

# EFFECTIVENESS OF THERAPEUTIC GUIDED IMAGERY ON DEPRESSION, ANXIETY AND STRESS AMONG PATIENTS WITH SUBSTANCE ABUSE IN CARE HOME DRUG REHABILITATION CENTER DHARAMPUR DISTT. SOLAN, HP, INDIA

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**ABSTARCT :** Substance abuse is defined as the dangerous or hazardous use of psychoactive substances Substance abuse, such as alcohol and illicit drugs such as amphetamine, barbiturates, benzodiazepines, cannabis, hallucinogens, methaqualone, and opioids. Alcohol and other drugs are frequently used to self-medicate the symptoms of mental health issues. Researchers assessed the pretest scores of depression, anxiety and stress among patients with substance abuse. They also assessed the effectiveness of therapeutic guided imagery in experimental group on depression, anxiety and stress. **Methods:** Quantitative quasi experimental study was carried out in Care home drug and rehabilitation center District Solan (HP). Using non-probability consecutive sampling, 60 patients (30 for experimental group and 30 for control group). Subjects were interviewed using structured questionnaire regarding demographic variables and DASS 21 for the level of depression anxiety and stress. Therapeutic guided imagery was given for period of 7 days for the patients who are suffering. **Results:** The result of effect of therapeutic guided imagery reveal that in experimental group 86% of study subjects were in normal depression and 13.3% were in mild depression. 46.7% 14(46.7%) of study subjects were in normal level of anxiety 8(26.7%) were in mild level of anxiety 7(23.3%) were in moderate level of anxiety and 1(3.3) were in severe level of anxiety 86.7% of study subjects were in normal level of stress 13.3%were in mild level of stress. **Conclusion:** The study concluded that patients with substance abuse had depression, anxiety and stress. The daily intervention with guided imagery for 15- 20 minutes among patients with substance abuse had shown statistically significant difference in pre-test and post-test level of depression, anxiety and stress. Thus guided imagery was effective in terms of reducing the level of depression, anxiety and stress among the patients with substance abuse at de-addiction ward.

**KEY WORDS:-**Anxiety, Depression, DASS 21 scale, Guided imagery, substance abuse.

## I INTRODUCTION

Substance abuse is defined as the dangerous or hazardous use of psychoactive substances such as alcohol and illicit drugs such as amphetamine, barbiturates, benzodiazepines, cannabis, hallucinogens, methaqualone, and opioids<sup>1</sup>. Substance abuse has varying effects on various family structures<sup>2</sup>. There is a link between substance abuse and psychiatric disorders like depression and anxiety. Cannabis or methamphetamine abuse can result in prolonged psychotic reactions, while alcohol abuse can exacerbate depression and anxiety symptoms. Symptoms of mental health problems are often self-medicated with alcohol and other drugs<sup>3</sup>. According to the United Nations World Drug Report 2019. 2,6 crore Indians have used opioids according to the National Drug Dependence Treatment Center report. 1.18 billion people use sedatives and inhalants<sup>4</sup>. Himachal Pradesh has 3,20 percent of its population using marijuana, compared to India's national average of 2,8 percent, and 11,66 percent of its population using opioids<sup>5</sup>. Using therapeutic imaging, mental health professionals help people relax by focusing on mental images. To reduce health issues and poverty, prevention is our top priority.<sup>6</sup> It's based on the mind-body connection theory. Guided imagery' is a well-established method Using guided imagery to relax is a quick and easy way to reduce stress and tension. In addition to physically relaxing the body, guided imagery can also assist participants in connecting with deeper levels of wisdom (held on a subconscious level) that would help them better manage their lives in ways that would reduce stress, according to research.<sup>7</sup>

## II STATEMENT OF THE PROBLEM

A study to assess the effectiveness of therapeutic guided imagery on depression, anxiety and stress among patients with substance abuse in care home drug and rehabilitation center Dharampur Distt. Solan (Himachal Pradesh)

## III OBJECTIVES

1. To assess the pre-test and post-test scores of depression, anxiety and stress among patients with substance abuse.
2. To assess the effectiveness of therapeutic guided imagery in experimental group on depression, anxiety and stress among patients with substance abuse.
3. To compare the post-test score of depression anxiety and stress in experimental group and control group among patients with substance abuse.

4. To find out the association between pre-test scores of depression, anxiety and stress with selected socio demographic variables

#### **IV RESEARCH METHODOLOGY**

**5.1 RESEARCH APPROACH** Quantitative research approach was adopted for the conduction of the study.

**5.2 RESEARCH DESIGN** Quasi experimental non- equivalent control group design was used in this study.

**5.3 RESEARCH SETTING:** The present study was conducted in Care Home Drug and Rehabilitation Center (CHD&RC) situated in District Solan Himachal Pradesh.

