Consumption of Illicit Psychoactive Substances for Recreation among Students of Age 15-25

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Abstract

Substance abuse in college campuses is not a hidden practice and is well received by the students to escalate it very fast. Illicit drug addiction may be one of the most dangerous types of addictions. In general, illicit drugs are those that are illegal to make, sell, or use and include a long list of items which are psychoactive, highly addictive and pose serious health risks, even when taken in small doses.
The aim of this study was to explore the illicit use of psychoactive substances among college students between ages 15 to 25 years studying in Karachi, Pakistan and add to our understanding of other associated factors with illicit use of these substances. A descriptive cross sectional study was conducted in Karachi, Pakistan in the year 2015. Using educational framework, the scope of the frequency of drug use among teens and youth was studied. A standardized multiple-choice and open-ended questionnaire was completed by 600 students from different institutes. The questionnaire was focused on frequency, accessibility and type of substance use, age at which the abuse started, monthly expenditure, dependence upon drug, and if the individual is aware of the toxic dose illicit substance use. The data were analysed using IBM SPSS Statistics version 22 and Microsoft excel. The prevalence of illicit drug use among students was found to be 54%. The frequency of consumption of the drugs by these students was weekly (31%), daily (27%), monthly (22%) and 20% consumed it only once a year. Most of them started drug consumption at age between 15-19 years. Most frequently used substances among university students were Marijuana (34%), alcohol (23%), cocaine (14%), heroin (12%), ecstasy (11%) and solvent (6%). More than one drug was used by 35% of the respondents. Students admitted easy accessibility of their substances of choice through friends (47%), dealers (36%), and over the counter (17%). They spent Rs.500 to Rs.3000 per month on drugs. The awareness about lethal dose among students was found to be very high (89%). Consumption of illicit psychoactive substances is widely prevalent affecting more than half of the students of age 15-25 studying in different educational institutes of Karachi. Most common substances consumed were marijuana and alcohol. Most of the students get drugs through their friends. There is a need to educate and create awareness about illicit drug use among the students and the community at large.

Key words: Psychoactive substances, Recreational Consumption, Illicit Substances, Substance Use among Students.

Introduction

Psychoactive drugs are substances that can change the consciousness, mood, and thoughts of those who take them. They include legal drugs, such as tobacco and alcohol; as
well as illicit drugs, such as cannabis, amphetamines, ecstasy, cocaine, and heroin.[1]

Data from the United Nations Office on Drugs and Crime (UNODC) show large-scale seizures of cocaine, heroin, cannabis and amphetamine-type stimulants in different parts of the world. Availability of cocaine, heroin and cannabis depends on the level of cultivation in source countries and on the success or failure of trafficking organizations. However, even with increased levels of law enforcement activities, there always seems to be enough available to users. [1]

Substance use is also more prevalent among young people than in older age groups. According to the scientific consensus report produced in 2004 by the World Health Organization (WHO) 2.7% of the total global population and 3.9% of people 15 years and above had used cannabis at least once between 2000 and 2001. Report also shows that there is evidence of rapid increases in the use of amphetamine-type stimulants among teenagers in Asia and Europe. [1]

Pakistan has always confronted with a drug abuse problem ever since its existence and today, the country has the largest heroin consumer market in the south-west Asia region. While the entire region suffers from the drug trade in South Asia, Pakistan appears to be its worst victim because of Pakistan’s geographic location next to Afghanistan. Opium and poppy have always been cultivated in the Northern parts of Pakistan. Opium has been sold in licensed shops for decade's prior partition. After independence in 1947, the major consequence of this has been a significant increase in domestic consumption of heroin in Pakistan. As a proportion of drug abusers, heroin users increased from 7.5 percent in 1983 to a shocking 51 percent in 1993. Since then Heroin use has reached epidemic proportions in Pakistan affecting nearly every socio-economic group. [2]

The most recent drug use data available in Pakistan was collected through National Assessment of Problem Drug Use in 2006. The highest prevalence of opioid use is in Baluchistan, followed by NWFP, Punjab and Sind. [2]

The 2006 Assessment Report identified a substantial increase in the use of cannabis, sedatives and tranquillisers since 2000. The use of inhalants has also been observed to be
increasing among adolescents. The report identifies an emerging shift from traditional plant based drugs to synthetic drugs commonly termed ‘Amphetamine Type Stimulants (ATS)’. Abuse of this new wave of drugs is not yet widespread and is largely restricted to young people. These recent developments in the abuse of synthetic drugs make the necessity of controlling their production and trafficking an immediate challenge for Pakistan. [2]

