



On-Campus Drug Consumption: Exploring the Trends and Patterns in Metropolitan Cities of Pakistan

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Abstract

This study is aimed at inquiring trends and patterns of illicit drug consumption in educational institutions of metropolitan cities of Pakistan. The quantitative research design was employed, where data was collected from 4997 students (3940 boys and 1057 girls) of public and private schools, colleges and universities of Islamabad, Karachi, Lahore and Peshawar through self-administered questionnaires. The study sample was selected through multistage cluster sampling. The study found that overall (19.6%) students used any sort of drug at least once in lifetime whereas, (3.7%) were found to be daily consumers. Worryingly, about half of the students (49.5%) had exposure to drugs in their teenage and further (7%) even under age 10. The ratio of female student's drug exposure prior to age 10 was more startling and twice higher than male. Strikingly (36%) students take drugs on campus. Findings suggest the need for taking measures to prevent the prevalence of drug use in educational institutions.

Key Words: Drug Abuse, Educational Institutions, Trends, Patterns, Teenage, Pakistan.

Introduction

The use of illicit drugs among youth and its production and trafficking is an enduring challenge confronted globally, as its horizon has extended over time. As per the World Drug Report (2016), 250 million people around the globe are illicit drug users comprising 1 in 20 people between the ages of 15-64. Pakistan is a developing state in the South Asian region with 97% of its population as adherents of Islam. Consumption of all type of drugs other than medical purposes is prohibited and abhorred publicly. However, drug consumption is widely practiced, and the country is considered as locus of drug users (Shafiq et al., 2006). As per estimations of the United Nations Office on Drugs and Crime (UNODC), approximately 6.7 million people in Pakistan consume illicit drugs. In addition to this, 1.6 million people consume opiates along with 860,000 heroin consumers of ages 15-64 (UNODC, 2013). Every year 40,000 more individuals are adding up as drug users, with an average age of fewer than 24 years (Baloch, 2016).

Pakistan also earns an enormous surplus through drug trafficking, in terms of per capita income. The country is leading among global usage of heroin worth \$2 billion annually through drug trafficking. The statistics reveal that every year 40 tons of processed heroin is consumed in Pakistan that is twofold of America, whereas further 110 tons been trafficked to international markets (Brown, 2017). The neighbouring country, Afghanistan, is the largest producer of opium in the world, and more or less 40% of its products have been transited through Pakistan in international markets (Mussadaq, 2014).

In educational institutions, drug use can also be associated with negative educational outcomes including diminishing interest, poor performance and dropouts (UNESCO, 2017). Likewise, drugs consumption is also linked with criminal tendencies resulting in physical, psychological and social harm to the human race (Shafiq et al. 2006). The excessive use of drugs is also considered a predominant cause of suicides among youth in educational institutions (Khan & Reza, 2000). Statistics reveal that every year the number of deaths caused due

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to drug usage is even higher than the terrorism. Approximately 685 deaths occur every day due to drug abuse, whereas only 39 people die due to terrorism (Ilyas, 2017).

The educational institutions in Pakistani society over the past few years also witnessed a surge in drug consumption. The print and electronic media frequently reported the proliferation and enormous use of narcotic drugs in educational institutions. These speculations were mainly spread by unconfirmed statistics provided by South Asia Strategic Stability Institute (SAASI), which claimed that half of the students (53%) in Islamabad's elite schools as drug users. As per SAASI report, they are mainly consuming hashish, heroin, ecstasy tablets and opium (Abbasi, 2016). However, these findings were based on a secret survey report that federal directorate of education (FDE) itself was incognizant of how and when it was carried out (Dawn, 2016; The News, 2018). This raised many questions on the authenticity of the reported claims.

The educational institutions are considered to be responsible not only for imparting knowledge but also for socializing students for their moral, social and physical wellbeing. However, the reported statistics, and occasional incidents reported in the media, put the educational institutions' credibility at stake. There are reported incidents of drug use and violence in the universities of Pakistan. For instance, the death of two students was reported in Lahore in 2016; a student at Lahore University of Management Sciences and a Medical student died due to drug intoxication (Javed, 2016). Another agonizing incident that took place in Abdul Wali Khan University, where a huge quantity of drugs was reported to be found in university hostels during the search operation (The News, 2017).

