Suicidal Ideation and Psychological Distress in Patients with Substance use disorders and non- users

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ABSTRACT

The aim of the present study is to measure the suicidal ideation and psychological distress (depression, anxiety, and stress) among patients with substance use disorders and non-users. The participants for the study were 60 patients with substance use disorders and 60 non-users, with ages range from 18 to 35 years. The participants were elevated through G Power software. The data was collected from drug rehabilitation centers and hospitals in Lahore, Pakistan. The Suicidal Ideation Attributes scale (Spijker et al., 2014), and Depressions, Anxiety, Stress Scale (Lovibond & Lovibond, 1995) was used to study the variables. The data is analyzed with SPSS 21 software. The t-test is used to analyze the results of the study variables. There were significant differences found in suicidal ideation and psychological distress (depression, anxiety and stress) among patients with substance use disorders and non-users.

Keywords: Suicidal Ideation, Distress, substance use disorders

Introduction

Different substance used by human beings is not a new experience but it's very old. The different extracts of different plants were used as a remedy in pain. At the time of modernization and industrialization the use of substance increased severely disturbing a lot of individuals, thus, causing it a severe psychological and environmental problems. People use to consume such substances as food which cause extreme dependency and used to change the system of the body and brain function. Equally, when these substances are abused they modify mental and physical functions of normal human. The different substance are divided into different groups such as depressants, like Opium, morphine, Opioid, methadone, and Other narcotics and stimulants, Hallucinogens, (Cocaine, and Peyote, other hallucinogens); Cannabis these substances are frequently used in all over the world (Prashant, 1991).

Substance use disorders is group of psychological, physiological, behavioural and cognitive symptoms, and identify the important substance associated problems. The identification of substance use disorder included all classes of substance like caffeine, cannabis, Opioid, opium etc. The significant feature of substance

use disorder is a basic changing in brain circuits that may continue beyond detoxification, particularly in individual with severe disorders. The behavioural changes may also exhibit frequent relapses and strong substance craving, when they are exposed to substance associated stimuli. The identification of drug related problems is based on a maladjusted pattern of behaviours of the drugs abuse. The lack of poor control over substance use is the first criteria of substance abuse group. Individuals who have used the substance in excessive amounts for longer time are included in substance use disorder. They may also express a continuous craving to decrease or regulate drugs use and may report several unsuccessful tries to decrease or discontinue drugs use (DSM-IV, 2005).

Increasing of substance use developed a syndrome by the intoxication of a substance. Clinically significant pathological, behavioural or psychological changes (for example, belligerence, mood liability, impaired judgment) occur by pathological effects of the drugs on central nervous system, these effects occur during or after use of the drugs (DSM-V, 2012).

The psychological interpersonal model of suicide indicated that the relationship among emotion dysregulation and suicidal

behaviours. The model of suicide risk is partially function of required ability to involve in self-injury and this ability may occur through hurting and challenging experience (Bender et al., 2011). Another study supporting this model to establish the association among difficulty in emotion regulation and required skill for suicide attempts connecting to courage about self-hurt and pain acceptance was mediated by the experience of painful and provoking life events. Emotion dysregulation involve impulsive responses and negative emotions may involve a person in suicidal behaviour to reduce their fear and self-hurting behaviours (Bender et al., 2011).

The research result indicated that significant relationship among depression and substance abuse in adults. The depression and substance abuse are highly co-morbid in major two condition, they occur together in a high percentage among adults. In some situation depression cause the drug addiction and sometime drug addiction can cause depression. Number of substances use directly affects the brain function and cause psychological distress. E.g., cannabis slows down brain functioning and affect the cognitive abilities and cause distress. Many people with depression control themselves by self-medications. When they're depressed, they have difficulty in accepting that they 'treated the depression by medications or psychotherapy but many people turn to medication for solutions (ADAA, 1980).

Research data indicates the relationship among mood disorders and drug addiction, those individuals who were diagnose with a mood disorder are probable to drug addiction than a individual without mood disorders (SAMHSA, 2002).Different research studies indicated that the substance abuse increases the severity level of depressive symptoms (Kelder et al., 2000).

Amelia et al., (2009) conducted a research study to explain the suicidal ideation in substance abusers. Interviews were conducted with 1,249 patients. The study results show that 6% of substance abuse patient had current suicidal ideation and depressive symptoms. Only 40% of individuals with suicidal ideation were classified as depressed according to standard criteria.

