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RESEARCH ARTICLE

EFFECTIVENESS OF EXPRESSIVE WRITING THERAPY ON THE ANXIETY LEVEL AMONG SUBSTANCE-DEPENDENT PATIENTS IN SOBER HOUSE DE- ADDICTION CENTRE, DEHRADUN

Akanksha Goswami¹ and Pooja Godiyal²

1. Department of Mental Health Nursing, State College of Nursing, Dehradun, Uttarakhand, India.

2. Assistant Professor, Department of Mental Health Nursing, State College of Nursing, Dehradun, Uttarakhand, India.

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Abstract

Background: Drug addiction has become a global problem and a significant public health concern, especially among adolescents. Contrary to widespread belief, substance misuse and mental health problems frequently co-occur. Depression and anxiety are among the most common problems brought up by patients seeking treatment for drug addiction. This study examines the level of anxiety of patients who are drug-dependent as well as the efficacy of expressive writing therapy.

Objectives: To evaluate the effectiveness of expressive writing therapy among substance-dependent patients in Sober House De-addiction Centre, Dehradun.

Material and Methods: A quantitative approach with a quasi-experimental design (time series) was used in the study. A purposive sampling technique was used to collect data. For one month, on alternate days, patients with substance abuse disorders received expressive writing therapy. Data were collected by using a socio-demographic profile and the Beck Anxiety Inventory Scale.

Results: This study reveals that the expressive writing therapy was found effective in reducing anxiety level with MD=7.32 and an 'f' value of 11.28 which is significant at $p=0.00002$. The calculated f value ($f=11.28$) is significantly higher than the tabulated value 3.00 at $p > 0.05$.

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Introduction:-

"Expressive writing can be a transformative tool for self-discovery and healing."

– James W. Pennebaker

Substance abuse is a major issue in the twenty-first century and a primary contributor to social, psychological, and health issues. It is becoming a bigger problem for families and society at large, especially among youth.¹

Corresponding Author:-Akanksha Goswami

Address: Department of Mental Health Nursing, State College of Nursing, Dehradun, Uttarakhand, India

Clinically significant impairments in health, social function, and voluntary control over substance use are hallmarks of a substance use disorder. In terms of severity, duration, and complexity, it ranges from mild to severe.² Globally, 35 million people are estimated to suffer from drug use disorders while only 1 in 7 people receive treatment, according to the latest World Drug Report, released by the United Nations Office on Drugs and Crime (UNODC) in 2019.³

Substance abuse poses a high risk of unintentional injuries, accidents, domestic violence incidents, medical problems, psychological anxiety, stress and even death. The economic potential of drug addicts is also negatively affected. They either fail to become part of the workforce or, if they do, there are problems with absenteeism and other things that affect the organization.⁴

On a personal level, relationships with family, friends and society are affected. Drug abuse also contributes to low self-esteem and hopelessness which can lead to criminal activities and even suicidal tendencies.⁵

In 2015, 20.8 million persons who were 12 years of age or older met the criteria for a substance use disorder, according to the United Nations Office on Drugs and Crime (UNODC)⁶ while in 2020, 284 million individuals aged 15-64 used drugs worldwide, a 26 percent rise over the previous decade.⁷

Meanwhile, the World Health Organization reports that the number of worldwide deaths attributable to drug abuse disorders increased by an alarming 47% between 2000 and 2016.⁸

Anxiety and depression are among the most common problems reported by persons seeking treatment for drug addiction. The Anxiety and Depression Association of America estimates that 20 percent of individuals diagnosed with an anxiety disorder also have a substance use disorder. In addition, Financial difficulties, health troubles, legal problems and relationship conflicts associated with substance abuse can cause a person's anxiety to worsen.⁹ In a recent study, approx. 17.7% of respondents with a Substance use disorder in the past 12 months also met the criteria for an independent (i.e., not related to intoxication or withdrawal) anxiety disorder, and 15% of those with any anxiety disorder in the past 12 months also had at least one co-occurring Substance use disorder.¹⁰

According to the Anxiety and Depression Association of America, anxiety is highly treatable with a combination of therapy, behavioral modification strategies, and anti-anxiety medications. It is essential to maximize the use of non-medication treatment options, and social workers can be crucial in delivering these psychosocial therapies. Among the best therapeutic approaches for treating anxiety and drug dependency are psychotherapy and cognitive behavioral therapy.¹¹

One of the promising interventions is expressive writing therapy which can be given to substance dependents to improve their emotional state via reduction of anxiety and distress. Writing therapy is also known as re-writing or re-storytelling. It is a process of exploring one's own ideas and emotions using writing as a tool in order to promote personal growth and self-healing. It has been included into several psychotherapies to treat specific mental disorders (depression, PTSD, etc.). More recently, this therapy has been included in several positive interventions as a useful tool to promote psychological well-being. Through this therapy, individuals can distance themselves from their problems and externalize, rather than internalize an issue. Since it is a common thought that substance dependents tend to use substances to avoid thoughts and feelings about emotional issues, writing about such experiences may force them to directly confront their emotions and organize their thoughts in ways they may never have done.¹²

Over the past two decades, there has been an increasing amount of research showing the several advantages that expressive writing offers for both physical and mental health when it comes to sharing traumatic or distressing events. Through expressive writing therapy, individuals gain a new perspective, learn to identify the root cause of a problem and adopt a new approach to resolve an issue. By rewriting their life story with the help of newly gained skills, beliefs, and values, they might lessen the negative effects of a traumatic experience on their lives.¹³

The effectiveness, efficiency, and affordability of expressive writings imply that writing about traumatic experiences can be an effective alternative to traditional alcohol and drug treatment, especially in settings for substance abuse treatment that do not routinely screen for trauma and PTSD and do not specifically address such issues during treatment.¹⁴

Need of the Study:-

Drug addiction has grown to be a major public health issue as well as a worldwide challenge, particularly among adolescents. The need for treatments to deal with the substance misuse problem has dramatically increased throughout the last two decades. It is common for mental health issues to rise in conjunction with substance abuse. Co-occurring of substance abuse and mental health issues are more common than many people originally realize.¹⁵

According to the Ministry of Social Justice and Empowerment (2019), Alcohol is the most common psychoactive substance used by Indians. About 16 crore people (14.6%) between the age of 10 and 75 years are current users of alcohol, and out of them, 5.2% are alcohol dependents. After Alcohol, Cannabis and Opioids are the next commonly used substances in India. About 3.1 crore individuals (2.8%) are cannabis users. Overall opioid users are 2.06% and 1.18 crore (1.08%) are current users of sedatives (non-medical use). It is estimated that about 8.5 lakh people who inject drugs in India.¹⁶

An article by the Journal of American Medical Association shows that approximately 50% of individuals with severe mental disorders are affected by substance abuse.¹⁷ Most alarming situation is that number of suicides due to drug abuse has more than doubled in the last decade in India. In the year 2010, 3,343 cases of suicides were reported, and the number increased to 7,860 suicides in 2019.¹⁸

Among the most prevalent issues mentioned by people seeking treatment for drug addiction are anxiety and depression. Anxiety is an emotion characterized by feelings of tension, worried thoughts, and physical symptoms like increased blood pressure, sweating, trembling, dizziness, or a rapid heartbeat. It is common during withdrawal from substances of abuse, and symptoms associated with substance use.¹⁹

A recent study revealed that anxiety issues were found in 70.5% of substance misuse cases where 33% had a gentle degree of uneasiness, 19% had serious anxiety and 18.5% had moderate nervousness.²⁰

As the above data suggests an increased rate of anxiety issues among substance dependents. Additionally, patients with drug abuse who are admitted to de-addiction centers exhibit increased drug cravings, which lessens the pleasure that drug abusers used to get from their drug use thereby increasing the experience of anxiety and depression.²¹

During my clinical posting in a psychiatric ward of NIMHANS, Bangalore as well as in Doon Hospital, Dehradun, I observed that 2-3 substance abusers per day were suffering from mild to severe anxiety in Doon OPD and 38 out of 40 admitted substance-dependent patients were suffering from mild to very severe anxiety in Centre for Addiction Medication (CAM), Department of Psychiatry in NIMHANS. Due to the high co-occurrence of anxiety and substance use disorder and their prevalence in the population, social workers and psychiatric workers in a variety of practice settings frequently encounter these conditions.¹⁰ In many recent studies expressive writing therapy seems to have good results in reducing anxiety as well as post-traumatic stress disorder. People often avoid sharing one's deepest thoughts and feelings to others, because they often feel ashamed, mocked, or rejected. As a result, people frequently suppress their negative feelings, which raises autonomic arousal levels over time. In the long run, it has a harmful impact on well-being by increasing the chances of all kinds of health hazards.²² Therefore, I decided to provide writing therapy to substance abusers so that they can express their hidden feelings which they cannot share with others and encouraged them to write about their deepest thoughts and feelings regarding any particular subject including their illness, recent loss, life transition, stressful events etc.

