

# Effect of the Nursing Practice of Creative Art Therapy on Psychiatric Symptoms among Schizophrenic Patients

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**Abstract Background:** People with schizophrenia tend to experience difficulties in social function, self-care, high rates of unemployment, and social exclusion due to cognitive impairment and schizophrenia symptoms therefor; the Art therapy was first organized in the 1930s. At the beginning of the twentieth century, psychiatrists studied the artwork of patients to see if there was a link between the art and the illness of their patients. **This study was aimed to** explore outcome from the nursing practice of creative arts therapy on Psychiatric symptoms among Schizophrenic Patients. **Methods:** Quasi-experimental design study used. **Setting:** The study was conducted at the Psychiatric Mental Health Hospital in Benha City, which is affiliated to the Ministry of Health. The tool was used to collect the data for this study consists of three parts: **Part I:** Socio-demographic data. **Part II:** clinical data. **Part III:** The symptom checklist-90 (SCL90): Arabic version of symptom checklist-90 adopted by El Behair [1], to evaluate psychiatric symptoms. **Results:-** This study showed that more than one third of patients aged between 45 to less than 55 years old with the mean and standard deviation is  $38.23 \pm 18.51$ , where the nearly of two thirds of study subject were male and more than two thirds from rural areas and have family responsibility. **Conclusion:-** schizophrenic patients had a significant psychiatric symptoms related to their illness and there was significant reduction in their psychiatric symptoms after the Practice of creative art therapy. **The study recommended** Furthermore researches about creative art therapy intervention on schizophrenic patients in other hospitals and on other psychiatric disorders such as mood disorders e.g. bipolar disorder and major depressive disorder. And Future research should include some interdisciplinary projects in which musicians and psychiatric health care professionals collaborate as a team work.

**Keywords:** Nursing, Creative art therapies, psychiatric symptoms, schizophrenic patients, nursing

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## 1. Introduction

Schizophrenia is a serious psychiatric illness generally attributed to long-term treatment, with acute exacerbations not uncommon throughout the illnesses trajectory. People with schizophrenia tend to experience difficulties in social function and self-care, high rates of unemployment, and social exclusion due to cognitive impairment and schizophrenia symptoms In this regard, cognitive deficits and negative symptoms such as alogia, avolition, and lack of energy lead to long-term disability [2].

Poor social skills are closely related to repetitive recurrences of the disease and re-hospitalization and have been reported as important factors affecting prognosis. Schizophrenia can diminish motivation, initiative, mood, and emotional expression; these constitute the category of "negative" symptoms. This may lead sufferers to become slower to talk and act, and increasingly indifferent to social contact and emotional interaction. Over time,

patients may lose contact with their friends and family, be unable to continue working, and become withdrawn and isolated. At its most extreme, individuals lose the ability to look after themselves [2].

There are multiple features of schizophrenia, including disability in everyday functioning (social functioning, everyday living skills, productive activities, and independence in living), cognitive impairments, various comorbidities (substance abuse, medical illness, and medication side-effects), and other symptoms such as depression and anxiety that are not part of the formal diagnostic criteria for this illness [3].

There is no conclusive evidence that any specific therapeutic intervention improves social functioning and negative symptoms for people with schizophrenia. Programs using behavioral therapy techniques to reward target behaviors with tokens may have beneficial effects on negative symptoms but have been limited to long-stay ward environments [4].

Art therapy was first organized in the 1930s. At the beginning of the twentieth century, psychiatrists studied

the artwork of patients to see if there was a link between the art and the illness of their patients. At this same time, art educators were discovering that the free and spontaneous art expression of children represented both emotional and symbolic communications. Since then, the profession of art therapy has grown into an effective and important method of communication, assessment, and treatment with many populations [5].

Music and medicine have been partners from the beginning of western medical practice. Ancient physicians such as Hippocrates and Galen upheld strongly the idea of treating the whole person rather than addressing discrete symptoms. It was probably after the Age of Enlightenment that emphasis on specialization appeared and complementary and alternative treatments lost some importance in traditional medical practice. Nevertheless, music is mentioned in physician records and notes throughout the eighteenth and nineteenth centuries. Music therapy, as the term is used today, developed during World War II. Overcrowded conditions in military hospitals provided an impetus for inviting adjunctive therapies into these facilities [6].

The benefits of art therapy have been shown to improve mood and self-esteem with Schizophrenic patients. Also, art therapy may be a non-threatening way of expressing patients' feelings while building positive coping skills. Art therapy promotes socialization and improvements in patient self-esteem. Schizophrenic patients can work in groups drawing pictures and sharing work. Art therapy also helps Schizophrenic patients to actually accomplish something giving way to feelings of creativity and empowerment. Smolarski et al., [7] reported that using art therapy and drawing improved Schizophrenic patients' mood and positive emotional expressions. It may reduce levels of anxiety, depression, and a variety of somatic complaints as well as promote patient cognitive function. It has been demonstrated to enhance Schizophrenic patient attention and focus span promoting positive emotional expressions of self. Art therapy thus offers a number of positive benefits to patients experiencing various forms of mental stress across the lifespan [8].

