International Journal of Chemical and Biochemical Sciences
(ISSN 2226-9614)

Journal Home page: www.iscientific.org/Journal.html

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Prevalence and causes of substance abuse among Egyptian university students

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Abstract

Substance abuse is a global challenge with dangerous effects on health, wealth and security of nations, and individuals' mental and physical health. This study was done to identify the prevalence and risk factor of drug abuse among university students and evaluate drug abuse use according to its type and problems encountered. Cross sectional study using self-administrated questionnaire conducted for one month in the academic year 2022-2023 to 600 university students at Beni-Suef University from grade 1 to grade 6 and postgraduates. The survey included all faculties in the university. Screening tests for drug abuse in the urine samples were performed by dipsticks and confirmed by auto-analyzer device. Most of the students were male (68.3%), their mean age was 22.05 ± 2.25 year. 58.3% of them were from urban, 84.7 % of them were single, with monthly pocket money 1205.73 ± 1260.02 Egyptian pounds while the mean of family income 5515.50 ± 9210.39. The urine samples were collected and analyzed by drug screening strips, 75.4% of the samples were negative and 24.6% were positive. Auto analyzer confirmed 31.8% of positive cases by drug screening strips and the most common drug was confirmed was combined drug abuse (59.6%). High significance relation of addiction with the mean age of the cases (P value=0.0001), males' gender (P value=0.0001), high monthly pocket money (P value=0.0001), lower father and mother education (P value =0.0001). The problems faced by addicts were oppose the orders (51.4%), usual liar (48.6%), struggle with parents (44.6%), and psychiatric problems (33.8%) especially unstable psychological state. The most common cause of substance intake in the positive group was adolescent curiosity (56.8%) followed by be happy (48.6%) and active (40.5%). Most of the students were male (68.3%), their mean age was 22.05 ± 2.25 year. 25.7% had a history of substance abuse, the most common substance abuse was THC (34%). Age of students, single, higher family income and father occupation were the most predicted risk factors to substance abuse.

Keywords: Drug abuse, detection, university students, Egypt

Full length article **Corresponding Author*, e-mail: dinaahmed@med.bsu.edu.eg Doi # https://doi.org/10.62877/27-IJCBS-24-25-19-27

1. Introduction

Substance addiction is a major international problem that threatens people's lives in many ways, including their physical and mental health, their families', and the safety of the community. It also has serious consequences for the emotional and physical wellbeing of persons who are afflicted. It also affects people's social position and responsibilities, and it may lead to other co-occurring physical, psychiatric, and social issues. According to the 2008 World Drug Report, drug addiction among teenagers has become an urgent public health problem in many parts of the world [1]. Family physician who is the first contact with individuals in different age groups from birth till death, all healthcare providers and therapists should intervene with substance abusers who show signs of increased nervousness, depressive symptoms, anxiety, fatigue, behavioral changes, and appetite swings to prevent the development of potentially fatal conditions [2]. Roughly 200 million people (or about 5% of the world population) between the ages of 15 and 64 report using at least one illegal drug each year. With a prevalence rate of 3.8%, marijuana use is

much higher than that of other drugs such as amphetamines and opiates (0.6%), cocaine and heroin (0.3%), and ecstasy (0.2%). Bennett and Holloway analyzed data from the 2011 United States Monitoring the Future Survey and found that nearly half of college students had tried illegal drugs at least once, with 21% admitting to using them within the past 30 days [3]. Substance abuse is a major problem in Egypt [4], it has attention in all sectors in the community either the public or the government. In 2018, 22.5% of Egyptian college students were reported to have used drugs at some point in their lives, according to research by Bassiony; Polysubstance addiction is a common problem that many people face [5]. One hundred students at Mansoura University were surveyed about their opioid use in 2016 and the research showed that 88 students used tramadol recreationally, whereas 12 used heroin recreationally [6]. In another study at Zagazig University in 2018 showed that alcohol abuse was found to be 10.29%, while sedative abuse was recorded at 5.2% [7]. The goals of this research were to determine the extent to which drug abuse is prevalent among college students, reasons behind substance abuse, their hazardous potential and to evaluate the methods of detection of drug abuse in the urine.

