

## THE PATTERN OF SUBSTANCE USE IN ADMITTED PSYCHIATRIC PATIENTS

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### ABSTRACT

**Background:** Substance abuse is very common problem in Psychiatric Patients. This study assesses the Pattern of substance use among the admitted psychiatric patients in Department of psychiatric RNT medical college, Udaipur. **Method:** Pattern of Substance use were assessed from 1<sup>st</sup> June 2014 to 31<sup>st</sup> August 2014 admitted in psychiatric dept. (n=502) using the ICD-10 criteria for diagnosis. **Results:** Most patients belong to low socioeconomic status, education up to primary level. 80% patients were suffering from schizophrenic and bipolar illness. 80% of male and 23% of females were using substance. Most commonly Tobacco, alcohol and cannabis. **Conclusion:** Majority of subjects belongs to low socioeconomic status, about ¾ of subjects were schizophrenic and bipolar. Most common substance use was tobacco followed by alcohol in males and opium in females.

**KEYWORDS:** substance use; low socioeconomic status, tobacco.

### INTRODUCTION:

We learn from history that man has always sought respite from trials and tribulations of daily life in certain drugs, herbs and potions which have the capacity of relieving tension, anxiety, fatigue, frustration and indeed transformation of reality into trance or ecstatic states. Amongst these drugs, alcohol appears to have the approval and acceptance in some societies provided it is used sensibly and in moderate quantities. Their uses are often

associated with a variety of cultural ceremonies. Opium has been used for medicinal purposes for at least, 3,500 years, references to cannabis (marijuana) as a medicinal can be found in ancient Chinese herbals.

With the introduction of the hypodermic needle in the mid-19<sup>th</sup> century, morphine could be injected and became subject to misuse by that route. Intravenous (IV) morphine and heroin use

began to spread in the early part of the 20<sup>th</sup> century. By the mid-20<sup>th</sup> century, cigarette smoking was a popular practice.

In 2000, the department of substance abuse was merged with the department of mental health to form the department of mental health and substance abuse, reflecting the many common approaches of management of mental health and substance use disorders.

Individuals with lower level of self-control, which may reflect impairments of brain inhibitory mechanisms, may be particularly predisposed to develop substance use disorders, suggesting that the roots of substance use disorders for some persons can be seen in behaviours long before the onset of actual substance use itself.

## MATERIAL AND METHODS

**Research setting:** This study was conducted in the Department of Psychiatry at M.B. Govt. Hospital, RNT Medical College, Udaipur. **Study population:** Study was conducted on all patients admitted in psychiatry department and diagnosis was based on “ICD-1 MANUAL”. **Duration of study:** From 1<sup>st</sup> June, 2014 to 31<sup>st</sup> August 2014. **Study design:** It was an observational study.

**Inclusion criteria:** The close caregiver / patient should give informed consent. All patients admitted in department of psychiatry between 12 to 65 years of age. **Exclusion criteria:** Patient / caregiver not willing to give informed consent. Patients were having age below 12 years and above 65 years. Patients had Any significant medical or neurological illness.

**Method:** Study participants included all (12-65 years) patients admitted to Department of Psychiatry at M.B. Govt. Hospital, Udaipur over a period of 3 months (from 1<sup>st</sup> June 2014 to 31<sup>st</sup> August, 2014) and gave consent for study.

On admission information on demographic data, patient’s admission information (e.g. voluntary or compulsory, first or re-admission), patient’s psychiatric and substance use history obtained on a self designed performa. This data sheet was completed on discharge. Psychiatric disorder, psychoactive substance harmful use (abuse) and dependence were diagnosed as per the WHO International Classification of Diseases ICD-10 and confirmed by consultant psychiatrist.

## Statistical Analysis

The data was analysed using chi-square with the help of statistical software SPSS version

## RESULTS

**Table 1. Diagnostic cluster wise distribution of substances**

Name of substance used	Psychiatric diagnosis				
	Schizophrenia and related disorders	Mood disorders	Substance use and related disorders	Neurotic, stress and somatoform related disorders	Other psychiatric disorders

	M	F	M	F	M	F	M	F	M	F
<b>Total subjects</b>	108	103	128	80	51	5	4	12	1	10
<b>Tobacco</b>	47	17	58	20	0	0	4	0	0	1
	43.51	16.5	45.31	25	0	0	100	0	0	10
<b>Alcohol</b>	1	1	8	1	14	0	0	0	0	0
	0.92	0.97	6.25	1.25	27.45	0	0	0	0	0
<b>Cannabis</b>	3	0	3	0	9	0	0	0	0	0
	2.77	0	2.34	0	17.64	0	0	0	0	0
<b>Opium</b>	0	0	1	1	19	5	0	0	0	0
	0	0	0.78	1.25	37.25	100	0	0	0	0
<b>Medication</b>	0	0	1	0	0	0	0	0	0	0
	0	0	0.78	0	0	0	0	0	0	0

