# PREVALENCE OF DEPRESSION AMONG SUBSTANCE USERS PRESENTED TO PSYCHIATRY DEPARTMENT OF A TERTIARY CARE HOSPITAL

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## ABSTRACT

**Background:** Substance user may face depression symptoms in many cases. **Objectives:** To determine the prevalence and severity of depression among substance users. **Methodology:** Study Design: Cross Sectional study. Place and duration of study: The study was conducted in the Inpatient Department of Psychiatry & Behavioral Sciences (Mowadat Hussain Rana), Sheikh Zayed Medical College/Hospital, Rahim Yar Khan from 1st January to 31st August 2015. One hundred patients having the history of substance use participated in this study and the sample was collected through purposive convenient sampling. Patients were interviewed according to the diagnostic and research criteria of International statistical Classification of Diseases and related health problems (ICD 10) for the identification of depression and its severity (mild, moderate and severe). SPSS 20 was used to analyze the data. **Results:** Out of 100 patients having history of substance use, 28% patients had depression. Among 28 depressed patients; 08 (8%), 12 (12%) and 08 (8%) have mild, moderate and severe depression respectively. The majority of the patients (60.71%) have duration of one or less than one year. Among substance users; 91,% 20 % and 28% patients used opioids, depressants and stimulants respectively. All patients were males. 62% received detoxification treatment atleast once in their life time. 59% lied between 31-45 years of age whereas; 29%, 17% and 1% were 15-30 years, 46-60 years and above 60 years of age respectively. The routes of administration found were smoking 91%, sniffing 28%, foil paper 48%, oral 54%, intravenous 29% and others 3%. **Conclusion:** There was high prevalence of depression among substance user. Majority of the depressed patients met the criteria of moderate depression present for atleast one year in a continuous manner. Among substance users; all participants were male, middle aged adults and received detoxification atleast once in their lifetime. The most frequent routes of administration were smoking, sniffing, foil paper, intravenous and oral.

**Key Words:** Substance use, Depression, Prevalence

## INTRODUCTION

Depression is a psychiatric disorder characterized by the presence of depressed mood, anhedonia, avolition, depressed cognition, diurnal mood variations alongwith disturbed biological functioning present for atleast two weeks or more.[1] Depression is found among hospitalized patients, female gender, low education status, past psychiatric history, family history and having the history of substance abuse.[2] According to World Health Organization (WHO), twelve months prevalence was high in among participants with chronic conditions.[3]

Among the substance users; cannabis, cocaine, amphetamines, alcohol and sedatives are the most widely used as substances of abuse.[4,5] The substance use is more prevalent among male gender, middle aged adults, childhood stressors, depression, social isolation, having significant history of educational and financial stresses.[4,5,6,7] There is a significant association between depression, suicidal behavior and substance use.[8,9] Those having psychiatric issues like depression started abusing substance at an early age compared to controls.[8] The route of administration also has a significant association with depression and suicidal tendencies.[9] The injection drug users (IDUs) are more likely to have depression, suicidal behavior and medical complications compared to controls.[10]

Positive coping strategies like low stress-distress, counseling, social support, problem solving strategies, spirituality, meditation, management of depression can prevent the future relapse and to aid in psychosocial rehabilitation among substance users.[9,11,12] Antidepressant medications are widely used along with anticraving agents among patients having history of substance abuse.[9,11,13]

Substance use is a grave mental health issue, the people of Pakistan has little awareness regarding the menace and its lethal effects. The objective of this study was to see the prevalence and severity of depression among substance users.

## METHODOLOGY

One hundred patients having the history of Psychoactive Substance were included in this study

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from indoor department of Psychiatry and Behavioral Sciences (Mowadat Hussain Rana), Sheikh Zayed Medical College/Hospital, Rahim Yar Khan through purposive convenient sampling. The study duration was from 1ˢᵗ January to 31ˢᵗ August 2015. Patients were interviewed according to the diagnostic and research criteria of International statistical classification of diseases and related health problems (ICD 10)[13] for the identification of depression and its severity (mild, moderate and severe).[13] The socio-demographic information were obtained on a structured proforma.

There was no risk involved to the participants of the study and was allowed by the Institutional Review Board. We took informed consent from the participants. The data was entered and analyzed through SPSS version 21.

## RESULTS

The mean age of the patients was 38.23±8 years with age range from 17-80 years. Majority of the patients (59%) has age range from 31 to 45 years of age (Table I).