2. Materials and Methods

2.1. Study design

Cross sectional study using self-report survey was conducted for one month in the academic year 2022-2023 for 600 university students at Beni-Suef University from grade 1 to grade 6 and postgraduates. The survey included all faculties in the university. A self-administrated questionnaire was fulfilled by the students to determine the prevalence of drug abuse. The sample size was calculated using Open Epi, Version 3, open-source calculator using sample size equation; Sample size n = [DEFF*Np(1-p)]/ [(d2/Z21-α/2*(N-1) + p*(1-p)] [8].

2.2. Designing the questionnaire

A semi-structured questionnaire was created by experts in public health, family medicine, psychology, and education. pilot sample was done on 20 students which included in the study sampling and modification had been done to confirm its validity and reliability. The first part of the questionnaire included socio-demographic characteristic of the students and their families that could be a risk of drug abuse (respondents' age, gender, residence, marital status, income level, parents' levels of education and employment). The second part was related to the respondent's current mental health, the respondent's medical and psychiatric background, as well as any other psychological phenomena they may have encountered, questions on drug use and its context were added. Finally, the poll inquired as to whether drug abuse had caused any problems or not and potentials push to addiction from point view of addicts and non addicts.

2.3. Screening methods for identifying drug addiction in urine samples

2.3.1. Rapid dipstick

To test for substance addiction, researchers used a dipstick called Accurate (Multi-Drug Rapid Test Panel) on urine samples. Drugs of abuse such as tramadol, opiates, tetrahydrocannabinol (THC), amphetamine, barbiturates, and benzodiazepines may all be detected qualitatively with this one-step screen test panel using this dipstick. When a coloured line was seen in the control line area [C], but not in the test line region 2, the result was considered affirmative [6, 9].

2.3.2. Drug analyzer verification

The Thermo Scientific Indiko auto analyzer, made by Thermo Fisher Scientific Co and provided by the AMG Company, was utilized in this investigation. The current investigation makes use of a specific antibody that can identify a broad variety of illegal drugs and their metabolites in the urine samples. The test is based that the unbound drug in the urine sample competes with the drug labelled with the enzyme glucose-6-phosphate dehydrogenase for a fixed number of binding sites on the antibody. In the absence of the medication, the antibody binds to the enzyme-labeled drug and blocks the enzyme's activity. A connection between drug content in urine and enzyme activity has been shown by this occurrence. Spectrophotometry at 340 nm is used to evaluate glucose-6-phosphate dehydrogenase's enzyme activity. This evaluation is predicated on the enzyme's ability to degrade nicotinamide adenine dinucleotide (NAD+) to NADH [6, 10].

2.4. Ethical issues

Ethical issues are of utmost significance to debate in this setting. Each patient signed an informed consent form before participating in the research; this form contained information about the operations to be performed, any risks associated with those procedures, and the patient's right to withdraw from the study at any time. The Beni-Suef University Faculty of Medicine Research Ethics Committee (FMREC) approved the study's protocol (approval number FMBSURE/06062023/Hussein).

2.5. Statistical analysis

The data in this research were analyzed statistically to better understand the situation. Using SPSS, a statistical programed for the social sciences created by SPSS Inc. in Chicago, USA, the collected data was methodically tabulated and analyzed. The qualitative data was transformed into a frequency distribution and a percentage distribution. Mean, standard deviation, minimum, and maximum will be calculated in the case of quantitative data. To simplify a comparison between the two groups, an independent samples test was used. In deciding whether tests were significant, we only considered those with p-values lower than 0.05.

