Original Article



# Pattern of Substance Abuse in Patients; A Cross Sectional Study at Khawaja Muhammad Safdar Medical College Sialkot, Pakistan

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## ABSTRACT

**Objective:** The objective of the current study was to assess the pattern of substance abuse in patients coming to our hospital.

**Study Design:** Cross sectional study.

**Place and Duration of Study:** This study was conducted at the Department of Psychiatry & Behavioral Sciences, AIMTH affiliated to KMSMC Sialkot, Pakistan from October to November 2017.

**Materials and Methods:** Adult patients coming in contact through OPD, indoor and emergency were approached. Non-probability convenience sampling technique was used to get a sample size of 200 patients. Inclusion criteria were patients who were actively using and dependant on any type of substance of abuse according to the ICD-10 Criteria. Written informed consent was taken. Patients suffering from severe physical illness needing urgent and emergency care, unconscious or in delirium were excluded from the study. The data was collected on a sheet and analyzed by SPSS v 21.

**Results:** There were 188 males and only 12 females. 53.5% belonged to low economic status. 21.5% of the patients from rural areas while 58.5% from urban areas and 20% were homeless. 89.5% were jobless. 21% of the patients had family history of drug abuse. 40% were poly substances abusers. 27.5% abused opium and heroin, 18% cannabis, 7% injections, 6.5% benzodiazepines and 1% others.

**Conclusion:** Most of the patients coming to our hospital were urban jobless males from lower economic status. One fifth of the patients had family history of drug abuse. 40% were poly substances abusers. 27.5% abused opium and heroin, 18% cannabis, 7% injections, 6.5% benzodiazepines and 1% others.

**Key Words:** Drug abuse, Pattern of substance abuse, Teaching Hospital, Health Services,

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## INTRODUCTION

Substance abuse is a major health problem. One of the definitions proposed that it is the pattern of substance being used which is maladaptive which leads to clinical and significant impairment and/or distress. The subject also experiences tolerance as well as withdrawal.[1]

Common drug used in west is alcohol. Other drugs are like MDMA, benzodiazepines and opioids. They may result in harm to health. Depression in students of medical can be due to stress [2] and they might start ruminating.[3]

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People who are abusing drugs are at increased risk of suffering from various medical problems and might be referred inappropriately in hospitals.[4] They may get anxious and depressed during or after surgery.[5] They get complications in surgery for example keloids and hypertrophic scars.[6] There is also chance that they are not satisfied with the treatments provided in hospital.[7] Female may be subject of battering and abuse as a consequence of substance abuse.[8] Psychotic illnesses eg schizophrenia may a consequence of substance abuse and a cause of major burden on the family and caregivers.[9]

As can be seen substance abuse is major problem to health, both physical and psychological. It can cause enormous burden which may be economic, social and at country level can become a problem which can be considered in the realms of public health needing urgent and prompt action. The physical illnesses can be damage to lungs, heart, liver, HCV infections,[10] HIV, GIT, kidneys and lack of nutrition. The psychological problems can be psychosis, schizophrenia, depression, mania, anxiety and delirium.[11] It is imperative to address this issues on urgent basis as it is already

becoming a public health issue. To address the issue we need to know what kind of substances are being used in our area to make plan for betterment. To our knowledge no research has been carried out in our hospital up till now on this issue. The objective of the current study was to assess pattern of substance abuse in patients coming to our hospital.

# MATERIALS AND METHODS

It was a cross sectional study carried out in the form of a survey at AIMTH, Sialkot from October to November 2017. The study was carried out at the department of Psychiatry and Behavioral Sciences. Guidelines in the declaration of Helsinki were followed. Ethics review committee approved the study. Adult patients coming in contact through OPD, indoor and emergency were approached. Non-probability convenience sampling technique was used get a sample size of 200 patients. Inclusion criteria were patients who were actively using and dependant on any type of substance of abuse according to the ICD-10 Criteria. Written informed consent was taken. For patients who were illiterate, data collectors made sure that they understand all the aspects of the study by reading or telling them in their native language all the details. Title along with purpose of the study was explained to the patients and they were assured of the complete confidentiality of their data. Patients suffering from severe physical illness needing urgent and emergency care, unconscious or in delirium were excluded from the study.

A data sheet was designed to collect information about demographics and other details of the patients. Data about the substance being abused was collected from patients ensuring privacy and confidentiality. They were provided with the available treatments in our hospital. As it is a large public sector hospital, all treatment is provided by the state free of cost. They were also encouraged to keep follow up with the treatment provided. The data was collected on the sheet and analyzed by SPSS v 21.