## 1.1. The Aim of the Study

This study aims to explore outcome from the nursing practice of creative arts therapy on Psychiatric symptoms among Schizophrenic Patients. It will be achieved through:

- 1- Assessing psychiatric symptoms among schizophrenic patients.
- 2- According to, develop and implement the nursing practice of creative art therapy on psychiatric symptoms among schizophrenic patients.
- 3- Evaluate the effect of the nursing practice creative art therapy on psychiatric symptoms among schizophrenic patients.

## 1.2. Research Hypothesis

The nursing practice of creative art therapy will have a positive effect on psychiatric symptoms among schizophrenic patients.

## 2. Subject and Methods

### 2.1. Research Design

A quasi-experimental design was used in this study.

### 2.2. Setting

The study was conducted at the Psychiatric Mental Health Hospital in Benha City, which is affiliated to the Ministry of Health. It has seven wards (6 male & 1 female) in two separate buildings with a capacity of 295 beds and the total numbers of the patient are 250 patients (66 female and 184 male) and the total number of the staff were 163 nurses.

### 2.3. Subject

#### 2.3.1. Sample Size

The sample size in this study included 60 patients who were subjected from inpatient departments (23 female patients & 37 male patients). They were classified into 10 groups, each group consists of 5-7 patients.

#### 2.3.2. Sampling Type

A convenient sampling of schizophrenic patients, who met the following inclusion criteria, diagnosed as schizophrenic, the last admission not less than 6 months, able to communicate, and had the willingness to participate in this study. Patients will be excluded if: They have the organic brain disorder, mental retardation, acute suicidal intention, those who had a problem with hearing or doing other activities, or any cognitive disorder, alcohol or drug abuse accompanied by series communication or behavioral problem that may affect the outcome variables. Patients were also excluded, when had severe psychomotor agitation or impulsivity, marked hostility, and aggression, severe paranoid ideation related to the setting or group members.

## 2.4. Tool of the Study

The tool was used to collect the data for this study consists of three parts:

**Part I: Socio-demographic data** to elicit data about the patient's characterized such as age, sex, residence, marital status, level of education, occupation, family income, and family responsibility

**Part II: clinical data** which includes; onset of disease, times of hospital admission, methods of hospital admission and past family history.

**Part III:** The symptom checklist-90 (SCL90): Arabic version of symptom checklist-90 adopted by El Behair [1] is a method to evaluate psychiatric symptoms by psychologists, psychiatrists, professionalism in mental health, medical and educational professionals for monitoring the patient's nursing progress outcome of treatment as well as for research purpose. It measures ninety symptoms on a five point Likert scale ranged from (0) not at all, (1) a little bit, (2) moderately, (3) quiet and (4) for extremely. It divided into nine subscales namely somatization, obsession, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism.

## 2.5. Total Scoring System

Less than 90 indicate dysfunctioning. 91 to 180 indicate mild functioning. 181 to 270 indicate moderate functioning. And more than 271 indicate functioning.

- Another name for the Symptoms Checklist 90 Revised is the Global Severity Index. The instrument's global index of distress is the Global Severity Index (GSI), The SCL-90 normally requires between 12 and 20 minutes to complete

## 2.6. Preparatory Phase

Review of current and past literature related to the topic by the researchers using books, magazines periodicals and network. This was done to get a clear picture of all aspects related to the arts such as drawing, dancing, music related to schizophrenic patients.

## 2.7. Content Validity

Before starting the data collection tool was tested for its content validity by three in the psychiatric field to check the relevancy, clarity, comprehensiveness, and applicability of the tool. As a result of the jury, required simple modifications were done and the final form was developed.

## 2.8. Reliability of the Tool

The Symptoms Checklist-90 Revised is an established instrument and has one 1,000 independent studies supporting its reliability and validity. The internal consistency coefficient rating ranged from 0.90 for Depression and 0.77 for Psychoticism Test-retest reliability has been reported at 0.80 to 0.90 with a time interval of one week.

## 2.9. Ethical Consideration

All ethical issued was considered before conducting the study, schizophrenic patients were assured that the data will be collected from the questionnaire will remain confidential and that no personal identification was needed by any means, through; gaining oral consent for participation in the study after explaining the purpose of the study to them. The patients were informed that they could refuse to participate in this study, or withdraw from it at any time.

## 2.10. Pilot Study

After the tools have been designed, they were tested through a pilot study, which was done before embarking on the field work to check the clarity and applicability of designed tool and to estimate the time needed to complete its items. It was carried out on 6 schizophrenic patients (10% of the sample size), who were included in the main study subjects, where no changes were required.