3. Results and discussion

The problem of drug usage, especially among adolescence and young people, is a serious public health both internationally and in Egypt. Students in colleges and universities are more likely to experiment with drug addiction. Our study's primary goal is to quantify the extent to which drug addiction is a problem among Beni-Suef College students. Males made up a sizable share of the student body (68.3%), while girls were a much smaller minority (31.7%). According to both Bethany et al. (2013) and Nahid et al. (2014), the average age of the students was 22.05 2.25 years [11]. Students from eight Egyptian governorates showed the greatest prevalence of drug use among 15 year olds, contradicting the results of Hamdi et al. (2013) [12]. The demographic pattern was blamed for this shift since it showed a connection between drug accessibility and availability. The research found that of the substances of abuse examined, tetrahydrocannabinol (THC) was the most common, followed by combination drug misuse and tramadol. THC use among students is explained by the ease and low cost of obtaining it. Research by Amin et al. (2019) on drug misuse at Zagazig University is consistent with the results of this study [13]. Tetrahydrocannabinol (THC) has been identified as the most often abused drug among college students. The families themselves shed light on the phenomenon's causes, explaining that it's due to the widespread nature of the technique in their area and the low cost involved. however, our results didn't agree with study had been done in Kenya and showed alcohol, cigarettes, marijuana and Khat claimed to be the most often misused drugs in university students [14]. In contrast to the results of a survey done by Zeferino et al. (2015) among 275 students at a private Brazilian university, the current research found that alcohol was the most often used substance, followed by cigarettes, marijuana, and psychotropic substances [15]. Seventy-four percent of the students in this survey reported their first experience with drug use happening during the last five years, with most beginning usage between the ages of 17 and 18. The vast majority of people who started using drugs at age 11 or younger reported abusing two or more substances when they entered treatment, contradicting the results of the TEDS research done in 2014. The percentage of admissions reporting multi-substance misuse was much lower among those who started using at 25 or older (30.4%). For 44.6% of those who struggle with addiction, communicating with their parents is a daily struggle. In addition, 51.4% of people are hostile to those in positions of power, and 48.6% have dishonest habits. The results of this study are consistent with those of Ofuebe et al. (2020), who found that drug abuse has a major effect on people and their families and leads to a wide range of mental and behavioral problems [16]. These shifts alter not just the dynamics between children and their parents, but also the dynamics between children and their siblings in, outside the family, and in all over the community. Most participants in this survey reported using substances in order to reduce anxiety (27%), increase happiness (26.3%), make daily life easier (22.3%), or increase physical activity (20.7%). The results provided here are at odds with those of a research by Natasha (2019) that found multiple shared causes of drug abuse [17]. Parental substance abusers or mental illness, family conflict, friendship and peer drug use, permissive attitudes towards personal and adolescent drug use, inadequate parenting, poor academic performance, social acceptance of drug use, and easy access to drugs are all contributors to the high rates of adolescent drug use. Ofuebe et al. (2020) categorized the factors that lead to substance misuse. They broke down the societal reasons into three distinct groups [18]. Peer pressure is often cited as one of the most important contributors to this mix of forces. In addition to these, researchers found that negative role models, drug availability, conflicts, cultural factors, a lack of social support, and negative societal attitudes all play a part in the development of drug dependence. Social defiance, early beginning, insufficient control, poor self-esteem, ineffective stress management, childhood loss or trauma, and psychological suffering are all examples of psychological variables. Family history, genetic susceptibility, personality issues, physical illnesses, drug reinforcement, drug withdrawal, and drug cravings are all examples of biological causes [18]. Kamlesh and Soma's (2012) research on the causes and effects of substance misuse found that curiosity was the most important psychological component leading to drug usage among adolescents, which is consistent with our own results [19]. Because of how easy it is to collect urine samples and run tests on them, urine testing has become the standard for detecting drug use. The demand for and use of immunoassay methods has increased as a result of their convenience and speed in producing results. Seventy-four percent of the samples in our study returned negative findings, whereas twenty-four percent returned positive ones. This result agrees with that of a study on the use of fast strips for drug misuse screening done [20]. There is a general consensus that substantial discrepancies in the incidence and patterns of drug misuse studies are attributable to differences in study populations and techniques. Eighteen out of 204 (8.8%) Egyptian high school pupils ages 13-18 tested positive for tramadol misuse. In contrast to our results, a 2015 research by Bassiony et al. found that chronic tramadol misuse was significantly associated with tobacco use [21].