Statement Of The Problem

A study to assess the effectiveness of expressive writing therapy on the anxiety level among substance-dependent patients in Sober House De-addiction Centre, Dehradun.

Objectives:-

1. To assess the pre-test and post-test level of anxiety among substance-dependent patients in Sober House De-addiction Centre, Dehradun.
2. To assess the effectiveness of expressive writing therapy among substance-dependent patients in Sober House De-addiction Centre, Dehradun.

3. To find out the association between the pre-test level of anxiety among substance-dependent patients and their selected demographic variables.

Hypothesis

1. H1: There is a significant difference in post-test anxiety levels after administration of expressive writing therapy among substance-dependent patients at $p \leq 0.05$
2. H2: There is a significant association between pre-test anxiety level with their selected demographic variables at $p \leq 0.05$

Assumptions

1. Substance abusers may have some level of anxiety due to various factors.
2. Expressive writing therapy gives a chance to bring out innermost feelings related to substance abuse and anxiety.
3. Expressive writing therapy may reduce the level of anxiety in substance-dependent patients.
4. The level of anxiety will be influenced by their selected demographic variables.

Operational Definitions**Effectiveness-**

In this study, it refers to the extent to which writing therapy has shown a difference in the mean pre-test and post-test levels of anxiety among substance abusers, followed by expressive writing therapy as assessed by the Beck Anxiety Inventory (BAI) scale.

Expressive writing therapy-

In this study, it refers to a way of expressing the innermost hidden feelings, negative and positive thoughts through writing in words, not considering any grammar mistakes, which involves writing for 15–20 minutes or until the time they want to write for 1 month on every alternative day.

Anxiety-

In this study, it refers to the feeling of restlessness that occurs when a person admitted to Sober House De-addiction Centre is craving alcohol, tobacco or other drugs or when he is withdrawing from alcohol, tobacco or other drugs, which is measured by the Beck Anxiety Inventory (BAI) scale.

Substance dependent patient-

In this study, it refers to a person who is admitted to the de-addiction centre for substance abuse.

Delimitation**The study was delimited to**

1. One selected de-addiction centre
2. The data collection period was 4 weeks

Conceptual Framework

The conceptual framework for the present study was adopted from Wiedenbach's Helping Art of Clinical Nursing Theory developed by Ernestine Wiedenbach. She published her ideas in 1964 in clinical nursing and further refined this theory in 1970. Wiedenbach sees nursing as an art based on purposeful care. In this theory, nursing is defined as the applications made to observe a patient's need for help, the behaviours and symptoms that occur due to his/her illness, to investigate the meaning of these symptoms, to determine the cause of the discomfort and the ability of the patient to solve the discomfort.

Wiedenbach defines the 4 main elements of clinical nursing as philosophy, purpose, practice and art.

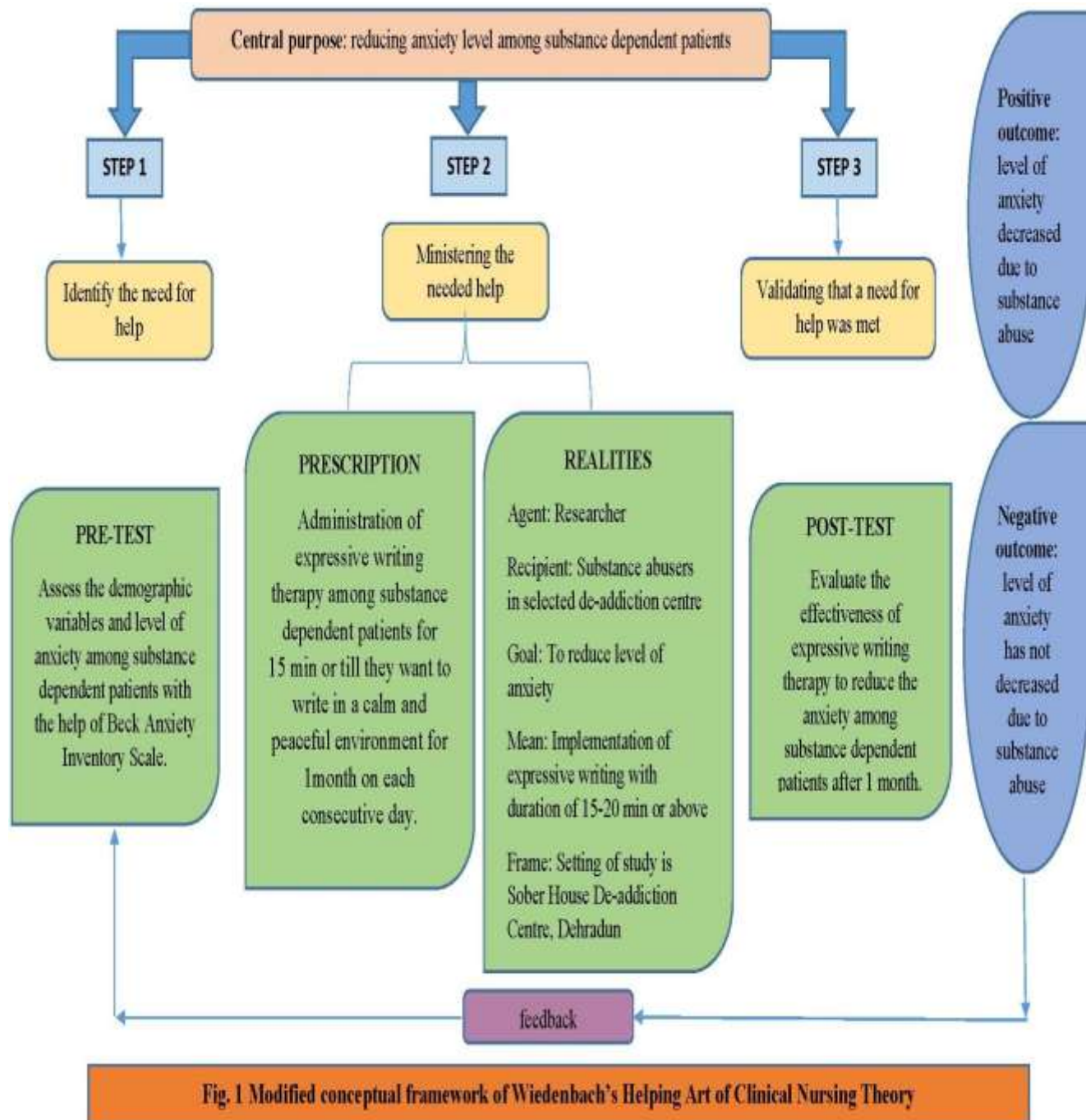
Nursing philosophy is concerned with attitudes, beliefs and how this attitude affects reality. The aim is all activities aimed at the general well-being of the patient.

A nurse's purpose is that which the nurse wants to accomplish through what he or she does. It is all the activities directed toward the overall good of the patient.

Practice is observable actions that are influenced by the patient's beliefs and feelings about meeting his/her need for help.

Art in theory is explained as understanding patients' needs and concerns, developing goals and actions aimed at improving patients' abilities and guiding activities related to the medical plan to improve the patient's condition.

This theory directs action towards an explicit goal. It consists of a Central purpose and steps include Identifying a need for help, ministering a needed help, and validating that a need for help was met.



Central purpose-

It refers to what the researcher wants to accomplish. It is the overall goal. The central purpose of this study is reduction of the level of anxiety among substance-dependent patients after giving expressive writing therapy.

Step 1- Identifying a need for help

The first step is to identify the need to plan for further action to meet them. In this study need to be identified among the sample to reduce anxiety level. The process began with sample selection based on the inclusion idea followed by assessing the pretest level of anxiety.

Step 2- Ministering the needed help

It refers to the provision of needed help for those who need help. According to the theorist, the ministration of the needed help has two components.

- (a) Prescription
- (b) Realities

Prescription-

It is a plan of care for a patient. It includes the action and its rationale which fulfills the central purpose. In this study prescription is, providing expressive writing therapy to drug-dependent patients having anxiety, this intervention is administrated very interestingly while keeping the confidentiality of participants in mind.