The surveys and reports provide an indication that the use of drugs is part of campus life. However, no credible statistics are available to know to what extent this menace has infiltrated these institutions. There has not been any concrete evidence found to gauge the prevalence of drugs. The issue had been solitarily discussed for the educational institutions of the capital city only (Mansoori et al. 2018). Therefore, the current study is significant as it endeavoured to portray the realistic picture of patterns of drug use in educational institutions of four metropolitan cities of Pakistan. Primarily we investigated commonly consumed drugs, age at exposure, methods and places used for intake of drugs by students along with gender-based variations.

Materials and Methods

The research employed a quantitative survey approach to understanding the patterns and trends of drug use. For this purpose, major educational institutions (schools, colleges and universities) of four metropolitan cities of Pakistan including Islamabad, Karachi, Lahore and Peshawar were selected. The ratio of drug use among these four cities was also observed to be the highest in Pakistan UNODC (2013). A team of qualified researchers acquired data, and students were provided with self-administrated questionnaires. The survey team had to face numerous challenges in the completion of this requisite task, and the foremost challenge was to gain access to these institutions. The educational institutes initially were reluctant to provide access to students of their particular institute probably due to security concerns and credibility. Therefore, a letter of authority describing the purpose of the research was shown to concerned institutional personals to seek consent. Furthermore, they were ensured about the anonymity and confidentiality of data. They were ensured about nondisclosure of the names of institutes.

We used a multi-staged cluster sampling strategy, at the first stage, the clusters were determined for different types of educational institutions (schools, colleges, universities), based on their geographic dispersion. In the next stage, each cluster was further divided into private and public sectors. In the third phase, the sample was drawn from each cluster of institutions using a stratified proportionate sampling technique.

The sample size (n) was determined by the proportion of units in each stratum (H) using the following formula:

$$\sum_{h=1}^H n_h = n.$$

Where H was each stratum of the total population (N), and n_h was the sample size for the stratum.

Initially, we set a target sample of 8000 students of public and private institutions. However, due to the accessibility issue and sensitivity of the topic, the team was able to collect data from 6200 respondents. Later,

the data was systematically edited, and a number of questionnaires half unfilled or lacking required information was discarded. After data editing, 4997 questionnaires were left, which were analyzed using Statistical Package for Social Sciences (SPSS).

The size of the sample varied in all four cities in proportion to the size of the population in educational institutions and accessibility. The number of male students who participate in the study was 3940, whereas 1057 were female students. Further, a number of respondents as per division of universities, colleges and schools were 3449, 760 and 788 respectively. Institution and sex-wise details are presented in Table 1.

Table 1. Institution and Sex wise Total Sample Distribution

Institution	Public/Private	Sex		Total
		Male	Female	
University	Public	2150	640	2790
	Private	487	172	659
	Total	2637	812	3449
College	Public	394	79	473
	Private	217	70	287
	Total	611	149	760
School	Public	483	20	503
	Private	209	76	285
	Total	692	96	788
Total	Public	3027	739	3766
	Private	913	318	1231
	Total	3940	1057	4997

Results

Consumption of Drugs among Students

Table 2 highlights the drug consumption patterns of students. Overall, 19.6 % of the total study sample comprising 1005 students admitted the consumption of at least one type of drug. The ratio of occasional users was found to be higher, as reported by 10.3 % of respondents, as compared to those who use drugs on a weekly basis (7.60 %). Students were provided with a list of commonly used drugs (see Table 2) to rate how often they use these drugs daily, weekly, occasionally or even once/twice in their lifetime. For instance, students were asked how they consume alcohol if they have ever consumed. Among (11.4%) students, whoever consumed alcohol only (1.2 %) were abusers who, intake it on a daily basis. Those who consume it on an occasional and weekly basis were 6.2 percent.