## 2.11. Fieldwork

- Preparation of data collection was carried out from the beginning of February 2017 to the end of April 2017.
- The researchers were obtained permissions to conduct the study through an official letter from the Dean of

Faculty of Nursing, Benha University to the Manager of Psychiatric and Mental Health Hospital to conduct the study.

- An official letter included the aim of the study and copy from the tool to facilitate the collection of data and implementation of the psychiatric nursing intervention of art therapy.
- The aim and the nature of the study were explained to the patients according to the level of their understand and assured that their personal data will be treated confidentially and will be used only for research purpose, and then it was possible to carry out the study with minimum resistance.
- The researchers collected data before the intervention for two weeks in the first half of February and collected the data after the intervention within two weeks in the second half of April.
- While the intervention was conducted eight weeks from mid-February to mid-April.
  - The researchers met patients in the waiting room and explained to them the purpose of the study according to his/her level of understanding before the intervention, in order to cooperate between participants.
    - Procedures carried out in terms/intervention of drawing, coloring, and music in the waiting room that follows the inpatient department of Mental Health Hospital.
      - The researchers visit the patients twice/week (Saturdays and Mondays), from 10.00 a.m. to 12.00 p.m.

## 2.12. Strategies for Creative Art Therapy Intervention

**1- Preparatory phase:** A review of recent, current, national and international literature in various aspects of art therapy and its effect on psychiatric symptoms among schizophrenic patients. The tool was designed to assess the psychiatric symptoms among schizophrenic patients regarding theoretical and practical content before and after implementing the art therapy.

**2- The assessment phase:** The pre-test questionnaire was designed and develop the content of art therapy sessions and evaluation of the used tool of Symptoms Checklist -90 Revised to identify the effects of art therapy on psychiatric symptoms among schizophrenic patients.

### **3- The planning and implementing phase:**

The general objective of the study was to evaluate the effect of the nursing practice of creative art therapy on the psychiatric symptoms Check list -90 Revised among schizophrenic patients.

### **The intervention content included:**

- 1<sup>st</sup> session: the researchers introducing themselves to each patient.
- Introducing session between researchers and patients and fill pre-test questionnaire.
- 2<sup>nd</sup> session: Knowledge about the schizophrenia definition, symptoms, causes.
- 3<sup>rd</sup> session: Define drawing and it's important.
- 4<sup>th</sup> and 5<sup>th</sup> sessions: Application for the drawing arts through:
- The application was prepared by tables if possible in some departments, a variety of art materials such as watercolor and poster paint, pencils, color

pencils, markers, crayons, pastels, different size paper and brushes, drawing boards, clay, tools, and storage facilities. The approach was non-directive – patients could choose to create whatever they wanted and use any available material they liked. The nursing interventions of art therapy aimed at supporting the art process and helping to understand the image. The last 30 minutes of a session was reserved for a shared viewing and reflecting on the images. Each patient was asked if he/she wanted to present his/her image and to talk about it. The patient's autonomous decision-making about the handling of his or her artwork was crucial. For a thorough description of therapeutic attitude, serving as a therapeutic guideline for the art therapist.

- 6<sup>th</sup> session: Define the knowledge about the music and it's important.
- 7<sup>th</sup> and 8<sup>th</sup> sessions: Application for listening to the music as well as, autonomous decision-making about the handling/offer of his or her music to listening help the patients to express their feelings, and fill the post-test questionnaire.

Training included eight sessions three for theory and five for practices. Each session takes from 20-25 minutes for theory and 55-60 minutes for practical.

The teaching methods used were small group discussions, listening, playing, videotaped and recorder. Mental health educational material (Booklet) was provided to the patients were distributed as teaching media at the workplace.

#### 4: Evaluating phase

To evaluate the effect of creative art therapy as a therapeutic nursing intervention on the psychiatric symptoms among schizophrenic patients through an individual interview to achieve the aim of having a positive effect with on psychiatric symptoms among schizophrenic patients to move from dysfunctional to functional scores as measured by SCL-90 scale that similar to the pre-test was applied.

### 2.13. Statistical Analysis

The calculated data for this study were analyzed and the collected data was organized, coded, computerized and tabulated and analyzed by using (SSPS) programs version 20. Data analysis was accomplished by the use of number, percentage distribution chi-square (X<sup>2</sup>) test, to test the significance of some variance, significant  $p < 0.05$ . The calculated data was analyzed and tabulated using "chi-square" for the number and percentage distribution, and independent "t" test was used for mean and standard division, and the correlation coefficient was used by using SPSS, version 18 to determine if there are statistically significance relations.