**5.4 SAMPLING** The sample of present study was patients diagnosed with substance abuse and having depression anxiety and stress In Care home drug and rehabilitation center.

**Sample size calculation** The formula used for sample size calculation is:

$$n = \frac{NZ^2 p (1-p)}{d^2 (N-1) + Z^2 p (1-p)}$$

N=60, Z=1.96, p=0.05, d=0.05

So, the sample required for the present study is 52, but the investigator selected 60 subjects, out of which half of the subjects i.e. 30 samples assigned to experimental group and 30 samples assigned to control group considering 10% attrition rate for generalizability of the study findings.

#### **5.5 DATA COLLECTING TOOL**

**Section A: Socio demographic profile sheet (Self developed).**

**Section B: Depression anxiety and stress scale (DASS21) (Standardized).**

**Section A- Socio-demographic profile sheet.** This tool consist of 11 items pertaining to socio- demographic profile of study participants such as Age in year marital status, residential are, religion, educational status, occupation, type of family, number of children, support system, duration of consumption of substance . (Name of substance, Duration, Quantity of substance use, Physical illness due to substance use, Duration in de-addiction center, Financial problem).

**Section-B (DASS 21 Stress Scale) – A 21 item questionnaire completed by a client with each answer scored on scale of 0 to 3 designed to measure the level of Depression anxiety and stress. The Rating scale is as follows:-**0 Did not apply to me at all 1 Applied to me to some degree, or some of the time 2 Applied to me to a considerable degree, or a good part of time 3 Applied to me very much, or most of the time.

## VI ANALYSIS

**TABLE: 1** frequency and percentage distribution of socio demographic variables of patients taking substance abuse in experimental group and control group:

( N=60)

Sr.no	Socio -demographic Variables	Experimental Groupf (%) n=30	Control Groupf (%) n=30
1	<b>Age( in years):-</b> a) 15-25 years b) 26-35 years c) 36-45years d) 46-55years	14(46.7) 13(43.3) 2(6.7) 1(3.3)	11(36.7) 14(46.7) 5(16.7)
2	<b>Gender</b> Male	30(100)	30(100)
3	<b>Marital Status</b> a) Married b) Unmarried c) Divorced	7(23.3) 22(73.3) 1(3.3)	10(33.3) 20(66.7) 0(0.0)
4	<b>Religion</b> a) Hindu b) Muslim c) Sikh d) Christian	24(80.0) 1(3.3) 4(13.3) 1(3.3)	24(80.0) 1(3.3) 5(16.7) 0(0.0)
5	<b>Residential area</b> a) Rural b) Urban c) Semi urban	10(33.3) 20(66.6)	19(63.3) 11(36.7)
6	<b>Type of Family</b> a) Nuclear b) Joint c) Extended	19(63.3) 11(36.7)	16(53.3) 14(46.7)
7	<b>Educational Status</b> a) Illiterate b) Primary c) Secondary d) Graduate/post graduate	2(6.7) 16(53.3) 12(40.0)	2(6.7) 13(43.3) 15(50.0)
8	<b>Occupational status</b> a) Student b) Govt. employee c) Private employee d) Others	16(53.3) 1(3.3) 6(20.0) 7(23.3)	9(30.0) 3(10.0) 8(26.7) 10(33.3)

9	<b>Number of children</b> a) Nil b) 1 c) 2 d) More than 2	23(76.7) 4(13.3) 3(10.0)	24(80.0) 2(6.7) 4(13.3)
10	<b>Support System</b> a) Family b) Friends c) NGO	30(100)	30(100)
11	<b>Drug of Choice</b> a) Alcohol b) Heroin c) Cannabis d) Smoking e) Opium f) Heroin & cannabis g) Cannabis & Alcohol Heroin & Alcohol	4(13.3) 14(46.7) 5(16.7) 1(3.3) 1(3.3) 2(6.7) 2(6.7) 1(3.3)	4(13.3) 15(15.0) 8(26.7) 1(3.3) 1(3.3) - - 2(6.7)
12	<b>Duration of substance</b> a) 1-5 years b) 6-10 years More than 10 years	19(63.3) 8(26.7) 3(10.0)	24(80.0) 5(16.7) 1(3.3)
13	<b>Quantity of substance</b> a) Less than 1 gram b) 1-2 gram c) 3-4 gram 5-6 gram	15(50.0) 9(30.0) 5(16.7) 1(3.3)	15(50.0) 14(46.7) 1(3.3) 0(0.0)
14	<b>Physical illness because of substance abuse</b> a) Yes No	3(10.0) 27(90.0)	5(16.7) 25(83.3)
15	<b>Duration in de-addictioncenter</b> a) 1-6 months b) 7-12 months More than 12 months	26(86.7) 4(13.3) 0(0.0)	21(70.0) 7(23.3) 2(6.7)
16	<b>Financial problem</b> a) Yes No	3(10.0) 27(90.0)	3(10.0) 27(90.0)