**Table 2.**

Pattern of substance use in male				Pattern of substance use in female			
Once	Occasional	Abuse	Dependence	Once	Occasional	Abuse	Dependence
<b>1</b>	<b>10</b>	<b>16</b>	<b>207</b>	<b>0</b>	<b>8</b>	<b>1</b>	<b>38</b>
<b>0.4</b>	<b>4.3%</b>	<b>6.8%</b>	<b>88.5%</b>	<b>0%</b>	<b>17%</b>	<b>2.1%</b>	<b>80.9%</b>

## DISCUSSION

India is facing a problem of multiple epidemics with infectious diseases at one end of the spectrum and related diseases at the other end. The disease affecting mental health, including substance abuse disorders constitutes the remainder of the spectrum.

The major concern of this study is to identify pattern of substance use during course of various psychiatric disorders.

In the present study total 502 subjects were included out of them 292 (58.2%) were Males and 210 (41.8%) were females.

In this study total substance abuse in male patients was 80.1% with tobacco 58.2%, alcohol 24%, cannabis 14.1%, opium 10.6% and medication 0.3% while 'In female patients total substance abuse was 22.4% with tobacco 18.6%, opium 2.9%, and alcohol 1.4%. This study is almost similar in respect of alcohol and opium abuser with the study of Judith J. Prochaska et al (2005) they identified: 66 patients (27%) with alcohol abuse and opioids by 18 (7%). (8) This study is also supported, by study of JOHN R. DEQUARDO, RAJIV TANDON et al (1987-90) they concluded that Female subjects abused substances at a much lower rate than male subjects

In this study voluntary admission was only 12.8% while involuntary admission was 87.2%. Comorbid substance use in schizophrenia (males 70.4%, females 17.5%) was lower than mood disorders (males 80.5%, females 28.8%).

In this study tobacco users in male were 58.2% while in female 18.6%.the prevalence of tobacco in male users were 100% in neurotic group, 68% in mood disorders, 66.7% in schizophrenia, and 13.71 %in substance use disorders while in female users 26.2% in mood disorders, 16.5% in schizophrenia, and 10% in other psychiatric disorder.

In present study data shows that in 71.4% males and 87.2% females onset of psychiatric disorders does not have temporal relation with substance use. Onset of psychiatric disorders in male patients were due to intoxication (10.3%), and during withdrawal (3.8) phase, while in female patients it was due to during withdrawal (2.1%) phase. Similar findings observed in study of Rahul Saha P.K., Dalal et al (2009-2010) that Schizophrenic patients with cannabis use have significantly more positive symptoms compared to cannabis nonusers.

In primary psychiatric disorders the quantity and frequency of substance is increased (male 53.4%, female 48.9%) and around 15% in both males and females started using substance during course of psychiatric illness Around 73% (male 73.9%, female 72.3%) substance using subjects had never abstinence -period in last 5 yrs and rest had multiple unsuccessful attempts. The duration of substance use in most (73.3%) substances using subjects was >5yrs. In this study cultural factors (males 39.7%, females 44.7%) predominant over peer pressure (males 35.5%. females 21.3%). it is because of socially sanctioned pattern of substance use during various social and religious ceremonies in this region. Previous studies were in favor of peer pressure.

Community based studies need to be conducted to estimate the magnitude of this problem and to study the conditional factors influencing the use of substances. Health education regarding the harmful effects (physical and psychological) of substance use should be addressed in schools and colleges. Awareness Programs and Camps need to be conducted at community level to address this major public health problem of substance use.

## CONCLUSION

Patients had pure substance use disorders were only 11% of total patients. Co-morbid Substance use in males were 80.1% while females were 22.4%. Substance abuse is more common in' mood disorders than schizophrenic disorders. Most commonly used substance was tobacco in both sex followed by alcohol in males and opium in females. Around 3/4 substances using subjects had never abstinence period in last 5 yrs and rest had multiple unsuccessful attempts. The duration of substance use in most substances using subjects was >5 yrs. To conclude, substance use

disorders are prevalent among psychiatric inpatients within the Udaipur region, impacts negatively on the patients and also add to the burden of service delivery. Few patients however receive interventions for their co, morbid problem.

## LIMITATIONS

Psychiatric diagnoses were taken as a consensus working diagnosis and were not diagnosed using rating scales and the study has not compared the patients of substance abuse in normal population distribution so the prevalence of substance abuse cannot detect correctly also consumption of substances not confirmed by laboratory investigations.

