

# Frequency of Socio-Demographic Factors and Variety of Substances used by Drug Induced Psychotic Patients in Tertiary Care Hospital

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## ABSTRACT

**Background and Aim:** Drug or substance abuse is still a major public health concern all over the world. Globally, the rate of fatal substances or drug overdoses has increased in recent decades, owing primarily to prescription drug overdoses, particularly opioids. The aim of the present study was to determine the frequency of socio-demographic factors and variety of substances used by drug induced psychotic patients in tertiary care hospital.

**Methodology:** This retrospective study was conducted on 86 drug-induced psychotic patients attending the Department of Psychiatry at Khattak Medical Center Peshawar, Khyber Teaching Hospital Peshawar and Divisional Headquarter hospital, Mirpur AJK for duration of six months from January 2020 to June 2020. Patient's demographic details and diagnosis of psychosis were collected and recorded in semi-structured proforma and ICD-10 DCR criteria respectively. Inclusion and exclusion criteria was followed for all the patients enrolled in this study. Socio-demographic details such as age, gender, identification number, educational status, marital status, occupation, socioeconomic status, and family types were all recorded.

**Results:** Out of 86 patients, male and females were 67 (77.9%) and 19 (22.1%) respectively. The majority of the patients were between the ages of 16 and 26. Single patients outnumbered married patients by 37 (43.0%) and 49 (57%) respectively. According to education, the proportion of patients attending university, higher secondary school, secondary school, primary school, and illiterate was 14 (16.3%), 24 (27.9%), 26 (30.2%), 13 (15.1%), and 9 (10.5%) respectively. Patients were mostly unemployed 41 (47.8%). Regarding social status, the prevalence of higher, middle, and lower class was 12 (14%), 47 (54.7%), and 27 (31.4%) respectively. Among 86 patients, Schizophrenia, ATPD, and Mental and Behavioral Disorders were diagnosed in 40 (46.5%), 28 (32.6%), and 18 (20.9%) respectively.

**Conclusion:** Our study revealed that substance abuse is common among drug-induced psychiatric patients. It was also discovered that unemployment could be one of the causes of substance abuse. Our study found a higher prevalence of schizophrenia.

**Keywords:** Socio-demographic; Substance use; drug induced patients

## INTRODUCTION

Drug overdoses are a major public health concern around the world [1]. Opioid users are more likely to die prematurely due to a variety of factors such as opioid variety, drug overdose, and prescription opioids [2]. Over the last few decades, the global rate of fatal drug overdoses has risen, owing primarily to prescription drug overdoses, particularly opioids [2]. Although these unintentional fatal overdoses are more common among non-treatment opioid users, they can also happen during opioid maintenance treatment (OMT). Individuals with bipolar disorder are also more likely to develop substance use disorders [6, 7]. Compared to the general population, psychosis individuals suffer from a higher substance abuse rate. People with schizophrenia mostly use drugs at some stage of their lives [3, 4]. Another study found that patients with schizophrenia and schizophrenia disorder are more susceptible to substance use compared to the non-psychotic population [5]. Many studies revealed that people with psychotic disorders and schizophrenia had a higher incidence of substance uses like cannabis. Additionally, numerous researchers focused on schizophrenia or psychotic disorders regarding cannabis's role as a risk factor [8-10].

Psychotic symptoms significantly preceded with substance uses such as cannabis [11], cocaine [12], and amphetamines abuse [13]. Substance use and psychotic disorders had a significant association as indicated by the psychotic illness emerging symptoms and substance use temporal proximity [13]. Co-occurring disorders due to substance uses are common in people suffering from psychotic disorders. It arose as the most significant barriers to the active treatment of people suffering from psychosis, resulting in meagre outcomes. The rising incidence of substance use over the last decade has fueled emergent distress about the link between substance use and psychotic disorders. The substance abuse lifetime prevalence in psychotic disorders

was reported 40-60% in the majority of Western samples [14]. Patterns of substance use appear to have a substantial part of individuals prior to the onset of psychotic disorders, possibly as early as first signs of illness [15]. There have only been a few large-scale studies of drug-induced psychosis where the incidence rates of alcohol and drug abuse ranged from 3% to 35% and 6% to 44%, respectively [16, 17]. However, no study assessing the incidence of substance use in drug-induced chronic psychiatric patients has been conducted so far in our country. The purpose of this research is to determine the frequency of substance use in drug-induced patients, as well as the associations between demographic variables, and substance use in the context of the Pakistani population.

