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A Study of Sociodemographic and Relationship Characteristics of Post-Traumatic Stress Disorder Patients with Substance Use Disorder

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Introduction

Post-Traumatic Stress Disorder (Ptd):

Post traumatic stress disorder (PTSD) is an emotional illness that usually develops as a result of a terribly frightening, life-threatening, or otherwise highly unsafe experience. PTSD sufferers re-experience the traumatic event or events in some way, tend to avoid places, people, or other things that remind them of the event (avoidance), and are exquisitely sensitive to normal life experiences (hyper arousal). Although this condition has likely existed since human beings have endured trauma, PTSD has only been recognized as a formal diagnosis since 1980. However, it was called by different names as early as the American Civil War, when combat veterans were referred to as suffering from "soldier's heart." In World War I, symptoms that were generally consistent with this syndrome were referred to as "combat fatigue." Soldiers who developed such symptoms in World War II were said to be suffering from "gross stress reaction," and many troops in Vietnam who had symptoms of what is now called PTSD were assessed as having "post-Vietnam syndrome." PTSD has also been called "battle fatigue" and "shell shock."

Statistics regarding this illness indicate that approximately 7%-8% of people in the United States will likely develop PTSD in their lifetime, with the lifetime occurrence (prevalence) in combat veterans and rape victims ranging from 10% to as high as 30%. Somewhat higher rates of this disorder have been found to occur in African Americans, Hispanics, and Native Americans compared to Caucasians in the United States. Some of that difference is thought to be due to

higher rates of dissociation soon before and after the traumatic event a tendency for individuals from minority ethnic groups to blame themselves, have less social support, and an increased perception of racism for those ethnic groups, as well as differences between how ethnic groups may express distress. In military populations, many of the differences have been found to be the result of increased exposure to combat at younger ages for minority groups. Other important facts about PTSD include the estimate of 5 million people who suffer from PTSD at any one time in the United States and the fact that women are twice as likely as men to develop PTSD. Almost half of individuals who use outpatient mental-health services have been found to suffer from PTSD. As evidenced by the occurrence of stress in many individuals in the United States in the days following the 2001 terrorist attacks, not being physically present at a traumatic event does not guarantee that one cannot suffer from traumatic stress that can lead to the development of PTSD. PTSD statistics in children and teens reveal that up to more than 40% have endured at least one traumatic event, resulting in the development of PTSD in up to 15% of girls and 6% of boys. On average, 3%-6% of high school students in the United States and as many as 30%-60% of children who have survived specific disasters have PTSD. Up to 100% of children who have seen a parent killed or endured sexual assault or abuse tend to develop PTSD, and more than one-third of youths who are exposed to community violence (for example, a shooting, stabbing, or other assault) will suffer from the disorder.

The DSM-IV defines post-traumatic stress disorder (PTSD) as set of symptoms which occur after, “the person experienced ,witnessed or was confronted with an event or events that involved actual or threatened death or serious injury or a threat to the Physical integrity of the self or others” and “the person’s response involved, intensive fear ,helplessness or horror. In addition to a positive traumatic event it requires the presence of one re-experiencing three avoidance and two increased arousal symptoms for diagnosis.” American Psychiatric Association, (1994).

1.5 Symptoms of PTSD

Signs and symptoms of post-traumatic stress disorder typically begin within three months of a traumatic event. In a small number of cases, though, PTSD symptoms may not occur until years after the event.

- Flashbacks, or reliving the traumatic event for minutes or even days at a time
- Shame or guilt
- Upsetting dreams about the traumatic event
- Trying to avoid thinking or talking about the traumatic event
- Feeling emotionally numb
- Irritability or anger
- Poor relationships
- Self-destructive behavior, such as drinking too much
- Hopelessness about the future
- Trouble sleeping
- Memory problems
- Trouble concentrating
- Being easily startled or frightened
- Not enjoying activities you once enjoyed

1.6 Events cause PTSD in children

A diagnosis of PTSD means that an individual experienced an event that involved a threat to one's own or another's life or physical integrity and that this person responded with intense fear, helplessness, or horror. There are a number of traumatic events that have been shown to cause PTSD in youth and may be diagnosed with PTSD if they have survived natural and man-made disasters such as floods; violent crimes such as kidnapping, rape or murder of a parent, sniper fire, and school shootings; motor vehicle accidents such as automobile and plane crashes; severe

burns; exposure to community violence; war; peer suicide; and sexual or physical abuse.

