

Effect of Interventional Package (TIP) on Stress, Anxiety and Depression, among Patients with Alcohol Use disorders

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Abstract

Alcoholism is one of the major medical and public health problems all over the world. The prolonged used of alcohol may lead to dependence of the substances. The dependence of alcohol causes many mental health problems which includes stress, depression and anxiety among the persons who developed dependence over that substance.

Aim: The main aim of the study was to evaluate the effectiveness of Interventional Package (TIP) on Stress, Anxiety and Depression, among Patients with Alcohol Use disorders.

Methodology: The study used a true-experimental research design with control and experimental group, which was a quantitative technique. Using cluster sampling technique, 150 alcohol use disorder patients were chosen. Pre-tests and post-tests were administered, data was gathered using Depression, Anxiety and Stress - 21 Scale (DASS – 21) and after the pre-test, Triple Interventional Package were given for the alcohol dependents which includes Breathing Techniques (Count in 15 Seconds for 15 minutes), Listening to Receptive Music (20 minutes) and Assertive Training (45 minutes).

Result: In Experimental Group pre and post-test level of stress mean value is 3.2 and 13.7 with mean value of 13.3 and 13.5 of patient with alcohol use disorder. The calculated independent t – test value and p value for the post test between experimental and control group was 12.89 and < 0.001, which was highly statistically significant at p value less than 0.001 level. On anxiety the pre and post-test level of anxiety mean value is 3.6 and 10.4 of patient and in Control Group pre and post-test level of anxiety mean value is 11.1 and 11.4. The calculated independent t – test value and p value for the post test between experimental and control group was 9.419 and < 0.001, which was highly statistically significant at p value less than 0.001 level. On depression, In Experimental Group pre and post-test level of depression mean value is 3.4 and 11 of patient with alcohol use disorder. In Control Group pre and post-test level of depression mean value is 11.9 and 11.4. The calculated independent t – test value and p value for the post test between experimental and control group was 9.419 and < 0.001, which was highly statistically significant at p value less than 0.001 level. On association, there is no significant association between level of Stress, Anxiety, and Depression with their Socio demographic Variables.

Conclusion: The study concluded that Implementation of triple interventional package on stress, anxiety and depression among patients with alcohol use disorder is highly effective in reducing the level of study variables. Hence, it can be implemented in broader aspects to get desired outcomes a larger scale among other populations.

Keywords: Triple interventional package, Stress, Anxiety, Depression, Alcohol use disorder

Introduction

The Healthy life style creates a wealthy world and Life style is a value and behaviors adopted by a person in daily life and everyone desires good health. Mostly people are unaware of maintaining healthy lifestyle¹. Health experts describe life style as one of a most important factors affecting health. The abuse of alcohol becomes more prevalent it takes an increasingly heavy physical, emotional and economic toll on society². Newly emerging patterns of drinking are now causing increased rate of injuries, disability, stress and death, leading to decreased levels of productivity in many regions of the world³.

Alcoholism is one of the major medical and public health problems all over the world. The World Health Organization (2022) states that 3 million deaths each year globally as well as to the disabilities and poor health of millions of people⁴. Problems associated with abuse of alcohol continue to consume major proportions of health care and the most of people, moderate to heavy consumption is associated with euphoria, mood liability, decreased impulse control, and increased social confidence⁵. Drinking alcohol plays an important social role in many cultures. Most countries have laws regulating the production, sale, and consumption of alcoholic beverages⁶. Alcohol is one of the most widely used recreational drugs in the world with about 33% of people

being current drinkers. Some countries ban such activities entirely, but alcoholic drinks are legal in most parts of the world ⁷.

Regular drinking changes the chemistry of the brain and, of particular relevance here, depletes the levels of the neurotransmitter serotonin ⁸. This leads to the cyclical process of drinking to relieve depression, becoming more depressed as levels of serotonin become more depleted, thus needing more alcohol to medicate the depression ⁹.