## 3. Results

**Table 1:-** This table showed that more than one third of patients (38.3%) aged between 45 to less than 55 years old with the mean and standard deviation is  $38.23 \pm 18.51$ , where the nearly of two thirds of study subject (61.7%) were male and more than two thirds (65.0% & 68.3) from rural areas and have family responsibility respectively.

**Table 2:-** This table showed that more than three quarters of patients (76.7%) haven't past family history of the disease, and more than two thirds of study subject (68.3%) were admitted to hospital voluntary, where more than half of study subject (51.7% & 50.0%) were twice time admitted to the hospital and onset of the disease less than three years respectively

**Table 3:-** This table showed that there is no significant difference between pre and post intervention regarding somatic symptoms. Regarding decrease of symptoms, the highest percentage was concerning heavy feelings in arms or legs, feeling weak in parts of body and soreness of muscles with t value (16.341, 13.821 and 12.984) respectively.

**Table 4:-** This table clarified that the highest percentage regarding the decrease of symptoms was concerning to trouble concentration, difficulty making decisions and feeling blocked in getting things done with t value (17.035, 13.454 and 13.231) respectively.

**Table 5:-** This table clarified that the highest decrease symptoms of interpersonal symptoms were concerning to feeling others don't understand you or are unsympathetic, feeling very self-conscious with others and feeling critical of others with t value (14.453, 13.379 and 13.362) respectively.

**Table 6:-** This table revealed that the highest percentage regarding decrease symptoms of depression was concerning to feeling lonely, feeling blue and thoughts of ending your life with t value (14.359, 14.096 and 13.105) respectively.

**Table 7:-** This table revealed that the highest percentage regarding decrease symptoms of anxiety was concerning to feeling tens or keyed up, feeling pushed to get things done and feeling fearful with t value (22.948, 11.756 and 11.527) respectively.

**Table 8:-** This table revealed that the highest percentage regarding decrease symptoms of phobic anxiety was concerning to feeling afraid will faint in public, feeling afraid to travel on buses, subways, or trains and feeling uneasy in crowds such as shopping with t value (14.997, 13.473 and 12.760) respectively.

**Table 9:-** This table revealed that the highest percentage regarding decrease symptoms of hostility was concerning to temper outbursts that could not control, shouting or throwing things and having urges to break or smash things with t value (23.312, 21.784 and 21.726) respectively.

**Table 10:-** This table revealed that the highest percentage regarding decrease symptoms of paranoid ideation was concerning to others not giving proper credit for achievements, having ideas or beliefs that others do not share and having ideas or beliefs that others do not share with t value (23.043, 21.876 and 21.784) respectively.

**Table 11:-** This table revealed that the highest percentage regarding decrease symptoms of psychoticism was concerning to the idea that someone can control your thoughts, feeling lonely even when you are with people and the idea that something serious is wrong with the body with t value (23.608, 22.582 and 22.218) respectively.

**Table 12:-** This table revealed that the highest percentage regarding decrease symptoms of global severity index was concerning to feelings of guilt with t value (22.800), and 21.854 equally for trouble falling asleep and thoughts of death or dying.

**Table 13:-** This table showed that highly statistically significant differences between pre and study post-intervention regarding total symptom checklist 90-R score ( $P < 0.001$ ).

Table 1. Frequency distribution of the study sample regarding socio-demographic characteristics

Socio-demographic characteristics	Frequency	%
<b>Age in years</b>		
25-<35	8	13.3
35-<45	15	25.0
45-<55	23	38.3
55-65	14	23.3
<b>Mean <math>\pm</math>SD3</b>	<b>8.23<math>\pm</math>18.51</b>	
<b>Sex</b>		
Male	37	61.7
Female	23	38.3
<b>Residence</b>		
Rural	39	65.0
Urban	21	35.0
<b>Marital status</b>		
Single	27	45.0
Married	30	50.0
Widow	3	5.0
<b>Educational qualification/ level of education</b>		
Illiterate	4	6.7
Read and write	16	26.7
Secondary	26	43.3
University	14	23.3
<b>Occupation</b>		
Not work	25	41.7
Work	35	58.3
<b>Family income</b>		
Enough	27	45.0
Not enough	15	25.0
Enough and save	18	30.0
<b>Family responsibility</b>		
Yes	41	68.3
No	19	31.7

Table 2. Frequency distribution of study sample regarding the history of current illness characteristics

History	Frequency	%
<b>The onset of the disease</b>		
Less than year	9	15.0
Less than 2 years	5	8.3
Less than 3 years	30	50.0
Less than 4 years	16	26.7
<b>Times of hospital admission long stay/ year</b>		
1-	18	30.0
2-	31	51.7
3 and more	11	18.3
<b>Mode of hospital admission</b>		
Voluntary	41	68.3
Involuntary	19	31.7
<b>Past family history of the disease</b>		
Yes	14	23.3
No	46	76.7

Table 3. Distribution of mean scores of studied subject pre and post-intervention regarding somatic symptoms

