	0 1 2 3
21.	I find it difficult to initiate to do things	0 1 2 3
22.	I feel upset because of my disease that changed my social activities	0 1 2 3
23.	I feel difficult to accept the suggestions or advice or support from others.	0 1 2 3
24.	I experience severe distress due to the treatment	0 1 2 3
25.	I am unable to become enthusiastic about anything.	0 1 2 3

Rating interpretation:

The score for each items in the scale as follows:

0 - Never, 1 - Rarely, 2 - Frequently, 3 - Always

Scoring:

50% and below Mild level of stress

51% - 75% Moderate level of stress

76% and above Severe level of stress

gFjp 1- jdpegh; tpguk;

fPBH bfhLf;fg;gl;Ls;s vy;yh tpdhf;fisk; goj;J, midj;Jf;Fk; jtwhJ gjpy; mspf;ft[k; .bfhLf;fg;gLk; gjpy;fs; midj;Jk; ufrpakhf itf;fg;gLk;.

	,.9,9=, 9,6,,,,,,			
khjpup	OVZ;:	ehs;:		
1.jA;f	spd; taJ ntw;wpy; ve;j	j gpupt[:		
	m). 20 taJ Kjy; 30 taJ		[]	
	M). 30 taJ Kjy; 45 taJ		[]	
	n). 46 taJ Kjy; 60 taJ		[]	
2. ghy	vpdk;:			
	m). Mz;			[]
	M).bgz;			[]
3.jhA	;fs; ve;j kjj;ijr; rhh;e;jtl	h;:		
m	n). ne;J		[]	
	M). fpwp^;Jth;			[]
	n). K^;yPk;;			[]
4.jA;f	s; FLk;gj;jpd; tifghL:			
	m). jdpf;FLk;gk;			[]
	M). TI;LFLk;gk;			[]
	n). bgupa FLk;gk;			[]
5.jA;f	spd; fy;tpjFjp :			
	m). gog;gwpt[ny;yhjth	•		[]
	M). bjhlf;f fy;tp gapd;w	th;	[]	
	n). nilepiy (m) cah;epiy	y fy;tpgapd;wth;	[]	
	N). Bky;epiy fy;tp gapo			[]
	c). gl;ljhup			[]

6.JA;TSPA; gzp :		
m). Btiyapy;yhjtu;	[]	
M). jpdf;Typahf gzpg[upgth;	[
n). bjhHpy;El;g gzpahsh;	[]	
N). Bkw;bfhz;l bjhHpy; g[upgth;	[
c). gpw bjhHpy;fs;	[
7. jA;fspd; jpUkzk; bjhlh;ghd epiy:		
m). jpUkzk; Mdth;	[]	
M). jpUkzk; Mfhjth;	[]	
n). jpUkzk; ele;J tpfhuj;J Mdth;	[]	
N). jpUkzk; Mfp tpthfuj;J Mfhky; jdpahf thH;gth; []	
c). jpUkzk; ele;J fztid nHe;j bgz; my;yJ kidtpia nHe;j Mz;		
[]		
8.jA;fspd; FLk;g khj tUkhdk; :		
m). \.3000 I tpl Fiwthf bgWgtu;	[]	
M). \.3001/- Kjy; \.6000/- f;Fs; khj tUkhdk; bgWgtu	; []	
n). \.6001/- Kjy; \.10000-f;Fs; khj tUkhdk; bgWgtu;	[]	
N). \.10000/- I tpl mjpfkhf bgWgtu;	[]	
9jA;fs; cly;eyf;Fiwtpd; fhy mst[:		
m). 1 tUlfhyj;ij tpl FiwthdJ]	
M). 1 - 2 tUlfhyk;	[]	
n). 2 tUIA;fis tpl mjpfkhf	[]	
10.jA;fSf;F g[w;WBeha; Vw;gl;Ls;s gFjp:		

]

]

