Cannabis Use among College Students: The Role of Peers, Media and Other Drugs.

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Abstract

Drug abuse is a global challenge that puts young people at high risk of health-related issues that may have adverse consequences in their lives currently and also in the future. Africa is not left behind by the struggles of drug and cannabis use among the young people. Youth are easily influenced by their peers, social media, and other factors that make them vulnerable to cannabis and other drug use. Those in universities may have more access to cannabis and other drugs due to the freedom of being away from their parents, making them more at risk when it comes to use of drugs than the general population. This study set out to examine factors associated with cannabis use among university students in Kenya. The total sample, obtained using respondent' driven sampling targeting students using cannabis, was 140. The respondents were assessed using ASSIST and a socio-demographic questionnaire. The results revealed that 53.6% of the respondents had moderate to high risk for cannabis use problems. Peer pressure, media influence, and other drug use were all factors that were found to influence cannabis drug use among university students. The findings of this study are significant to university students, other youths, academic institutions, parents, counselors and psychologists, policy makers and other stakeholders in young people's lives.

Key Words: Cannabis, peer pressure, media influence, university students, youth

Introduction and background

Drug abuse is a global epidemic (McBabe et al., 2009) that puts young people at high risk of health problems (Dammann et al., 2014; NACADA, 2014). Although adolescents begin consuming cannabis regularly at younger ages (Meir et al., 2012), research indicates higher prevalence of cannabis use in tertiary institutions as compared to primary and secondary schools (Dammann et al., 2014). This is likely due to easier availability of the drug.

Worldwide, 119-224 million people aged between 15-64 years used cannabis in 2010 translating to an annual prevalence rate of 2.6% to 5%. The prevalence rate of cannabis use in Canada among young people aged 15-24 years was 25-36% comparable to 25% prevalence among college students in USA (Fischer et al., 2012; See, 2010). Africa is ranked third in cannabis use

prevalence in the world due to its high production of the drug (UNODC, 2012) with high usage among university students (Atwoli et al., 2011; NACADA, 2012).

Peer pressure is a major predictor of substance use among young people because most of them end up doing what they see their friends doing (Garnier & Stein, 2002). A study done in Russia reported that most students who used drugs were influenced by their peers (Tsvetkova & Antonova, 2013). In support of this, studies have shown that students with friends who use substances are at a higher risk of using substances due to the influence from friends (Deressa & Azazh, 2011; Li et al., 2002).

Advertisements in media play a major role in influencing drug use behavior among the young people (WHO, 2005). Some of the secular music young people watch on the TV, music videos and internet (social media) have individuals who potrays drug use as a good thing. Such, end up becoming a major source of influence to start using drugs by the young people.

Students who use cannabis are more likely to use alcohol and other substances and vice versa. A study done among youth in Switzerland on cannabis use reported that those who used alcohol had a high probability of cannabis use (Dammann et al., 2014). Additionally, the study found out that those students who were found to be using cannabis had an increased use of other drugs. Moreover, Vargas and Trujillo (2012) reported that alcohol and tobacco use by students was significantly associated with cannabis use. This may show that a student who uses one drug is more likely to end up using more drugs, which makes such a student to become a poly-drug user.

Methodology

Participants

This study was conducted in a private university in Nairobi, Kenya. Respondent-driven sampling (RDS) was used and after informed consent, 140 students were recruited. The inclusion criteria was male and female undergraduate students with medium to high-risk cannabis or alcohol use. The data was collected using a socio-demographic questionnaire and Alcohol, Smoking and Substance Involvement Screening and Test (ASSIST). Exploratory data analysis (EDA) techniques were used. The descriptive statistics such as mean, standard deviation (SD), 95%

confidence interval of mean, minimum and maximum were used to summarize continuous variables. Categorical variables were summarized using frequencies and proportions.

Assessment

Socio-demographic questionnaire

A socio-demographic questionnaire had been developed to capture the socio-demographic characteristics of the respondents. The questionnaire included: age, gender, year of study, duration in college, peers using drugs, marital status of the parents, whether parents use drugs, economic status of the parents, siblings in schools and status of their fees payment among other details.

Alcohol, Smoking and Substance Involvement Screening and Test (ASSIST),

ASSIST was developed by World Health Organization (WHO) in order to help in detecting and managing drug use and related problems. Therefore, ASSIST screens for all drug use. It is a valid and reliable tool that has undergone thorough and extensive testing to ensure it produces reliable and valid cross-cultural data all over the world. When using ASSIST, individuals who score 0-3 are at low risk; those who score 4-26 are at moderate risk while those who score 27 and above are at high risk of cannabis use (WHO, 2008). This study focused on the students whose ASSIST scores ranged between moderate and high risk because they were most likely having problems related to the cannabis use.

Results

There was slightly higher male representation (52.1%) than females with more students aged between 21 – 22 years (38.6%). Majority of the respondents were in second (30.7%) and third (39.3%) years of university education. Almost half of the respondents (44.3%) resided in off-campus hostels, with almost all respondents (98.6%) were single.

