



## **SYMPTOM PROFILE OF SUBSTANCE INDUCED PSYCHOSIS VERSUS PSYCHOSIS WITH COMORBID SUBSTANCE AT KUWAIT ADDICTION TREATMENT CENTER**

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<p><b>Received:</b> August 20<sup>th</sup> 2022 <b>Accepted:</b> September 20<sup>th</sup> 2022 <b>Published:</b> October 26<sup>th</sup> 2022</p>	<p><b>Background:</b> The determination of possible indicators of the abnormalities could facilitate their detection and management because the differential diagnosis of substance-induced psychotic disorder and psychosis with comorbid substance is especially difficult while in a severe admittance when psychotic symptoms are at their worst. The article compares individuals with substance-induced psychosis and individuals with psychosis and concomitant drug to examine the phenomenological elements and many factors affecting the clinical picture.</p> <p><b>Methods:</b> A comparative cross-sectional research study involving 60 patients who were admitted to Kuwait Addiction Treatment Center's dual diagnosis unit between April 2021 and October 2021 and evaluated with substance use disorders with psychotic characteristics.</p> <p><b>Results:</b> Participants with substance-induced psychosis were younger, more likely to be single, less probable to have a relatives history of mental health comorbidity conditions, and had significantly reduced average rating on positively, negatively, and overall psychopathology particularly in comparison to those with psychosis and comorbid substances use disease. Subscales of PANSS.</p> <p><b>Conclusion:</b> On the basis of a number of demographics, familial, and clinical traits, substance-induced psychosis and psychosis with co-occurring substances use disorders were separated from each other.</p>

**Keywords:** Substance use disorder, Dual diagnosis, Psychosis with comorbid substance use, Substance induced psychosis, Mental health

### **INTRODUCTION**

Substance use disorders (SUDs) are complicated diseases that impact behaviour and brain function. They are marked by decreased performance and do great harm to both the people who have them and to society at large <sup>(1)</sup>.

About 275 million individuals globally, or 5.6% of the globe's individuals between the ages of 15 and 64, consumed drugs at least once in 2016. It is a global phenomenon. About 31 million people use drugs, and some of them have drug use disorders, which means that their drug use has caused them damage to the extent that they may require therapy <sup>(2)</sup>.

With the exception of tobacco dependence, between 40% and 70% of people with first-episode psychosis who use drugs or alcohol meet the requirements for a cooccurring substances use disorders. Alcohol, amphetamines, cocaine, LSD, and cannabis can all cause psychotic symptoms. Individuals with first-episode psychosis were reported to routinely use more marijuana and alcohol <sup>(3)</sup>.

There is a strong belief that, in the lack of a family background, substance usage raises the probability of psychosis <sup>(4)</sup>. In the absence of a genetic susceptibility, substance use could cause neurochemical changes that hasten the onset of psychosis <sup>(5)</sup>. Consequently, there could be a difference between the etiologies of primary psychotic



disorders (PPD) and substance-induced psychotic disorders (SIPD) <sup>(6)</sup>.

Healthcare facilities, crisis centres, and other emergency facilities frequently see patients with substance-induced psychosis (SIP), but there is far less study on the condition's therapy and long-term prognosis than there is for basic psychosis <sup>(7)</sup>. The difference between a primary psychosis (PP) that co-occurs with the consumption of alcohol or other substances and a substance-induced psychosis (SIP) is essential for comprehending the course of the disease and formulating an effective treatment plan, especially when the psychotic disorder has just recently started <sup>(8)</sup>. Therefore, it can be difficult to distinguish SIP from PP <sup>(9)</sup>. Despite the sharp rise in SIP hospitalizations, less research has been done on the disorder's clinical manifestations than there has been for PP <sup>(10)</sup>.

Psychosis and substance abuse are closely associated. Throughout this article, Starzer et al. <sup>(11)</sup> report on a register-based research, 32% of people with any substance-induced psychosis subsequently adapted to either schizophrenia or bipolar disorders, with a vast bulk 26% provided the former assessment. The study was intended to ascertain as to if people with substances-induced psychosis diagnoses and no prior history of schizophrenia spectral range or bipolar disorder converted to either schizophrenia or bipolar disorders over a 20-year period. Within 3 years or 4.5 years, correspondingly, following the incident substance-induced event, 50% of those who switched to schizophrenia or bipolar disorders accomplished so.