Although tobacco is not considered the illicit drug, yet it leads to the consumption of drugs. Alarmingly, almost every fourth of our respondents (27.3%) was smoking cigarettes. Unlike other drugs, the ratio of daily smokers was highest as one third were found to smoke every day. It is notable that those who intake alcohol occasionally is most in number after tobacco. To highlight tobacco usage is important as it is considered a gateway to other illicit drugs. Individuals' usually initiate with soft addictions like tobacco, *Gutka* (betel quid), *Chaliya* (betel nut), *Naswar* (moist powdered tobacco) ([Karachi Youth Initiative & Drug-Free Pakistan Foundation, 2013](#)). As Hallfores, (2002) states that regardless of gender, people who smoke cigarettes are five times more likely to experiment with marijuana and alcohol. Further, it is considered the most addictive drug with relatively weak resistance. Individuals smoke tobacco because they have strong inclination, and it makes them feel good (Baumistier, 2017). In our study, it was also substantiated that those students who were consuming any type of drug were also consuming tobacco.

Among other drugs, Marijuana was found to be used by (10.5 %) students. It is disconcerting to reveal that 8% of the respondents consumed ice, and 7% the ecstasy at least once in a lifetime. A similar pattern can be observed in Table 2 for most of the drugs, including cocaine, heroin, ecstasy and cannabis.

One might argue that why individuals consume drugs, knowing that it has perilous consequences. [Sani \(2010\)](#) is of the view that the young individual who is exposed to drugs out of curiosity to try something new are then fallen prey to intense euphoric effect, and then the addict finds it unable to quit. He/She knows that in the long run it may have hazardous consequences, yet due to the changes in functions of the brain, it overrides the rational warnings. He loses control over him, and his brain demands drugs.

Table 2. Drug Use among Students

Drugs	Never in Lifetime		Once/twice in a lifetime		Occasional		Every Week		Thrice a Week		Every Day	
	F	%	F	%	F	%	F	%	F	%	F	%
Alcohol	3676	88.6	171	4.1	180	4.3	57	1.4	19	0.5	48	1.2
Cocaine	3854	93.7	92	2.2	87	2.1	29	.7	13	0.3	40	1.0
Marijuana	3679	89.5	137	3.3	143	3.5	54	1.3	32	0.8	66	1.6
Heroin	3834	93.5	81	2.0	74	1.8	43	1.0	22	0.5	47	1.1
Tobacco	3026	72.7	317	7.6	279	6.7	118	2.8	73	1.8	350	8.4
Ecstasy	3778	92.8	98	2.4	68	1.7	34	.8	41	1.0	51	1.3
Cannabis	3733	91.2	124	3.0	101	2.5	50	1.2	36	0.9	50	1.2
Samad bond	3775	92.5	101	2.5	78	1.9	44	1.1	39	1.0	42	1.0
Petrol Sniffing	3696	90.5	155	3.8	102	2.5	46	1.1	42	1.0	44	1.1
Ice	3754	91.9	92	2.3	97	2.4	46	1.1	36	0.9	59	1.4
Naswar	3550	86.6	180	4.4	109	2.7	54	1.3	42	1.0	162	4.0

Gender and Drug Consumption Behaviour

The gender-based analysis of drug consumption presents a number of similarities and variations. Although tobacco was most frequently consumed by both genders, however, the ratio of male smokers was two times higher (29.6%) than the females. This is subsequently followed by *Naswar*, Alcohol and Marijuana reported with (15.7%), (12.2%) and (11.5%), respectively. Interestingly, Alcohol, Marijuana and Ice have commonly consumed drugs after tobacco. Consumption patterns of these drugs and intensity also vary among both genders. For instance, the use of Marijuana on a daily basis among male students is (1.8%) and approximately (4%) are occasional consumers. On the other hand, female students who consume Marijuana were only 0.7%.

Similarly, the use of ecstasy was reported by (5%) of the female respondents, superseded by cocaine (4%) and heroin (3.4%), respectively. Among the male, after tobacco, *Naswar* was the most commonly consumed, followed by alcohol and cannabis. Whereas, among females, after smoking, alcohol is the most consumed illicit substance. Men who drink on a daily basis were 1.3 % whereas only 0.7 % of female students admitted drinking every day. However, those who drink a week thrice were found to be higher among female students. The ever use of cannabis among female was twice as less as that of male students. The consumption of cannabis on a daily basis among girls was found to be least among all drugs that were in contrast to the consumption pattern of male students.

