

Prevalence, Drugs Used, Sources, And Awareness of Curative and Preventive Measures among Kenyatta University Students, Nairobi County, Kenya

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Abstract

The purpose of the study was to establish the prevalence of drug use and abuse among the students in Kenyatta University (Main Campus). The study was guided by the following objectives: establishing the extent of drug use and abuse, determining drugs commonly used, sources of drugs, the factors that encouraged drug use and abuse, awareness of prevention and curative services available in the University. A survey research design was used in which a paper based questionnaire was used to collect study data. A sample of 491 students was randomly selected from 42 departments and eight schools. Of these, 212(43.2%) were females, and 256(52.1%) were males while 23(4.7%) did not indicate their gender. The findings showed that majority of the respondents (68.02%) did not use drugs. Only 25.5% of the respondents were using drugs while 34(6.92%) did not respond. Further, the results showed that the most commonly used drug was alcohol (92.1%). Others included: bhang (62.9%), tobacco (51.5%), miraa (khat) (51.9%), cocaine (5.9%), and heroin (3.5%). The main drugs sources included: KM (42.8%), Students Annex (36.6%), Wakiro (KU Ruiru Campus) (6.3%), tuck-shops, (6.3%), Kenyatta University Shopping Centre (5.4%), and the kiosks (2.4%). The main factors that encouraged drug use included: peer pressure (69.25%), stress relief, (67.62%), recreation, (39.31%), and social acceptability, (36.66%). An overwhelming majority of the respondents, 88% agreed that peer influence was a very significant factor in drug use. Only 28% admitted being aware of the availability of preventive and curative programs in the University while 72% were not aware. Of the respondents, 42.43% said that the ADA problem was rampant. Majority, (44.13%) of the respondents suggested that alcohol and drug abuse awareness should be increased while others suggested strict punishment for ADA offenders. The study recommended that many students be trained as ADA trainer of trainers (TOTs) by Wellness Centre in order to reach the others in the campaign against ADA, and increase the students' awareness of the preventive and curative programs available in the University. Further, a rehabilitation centre should be developed to provide curative programs to the addicted students.

Keywords: alcohol, curative measures, drugs, drug use, drug abuse, university students, prevalence

INTRODUCTION

Alcohol and drug abuse have been categorized as global epidemics alongside HIV and AIDS (McCabe, Boyd and Teter (2009) while the NACADA report of (2012) identified alcohol and drug abuse as a major challenge facing Kenya during current times. The detrimental effects of alcohol and drug abuse have been documented by study after study and across temporal and spatial domains. Indeed, alcohol and drug abuse have been identified as major factors contributing not only to the psychological ill health of the people involved but to the detrimental impact of their physical health as well. University students may have a history of drug taking long before entering college while there are those who may be introduced to drugs on college entry. University students who take drugs risk dependence and addiction to the substances they use or abuse and this becomes an

issue of concern as shown by studies by Dhanookdhary et al., (2010) and Purris, and Mach Innis (2009) who aver that students may start to use drugs as a voluntary activity, however, with continued use dependency sets in. The substances students may use or abuse alter the way their brain functions subsequently affecting how they behave. Thus a student taking drugs may suffer panic attacks, psychosis, outbursts of violence, mood swings and increased risk of heart attack or stroke depending on the type of drug used. Psychologically, the effects of drug use include long lasting changes in feelings, thoughts, and perceptions of the world. For university students, alcohol and substance abuse are most likely to be associated with lowered performance, missed lectures, aggression as well as risky sexual behaviors which the students may engage in due to loss of cognitive self control (Zinn et al., 2004). Indeed

according to Levinthal (2002) and NACADA (2012) alcohol and drug abuse inhibits attainment of the individual's full potential thus jeopardizing lives and careers. In addition to this, NACADA (2012) noted that the negative effects of alcohol and drug addiction affect not only the individual involved alone but also the significant relationships like family members and the society as well. Also, people abusing drugs have many economic challenges as they may not hold steady job or work efficiently leading to losses in the economic sector. Other detrimental effects of drug abuse have been identified as poor health outcomes that include liver, lung, heart diseases, vitamin deficiencies and brain damage (Caan, 2002, and NACADA, 2010). Similarly, MacCoun and Reuter (2001) identified AIDS and hepatitis B as health problems related to drug abuse.