In Karachi some 2 million children and youth are at risk of drug addiction, as prevalence of drug addiction is very high in this megacity. The major portion of Pakistani population is consisted of youth and children and they are highly exposed to smoking and drugs. 100 million people in Pakistan might be at risk of smoking and other types of addiction. The main addiction is of hashish because this drug is easily available at every nook and corner of the city. The main trafficking areas of hashish are Chanessar Goth, Safoora Goth, Gadap town, Massan near kemari. The second main addiction amongst karachities is of heroin which is another easily accessible. These children start addiction from cigarette smoking and then jump to hashish after which they start inhaling glues and petroleum products. These children later switch to heroin and finally become injection addicts. [3]

The present study was aimed to investigate prevalence of substance abuse and associated factors of drug abuse among college and university students of Karachi, the metropolitan city of Pakistan.

**Materials and methods**

A descriptive cross-sectional study was carried out among 600 undergraduate students of 13 Public and private educational institutes including medical universities of Karachi, Pakistan. The study sample was conveniently selected from these institutes.

Sample size was calculated on the assumption that the prevalence of substance use among students would be 50%. The confidence level was set at 95% with a 10% acceptable margin of error. This required a sample size of 595, which was increased by 5 to allow for any dropouts or withdrawals. Therefore, a total of 600 students were recruited for the study. Both male and female students, of age between 15 to 25 years of age, and willing to participate in the study were eligible to be included.
Data was collected through a semi-structured questionnaire developed through literature review. The data were entered and analysed using, Microsoft Excel and IBM SPSS VERSION for Windows 20.0 software.

**Ethical considerations**

Informed verbal consent was obtained prior to the interview. Participation was voluntary and no coercion was used in the data collection process. They were fully informed of the nature of the study and the use of the data. They were free to withdraw from the interview at any time or refuse to answer any particular question. Participants were also ensured of confidentiality. No personal identifying information was obtained for any part of the investigation. Participants were offered information, counselling, referral to health and social services available in the community.

**Results**

**Response rate**

The questionnaires were completed by 600 students. A lot of reassurance was done due to sensitivity of the selected topic, i.e., substance use in a university. Some students were anxious of counter-accusation despite of anonymity assurance. Others perceived the study as violation of their privacy, while a few of them were indifferent to the aims of the study.

**General Characteristics**

The average age of the students in the sample was 15-25 years. Most of the respondents were males, females ‘participation was slightly lower. 100 percent of the participants were Muslims.

**Prevalence, Types and frequency of substances used**

The study showed 324 (54%) consumed contra band illicit drugs. (see Chart.1) Marijuana, alcohol, cocaine, heroin, ecstasy and solvent were the most commonly used drugs. (see Table l).
More than one drug was used by 35% of the respondents. The most common age for starting the drug was between 15-19 years, followed by 20-25 years and 12-14 years. (see Table 2) The frequency of consumption of the drugs by these students was weekly (31%), daily (27%), monthly (22%) and 20% consumed it only once a year. (see Chart 3) Most of the students were aware about lethal dose or toxic dose of the substance of ‘choice (see Chart 2).

Cost and accessibility

According to the respondents 72% of them paid for the drugs out of their own pocket where as 28% obtained the money from other means which included borrowing from friends. Amongst them 33% spent maximum amount of the Rs. 3000/month on drugs, 32% spent less than Rs. 500/month while 35% spent between Rs. 500-1000/month. Respondents were getting substances of their choice easily over the counter; others got hold of it through a dealer and from their friends and relatives. (see Table 3)
### Table 1: Types of Illicit Substance Used by students

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Type Of Substance used</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Marijuana</td>
<td>34</td>
</tr>
<tr>
<td>2.</td>
<td>Alcohol</td>
<td>23</td>
</tr>
<tr>
<td>3.</td>
<td>Cocaine</td>
<td>14</td>
</tr>
<tr>
<td>4.</td>
<td>Heroine</td>
<td>12</td>
</tr>
<tr>
<td>5.</td>
<td>Ecstasy</td>
<td>11</td>
</tr>
<tr>
<td>6.</td>
<td>Solvent Abuse</td>
<td>6</td>
</tr>
</tbody>
</table>

### Table 2. Age at first substance use

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Age (years)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>12-14</td>
<td>11</td>
</tr>
<tr>
<td>2.</td>
<td>15-19</td>
<td>67</td>
</tr>
<tr>
<td>3.</td>
<td>20-25</td>
<td>22</td>
</tr>
</tbody>
</table>

### Table 3: Respondents’ Accessibility to Illicit Substances

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Source Of Substances</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Over the Counter</td>
<td>17</td>
</tr>
<tr>
<td>2.</td>
<td>Dealer</td>
<td>36</td>
</tr>
<tr>
<td>3.</td>
<td>Friends</td>
<td>47</td>
</tr>
</tbody>
</table>
Discussion