## METHODOLOGY

This retrospective study was conducted on 86 drug-induced psychotic patients attending the Department of Psychiatry at Khyber Teaching Hospital Peshawar, Khattak Medical Center Peshawar and Divisional Headquarter hospital, Mirpur AJK for duration of six months from January 2020 to June 2020. Patient's demographic details and diagnosis of psychosis were collected and recorded in semi-structured proforma and ICD-10 DCR criteria respectively. Inclusion and exclusion criteria was followed for all the patients enrolled in this study. Socio-demographic details such as age, gender, identification number, educational status, marital status, occupation, socioeconomic status, and family types were all recorded. Patients suffering from organic brain syndrome, mental and behavioral disorders, effective psychosis, and mental retardation were all excluded.

Details about substance use were also included, such as the age at which the patient began taking the substance, the type of substance, usage pattern, substance usage duration, psychotic illness onset, family history, and substance last intake. Psychotic

disorders include substance use causing mental and behavioral disorders, Schizophrenia, transient psychotic disorders, nonorganic psychotic disorders, and schizotypal disorder. Additional information regarding substance use assessment and history were gathered after two weeks or more follow up by conducting a second interview.

**RESULTS**

Out of 86 patients, male and females were 67 (77.9%) and 19 (22.1%) respectively. The majority of the patients were between the ages of 16 and 26. Single patients outnumbered married patients by 37 (43.0%) and 49 (57%) respectively. According to education, the proportion of patients attending university, higher secondary school, secondary school, primary school, and illiterate was 14 (16.3%), 24 (27.9%), 26 (30.2%), 13 (15.1%), and 9 (10.5%) respectively. Patients were mostly unemployed 41 (47.8%). Regarding social status, the prevalence of higher, middle, and lower class was 12 (14%), 47 (54.7%), and 27 (31.4%) respectively as shown in Table-II. Among 86 patients, Schizophrenia, ATPD, and Mental and Behavioral Disorders were diagnosed in 40 (46.5%), 28 (32.6%), and 18 (20.9%) respectively. Gender distribution is shown in Figure-1. Of the total patients, 41 (47.7%) were substance users is shown in Table-I. The prevalence of different substances used is shown in Figure-2. Based on pattern and diagnosis, the prevalence rate of substance use is shown in Figure-3 and 4.

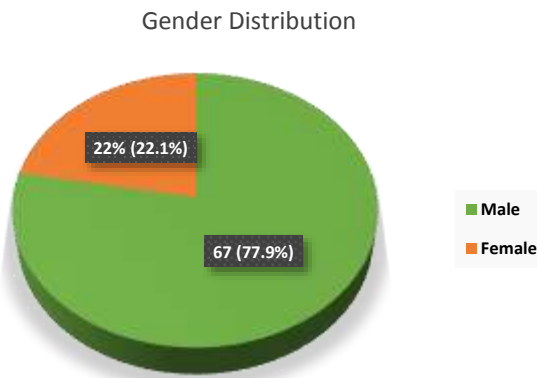


Figure-1: Gender distribution (n=86)

Table-1: Substance user's distribution (n=86)

Substance users Status	Frequency (N)	Percentage (%)
Users (Yes)	41	47.7
Not users (No)	45	42.3

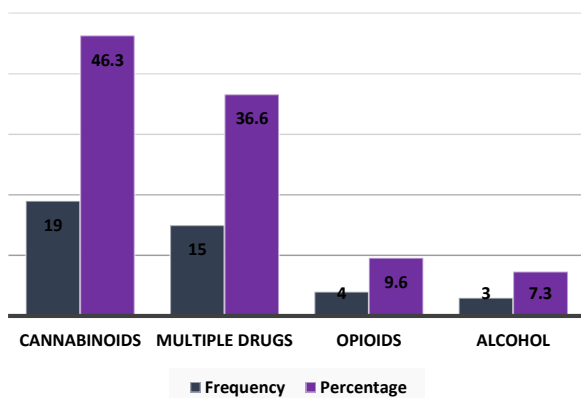


Figure-2: Prevalence of Different Substance Use (N=41)