Factors determining the drugs university students use were of interest to this study. Easy availability as well as the cost of the drug is identified as such factors. Hence studies have concurred that alcohol is the most accessible and affordable drug. The reason for this may be that alcohol is a licit substance which is widely available as well as one that is most commonly used by the general population. Besides alcohol, tobacco is another drug that falls in the category of most available substance. Like alcohol, it is licit and readily available in many outlets. Both drugs have been labeled gateway drugs because people who take drugs including university students begin to experiment with them before embarking on hard drugs. In agreement with this NACADA (2007) survey identified alcohol as the most frequently used drug with a prevalence rate of 13% among Kenyans aged between 15 and 65 years. The most commonly abused narcotic drug was bhang, heroin while cocaine was the least used drug. Tobacco and khat were other drugs identified in the NACADA (2007) survey. Lonah (2013) study concurs with others that alcohol, tobacco, cannabis and khat are the most commonly used drugs by university students in Kenya. Similarly, Dhanookdhary et al., (2010) averred that alcohol, tobacco and marijuana were the commonly abused substances in most societies. In addition, the Ministry of Education Science and Technology (2010) reported that hard drugs such as cocaine, mandrax, heroine and tranquilizers were becoming popular among the young people in Kenya. Depending on the risk factors, university students are likely to have started taking drugs early in life if the home and school protective factors were absent. This sentiment is supported by Dhanookdhary et al., (2010) and Melchior et al., (2008) research that suggest that drug use and abuse tends to peak between the ages of 18 and 25 years thus putting the university students at greater risk of drug abuse than individuals outside this age bracket. Other factors that may push university students toward a drug taking lifestyle have been identified as environmental. This

fact was acknowledged by the Ministry of Education (2010) whose study averred that universities do not exist in isolation but in environmental settings which may have drugs readily available. According to United Nations (2000), family dysfunction such as parental separation and familial violence are risk factors related to youth drug taking. Hence if university students come from such families, they are more likely than their counter parts with different family background to take drugs. Also, families with histories of alcoholism and parental drug abuse act as major influence for drug taking among the youth. Over and above these factors, Leninthal (2002) added media influence, peer pressure and lack of parental control as other factors supporting drug use among the youth. Further, the Ministry of Education (2010) argued that young people may take drugs as a way of imitating members of society such as successful business people and leaders. In agreement with these sentiments, Karechio (2009) averred that young people were encouraged by their friends to take drugs and thus drug taking becomes a means of peer acceptance. Young people, Ndirangu (2008) averred took drugs so as to prove to their friends that they were tough. Preventive factors may include intact home where the person has positive interactions with parents. Close parental involvement and supervision of the activities of children and adolescents as well as positive school experience of academic success and peer acceptance. Young people who keep away from peers who take drugs and who have high aspirations in their lives develop the resilience needed to escape drugs.

STATEMENT OF THE PROBLEM

The study is premised on the fact that although alcohol and substance abuse has been identified as a challenge as well as a hazard due the consequences it has on the individual abusing drugs and the society as well, the problem seems to escalate rather than diminish. Despite the studies that show the destructive effects of drug abuse on individuals and campaigns against drug use, sections of society continue to abuse alcohol and drugs among them university students. Alcohol and drug abuse for university students is a matter of serious concern because it leads to serious lowered returns for the resources parents and the country invest in the young people. For the young people alcohol and drug abuse leads to physical and psychological ill-health, poor academic performance that may lead to discontinuation from university studies, spending more time than required to complete a programme or eventually dropping out all together. Alcohol and drug abuse are known to lead to destroyed relationship causing unhappiness to the individual and to significant other people as well. Studies have also shown that the problem of drug use and abuse in the university is rampant and has many repercussions on the users, the university vision and the friends and

families of abusers. This has attracted the need to try and curb it through multiple anti-drug campaign methods for education and prevention. To this end, the University spends a lot of money sustaining these programs. Despite these efforts, the problem of drug abuse still continues to escalate. This study hence endeavored to find out the magnitude, sources of commonly abused drugs and whether students were aware of the availability of the prevention and curative programs at the University.