**Table I: Age Distribution of Patient (n=100)**

| Age (Years) | Number of Patients | Percentage |
|---|---|---|
| 15-30 | 29 | 29 % |
| 31-45 | 59 | 59 % |
| 46-60 | 12 | 12 % |
| 61-75 | 1 | 1 % |
| >75 | 1 | 1 % |

**Table II: Substances used (n=100)**

| Substance | Number of Patients |
|---|---|
| Opioids | 91 |
| Depressants | 20 |
| Stimulants | 28 |
| Hallucinogens | - |
| Polyactive | 4 |
| Others | 12 |

Out of 100 patients; 91, 20, 28, 4 and 12 patients were found to use opioids, depressants, stimulants, polyactive and other substances respectively (Table II). The duration of substance use either alone or in combination was found to be more than two years among 95% patients.

**Table III: Route of Administration (n=100)**

| Route of Administration | Number |
|---|---|
| Smoking | 91 |
| Sniffing | 28 |
| Foil Paper | 48 |
| Oral | 54 |
| Intravenous | 29 |
| Others | 3 |

**Table IV: History and duration of Depression (n=100)**

| Characteristics | Frequency of Patients |
|---|---|
| **Depression:** | |
| • Present | 28% |
| **Severity of Illness:** | |
| • None | **72%** |
| • Mild | **8%** |
| • Moderate | **12%** |
| • Severe | **8%** |
| **Duration of Depression:** | |
| • Under 1-Year | 17% |
| • 1 to 2-Years | 6% |
| • 2 Years and above | 5 |
| **Course of Depression:** | |
| • Continuously | 27% |
| • Recurrent | 1% |

The smoking, sniffing, foil paper, oral, intravenous and other routes of administration were found in 91, 28, 48, 54, 29 and among 3 patients respectively (Table III). Previous detoxification was found in 62% patients whereas, previous attempt to quit found in 73 patients.

The depression was found in 28 patients (28%). The mild, moderate, severe depression was found in 08, 12% and 08% patients respectively. (Table IV). Regarding duration of depression; 17%, 6%, 5% patients were found to have under 1year, 1year to 2years and above 2years respectively (Table IV). The continuous and recurrent courses of depression were

found in 27 patients and among one patient respectively.

## DISCUSSION

The study was conducted in Inpatient, Department of Psychiatry & Behavioral Sciences (Mowadat Hussain Rana), Sheikh Zayed Medical College/Hospital, Rahim Yar Khan. The results showed that 28% of the patients suffered from depression among substance users. Among depressive disorders, 12% patients fell into the category of moderate depressive disorder whereas; 8% patients each in the category of mild and severe depressive disorder respectively. The evidence from other researches confirms the presence of significant depressive symptomatology among substance users.[14-18]

The Psychosocial hazards like war, earthquake etc. play a major role in causing depression and inclination towards substance abuse. More than 65% women and 45% men have depression in Pakistani region of Khyber Pakhtunkhwa (KPK) and Federally Administered Tribal Area (FATA) due to years of turmoil in an Afghanistan.[19] On the other hand, more than 80% suffered from depressive symptomatology and later indulged in substance abuse preceding the earthquake in the northern region of Pakistan.[20]

This suggests two plausible mechanisms of having significant depressive symptoms among the patients having history of substance use. On one hand, it can be predicted that the substance abuse itself may induce depression or vice versa. On the other hand, it may have suggested that those who predispose towards depressive symptomatology due to either reason (genetic, biological, social, psychological) are more inclined towards the substance use or vice versa but none of the studies confirm the plausible explanation of direct relationship although, needs to be investigated in future.

The sample of study comprised of 100 substance users out of which, majority was opioid users (91 patients) and afterwards; found the substance user of stimulants (28 patients), depressants (20 patients), others (12 patients) and polyactive (4 patients) found. In this study, the mean age found to be 38.23 years but the majority of the patients fell between 31-45 years of age. Multiple studies suggest the substance use is more common among middle aged persons,[21] and out of substances of abuse; the use of cannabis is quite prevalent in many countries,[17,22] including Pakistan.[21]

The routes of administration also play a vital role as 29% Injection Drug Users (IDUs) found which raise grave concern towards existing health standards and can lead to hazardous medical complications which need to be investigated further and needs to be communicated to the concerned authorities in order to improve the existing health facilities.

Previous detoxifications were found in 62% of the patients whereas; 73% patients of the sample attempted to quit on their own. So, majority of substance users (almost 2/3rd) attempted to quit substance of abuse but failed. This raises the serious question towards existing health standards, detoxification and rehabilitation centers working in Pakistan and needs to be investigated further in order to prevent the future relapses and to reduce the burden of diseases.

## CONCLUSION

There was high prevalence of depression among substance users. Majority of the depressed patients met the criteria of moderate to severe depression. Among substance users; all participants were male, majority were middle aged adults and received detoxification atleast once in their lifetime. It needs to be communicated to government, media, health agencies, Non-government organizations (NGOs), detoxification and rehabilitation centers about the significance of managing psychiatric issues alongwith substance use and to take concrete steps towards preventing significantly large number of relapse.

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