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Short Communication

Rising trend of substance abuse in Pakistan: a study of sociodemographic profiles of patients admitted to rehabilitation centres



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ABSTRACT

Objectives: In Pakistan, the prevalence of drug addiction is increasing at an alarming rate. However, the risk factors, which are increasing vulnerability towards addiction, remain largely elusive. The major objective of this investigation was to study the sociodemographic variables common in addicted patients in order to identify vulnerable cohorts and risk factors, which increase predisposition towards substance abuse.

Study design: This is a multi-site cross-sectional survey-based study.

Methods: In this study, 102 male addicted patients admitted to drug rehabilitation centres of the Islamabad/Rawalpindi and fulfilling Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, criteria for dependence, were interviewed with the help of a structured questionnaire.

Results: A total of 102 male patients participated in the survey. Participants mean age was 28.4 years (± 9.8), whereas 14% were aged between 15 and 20 years. A large number of respondents (35%) initiated drug abuse in the teenage years. Majority of the subjects were skilled (60%) and had secondary education (47%), whereas 8% of the patients were students. Heroin was the most abused substance (48%) followed by cannabis (28%). The mean duration of substance abuse was between 1 and 5 years, whereas a significant fraction of subjects (8%) had more than 16 years of duration of abuse. Family disputes and peer pressure were the most common reasons for initiation of substance abuse. A significant fraction of patients (46%) reported to suffer from comorbid depression.

Conclusions: The growing trend of abuse in highly addictive substances such as heroin in teenagers and in the skilled and educated stratum of society is of great concern and demands immediate preventive measures from the policymakers.

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Pakistan is facing a massive rise in drug abuse. According to recent estimates, there are 6.7 million drug abusers, of which 4.25 million are drug dependents who need long-term treatments in residential setups.¹ Despite these shocking statistics, there is severe lack of preventive measures and drug indictment policies. Consequently, the number of drug dependents

continues to increase at an alarming rate of 40,000 per year, making Pakistan one of the most drug-affected countries in the world.¹ The ever-increasing rise in drug abuse can be devastating for a country such as Pakistan where the youth population (aged <30 years) makes a substantial 64% of the total population.² In fact, this widespread drug abuse

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tendency can be largely attributed to drug trafficking from neighbouring estates into Pakistan. Pakistan's geographic location next to Afghanistan, the world's largest producer of illicit opium, places the country in a vulnerable position. Complete halt of drug trafficking from neighbouring estates into Pakistan can be a challenging task in the context of the vast geographical expanse and limited financial resources. Therefore, a pragmatic approach in this scenario would be to understand the prevailing conditions of the individual drug abuser and their surrounding socio-economic environment in order to design effective interventions and prevention of drug-related problems. Despite the exponential rise in drug abuse and addiction, research studies identifying the high-risk groups vulnerable to substance abuse in the population are quite limited. A literature survey performed through PubMed and Google Scholar with search terms 'Substance abuse, Pakistan' returned few publications.

Therefore, the major objective of this investigation was to study sociodemographic variables common in addicted patients in order to identify vulnerable cohorts and risk factors, which increases predisposition towards substance abuse.

The present cross-sectional study was conducted on 102 addicted patients admitted to four different drug rehabilitation centres situated in the twin cities of Islamabad/Rawalpindi. The study was conducted from August 2017 to October 2017, after obtaining informed written consent from the patients. A stringent inclusion criterion was adopted, and only those addicted patients were recruited, who fulfilled Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, criteria for dependence and were chronically dependent on psychoactive substances for more than 3 years. The participants of the study were briefed about the aims and objectives of the study, and information related to various sociodemographic variables was collected using a structured questionnaire. The questionnaire consisted of three sections: the first section was based on questions solely related to the sociodemographics; the second section was related to substance abuse and its duration and reason for its abuse; and the third section contained questions related to the presence or absence of comorbid depression. An interviewer conducted the interview during the daytime when patients showed no symptoms of the disease. The research study was accepted and approved by the Ethics Review Board of the Department of Biosciences, COMSATS University Islamabad.

The mean age of our study population was below 30 years (28.4 ± 9.4) with 75% of the patients aged between 21 and 40 years, whereas chronic abuse at younger ages was also evident; 17% of the patients were aged between 15 and 20 years. Intriguingly, with increasing age, a decrease in the number of individuals initiating substance use was observed. Similar observations have been reported in survey studies conducted in different cities of Pakistan. In a study from Lahore, 45% of the addicted patients were reported to be less than 18 years of age,³ whereas a study in Karachi observed 22.4% of patients to be aged between 15 and 20 years.⁴ Studies from India and Iran have reported similar observations in this regard.^{5,6} Sociodemographic information of the patients is detailed in Table 1.

The most alarming finding of this study was that a large majority (77%) of the participants had completed their

Table 1 – Sociodemographic variables of the study population.