Table 3. Cross Tabulation Gender and Drug Use among Students

Drugs	Gender	Never in lifetime		Once/ Twice in a lifetime		Occasional		Every Week		Thrice a Week		Every Day	
		F	%	F	%	F	%	F	%	F	%	F	%
Alcohol	Male	2855	87.8	149	6	150	6%	46	1.4	11	0.3	42	1.3
	Female	821	91.4	22	2.4	30	3.3	11	1.2	8	0.9	6	0.7

Drugs	Gender	Never in lifetime		Once/Twice in a lifetime		Occasional		Every Week		Thrice a Week		Every Day	
		F	%	F	%	F	%	F	%	F	%	F	%
Cocaine	Male	3004	93	86	2.7	73	2.3	21	0.7	10	0.3	36	1.1
	Female	850	96	6	0.7	14	1.6	8	0.9	3	0.3	4	0.5
Marijuana	Male	2859	88.5	121	3.7	124	3.8	39	1.2	28	0.9	59	1.8
	Female	820	93.1	16	1.8	19	2.2	15	1.7	4	0.5	7	0.8
Heroin	Male	2983	92.6	72	2.2	69	2.1	34	1.1	19	0.6	43	1.3
	Female	851	96.6	9	1.0	5	0.6	9	1	3	0.3	4	0.5
Tobacco	Male	2271	69.4	273	8.3	242	7.5	98	3.0	64	2.0	321	9.8
	Female	755	84.9	44	4.9	32	3.6	20	2.2	9	1.0	29	3.3
Ecstasy	Male	2945	92.2	83	2.6	60	1.9	27	0.8	34	1.1	44	1.4
	Female	833	95.0	15	1.7	8	0.9	7	0.8	7	0.8	7	0.8
Cannabis	Male	2894	90	115	3.6	86	2.7	41	1.3	31	1.0	47	1.5
	Female	839	95.3	9	1.0	15	1.7	9	1.0	5	0.6	3	0.3
Ice	Male	2429	91.3	81	2.5	78	2.4	36	1.1	29	0.9	53	1.7
	Female	830	94.0	11	1.2	19	2.2	10	1.1	7	0.8	6	0.7
Naswar	Male	2709	84.3	167	5.2	100	3.1	47	1.5	36	1.1	154	4.8
	Female	841	95.1	13	1.5	9	1.0	7	0.8	6	0.7	8	0.9

Age at first use

An individual is more at risk of exposure to drugs during the period of adolescence. The earlier experimentation of psychoactive drugs increases the possibility of drug dependency (Hawkins & Graham, 1997). For instance, individuals who reported to use hardcore drugs like cocaine and crack later in their lives initiated their addictive behaviour with the use of cigarettes, Marijuana and alcohol almost two years earlier. The increase in drug exposure of teenagers is between the ages of 11-16 (EMCDDA 2007). Table 4 showed the ages of students when they were first introduced to drugs. It can be observed that most of the respondents (51.5%) started experimenting with drugs between the ages of 18-26. However, the majority (49.5%) of the students were introduced to drugs in their teenage.

The patterns of age at exposure to drugs among male and female students also varied. It can be observed that the ratio of female students exposed to drugs in their teenage is higher than the males. Overall, 52.6 % of the total female drug users first consumed drugs prior to the age of 18.

This indicates that drugs are easily accessible even to the minors, and drug peddlers are freely moving in the country despite a ban on the sale of all types of narcotics—Similarly, the health and social costs of drug usage increase with early exposure to drugs. About 12% of drug users are suffering from drug-related disorders (UNODC 2016). The increasing trend of drug intake among young individuals is also related to violence (Jawaid et al., 2008). Besides this, early experimentation of drugs negatively affects the physical and social development of the individual. It is considered the productive phase of their life in which they mainly have opportunities for personal growth.