The probabilities of transition to bipolar disorder and schizophrenia were significantly different. Generally, conversion percentages from substance-induced psychosis to schizophrenia were greater than for bipolar illness and varied depending on the substance in question. Amphetamines and cannabis were the key substances linked to increased rates. Broad confidence intervals, which may be a reflection of the lower number of people who converted to bipolar disorder, meant that the substance kind utilised had no various impacts on conversion rates. Additional distinction that has been noted is the younger age at which substance-induced psychosis occurs (16–25 years) <sup>(11)</sup>.

Several young people who arrive with a SIP can have a mental disease and associated substance use problem that is undiagnosed. Such a diagnosis may lead to stigmatisation, unwarranted long-term antipsychotic prescription use, and detrimental consequences on social, academic, and career performance <sup>(9)</sup>. It's critical to understand the differences between a SIP and a PP since they call for completely different methods to treatment <sup>(12)</sup>.

Distinguishing between the clinical presentations of a drug induced psychosis and a psychiatric disorder with comorbid substance use patients can be challenging. The right diagnosis will have positive outcome on management, the outcome of the treatment and will add consistency to the diagnosis over time.

#### **Rationale of the study:**

Recognizing the course of the illness and deciding on the best course of therapy depends on knowing the difference between a substance-induced psychosis and a psychotic condition that co-occurs with the consumption of alcohol or other drugs.

#### **Aim of the study:**

To contrast the clinical profile of a sample of individuals with drug-induced psychosis with that of a different group of patients with psychosis and concomitant substance.

### **PATIENTS AND METHODS**

**Study design:** This is a comparative cross-sectional study.

#### **Features of the research population and study area:**

From April to October 2021, this research was carried out in the Kuwait Addiction Treatment Center. All participants who met the inclusion requirements and gave their agreement to participate in the trial were enrolled. In accordance with the DSM-5 criteria, patients must be males between the ages of 18 and 45 who have been identified with a primary psychotic disorder and concomitant substance use disorder or substance-induced psychosis. Individuals with psychosis related to a general health condition or associated with a medical or neurological problem or aged under or above our age range, as well as those with these factors, were removed from the study.

#### **Sampling:**

Sixty patients were enrolled in the trial, and they were divided into two groups based on their diagnoses: Group I consisted of individuals who met the criteria for psychosis with concurrent substance use. Individuals in Group II who meet the criteria for substance-induced psychosis.

#### **Data collection tools and measurements:**

All respondents were informed about the study, and those who agreed to take part would be assessed between one week and one month after the symptom onset using the Structured Clinical Interview for DSM-IV (SCID-I) and the Positive and Negative Syndromes Scaling (PANSS).

#### **Ethical Consideration**

The Kuwait Ministry of Health approved the article's ethical conduct. Participants undergo assurances regarding the privacy of their personal



data. Patients were made aware that taking part in the research was fully voluntary and that they might opt out of the evaluation at any moment. They were also told that discontinuing the trial would not have an impact on their treatment.

**Study procedure:**

- 1- All subjects were informed of the study's objectives and overarching concepts before providing their written consent. Additionally, the participants' names weren't listed on the questionnaire due to ethical reasons, which also included the protection of secrecy and identity.
- 2- Individuals' sociodemographic information was recorded in a specially created socio demographic sheets.
- 3- Participants were divided into two categories based on their diagnoses: Individuals in Group I who meet the criteria for psychosis with concomitant substance use. Individuals in Group II who meet the criteria for substance-induced psychosis.
- 4- To verify substance usage, the two patient groups underwent thorough drug testing.
- 5- All patients were tested upon admittance using the Structured Clinical Interview for DSM-IV (SCID-I) and a semi-structured diagnostic sheets used by addiction treatment facilities. The evaluation included questions about each patient's age, address, level of education, past psychiatric history, past medical history, family medical history of psychiatric disorders as well as other health problems, and mental state.
- 6- When individuals were admitted, a urine drug test and blood alcohol concentration were used to determine whether they had used drugs.
- 7- Positive and Negative Syndrome Scale interviews were conducted with all participants between one week and one month after the onset of symptoms (PANSS).

Using the SCID-I (Structured Clinical Interview for DSM-IV), an axis I diagnoses are determined. It was utilised by both teams. This new semi-structured diagnosis interview uses the DSM-IV. The part on demographic data and clinical history is the first in the

document. The following seven diagnostic courses are centred on several diagnostic categories, including moods, psychotic, substances usage, stress, somatoform, nutrition, and adjustment disorders. Skip aways are exposed to mandatory and discretionary probes when no additional questioning is necessary. It is widely utilised in different types of psychiatric research and is regarded as the standard assessment for confirming the diagnosis in clinical studies (13).