Virtually any trauma, defined as an event that is life-threatening or that severely compromises the emotional well-being of an individual or causes intense fear, may cause PTSD. Such events often include either experiencing or witnessing a severe accident or physical injury, receiving a life-threatening medical diagnosis, being the victim of kidnapping or torture, exposure to war combat or to a natural disaster, exposure to other disaster (for example, plane crash) or terrorist attack, being the victim of rape, mugging, robbery, or assault, enduring physical, sexual, emotional, or other forms of abuse, as well as involvement in civil conflict. Although the diagnosis of PTSD currently requires that the sufferer has a history of experiencing a traumatic event as defined here, people may develop PTSD in reaction to events that may not qualify as traumatic but can be devastating life events like divorce or unemployment.;

Interest in the study of co-occurrence between mood, anxiety disorders and substance use disorders has grown tremendously in past decade and a half. It has become clear that co-occurrence of these disorders is common and has definite impact on treatment of dually diagnosed patients. After DSM III-R (APA1987) allowed clinicians to give multiple diagnoses when different syndromes occur together in one episode of illness, the issue of co morbidity has assumed a central stage in psychiatric records. Association between Posttraumatic Stress Disorder and substance use disorder has been reported in Vietnam Veterans and civilian samples. Studies also found that substance use was very common in PTSD cases in USA as were other co morbid psychiatric conditions present in these patients. Combat veterans and civilians with PTSD have demonstrated that in PTSD, alcohol abuse or dependence is the most common co morbid disorder followed by depression, other anxiety disorders, conduct disorder and non-alcohol substance abuse and dependence .High rates of substance abuse and PTSD were first reported in war related studies in which as many as 75%combat veterans with life time PTSD also met criteria for alcohol abuse or dependence. Among the civilian population substance use disorder

have ranged from 21.6% to 43% in the patients with PTSD as compared with 8.1% to 24.7% in persons without PTSD . Many of these studies have assumed that PTSD is a primary disorder and that the substances are used to self medicate symptoms. Chill coat added that drug use disorders in people who have been diagnosed as PTSD might be result of efforts on their part to self medicate masking the symptoms of PTSD .

Objective:

The present study was undertaken to assess the prevalence of post-traumatic stress disorder in substance use disorder patients and examined the temporal relationship between the few psychiatric disorders.

Material and Methods

Patients registered in the outpatient department of psychiatric diseases hospital, Srinagar were the source of the study. Semi-structured interview was used to record sociodemographic variables and history of drug use inpatients. Total of 561 substance use disorder patients diagnosed with the help of DSM-IV based MINI Plus were screened for a co morbid diagnosis of MINI Plus out of these 561, 351 patients had an associated psychiatric disorder. Among these dually diagnosed patients, 83 patients had PTSD as a co morbid diagnosis. The relative onset of concurrent disorders was rated on the basis of historical report during assessment.

Result

Total of 561 substance use disorder patients were included in the study, out of which 62.56% (n=351) Patients had an associated psychiatric disorder. Concurrent PTSD as dual diagnosis was present in 23.64% (n=83) patients. The age of cases ranged from 19-55 years with mean age 27.17 years +- S.D +- 5.23. The maximum number of patients 39.75% (n=33) belonged to 19-26 age group followed by 30.12 % (n=25) m 27-34 years of age group. This study was dominated by male sex as there were 63.85% (n=53) males and 36.14% (n=30) females. Most of the cases were unmarried 49.39% (n=41) followed by married 39.75% (n=33) and 10.83% (n=) were divorcees or widowers. The middle class constituted most of our patient population i.e 78.32% (n=65). Graduates and postgraduates constituted 48.84 % (n=41) followed by matriculates 39.75% (n=33) and illiterates constituted only 10.84% (n=9) of our dually diagnosed Substance Use Disorder and PTSD patients. 50.60% (n=42) were government employees followed by 39.75% (n=33) Laborers/unemployed and 9.63% (n=8) were students. Most of the patients 63.85% (n=53) had either experienced or witnessed multiple traumatic events qualifying for the diagnosis of PTSD as compared to 36.14% (n=30) patients who had exposure to one traumatic event. Other parameters are given in the table.