Depression is the common and serious medical illness and a type of psychiatric disorders that negatively affect the individual ¹⁰. Depression causes feelings of sadness and loss of interest in activities once enjoyed. It can lead to variety emotional and physical problems and can decrease a person's ability to function at work and home ¹¹. Depression symptoms can vary mild to severe and can include feeling sad or having a depression mood, loss of interest or pleasure in activities once enjoyed, changes in appetite, weight loss or gain unrelated to dieting, trouble sleeping or sleeping too much, loss of energy or increased fatigue, feeling of worthlessness or guilty, difficulty in thinking, concentrating or making decisions and thoughts of death or suicide. However, 30%-40% of alcoholics also experience a depressive disorder ¹².

Anxiety disorders form a category of mental health diagnoses that lead to excessive nervousness, fear, apprehension, and worry ¹³. These disorders alter how a person processes emotion and behave, also causing physical symptoms. Mild anxiety might be vague and unsettling, while severe anxiety may seriously affect day-to-day living. The duration or severity of an anxious feeling can sometimes be out of proportion to the original trigger, or stressor. Physical symptoms, such as increased blood pressure and nausea, may develop. These responses move beyond anxiety into an anxiety disorder ¹⁴.

Stress is our body's way of responding to any kind of demand or threat. When our sense danger the body's defences kick into high gear in a rapid, automatic process known as the "fight-or-flight" reaction or the "stress response" the stress response is the body's way of protecting us ¹⁵. When working properly, it helps us stay focused, energetic, and alert in emergency situations, stress can save our life giving us extra 18 strengths to defend us. Stress can also help us to rise to meet challenges ¹⁶.

It is very important to make a concentrated effort to reduce depression, stress and anxiety. In recent years, there has been significant progress and expansion in the development of a broad range of evidence based psychological interventions currently used to treat alcoholism with help of complementary therapies like Receptive Music therapy, Assertive Training and 4, 7, 8 breathing techniques ¹⁷. Breathing control is a technique for controlling both the pattern and depth of breathing while promoting upper chest exercise and shoulder relaxation. Music is "a systematic process of intervention where in the therapist helps the client to promote health." Music can have a powerful impact on anyone. It is a therapeutic approach that uses naturally mood lifting properties of music to help people improve their mental health and overall wellbeing ¹⁸.

Assertiveness training is required for patients who in interpersonal contexts have adaptive anxiety responses that prevent them from saying or doing what is reasonable and right. It is assumed that, assertive behaviour will bring about positive changes in the behaviour of others toward him, and thus be better able to achieve significant social (as well as material) rewards ¹⁹. Therefore, the individual achieves both internal and external positive feedback from appropriate assertive responses ²⁰.

Very limited studies were conducted on Triple interventions among alcohol dependents; Hence Triple Intervention is one of the best practices to reduce the level of stress, anxiety and depression among patients with Alcohol use disorder.

Methodology:

The main aim of the study is to evaluate the effectiveness of Triple Interventional Package (TIP) on Stress, Anxiety and Depression among Patients with Alcohol Use disorders. The research design used for the present study is a true experimental design with pre - test and post – test only design. 150 Alcohol Dependents (Each Group 75) were selected using cluster sampling technique. The data were collected using Depression, Anxiety, Stress - 21 Scale (DASS – 21) and after the pre-test, Triple Interventional Package were given for the alcohol dependents patients who fulfilled the inclusion criteria and were available during the data collection. The intervention was carried out for the 21 days were Breathing Techniques (Count in 15 Seconds for 15 minutes), Listening to Receptive Music (20 minutes) and Assertive Training (45 minutes) were carried out among the study subjects. At the end of the intervention the post test was conducted among the subjects by using the same scale.

Objectives of the study:

- To assess the Pre and post-test level of Stress, Anxiety and Depression among Patients with alcohol use disorder
- To evaluate the effectiveness of Triple Interventional Package (TIP) on reducing Stress, Anxiety and Depression among Patients with alcohol use disorder
- To associate the pretest level of Stress, Anxiety and Depression among Patients with alcohol use disorder

Results:

With respect to Pretest and Post Test Level of Anxiety Among Patients with Alcohol Use Disorder.