**SECTION B - ASSESS THE PRE-TEST AND POST- TEST SCORES OF DEPRESSION, ANXIETY AND STRESS AMONG PATIENTS WITH SUBSTANCE ABUSE IN EXPERIMENTAL AND CONTROL GROUP**

**TABLE 2.1** : Frequency and percentage distribution of pre-test and post- test level of depression in experimental group and control group. (N =60)

Sr.no	Depression Score	Pre- Test		Post –Test	
		Experimental Group f (%)	Control Group f(%)	Experimental Group f(%)	Control Group f(%)
1	Normal	3(10.0)	8(26.7)	26(86.7)	12(40.0)
2	Mild	10(33.3)	8(26.7)	4(13.3)	11(36.7)
3	Moderate	13(43.3)	12(40.0)		6(20.0)
4	Severe	4(13.3)	1(3.3)		1(3.3)
5	Extremely Severe	0(0)	1(3.3)		
<b>Level of depression-</b> <b>Normal 0-9</b> <b>Mild 10-13</b> <b>Moderate 14-20</b> <b>Severe 21-27</b> <b>Extremely severe 28+</b>					

**TABLE 2.2: FREQUENCY AND PERCENTAGE DISTRIBUTION OF PRE-TEST AND POST-TEST LEVEL OF ANXIETY IN EXPERIMENTAL GROUP AND CONTROL GROUP**

(N =60)

Sr.no	Anxiety Score	Pre- Test		Post- Test	
		Experimental Group f(%)	Control Group f (%)	Experimental Group f(%)	Control Group f(%)
1	Normal	3(10.0)	6(20.0)	8(26.7)	8(26.7)
2	Mild	9(30.0)	2(6.7)	14(46.7)	4(13.3)
3	Moderate	8(26.7)	9(30.0)	7(23.3)	14(46.7)
4	Severe	10(33.3)	6(20.0)	1(3.3)	4(13.3)
5	Extremely severe	10(33.3)	7(23.3)		
<b>Level of anxiety</b> <b>Normal 0-7</b> <b>Mild 8-9</b> <b>Moderate 10-14</b> <b>Severe 15-19</b> <b>Extremely severe 20</b>					

**TABLE 2.3: FREQUENCY AND PERCENTAGE DISTRIBUTION OF PRE-TEST AND POST- TEST LEVEL OF STRESS IN EXPERIMENTAL GROUP AND CONTROL GROUP**

(N =60)

Sr.no.	Stress Score	Pre Test		Post Test	
		Experimental Group f (%)	Control Group f (%)	Experimental Group f(%)	Control Group f(%)
1	Normal	6(20.0)	19(63.3)	26(86.7)	12(40.0)
2	Mild	12(40.0)	5(16.7)	4(13.3)	11(36.7)
3	Moderate	10(33.3)	5(16.7)		6(20.0)
4	Severe	2(6.7)	1(3.3)		1(3.3)
5	Extremely Severe	0(0)	0(0)		
<b>Level of stress</b> <b>Normal 0-14</b> <b>Mild 15-18</b> <b>Moderate 19-25</b> <b>Severe 26-33</b> <b>Extremely severe 34+</b>					

**SECTION C**

**OBJECTIVE 2 TO DETERMINE THE EFFECTIVENESS OF THERAPEUTIC GUIDED IMAGERY IN EXPERIMENTAL GROUP AND CONTROL GROUP ON DEPRESSION, ANXIETY AND STRESS AMONG PATIENTS WITH SUBSTANCE ABUSE.**

**TABLE 3** Mean and standard deviation of pre- test post-test level of depression in experimental group and control group

(N=60)

S. No	Depression Level	Pre -Test (Mean± Sd)	Post - Test (Mean± Sd)	Mean Difference	"t" value	p value
1	<b>Experimental Group</b>	15.200±.5.0368	5.07±3.051	10.13	13.538	.000
2	<b>Control Group</b>	12.067±6.5492	9.87±5.532	2.200	2.194	.163

**Highly significant- \*\* (p<.000)**

**TABLE 3.2** Mean and standard deviation of pre- test post-test level of anxiety in experimental group and control group

(N=60)

S.no	Anxiety level	pre –test (mean± sd)	post – test (mean± sd)	Mean difference	“t” value	P value
1	<b>Experimental Group</b>	17.53±6.822	7.80±3.253	9.733	8.877	.000
2	<b>Control Group</b>	14.60±8.760	9.33±4.147	5.267	3.724	.116

Highly significant- \*\* (p&lt;.000)

**TABLE 3.3** Mean and standard deviation of pre- test post-test level of stress in experimental group and control group

(N=60)

S.No	Stress Level	Pre –Test (Mean± Sd)	Post – Test (Mean± Sd)	Mean difference	“t” value	P Value
1	<b>Experimental Group</b>	18.67±4.589	7.27±5.420	11.40	12.124	.000
2	<b>Control Group</b>	12.53±6.601	10.13±4.361	2.4	2.159	.193

Highly significant- \*\* (p&lt;.000)

**SECTION - E**

**OBJECTIVE IV** to find out the association between pre-test scores of depression, anxiety and stress with selected socio demographic variables of patients with substance abuse.