The present research contributes to the use of illicit substances by providing data on prevalence, personal and environmental factors facilitating substance use among students of 15 to 25 years in metropolitan city of Pakistan called Karachi. The findings of present study revealed that the prevalence rate of illicit psychoactive substance use was 54% among students. A study conducted during 2005 among different educational institutions of Karachi
reported the prevalence rate of 34% [4] and another study done in Khyber pakhtunkhwa in 2014 reported 68% prevalence rate among students.[5] Present study shows that even though the prevalence has significantly increased among students of Karachi but still lower than educational institutes of Khyber pakhtunkhwa, which is near to Afghanistan border. If we compare it with country located across border called India then according to a study done among undergraduate students in Calcutta indicated that 48.9% of the respondent students were abusing drugs [6]. The same trend in results was found in Nigeria as well [7].

The most common substances used by students in this study were Marijuana 109 (34%), alcohol 76(23%), cocaine 46 (14%), heroin 40(12%), ecstasy 35( 11%) and solvent 18 (6%). More than one drug was used by 35% of the respondents. While the other study done in Karachi by Niaz U, Siddiqui S, Hassan S, Et Al, Hashih, Alcohol, Ecstasy and Marijuana i.e. 37.9% were the most commonly used substances.4 Other research studies have also shown Marijuana and Ecstasy as prevalent illicit (illegal) drugs among teens because it is highly accessible [8]. In fact, 90% of high school seniors stated that obtaining marijuana is virtually trouble-free, and nearly 40% of 10th and 12th graders reported smoking marijuana in 1999[9]. Teens who use this drug, are more likely to initiate the use of other drugs (e.g., cocaine and heroin). According to the National Institute on Drug Abuse (2001), 5% of 12th graders reported using cocaine in 2000 [10]. The most commonly used drugs were cocaine (19.0%) and crack-cocaine (15.0%), followed by amphetamines (11.0%), alcohol, caffeine, barbiturates and benzodiazepines (10.0% each) reported by another study done in Karachi among drug users in 2011 [11] while the common substance used by the students of Khyber pakhtunkhwa in 2014, was tobacco products (n=124, 41.4%) followed by sedatives (n= 44, 14.7%) and alcohol (n=20, 6.7%)[6].

The study isolated factors which should be controlled to address the illicit substance use among students which include common age at which the students started drug consumption was between 15-19 years, easy accessibility of these substances through friends (47%), dealers (36%), and over the counter (17%). In this research a significantly high percentage i.e., 88% of students declared mastery of lethal dose of their substance of choice
which is a positive aspect because it is a very sensitive issue as a medical epidemiologist at the Centers for Disease Control and Prevention stated that in 2005 more than 22,000.

American lives were lost due to overdoses, and the number is growing rapidly. Paulozzzi also testified that all available evidence suggests that unintentional overdose deaths are related to the increasing use of prescription drugs, especially opioid products [12]. However, the vast majority of overdoses are also attributable to alcohol. It is very rare for a victim of an overdose to have consumed just one drug. Most overdoses occur when drugs are ingested in combination with alcohol [13]. According to the Centers for Disease Control and Prevention, every day in the U.S., 44 people die of drug overdoses [14].

Conclusion

Consumption of illicit psychoactive substances is widely prevalent affecting more than half of the students of age 15-25 studying in different educational institutes of Karachi. Most common substances consumed were marijuana and alcohol. Most of the students get drugs through their friends. There is a need for health education and counselling for students to be integrated into illicit drug abuse management plans. Public health programs need to address all the factors which are facilitating illicit substance use among students as an integral part of Comprehensive Health Services since it has both medical as well as social implications.

Limitations of study

1. Some of the respondents especially females were reluctant in answering the questions due social restraints, so it was a predominantly male sample.
2. Only students who were willing to fill the questionnaire were included. Convenient sampling was a limitation as the data gathered for this study may not be generalized.
3. The results are based on self-reported rates of substance use.

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References


Authors Column

Dr. Rehana Khalil is a gold medalist and award winning Pakistani Researcher (MBBS, MPH) working as Assistant Professor at Unaizah College of Medical Qassim University, KSA. She has published eight research papers in peer reviewed journals at national and international levels. She has eleven years of experience in the Medical teaching and non-profit sector (with SHED Society for Health and Education Development and UNICEF). She has participated in many workshops, certificate courses and training programs. Apart from her direct involvement in research with Aga Khan University, John Hopkins University, Baqai Medical University, and HASP-CIDA, she has been teaching undergraduate (MBBS) and postgraduate (MPH) students at Baqai Medical University and supervised 25 dissertations.