Somatic symptoms	Pre-intervention	Post-intervention	Paired t test	P value
	Mean $\pm$ SD	Mean $\pm$ SD		
- Headaches	3.4333 $\pm$ .67313	2.1667 $\pm$ .45721	11.396	.000
- Faintness or dizziness	3.3500 $\pm$ .93564	2.2500 $\pm$ .50840	7.972	.000
- Pains in heart or chest	3.5667 $\pm$ .92730	2.3333 $\pm$ .54202	8.851	.000
- Pains in the lower back	3.7333 $\pm$ .66042	2.2833 $\pm$ .52373	11.867	.000
- Nausea or upset stomach	3.4500 $\pm$ .99873	2.3333 $\pm$ .54202	7.931	.000
- Soreness of muscles	3.6667 $\pm$ .75165	2.3333 $\pm$ .54202	12.984	.000
- Trouble in getting breath	3.6667 $\pm$ .83700	2.2500 $\pm$ .50840	10.330	.000
- Hot or cold spells	3.6500 $\pm$ .75521	2.2833 $\pm$ .52373	11.072	.000
- Numbness or tingling in parts of the body	3.6000 $\pm$ .82749	2.2833 $\pm$ .52373	10.032	.000
- A lump in the throat	3.5333 $\pm$ .83294	2.2833 $\pm$ .52373	8.811	.000
- Feeling weak in parts of the body	3.3333 $\pm$ .57244	2.0667 $\pm$ .36204	13.821	.000
- Heavy feelings in arms or legs	3.6833 $\pm$ .65073	2.3667 $\pm$ .55132	16.341	.000

**Table 4. Distribution of mean scores of studied subject pre and post-intervention obsessive-compulsive symptoms**

Obsessive-compulsive symptoms	Pre-intervention	Post-intervention	Paired t test	P value
	Mean±SD	Mean±SD		
- Unwanted thoughts, words, or ideas that won't leave the mind.	3.4833±.65073	2.1452±.43783	12.649	.000
- Trouble remembering things.	3.6000±.76358	2.3387±.54151	9.662	.000
- Worried about sloppiness or carelessness.	3.6833±1.06551	2.4194±.55952	7.465	.000
- Feeling blocked in getting things done.	3.8000±.77678	2.3710±.55023	13.231	.000
- Having to do things very slowly to insure correctness.	3.3333±.83700	2.2419±.50198	7.899	.000
- Having to check and double-check what do.	3.6833±77002	2.3387±.54151	11.072	.000
- Difficulty making decisions.	3.7667±.67313	2.2419±.50198	13.454	.000
- Mind going blank.	3.5000±.83362	2.1774±.46250	10.032	.000
- Trouble concentrating.	3.7500±.43667	2.1613±.45063	17.035	.000
- Having to repeat the same actions such as touching, counting, washing.	3.5667±.67313	2.1613±.45063	12.792	.000

**Table 5. Distribution of mean scores of studied subject pre and post-intervention regarding interpersonal sensitivity symptoms**

Interpersonal sensitivity symptoms	Pre-intervention	Post-intervention	Paired t- test	P value
	Mean±SD	Mean±SD		
- Feeling critical of others	3.6000±.66892	2.1613±.45063	13.362	.000
- Feeling shy or uneasy with the opposite sex	3.4167±.84956	2.2419±.50198	8.937	.000
- Feelings easily hurt	3.7167±.84556	2.4194±.55952	10.010	.000
- Feeling others do not understand you or are unsympathetic	3.8667±.81233	2.3387±.54151	14.453	.000
- Feeling that people are unfriendly or dislike	3.5333±.72408	2.1452±.43783	11.857	.000
- Feeling inferior to others	3.5333±.89190	2.4194±.55952	9.713	.000
- Feeling uneasy when people are watching or talking about you	3.5500±.79030	2.3387±.54151	9.248	.000
- Feeling very self-conscious with others	3.4333±.49972	2.1613±.45063	13.378	.000
- Feeling uncomfortable about eating or drinking in public	3.6167±.90370	2.3387±.54151	9.751	.000

**Table 6. Distribution of mean scores of studied subject pre and post-intervention regarding depression symptoms**

Depression symptoms	Pre-intervention	Post-intervention	Paired t test	P value
	Mean±SD	Mean±SD		
- Loss of sexual interest or pleasure	3.6333±.95610	2.3500±.54695	10.187	.000
- Feeling low in energy or slowed down	3.5500±.90993	2.2500±.50840	8.510	.000
- Thoughts of ending your life	3.7500±.60014	2.3500±.54695	13.105	.000
- Crying easily	3.3000±.72017	2.1667±.45721	8.937	.000
-the feeling of being trapped or caught	3.5667±.85105	2.3500±.54695	9.036	.000
- Blaming yourself for things	3.6000±.78546	2.3000±.53043	10.104	.000
- Feeling lonely	3.6167±.64022	2.1500±.44436	14.359	.000
- Feeling blue	3.7667±.59280	2.2500±.50840	14.096	.000
- Worrying too much about things	3.4500±.76856	2.1500±.44436	12.139	.000
- Feeling no interest in things	3.6000±.88681	2.3500±.54695	9.829	.000
- Feeling hopeless about the future	3.7000±.61891	2.3500±.54695	12.756	.000
- Feeling everything is an effort	3.2000±.75465	2.1667±.45721	7.812	.000
- Feelings of worthlessness	3.7000±.67145	2.3833±.55515	10.565	.000