Xiaoyun & Wu1, (2014) conducted the research study to examine relationship among substance use and suicidal ideation among adolescents and young adults (aged 17–21 at wave 1; aged 24–32 at wave 4). The study sample consisted (N= 3,342). Current regular and past-year marijuana use, and ever use of other illegal substance as well as past year suicidal ideation were

measured at the four waves (1995, 1996, 2001–2002, and 2008–2009). Fixed effects models with lagged dependent variables were modelled to test unidirectional relationship among substance use and suicidal ideation, and non-recursive models with feedback loops combining correlated fixed factors were conducted to examine reciprocal associations among each substance use and suicidal ideation, respectively. The study results unidirectional associations from substance use to suicidal ideation were consistently significant, and vice versa. Non recursive model results showed that use of substance increased risk of suicidal ideation.

Maria et al., (2011) conducted the study to describe levels of depression, anxiety and stress among substance users. Descriptive co-relational method were used in study with a Portuguese version of DASS-21; consecutive sample (n=343). Results: 40.52%, 43.48% and 45.06% substance users present some degree of depression, anxiety and of stress, respectively. Severe or very severe levels of disturbance were found in 20.87% (anxiety), 22.38% (stress) and 12.24% (depression) in less substance use individuals. The results show significant relationship of depression, anxiety and stress with substance abusers.

Carla et al., (2003) conducted the research to determine the depression levels differ among suicide-attempting and non–suicide-attempting in substance use adolescent. Ninety-eight adolescents hospitalized at a mid-western psychiatric hospital completed the Depression Inventory adolescents were classified as heavy substance users (n = 36) or light substance users and non-users (n = 62). The results show that the heavy substance users had significantly more depression than those who were classified as light or non-users.

Method

The methodology of current research is primary in nature. The data collection through primary source using self-administered questionnaire and analyses by different statistical techniques. The scale is used into Urdu language. The current chapter describes the procedure of investigation for the research i.e. research approach which has been used for data gathering, questionnaire as data collection instrument and data analysis methods and techniques.

Sample: The sample size was consisted of 120 adults' age range 18 -35 with equal presentation on the basis of patient with substance use disorders and non-users. The non-user's participants were from general population. Random sample size technique is used for this research. The data was collected from different rehabilitation centres of Lahore.

Measures: The measuring Instruments were used in this current study are the Demographic Form, depression, anxiety, stress scale, suicidal ideation scale and difficulty emotion regulation scale.

Demographic information Form: The demographic form was used to collect socio demographic information of the participants such as age, gender, work, education, relapse, socioeconomic status and marital status etc.

Suicidal ideation attributes scale (SIDAS): This scale designed by (spijker et al., 2014). The suicidal ideation attributes scale was developed to recorded the presences of suicidal thoughts and identify the severity level of these thoughts. Scale has five items. Scale responses are shown on the 10 points. Items are coded so that a higher total score reflect more severe suicidal thoughts. The internal consistency is evaluated by calculated the Cronbach Alpha, which is .874 for Urdu version of the scale.

Depression anxiety stress scale (DASS): The scale was developed by Lovibond & Lovibond, (1995) that consist four items. Its included three subscales and each subscale have fourteen items. It is a four point likert scale. The scores range from 0 to 3. The reliability of scale is 0.87.

Procedure: The current study synopsis was approved by graduate research committee (GRC), university of central Punjab Lahore (UCP). After the approval the procedure of the research was followed. The permission was taken from the drug rehabilitation centres authorities. The substance abusers from different hospital and rehabilitation centres of Lahore were approached for data collection. The participants were briefed about the nature and purpose of current research being carried out before the administering of the research questionnaires.

The researcher was first administered consent form then difficulty emotion regulation, suicidal ideation, depression, anxiety stress and substance involvement screening scales. The participants were asked to fill questionnaire based on the given instructions. The researcher was explain to participant related to research questionnaire questions.

Statistics: Date was analyzed by using SPSS version 21. Descriptive statistics was used to present, manage and sum up the data in an informative way. The t- test analysis was used to analyze the data.

Ethical considerations: The participant was assured that the collected data would be only used for research purpose and they decide to withdraw from any stage of study. Anonymity and confidentiality of the research was assured. Not to harm the participant, physically, emotionally and psychologically. Accurate reporting of result is carried out. Due to the ethical code the researcher were provide the counselling to participant if he needed after filling up the questioner. Immediate counselling was given and therapeutic recommendation would be made to the participants.

Findings

The t test was administered to figure out the differences in suicidal ideation among patient with substance use disorders and non-users. Independent sample t- test was analysis the differences among the variables.