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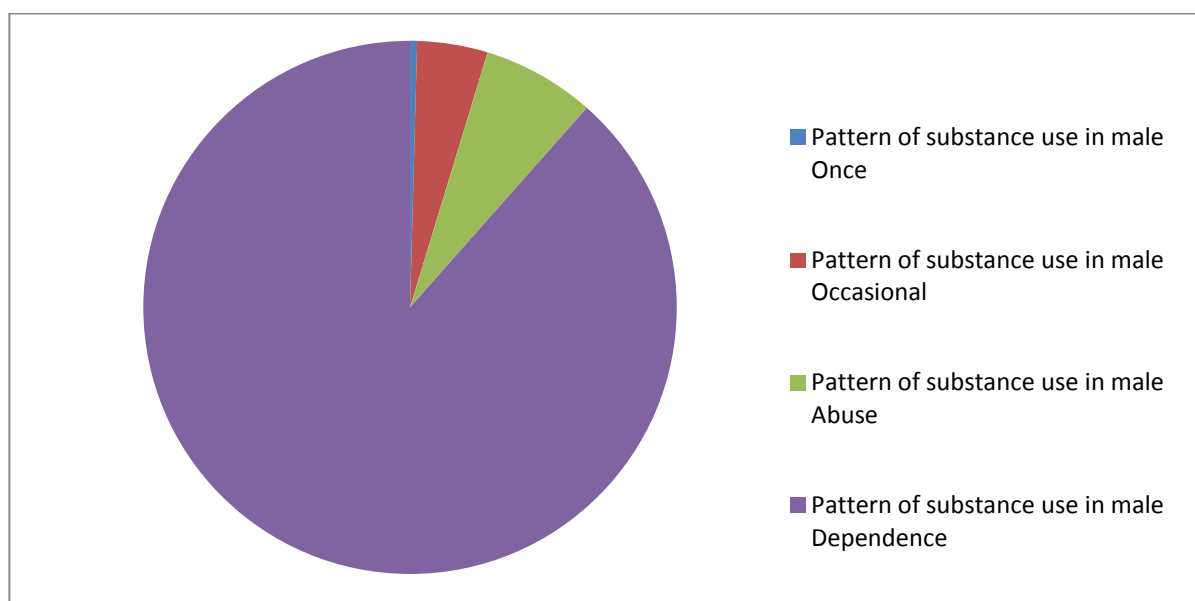
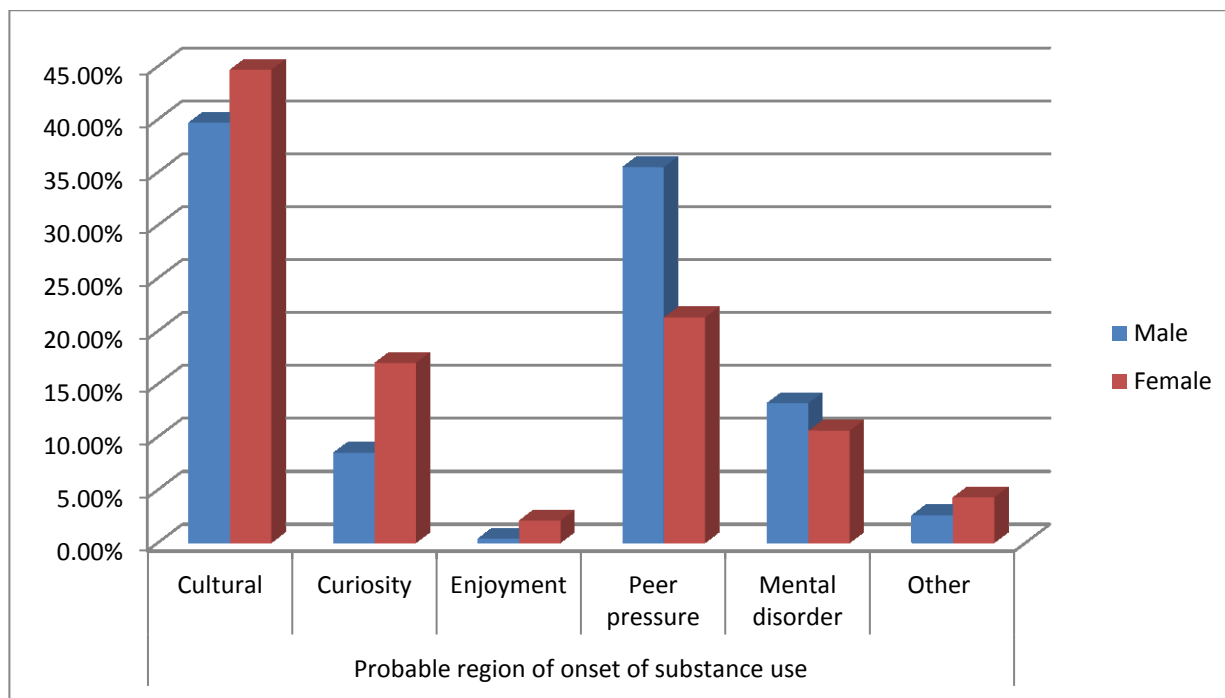
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### Figures 1

Probable region of onset of substance use



# Correlation between substance use and onset of psychiatric illness