The research implemented the English version of the Positive and Negative Syndrome Scale (PANSS), a professional tool for assessing the intensity of schizophrenia individuals' symptomatology. Thirty distinct symptoms are scored for the patient on a scale of 1 to 7. an upward scale (including: delusions, conceptual disorganization, hallucination.) Negative scale, 7 items, lowest score 7, maximum score 49: (including blunted affect, emotional withdrawal, poor rapport) 7 items (7 minimum and 49 maximum points), Measure for generalized psychopathology: (including: somatic concern, anxiety, poor attention, judgment, and insight.) PANSS overall score: minimum: 30, maximum: 210 for 16 items (minimum scoring: 16, maximum scoring: 112) (14).

**Statistical Analysis:**

The findings were examined, assigned codes, and entered into IBM SPSS version 23 of the Statistical Package for Social Science. With parametric data, quantitative data were presented as averages, standard deviations, and ranges. Non-quantitative statistics were also shown as ratios and numbers. In non-quantitative data comparison, the Chi-square test was used. Independent t-test was used to compare quantitative data with the descriptive structures. The allowable margin of error was set at 5%, while the confidence interval was set at 95%. Thus, a p-value was considered significant if it was less than 0.05.

**RESULTS**

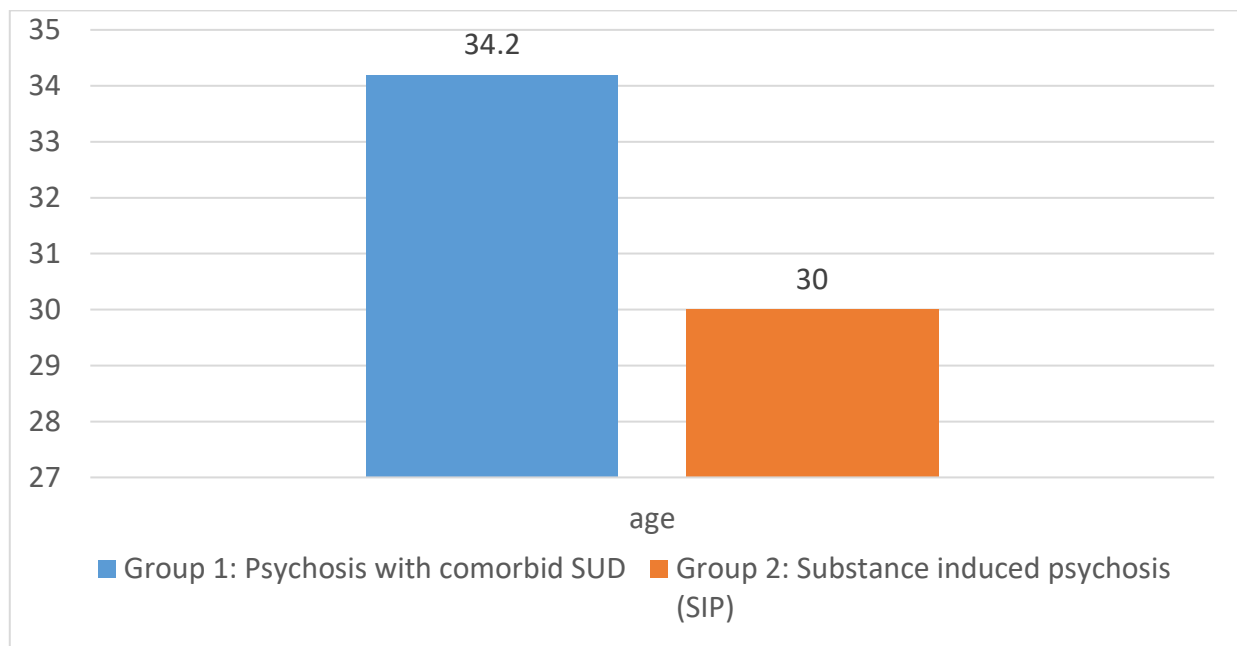
Over the course of the study's six-month period, 60 patients were enrolled. They were separated into two further categories: those with a diagnosis of co-occurring substance use disorders and psychosis (N = 30). The other group with a diagnosis of substance induced psychosis (N = 30). All patients were assessed on admission and one week and one month from the onset of symptoms.