Realities-

It refers to physical, physiological, emotional and spiritual factors that involves nursing actions. Wiedenbach defines five realities as: the agent, the recipient, the goal, the means and the framework.

- (i)Agent: The agent is a professional nurse and is characterized by the personal attribute capacities, capabilities and most importantly commitment and competencies in nursing. In this study, the researcher is the agent.
- (ii)Recipient: The recipient means the patient who is characterized by the personal attributes of problem, capabilities and ability to cope with the concerns or problems being experienced. In this study, substance-dependent patients in selected de-addiction centre are the recipient.
- (iii)Goal: The goal is the desired outcome the nurse wishes to achieve. In this study it refers to reducing the anxiety among the substance-dependent patients.
- (iv)Means: The means comprise the activities and devices through which the practitioner is enabled to attain the goal. In this study means is implementation of expressive writing therapy with a duration of 15-20 min or until the time they want to write.
- (iv)Frame- It is the setting of the study where it is conducted. In this study, the frame was Sober House De-addiction Centre, Dehradun.

Step 3- Validating that a need for help was met

It refers to the extent the person provides convincing evidence of comfort/capacity. In this study the validated need for help was met by utilizing the post-test assessment of the level of anxiety after the administration of expressive writing therapy. There will be a reduction in the level of anxiety within the normal range among drug-dependent patients and positive outcome will be seen.

Summary

This chapter has dealt with the introduction, need for the study, problem statement, objectives, hypothesis, operational definition, delimitations, assumptions, and conceptual framework of the study.

Chapter -2**Review of Literature:-**

The review of literature is essential to all steps of the research process. It is an account of what is already known about a particular phenomenon.

A review of literature is a critical summary of research on a topic of interest, often prepared to put a research problem in context or as the basis for an implementation project(Polit and Hungler, 2005).

In this study, the literature is classified into the following-

- a) Prevalence of anxiety and stress among substance-dependent patients.
- b) Effectiveness of expressive writing therapy.

Literature related to the prevalence of anxiety and stress among substance-dependent patients.

Grant. F.B., Stinson. S.F., Dawson. A.D., Chou. P.S., Dufour. C.M., Compton. W, et.al (2004) conducted a study on the prevalence and co-occurrence of substance use disorders and independent mood and anxiety disorders in the U.S. Total of 43093 respondents were taken as a sample. National Institute on Alcohol Abuse and Alcoholism Alcohol Use Disorder and Associated Disabilities Interview Schedule–DSM-IV Version was used for the assessment. Results show that the prevalences of 12-month DSM-IV independent mood and anxiety disorders in the US population were 9.21% and 11.08%. Associations between most substance use disorders and independent mood and anxiety disorders were positive and significant ($P < .05$). It is concluded that substance use disorders and mood and anxiety disorders that develop independently of intoxication and withdrawal are among the most prevalent psychiatric disorders.^{xxiii}

Armstrong. G, Nuken. A, Samson. L, Singh. S, Jorm. F.A., Kermode. M (2013) conducted a study on quality of life, depression, anxiety and suicidal ideation among men who inject drugs in Delhi, India. A total of 420 participants were recruited from needle and syringe programs using time location sampling. Self-report symptom scales were used to measure the severity of symptoms of depression and anxiety within the preceding 2 weeks while the presence of suicidal thoughts and attempts within the past 12 months. Findings show a high prevalence of depressive (84%, cut-off ≥ 10) and anxiety (71%, cut-off score of ≥ 3) symptoms. 53% thought about killing themselves in the past 12 months, and 36% had attempted to kill themselves. Results show that the prevalence of depressive and anxiety symptoms among this population of men who inject drugs was very high and suicidal thoughts and acts were disconcertingly common.^{xxiv}

Maheswari. K (2018) conducted a study on depression, anxiety and stress among patients undergoing de-addiction treatment in Madurai, Tamilnadu in which 60 respondents were selected by a convenient non-random sampling method. Data was collected with the help of a self-prepared questionnaire along with a standardized tool on ADSS-Anxiety, Depression and Stress Scale. Findings revealed that 3/5th of the respondents had a high level of depression, 63.3% of the respondents perceived a high level of anxiety and 58.3% of the respondents had a high level of stress. This study revealed that more than half of the respondents perceived high levels of depression, stress and anxiety.^{xxv}

Arya. A (2018) conducted a comparative study on the depression & anxiety status of addicts and non-addicts in a selected de-addiction & rehabilitation centre, Uttarakhand in which 90 samples that is 60 addicts and 30 non-addicts were taken through a random sampling technique. Standardized Depression and Anxiety Scale were used. In a comparison of depression, it was found that the mean scores of addicts & non-addicts were 121 and 83.34 with a standard deviation of 38.19 & 38.76. In a comparison of anxiety, it was found that the mean score of addicts was 41.33, with a standard deviation 14.25 and the mean score of non-addicts was 28.8 with a Std deviation of 17.4. It was concluded that the non-addicts who have freer & less faltered minds are more relaxed, focused, happy and patient than the addicts who are not stable physiologically which in turn, affects their psyche.^{xxvi}

Lal. R, Sekhri. R, Singh. J (2019) conducted a comparative study of depression, stress and happiness among drug addicts and non-drug addicts in Chandigarh, India. In this study, 30 drug addicts and 30 non-drug addicts were taken using a purposive sampling technique. Depression, stress, and happiness were assessed by the Beck Depression Inventory, Perceived Stress Scale, and the Oxford Happiness Inventory. For data analysis, descriptive statistics and t-test was used. The result shows that drug addicts and non-drug addicts experience differences in the stress variable with Mean-24.27 vs. 19.00, $t=2.65$, $df=58$, $SD=8.35$ vs. 6.95 , $p < 0.05$. The p-value of the happiness variable between drug addicts and non-drug addicts was found to be 0.007 which shows the significant differences between the two groups with Mean-81.77 vs. 100.37, $t=3.59$, $df=58$, $SD=31.10$ vs. 28.30 . It is concluded that drug addicts are high on depression, and stress but low on happiness.^{xxvii}

Mohamed I.I., Ahmad H.E.K., Hassaan S.H., Hassan S.M. (2020) conducted a study on the assessment of anxiety and depression among substance use disorder patients in Neuropsychiatry Hospital, Egypt in which 100 patients with substance use disorder were selected. Hamilton Anxiety and Depression Rating Scale was used to assess anxiety and depression. A descriptive analysis was done using means with standard deviation, frequency counts, and percentages. The findings show that 72% of the study sample was found to have severe depression in comparison to 6% of the control group ($p < 0.001$). 67% in the study group had severe anxiety in comparison to 14% in the control group ($p < 0.001$). It is concluded that most of the drug users' sample had severe levels of depression in comparison to the non-users and more than two-thirds of the drug users' group had a severe level of anxiety as well while the majority of drug non-addict people had a mild level of anxiety.^{xxviii}

El-Hamady M.M, El-Sayed H.M, El-Bakry S.T, Youniss M.S. (2020) conducted a study on the prevalence of anxiety disorders in Substance Related Disorders in psychiatric hospitals, Egypt. A total of 200 patients were chosen randomly. Patients were subjected to a complete physical and neurological examination, psychiatric assessment, and psychometric assessment using the Hamilton Anxiety Rating Scale. The findings show that anxiety issues were found in 70.5% of substance misuse cases where 33% had a gentle degree of uneasiness, 19% had serious tension and 18.5% had moderate nervousness. It is concluded that (70.5%) of substance use disorders have a comorbid anxiety disorder. Most anxiety disorder among substance abuse cases was panic disorder (34%) followed by generalized anxiety disorder (27.5%).²⁰

Barbosa. F.N.L, Asfora. A.C.G, Moura. C.M. (2020) conducted a study on anxiety and depression and psychoactive substance abuse in university students in Brazil. A total of 116 students were taken and a structured questionnaire as well as the Hospital Anxiety and Depression Scale was used for the assessment. The findings show that 51.72 % of participants reported using some psychoactive substance, especially alcohol. Anxiety symptoms were present in 28.45% of the participants and depression in 16.38% of the participants. The study showed data that were in agreement with those in other studies on this type of population, identifying a higher frequency of substance use by students with anxiety symptoms.^{xxix}