There were significant differences in suicidal ideation among patient with substance use disorders and non-users. The result was shown in the table the score in suicidal ideation inpatient with substance use disorders (m=9.02, sd= 13.547) and suicidal ideation in non-users (m=8.17, sd= 10.073). Score on the table was also show that there were significant differences among the both variables. Results can be seen in the below Table-1.

Table 1: Independent t test analysis of suicidal ideation

Variables	M	sd	Std (error mean)	t	df	P
SI in patient with substance use disorders	9.02	13.547	1.749	5.156	59	.000
SI in non-users	8.17	10.073	1.300	6.280	59	.000

Note: SI = mean suicidal ideation, M= mean, SD= standard deviation, t= T-test, df= degree of freedom, *p<.05, N= 120

Table-2 shows, that there was significant differences in depression among patient with substance use disorders and non-users. The result was shown in the table the score in depression inpatient with substance use disorders (m=14.47, sd= 8.726) and depression in non-users (m=13.53, sd= 8.028). Score on the table was also show that there were significant differences among the both variables.

Table 2: Independent t test analysis of Depression

Variables	M	sd	Std (error mean)	T	df	P
Depression in patient with substance use disorders	14.47	8.726	1.127	12.841	59	.000
Depression in non-users	13.53	8.028	1.036	13.057	59	.000

Note: M= mean, SD= standard deviation, t= T-test, df= degree of freedom, *p<.05, N= 120

Table-3 shows, that there was significant differences in anxiety among patient with substance use disorders and non-users. The result was shown in the table the score in anxiety inpatient with substance use disorders (m=13.38, sd= 7.831) and anxiety in non-users (m=12.42, sd= 9.869). Score on the table was also show that there were significant differences among the both variables.

Table 3: Independent t test analysis of Anxiety

Variables	M	sd	Std (error mean)	t	df	P
Anxiety in patient with substance use disorders	13.38	7.831	1.011	13.238	59	.000
Anxiety in non-users	12.42	9.869	1.274	9.745	59	.000

Note: M= mean, SD= standard deviation, t= T-test, df= degree of freedom, *p<.05, N= 120

There were significant differences in stress among patient with substance use disorders and non-users. The result was shown in the table the score in stress inpatient with substance use disorders (m=15.62, sd= 8.122) and stress in non-users (m=12.93, sd=

9.272). Score on the table was also show that there were significant differences among the both variable. Results can be seen in the below Table-4.

Table 4: Independent t test analysis of Stress

Variables	M	sd	Std (error mean)	T	df	P
Stress in patient with substance use disorders	15.62	8.122	1.049	14.893	59	.000
Stress in non-users	12.93	9.272	1.197	10.805	59	.000

Note: M= mean, SD= standard deviation, t= T-test, df= degree of freedom, *p<.05, N= 120

Discussion

The current chapter discusses findings of the study. The present study explored the difference in suicidal ideation and psychological distress among patient with substance use disorders and non-users. The table I results indicate that there is significant difference in suicidal ideation among patient with substance use disorders and non-users (p <0.05). The findings of the recent study showed that, there is significant difference among them. The research result show that the there is significant difference in suicidal ideation among substance abusers and non-user.

This is exacerbated by the fact that substance use frequently damages or destroys familial, professional, personal, and financial relationships and further increasing the risk of suicide, substance use actually increases the severity and duration of depressive episodes, and despite any temporary relief they may provide, actually greatly increasing the likelihood of suicidal thoughts (suicidal ideation) even worse, many substances severely impact judgment, leading to suicide ideation (Kelly, Cornelius & Clark, 2004). Suicidal ideation and substance use disorders have a very close relationship. More than 90% of people who fall victim to suicide suffer from depression, have substance abuse disorder, or both. Loss of relationships, job and other financial problems and may lose all hope they starting suffer depression and substance abuse combine to form a vicious cycle that all too often leads to suicide. Many who experience such severe depression and other conditions frequently turn to substance use, gambling, and other risky behaviors to numb their pain and/or alleviate their negative feelings which increase the

risk of suicide. Some evidence showed that the disinhibition of the certain substances, caused and facilitate suicidal ideation and increase risk factors of suicidal thoughts, while depression and other mood disorder is main cause of suicidal ideation and attempts, (Sher, 2006; Zakaria & Hasan, 2020).

Additionally, the other researches and findings of the study indicated that there was significant difference in suicidal ideation among the both populations. Several theories of suicide and substance abuse have indicated that the relationship of substance abuse and suicide exists. The theories briefly indicated that the individuals with depress mood are more prone to use the self-medicate substances. Otherwise, the substance abuse is related to high levels of aggression and impulsivity that turn to conduct problems that can support risk for suicidal behaviours. e.g., sometime the significant relationship of substance abuse and suicide were decreases when other risky behaviours are present e.g., stealing, gambling, sexual behaviours etc, (Afifi & Katz, 2007).