**Table 1. Sociodemographic characteristics of the studied sample**

	Psychosis with comorbid SUD (N= 30)			Substance induced Psychosis (N= 30)
Marital status	Single	No.	16	24
		%	53.4 %	80.0%
	Married	No.	7	1



		%	23.3 %	3.3 %
	Divorced	No.	7	5
		%	23.3 %	16.7 %
Occupation	Jobless	No.	22	22
		%	73.3%	73.3%
	Working	No.	8	8
		%	26.7 %	26.7 %
Education	Secondary	No.	30	27
		%	100.0%	90.0%
	University	No.	0	3
		%	0.00%	10.0%
Medical comorbidity	No	No.	28	26
		%	93.3%	86.7 %
	Yes	No.	2	4
		%	6.7%	13.3 %
Family history of Psychiatric comorbidity	No	No.	23	29
		%	76.7 %	96.7 %
	Yes	No.	7	1
		%	23.3 %	3.3%
Family history of substance use	NO	No.	22	25
		%	73.3%	83.3 %
	Yes	No.	8	5
		%	26.7%	16.7 %
Type of substance	THC	No.	6	9
		%	20.0%	30.0%
	Amphetamine	No.	11	16
		%	36.7%	53.3%
	Synthetics	No.	4	0
		%	13.3%	0.00%
	Alcohol	No.	1	0
		%	3.3%	0.00%
	polysubstance	No.	8	5
		%	26.7%	16.7%



**Figure 1. Mean age in years regarding the studied groups**

The study showed that, among patients with psychosis with comorbid substance use disorder, the mean age was **34.2± 6.5** years in comparison to **30± 7.2** years in patients with drug induced psychosis (**Figure 1**).

As regard marital status, 53.4 % of patients with psychosis with comorbid substance use disorder were single, while 23.3% were married and divorced in comparison to 80 % of patients with drug induced psychosis were single, while 3.3% were married and 16.7% were divorced (**Table 1**).

As regard occupational status among patients with psychosis with comorbid substance use disorder, Jobless patients represented 73.3% while 26.7% had a job, in comparison to 73.3% and 26.7% of patients with substance induced psychosis respectively (**Table 1**).

As regard educational level, all patients with psychosis with comorbid substance use disorder got secondary education certificate, while 90% of substance induced psychosis patients got secondary education certificate and 10% got higher university education (**Table 1**).

As regard medical comorbidity in patient with psychosis with comorbid substance use disorder, 93.3% had no medical comorbidity while 6.7% had a

medical comorbidity in comparison to 86.7% and 13.3% of patients with substance induced psychosis respectively (**Table 1**).

As regard family history of psychiatric comorbidity, more than two third (76.7%) of patients with psychosis with comorbid substance use disorder had no family history of psychiatric comorbidity while 23.3% had a family history of psychiatric comorbidity in comparison to 96.7% and 3.3% of patients with substance induced psychosis respectively (**Table 1**).

As regard family history of substance use, more than two third (73.3%) of patients with psychosis with comorbid substance use disorder had no family history of substance use while 26.7% had a family history of substance use in comparison to 83.3% and 16.7% of patients with substance induced psychosis respectively (**Table 1**).

As regard type of substance use in patient with psychosis with comorbid substance use disorder, there were 36.7% used amphetamine, 26.7% used polysubstance 20.0% used THC, 13.3% used synthetics and 3.3% used alcohol, in comparison to patients with substance induced psychosis, there were 53.3% used amphetamine 30.0% used THC, and 16.7% used polysubstance (**Table 1**).

**Table 2. Sociodemographic characteristics of the studied sample regarding to grouping**

	Psychosis with comorbid SUD	Substance induced psychosis		Chi –square	P. value
		No.			
Marital status	Single	No.	16	6.4	0.04*
		%	53.4 %		



	Married	No.	7	1		
		%	23.3 %	3.3 %		
	Divorced	No.	7	5		
		%	23.3 %	16.7 %		
Occupation	Jobless	No.	22	22	0.00	1.00
		%	73.3%	73.3%		
	Working	No.	8	8		
		%	26.7 %	26.7 %		
Education	Before university	No.	30	27	3.15	0.07
		%	100.0%	90.0%		
	University	No.	0	3		
		%	0.00%	10.0%		
					T test	P .value
Age	Mean ±S.D	34.2± 6.5	30±7.2		0.917	0.02*

\* $p \leq 0.05$  is significant

The study showed that, there was a statistically significant difference between the 2 groups regarding the age, in which the mean age of psychosis with comorbid SUD group was  $34.2 \pm 6.5$  years compared with  $30 \pm 7.2$  years in substance induced psychosis group ( $p=0.02$ ) (Table 2).