Khan. M.S., Bashir. T (2022) conducted a study on the comparison of depression, anxiety and stress between persons with substance abuse and persons without substance abuse in Kashmir, India. A total of 30 addicts and 30 non-addicts were selected using the purposive sampling technique. The DASS scale was used for the assessment. The 't' test was used for the statistical analysis. Findings show that in the anxiety domain, the mean and standard deviation of individuals consuming substances is 19.16 ± 7.62 while the mean and standard deviation of the normal population is 6.3 ± 4.6 and in the stress domain, the mean and standard deviation of persons abusing substances is 20.5 ± 4.48 and mean and standard deviation of the normal population is 7.1 ± 4.2 . It is concluded that compared with the normal population the drug abusers had high scores on anxiety, depression, stress and quality of life.^{xxx}

Khati. B, Subba. S, Varte. C.L. (2023) conducted a study on the relationship of depression, anxiety and self-esteem among substance abusers and non-abusers in Sikkim, India. A total of 70 participants were taken using a purposive sampling method. Beck Depression Inventory-II, IPAT Self Analysis form and Rosenberg Self-Esteem Scale were used for the assessment. Statistical techniques used were Pearson correlation and t-test. Results show that there was a significant difference between Substance Abusers and Non-Abusers on Anxiety with $t=15.09$, $p<0.00$. It is concluded that in terms of depression and anxiety, substance abusers were found to score higher as compared to non-abusers. Similarly, non-abusers score slightly high in self-esteem as compared to substance abusers.^{xxxi}

Literature related to the effectiveness of expressive writing therapy.

Halpert, Alben, Rybin, Denis, Doros, Gheorghe (2010) conducted a study on expressive writing as a promising therapeutic modality for the management of IBS. A total of 103 subjects were enrolled, 82 subjects in the writing group and 21 subjects in the non-writers group. The IBS severity scale (IBSSS), functional bowel disease-related cognition, catastrophizing/coping, and IBS-specific quality of life were measured at baseline and at 1 and 3 months follow-up. For the writing group at 1 and 3 months, the IBSSS improved significantly ($+37.4 (\pm 10.8)$, $p=0.0012$ and $+53.8 (\pm 13)$, $p=0.0002$, respectively) and this was not seen in the non-writers group. It was concluded that expressive writing improved IBS disease severity and cognition in subjects with a longer-term duration of the disease.^{xxxii}

Manimegalai. B (2016) conducted a study on the effectiveness of writing therapy on anxiety among differently abled adolescents in Coimbatore, India. A total of 30 differently abled adolescents were selected by using a purposive sampling technique. Zung Self Rating Anxiety Scale (1997) was used to assess the level of anxiety and for data analysis paired 't' test was used. The results show that the overall mean score on the level of anxiety among samples in the pretest and post-test reveals that the posttest level of anxiety 52.1 ± 5.80 was lower than the pretest level of anxiety 62.8 ± 2.98 . The mean difference was 10.7. The paired 't' test value of 14.5 was significantly higher than the table value of 2.46 at $p \leq 0.01$. It indicates that writing therapy was effective in reducing the level of anxiety among differently abled adolescents.^{xxxiii}

Rani. D.S, Princely. R (2016) conducted a true experimental study to assess the effectiveness of expressive writing on the level of stress among adolescent students in Tamilnadu, India. A total of 70 samples were selected using the random sampling lottery method. The levels of stress were assessed using a modified perceived stress assessment

scale, inventory contributing stress assessment scale and student stress rating scale. The result shows that the mean value of the experimental group was 72.83 with SD=12.18 and the mean value of the control group was 99.02 with SD=16.68. The calculated 't' value of 7.590 was higher than the table value which indicated that there was a higher statistically significant difference in the post-test level of stress among adolescent students between the experimental and control group at $p < 0.00$. It was concluded that expressive writing was effective in reducing the level of stress among adolescent students and can be utilized by the healthcare professionals in their practice.^{xxxiv}

Shen L, Yang L, Zhang J, Zhang M (2018) conducted a quantitative study on effects of expressive writing in reducing test anxiety among senior-high-school students in China. A total of 75 students with high anxiety were selected. Test Anxiety Scale (TAS) was used to assess the anxiety level of students. Research International software program NVivo10.0 was used to analyze data. Results indicate that there was a significant difference in post-test results ($P < 0.001$), in the experimental group. There were significant differences in the positive emotion and anxiety. This study shows that long-term expressive writing of positive emotions appears to help reduce test anxiety by positive emotion words.^{xxxv}

Jannah. M, Widohardhono. R, Fatimah. F, Dewi. K.D, Umanailo. B.C.M. (2019) conducted a study on managing cognitive anxiety through expressive writing in student-athletes in Indonesia. A total of seven subjects were taken for the study. Measurement of cognitive anxiety was carried out using an adaptation of Competitive State Anxiety Inventory-2 (CSAI-2). Data were analyzed using a hypothesis test in the form of the Wilcoxon test. The result shows a significance value of $0.042 < 0.05$ which indicates that there was a difference between the pretest and posttest of research subjects so that it can be said that there was an effect of expressive writing on cognitive state anxiety. It was concluded that method training expressive writing has contributed to the decrease in cognitive state anxiety of badminton athletes.^{xxxvi}

Mirmolaei S.T., khalili F, ranjbar H (2019) conducted a study on The Effect of Writing Therapy Using Two Methods of Expressive Writing and Daily Activity Writing on Stress, Anxiety and Depression in Primiparous Pregnant Women at Tehran, Iran. A total of 102 primiparous women with a gestational age of 25-28 weeks were selected using block randomization sampling method. Research instruments included, Beck Depression Inventory, and Depression Anxiety Stress Scale (Dass21). Data were analyzed using SPSS V21 software and ANOVA, Chi-square, and Fisher tests. Result shows that there was a statistically significant difference between the two groups of expressive writing and daily activity writing compared to the control group at the end of the eighth week -1.79 (0.46, 0.01) and -1.91 (0.46, 0.00) respectively. It was concluded that writing can be recommended as a simple and low-cost method in reducing anxiety, stress, and depression in pregnant women during prenatal care.^{xxxvii}

Norman E.D. (2020) conducted a study on efficacy of psychological first aid compared to expressive writing as a crisis intervention method for individuals exposed to a traumatic event using a randomized controlled trial. Subjects were divided into expressive and superficial writing groups. The state-Trait Anxiety Inventory tool was used to assess the anxiety. Data was analyzed using ANOVA. The result shows that for within-subjects effects, there was a significant p-value of 0.00002 for the effect of time. For between-subjects effects, there was a slightly significant p-value of 0.00487. It was concluded that there was a decrease in anxiety over time for those who were in the expressive writing group condition.^{xxxviii}

Boominathan. V, Kurushev.J, Chitra.F.A. (2022) conducted a quasi-experimental study on the effectiveness of expressive writing therapy in reducing test anxiety among adolescents in Puducherry. A total of 144 adolescents were taken using the purposive sampling technique. The data was collected by using the Westside Test anxiety scale. Descriptive and Inferential statistics were used to analyze the data. The calculated t value was -16.952. It shows that it was statistically significant at the level of $p < 0.00$, which clearly shows the effectiveness of expressive writing therapy in reducing test anxiety among adolescents in the experimental group compared to the control group. It is concluded that expressive writing therapy can be implemented easily and is also a cost-effective technique for all age groups.^{xxxix}

Summary

The above review of kinds of literature shows the prevalence of anxiety and stress among substance-dependent patients and the effectiveness of expressive writing therapy among various populations such as patients, differently-abled adolescents, students, student-athletes, pregnant women, adolescents etc.

Chapter-3

Research Methodology:-

Research methodology is the blueprint of a research or study. It is defined as the systematic method to resolve a research problem through data gathering using various techniques, providing an interpretation of data gathered and drawing conclusions about the research data (Murthy & Bhojanna, 2009).