STUDY OBJECTIVES

The study set out to investigate the following objectives:

- i. Prevalence of drug use among Kenyatta University students.
- ii. Drugs commonly used by Kenyatta University students.
- iii. The sources of drugs used.
- iv. The factors that encourage drug use amongst students.
- v. Students’ awareness on prevention and curative programs available in the University.

THEORETICAL FRAMEWORK

This study was informed by Bandura’s (1977) Social Learning Theory that states that behavior is learned from the social environment through the process of observational and imitating learning. According to this theory, people acquire new behavior through two forms of observational learning. These include: direct observation and imitation of behavior and also

through vicarious conditioning. Direct observation and imitation involves a model like a parent, a peer, a teacher or community figure who displays behavior that the person observes and practices until he/she does it the same way that the model did it. Another important type of modeling is symbolic modeling in which people watch movies, the television, and internet or radio characters and try to emulate them. In vicarious conditioning, the observer watches the consequences the model’s behavior receives for example praise; recognition and admiration. Hence the observer imitates the behavior hoping to receive similar treatment as the model. In this study cognizance is made of the fact that university students are mainly initiated into drug use through observation and imitation of the people in their social environment. The models could be their own peers who not only initiate them to drugs but also reinforce the drug taking behavior through social approval and companionship. Other models that university students may emulate are their drug abusing parents who may have presented them with the first opportunity to sample drugs available at home like tobacco products and alcohol. Models in society and the media may have influenced alcohol and drug use among university students as they may be depicted as glamorous and successful as they smoke a certain brand of cigarettes or alcoholic drink. Movies and videos characters may be depicted using other drugs like cocaine, heroin and other recreational drugs and it may seem admirable to emulate them