Also, there was a statistically significant difference between the 2 groups regarding marital status, as 53.4% of patients with psychosis with

comorbid SUD were single, 23.3% were married and divorced, compared to 80.0 % of patients with substance induced psychosis were single, 3.3% were married and 16.7% were divorced ( $p=0.04$ ) (Table 2).

There was no statistically significant difference between the 2 groups regarding occupational status and the education level (Table 2)

**Table 3. Medical and psychiatric comorbidity of the studied sample**

	Psychosis with comorbid SUD		Substance induced psychosis		Chi -square	P. value
Medical comorbidity	No	No.	28	26	0.741	0.389
		%	93.3%	86.7 %		
	Yes	No.	2	4		
		%	6.7%	13.3 %		
Family history of Psychiatric comorbidity	No	No.	23	29	5.192	0.02*
		%	76.7 %	96.7 %		
	Yes	No.	7	1		
		%	23.3 %	3.3%		
Family history of substance use	NO	No.	22	25	0.884	0.347
		%	73.3%	83.3 %		
	Yes	No.	8	5		
		%	26.7%	16.7 %		
Type of substance	THC	No.	6	9	7.21	0.12
		%	20.0%	30.0%		
	Amphetamine	No.	11	16		
		%	36.7%	53.3%		
	Synthetics	No.	4	0		
		%	13.3%	0.00%		
	Alcohol	No.	1	0		
		%	3.3%	0.00%		
	Polysubstance	No.	8	5		





		%	26.7%	16.7%		
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**\*p ≤ 0.05 is significant**

Despite having no statistically significant difference as regards type of substance, medical comorbidity and family history of substance use, the data concerning

the presence of family history of psychiatric illness were statistically significant different between the two groups (**P = 0.02**) (**Table 3**).

**Table 4. PANSS score of the studied sample**

	4 <sup>th</sup> week			T TEST	P. value
	psychosis with comorbid SUD		substance induced psychosis		
PANSSP	Mean ±S.D	5.8±5.9	1.0±1.5	4.310	0.00*
PANSSN	Mean ±S.D	4.7±4.9	1.3±1.6	3.55	0.00*
PANSSG	Mean ±S.D	10.8±7.1	4.9±4.02	3.937	0.00*

The two studied groups were assessed as regard the symptom severity using the PANSS to study the different clinical description of both groups. The study showed that, there was a statistically significant difference between the 2 groups regarding PANSS positive score, in which the mean of PANSS positive for Psychosis with comorbid SUD group was 5.8 ± 5.9 years compared with 1.0 ± 1.5 years in substance induced psychosis group (**p=0.00**) (**Table 4**).