]

m) khh;gfk;			[]
M) Fly; kw;Wk; / kyf;Fly; gFj p	[]		
n) fh;g;gig/ fh;g;gigapd; fGj;JgFjp /gpuhRBll; Rug;gp.	[]		
N) jiy kw;Wk; fGj;J gFj p	[]		
c) gpw gFjpfspy;			[]
11.jA;fspd; rpfpr;ir Kiw:				
m). #PBkhbjugp (kUe;J)			[]
M). fjPh;tPr;R Kiw			[]
n). mWit rpfpr;ir Kiw	[]		
N). m kw;Wk; M nize;jJ	[]		
c). M kw;Wk; n nize;jJ	[]		
12.jhA;fs; rpfpr;ir Bkw;bfhz;l ehl;fs;:				
m). 6 khjA;fis tpl FiwthdJ []				
M).6 khjk; Kjy; 1 tUlk; tiu	[]		
n).1 tUlj;jpw;F Bkyhf	[]		
13. jA;fspd; gHf;fA;fs;:				
m). g[ifgpoj;jy;			[]
M). FogHf;fk;	[]		
n). g[ifapiy	[]		
N). m kw;Wk; M nize;jJ	[]		
c). Bkw;Fwpq;qpl;l qHf;fA;fs; VJk; ny;iy	ſ	1		

kdmGj;j mst[Bfhy;

midj;J tpdhf;fSf;Fk; tpilaspf;ft[k;. fPH;fz;l tpdhf;fspy; fle;j thuA;fspy; cA;fSf;F Vw;gl;l khw;wA;fSf;F Vw;wthW 0,1,2,3 y; tl;lkplt[k;

t. vz;	gl;oay;	mstPL
m.	cly;rhh;e;j eykpd;ik	
1	cly; rhh;e;j fodKaw;;rp my;yJ fod Btiy ehd; bra;ahky;	0 1 2 3
	nUf;Fk; BghJ, vd;dhy; vdJ njaj;jpd; bray;fis czu	
	KofpwJ.(v.fh mjpfkhd njaj;Jog;g[,	
	njaj;Jog;g[jtWjy;).	
2	vdf;F }r;R tpLtjpy; rpukk; cs;sjhf czh;fpBwd;.	0 1 2 3
3	vdf;F Jhf;fkpd;ik nUf;fpwJ.	0 1 2 3
4	vdJ fGj;J,KJF kw;Wk; jhil jir ehh;fspy; rpukk; kw;Wk;	0 1 2 3
	nWf;fk; cs;sJ.	
5	vdf;F mjpfkhf tpah;it btspBaw;wk; Vw;gLfpwJ.	0 1 2 3
	(cly;rhh;e;j fodBtiy kw;Wk; cah;cly; btg;gepiy ny;yhj	
	BghJk; vdJ iffspy; tpah;f;fpwJ).	
M	kdf;fpsh;r;rp eykpd;ik	
6	ehd; nUg;gjhf czh;fpBwd;	0 1 2 3
7	ehd;, vd;id kjpg;gw;wtshf fUJfpBwd;.	0 1 2 3
8	vdf;F Jd;gk; kw;Wk; kdr;Brhu;t[cs;sjhf czh;fpBwd;.	0 1 2 3
9	ehd; vdJ Behapdhy; mof;fo mGfpBwd;.	0 1 2 3
10	ehd; kdj;jhf;FjYf;F cs;shf;fg;gl;Ls;Bsd;.	0 1 2 3
N	mwpt[j;jpwdpy; khw;wk;	
11	ehd; mjpf Beuk;, vdJ Behapid gw;wpBa epidj;J	0 1 2 3
	bfhz;oUg;Bgd;.	
12	vdf;F qhgf kwjp cs;sJ.	0 1 2 3
13	vd;dhy; ve;j BtiyapYk; ftdk; brYj;j naytpy;iy.	0 1 2 3
14	vd;dhy; ed;ik kw;Wk; jPikfis Muha;e;J Kot[vLf;f	0 1 2 3
	Koatpy;iy.	
15	vd;dhy; btspcyfj;jpid fz;L,Bfl;L bjupe;J bfhs;s Koatpy;iy.	0 1 2 3
N	jdpkdpjd; rhu;e;j mikjpapd;ik	
16	vd;dhy; ve;j bghWg;g[fisa[k; Vw;Wf;bfhs;s naytpy;iy.	0 1 2 3