3.1. Using an automated analyzer

We found that polysubstance abuse (detected at 59.6%) and THC (34.0%) were the most common forms of drug misuse. Using an automatic analyzer, we found that tramadol was not the most often abused drug among men, contradicting the findings of Mohammed et al. (2020) [22]. Mbuthia et al. (2020) found that there was a significant difference in the substance usage habits of men and women. In particular, drug misuse was shown to be more prevalent among male students while affecting a much lesser percentage of female students. The propensity of men to engage in risky actions is a major contributor to this difference [23]. The findings were in agreement with our own. Mehany et al. (2021) investigated the causes of drug misuse and discovered that many people who experiment with drugs do so for the purpose of improving their performance in some way, whether it be athletic, intellectual, or sexual. Anxiety reduction, distress relief, mood improvement, and dealing with family, social, or professional obstacles were also cited by 16.7% of individuals as contributing causes to their drug misuse [24].

Table 1. Drug screening among the studied population

Characteristic	Total (n =600)
Drug screening by strips • positive • negative	 148(24.6%) 452(75.4%)
screening for drug by auto analyzer (n= 148) • positive • negative	 47(31.8%) 101(68.2%)
Result of screening for drug by auto analyzer (n= 47) • positive THC • Positive tramadol • positive opium • combined substance abuse	 16(34.0%) 2(4.3%) 1(2.1%) 28(59.6%)

Data displayed as number and percent.

Table 2. Demography of the studied population (addict & non-addict)

Characteristic	addict (n =148)	Non addict (n =452)	Total	p-value
Age (years) Mean ± SD	22.95±2.94	21.76±1.88	22.05 ± 2.25	<0.0001*
Gender Male Female	144(97.3%) 4(2.7%)	266(58.8%) 186(41.2%)	410(68.3%) 190(31.7%)	<0.0001*
Residence Urban rural	82(55.4%) 66(44.6%)	268(59.3%) 184(40.7%)	350(58.3%) 250(41.7%)	0.405
Marital status Single Married Divorced Not applicable	188(79.7%) 26(17.6%) 0.0(0.0%) 4(2.7%)	390(86.3%) 38(8.4%) 2(0.4%) 22(4.9%)	508(84.7%) 64(10.7%) 2(0.3%) 26(4.3%)	0.012*
pocket money (monthly) Mean ± SD	1733.11±1638.32	1107.26±1096.61	1205.73 ± 1260.02	<0.0001*
Education grade First grade Second grade Third grade Fourth grade Fifth grade Sixth grade Graduated	16(10.8%) 22(14.9%) 50(33.8%) 48(32.4%) 0.0(0.0%) 2(1.4%) 10(6.8%)	62(13.7%) 82(18.1%) 120(26.5%) 120(26.5%) 18(4.0%) 2(0.4%) 48(10.6%)	78(13.0%) 104(17.3%) 170(28.3%) 168(28.0%) 18(3.0%) 4(0.7%) 58(9.7%)	0.016*
Number of persons in family Mean ± SD	5.19±1.41	5.46±1.36	5.39 ±1.38	0.041*
Family income Mean ± SD	5456.76±3629.62	5534.73±10410.29	5515.50 ± 9210.39	0.929
Father education before university University graduate after university	74(50.0%) 70(47.3%) 4(2.7%)	120(26.5%) 312(69.0%) 20(4.4%)	194(32.3%) 382(63.7%) 24(4.0%)	<0.0001*
Mother education before university University graduate after university	100(67.6%) 42(28.4%) 6(4.1%)	182(40.3%) 266(58.8%) 4(0.9%)	282(47.0%) 308(51.3%) 10(1.7%)	<0.0001*
Father occupation do not work Employee Craftsman freelancer work	0.0(0.0%) 78(52.7%) 24(16.2%) 46(31.1%)	2(0.4%) 284(62.8%) 44(9.7%) 122(27.0%)	2(0.3%) 362(60.3%) 68(11.3%) 168(28.0%)	0.063
Mother occupation do not work Employee Craftsman freelancer work	114(77.0%) 30(20.3%) 0.0(0.0%) 4(2.7%)	254(56.2%) 188(41.6%) 4(0.9%) 6(1.3%)	368(61.3%) 218(36.3%) 4(0.7%) 10(1.7%)	<0.0001*