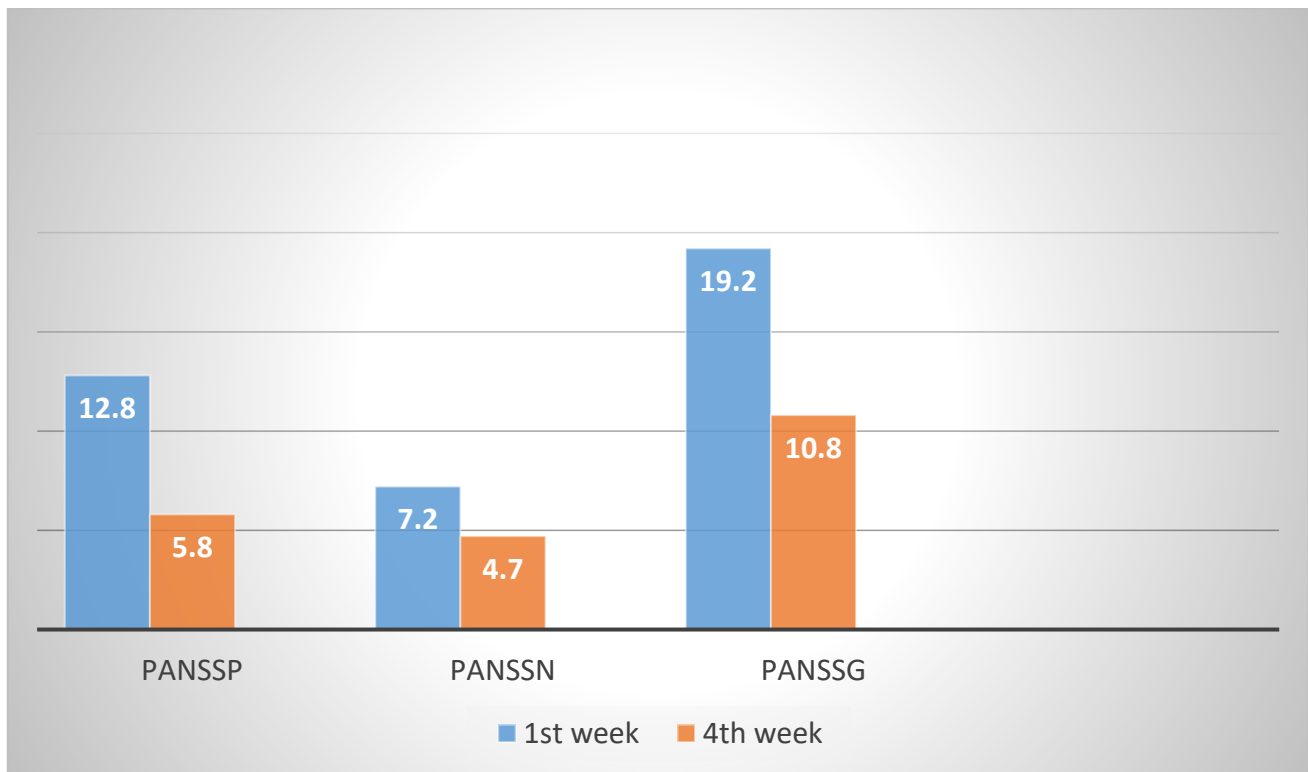
There was a statistically significant difference between the 2 groups regarding PANSS negative

score, in which the mean of PANSS negative for psychosis with comorbid SUD group was 4.7 ± 4.9 years compared with 1.3 ± 1.6 years in substance induced psychosis group (**p=0.00**) (**Table 4**).

There was a statistically significant difference between the 2 groups regarding PANSS general psychopathology score, in which the mean of PANSS general for Psychosis with comorbid SUD group was 10.8 ± 7.1 years compared with 4.9 ± 4.02 years in substance induced psychosis group (**p=0.00**) (**Table 4**).

**Table 5. PANSS score of patients with psychosis with comorbid SUD**

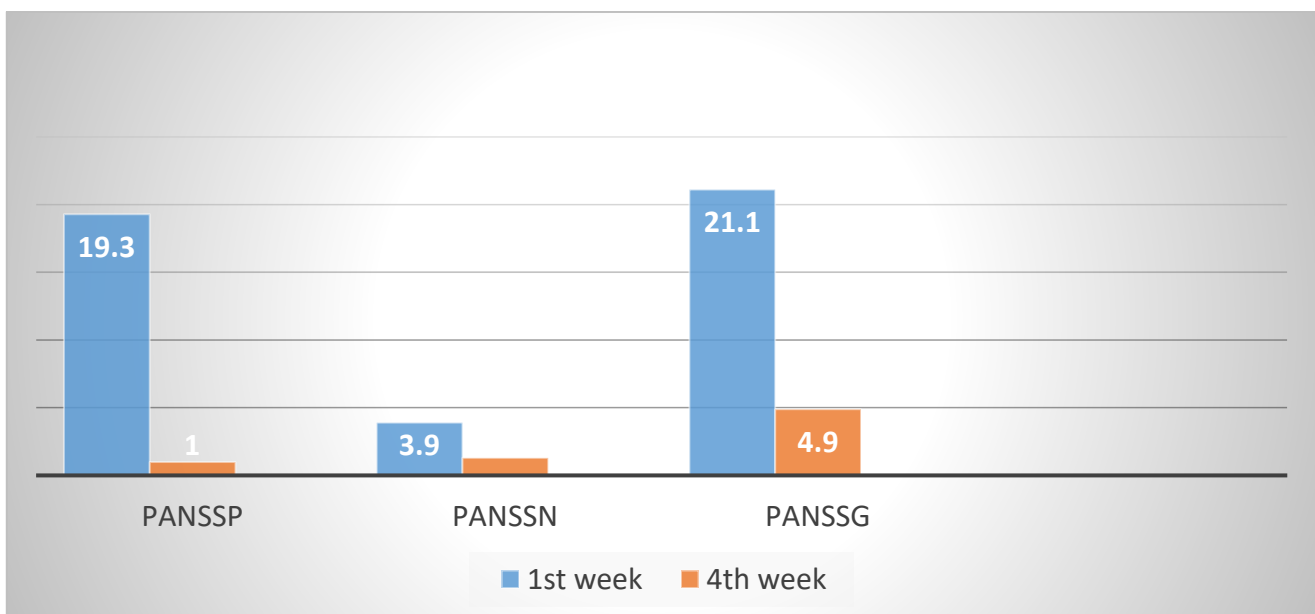
	Psychosis with comorbid SUD			Paired T TEST	P. value	Mean difference
		1 <sup>st</sup> week	4 <sup>th</sup> week			
PANSSP	Mean ±S.D	12.8±8.5	5.8±5.9	5.59	0.00*	8
PANSSN	Mean ±S.D	7.2±6.5	4.7±4.9	5.221	0.00*	2.5
PANSSG	Mean ±S.D	19.2±9.4	10.8±7.0	6.743	0.00*	8.4



