

A Cross Sectional Study on the Risk Factors of Illicit Drug use Among the University Students

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ABSTRACT

Aim: The aim of this study was to assess the prevalence of illicit drug use among university students of private and public universities. And also, to assess risk factors of illicit drug use.

Methods: This study was conducted at DHQ Hospital Faisalabad and the duration of this study was from November 2020 to April 2022. This was a cross sectional study design, in which data was collected from 600 students of public and private sector universities. The sample had an equal gender proportion i.e 300 males and 300 females. Data was collected through questionnaires. The data was then analyzed for the prevalence of illicit drug use among university students and also the associating risk factors of illicit drug use. Chi square test was performed to find out the association of illicit drug use to various factors such as age, living status, availability, source of drug, frequency of intake etc.

Result: According to data analysis 17.3% students of government colleges were using more than one drug while 82.6% were using single drugs. 26.3% students of private colleges were using more than one drug while 73.6% were using single drug. 80% of public sector had abused prescribed drugs. 73.6% of private sector had abused prescribed drugs. 19.2% public sector students knew multiple drug suppliers. 46.9% students revealed that the drug was available within the university premises.

Practical Implication: Our finding of the increased risk of illicit drug use among the university students has added an important information to the literature in this research area. The aim of this study was to investigate the risk factors of illicit drug use among the public and private university students of Punjab. We also tried to learn the reason for the usage of these drugs and also whether these are any factors associated with use of these illicit drug.

Conclusion: Illicit drug use is more prevalent in boarders as compared to day scholars. A chunk of the students revealed that the drugs most commonly used are cheap. Drugs are more easily available in public sector universities as compared to private ones. There has been a gradual increase in the frequency of drug intake per day in addicts. Illicit drugs had an overall negative effect on the academics of students. A good proportion of the sample believes that parental care plays a key role in preventing their child from indulging into any type of illicit drug use.

Keywords: Drugs, Risk Factors, Addicts, Maladaptive, Psychologically, Neurotransmitters

INTRODUCTION

Illicit drug use is stated as a maladaptive pattern of use of drugs that ultimately leads to clinically, mentally, physically and psychologically substantial impairment or distress of body, mind and social wellbeing, in which the user may also suffer from addiction, tolerance, withdrawal⁽¹⁾. These are the folks who use them with or without medical prescription just for the sake of pleasure or gratification, but later on first develop psychological dependence and then physical dependence and so thus they increase the dosage of it just to get the desired level of satisfaction and get the same magnitude of high⁽²⁾. There are many drugs that can be used illicitly and they have strong potential to develop the dependence among its users. Many of these illicit drugs share properties and features that alter the neurons in the pleasure and the reward area of the brain and thus neurotransmitters levels are altered in such a way that overtime person needs higher and higher doses of the said drug just to combat against the tolerance developed against it⁽³⁾.

Several socio-demographic and behavioral characteristics have been found to be associated with different levels of illicit drug use. Living with parents or guardians and living in a lower-middle-income country increased the risk of both frequent and infrequent illicit drug use. The relationship between living with parents or guardians and the increased odds of illicit drug use was also found in a previous study but not in another one⁽⁴⁾. While high-family income was reported to be a risk factor for illicit drug, the relationship was not found among university students in our study. Our finding of the increased risk of illicit drug use among students living in a lower-income country has added an important information to the literature in this research area. This finding could be explained by the geographical location of these countries that is close to major drug production zones⁽⁵⁾.

Issues covered included the morality or ethics of drug use, safety beliefs, the perceived effect of drug use and perceived

motivations for use. Early studies noted that attitudes to cannabis were markedly different to those towards tobacco or alcohol⁽⁶⁾. People that drank alcohol perceived that people that used cannabis were 'definitely emotionally unstable' and 'definitely less able to cope with life', whereas the latter group perceived that people that used illicit drugs in general were 'more interested' and 'vested with more friends'. This attitudinal separation was hypothesised to be an effective 'barrier' to starting cannabis use.

MATERIAL AND METHODS

The design of this study was cross sectional study design. This study was conducted at DHQ Hospital Faisalabad and the duration of this study was from November 2020 to April 2022. Data was collected from 600 students of public and private sector universities. The sample had an equal gender proportion i.e 300 males and 300 females. Data was collected through questionnaires. The data was then analyzed for the prevalence of illicit drug use among university students and also the associating risk factors of illicit drug use. Chi square test was performed to find out the association of illicit drug use to various factors such as age, living status, availability, source of drug, frequency of intake etc.

By estimating the population size to be 20,000 from 6 universities of Punjab the sample size was calculated from sample size calculator in <http://www.raosoft.com/samplesize.html>. The required sample size was 600 students with 95% confidence level and margin of error accepted was 3.94% and response distribution of 50%. Stratified quota sampling technique was adopted in study. Two strata were formed on the basis of public and private universities. Within each stratum, a sample of respondents of an optimum size with a proportional allocation were interviewed. Data was entered and analyzed in SPSS. Frequency was calculated.