The table 2, 3 & 4 results shows that the significant difference in psychological distress (Depression, anxiety and stress) between patient with substance use disorders and non-users (P<0.05). The current study provided partial support for general hypotheses underlying the research, which indicated that relationship among psychological distress and substance use disorder. The depression and substance abuse are highly co-morbid in major two condition, they occur together in a high percentage among adults (Dass & Myrick, 2010).

Present study was done with the goal of comparing psychological distress among patient with substance use disorders and non-users people. According to the findings obtained from this study it can be concluded that among psychological distress there is a difference among patient with substance use disorders and non-users. That is, substance users suffer more from psychological distress than non-users' individuals. The results of the research findings of Hasien and colleagues (2002), Flavio and colleagues (2005), Harrel and Karim (2008), Blume and Marlatt (2000), high levels of psychological distress between substance uses disorders compared with the non-users. So it seems the always use a vicious cycle in order that is people use substance because they believe that the substance can reduce their negative emotions, or amend these conditions. And lack of energy, low mood and fatigue in depressed patients in the short term can be eliminated by substance. On the other hand, it leads to a positive reinforcement resulting in continuity of use.

The results showed significant difference between the patient with substance use disorders and non-user's people there. That is, the quality of patient with substance use disorders lives is lower than non-users' people. But the general health, physical functioning, physical limitations and social functioning among patient with substance use disorders and non-users here is a significant difference. The results of the present research findings, Smith and Larson (2003), Vaarwerk and Gaal (2001), showed that all patient with substance use disorders compared with non-users people have lower quality of life. Addiction changes normal life with making change in behaviour, self-esteem, nutrition, work and social relationships, aggression, lack of interpersonal trust and these changes will lead to psychological distress (depression, anxiety and stress (Mahmodi, 2012).

The current study finding indicates the substance abuse has strong relationship among mood disorders like depression, some situation depression can cause the substance abuse and sometime substance abuse can cause depression. Large number of substances that people use and abuse that directly affects the brain and cause depression those individuals who diagnosed with a mood disorder being twice as likely to abuse substances as a person without mood disorders (SAMHS, 2014). Some previous study finding also indicated that acute and chronic stress plays a key role in the motivation to substances addiction (Tomkins, 1966; Russell &Mehrabian,1975), the stress coping model of addiction indicated that substances use reduce negative affect and increase positive effect, by reinforcing substance using as an effective, in difficulty in coping (Shiffman, 1982; Wills & Shiffman, 1985).

Conclusion

The aim of the study was to examine the, suicidal ideation and psychological distress between patient with substance use disorders and non-users. The result of the study showed that the substance use disorder may lead the emotion regulation problems as well as the suicidal ideation and psychology distress between patients with substance use disorders. The present study demonstrates

the significant differences in, suicidal ideation and psychological distress between patient with substance use disorders and non-users. The view of present study and sample support the hypotheses which define that there are significant differences among them. The previous researches also proved that they both s substance abusers and non-users face the different condition along with psychological problems. Present studies also support our hypothesis that there are significant differences among these variables.

Limitations of the Research

The limitations of the study are discussed in this section. Limitation of this study concerns the use of self- report tools and measures to assess the, suicidal ideation and psychological distress (depression, anxiety and stress) among patient with substance use disorders and non-users. Our study comprised on the sample was taken from the rehabilitation centres. We can gather more accurate results, if the data were collected from different cities rehabilitation centres. It is recommended that a replication of this study should be conducted with a larger sample. In addition, the inclusion of a control group would be a vital and effective for accurately assess and also the efficacy to the program. It is recommended that the family of patients should educate about the substance use disorders and its related problems like, suicidal ideation and psychological problems. The family should make the strict roles regulation for their children to overcome the substance using and other problems.

Implications

The findings of the study can be implicated among patient with substance use disorders and non-users. According to my study, it has been identified to enhance and provoke the awareness, which can control and manage their substance use related disorders and better know how to address their problems. According to current research study findings are clearly explain which are add more leaning activities for educational experiences and also give an idea to experience them in social context.

In addition, psycho-educational plan should be implement for patient with substance use disorders. According to the different therapeutic technique of substance use related, which has play a role in asserting and providing the enough capacity to understand their problems and also learn the skill to control their emotions.

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