- Data displayed as mean, standard deviation rang (SD), number and percent
- Independent sample T-Test test for quantitative data between the groups
- Chi square test (if less than 20% of cells have expected count less than 5) or Fisher's Exact test(if more than 20% of cells have expected count less than 5) for qualitative data between groups
- Significant level at P value < 0.05

Table 3. Demography of the addicted persons according to type of substance abuse

Characteristic	Bango (n =4)	opium (n =2)	MAX (n =2)	THC (n =66)	Tramadol (n =12)	combined (n =62)	p-value
Age (years) Mean ± SD	27.50±2.89	23.00±0.02	26.00 ± 0.01	22.67±2.50	25.33±5.96	22.96±2.94	<0.0001*
Gender Male Female	4(100.0%) 0.0(0.0%)	2(100.0%) 0.0(0.0%)	2(100.0%) 0.0(0.0%)	66(100.0%) 0.0(0.0%)	2(100.0%) 0.0(0.0%)	58(93.2%) 4(6.5%)	0.312
Residence Urban Rural	4(100.0%) 0.0(0.0%)	0.0(0.0%) 2(100.0%)	0.0(0.0%) 2(100.0%)	36(54.5%) 30(45.5%)	8(66.7%) 4(33.3%)	34(54.8%) 28(45.2%)	0.125
Marital status Single Married Divorced Not applicable	2(50.0%) 2(50.0%) 0.0(0.0%) 0.0(0.0%)	0.0(0.0%) 2(100.0%) 0.0(0.0%) 0.0(0.0%)	2(100.0%) 0.0(0.0%) 0.0(0.0%) 0.0(0.0%)	54(81.8%) 8(12.1%) 0.0(0.0%) 4(6.1%)	6(50.0%) 6(50.0%) 0.0(0.0%) 0.0(0.0%)	54(87.1%) 8(12.9%) 0.0(0.0%) 0.0(0.0%)	0.002*
pocket money (monthly) Mean ± SD	1650.0±1558.85	1500.0±0.00	1500.0±0.0	1377.27±1235.82	866.67±640.08	2300.0±2008.02	0.014*
Education grade First grade Second grade Third grade Fourth grade Fifth grade Sixth grade Graduated	0.0(0.0%) 0.0(0.0%) 4(100.0%) 0.0(0.0%) 0.0(0.0%) 0.0(0.0%) 0.0(0.0%)	0.0(0.0%) 0.0(0.0%) 0.0(0.0%) 0.0(0.0%) 2(100.0%) 0.0(0.0%) 0.0(0.0%)	0.0(0.0%) 0.0(0.0%) 0.0(0.0%) 0.0(0.0%) 2(100.0%) 0.0(0.0%) 0.0(0.0%)	10(15.2%) 6(9.1%) 22(33.3%) 22(33.3%) 0.0(0.0%) 0.0(0.0%) 6(9.1%)	2(16.7%) 0.0(0.0%) 2(16.7%) 8(66.7%) 0.0(0.0%) 0.0(0.0%) 0.0(0.0%)	2(3.2%) 6(9.7%) 14(22.6%) 16(25.8%) 22(35.5%) 0.0(0.0%) 2(3.2%)	0.054
Number of persons in family Mean ± SD	4.50±0.58	3.0±0.0	6.0±0.0	5.30± 1.30	4.50±1.31	5.29±1.52	0.069
Family income Mean ± SD	3250.0±866.03	2500.0±0.0	4000.0±0.0	4675.76±2260.16	3916.67±633.65	6870.97±4728.65	0.002*
Father education before university during after university	2(50.0%) 2(50.0%) 0.0(0.0%)	2(100.0%) 0.0(0.0%) 0.0(0.0%)	2(100.0%) 0.0(0.0%) 0.0(0.0%)	34(51.5%) 30(45.5%) 2(3.0%)	2(16.7%) 10(83.3%) 0.0(0.0%)	32(51.6%) 28(45.2%) 2(3.2%)	0.261
Mother education before university during after university	2(50.0%) 2(50.0%) 0.0(0.0%)	2(100.0%) 0.0(0.0%) 0.0(0.0%)	2(100.0%) 0.0(0.0%) 0.0(0.0%)	44(66.7%) 20(30.3%) 2(3.0%)	6(50.0%) 6(50.0%) 0.0(0.0%)	44(71.0%) 14(22.6%) 4(6.5%)	0.603
Father occupation do not work Employee Craftsman freelancer work	0.0(0.0%) 0.0(0.0%) 0.0(0.0%) 4(100.0%)	0.0(0.0%) 2(100.0%) 0.0(0.0%) 0.0(0.0%)	0.0(0.0%) 0.0(0.0%) 0.0(0.0%) 2(100.0%)	0.0(0.0%) 38(57.6%) 16(24.2%) 12(18.2%)	0.0(0.0%) 8(66.7%) 2(16.7%) 2(16.7%)	0.0(0.0%) 32(51.6%) 4(6.5%) 26(41.9%)	<0.0001*
Mother occupation do not work Employee Craftsman freelancer work	4(100.0%) 0.0(0.0%) 0.0(0.0%) 0.0(0.0%)	2(100.0%) 0.0(0.0%) 0.0(0.0%) 0.0(0.0%)	2(100.0%) 0.0(0.0%) 0.0(0.0%) 0.0(0.0%)	50(75.8%) 12(18.2%) 0.0(0.0%) 4(6.1%)	8(66.7%) 4(33.3%) 0.0(0.0%) 0.0(0.0%)	48(77.4%) 14(22.6%) 0.0(0.0%) 0.0(0.0%)	0.552