RESULTS

Risk factors of illicit drug use in university students of Punjab and the age group taken were between 18 and 25 years of all the sample population. The population sample were consisting of 600 illicit drug users, 300 from private (50%) and 300 from govt (50%) colleges were taken. As six colleges were included in our research half of which were private and half were public, further 100 individuals were taken from each college of which half were males and half were females, details are shown in graph chart. In private universities 61% were doing BS/BSc, 8% U. Education, 15% PhD, 3.7% MA/MSc, 3% LLB, 7% FSc and 16.3 % left this question blank. In government universities 42.3% were doing BS/BSc, 33% U. Education, 0.3% PhD, 19% MA/MSc, and 5.3% left this question blank.

Table 1: Age

Case	Sample Size	Age
Govt	300	18-25
Private	300	18-25

Table 2: Gender

Gender	Govt	Private
Female	150	150
Male	150	150
Total	300	300

Table 3: Living Status

Gender	Govt	Private	Chi. Sq	P. Value
Boarder	223	133	55.95	<0.0000001
Day Scholar	77	167		
Total	300	300		

In government universities students 74.3% were boarders and 25.6% were day scholars and in private universities 44.3% were boarders and 55.6% were day scholars. In private universities 4% were using nasal route for drug intake, 47.3% were smokers, 13.7% were using oral route 0.7% were using injections, 17.7% were using other routes and the rest 16.7% left this question blank. In government universities 2.3% were using nasal route for drug intake, 24.7% were smokers, 13.7% were using oral route 1.7% were using injections, 32.3 were using other routes and the rest 25.3% left this question blank.

Table 4: Number of Drugs

Parameters	Govt	Private	Chi. Sq	P. Value
No	248	221	7.119	0.007626
Yes	52	79		
Total	300	300		

17.3% students of government universities were using more than one drug while 82.6% were using single drug. 26.3% students of private universities were using more than one drug while 73.6% were using single drug.

Table 5: Cost of The Drug

Parameters	Govt	Private	Chi. Sq	P. Value
Cheap	156	98	29.58	<0.0000001
Expensive	77	136		
Blank	67	66		
Total	300	300		

According to 52% of students of government universities the illicit drugs they are using are cheap, and according to 25.6% the drugs are expensive the rest 22.3% left this question blank. According to 32.6% of students of private universities the illicit drugs they are using are cheap, and according to 45.3% the drugs are expensive the rest 22% left this question blank.

In government universities 80% had abused prescribed drug, while 20% had not. In private universities 73.6% had abused prescribed drug, while 26.3% hadn't

Table 6: Rate of Prescribed Drug Abusion

Parameters	Govt	Private	Chi. Sq	P. Value
No	240	221	3.38	0.06599
Yes	60	79		
Total	300	300		

DISCUSSION

The aim of this study was to investigate the risk factors of illicit drug use among the public and private university students of Punjab. We also tried to learn the reason for the usage of these drugs and also whether these are any factors associated with use of these illicit drug. In our research the age group were taken as 18- 25 year ^(4,5). Our sample size comprised of 600 students from 6 different university of Punjab. 3 private and 3 government universities. 100 students were selected from each university in which 50 were male and 50 female ⁽⁶⁾. We also found that among 300 students of Government University 74.3% were hostilities and 25.6% were day scholars. Out of 300 students of private university, 44.3% were hostilities and 55.6 % were day scholars ⁽⁷⁻⁹⁾. After data analysis, compilation of results and representation in the form of tables and charts, we found that the most highly risk factor of illicit drug use was seeking pleasure and curiosity. The second risk factor was addiction ⁽¹⁰⁾. Among 300 students of Govt University 41.6% were taking for pleasure and 31.6% were taking for addiction. And among private 40% were taking for pleasure and 28.3 % were taking it for addiction ^(11,12). Same research was conducted in two Jahrom university in 2012-13, also found that seeking pleasure and curiosity were important risk factors of illicit drug use ⁽¹³⁾. In course of our study, we found that among students of private university 4% were using nasal route for drug intake, 47.3% were smokers, 13.7% were using oral route 0.7% were using injections and 17.7% were using other routes ^(14,15). And among the govt students 2.3% were using nasal route for drug intake, 24.7% were smokers, 13.7% were using oral route 1.7% were using injections and 32.3 were using other routes. In our research we found that out of 300 subjects of govt colleges according to 3.7% charrs, 23.0% cigarette and 41.7% snuff is easily available. And in 300 subjects of private colleges according to 5% charrs, 32% cigarette and 41.7% snuff is easily available ⁽¹⁶⁾. We found that the most illicit drug used by the students were snuff (snuff) and smoking cigarette. Research conducted in Sudan showed the prevalence of individual drug was tobacco 13.7%, charrs 4.9%, alcohol 2.7%, cocaine .7%. Another research conducted in Islamabad showed the prevalence of drug was; cigarette 23.7%, niswar 6.1% and heroine 4.7%. The high prevalence of cigarette smoking among our students showed that these are easily available and approachable to common students ⁽¹⁷⁾.