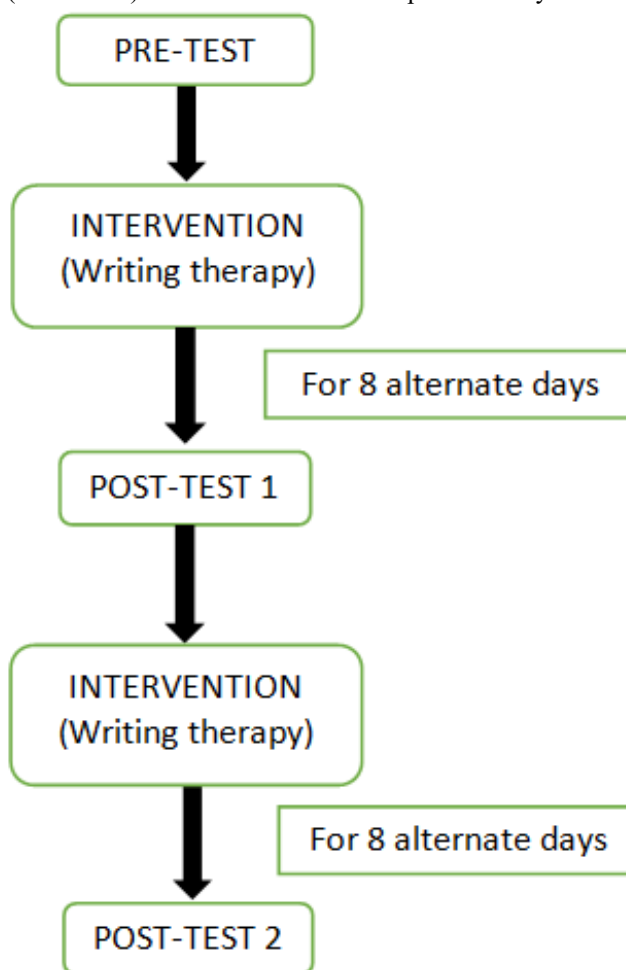
This chapter includes a description of the research approach, research design, study settings, sampling technique, sampling criteria, development and description of the tool, validity, reliability, pilot study, data collection technique and plan for data analysis.

Research Approach:

A quantitative research approach has been used to achieve the objectives of the study.

Research Design:

A quasi-experimental design (time series) was used to conduct the present study. It can be represented as:



Variables:

Independent Variable - Expressive writing therapy

Dependent Variable – Anxiety

Study Setting:

The study was conducted at Sober House De-addiction Centre in Dehradun, Uttarakhand.

Population:

Target population - The target population of the study was substance-dependent patients.

Accessible population - The accessible population of the study was substance-dependent patients who were admitted in the Sober House De-addiction Centre.

Sample And Sampling Technique:

Sample - Substance-dependent patients at Sober House De-addiction Centre who fulfilled the inclusion criteria were selected as a sample for this study.

Sampling Technique - Samples were selected by a purposive sampling technique that fulfilled the inclusion criteria.

Sample Size - The sample size comprised 64 substance-dependent patients at Sober House De-addiction Centre.

Criteria For Sample Selection:**Inclusion Criteria:**

Substance-dependent patients who

- were having mild to very severe levels of anxiety.
- were able to write.
- were willing to participate.

Exclusion Criteria:

Substance-dependent patients who-

- were having blindness.
- were having psychotic disorders.
- were having severe withdrawal symptoms at the time of data collection.

Description Of Tools:

The research tool consists of two sections-

Section A - Demographic variables

Demographic data of substance abusers consists of age, marital status, educational status, occupational status, type of family, place of living, family monthly income, duration of stay in the de-addiction centre, age of initiation of substance, type of substance, reason for initiating substance use, duration of substance use, reasons leading to the realization of dependence, path of referral in the de-addiction centre.

SECTION B- Beck Anxiety Inventory (BAI) Scale

The scale was developed by Aaron T. Beck and it's a rating scale to measure the severity of anxiety symptoms. This scale is a self-report measure of anxiety. The scale consists of 21 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). The BAI discriminated anxious diagnostic groups (panic disorder, generalized anxiety disorder, etc.) from non-anxious diagnostic groups (major depression, dysthymic disorder, etc). In addition, the BAI was moderately correlated with the revised Hamilton Anxiety Rating Scale, $r(150) = 0.51$, and was only mildly correlated with the revised Hamilton Depression Rating Scale, $r(153) = 0.25$.

Scoring of the Tool

SCORES	LEVEL OF ANXIETY
0-21	Low level of anxiety
22-25	Moderate level of anxiety
36 and above	Potentially concerning levels of anxiety

Content Validity

The content validity of the tool and demographic variables was established by 8 experts including, 5 nursing experts, 1 psychologist, 1 psychiatrist and 1 Hindi lecturer. The experts were requested to give their opinions and suggestions for further modification of items to improve the clarity and content of the items. The final tool was prepared as per the suggestions and pieces of advice given by the experts.

Reliability

The reliability of the tool was obtained by administering it to 6 drug-dependent patients in Magic Nurf De-addiction Centre, Dehradun. The reliability of the tool was obtained by the test-retest method. The calculated value was 0.95 which signified the tool is reliable.

Ethical Consideration

Administrative permission was taken from the principal and ethical permission was taken from the ethical committee of the State College of Nursing, Chander Nagar, Dehradun.

For the pilot study, written permission was taken from Mr. Asif, owner of the Magic Nurf De-addiction Centre, Dehradun, Uttarakhand.

For the main study, written permission was taken from the Sober House De-addiction Centre, Dehradun, Uttarakhand.

Written informed consent was taken from the participants of the study.

Pilot Study

The pilot study was conducted in the Magic Nurf De-addiction Centre after obtaining formal approval from the principal and ethical committee of the State College of Nursing, Uttarakhand. The study was conducted from 2nd June 2023 to 8th June 2023. The researcher introduced herself to the study participants and established a good rapport. A short introduction was given by the researcher about her study and intervention. Written informed consent was taken from the participants of the study.

The pre-test level of anxiety was assessed by the Beck anxiety inventory scale. The samples were selected using the purposive sampling technique. Based on inclusion criteria, six subjects were selected and intervention was given. Post-test was performed after 1 week of intervention.

The pilot study was feasible, the questionnaire was understandable to the substance-dependent patients and they were cooperative as well.

Data Collection Procedure:-

After obtaining formal approval from the owner of the Sober House De-addiction Centre, Dehradun, the researcher proceeded with the data collection. The study was conducted from 21st June 2023 to 21st July 2023. The researcher gave a brief introduction about herself and explained her study to the participants. The researcher established a good rapport with the participants and informed consent was taken from the participants. The researcher assured participants that information would be kept confidential. A total of 64 subjects were selected by purposive sampling technique based on inclusion criteria. The Beck anxiety inventory scale was used to assess the level of anxiety among participants. The pre-test was taken and then the intervention was given for 2 weeks on each alternative day. After which post-test 1 was taken. Once again intervention was given for 2 weeks and then finally post-test 2 was taken.

Plan For Data Analysis

Both descriptive and inferential statistics were used to analyze the data.

Descriptive statistics:

1. Frequency and percentage distribution were used to analyze the demographic variables.
2. Frequency and percentage distribution were used to evaluate the level of anxiety.
3. Mean and standard deviation were used to evaluate the effectiveness of expressive writing therapy in the level of anxiety.

Inferential statistics:

1. ANOVA analysis was performed to find out the difference between the mean anxiety level of pre-test, post-test 1 and post-test 2.
2. Post hoc analysis was performed to find MD in the level of anxiety between the three levels of assessment.
3. A chi-square analysis was done to find out the association between pre-test anxiety level with their selected demographic variables.

Summary

This chapter dealt with the research methodology adopted for the study. It included the research approach, research design, settings, population, sample and sample size, sampling technique, a tool for data collection, data collection procedure, plan for data analysis and schematic research presentation.