Sample characteristics of substance use disorder patients with PTSD as co morbid diagnosis							
Age in years status			Gender			Residential	
	Pts.	%age	Pts .	%age		Pts .	%age
19-26	33	39.75					
27-34	25	30.12	53	63.85	Rural	61	73.49
35-42	13	15.66					
43-50	4	4.80	30	36.14	Urban	22	26.50
> 50	8			9.6%			
Marital status		Socioeconomic status		Occupation			
	Pts.	%age	Pts .	%age		Pts .	
	%age						

Married	33	39.75 UC	13	15.66	Employed	42
50.60						
Unmarried	41	49.39 MC	65	78.30	Unemployed	33
39.75						
Divorcee	5	6.02 LC	5	6.02	Students	08
9.63						
Education				Precipitating factors		
	Pts.	%age			Pts .	
%age						
Illiterate	9	10.84		Multiple events	53	
63.85						
Matric	33	39.75		Single event	30	
36.14						
Graduates	29	34.39		Opioids	25	
30.12						
Post graduates	12	14.45		alcohol	14	
4.8						

Discussion

The present study assessed the prevalence of posttraumatic stress disorder in substance use disorder patients, their sociodemographic variables and relationship between the two disorders. 62.56% (n=351) patients had an associated psychiatric disorder and concurrent PTSD as dual diagnosis was present in 23.64% (n=83) patients. These figures are supported by studies carried out by Reiger 1984 and NCS 1991 in which the odds ratio for Substance Use Disorder in men was 2-3 and 2.5-4.5 for women suffering from PTSD. Using data from ECA study 1981, Cottler observed that cocaine/opiate users were most likely to report PTSD qualifying traumatic events (43%) and over all Substance Use disorder was more common in these PTSD patients as compared to the rest. In our study 39.75% (n=33)

Belonged to the 19-26 age group which are in agreement with the figures seen Hellen E. Ross et al. Male sex 63.85% (n=53), unmarried 49.39% (n=41), from middle class family 78.32% (n=65), 50.60% (n=42), government employees and literates 89.15% (n=74) dominated our dually diagnosed Substance Use Disorder and PTSD patient sample. This is consistent with findings of Khantzian, et al. However keeping in view the over illiteracy rate of this part of the world and earlier studies by Margoob et al literacy rate and

occupational status are not consistent with the socio-demographic distribution of the community as are earlier results. This could be due to lack of knowledge. Most of the patients are still unaware of PTSD symptoms and continue taking drugs/self medication themselves or prescribed by non-psychiatric experts as treatment of these somatic symptoms resulting in addiction subsequently. In addition most of the patients were actually referred from private clinics in contrast to earlier studies, which were carried out in psychiatric hospitals where patients from lower socioeconomic background seek treatment. The study revealed that most of the patients 63.85% (n=53) had either experienced or witnessed multiple traumatic events qualifying for the diagnosis of PTSD as compared to 36.14% (n=30) patients who also had history of one event may be due to persistent disturbed conditions in this part of the world. Most of the patients 39.75% (n=33) used multiple drug combinations like benzodiazepines, opioids and cannabis, followed by 30.12% (n=25) opioid which is supported by our earlier study results. However alcohol was least used by these patients 4.8% (n=4) in contrast to the studies from rest of the world, possibly due to the fact that alcohol is not a socially approved beverage in this part of the world and its relatively lesser availability. So the high rates of co morbidity between Substance Use

Disorder and PTSD in our study suggest that these disorders are functionally related to each other. The self-medication model suggested that patients report CNS depressants like alcohol, opioids and benzodiazepines lead to instant symptom relief for a short duration. In addition, clinical evidence suggests that the choice of substance use (CNS depressants vs CNS stimulants) may stem from a particular constellation of PTSD symptoms that the patients experience. Jacobson's review paper also establishes stress as a contributing factor for future development of substance use. He suggested that in PTSD, sensitization makes the patient more sensitive to the stressor and in substance abuse sensitization makes the patient more sensitive to drugs. In addition, in PTSD, the individual is conditioned to an aversive stimulus, the stressor, in drug abuse the same individual is conditioned to the rewarding stimulus, the drug. Thus showing that PTSD and substance use share the conditioning and sensitization model which is mediated by the amygdala, the center mediating fear, emotions and addiction. In fact, four decades of clinical work involving substance use disorder patients has led Khantzian to conclude that suffering is the heart of addiction.

Conclusion

Our study confirms that co-morbidity between substance use disorders and post-traumatic stress disorders is common and symptoms of dually diagnosed patients tend to be more severe and refractory to treatment. The study also revealed that most of our dually diagnosed patients were young males and females from middle class and most of the patients had experienced multiple traumatic events resulting mostly in the use of combination drugs.

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