**Figure 2. PANSS score of patients with psychosis with comorbid SUD**

**Table 6. PANSS score of patients with drug induced psychosis**

	Substance induced psychosis			Paired T TEST	P. value	Mean difference
		1 <sup>st</sup> week	4 <sup>th</sup> week			
PANSSP	Mean ±S.D	19.3±6.9	1.0±1.5	14.8	0.00*	17.7
PANSSN	Mean ±S.D	3.9±2.3	1.3±1.6	5.54	0.00*	2.6
PANSSG	Mean ±S.D	21.1±9.0	4.9±4.02	9.74	0.00*	16.2



**Figure 3. PANSS score of patients with substance induced psychosis**





The 2 studied groups were assessed as regard the mean difference of symptom severity between the first and the fourth week of the two studied groups using the PANSS.

The study showed that, the mean difference of PANSS positive for patient with psychosis with comorbid SUD was 8 in comparison to 17.7 for patients with substance induced psychosis (**Table 5,6**) (**Figure 2,3**).

The study showed that, the mean difference of PANSS negative for patient with psychosis with comorbid SUD was 2.5 in comparison to 2.6 for patients with substance induced psychosis (**Table 5,6**) (**Figure 2,3**).

The study showed that, the mean difference of PANSS general psychopathology for patient with psychosis with comorbid SUD was 8.4 in comparison to 16.2 for patients with substance induced psychosis (**Table 5,6**) (**Figure 2,3**).

## DISCUSSION

The diagnostic differentiation between psychosis brought on by substance abuse and psychosis with concurrent SUD is crucial since each condition necessitates a unique course of treatment. People who have drug-induced psychosis, for instance, may require alternative medications, no treatments, or limited medication treatment. They could also be more vulnerable to the negative effects of antipsychotic drugs.

A proper diagnostic evaluation is especially important in the early phases of psychotic disorder, when the diagnostic image is frequently obscured by the existence of substance usage, even if psychoactive drugs use may cause a chronic schizophrenia illness.

The present study looked at the various traits of individuals with concomitant SUD and substance-induced psychosis and psychosis. We predicted that the clinical and demographic features of the two groups of patients will vary.

### Differences in demographic characteristics

Two significant distinctions were discovered when the subgroups with substance-induced psychosis and psychosis with concurrent SUD were contrasted on demographic traits. With an average age of 30.0 years as opposed to 34.2 years for those with psychosis and concurrent SUD, individuals with substance-induced psychosis were younger. In contrast to those who had psychosis with concurrent SUD, a higher percentage of those with a diagnosis of substance-induced psychosis (80.0%) was already single. Additionally, opposed to 23.3% of individuals in the psychosis with concomitant SUD subgroup, only 3.3% of individuals in the substance-induced group were married. The two groups' employment and

educational levels did not differ significantly from one another.

### Differences in family characteristics and type of substance

In contrast to psychosis with co-occurring SUD, substance-induced psychosis had a lower positive family history of mental comorbidity when evaluated on the basis of family features. Although there was little difference between the two groups in terms of the type of substance used and family background of medical and substances usage problems.

### Differences in clinical characteristics

On the PANSS's assessment of general psychopathology, the significant disparities were seen. Individuals with psychosis and concurrent SUD showed substantially higher average scores on the positive symptoms sub - scales (5.8 vs 1.0), the negativity symptoms sub - scales (4.7 vs 1.3), and the overall psychopathology sub - scales than those in the substance-induced psychosis category (10.8 vs 4.9).