**Table 7. Distribution of mean scores of studied subject pre and post-intervention regarding anxiety symptoms**

Anxiety symptoms	Pre-intervention	Post-intervention	Paired t test	P value
	Mean±SD	Mean±SD		
- Nervousness or shakiness inside	3.5000±.81303	2.1667±.45721	9.815	.000
- Trembling	3.4000±.92425	2.1667±.45721	8.167	.000
- Suddenly scared for no reason	3.5500±.79030	2.2500±.50840	9.623	.000
- Feeling fearful	3.8667±.91070	2.4333±.56348	11.527	.000
- Heart pounding or racing	3.6000±.69380	2.2833±.52373	10.032	.000
- Feeling tense or keyed up	3.9000±.54306	2.2667±.51640	22.948	.000
- Spells of terror or panic	3.5167±.79173	2.2500±.50840	8.898	.000
- Feeling so restless couldn't sit still	3.8000±.79830	2.4000±.55845	10.222	.000
- Feeling that familiar things are strange or unreal	3.7500±.65419	2.3833±.55515	10.872	.000
- Feeling pushed to get things done	3.4333±.78905	2.1500±.44436	11.756	.000

**Table 8. Distribution of mean scores of studied subject pre and post-intervention regarding phobic anxiety symptoms**

Phobic anxiety symptoms	Pre-intervention	Post-intervention	Paired t test	P value
	Mean±SD	Mean±SD		
- Feeling afraid in open spaces or on the streets	3.6667±.91442	2.2333±.49972	10.943	.000
- Feeling afraid to go out of your house alone	3.6833±.67627	2.2833±.52373	10.900	.000
- Feeling afraid to travel on buses, subways, or trains	3.8000±.65871	2.2500±.50840	13.473	.000
- Having to avoid certain things, places, or activities because they frighten	3.5167±.77002	2.2833±.52373	9.416	.000
- Feeling uneasy in crowds, such as shopping or at a movie	3.3833±.66617	2.1667±.45721	12.760	.000
- Feeling nervous when left alone	3.8000±.85964	2.3500±.54695	11.867	.000
- Feeling afraid will faint in public	3.5667±.49972	2.2667±.51640	14.997	.000

**Table 9. Distribution of mean scores of studied subject pre and post-intervention regarding hostility symptoms**

Hostility symptoms	Pre-intervention	Post-intervention	Paired t -test	P value
	Mean±SD	Mean±SD		
- Feeling easily annoyed or irritated	3.6333±.80183	2.2667±.44595	19.201	.000
- Temper outbursts that could not control	3.7500±.67961	2.2333±.42652	23.312	.000
- Having urges to beat, injure, or harm someone	3.4333±.67313	2.1000±.30253	15.761	.000
- Having urges to break or smash things	3.5667±.56348	2.2333±.42652	21.726	.000
- Getting into frequent arguments	3.7167±.88474	2.2833±.45442	16.494	.000
- Shouting or throwing things	3.6000±.55845	2.2333±.42652	21.784	.000

**Table 10. Distribution of mean scores of studied subject pre and post-intervention regarding paranoid ideation**

Paranoid ideation	Pre-intervention	Post-intervention	Paired t test	P value
	Mean±SD	Mean±SD		
- Feeling others are to blame for most of your troubles	3.5500±.99873	2.2833±.45442	12.976	.000
- Feeling that most people cannot be trusted	3.3000±.78762	2.1000±.30253	12.317	.000
- Having ideas or beliefs that others do not share	3.7333±.73338	2.3667±.48596	21.784	.000
- Having ideas or beliefs that others do not share	3.5167±.56723	2.2333±.42652	21.876	.000
- Others not giving proper credit for achievements	3.7500±.70410	2.2500±.43667	23.043	.000
- Feeling that people will take advantage if let them	3.5333±.65008	2.1833±.39020	21.740	.000

