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ORIGINAL PAPER

Socio-demographic and Clinical Profile of Substance use Disorders Admitted in a Tertiary Hospital in Manipur

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ABSTRACT

Background: *Substance abuse is a widely prevalent and growing problem of the present day, especially in the state of Manipur. In this study we are trying to find out the clinical profile of substance users admitted patients in the De-addiction centre of Department of Psychiatry, RIMS.* ***Methods:*** *In this retrospective study, 700 samples were examined from the register of the in-patients, Department of Psychiatry, RIMS. All patients diagnosed with any kinds of substance abuse and admitted in the de-addiction centre of Department of Psychiatry from 9/ 2011 to 8/2015 were included in the study.* ***Results:*** *Majority of them are males 99.4% (n-696). 81.3% (n-569)are alcohol withdrawal out of which 62.9% (n-440) are uncomplicated withdrawal and 19.4% (n-136) are complicated withdrawal. 11.9% (n-83) are opioid users, 2.1%(n-15) are cannabis induced psychosis, 4.3% (n-30) are polysubstance use disorders. There are no deaths as such reported. Most common age group found with highest frequency of substance abuse was found to be within (31-40) years which is 35.6% (n-249).88.4% (n-619) are Hindus, 9.9% (n-69) are Christians, 1.7% (n-12) are Muslims.* ***Conclusion:*** *From this study we conclude that the most common cases admitted patients are among the alcohol withdrawal patients, however opioid and cannabis also are playing a role into the admission of patients into hospitals.*

Keywords: *Clinical profile, Substance abuse, admitted, Tertiary hospital*

INTRODUCTION

While there is great concern on the illicit effects of substance abuse and the increase rate of admission of patients with substance abuse in the Department of Psychiatry, RIMS, there has never been any effort to study the profile of substance use disorders admitted patients in Psychiatry Department RIMS. In the recent decades we have seen significant changes in the culture and pattern of substance abuse of various types in Manipur, especially due to easily availability of substance especially alcohol, SP tablet, heroin, cannabis, nitrazepam. Increase rate of substance abuse has led to increase morbidity manifested in the form of alcohol withdrawal symptoms which can be complicated or un-complicated, opioid withdrawal symptoms, cannabis induced psychosis and premature death due to overdose and accidents.

Alcoholism is not a crime or moral weakness but an illness and a disorder. Problems arose when drinking interferes with family life, job performance, career, budget or personal health and has become a social nuisance.[1] The need for hospitalization arise when withdrawal fits or rum-fit appear on reducing the usual amount or giving up alcohol.

Opioids have been used for analgesic and other medicinal purposes for thousands of years, but they also have a long history of misuse for their psychoactive effects. Continued opioid misuse can results in syndrome of abuse and dependence and cause disturbances in mood, behaviour and cognition that can

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mimic other psychiatric disorders.[2] In Manipur the most common opioid associated with abuse and dependence in injectable form is heroin, however abuse and dependence of SP tablet is also growing popular and has been abuse in the oral form. The problems arise when clients do not have money to get the drug and reduce the dose or does not take the drug at all they get withdrawal symptoms which warrant treatment or admission to a hospital. Some do come to the hospital for detoxification and wanting help to abstain from the drug.

Cannabis preparation are obtain from the plant *Cannabis sativa* which has been used in China, India and the middle east for approximately 800 years & Delta-9-tetrahydro-cannabinol is the cannabinoid that is primarily responsible for the psychoactive effects of cannabis. Florid psychosis is common in countries in which some persons have long term access to cannabis of particularly high potency.[2] Patients with cannabis induced disorder admitted in our ward are usually suffering from cannabis induced psychosis.

Although any combination of three drugs can be used, studies have shown that alcohol is commonly used with another substance.[3] This is supported by one study where three substances were cocaine, alcohol, and heroin, which implies that those three are very popular.[4] Other studies have found that opiates, cannabis, amphetamines, hallucinogens, inhalants and benzodiazepines are often used in combination as well.[5]

AIMS AND OBJECTIVES

(1) To study the socio-demographic profile of the substance users among there admitted in de-addiction centre of Department of Psychiatry RIMS and (2) To find the prevalence of substance abuse among them

MATERIALS AND METHODS

This is a retrospective study, where in-patient department register of the Department of Psychiatry, RIMS Imphal was examined and all cases diagnosed as substance abuse of any type was included in the study. Patients admitted with any kind substance use disorders from September 2011 to may 2015 were included in the study. There was no restriction in terms of age during selection. Both male and female registers were examined.