Sociodemographic variable (n = 102)	n (%)
Age groups (y)	
<20	17 (16.6)
21–40	75 (73.5)
41–50	9 (8.8)
>50	1 (1)
Educational status	
No formal education	17 (16.6)
Education (≤ 12 y)	77 (75.4)
Education (>12 y)	8 (7.8)
Occupational status	
Student	11 (10.7)
Unskilled	17 (16.6)
Skilled	74 (72.5)
Teenage of initiation of substance use	
Yes	37 (36.2)
No	65 (63.7)
Duration of substance use (y)	
≥ 5	61 (59.8)
6–10	24 (23.5)
10–20	17 (16.6)
Type of substance used	
Alcohol	10 (9.803)
Heroin/morphine/opium	62 (60.7)
Cannabis	30 (27.45)
Amount of intake (per day)	
1–10 g	48 (47.01)
1–10 cigarettes	54 (52.9)
Intake method	
Oral	22 (21.5)
IV	16 (15.6)
Cigarette	51 (50)
Sniff via nose	13 (12.7)
Comorbid depression	
Yes	46 (45.1)
No	56 (54.9)
Reasons for initiating substance use	
Stress (family disputes)	78 (76.4)
Recreation/availability of drugs	24 (23.5)

secondary education, and 74% were skilled and had an occupation. Similar observations were reported from a study in Peshawar, where 62.6% of the drug abusers were literate.⁷ Of note, 11% of our study population was comprised of students. Thus, quite contrary to the popular belief, that poverty, illiteracy and unemployment gravitate towards drug abuse, these observations suggest that problem of substance abuse is growing and affecting individuals irrespective of the education levels and employment status.

In the present study, the majority of participants were chronically abusing drugs for a mean duration of 5 (standard deviation ± 4.57) years. Most of the patients were single or mono substance users (70%), and the remaining (30%) were polysubstance users.

Heroin was found to be the most abused drug (60.7%) in our study population, either singly or in combination with other substances followed by cannabis (27.45%). Heroin was also reported as the major drug of abuse in Peshawar, abused by nearly 80% of the study cohort.⁷ Whereas, in Lahore, heroin was the second most abused drug.³ However, in Karachi, cocaine and amphetamines were found to be the most commonly abused

substances.⁴ A study from the neighbouring country of Iran also reported opium and heroin to be the most abused substances,⁶ and this can be largely attributed to close proximity with Afghan borders; in contrast, a similar study in India has found alcohol to be the most abused substance.⁵ Almost 80% of the opium processed in Pakistan comes from neighbouring countries.⁸ Consequently, heroin addiction is on high rise in Pakistan. According to the United Nations Office on Drug and Crime survey 2013, an estimated 860,000 or 0.8% of the population are regular heroin users, and 320,000 (0.3%) are opium users.¹

Majority of the study cohort reported smoking as the preferred method for intake of drugs. Smoking is erroneously perceived as a much safer way of drug administration in comparison to injecting drugs through needles; however, smoking increases the chances of developing respiratory tract infections and associated lung disease.⁹ The mean amount of drug intake ranged from 1 to 5 g/d. A study shows that daily intake of 5–10 mg of heroin can cause dependence.¹⁰ However, the mean amount reported by our study population is many times higher.

Majority of abusers (47%) were consuming >5 g of the substance per day, whereas the other significant majority (52.9%) was habitual of smoking 1–10 cigarettes per day (see Table 1).

Peer pressure and stress caused by family disputes were reported by our study cohort as the most compelling reason to abuse drugs (78%) followed by curiosity or joy seeking (24%). Similar observations have been reported in this regard from studies from Karachi, Lahore and Peshawar.^{3,4,7} Drug use is usually made in congregates among a group of close friends and is usually used as a means of communication, and refusal to participate in such activity might lead to elimination from friends company and desolation, which is quite critical to individuals in their teenage years. Bridging communication gaps among teenagers and their parents or guides at schools and colleges can improve this scenario. Academic institutes such as colleges and universities can play the significant role in imparting education on the effects of drug abuse on the adolescent brain and its consequences.

In addition to that, drugs are usually perceived as an escape from stress. It is now frequently witnessed that individuals experiencing any traumatic life event tend to self-medicate themselves by substance misuse, specifically, opioids (heroin, morphine and alcohol), in order to relieve the negative symptoms of depression and anxiety. In our study, 46% of the patients reported suffering from depression together with craving and dependence. Depression increases the probability to relapse by many folds. Conversely, addiction can derail depression treatment as well because substance abuse can interfere with antidepressants, making them ineffective. Treatment should be available in an integrated fashion for both mental and substance use disorders.

Currently, despite ever-increasing treatment demands, there is far fewer substance abuse treatment and rehabilitation centres in Pakistan. Unlike many other mental disorders, which can be treated, addiction is a chronic relapsing mental disorder, which requires structured treatment regimens and lifelong management. According to the World Health Organisation, for substance use treatment and management, there is a need for

specialist substance abuse treatment centres, together with mental health systems and primary care.

Moreover, among dependent users, women are less likely to receive treatment than men due to gender bias in treatment at deaddiction centres. Female addicted patients are generally not admitted to the majority of the deaddiction centres due to the lack of trained female supervisors and nursing staff and absence of separate female wards. Consequently, all the participants in our study were males.

Therefore, alternative approaches are required, such as establishment of psychosocial support centres, which can be accessed by all socio-economic classes of society, who are coping with mental illnesses especially, stress and depression. Easy access to such centres can help to deter the use of illicit substances for stress coping and self-medication purposes. Mental health education and the organisation of awareness campaigns regarding deleterious effects of drug abuse at a young age at schools and college level and using print and electronic media for health education can be a major step in combating the menace of substance abuse.

Author statements

Ethical approval

The study was accepted and approved by the Ethics Review Board of the Department of Biosciences, COMSATS University Islamabad.

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Competing interests

The author declares no conflict of interest.

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