# RESULTS

The results show that there were 188 males and only 12 female patients. There was preponderance of male patients. It may be because of stigma that many female patients suffering from drug abuse could not or were not able to reach the hospital to get treatment. Most of the patients 53.5% belonged to the low economic status. Patients from middle class were 26% and from upper class 21.5%. The large number of patients from poor economic background may be due to their downward drift because of drug abuse. The other hypothesis is that may be our hospital is a large public sector hospital and all the treatment is provided free to all patients by the state so patients from poor back ground resorted to getting treatment from here. 21.5% of the patients resided in rural areas while 58.5% in urban areas. 20% were homeless. The largest percentage from urban area may be because it was easy to reach hospital from city than a far flung rural area or it could be because of awareness in urban patients of the availability of treatment in hospital. The 20% patients, who described themselves homeless, usually lived on streets or roads and slept whatever place they could find. They mostly lived in urban rather than rural areas but it was difficult to classify them to one category as they kept on moving from place to place. Most of the patients 89.5% were jobless. Only 10.5% had regular or permanent jobs. Joblessness may be due to their drug abuse or they may have started the drug abuse due to joblessness. It was not the objective of this study, so it was not further probed. 21% of the patients had family history of drug abuse. Many theories have been postulated from genetics to environment and debate of nature verses nurture is still going on. The impact of observational learning may be a factor. Table 1.

**Table No.1. Characteristic of patients N=200**

| **Gender** | **Frequency** | **Percentage** |
|---|---|---|
| Male | **188** | **94%** |
| Female | **12** | **6%** |
| **Economic status** | | |
| Low | **107** | **53.5%** |
| Middle | **52** | **26%** |
| Upper | **41** | **20.5%** |
| **Residence** | | |
| Rural | **43** | **21.5%** |
| Urban | **117** | **58.5%** |
| Homeless | **40** | **20%** |
| **Having job** | | |
| Yes | **21** | **10.5%** |
| No | **179** | **89.5%** |
| **Family history of drug abuse** | | |
| Yes | **42** | **21%** |
| No | **158** | **79%** |

**Table No.2: Pattern of substance abuse**

| **Type** | **Frequncy= n** | **Percentage %** |
|---|---|---|
| Opium | 12 | 6 % |
| Heroin | 43 | 21.5 % |
| Poly substance | 80 | 40 % |
| Cannabis | 36 | 18 % |
| Injections | 14 | 7 % |
| Benzodiazepines | 13 | 6.5 % |
| Others | 2 | 1 % |

The most common were patients with poly substance abuse. They abused more than one substance at a time and kept on shifting from one drug to other. In our study we classified poly substance abuse patients as those patients who were doing it at the time of interview. Some patients had used only one type of drug in the past but now were using two or more than two drugs at the time of interview. This group was the

largest about 40% of the whole sample. Although it was not the objective of the study but they were suffering from most medical, surgical and psychological problems than the other type of patients with drug abuse. 21.5% of the patients exclusively used heroin and 6% used opium. These are similar substances and belong to opioid group of drugs. Heroin in many forms is used mostly now. There are many street names of it like crystal and button. These differ in potency and price. 18% of the patients used cannabis. They used it in different local forms like bhang, booti or garda etc.7% of the patients used injections. They used i/v injections mostly tramadol and other pain killers with effects like euphoria. Use of benzodiazepines was seen in 6.5% of patients and mostly these were pills. Table 2

# DISCUSSION

The results of our study show that most of the patients coming to our hospital were urban jobless males from lower economic status. One fifth of the patients had family history of drug abuse. 40% were poly substances abusers. 27.5% abused opium and heroin, 18% cannabis, 7% injections, 6.5% benzodiazepines and 1% others. Another study has reported similar findings that males, being unmarried and belonging to age group 18-44 and poor economic conditions were risk factors for indulging in drug abuse. Genetic and family factors also play a role.[12]

The pattern of substances being abused differs in different societies. Culture and attitudes are different across societies and may determine what kind of substances people will use. In our study poly substance abuse was the most common followed by opioids and cannabis. There is easy availability of these drugs as our country lies in the infamous route of drug transport from Afghanistan.[13]

In our study 20% patients were homeless. A study reports that people who belong to a family which is supportive have lower chances of getting into the problem of drug abuse. On the other hand parents who are strict may increase the chances of drug abuse in children.[14] Our patients did not report alcohol abuse. This has also been reported by another study. Alcohol is banned strictly and carries social taboo so patients might not report it.[15]

Our study has some strengths and limitation. The strength of the study was its easy methodology. Data was collected easily from patients coming to hospital. It did not require any psychometric scale of English language to be translated in Urdu Or Punjabi. Simple survey sheet was used to collect data during interview. Data collectors had the ease of data collection in hospital during treatment process and separate time or resources were not needed to be allocated. The limitations of the study are that it is a hospital based study and results may not be generalized to community. In future community based studies using robust methodology are needed to resolve the issue further.

# CONCLUSION

Most of the patients coming to our hospital were urban jobless males from lower economic status. One fifth of the patients had family history of drug abuse. 40% were poly substances abusers. 27.5% abused opium and heroin, 18% cannabis, 7% injections, 6.5% benzodiazepines and 1% others.

**Author's Contribution:**

| | |
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| Revisiting Critically: | Aqsa Faiz-ul-Hassan, Javeria Ali Asghar |
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**Conflict of Interest:** The study has no conflict of interest to declare by any author.

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