RESULTS AND ANALYSIS

The data was analyzed using SPSS 21. A total sample of 700 was entered in SPSS 21 and processed. Out of the 700 patients with substance abuse there was no death. Unfortunately, almost all patients are male. **Table 1** give an overall picture of what we are trying to look at in this study.

District wise distribution of the admitted patients with substance abuse. Majority of the patients admitted in our hospital are from Imphal West. 55.0% are from Imphal West, 14.3% from Imphal East, 14.3% from Thoubal, 4.4% from Bishnupur, 3.0% from Senapati, 2.7% from Chandel, 2.7% from Tamenglong, 2.4% from Churachandpur, 1.1% from Ukhrul.

Majority of the patients admitted in the Department of Psychiatry fall in the age group of (31-40) years. 1.1% are among the adolescents and 0.7% are among the age group of (71-80) years. Almost all patients admitted in the Department of Psychiatry were males (99.4%). There were 4 females (0.6%). Majority of the admitted patients with substance abuse were among the Hindus (88.4%), next are the Christians (9.9%), and Muslims (1.7%)

Table 1 shows that the substance most commonly abused in alcohol as most of the admitted patients are diagnosed with alcohol withdrawal i.e (81.3%), Opioid dependent syndrome (11.9%), Cannabis induced psychosis 3.4% and polysubstance abuse 3.9%.

Table 1 Patterns of substance use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Alcohol Withdrawal	569	81.3	81.3	81.3
	Opiod dependence syndrome	83	11.9	11.9	93.1
	Cannabis induced psychosis	15	2.1	2.1	95.3
	Polysubstance Abuse	30	4.3	4.3	99.6
	Others	3	.4	.4	100.0
	Total	**700**	**100.0**	**100.0**	

Table 2 shows the frequency of co-morbidity associated with substance abuse. Most of the patients didn't have any significant co-morbidity. Though, most common co-morbidity among the rest was found to be HIV (1.0%) followed by Hepatitis C (0.6%) and lastly Hepatitis B (0.1%)

Table 2 comorbidity associated with substance use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nil	688	98.3	98.3	98.3
	HIV	7	1.0	1.0	99.3
	Hepatitis C	4	.6	.6	99.9
	Hepatitis B	1	.1	.1	100.0
	Total	**700**	**100.0**	**100.0**	

Table 3 shows the frequency of types of alcohol withdrawal. Of all the patients with Alcohol dependent syndrome, majority was found to have uncomplicated withdrawal (76.4%) and rest were with complicated withdrawal (23.6%).

Table 3 Types of alcohol withdrawal

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Uncomplicated withdrawal	440	62.9	76.4	76.4
	Complicated withdrawal	136	19.4	23.6	100.0
	Total	576	82.3	100.0	
Missing	System	124	17.7		
Total		**700**	**100.0**		

Table 4 shows the pattern of opioids used among the patients with opioid dependent syndrome. Most common opioid used among those patients was Heroin (64.6%) followed by SP tablets (34.4%) and lastly codeine (1.0%).

Table 4 Types of opioids used

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Heroin	62	8.9	64.6	64.6
	SP tablet	33	4.7	34.4	99.0
	Codiene	1	.1	1.0	100.0
	Total	96	13.7	100.0	
Missing	System	604	86.3		
Total		**700**	**100.0**		

Table 4 depicts the frequency of the primary drug used in case of patients with polusubstance abuse. Heroin was found to be the commonest primary drug used by the polysubstance users (37.9%) followed by Alcohol (31.0%). Next was SP tablets with a frequency of 27.6% followed by cannabis (3.4%).

Table 4 Primary drug in polytsubstance abuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Alcohol	9	1.3	31.0	31.0
	Heroin	11	1.6	37.9	69.0
	SP tablet	8	1.1	27.6	96.6
	Cannabis	1	.1	3.4	100.0
	Total	29	4.1	100.0	
Missing	System	671	95.9		
Total		**700**	**100.0**		

DISCUSSIONS

The maximum of the patients admitted in RIMS psychiatry ward with substance abuse are from Imphal West i.e 55.0% most probably because of the awareness of the people about the existence of RIMS psychiatry de-addiction centre, so there is instant referral from the public as well as from the neighbouring CHC and PHC. From Imphal East 14.3%, the localities falling under this district is near to this institute so people directly bring their family members with substance abuse to this institute. 14.3% from Thoubal district as against Mohan et al[8] which found 36.8% of men in Thoubal having alcohol related problem,the number of admission from this district is lower as compared to Impal West and East because this district is farther from this institute as compared to the other two districts, and some psychiatrist are employed in Thoubal district hospital so there is less referral from their end. From Bishnupur 4.4%,Senapati 3.0%, Ukhrul 1.1%,Churachandpur 2.4%,Chandel 2.7% and Tamenglong 2.7%,the admission from these 06 districts are very few because these districts are very far from RIMS psychiatry department, Imphal, and most of the general physician are trained on substance abuse and its management, so these general physician treat the patients at their end, so there is less referral.