Table 4. Drug Use and Age at Exposure among Male and Female Students

Gender		How old were you when you started taking drugs?			Total
		Age 10 and below	11-17	18-26	
Male	Count	42	284	353	679
	% within Gender	6.2%	41.8%	52.0%	100.0%
Female	Count	11	30	37	78
	% within Gender	14.1%	38.5%	47.4%	100.0%
Total	Count	53	314	390	757
	% within Gender	7.0%	41.5%	51.5%	100.0%

Methods of Drug Consumption

There are diverse methods of drug consumption, depending on the variety of drugs. Each of the methods produces different health hazards for the drug addict. Notoriously, shared syringes and needles used by Injecting Drug Users (IDUs) have been attributed to cause and spread HIV/AIDS virus. Table 5 demonstrates the methods of drug consumption among students. Majorly, four different methods are frequently employed by the students for taking drugs.

The findings indicate that 62% of the students use drugs by oral intake, whereas 40.2% admitted to inhaling. Disconcertingly, 11% of students were consuming drugs through injections, which dangerously exposes them to catch chronic and acute diseases. Use of injections is the malignant cause of the proliferation of AIDS. The use of drugs and reported cases of AIDS among injecting drug users are high in number in metropolitan regions in numerous countries (UNODC, 2015). In addition, almost 17% of students sniff drugs.

Table 5. Methods of Drug Intake

Method of Drug Use	Responses*		Percent of Cases
	N	Percent	
Injection	105	8.5%	11.0%
Sniffing	159	12.8%	16.6%
Inhaling	385	31.0%	40.2%
Oral intake	593	47.7%	61.9%
Total	1242	100.0%	

Multiple responses generated 1242 responses for 958 cases who responded to this question

Where do they go for drug Consumption?

The drug consumers usually intake drugs at different places, either at home or away from home and family. It can be observed in Table 6 that over two quarters (61 %) of students consume drugs away from home. It is alarming that almost (21 %) students also take drugs at their homes, which may be an indication that their home environment is insecure. The literature has also highlighted that the likelihood of drug abuse increases with parental involvement in drug-related activities. Peer influence can also be seen, as 35% of the students take drugs at their friend's place. Alarmingly, more than one-third of the drug consumers (36%) take drugs on campus. The proportion of female students' who admitted consuming drugs in educational institutions is slightly higher (41%) than their counterparts. This indicates that they find the campus environment more favourable for consuming drugs than any other place.

Table 6. Preferred Places of Drug Use

Gender		Places					Total
		Away from Home	At Home	At Friends' Place	At Campus	At Parties	
Male	Count	605	192	330	344	412	1883
	% within Gender	62.3%	19.8%	34.0%	35.4%	42.4%	
Female	Count	58	32	52	48	59	249
	% within Gender	49.6%	27.4%	44.4%	41.0%	50.4%	
Total	Count	663	224	382	392	471	2132
		31.1%	10.5%	17.9%	18.4%	22.1%	100%
	Percent of Cases	60.9%	20.6%	35.1%	36.0%	43.3%	

Multiple responses generated 2132 responses for 1088 cases who responded to this question

Discussion

The nexus between campus life and drug abuse is not new, and students comprise a significant proportion of drug users. Our study highlights that the majority of students (80.4%) in educational institutions of four metropolitan cities in Pakistan were those who never consumed drugs. Overall, the percentage of respondents, including ever and daily users, was 19.6 %. Whereas, only 3.7% are drug abusers who intake drugs on a daily basis. These findings significantly differ from the previous astronomical claims ([Qasim, 2018](#); [Abbasi, 2016](#); [Ali, 2016](#)) of unbelievably high rates of on-campus drug users in Pakistan. Usman et al., (2017) in a study in Islamabad and Rawalpindi schools and colleges described 73 % males and 75% females using drugs on a daily and weekly basis. Our data did not confirm these claims. However, the study findings were in line with the drug usage patterns explored in numerous studies, globally. For instance, [Tarehian et al., \(2008\)](#) found that the prevalence of soft drug users, including tobacco (24 %), and alcohol (17 %) was higher in comparison to drugs like opium (2.3 %), hashish (2.2 %), and ecstasy (0.7 %) in Tehran University. An identical trend was found in the current study, as the use of tobacco and alcohol was higher than the other drugs. [Bennett and Holloway's \(2014\)](#) study on the students of colleges and universities also show that 27% of them consume drugs. These global trends indicate that usually, the prevalence of drug consumption on average is around 20-30% among the students.