17	vd;dhy; md;g[, Berk; kw;Wk; ghr czh;t[fis jpUg;jp bra;a	0 1 2 3
	Koatpy;iy.	
18	ehd; vdJ bghUshjhuk; kw;Wk; rKjha ghJfhg;g[epiyia	0 1 2 3
	epidj;J ftiyf;; bfhz;Ls;Bsd;.	
19	vdJ Behapdhy; vdJ FLk;gj;jhupd; eyd;fis ftdpf;f	0 1 2 3
	naytpy;iy.	
20	vd;dhy; gpwUld; RKfkhd cwt[Kiwfis Vw;gLj;j Koatpy;iy.	0 1 2 3
21	vd;dhy; ve;j Btiyiaa[k; Muk;gpf;f Koatpy;iy.	0 1 2 3
22	vdJ r}f Btiyfis, vd; BehapdhJ khw;wj;ij Vw;gLj;jpaij	0 1 2 3
	epidj;J ehd; fyf;fk; mile;J cs;Bsd;.	
23	vd;dhy; gpwhpd; MByhridfisfisBah my;yJ	0 1 2 3
	mwpt[iut[fisBah my;yJ MWjiyBah Vw;fKoatpy;iy.	
24	vdJ g[w;WBeha;f;fhd rpfpr;irahdJ nUg;gJ vdf;F	0 1 2 3
	mjpfg;goahd kdmikjpapd;ikia Vw;gLj;jp cs;sJ.	
25	vd;dhy; ve;j XU fhuzj;jpw;fhft[k; kfpH;r;rpahfBth my;yJ	0 1 2 3
	Mu;tkhfBth nUf;f Koatpy;iy.	
	I .	l .

mstPL:

0	vg;BghJBk ny;iy
1	mupjhf
2	mof;fo
3	vg;BghJk;

kjpg;gpL:

50 kw;Wk; 50% f;Fk; Fiwthf	kpjkhd kd mGj;jk;
51—75%	mjpfkhd kdmGj;jk;
76% kw;Wk; <76%	kpf mjpkhd kdmGj;jk;

Art making is seen as an opportunity to express oneself imaginatively, authentically, and spontaneously, an experience that, over time, can lead to personal fulfillment, emotional reparation, and transformation. The creative process can be a "health-enhancing and growth-producing experience.". (Malchiodi, 2009).

Main Goal of Art therapy:

To help the patients to express thoughts, emotions and feelings through their drawings.

Art therapy:

- 1. Art therapy is a form of treatment using simple art materials.
- 2. Art therapy allows spontaneous art expression.
- 3. Art therapy is non-judgmental.
- 4. Art allows free articulation of repressed thoughts and feelings.
- 5. Art therapy allows expression without the threat of repercussion.
- 6. Art allows previously undisclosed feelings to be externalized.

Importance of Art therapy:

- It is used as a diagnostic and therapeutic tool.
- It provides socially acceptable outlet for fantasy and wish fulfillment
- It helps the patient to gain relief from anxiety by graphically representing conflict and aggressive and traumatic material without guilt.

Forms of Art Therapy:

- Drawing, painting and sculpture work
- Dance and creative movement
- Drama and poetry
- Photography

• Looking at and evaluating other people's artwork

Art Therapy: Two Main Approaches:

There are two basic ways in which an art therapist can approach the idea of art therapy.

The first is to be process intensive. In this approach the art therapist, uses art as a means to help his/her patient(s) to discover something about him or herself. Art is used as a catharsis, an emotional journey to which self-actualization and discovery are the end result. Edith Kramer was the first person to champion this school of thought. Kramer emphasized the healing qualities of art making, and was concerned with artistic quality.

The second approach is not to be so concerned with the process of making the art, but with what the person is consciously or unconsciously expressing through their art.