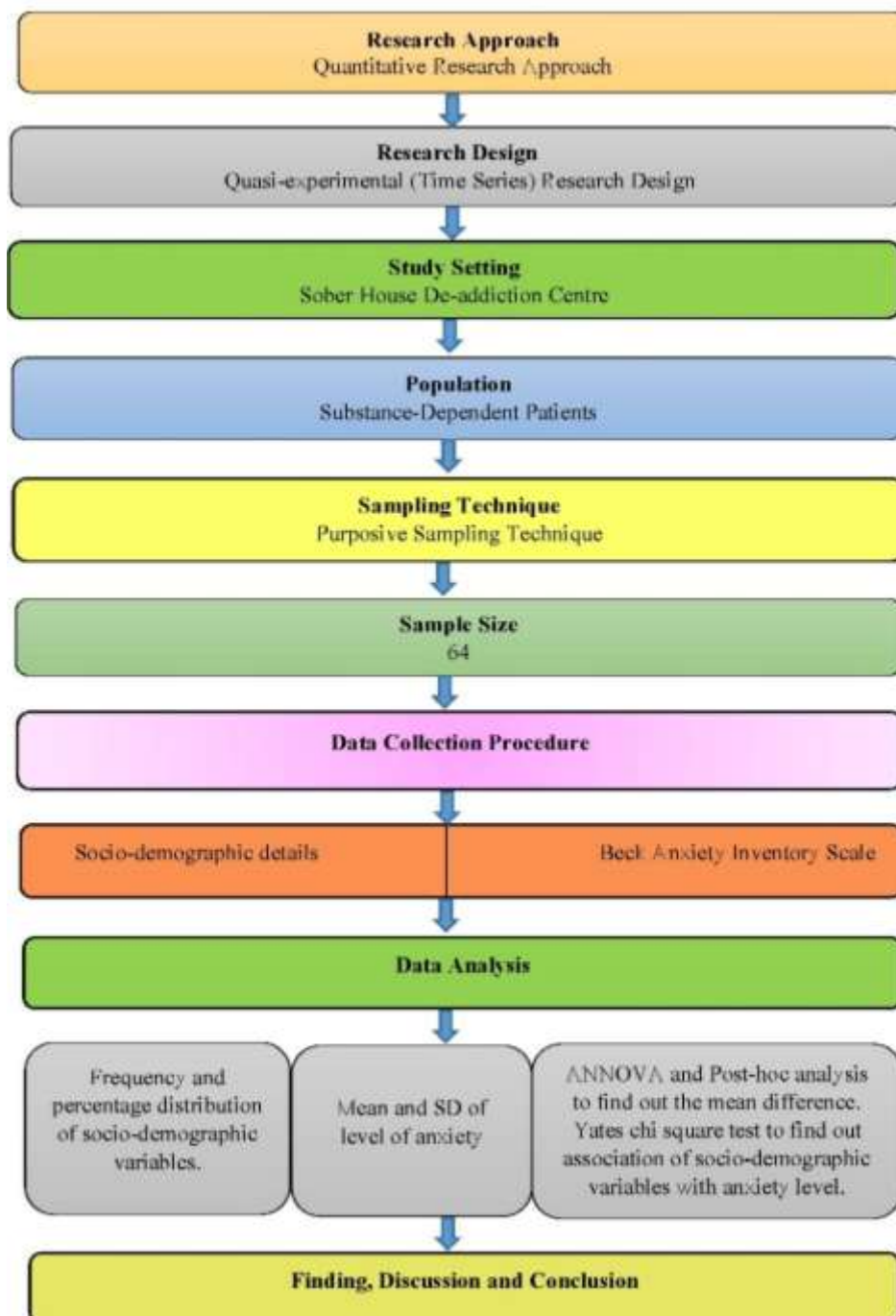


FIGURE 2: SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY

Chapter-4**Data Analysis And Interpretation**

Statistical analysis helps the researcher to make sense of quantitative information. Statistical procedures enable researchers to summarize, evaluate, interpret and communicate numeric information **Polit and Hungler (2006)**.

This chapter deals with the analysis and interpretation of the data on the effectiveness of expressive writing therapy on anxiety among drug-dependent patients.

The data collected by the Beck Anxiety Inventory Scale were analyzed using descriptive and inferential statistics which are necessary to provide a substantive summary of the results concerning the objectives.

Objectives:-

- To assess the pretest level and post-test level of anxiety among substance-dependent patients in Sober House De-addiction Centre, Dehradun.
- To assess the effectiveness of expressive writing therapy among substance-dependent patients in the Sober House De-addiction Centre, Dehradun.
- To find out the association between the pre-test level of anxiety among substance-dependent patients and their selected demographic variables.

Presentation Of Data

The analysis of the data is organized and presented under the following broad sections-

Section A: Frequency and Percentage distribution of subjects according to their demographic variables

Section B: Frequency and percentage of pre and post-test level of anxiety

Section C:

- Changes in anxiety score of substance-dependent patients; before, during and after intervention
- Post-hoc analysis (pairwise multiple comparisons) of anxiety at three levels of assessment

Section D: Association between the level of anxiety among Substance-dependent patients and their selected demographic variables.

Section - A

Table No.1:- Frequency and Percentage distribution of samples according to their demographic variables

N=64

S.NO.	DEMOGRAPHIC VARIABLES	FREQUENCY (f)	PERCENTAGE (%)
1.	Age in years		
	a) 11-20	2	3.1
	b) 21-30	36	56.2
	c) 31-40	16	25
	d) 41-50	10	15.7
2.	Marital status		
	a) Unmarried	45	70.3
	b) Married	19	29.7
3.	Educational status		
	a) Primary education	16	25
	b) Secondary education	10	15.7
	c) Higher secondary education	8	12.5
	d) Graduation	24	37.5
	e) Post-graduation and above	6	9.3
4.	Occupational status		
	a) Govt. employee	16	25
	b) Private employee	18	28.1
	c) Self-employed	24	37.5
	d) Unemployed	6	9.3
5.	Type of family		
	a) Nuclear	29	45.3
	b) Joint	35	54.7
6.	Place of living		

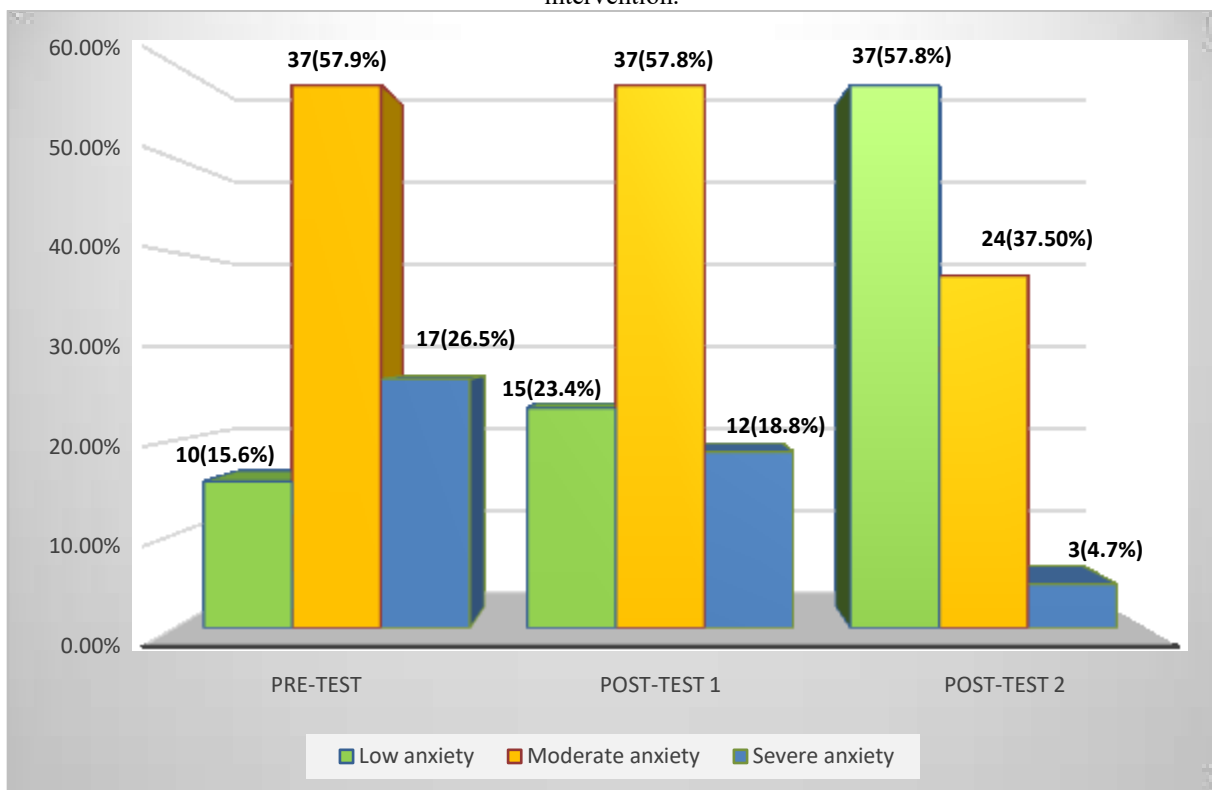
	a) Urban	38	59.3
	b) Rural	26	40.7
7.	Family's monthly income		
	a) Rs.5001-Rs. 10,000	9	14.0
	b) Rs. 10,001- Rs. 20,000	18	28.1
	c) Rs. 20,001-Rs. 30,000	17	26.6
	d) Rs. 30,001-Rs. 40,000	16	25
	e) Rs. 40,001- Rs. 50,000	4	6.2
8.	Duration of stay in de-addiction centre		
	a) \leq 1month	18	28.1
	b) 2-4 month	30	46.9
	c) 5-7 month	10	15.7
	d) 8-10 month	6	9.3
9.	Age of initiation of substance		
	a) 10-20 years	42	65.7
	b) 21-30 years	19	29.7
	c) 31-40 years	3	4.7
10.	Type of addiction		
	a) Alcohol	26	40.7
	b) Tobacco	5	7.9
	c) Analgesics	2	3.12
	d) Cannabis	5	7.18
	e) Cocaine	2	3.12
	f) Smack	24	37.5
11.	Reason for initiating substance use		
	a) Teenager's curiosity	30	46.9
	b) Peer pressure	3	4.7
	c) Academic stress	1	1.5
	d) Family-related stress	13	20.3
	e) Presence of an addicted person in the family	8	12.5
	f) For enjoyment	9	14
12.	How often did you use drugs before admission to the de-addiction centre?		
	a) 1-2 times/day	16	25
	b) 3-4 times/day	16	25
	c) 5-6 times/day	12	18.8
	d) 7-8 times/day	11	17.1
	e) 9-10 times/day	9	14
13.	Reasons leading to the realization of dependence		
	a) Made aware by the family	21	32.9
	b) Self-realization	22	34.3
	c) Inability to do continuous work	6	9.3
	d) Continuous craving	7	11
	e) Non-specific	8	12.5
14.	Path of referral in de-addiction centre		
	a) Family and friends		
	b) Self	58	90.7
	c) Police	1	1.5
	d) Social worker	4	6.2
		1	1.5