Probability of becoming a drug addict is higher in the periods of transition from teenage to adulthood, as it is considered a time of major physical changes and exploration (Arnet, 2000). Individuals try to explore and experiment with diverse life opportunities during this phase. In our analysis of Drug use at the campus in Pakistan, it was found that 49% of the students started taking drugs below 18 years of age. This stipulates that the drugs are easily accessible to the youngsters. Surprisingly, the ratio of female students' exposure in teenage was slightly higher than the male students.

The existing literature shows a mixed response to the age of drug exposure. [Mansoori et al. \(2018\)](#) reveal that most of the drug users (61%) had experienced drugs between the ages of 20-30. On the other hand, age of transition from teenage to adulthood (16-20 years) was found to be the riskiest period for the students of schools and colleges in Islamabad (Usman et al., 2017). [Skara and Sussman \(2003\)](#) state that drug-related problems are on the rise during the adolescent period. However, our study reflected some worrisome figures about the age at first consumption. Seven percent of students started consuming drugs even before the age of 10. As adolescents are more likely to be the victims of drug abuse, smoking is considered the first link in the chain ([Kandel & Chen, 1992](#)). The earlier exposure to drugs increases the drug dependency and habitual intake of heavy dosage ([Liang and Chikritzhs, 2015](#); [DiClemente, Hansen & Ponton, 1996](#)).

The use of drugs is not always a voluntary activity. Individuals consume them due to different reasons and motivations. Numerous studies focused on exploring these urges, among them: failure in romantic life, partner cheating, curiosity, peer pressure, and domestic problems are commonly observed ([Sani 2010](#)). Besides, academic stress is also a contributory factor to drug abuse. The level of stress depends upon the varying circumstances. Usually, the pressure in terms of expectations to be successful in a competitive environment asserted by family, teachers and friends is a key factor ([Simon-morton & Chen, 2006](#); [Zaman et al., 2015](#); [Wechsler et al., 2000](#)).

Students use various methods for drug intake, and injecting drugs being one of the most harmful methods of drug use is also in practice among students. Our study finds that the oral intake was the most commonly used method (60%), superseded by inhaling (40%). This is a serious public health issue, and ignorance may lead to devastating consequences in terms of physical and mental health of young people. As the drug users often share syringes and do not dispose of them off in a prescribed manner, which increases not only lethal health risks for them but also for the general public around them.

Students are exposed to drugs due to various factors. However, the role of primary socialization groups, including, the peer and family, are crucial. Our study highlights that most of the students consider their institutional environment favourable for drug consumption, as almost one-third of the drug consuming student find refuge in educational institutions for drug consumption. Numerous studies (for example, [Zaman et al., 2015](#); Usman et al., 2017; [Bray et al., 2003](#)) indicate the well-established role of the peer as motivating factor to persuade students to be indulged in drug usage. Besides, the attitude of parents toward their children's first exposure to drugs is also positively associated with students' drug intake.

Conclusion

The study finds that every fifth of the students in educational institutions of Pakistan has been exposed to drugs at least once in a lifetime. Although the study findings were in contrast to the prevalent speculation of the alarming ratio of drug abuse, yet the presence of three to ten per cent of regular drugs users in educational institutions shall not be considered inconsequential. As ignorance may lead to disastrous implications in terms of physical and mental health of young people, as well as a rise in future trends if not addressed in timely. For most of the students existing peer group of drug users can create a domino effect, and non-consuming student can potentially fall prey to drug abuse if proper and timely measures are not taken. This is also witnessed in the current study that the students are mainly exposed to drugs in their teenage. It may also adversely affect the overall wellbeing through indulgence in illegal, immoral and unethical behaviours.

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