Benefits of art therapy:

- Self-discovery: At its most successful, art therapy triggers an emotional catharsis (a sense of relief and wellbeing through the recognition and acknowledgement of subconscious feelings).
- 2. **Personal fulfillment**: The creation of a tangible reward can build confidence and nurture feelings of self-worth. Personal fulfillment comes from both the creative and the analytical components of the process.
- 3. Empowerment.: Art therapy can help individuals visually express emotions and fears that they were never able to articulate through conventional means, and give them some sense of control over these feelings.

- **4. Relaxation and stress relief:** Chronic stress can be harmful to both mind and body. It can weaken and damage the immune system, cause insomnia and depression, and trigger a host of circulatory problems (e.g., high blood pressure, atherosclerosis, and cardiac arrhythmia). When used alone or in combination with other relaxation techniques such as guided imagery, art therapy can be a potent stress reliever.
- 5. Symptom relief and physical rehabilitation: Art therapy can also help individual's cope with pain and promote physiological healing by identifying and working through anger and resentment issues and other emotional stresses.

Uses of Art therapy:

- People under lots of stress or pressure may use art as therapy.
- Managers and/or staff may be someone who uses art therapy.
- Someone who has mental health problems uses art therapy.
- Someone with learning disabilities or difficulties can use art as therapy.
- Children or young adults having problems in school can use art therapy.
- Kids, teenagers, or adults with personal problems can benefit from using art therapy.
- People with more serious issues can make use of art therapy...For example,
 people with autism, brain injuries, eating disorders, cancer, post traumatic
 stress disorder (PTSD), depression, etc.
- Someone who believes they are problem-free and simply would like to explore themselves more deeply can be someone who uses art therapy.

Indications:

- Anxiety, Depression
- Mental and emotional problems and disorders
- substance Abuse
- Conflicts
- Learning disability.

Setting:

- One to one basis
- Educational Institution
- Wellness Centre
- Public and community agencies and clinics

Steps of art therapy:

1. Assessment:

Assessment often comes at the beginning of art therapy, and usually happens during the first session that the therapist has with the client. Assessment is used by the therapist to find out what the client is going through, and to gain any other information that he or she may wish to find out about the client. It is important to be very up-front at this time with the client, being very clear that the session is not treatment oriented, but is for assessment purposes. Assessment at the beginning of therapy is an important first step because it is at this point that the therapist will decide if art therapy is a good option for the client or if it would be a waste of time.

2. Treatment in the beginning:

The very first thing that needs to happen during the first session of treatment is for the therapist to establish a good rapport with the client. This rapport between the client and therapist is an important one because it allows for the development of trust in the relationship.

It is also essential in this first session for the art therapist to better grasp the framework from which the client is operating. This is also done in the assessment stage of the sessions.

This first piece of art that the client creates is a very important one because it sets the tone for the rest of the session. Because many people have art anxiety in these beginning sessions, it is important that the therapist makes the client feel as comfortable as possible. This could be done by saying to the client that they should not worry about artistic accomplishment, but rather self-expression. Another important aspect of this first artistic work is the reaction of the therapist to it. After this first session, it is important for the art therapist to begin developing treatment goals, as well as to reflect on what initial reactions the therapist may have after the first meeting.

3. Midphase of Treatment:

There are many different techniques that are used in art therapy and knowing which one to use at what time is one of the art therapist's toughest jobs. Because each case is unique and each client is different, the art therapist must custom fit the art therapy for each individual client.

Techniques for Group and Individual Art therapy:

I. Exploration Tasks:

An exploration task can be quite liberating. The goal is to encourage the patient/client to let go of conscious thoughts and controls, and to have them express

themselves as freely and spontaneously as possible. In this way, exploration tasks are very much akin to verbal free associations. Exploration tasks are generally used in the beginning sessions of art therapy. Some examples of exploration tasks are:

- a. Automatic drawing (also known as the Scribble Technique) -In automatic drawing, the patient/client is asked to relax and begin to make draw free lines or scribbles on paper. In some cases the patient/client will be instructed not to remove his or her pen from the paper until the exercise is over. Automatic drawing provides an excellent way for the patient/client to let down their guards and thus is a good starting point for therapy.
- b. Free Drawing In free drawing all the choices are up to the patient/client. All that the are patient/client is told is to express him or herself freely, and not to worry about planning the picture. This technique is useful because the images that the patient/client create are often mirrors into the person's present problems, strengths and weaknesses. Often at the end of free drawing, the patient/client is asked to share and explain what they drew about.
- c. Drawing Completion In the drawing completion technique, a patient/client is given one or more pieces of paper that already have a few lines or simple shapes on them. These shapes or lines act as a starting point for the art therapy artist, and they are to be incorporated into a larger picture. Because of the wide individual responses to the same stimuli, this is an excellent technique for a group discussion topic. Kinget developed this approach for therapeutic purposes.