In our research we found that out of 300 subjects of govt colleges 80% had abused prescribed drug, while 20% hadn't and also in 300 subjects of private colleges 73.6% had abused prescribed drug, while 26.3% hadn't. Same research was conducted in different colleges of USA on use of prescription stimulants such as amphetamines ⁽¹⁸⁾. The data showed that 35.5% students were using prescription stimulants. The increase use of these drugs in students shows that these students are under great stress and tension during studying hours and examination preparation. We also found through our research that among the 300 govt students 11.3% were using more than one drugs and 82.6% were using single drug and among private students 26.3% were using more than one drug and 73.6% were using one drug. Among 300 students of govt university 0.7 % used charrs for the first time, 59% used cigarette, 0.00% used ice, 10.7% used snuff, 0.3% used these all drugs ⁽¹⁹⁻²¹⁾. And among 300 student of private colleges 4.3% used charrs for the first time, 69.7% used cigarette, 0.3% used ice, 11.7% used snuff, 1.3 %

used these all these drugs. The high prevalence of the cigarette smoking for first time shows that these are easily available within our community⁽²²⁾. Through this research we found that among 300 govt colleges 1% are using illicit for one year, 5.3% for two years, 2.7% for three years, 7.3 % for four years, 1.7% for five year, 9.3% for six years, 0.7% for seven years, 3.0% for eight years, 1 % for nine years and among 300 students of private colleges 0.3% are using illicit for one year, 2.7% for two years, 2.3% for three years, 5.3 % for four years, 1.3 % for five year, 0.3% for six years, 1% for seven years, 1.7% for eight years and 0.3 % for nine years⁽²³⁾.

Out of 300 students of govt university we found that 14% obtained these drugs from friends, 1% from relatives, 13% from medical store, 30% from any local shop, 17% from others sources and out of 300 subjects of private colleges 28.3% obtained these drugs from friends, 4% from relatives, 9% from medical store, 22.7% from any local shop, 10.3% from others sources. Research conducted in Alhaba city of Saudi Arabia showed that the illicit drugs were introduced through friends. The increased percent of these drugs source from local shops showed that these should be excluded from the territory of the community and the students should choose good friends⁽²⁴⁾.

Through this research we found that among govt colleges 19.2% knew multiple drug suppliers, 60% knew single drug suppliers and among 300 subjects of private colleges 14.2% knew multiple drug supplier and 82% knew single drug supplier. The increased rate of single drug supplier showed that because of decrease unavailability of these drugs within university premises and these are supplied by specific persons that may be hostel chachas and waiters⁽²⁵⁾. We also found that out of 300 students of Govt University 43.33% were introduced to illicit drug through friends, 4.33% through family members, and 17.3% through others. And among 300 students of private university 48% were introduced to illicit through friends, 8% through family members, 8.6% through others. The high percent of introduction through friends showed that students are not care about in selection of their friends that latter become their identity⁽²⁶⁾. We found a strong association of illicit drug users in 300 students of govt colleges 6.6% were engaged in illegal activity, 80.6% weren't engaged in any illegal activity and among 300 subjects of private colleges 9% were engaged in illegal activity, 78.3% weren't engaged in any illegal activity. The reason of involvement in illegal activity was that some of students don't afford the cost of these drugs or taking in high dose these drugs. In our research through questionnaire, we found that among 300 subjects of govt colleges 8% used illicit drug once a day, 16% twice a day and 46% many times a day⁽²⁷⁾. And among 300 subjects of private colleges 18% used illicit drug once a day, 18.3% twice a day and 33% many times a day. Research conducted in 2015 in Cambodia, Indonesia, Laos, Malaysia, Singapore and Thailand showed that 4.7% were infrequently using the illicit drug use and this percent reached to 16.9% in past 12 months. The high percent of these illicit drug use in our community showed fashion, poverty and Stress⁽²⁸⁾. In our research we found that in 300 subjects of govt colleges 22.33% were encouraged to start illicit drug usage and 62.66% weren't. And also, in 300 subjects of private colleges 37% were encouraged to start illicit drug usage and 48.66% weren't. The encouragement to start these drugs were either given by their friends or through relatives.

CONCLUSION

The results concluded that illicit drug use was more common in male students than females. Private universities students were found more abusive than public universities students because of social status and lack of supervision, further because of bad company and lack of parental supervision and easy availability of drugs in hostels boarders were more involved in illicit use compared to day scholar. Most commonly abused substance was tobacco in form of cigarettes. Risk factors of illicit drug use were,

Easy availability of drugs, Bad company, lack of supervision and Lack of awareness of their side effects.

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