Table 1: Frequency and Percentage Distribution of Pretest and Post Test Level of Anxiety among Patients with Alcohol Use Disorder:

LEVEL OF STRESS	PRETEST				POST TEST			
	Experimental Group		Control Group		Experimental Group		Control Group	
	N	%	N	%	N	%	N	%
NORMAL	4	40%	2	20%	10	100.0%	1	10.0%
MILD	6	60%	8	80%	0	0.0%	9	90.0%
TOTAL	10	100%	10	100%	10	100.0%	10	100.0%

In Experimental Group Pre Test 6 (60%) patient with alcohol use disorder had mild stress and 4 (40%) were normal. In Post-test 10 (100%) of patient with alcohol use disorder were normal. In Control Group, pre-test 8 (80%) of patient with alcohol use disorder had mild stress and 2 (20%) of them were normal. In post-test 9 (90%) of patient with alcohol use disorder had mild stress and 1 (10%) of were normal.

Fig 1: Frequency and Percentage Distribution of Pretest and Post Test Level of Anxiety among Patients with Alcohol Use Disorder:

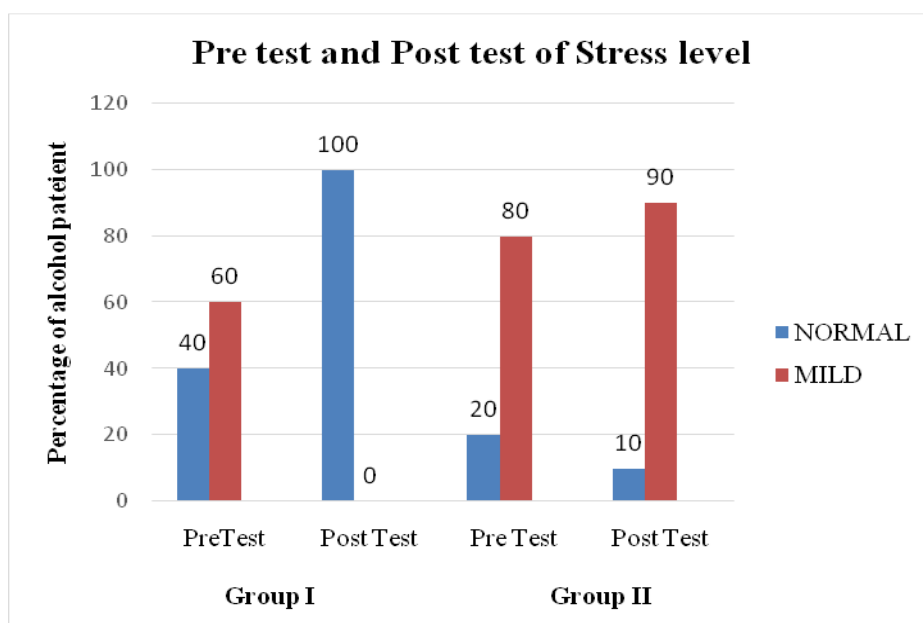


Table 2: Frequency and Percentage Distribution of Pretest and Post Test Level of Anxiety Among Patients with Alcohol Use Disorder

LEVEL ANXIETY	OF	PRETEST				POST TEST			
		Experimental Group		Control Group		Experimental Group		Control Group	
		N	%	N	%	N	%	N	%
NORMAL		1	10%	0	0%	10	100.0%	0	0%
MILD		4	40%	2	20%	0	0.0%	1	10.0%
MODERATE		5	50%	8	80%	0	0.0%	9	90.0%
TOTAL		10	100%	10	100%	10	100%	10	100.0%

Table 2 shows that in Experimental Group Pre Test 5 (50%) patient with alcohol use disorder had moderate anxiety and 4 (40%) of them had mild anxiety and 1 (10%) of them were normal. In Post-test 10 (100%) of patient with alcohol use disorder were normal. In Control Group, pre-test 2(20%) of patient with alcohol use disorder had mild anxiety and 8(80%) of them were moderate anxiety. In post-test 1(10%) of patient with alcohol use disorder had mild anxiety, and 9(90%) had moderate anxiety.