**Table 11. Distribution of mean scores of studied subject pre and post-intervention regarding psychoticism symptoms**

Psychoticism symptoms	Pre-intervention	Post-intervention	Paired t test	P value
	Mean±SD	Mean±SD		
- The idea that someone can control your thoughts	3.8167±.72467	2.2833±.45442	23.608	.000
- Hearing words that others do not hear	3.2167±.86537	2.1000±.30253	10.481	.000
- Other people being aware of your private thoughts	3.7833±.84556	2.2833±.45442	17.849	.000
- Having thoughts that are not your own	3.8000±.85964	2.2833±.45442	17.372	.000
- Feeling lonely even when you are with people	3.8000±.65871	2.3333±.47538	22.582	.000
- Having thoughts about sex that bother a lot	3.5333±.79119	2.1833±.39020	21.740	.000
- The idea should be punished for sins	3.6500±.89868	2.1833±.39020	16.815	.000
- The idea that something serious is wrong with body	3.7667±.49972	2.3333±.47538	22.218	.000
- Never feeling close to another person	3.5667±.72174	2.2333±.42652	15.761	.000
- The idea that something is wrong with your mind	3.6333±.63691	2.2833±.45442	21.740	.000

**Table 12. Distribution of mean scores of studied subject pre and post-intervention regarding global severity index symptoms**

Global severity index symptoms	Pre-intervention	Post-intervention	Paired t - test	P value
	Mean±SD	Mean±SD		
- Poor appetite	3.6000±.74105	2.2000±.40338	18.442	.000
- Trouble falling asleep	3.6667±.62887	2.2833±.45442	21.854	.000
-Thoughts of death or dying	3.5833±.67124	2.2000±.40338	21.854	.000
- Overeating	3.4000±.49403	2.1000±.30253	21.790	.000
- Awakening in the early morning	3.4500±.67460	2.2000±.40338	15.424	.000
- Sleep that is restless or disturbed	3.3500±.70890	2.2333±.42652	15.581	.000
- Feelings of guilt	3.8000±.63246	2.3167±.46910	22.800	.000

**Table 13. Total scores of Psychiatric Symptoms Checklist 90-R of studied subject pre and post-intervention**

Psychiatric Symptoms	Pre-intervention						Post-intervention						Chi square Test	P value
	Mild		Moderate		Sever		Mild		Moderate		Sever			
	No	%	No	%	No	%	No	%	No	%	No	%		
Somatization (SOM)	0	0.0	11	18.3	49	81.7	21	35.0	37	61.7	2	3.3	78.39	<0.001**
Obsessive Compulsive (O-C)	0	0.0	11	18.3	49	81.7	16	26.7	42	70.0	2	3.3	77.44	<0.001**
Interpersonal Sensitivity (I-S)	0	0.0	9	15.0	51	85.0	30	50.0	28	46.7	2	3.3	85.05	<0.001**
Depression (DEP)	0	0.0	10	16.7	50	83.3	19	31.7	38	63.3	3	5.0	77.01	<0.001**
Anxiety (ANX)	0	0.0	8	13.3	52	86.7	22	36.7	36	60.0	2	3.3	86.11	<0.001**
Hostility (HOS)	0	0.0	4	6.7	56	93.3	26	43.3	32	53.3	2	3.3	98.05	<0.001**
Phobic Anxiety (PHOB)	1	1.7	54	90.0	5	8.3	52	86.7	8	13.3	0	0.0	88.20	<0.001**
Paranoid Ideation (PAR)	0	0.0	3	5.0	57	95.0	17	28.3	43	71.7	0	0.0	108.78	<0.001**
Psychoticism (PSY)	0	0.0	6	10.0	54	90.0	27	45.0	33	55.0	0	0.0	99.69	<0.001**
Global Severity Index (GSI)	0	0.0	3	5.0	57	95.0	28	46.7	32	53.3	0	0.0	109.02	<0.001**

## 4. Discussion

The result of the present study revealed that more than one-third of patients aged between 45 to less than 55 years old, this finding may be due to that middle-aged adult have a deeper and focused vision to different issues; they also are generally more positive, accepting, understanding and experiencing. These findings were in disagreement with Atia [9] found that the majority of the patient's age was ranged between 31- 40 years old. Where the nearly of two-thirds of study subject were male this is may be due to the hospital consist of one department for female patients and five for the male. This result is congruent with Foruzandeh and Parvin, [10] who found that the majority of schizophrenic patient were male. Also, more than two-thirds have family responsibility. This is may be due to the majority of the studied subjects from rural areas and also most of them were male .in the eastern societies the male have the biggest responsibility for their families.