Table no. 1 shows that the mean age of study participants was 30.81. The majority of study participants were,36 (56.25%) between the 21-30 years age group in this study. All study participants were male in this study. Marital

status reveals that the majority of the 45 (70.35%) participants were unmarried. Educational status depicts that the majority of participants, 24 (37.5%) had completed graduation. Occupational status depicts that the majority of participants, 24 (37.5%) were self-employed. The type of family reveals that the majority of participants, 35 (54.68%) belong to joint families. Place of living reveals that the majority of participants, 38 (59.37%) belong to urban areas. The family's monthly income shows that the majority of participants, 18 (28.12%) had Rs. 10,001- Rs. 20,000 monthly income. The duration of stay in the de-addiction centre shows that the majority of participants, 30 (46.87%) were residing in the de-addiction centre for 2-4 months. The majority of study participants, 42 (65.62%) initiated substance abuse from the age of 10-20 years. The study shows that the majority of participants, 26 (40.62%) were addicted to alcohol abuse. The majority of participants, 30 (46.87%) initiated substance use due to teenage curiosity. The majority of participants 32, (50%) used drugs 1-4 times/day before admission to the de-addiction centre. The majority of participants, 22 (34.37) self-realized that they were dependent on the substance. The majority of participants, 58 (90.62) were referred to a de-addiction centre by family and friends.

Section-B

Figure 1:-Frequency and Percentage distribution of subjects according to the level of anxiety before and after the intervention.



The above figure shows the frequency and percentage distribution of the study participants according to the level of anxiety among them before and after the implementation of expressive writing therapy. Most of the samples that is 37 (57.81%) had marked moderate levels of anxiety whereas 17 (26.56%) had severe level of anxiety and 10 (15.62%) had low level of anxiety during the pre-test. In post-test 1, the majority of samples that is 37 (57.81%) had a moderate level of anxiety whereas 12 (18.75%) had a severe level of anxiety and 15 (23.43%) had a low level of anxiety. However, in post-test 2, the majority of samples that is 37 (57.81%) had a low level of anxiety whereas 24 (37.50%) had a moderate level of anxiety and 3 (4.68%) had a severe level of anxiety.

Section-C

Table No.2 (a):- Changes in anxiety score of substance-dependent patients; before, during and after intervention
N=64

Variable	Pre-test	Post-test 1	Post-test 2	F value	df	P value
Anxiety score	28.25 ± 9.71	25.27 ± 9.47	20.92 ± 6.85	11.28	191	0.00002**

Hypothesis tested at $p \leq 0.05$ **Table No. 2 (b):-**Post-hoc analysis (pairwise multiple comparisons) of anxiety at three levels of assessment.
N=64

S. No.	Level of anxiety	Mean difference	P value
1.	PRE-TEST - POST-TEST I	2.98	0.135
2.	POST TEST I - POST TEST II	4.34	0.016
3.	PRE-TEST -POST-TEST II	7.32	0.000

Hypothesis tested at $p \leq 0.05$

Table no. 2 (a) shows that there was a statistically significant comparison between two follow-up tests in anxiety level with $p=0.00002$ after applying repeated measured ANOVA. The mean post-intervention score following 15 days and one month of intervention was lower than the mean pre-intervention score. The calculated 'f' value was 11.28, which was greater than the tabulated value. Hence, the null hypothesis was rejected. The result showed a decrease in the level of anxiety after giving two interventions, which means expressive writing therapy was effective in reducing the anxiety level among substance-dependent patients.

Table no.2 (b) After applying the post hoc test, it shows that there was no significant comparison between pre-test and post-test 1 with MD=2.98 and $p=0.135$ but there was a significant comparison between post-test 1 and post-test 2 with MD=4.34 and $p=0.016$. Also, there was a significant comparison between pre-test and post-test 2 with MD=7.32 and $p=0.000$. It depicts that after the intervention there is a reduction in the anxiety level of the participants.

Section C

Table no. 3:-Association between the pre-intervention anxiety level with selected demographic variables.
N=64

DEMOGRAPHIC VARIABLES		PRE-INTERVENTION ANXIETY LEVEL		DF	YATES/CHI-SQUARE	P VALUE
		Moderate	Severe			
Age in years	a. 11-30	27	11	1	0.054	0.814
	b. 31-50	20	6			
Marital status	a. Married	36	9	1	3.346	0.067
	b. Unmarried	11	8			
Educational status	a. Secondary and higher secondary	26	8	1	0.342	0.558
	b. Graduation and above	21	9			
Occupational status	a. Employed	27	10	1	0.000	0.921
	b. Unemployed	20	7			
Type of family	a. Nuclear	4	25	1	0.000	0.982
	b. Joint	6	29			
Place of living	a. Urban	27	11	1	0.272	0.601
	b. Rural	20	6			

Family's monthly income	a. Rs 5001/- to Rs 30,000/- b. Rs 30,001/- to 50,000/-	31 16	13 4	1	0.246	0.619
Duration of stay in de-addiction centre	a. 1-5 months b. 6-10 months	34 13	14 3	1	0.240	0.623
Age of initiation of substance abuse	a. 10-25 years b. 26-40 years	45 2	16 1	1	0.158	0.690
Reason for initiating substance use	a. Teenager's curiosity, enjoyment & peer pressure b. Family r/t stress, academic stress & presence of an addicted person in the family	29 18	11 6	1	0.048	0.941
How often did you use drugs before admission to the de-addiction centre?	a. 1-5 times/day b. 6-10 times/day	31 16	13 4	1	0.246	0.619
Reasons leading to the realization of dependence	a. Made aware by the family & self-realization b. Inability to do continuous work, continuous craving & non-specific	31 16	12 5	1	0.121	0.727
Path of referral to a de-addiction centre	a. Family & friends b. Police & social worker	41 6	17 0	1	0.032	0.858

Hypothesis tested at $p \leq 0.05$

Table no. 4 shows the association between pre-intervention anxiety levels with their selected demographic variables. There was no significant association that exists between pre-intervention anxiety level with any of the selected demographic variables.

Summary

This study aimed to show the effectiveness of expressive writing therapy in reducing anxiety levels among drug-dependent patients. The result of the study shows that expressive writing therapy is effective in reducing the level of anxiety which was found to be statistically significant with $f=11.28$ at $p \leq 0.05$.

Chapter-5

Discussion, Summary, Conclusion, Implication, Limitations and Recommendation:-

It is the final chapter of a research study. The chapter comprises of summary, major findings, discussion, conclusion, implication, limitations and recommendations of the study. The discussion will focus on the objectives of the study and compare the research findings with existing literature.

Discussion:-

Pretest level and post-test level of anxiety among substance-dependent patients

During the pre-test, among 64 subjects 10 (15.62%) had a low level of anxiety, 37 (57.81%) had a moderate level of anxiety and 17 (26.56%) had a potentially concerning level of anxiety. During post-test 1, 15 (23.43%) had a low level of anxiety, 37 (57.81%) had a moderate level of anxiety and 12 (18.75%) had a potentially concerning level of anxiety. During post-test 2, 37 (57.81%) had a low level of anxiety, 24 (37.5%) had a moderate level of anxiety and 3 (4.68%) had a potentially concerning level of anxiety.