II. Rapport-Building:

Rapport-building exercises are used in both individual and group art therapy settings. The basic idea behind rapport-building exercises is to reduce the amount of

isolation that the patients/clients may feel while they are creating their art. This includes isolation from the other patients/clients in the group, and the distance they feel between themselves and the therapist.

III. Expression of Inner Feelings:

These techniques are designed to help the patient/client get in touch with inner feelings, desires and fantasies and to make visual representations of them. This is done in the hopes that the patient will become increasingly aware of him or herself. The therapist will then attempt to help the patient/client deal with these feelings, and move in a direction toward a solution.

IV. Self Perception:

The self perception technique is aimed at moving a client toward a more complete awareness of personal needs and body image.

V.Interpersonal Relations

The interpersonal relations technique is designed to make the patient/client more aware of others, and how others may perceive him or her.

VI. The Individual's Place in the World:

This technique is designed to help the patient/client to see where he or she fits into the world, and hopefully accept and deal with this realization.

4. Termination:

The therapist should prepare the patient well in advance. This can be done by bringing up the issue of termination, focusing on its importance and discussing and interpreting feelings and behaviors due to the pending ending of the sessions. This is a

difficult tightrope for the therapist to walk because focusing on the end often brings to mind other separations that client may have suffered.

When nearing the end of the therapy, the client and therapist should begin relooking at the art that the client has created throughout the sessions and talking about the progress that the client has made. It is also a good idea to use art in these last few sessions to help express feeling about the termination of the therapy sessions. The therapist often will join the client on these works of art.

Articles needed for art therapy:

- 1. Chart
- 2. Crayons
- 3. Water color Paints
- 4. News Paper
- 5. Water
- 6. Paint brush

Instructions:

- Lay newspaper on the surface of the table. This is done so that the watercolor paints will be absorbed by the newspaper underneath, should they soak and place the chart on the Newspaper.
- 2. There is no restriction in drawing, There is no good or bad in your drawing, So whatever comes to your mind, that can be drawn.
- 3. Draw a design or picture with the crayons. This is where the artist can really use his/ her imagination as there are no rules to this step except to leave some of the paper white.

- 4. Apply the water color paint or crayon color or pick a color that will contrast well with the crayon or whatever color you like. For example, if the crayon drawing is primarily darker colors, use a lighter color of paint.
- 5. Apply another color of paint, if desired. It doesn't have to be just one color.
- 6. you can draw for 30-45 minutes.

Why people with cancer use art therapy?

As with many types of complementary therapies, people with cancer use art therapy to help themselves feel better and more positive. Art therapists promote this type of therapy as a way to help people,

- Express buried emotions
- Cope with grief
- Cope with fear, anxiety, stress and depression
- Achieve a sense of freedom and self confidence

Art therapy can be a safe way for people with cancer and their families to explore emotions such as anger, fear and anxiety about the cancer and treatment. Some adults and children find it easier to express difficult emotions and painful times through being creative, rather than trying to talk things through.

ANNEXURE-C

LETTER REQUESTING OPINION AND SUGGESTION OF EXPERTS FOR CONTENT VALIDITY OF THE RESEARCH TOOLS

From

Ms.Akila.A

Final Year M.Sc., (N),

Sara Nursing College,

Dharapuram, Tirupur District

To,

Respected Sir/ Madam,

Sub: Requesting opinion and suggestion of experts for establishing content validity of the tools.

I, Ms.Akila.A, a Final Year M.Sc., (Nursing) student of Sara Nursing College, Dharapuram. I have selected the topic mentioned below for the research project to be submitted to The Tamil Nadu Dr. M.G.R Medical University, Chennai for the fulfillment of .Masters Degree in Nursing.