Fig 2: Frequency and Percentage Distribution of Pretest and Post Test Level of Anxiety Among Patients with Alcohol Use Disorder

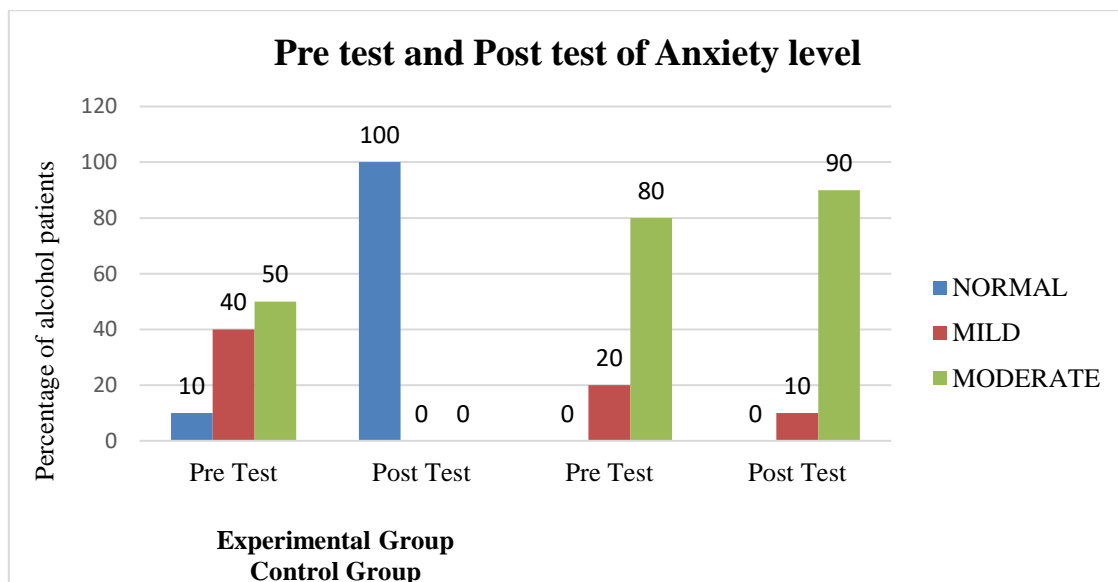


Table 3: Frequency and Percentage Distribution of Pretest and Post Test Level of Depression Among Patients with Alcohol Use Disorder

LEVEL OF DEPRESSION	PRETEST				POST TEST			
	Experimental Group		Control Group		Experimental Group		Control Group	
	N	%	N	%	N	%	N	%
NORMAL	1	10%	2	20%	10	100.0%	0	0%
MILD	9	90%	6	60%	0	0.0%	4	40.0%
MODERATE	0	0%	2	20%	0	0%	6	60.0%
TOTAL	10	100%	10	100%	10	100.0%	10	100%

Table 3 shows that in Experimental Group Pre Test 9 (90%) patient with alcohol use disorder had mild depression and 1(10%) were normal. In Post-test 10 (100%) of patient with alcohol use disorder were normal. In Control Group pre-test 6 (60%) of patient with alcohol use disorder had mild depression, 2 (20%) had moderate depression and 2 (20%) had normal. Post-test, 6 (60%) of patient with alcohol use disorder had moderate depression, 4 (40%) had mild depression.

Fig3: Frequency and Percentage Distribution of Pretest and Post Test Level of Depression Among Patients with Alcohol Use Disorder