ANOVA represents that p value for age in years was less than the p<0.05 level of significance and calculated ANOVA value is more than tabulated values which indicates that there was significant association between pre-test depression score with age in years at 0.05 level of significance. Hence research hypothesis H<sub>2</sub> was accepted.

ANOVA represents that p value for drug of choice was less than the p<0.05 level of significance and calculated ANOVA value is more than tabulated values which indicates that there was significant association between pre-test anxiety score with drug of choice at 0.05 level of significance. Hence research hypothesis H<sub>2</sub> was accepted.



**DISCUSSION:**

Nursing research generates new knowledge that improves scientific practices and is the only reliable source of information for nurses to use in their practice.<sup>8</sup>

**Objective I To assess the pre-test and post- test scores of depression, anxiety and stress among patients with substance abuse**

The result of experimental group shows that 43.3% were in moderate level of depression, 33.3% were in mild level depression, 13.3% were in severe level of depression 10% of study subjects are in normal level of depression. In pre-test of control group 40% of study subjects were in moderate level of depression, 26.7 were having mild depression, 3.3% were having severe depression and 3.3% have extremely severe 26.7% were in normal level of depression. The result of experimental group shows that 33.3% were in extreme level of anxiety, 33.3% were in severe level of anxiety, 33.3% were in mild level of anxiety 26.7% of study subjects were in moderate level of anxiety. In pre -test of control group 30%of study subjects were in moderate level of anxiety, 23.3% were in extremely severe level of anxiety, 20.0% were in severe level of anxiety , 6.7% of study subjects were in mild level of anxiety and 20.0% were in normal level of anxiety. The result of experimental group shows that 40.0% were in mild level of stress, 33.3% were in moderate level of stress, 6.7% were in severe level of stress 20.0% of study subjects were in normal level of stress. In pre -test of control group 63.3% of study subjects were in normal level of stress, 16.7%were in moderate level of stress, 16.7% were in mild level of stress, 3.3% of study subjects were in severe level of stress.

**OBJECTIVE II To assess the effectiveness of therapeutic guided imagery in experimental group on depression, anxiety and stress among patients with substance abuse.**

The result of effect of therapeutic guided imagery reveal that in experimental group 86% of study subjects were in normal depression and 13.3% were in mild depression.

The result of intervention in experimental group (therapeutic guided imagery) shows that 46.7% of study subjects were in normal level of anxiety 26.7% were in mild level of anxiety 23.3% were in moderate level of anxiety and 3.3 were in severe level of anxiety 86.7% of study subjects were in normal level of anxiety 13.3%were in mild level of anxiety.

The result of intervention In the experimental group 86.7% of study subjects were in normal level of stress 13.3%were in mild level of stress.

So it is proved that therapeutic guided imagery is effective to reduce level of depression anxiety and stress of patients with substance abuse.

#### **OBJECTIVE IV Association between Pre Test level of Depression anxiety and stress with Socio Demographic Variables in Experimental Group and Control group.**

ANOVA analysis revealed that all the study variables were not significantly associated among the patients with substance abuse with their pre-test scores of depression anxiety and stress in experimental group. Hence research hypothesis H2 was rejected

In control group p value for age in years residential area or drug of choice was less than  $p < 0.05$  level of significance and calculated ANOVA value is more than tabulated values which means that there was significant association between pre- test scores of depression and anxiety at 0.05 level of significance hence research hypothesis H2 was accepted.

#### **RECOMMENDATION:**

- Similar study can be replicated with a large sample size and in different settings.
- A comparative study can be conducted to evaluate the effectiveness of guided imagery with other complementary therapies and among other population such as spouse of alcoholics, chronic illnesses such as Cerebrovascular. accidents, cancer, psychotic and neurotic patients.
- A similar study can be conducted by using a qualitative approach .

#### **CONCLUSION**

The study concluded that patients with substance abuse had depression anxiety and stress. The daily intervention with guided imagery for 15- 20 minutes among patients with substance abuse had shown statistically significant difference in pretest and posttest level of depression anxiety and stress. Thus guided imagery was effective in terms of reducing the level of depression anxiety and stress among the patients with substance abuse at de addiction ward. Guided imagery interventions are cost effective, non-invasive, non-pharmacological free from side effects and highly feasible. The researcher concluded that it can be used as an effective intervention to reduce the depression anxiety and stress to improve the life status of patients with substance abuse.

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