Topic: A study to evaluate the effectiveness of art therapy on stress among patients with Cancer in a selected Hospital, Thanjavur.

I wish to request you to kindly validate the tool and give your expert opinion for necessary modification. I will be grateful to you for this.

Thanking you

Place: Dharapuram Yours Sincerely,

Date:

(Ms.Akila.A)

Enclosed:

- 1. Certificate of validation
- 2. Criteria checklist of evaluation of tool
- 3 Tool for collection of data
- 4. Procedure

ANNEXURE-D

CERTIFICATE OF VALIDATION

This is to certify that the tool developed by, **Ms.Akila.A**, Final year M.Sc. Nursing student of Sara Nursing College, Dharapuram (affiliated to Dr.M.G.R.Medical University) is validated and can proceed with this tool and content for the main study entitled "A study to evaluate the effectiveness of art therapy on stress among patients with cancer in a selected Hospital, Thanjavur".

Signature with Date

ANNEXURE-E

LIST OF EXPERTS

1. Prof. Mrs. R. Kalai selvi, M.Sc(N)

Reader,

Bishops college of nursing,

Dharapuram

2. Prof. Mrs.S. Rajamani, M.Sc(N)

Nursing Tutor,

College of Nursing, Govt. Madurai Medical college,

Madurai.

3. Prof.Mrs. Vanitha Innocent Rani M.Sc(N)

Principal,

Our lady college of Nursing,

Thanjavur.

4. Dr.Dheep, M.D.,

Psychiatrist,

Dheep Psychiatric Clinic,

K.Pudur, Madurai.

5. Dr. T. Sujit M.D,

Consultant Radiation oncologist,

Thanjavur Cancer Centre,

Thanjavur.

6. Mrs.Kavitha M.phil (Psy).,

Clinical psychologist,

Govt. Headquarters Hospital,

Mannargudi.

ANNEXURE - F

TRANING CERTIFICATE



THE VALLIAMMAL INSTITUTION (TVI)

11/6 B.B. Road 2nd St., Pankajam Colony, Madurai-625 009. ② 98942 49630 email: ananthibetsy@rediffmail.com

Certificate Course in Counselling and Art Therapy

Reg. No. PCC/19/June 2011/146

This is to certify that .Ms. AKILA .A

has completed our CERTIFICATE COURSE IN COUNSELLING

AND ART THERAPY (24hrs Part-time Education Programme designed and offered by experts) by effectively participating in theory & practical classes and successfully completall the exercises. She has been placed in

> 2nd Street. Pankajam Colony, Madurai-625 009

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SJegnfor

Rajarajan Institute of Science (RISE)

Prof. Dr. S. Jeyapragasam M.Sc., M.A., M.A., Ph.D., Dr. B. Ananthi M.Sc., M.A., M.Phil., Ph.D.,

Date: 13/06/2011

Director & Secretary

The Valliammal Institution (TVI)

ANNEXURE -G

ENGLISH EDITING CERTIFICATE

I hereby certify that, I have edited the work of Ms.A.AKILA, II year M.Sc Nursing student of SARA NURSING COLLEGE, DHARAPURAM, who has undertaken dissertation work on "A study to evaluate the effectiveness of Art Therapy on Stress among patients with Cancer at selected Hospital in Thanjavur District (2010-2012)"

Signature of the Expert

K.KOTEESWARAN, M.A., B.Ed., P.G. Asst. (English) V.S. Boys. Hr. Sec. School, Thiruvarur.

TAMIL EDITING CERTIFICATE

I hereby certify that, I have edited the work of Ms.A.AKILA, II year M.Sc Nursing student of SARA NURSING COLLEGE, DHARAPURAM, who has undertaken dissertation work on "A study to evaluate the effectiveness of Art Therapy on Stress among patients with Cancer at selected Hospital in Thanjavur District (2010-2012)"

Signature of the Expert

A. SAMBASIVAM, M.A., B.Ed.,
TAMIL PANDIT
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