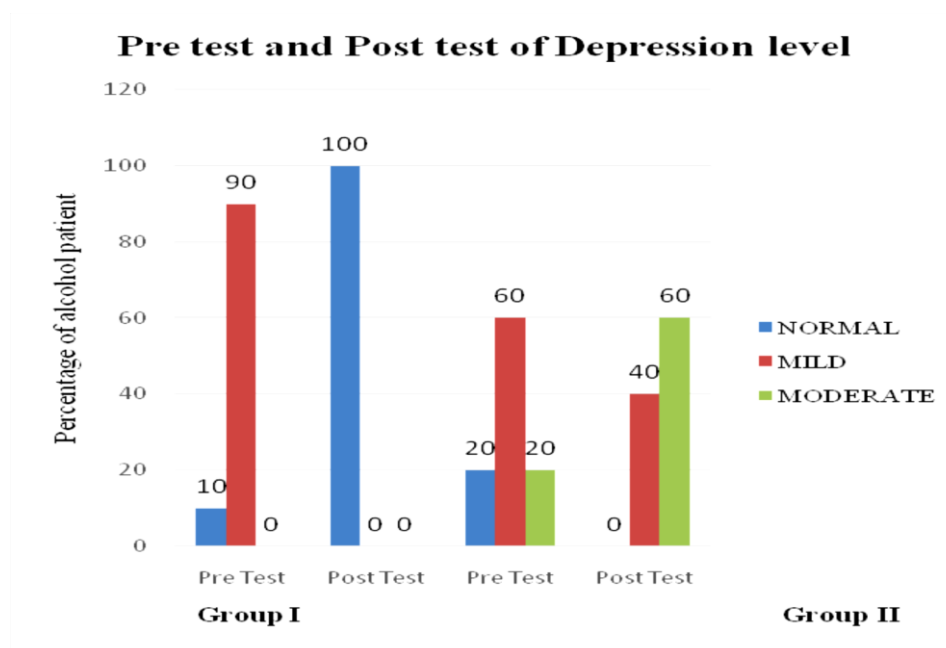


Table 4 shows Effectiveness of Triple Interventional Package (TIP) On Stress, Anxiety and Depression Among Patients with Alcohol Use Disorder (Experimental Group)

S.No.	Variables	Experimental Group	N	Mean	Standard Deviation	Paired t test	p- value

1	Stress	Pre test	10	13.7	2.497	13.024	<0.001 *
		Post test	10	3.2	0.789		
2	Anxiety	Pre test	10	10.4	2.547	7.323	<0.001 *
		Post test	10	3.6	1.174		
3	Depression	Pre test	10	11	2.309	9.277	<0.001 *
		Post test	10	3.4	1.075		

Table 5 shows Effectiveness of Triple Interventional Package (TIP) On Stress, Anxiety, Depression, Quality of Sleep, Self Esteem and Selected Physiological Parameters among Patients with Alcohol Use Disorder (Control Group).

S. No.	Variables	Control Group	N	Mean	Standard Deviation	Paired t – test	p- value
1	Stress	Pre test	10	13.3	1.494	0.318	0.758
		Post test	10	13.5	1.179		
2	Anxiety	Pre test	10	11.4	2.011	0.303	0.769
		Post test	10	11.1	1.595		
3	Depression	Pre test	10	11.4	2.221	0.439	0.671
		Post test	10	11.9	2.644		

In Experimental Group pre and post-test level of stress mean value is 3.2 and 13.7 of patient with alcohol use disorder. In Control Group pre and post-test level of stress mean value is 13.3 and 13.5 of patient with alcohol use disorder. The calculated independent t – test value and p value for the post test between experimental and control group was 12.89 and < 0.001, which was highly statistically significant at p value less than 0.001 level. It was inferred that Triple Interventional Package was effective.

In Experimental Group pre and post-test level of anxiety mean value is 3.6 and 10.4 of patient with alcohol use disorder. In Control Group pre and post-test level of anxiety mean value is 11.1 and 11.4 of patient with alcohol use disorder. The calculated independent t – test value and p value for the post test between experimental and control group was 9.419 and < 0.001, which was highly statistically significant at p value less than 0.001 level. It was inferred that Triple Interventional Package was effective.

In Experimental Group pre and post-test level of depression mean value is 3.4 and 11 of patient with alcohol use disorder. In Control Group pre and post-test level of depression mean value is 11.9 and 11.4 of patient with alcohol use disorder. The calculated independent t – test value and p value for the post test between experimental and control group was 9.419 and < 0.001, which was highly statistically significant at p value less than 0.001 level. It was inferred that Triple Interventional Package was effective.

There is no significant association between level of Stress, Anxiety, and Depression with their Socio demographic Variables.