- Data displayed as mean , standard deviation rang (SD),number and percent; One way ANOVA test for quantitative data between the groups and post HOC LSD for sub-group; Chi square test (if less than 20% of cells have expected count less than 5) or Fisher's Exact test (if more than 20% of cells have expected count less than 5) for qualitative data between groups; Significant level at P value < 0.05

Table 4. Pattern of substance abuse among the addicted cases

Characteristic	Total (n =148)
Date of start taking substance	
≤ 5 years	110(74.3%)
6-9 years	30(20.3%)
≥ 10 years	8(5.4%)
Still taking substance	
till now	94(63.5%)
not till now	54(36.5%)
number of times taking it if still taking it(n=94)	
0	8(8.5%)
1	14(14.9%)
2	12(12.8%)
3	22(23.4%)
4	38(40.4%)
last time of taking it when stop (n=54)	
Less than 1 year ago	6(11.1%)
More than 1 year ago	48(88.9%)

Data displayed as number and percent

Table 5. Problems related to substance abuse

Characteristic	Total (n =148)
Struggle with parents	
Yes	66(44.6%)
No	82(55.4%)
Oppose the orders	
Yes	76(51.4%)
No	72(48.6%)
usual liar	
Yes	72(48.6%)
No	76(51.4%)
History of facing the police	
Yes	20(13.5%)
No	128(86.5%)
History of psychiatric problems in last months	
positive	50(33.8%)
negative	98(66.2%)
Type of psychiatric problems if positive history (n=50)	
nervous and tendency to violence	6(12.0%)
educational and social problems	8(16.0%)
unstable psychological state	30(60.0%)
financial problem	4(8.0%)
decrease self confidence	2(4.0%)

Data displayed as number and percent

Table 6. Cause of substance abuse in point of view of the studied population (addict and non-addict)

