



## FREQUENCY OF SUBSTANCE USE AMONG THE MEDICAL UNIVERSITY OF LARKANA SINDH, PAKISTAN

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### ABSTRACT:

The Quarter of the psychiatric disorders start below the age of 24. The substance used by the medical students are alcohol (24%), cannabis (11.8%) and tobacco (17.2%), in addition 9.9% use is of hypnotic and sedative. Cocaine use is about 2.1% and stimulants are being used by them 7.7%. very low percentage of opiate is also been used which is 0.4% specially in latin america. Mostly substance use is found in final year students. A cross-sectional descriptive was conducted among the undergraduate Medical students of ty larkana. Data was collected using online questionnaire and the results were analyzed by SPSS 23 with the help of mean and percentages. Majority of students ranged from age group of 22-23 (32.8%). 41.1% Studnets living with more than 5 family members, 79.7%, participants did not use drugs ever, 72.4%, never tried ciggerates, 86.5% have never tried marijuana cannabis, 73.7% are never on drugs, 92.9% never used amphetamine crystals, 62.5% participants were aware regarding drug related information, its prevention, treatment and side effects. 70.3% participants never have any withdrawal symptoms which may be due to being non user, 52% of the participants were unaware about the potential risk and dangerous association with cocaine use. 54.9% of the participants were unaware not familiar with the available resources and support services regarding quitting tobacco. 67.9% of the participants were unaware of the potential risk and dangerous effects associated with cocaine. Policies must be formed to avoid usage of these substances and and strictness must be observed on the students.

**KEYWORDS:** Students, Substance Use, Survey

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**Introduction:**

The most important objective with medical field is to train competent professionals in order to promote public health and advancement of medical sciences<sup>1</sup>. Medical students are considered as the future workforce and important to deal with health of current and future populations. It is not easy to get admission in medical colleges as there is very competent and stressful process. It has been found that more women's are pursuing this field. Quarter of the psychiatric disorders start below the age of 24<sup>2</sup>. The reason for consumption of legal and illegal substance by the medical students is only less known. The substance used by the medical students are alcohol (24%), cannabis (11.8%) and tobacco (17.2%), in addition 9.9% use is of hypnotic and sedative. Cocaine use is about 2.1% and stimulants are being used by them 7.7%. very low percentage of opiate is also been used which is 0.4% specially in latin america. Mostly substance use is found in final year students<sup>3</sup>. it has been revealed that college students who report non medical use of prescription drugs are majority involved in cigarette, heavy drinking, alcohol, marijuana and other illicit drug use. The chances of usage of Ecstasy (3,4-methylenedioxymethamphetamine) was reported to be fourteen times higher<sup>4-6</sup>. With the usage of alcohol and other illicit substance in society it poses a grave social issue, which also include medical professionals, although students deny the use of psychoactive substances at this level<sup>7-9</sup>. consumption of alcohol is more in western countries but less dependency on cigarette smoking and consumption of psychoactive substances is observed<sup>10</sup>. It has been found that in medical undergraduates of India and Pakistan the substance use has been prevalent<sup>11-12</sup>. Senior students are found to be consuming more psychoactive drugs in comparison with junior students<sup>13-15</sup>. Students who lives in hostels and rented places are more prone to psychoactive drug abuse<sup>16-18</sup>. These substance are mainly used to get relief from psychological stress, student abuse, immaturity, and history of family consuming alcohol and because of that students are using them<sup>10</sup>. The main objective of this study was to explore the different psychoactive substances/drugs patterns among medical students of larkana.

**Methodology:**

A Cross-Sectional Descriptive study with sample size of 384 participants was conducted among the Undergraduate Medical Students of Larkana for the period of six months starting from 1st August 2023 to 31st January 2024. All students responded to a questionnaire which was designed to measure the

prevalence of drug use. Data were collected by an online self-administered questionnaire regarding drugs abuse. Data were collected using a validated and reliable self-administered questionnaire that included items regarding the following data: sociodemographic factors; current and past history of smoking, drug abuse; and problems related to drug abuse. The questionnaire was developed on the basis of thorough literature reviews. The eligibility criteria were adjusted in such a way that both genders (male, female) were studied. The results were analyzed by SPSS 23 with the help of mean and percentages.