Discussion:

The main aim of the study is to evaluate the effectiveness of Triple Interventional Package (TIP) on Stress, Anxiety and Depression among Patients with Alcohol Use disorders. The research design used for the present study is a true experimental design with pre - test and post – test only design. 150 Alcohol Dependents (Each Group 75) were selected using cluster sampling technique. The data were collected using Depression, Anxiety, Stress - 21 Scale (DASS – 21) and after the pre-test, Triple Interventional Package were given for the alcohol dependents patients who fulfilled the inclusion criteria and were available during the data collection. The intervention was carried out for the 21 days were Breathing Techniques (Count in 15 Seconds for 15 minutes), Listening to Receptive Music (20 minutes) and Assertive Training (45 minutes) were carried out among the

study subjects. At the end of the intervention the post test was conducted among the subjects by using the same scale.

The first objective of the study was to assess the Pre and post-test level of Stress, Anxiety and Depression among Patients with alcohol use disorder. With data reference to pre and post-test level of stress, Pre Test 6 (60%) patient with alcohol use disorder had mild stress and 4 (40%) were normal. In Post-test 10 (100%) of patient with alcohol use disorder were normal. In Control Group, pre-test 8 (80%) of patient with alcohol use disorder had mild stress and 2 (20%) of them were normal. In post-test 9 (90%) of patient with alcohol use disorder had mild stress and 1 (10%) of were normal.

With data reference to pre and post-test level of anxiety, In Experimental Group Pre Test 5 (50%) patient with alcohol use disorder had moderate anxiety and 4 (40%) of them had mild anxiety and 1 (10%) of them were normal. In Post-test 10 (100%) of patient with alcohol use disorder were normal. In Control Group, pre-test 2(20%) of patient with alcohol use disorder had mild anxiety and 8(80%) of them were moderate anxiety. In post-test 1(10%) of patient with alcohol use disorder had mild anxiety, and 9(90%) had moderate anxiety With data reference to pre and post-test level of depression, In Experimental Group Pre Test 9 (90%) patient with alcohol use disorder had mild depression and 1(10%) were normal. In Post-test 10 (100%) of patient with alcohol use disorder were normal. In Control Group pre-test 6 (60%) of patient with alcohol use disorder had mild depression, 2 (20%) had moderate depression and 2 (20%) had normal. Post-test, 6 (60%) of patient with alcohol use disorder had moderate depression, 4 (40%) had mild depression.

The second objective of the study was to evaluate the effectiveness of Triple Interventional Package (TIP) on reducing Stress, Anxiety and Depression among Patients with alcohol use disorder Data pertaining to effectiveness of Triple intervention, In Experimental Group pre and post-test level of stress mean value is 3.2 and 13.7 of patient with alcohol use disorder. In Control Group pre and post-test level of stress mean value is 13.3 and 13.5 of patient with alcohol use disorder. The calculated independent t – test value and p value for the post test between experimental and control group was 12.89 and < 0.001 , which was highly statistically significant at p value less than 0.001 level. It was inferred that Triple Interventional Package was effective.

In Experimental Group pre and post-test level of anxiety mean value is 3.6 and 10.4 of patient with alcohol use disorder. In Control Group pre and post-test level of anxiety mean value is 11.1 and 11.4 of patient with alcohol use disorder. The calculated independent t – test value and p value for the post test between experimental and control group was 9.419 and < 0.001 , which was highly statistically significant at p value less than 0.001 level. It was inferred that Triple Interventional Package was effective.

In Experimental Group pre and post-test level of depression mean value is 3.4 and 11 of patient with alcohol use disorder. In Control Group pre and post-test level of depression mean value is 11.9 and 11.4 of patient with alcohol use disorder. The calculated independent t – test value and p value for the post test between experimental and control group was 9.419 and < 0.001 , which was highly statistically significant at p value less than 0.001 level. It was inferred that Triple Interventional Package was effective.

The third objective of the study was to with respect to associate the pretest level of Stress, Anxiety and Depression among Patients with alcohol use disorder. In association, there is no significant association between level of Stress, Anxiety, and Depression with their Socio demographic Variables.

Conclusion:

Implementation of triple interventional package on stress, anxiety and depression among patients with alcohol use disorder is highly effective in reducing the level of study variables. Hence, it can be implemented in broader aspects to get desired outcomes a a larger scale among other populations.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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