Effectiveness of Expressive Writing Therapy on the level of Anxiety among substance-dependent Patients

The overall mean score on the level of anxiety among subjects in the pre-test and post-test revealed that the post-test 1 mean of 25.27 ± 9.47 and post-test 2 mean of 20.92 ± 6.85 was lower than the pre-test mean of 28.25 ± 9.71 . The calculated f value ($f=11.28$) is significantly higher than the tabulated value 3.00 at $p \leq 0.05$. It indicates the effectiveness of expressive writing therapy on the level of anxiety. Hence H1 was accepted.

A study conducted by Cohen. M.S. at Yale University School of Medicine, U.S. (2014), on expressive writing as a therapeutic process for drug-dependent women in residential treatment, completed a randomized clinical study comparing expressive writing to control writing. A total of 149 samples were taken. When compared to control writing participants, expressive writing participants described their essays as more meaningful, $t(139) = 9.1$, $p < .0005$, more personal, $t(139) = 13.3$, $p < .0005$, and more revealing of one's emotions, $t(139) = 18.0$, $p < .0005$. They were more likely to have wanted to discuss it with others, $t(139) = 8.7$, $p < .0005$, than control writing participants. Expressive writing participants showed significant improvements in anxiety scores at the 2-week follow-up were calculated $f = 14.1$, $p < 0.05$ while control participants did not, $p > 0.05$.

Association between the pre-test level of anxiety among substance-dependent patients and their selected demographic variables

There was no significant difference found between pre-test level of anxiety among drug-dependent patients and their selected demographic variables such as age, marital status, educational status, occupational status, type of family, place of living, family's monthly income, date of admission in de-addiction centre, age of initiation of substance, type of addiction, reason for initiating substance use, frequency of substance use before the admission in de-addiction centre, reasons leading to realization of dependence and path of referral in de-addiction centre.

The result was supported by the findings of the study conducted by Ganavadiya R. on the effectiveness of two psychological intervention techniques for de-addiction among patients with addiction to tobacco and alcohol. The study found that there was no statistically significant difference in the age distribution ($P = 0.282$), socioeconomic status, which takes into consideration education, occupation, and per-capita income ($P = 0.693$), type of substance addiction ($P = 0.156$), duration of addiction ($P = 0.917$).

The results of the above studies show that there was no significant difference between the pre-test level of anxiety among drug-dependent patients and their selected demographic variables like age, education, occupation, type and duration of addiction etc. Hence H2 was rejected.

Summary of the Study:-

In the present study, the researcher assessed the effectiveness of expressive writing therapy on the level of anxiety among substance-dependent patients using quasi quasi-experimental (time series) research design. The socio-demographic variables include age in years, marital status, educational status, occupational status, type of family, place of living, family monthly income, duration of stay in the de-addiction centre, age of initiation of substance, type of substance, reason for initiating substance use, duration of substance use, reasons leading to the realization of dependence, path of referral in the de-addiction centre. The sample size was 64. The self-structured questionnaire and Beck Anxiety Inventory scale were used for the collection of data. The collected data was analyzed by using descriptive and inferential statistics including socio-demographic variables of participants of the study. It was found that expressive writing therapy was effective in reducing the anxiety level among substance-dependent patients.

The objectives of the study were

1. To assess the pre-test and post-test level of anxiety among substance-dependent patients in Sober House De-addiction Centre, Dehradun.
2. To assess the effectiveness of expressive writing therapy among substance-dependent patients in Sober House De-addiction Centre, Dehradun.
3. To find out the association between the pre-test level of anxiety among substance-dependent patients and their selected demographic variables.

The hypothesis of the study was

1. H1: There will be a significant difference in post-test anxiety levels after administration of expressive writing therapy among substance-dependent patients at $p \leq 0.05$
2. H2: There will be a significant association between pre-test anxiety level with their selected demographic variables at $p \leq 0.05$

Major Findings OfThe Study**Socio-demographic characteristics of participants**

The characteristics of substance-dependent patients in this study were that the majority of study participants were 56.25% between the 21-30 years of age group. All study participants were male in this study. Marital status reveals that the majority of, 45 (70.35%) participants were unmarried. Educational status indicates that the majority of participants, 24 (37.5%) had completed graduation. Occupational status indicates that the majority of participants, 24 (37.5%) were self-employed. The type of family reveals that the majority of participants, 35 (54.68%) belong to joint families. Place of living reveals that the majority of participants, 38 (59.37%) belong to urban areas. The family's monthly income shows that the majority of participants, 18 (28.12%) had Rs. 10,001- Rs. 20,000 monthly income. The duration of stay in the de-addiction centre shows that the majority of participants, 30 (46.87%) were residing in the de-addiction centre for 2-4 months. The majority of study participants, 42 (65.62%) initiated substance abuse from the age of 10-20 years. The study shows that the majority of participants, 26 (40.62%) were addicted to alcohol abuse. The majority of participants, 30 (46.87%) initiated substance use due to teenage curiosity. The majority of participants, 32 (50%) used drugs 1-4 times/day before admission to the de-addiction centre. The majority of participants, 22 (34.37) self-realized that they were dependent on the substance. The majority of participants, 58 (90.62) were referred to a de-addiction centre by family and friends.

Major findings related to the effectiveness of expressive writing therapy on anxiety level among substance-dependent patients

Results of the study revealed that the expressive writing therapy was found effective in reducing anxiety level with $MD=7.32$ and an 'f' value of 11.28 which is significant at $p=0.00002$

Major findings related to the association between the pretest level of anxiety among substance-dependent patients with their selected demographic variables.

The findings revealed that there is no significant association between the pretest score of anxiety among substance-dependent patients with their selected demographic variables such as age, marital status, educational status, occupational status, type of family, place of living, family monthly income, duration of stay in the de-addiction centre, age of initiation of substance, type of substance, reason for initiating substance use, duration of substance use, reasons leading to the realization of dependence, path of referral in the de-addiction centre.

Conclusion:-

This study concludes that there was a significant effect of expressive writing therapy on reducing anxiety among participants. The researcher provided a diary and pen to express their feelings and thoughts. This therapy helps them to vent their hidden emotions and negative feelings. The study was cost-effective and can be applied by people in their daily lives.

Implication

The findings of this study have been implemented for

1. Nursing practice
2. Nursing education
3. Nursing administration
4. Nursing research

Nursing Practice

- Nurses should create awareness among people about expressive writing therapy and its results in improving both physical and psychological health among non-clinical and clinical populations.
- Expressive writing therapy can be used to facilitate the clarification and solution of various problems, increase cognitive abilities, promote social interactions and increase adaptive coping strategies.
- Expressive writing therapy can be used to reduce the psychological distress among the staff nurses.

Nursing Education

- Nursing students can be aware to practice expressive writing therapy to reduce their day-to-day stress and anxiety.
- Nursing students can practice expressive writing therapy to reduce examination anxiety.
- Emphasis on adding complementary therapies in the nursing curriculum should be given.

Nursing Administration

- Nurse administrators can arrange expressive writing therapy for nurses practicing in various healthcare settings.
- Nurses working in the occupational and community health departments, and hospice care should be given in-service education to update and improve their knowledge regarding techniques and benefits of expressive writing therapy.

Nursing Research

- There is a need for extensive research on expressive writing therapy in other populations.
- The findings of the study can be utilized for conducting further research on assessing various aspects of anxiety in different populations.

Limitations:-

- This study was done on a small sample size of 64, hence generalization is possible only for the selected participants.
- This study was targeted at only literate patients, so some portion of the population was excluded due to illiteracy. Hence, reported findings should be considered with caution.
- Another limitation is that one month is a relatively short follow-up period. Future studies should be conducted over a longer period.
- Individuals with more severe mental health problems (e.g., PTSD) may require more writing sessions or longer writing sessions to have positive effects.

Recommendations:-

- A similar study can be conducted for a large number of samples to generalize the findings.
- A descriptive study can be conducted to assess the occurrence of positive and negative feelings in different populations.
- A comparative study can be done to find out the effectiveness of expressive writing therapy on anxiety between non-addict adults and drug-dependent patients.
- Expressive writing therapy can be used on other psychological variables such as stress, depression and psychological well-being as well as in psychiatric patients.

Summary

This chapter dealt with a summary of study findings and conclusion, implications for nursing practice, nursing administration, nursing education, nursing research and recommendations.

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