**RESULTS:**

Majority of students ranged from age group of 22-23 that were about 126 (32.8%), followed by >24 (29.2%), then 18-19 about 76 (19.8%) and 20-21 were about 70 (18.2%) as mentioned in Table No.1. In our study out of 384 the female participants were 205 (53.4%) and male participants were 175 (45.6%) and 4 (0.10%) participants preferred not say about their gender as shown in Table No.2, Majority of the participants belong from urban areas of about 227 (59.1%) in comparison with rural were 157 (39.9%) as mentioned in Table No.3. Majority of the participants were living with more than 5 family members which were about 158 (41.1%), followed by two members of about 82 (21.4%), followed by four members which were 78 (20.3%) and only five members were 66 (17.1%) as mentioned in Table No.4. In this study 313 (82.5%) were single, 64 (16.5%) were married, 4 (1%) were divorced as mentioned in Table No.5. Majority of the participants did not use drugs ever 306 (79.7%), 58 (15.1%) used drugs in their life and 19 (4.9%) were unsure about using drugs or not as mentioned in Table No.6. Majority of the participants 278 (72.4%) have never tried cigarettes or puffs, 89 (23.2%) did used them and 17 (4.42%) were unsure about their consumption or usage as mentioned in Table No.7. Majority of the participants 332 (86.5%) have never tried marijuana cannabis, 37 (9.6%) did used them and 15 (3.90%) were unsure about their consumption or usage as mentioned in Table No.8. Majority of the participants 315 (82%) have never tried marijuana cannabis, 27 (7%) did used them when they were between the age group of 15-18 years, and 21 (5.46%) did used them when they were between the age group of 18-20 years and 21 (5.5%) participants were unsure as mentioned in Table No.9. Majority of the participants 283 (73.7%) are never on drugs, 43 (11.2%) rarely used drugs and 26 (6.8%) occasionally used drugs, daily users were about 18 (4.37%) and monthly usage of drugs was about 7 (1.8%) as mentioned in Table No.10. Majority of

the participants never used amphetamine crystals which were about 357 (92.9%) and rest of respondents did have a crack at amphetamine which were 27 (7%) as mentioned in Table No.11. About 312 (81.25%) never had drugs in their life, 40 (10.4%) participants took drugs because of emotional Damage, 25 (6.5%) took due to academic stress and 7 (1.8%) took due to peer pressure as mentioned in Table No.12. 240 (62.5%) participants were aware regarding drug related information, its prevention, treatment and side effects. 103 (26.8 %) were not aware and 41 (10.6%) were unsure did feel withdrawal symptoms as mentioned in Table No.13. 270 (70.3%) participants never have any withdrawal symptoms which may be due to being non user, 73 (19 %) did feel withdrawal symptoms 41 (10.7%) were unsure about the withdrawal symptoms as mentioned in Table No.14. 268 (69.7%)

participants never did drugs but 116 (30.2%) of the participants did tries to reduce or quit dugs as mentioned in Table No.15. 200 (52%) of the participants were unaware about the potential risk and dangerous association with cocaine use while 184 (47.9%) were aware about the potential risks as mentioned in Table No.16. 211 (54.9%) of the participants were unaware not familiar with the available resources and support services regarding quitting tobacco and 145 ( 37.8%) participants were familiar with the available resources and support services for quitting tobacco while 28 (7.3%) were unaware as mentioned in Table No.17. 261 (67.9%) of the participants were unaware of the potential risk and dangerous effects associated with cocaine while 54 (14.1%) were aware and 23 (5.9%) were not sure as mentioned in Table No.18.

Table No.1

<b>AGE RANGE OF THE RESPONDANTS</b>		
Age Range	Frequency	percentage
18-19	76	19.8
20-21	70	18.2
22-23	126	32.8
>24	112	29.2

Table No.2

<b>Gender</b>		
Male	Female	Prefer not to say
175 (45.6%)	205 (53.4%)	4(0.10%)

Table No.3

<b>Are of Residency</b>	
Urban	Rural
227 (59.1%)	157 (39.9%)

Table No.4

<b>How many peoples are you living with</b>		
Age Range	Frequency	percentage
>five	158	41.1
Five	66	17.1
Four	78	20.3
two	82	21.4

Table No.5

<b>Marital Status</b>		
	Frequency	percentage
Married	64	16.5
Divorced	4	1
Single	313	82.5

Table No.6

<b>Drug usage</b>		
	Frequency	percentage
Yes	58	15.1%
No	306	79.7%
May be	19	4.9%

Table No.7

<b>Have you ever tried cigarette of few puffs</b>		
	Frequency	percentage
Yes	89	23.2%
No	278	72.4%
May be	17	4.42%

Table No.8

<b>Have you ever tried Marijuana Cannabis</b>		
	Frequency	percentage
Yes	37	9.6%
No	332	86.5%
May be	15	3.90%

Table No.9

<b>What was your age when you first attempted marijuana Cannabis</b>		
Age Range	Frequency	percentage
15-18	27	7%
18-20	21	5.5%
Not at all	315	82
others	21	2.5%