The result of the present study revealed that more than three-quarters of patients haven't past family history of the disease, These findings were similar to the study done by Solanki et al., [11], stated that the majority of the studied subjects were absent family history of psychiatric illness. And more than two-thirds of study subject was admitted to hospital voluntary, this may be due to the majority of the studied subjects were having secondary education. this lead to that majority of the patient seek treatment and admitted to hospital voluntary, this results congruent with Foruzandeh and Parvin, [10] who found the most of the studied sample haven't past family history of the disease and admitted to hospital voluntary. where more than half of the studied subject was twice time admitted to the hospital and onset of the disease for less than three years. This may be due to many people with schizophrenia, an inpatient admission is a necessary and perhaps important turning point in the course of their illness, more and better interventions were not available outside the inpatient setting. These findings were in agreement with Hosseini and Yousefi [12], reported that the majority of the patients admission in their study were 3times or more. On the contrary, these findings were in disagreement with Ahmed [13], reported that most of the patient admission was two times. Conversely, Abd Elfattah [14], found that the majority of the patients re-hospitalization rate was one time.

The result of the present study showed that there is no significant difference between pre and post-intervention regarding somatic symptoms this may due to the effect size vary according to the dependent measure being used, physiological measures being stronger than subjective assessment. This result congruent with Ali Hirani et al., [15], who found no significant changes in a specific physiological variable during the session of art therapy, while contraindicated with Sexton-Radek [16] who found sensitivity to the relationship between headaches and daily life activities such as art helps develop the effective pain management.

This study clarified that the highest decrease symptoms of interpersonal symptoms were concerning to feeling others don't understand themselves or are unsympathetic, feeling very self-conscious with others and feeling critical of others. The patients used the art therapy in many different ways. This is may be due to that most important benefit of art therapy was a strengthening of the patients' sense of self. This result in agreements with the result of Teglbjaerg [17] that was accomplished by engagement in the artistic process and by aesthetic reflections on the painted images. The stronger sense of self-diminished the tension arising from interpersonal contact, boosting their self-esteem and thereby improving their social competences. The same line Ricoeur [18], who supported by this study was that art therapy intervention gave rise to an experienced stronger sense of self. For patients with schizophrenia, the result can be understood as a strengthening of the minimal self in this phenomenological sense. While working with art, the patients shape images and are shaped by the aesthetic interaction with the art materials. The experience of self-gave rise to a better demarcation and an improved emotional capacity.

This study revealed that the highest percentage regarding decrease symptoms of depression was concerning to feeling lonely, feeling blue and thoughts of ending your life, this result was congruent with Updike [19] who found that art therapy relived depression with patients suffering from coronary heart disease. Also, this study revealed that the highest percentage regarding decrease symptoms of anxiety was concerning to feeling tens or keyed up, feeling pushed to get things done and feeling fearful, This reduced in symptoms of anxiety companied by decrease in somatic symptoms among minimal percentage of schizophrenic patients, This study revealed that the highest percentage regarding decrease symptoms of phobic anxiety was

concerning to feeling afraid will faint in public, feeling afraid to travel on buses, subways, or trains and feeling uneasy in crowds such as shopping. This result in agreements with Blowerk [20] who set out to relieve the state anxiety of patients in a myocardial infarction ward by using art therapy.

This study revealed that the highest percentage regarding decrease symptoms of hostility was concerning to temper outbursts that could not control, shouting or throwing things and having urges to break or smash things. This is maybe because of the art therapy intervention help in represented symbolic communications, social skills and expresses the internal emotion this leading to improving patients' behavior. This result has similarity with Weinberg [21], who found that computer art therapy programs provide appropriate means of expression of hostility and frustration in patients who have suffered brain injury, cerebral vascular accident, or those who are quadriplegics and increases patients' self-esteem and motivation

This study revealed that the highest percentage regarding decrease symptoms of paranoid ideation and decrease symptoms of psychoticism was concerning to the idea that someone can control his thoughts, feeling lonely even when the patient with people and the idea that something serious is wrong with the body. The researcher's opinion that may be due to the art therapy intervention is a way of restoring wholeness to a person struggling with either mind or body illness. This was similar to Robbins, [22] who found that art therapy intervention is used to help a patient organize or synthesize affective issues that include abandonment, loss, grief, pain, psychoticism, schizoid and paranoid ideation.

Therefore, this study revealed that the highest percentage regarding decrease symptoms of global severity index was concerning to feelings of guilt with t value (22.800), and 21.854 equally for trouble falling asleep and thoughts of death or dying Shapiro, [23] There for the study showed that highly statistically significant differences between pre and study post-intervention regarding total symptom checklist 90-R score Schneider et al [24] also found after completion of treatment through art therapy, the 10 patients whose pretests strongly suggested depression significantly improved scores on 8 of 15 items in the posttest.

## 5. Conclusion

Schizophrenic patients had significant psychological problems related to their illness and there was a significant reduction in the psychological problems after the Practice of creative art therapy.

## 6. Recommendation

Furthermore researches about creative art therapy intervention on schizophrenic patients in other hospitals and on other psychiatric disorders such as mood disorders e.g. bipolar disorder and major depressive disorder. And Future research should include some interdisciplinary projects in which musicians and psychiatric health care professionals collaborate as a teamwork.

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