Cause of substance abuse	addict (n =148)	Non addict (n =452)	p-value
Be happy			
Yes	72(48.6%)	86(19.0%)	<0.0001*
No	76(51.4%)	366(81.0%)	
Be active			
Yes	60(40.5%)	64(14.2%)	<0.0001*
No	88(59.5%)	388(85.8%)	
It increases my sexual ability			
Yes	34(23.0%)	46(10.2%)	<0.0001*
No	114(77.0%)	406(89.8%)	
It increases my ability to work			
Yes	42(28.4%)	54(11.9%)	<0.0001*
No	106(71.6%)	398(88.1%)	
Be alert and awake			
Yes	32(21.6%)	50(11.1%)	0.001*
No	116(78.4%)	402(88.9%)	
Not afraid of power			
Yes	20(13.5%)	18(4.0%)	<0.0001*
No	128(86.5%)	434(96.0%)	
Dream when I'm awake			
Yes	30(20.3%)	54(11.9%)	0.011*
No	118(79.7%)	398(88.1%)	
Make life easy			
Yes	56(37.8%)	78(17.3%)	<0.0001*
No	92(62.2%)	374(82.7%)	
Keep one away from worry			
Yes	50(33.8%)	112(24.8%)	0.032*
No	98(66.2%)	340(75.2%)	
Opens appetite for food			
Yes	18(12.2%)	22(4.9%)	0.002*
No	130(87.8%)	430(95.1%)	
Make one calm			
Yes	50(33.8%)	30(6.6%)	<0.0001*
No	98(66.2%)	422(93.4%)	
solve problems easily			
Yes	18(12.2%)	42(9.3%)	0.312
No	130(87.8%)	410(90.7%)	
Adolescent curiosity			
Yes	84(56.8%)	NA	NA
No	64(43.2%)		
Kidding			
Yes	48(32.4%)	NA	NA
No	100(67.6%)		
Physical diseases			
Yes	4(2.7%)	NA	NA
No	144(97.3%)		
Psychological disorders			
Yes	16(10.8%)	NA	NA
No	132(89.2%)		
Low self-confidence			
Yes	4(2.7%)	NA	NA
No	144(97.3%)		
To eliminate shyness			
Yes	4(2.7%)	NA	NA
No	144(97.3%)		
Family problems			
Yes	18(12.2%)	NA	NA
No	130(87.8%)		
Having free time			
Yes	24(16.2%)	NA	NA
No	124(83.8%)		
The presence of an addicted person			
Yes	58(39.2%)	NA	NA
No	90(60.8%)		

- Data displayed as number and percent; Chi square test (if less than 20% of cells have expected count less than 5) or Fisher's Exact test(if more than 20% of cells have expected count less than 5) for qualitative data between groups; Significant level at P value < 0.05

Our results were in line with what we expected to see. However, Wubetu et al. (2020) found that characteristics such students' domicile, academic level, presently living situation, and family monthly income did not show statistical significance in connection to cocaine usage among college students [25], this may be due to differences in the sociodemographic characters of the studied population.

4. Conclusions

The majority of the students were male (68.3%), their mean age was 22.05 ± 2.25 year. 58.3% of them were from urban areas, about two thirds of their fathers were highly educated and worked as professionals, 24.6% had drug abuse, the most common substance abuse among students was combined substance abuse (59.6%) followed by THC (34%). The most common causes of substance intake were adolescent curiosity (56.8%), be happy (48.6%) and be active (40.5%). Struggle with parents (44.6%), oppose the orders (51.4%), usual liar (48.6%) were the most common problems related to abuse. The mean age of studied cases, marital state, family income and father occupation were the most predicting risk factors of substance abuse.

Recommendations

It is essential to screen any student at the university with suspected abnormal behavior or change in the performances for the manifestation of substance abuse. Increase the awareness of family physicians towards screening of mental health problems in secondary schools and in university students, as this time is critical in adults' life. Frequent health education programs in the universities and the social media about the dangerous of the substance abuse. Increasing community awareness of the magnitude of stimulant and illegal drugs and their effects on the family and the community is mandatory.

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