Table 1: Socio-Demographic Characteristics of the Participants

Variables	n=140	%
Gender		
Male	73	52.1%
Female	67	47.9%
Age in year		
<21	51	36.4%
21 – 22	54	38.6%
>22	35	25.0%
Year of study		
1st year	15	10.7%
2nd year	43	30.7%
3rd year	55	39.3%
4th year	27	19.3%
Place of residence		
On-Campus hostels	26	18.6%
Off-Campus hostel	62	44.3%
Living with family	52	37.1%
Marital status		
Single	138	98.6%
Married	2	1.4%

Table 2 presents the mean, standard deviation and range of substance use among the respondents. Overall, the mean alcohol use score was 26.5 ($\pm$ 19.9 SD) ranging between 0 and 109. This was an indication that the respondents' mean alcohol use was bordering on high risk. In addition, the mean cannabis use score was 9.1 ($\pm$ 10.7 SD), which ranged between 0 and 38, which put the respondents mean cannabis use at moderate risk. The mean tobacco use score was 6.8 ($\pm$ 8.5 SD), which ranged between 0 and 30, and that of khat use score was 2.9 ($\pm$6.2 SD), which ranged between 0 and 26. The means of tobacco and khat use were thus relatively lower than that of alcohol and cannabis, suggesting that the respondents were at low risk of developing problems related to their tobacco and khat usage.

Table 2: Distribution of Substance Use

Characteristics	N	Mean	SD	95% CI Lower	Upper	Min.	Max.
Substance use							
Alcohol intake – Score	140	26.5	19.9	23.2	29.8	0	109
Cannabis intake – Score	140	9.1	10.7	7.3	10.9	0	38
Tobacco intake – Score	140	6.8	8.5	5.4	8.2	0	30
Khat (*Miraa*) intake – Score	140	2.9	6.2	1.8	3.9	0	26

Analysis of risk levels of cannabis, using ASSIST scores, of the respondents was done. All of the respondents were using cannabis. Those at low risk of cannabis use according to ASSIST were 46.4%, followed by moderate risk (44.3%), and high risk was 9.3%.

Factors Associated with Elevated Cannabis Use Scores among the Study Respondents

Cannabis Use Score in Relation to Peers

Having friends who use other drugs had significant association with cannabis use scores (p=0.024). Those that had friends who used other drugs had significantly high mean cannabis use score (10.3 ($\pm$ 10.9 SD) compared to those whose didn't use cannabis (5.6 ($\pm$ 9.3 SD).

Cannabis Use Score in Relation to Media

In relation to the media influence on respondents' start of drug use, the most common form of media influence was TV (36.4%), followed by celebrities in the media (20.0%). Other specific forms of media influence accounted for less than 10.0%. There was a significant association between cannabis use score and celebrities influence starting to use drugs (p=0.003). Those who indicated that they were influenced to start using drugs by the celebrities in the media had significantly higher mean cannabis use score (14.1 ($\pm$ 11.6 SD)), than those that were not influenced by celebrities (7.8 ($\pm$ 10.1 SD).

Cannabis Use Score in Relation to Other Substance Use

Cannabis use score had significant correlation with use of other substances such as use of alcohol (p=0.017), use of tobacco (p<0.001), and use of khat (p<0.001). Positive Spearman's Rho correlation coefficients imply that for every increase in cannabis use score, there was a direct

increase in the alcohol, tobacco, and khat use score. This suggests that the more one used cannabis, the more the likelihood of increasing use of other substances.

Multiple linear regression was used to model cannabis use score using factors identified to be significant at P<0.1 during bivariate analysis. Backward conditional method was specified with removal at P<0.05. Elevated cannabis use scores among the respondents were significantly associated with: increased use of tobacco (p=0.001) and increased use of khat (p<0.001) as noted in table 3.

Table 3: Factors Associated with Elevated Cannabis Use Score

Variables	B	95% CI Lower	Upper	t value	p value
Reduced Model					
(Constant)	10.78	4.28	17.29	3.28	0.001
Tobacco – Score	0.33	0.13	0.52	3.29	0.001
Khat *(Miraa)* - Score	0.52	0.26	0.78	3.99	<0.001

Discussion

This study noted levels of cannabis use at low risk (46.4), moderate risk (44.3%), and high risk (9.3%) for the respondents. Moderate and high risk cannabis use exposes individuals to cannabis use-related complications (WHO, 2008) that include dependence, poor academic performance, engagement in risky behaviours, psychosis, respiratory and cardiovascular system problems (Hall, 2009; Henry et al., 2007; Onifade et al., 2014). This underlies a need for awareness creation to enhance help seeking behaviour to overcome challenges brought about by cannabis use (Shek, n.d.).

Peer influence was found to be a contributing factor to drug use among the respondents. Having friends who used other drugs had significant association with cannabis use scores (p=0.024). Other studies have similarly reported that students who use drugs have friends who do the same (Deressa & Azazh, 2011; Li et al., 2002; Tsvetkova & Antonova, 2013). The desire for social acceptance and the fear of being rejected by peers might be a plausible explanation for this finding (Bandura, 1994).

Media influence was significantly associated with commencing drug use among the respondents with a significant association found between cannabis use score (p=0.003) and celebrities' influence via media. According to the World Health Organization's (2005), media plays a major role in influencing drug use among the young people. This is because Modeling plays a key role in the learning of new behavior (Bandura, 1999).

This study also showed a direct association between cannabis use and the use of alcohol (p=0.017), tobacco (p<0.001), and khat (p<0.001). These findings imply that for every increase in cannabis use score, there was a direct increase in other substance use, hence the high likelihood of multiple drug use among cannabis users. Cannabis use is usually associated with increased use of other drugs (Dammann et al., 2014; Vargas & Trujillo, 2012).

Some students were reluctant to be involved in the study due to fear of victimization by the university administration. This was dealt with by assuring them of confidentiality.

Conclusion

This study found a higher prevalence of moderate to high risk cannabis use among the students. It noted that peers and celebrities influence, through media, contributed to respondents' drug use. Moreover, students using cannabis were also using other drugs like alcohol, cigarettes, and khat.

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