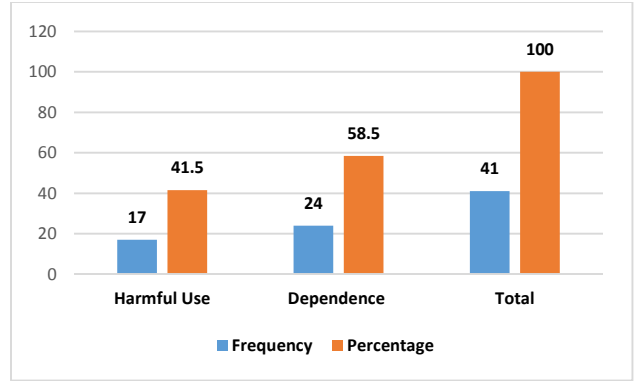


Figure-3: Pattern based distribution of substance users (n=41)

Table-2: Demographic details of all the patients

Parameters	Frequency N	Percentage %
Gender		
Male	67	77.9
Female	19	22.1
Marital Status		
Single	37	43
Married	49	57
Education		
University level	14	16.3
Higher secondary school	24	27.9
Secondary school	26	30.2
Primary school	13	15.1
Illiterate	9	10.5
Employment status		
Employers	45	22.1
Unemployed	41	77.9
Social Status		
Higher class	12	14
Middle class	47	54.7
Lower class	27	31.4

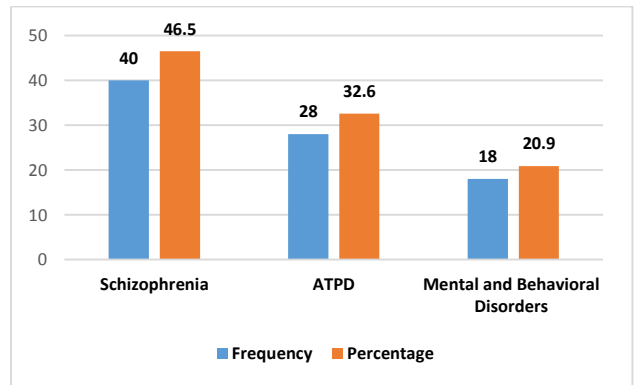


Figure-4: Diagnosis base distribution of substance users (n=86)

**DISCUSSION**

Our findings reported a high incidence of substance use in drug-induced patients (47.7%). Of the total patients, 41 were substance users. Significant association has been reported between substance use and socio-demographic variables. In the present study, cannabinoids were the prevalent substance (46.3%) used followed by multiple drugs (36.6%) and opioids (9.6%). These findings were consistent with various studies conducted in the UK [17], Australia [18], and Canada [19] where cannabis besides alcohol was a commonly used substance. Compared to other substances, alcohol was less prevalent in psychotic disorder patients due to religious and cultural disapproval among ethnic groups. Also, availability, affordability, and lack of social norm conformity besides illegal consideration. Substance dependency

was more prevalent and higher in our study. Dependency patients were about 58.5%. Harmful behaviors were observed among cannabis substance users.

Psychotic disorders patients had similarities in mean age between user and no-users. Our findings contradict other published research [20-22] which reported that younger age substance users had a higher prevalence of psychosis compared to an older age. Another study found no significant association between alcoholic patients and the general population suffering from psychotic disorders [23].

Out of 41 substance users, males and females were 87.8% and 12.2% respectively. A previous study found similar results that male proportion is prominent in substance use [24]. The higher rate of the male population in substance users are might be belief in our socio-culture that females don't express their issues and their substance usage is disparaged. Most of the substance users were unemployed which represents unemployment leads to psychotic disorder.

Patients with education level up to secondary level were prevalent (30.2%) during psychotic disorders disease presentation. Our findings matched with other studies' results, according to which illiterate people had a higher proportion of substance users compared to educated people [25, 26]. Secondary school students are more susceptible to substance users due to their curiosity and capitulate to aristocrat pressure to use substances.

About 51% drug users were married. This result contrasts with other studies [27, 28] which found that substance abuse comorbidity and psychosis was considerably connected with unmarried status. One cause for this disparity could be that in Pakistani culture, it is customary to marry at a younger age than in Western society. Both substance users and non-users belonged to the same family which could be explained by social paradigm. The majority of families are joint families. Despite the existing disparities, our research demonstrated that substance use is common in drug-induced patients.

## CONCLUSION

Our study revealed that substance abuse is common among drug-induced psychiatric patients. It was also discovered that unemployment could be one of the causes of substance abuse. Our study found a higher prevalence of schizophrenia.

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