Additionally, the average difference in total psychopathology between one week and one month after the onset of symptoms, as determined by the PANSS. Upon that positive symptoms sub - scale (17.7 vs 8.0), the negative symptom subscale (2.6 vs 2.5), and the overall psychopathology subscale, participants in the subgroup with substance-induced psychosis exhibited greater mean variance scores than individuals in the group with psychosis and concomitant substance (16.2 vs 8.4).

The findings of the study regarding patients' ages in both groups were comparable to those of a 2011 Australian study by Dawe et al. <sup>(15)</sup> Wherein he contrasted primary psychosis (PP), which included 98 individuals, with substance-induced psychosis (SIP). Individuals in the SIP cohort were on mean 25 years old, which was much younger than the mean age of the individuals with PPD, who was 29 years old. In addition, Starzer et al.'s research <sup>(11)</sup> demonstrated that drug-induced psychosis occurred at a younger age (16–25 years) than psychosis with concomitant substances.

The study's findings in relation to family history of psychiatric condition were in line with those of a research by Fraser et al. <sup>(9)</sup> comparing 61 young persons with first episode substance induced (SIP) and primary psychotic disorder (PPD), it was discovered that PPD sufferers were much more likely than SIP participants to have a family background of psychosis.

Despite the fact that there was no statistically significant distinction between the two categories in the findings of the current investigation regarding family history of substances use, Caton et al. <sup>(8)</sup> found that individuals with substance-induced psychosis



seemed to have a greater proportion of positive familial histories of substance use rather than did the psychosis with concomitant SUD group.

Regarding other demographic factors, it was noteworthy that there were no significant variations between the two analysed groups in terms of employment and educational attainment. This conclusion was in agreement with the findings of the survey performed by Okasha et al. in 2016 <sup>(16)</sup> which determined that first episode individuals with a SIP and PPD during an acute hospitalisation had similar features in terms of job and educational attainment.

Over than 50% of individuals with SIP utilised stimulants, according to the study's findings regarding substance usage, which contrasts with research conducted by Drake et al. in 2011 <sup>(7)</sup> who contrasted 217 individuals with early stages primary psychosis to 134 individuals with a SIP found that the particular symptoms in the SIP group were psychosis caused by two or more substances, most frequently cannabis and one additional drug.

According to the findings of the present study, individuals with psychosis and a concomitant drug had far more acute positive, negative, and overall psychopathological characteristics. These results correspond with those of the 2005 survey by Caton et al. <sup>(8)</sup> which showed that patients with initial psychosis would have more severe mental symptoms related to less awareness. This conclusion applies to both positive and negative symptoms, as well as general psychopathology.

Additionally, similar to the findings of the current investigation, a 2011 study by Drake et al <sup>(7)</sup> in psychiatric emergency departments at health facilities in Upper Manhattan received 217 patients with early-phase primary psychosis and 134 patients with early-phase SIP. Researchers compared these two groups, and discovered that the primary psychosis cohort steadily exhibited increased rates of both positive and negative psychotic symptoms.

As was previously said, some research found important distinctions between individuals with substance-induced psychosis and those with psychosis with concomitant SUD, whereas other researchers prove no differences between the two patient groups other than for a few minor factors. It is hard to say whether substance-induced psychosis and psychosis with comorbid substances have a differing profile due to such vast variation or because of the nature of psychotic symptoms of every disease because of variations in the study communities, sociodemographic characteristics, length of illness, and timescale of evaluations. Therefore, people with psychosis and drug use need to be closely monitored and periodically reevaluated.

## **CONCLUSION**

As a conclusion, the research presents a list of factors that separate substance-induced psychosis and psychosis with concomitant SUD from each other. These factors may be used as a guide by physicians who are responsible for making diagnoses and treatment choices. In order to better comprehend the connection between substance use and psychotic disease, which continuing to pose challenges for efficient management and treatment the results point to future areas for interdisciplinary research.

## **LIMITATIONS**

There are a few restrictions on this study. Firstly, the article's cross-sectional methodology merely provided a snapshot of the sampling findings without conducting further analysis; as a result, any effort to forecast the future using the results must be cautiously made.

Secondly, the small sample size prevents the current findings from being generalised because a larger sample size might have greater statistical power.

Thirdly, because only behavioural data are used to make diagnostic and symptom evaluations, future investigations should take advantage of improvements in neuroscience to look for biological markers and conduct studies that could clarify the difference between primarily and substance-induced psychosis.

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