Gupta VK et al found in their study the maximum of the admitted substance users are in the age group of 21-30 years. But in this study, we found that the majority of the patients were in the age group of 31-40 years.[6] Similar findings were reported by Mohan et al[7] who found that 59% belonged to (20-30) years group and 25% belonged to (30-40) years age group. Kumar V et al also found that majority of patients were of the age group between (26-35) years(34.16%)[8] which is nearly consistent with our study. Kadri et al also found that majority of patients were of the age group between 26-35 years (46%).[9] Singh et al found that 59.03% of drug abusers were more than 30 years of age followed by 19.86% in 26-30 years.[10] DeSilva & Fonseka found that mean age of the drug addicts was 34.04±7.5 years which is similar to mean age of 31.22±9.50 years of present study.[11]

Kumar Vinay et al reported in his study that out of 521 patients, 03 are females. This study is consistent with our study where we found 04 females admitted due to substance abuse.[8]

Kumar Vinay et al reported in his study that out of 521 patients, the most common addiction was alcohol (33.78%).[8] Ndetei DM et al in his study found that the most common substance of abuse was alcohol (25.5%).[12] These two studies are consistent with our study, though our finding is higher than those two studies (81.3%). Out of all the alcohol withdrawal 76.4% are having uncomplicated withdrawal and 23.6 % are having complicated withdrawal Kumar Vinay et al reported in his study that out of 521 patients, the proportion of patients using opioids was 10.74%[10], which is almost consistent with our study 11.9%. Such a big percentage clearly depicts the rate of drugs infiltration from Myanmar and allied areas to Manipur.

Out of the patients diagnosed with opioid dependence syndrome 64.6% (n-62) are dependent on heroin, and all of them are using heroin by injection route, as against Bureau of substance abuse services which reported 83.3% (39,783) reported injection drug use (past year) in India.[13] 34.4% (n-33) are dependent on SP tablet. Admission is higher among those patients dependent on heroin because they suffer from a number of complications like abscess in the injected areas, HIV, hepatitis-B, hepatitis-C, pulmonary TB.

In our study 4.3% (n-30)are diagnosed as poly-substance

dependence syndrome. Kumar Vinay et al reported in his study that out of 521 patients, the proportion of patients using opioids was 11.32%.[7] This can be due to majority of the patients were alcohol dependent or prevalence of single drug users being more, so prevalence of polysubstance use might be less in our study. Heroin was the most common (primary) drug used in polysubstance users 37.9% (n-11). More number of people use opioid i.e heroin as primary drug because according to some patients it satisfy their craving, but the finding is too small which indicate more study is required in this field where we can examine more samples.

2.1% (n-15) are diagnosed with cannabis induced psychosis in our study. Kumar Vinay et al reported in his study that out of 521 patients, the proportion of patients using opioids was 3.26%[8] and also Gupta VK et al in their study found 2.5% of the drug abusers took cannabis as single drug.[6] Data of both the above studies are almost consistent with our study.

LIMITATIONS

First: Since this is a retrospective study, data were collected from register entered by nurse, they did not enter the co-morbidity for all the patients properly, so co-morbidity reported in this study were inadequate.

Second: The data is collected only from register so death could not be detected. If the study was conducted in the community, surely some deaths could have been detected.

Third: There are very less female in this study because they are not coming for admission otherwise in the community there must have been more females having alcoholic or other substance abuse problems.

CONCLUSIONS

From this study we conclude that the most common admitted patients are among the alcohol withdrawal patients, however opioid and cannabis also are playing a role into the admission of patients into hospitals. There is no death, and maximum among the Hindus. There is increase need to create awareness among people about ill-effects of alcohol and other substance, and a need to provide MET and relapse prevention counselling and an awareness of the availability of treatment centres of substance withdrawal for the purpose of early treatment of withdrawal symptoms to reduced unwanted morbidity and mortality.

Conflicts of interest: No conflict of interest is associated with this work.

Contribution of authors: We declare that this work was done by the authors named in this article and all liabilities pertaining to claims relating to the content of this article will be borne by the authors.

Ethical clearance: Taken from Institutional Ethical Committee.

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