Table No.10

<b>Frequency of drug use</b>		
	Frequency	percentage
Daily	18	4.37%
Monthly	7	1.8%
Occasionally	26	6.8%
Rarely	43	11.2%
Never	283	73.7%

Table No.11

<b>Use of Ice/Amphetamine crystals</b>		
	Frequency	percentage
Yes	27	7%
No	357	92.9%

Table No.12

<b>Factor contributing Drug Use</b>		
	Frequency	percentage
Academic Stress	25	6.5%
Emotional Damage	40	10.4%
Peer pressure	7	1.8%
never	312	81.25

Table No.13

<b>Awareness regarding drug related information , its prevention , treatment and side effects</b>		
	Frequency	percentage
Yes	240	62.5%
No	103	26.8%
Unsure	41	10.6 %

Table No.14

<b>Once you stopped taking drug, did you felt any withdrawal symptoms?</b>		
	Frequency	percentage
Yes	41	10.7%
No ( never used)	270	70.3%
Unsure	41	10.7 %

Table No.15

<b>Attempt to stop quitting drugs</b>		
	Frequency	percentage
Never used drugs	268	69.8%
Attempt to quit	116	30.2%

Table No.16

<b>Knowledge related with risks associated with cocaine use</b>		
	Frequency	percentage
Yes	184	47.9%
No	200	52%

Table No.17

<b>familiarity with the available resources and support services for quitting tobacco</b>		
	Frequency	percentage
Yes	145	37.8%
No	211	54.9%
unaware	28	7.3%

Table No.18

<b>familiarity with the potential risk associated with cocaine use</b>		
	Frequency	percentage
Yes	54	14.1%
No	23	5.9%
unaware	261	67.9%

### Discussion:

The psychoactive substances are consumed by the medical students from india , pakistan and western world<sup>11-13</sup>. The current study calculated the mean and frequencies of different psychoactive substances used among medical students and their consumption pattern and hence giving health policy makers an idea how to counter this important issues. We found 100 percentage of response rate in comparison to previous studies where response rate was 89.46 % and 86.6% from lahore<sup>9</sup> and 83.6% from a polish study<sup>18</sup> and 50% reported by the Candian study<sup>15</sup> and 57.7% by the brazillian study<sup>19</sup>. In current study the majority of students denied to have use of substance about 79.7% which is lower than the previous published studies that are

81.66% and 83%<sup>15</sup> and higher than 78.51%<sup>10</sup>, around 15.1% of the responders agree to use the drugs which are lower than the previous published studies i.e. 17% from lahore<sup>9</sup>. A Majority of the students belonging from age group of 22 to 23 years with percentage of 32.8% which is lower than the previous published literature i.e 62%<sup>10</sup>. Males mostly frequently use the drugs and previous literature also supports this logic<sup>10</sup>. Students from senior batches are more prone to use substance abuse which is also supported by global literature<sup>10</sup>. In previous literature the main use for consuming these substances are low self esteem<sup>10</sup> in comparison with our study we have found out the main reasons are emotional damage 10.4%. undergraduates also have tendency to use these



substances for pleasure or fun purpose<sup>7</sup>. 23.2% of the students were smoking cigarettes which is lower than the previous published studies 76.67%<sup>10</sup>. The main reason behind usage of tobacco is more socially then dependency specially in Pakistan. In our study 9.6% used cannabis which is also lowest as compared to previous literature which was 27.33%<sup>10</sup> and 54.75 from the west<sup>20</sup>. The use of amphetamine crystal was 14.67%<sup>10</sup>, 32.9%<sup>20</sup>, 14.6%<sup>9</sup>, 16.67%<sup>8</sup> in comparision with our study it was 7%.

### Conclusion:

It has been found that psychoactive substances are very prevalant and easily accessible in this part of the world which is very worrying as this trend need to be stopped else the perentage of user will be increased. Seminars and lectures regarding avoding the use of substance must be held while higlighting their hazardous effects. Policies must be formed to avoid usage of these substances and and strictess must be observed on the stduens and this is the time for the policy makers to look after this issue else it would be difficult for them to have a control on impotant issue.

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### Conflict of interest:

The authors doesnt have any conflict of interest.

### Authors contribution:

Fahad Jibrán Siyal, Raheela Saleem and Nazeer Ali Buriro generated the idea and design the study, Madah Masood, Zeeshan Ahmed and Salman Ahmed wrote manuscript and did Statistical Interpretation of Data, Khushboo Gul Buriro, Mir Hassan Khoso and Shahrukh Parvez gathered the data, Saleem Ahmed, Sarmad Jamal Siddiqui and Muhamamd Umair Farooqui did the critical review. Nadeem Lund and Waseem Abbas did literature review.

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