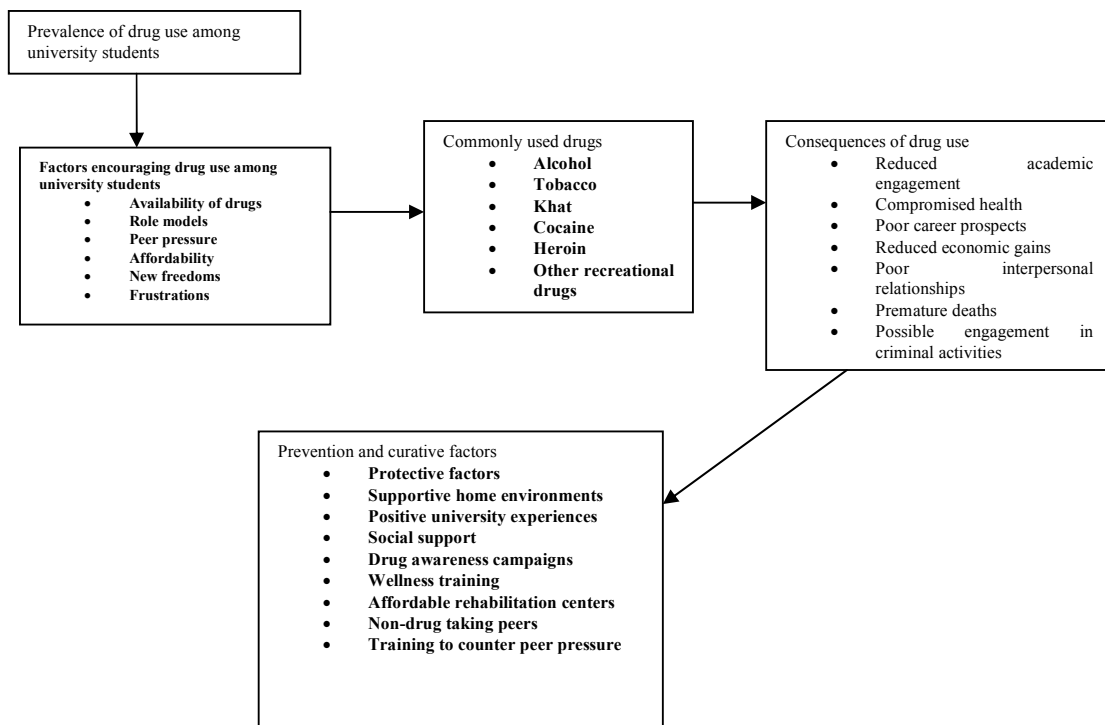


Figure 1: Prevalence of drug use among university students: factors encouraging students’ drug use, preventive and curative programs

The conceptual framework of the envisioned study to involve various precipitating factors such as drug use among university students as precipitated by factors such as availability of commonly used drugs, role models, peer pressure, affordability, new freedoms, frustrations, recreation and pleasure. Hence university students are bound to take the drugs like alcohol, tobacco, khat, recreational drugs, heroin and cocaine. The study identifies the negative consequences of drug abuse among university students as: reduced academic engagement, compromised health, poor career prospects, reduced economic gains, poor interpersonal relationships, possible engagement in criminal activities and premature deaths. The prevention and curative programs in targeting these factors are identified as protective factors such as supportive home environments and positive university experiences and social support from peers who do not abuse drugs. The universities should hold drug awareness campaigns and wellness training to ensure that students who are not abusing drugs keep their sobriety. University students could also benefit in life skills training and particularly how to counter peer pressure. For those students who are already abusing drugs, affordable rehabilitation services should be available and other social support systems like Alcoholic Anonymous (AA).

METHODOLOGY

The research was a cross-sectional survey conducted in Kenyatta University which currently has a student population of about 70,000 drawn from the whole country, thus giving it a country wide perspective. Specifically, the study was conducted at the main campus. The study sample consisted of 491 students randomly selected from 42 departments and eight schools. Of these 212(43.2%) were females, and 256(52.1%) were males while twenty three (4.7%) of the students did not indicate their gender. The age the students' sampled ranged between 18-26 years with majority being between 20–24years old. With regard to residential status, 54% of the students resided on the campus while 46% resided outside the campus. Majority of the students sampled were from the School of Education which is the largest school. Research Assistants were used to distribute and collect questionnaires during the beginning of lectures in order to ensure high questionnaire return rate.

FINDINGS OF THE STUDY

Objective One: The Extent of Drug Use in Kenyatta University (Main Campus)

The first objective of the study sought to determine the extent of drug use in Kenyatta University (Main Campus). The findings are presented in Figure 2.

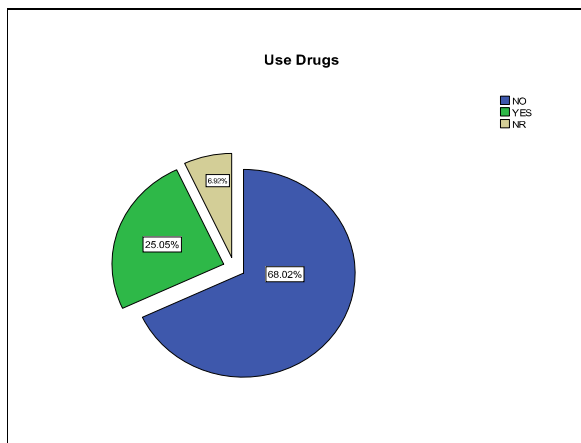


Figure 2: Prevalence of drug use among Kenyatta University students

The results revealed that 25.05% of the students under investigation reported using drugs against 68.02% who reported on the contrary with 6.92% not responding to the item. These result are in agreement with the research findings by Dhanookdhary et al., (2010) and Melchior et al., (2008) who revealed that drug use and abuse tends to peak between the ages of 18 and 25 years putting the university students at greater risk of alcohol abuse thus agreeing with NACADA (2007) report that majority of drug abusers in Kenya were secondary school and university students. These results are of major concern as they indicate that more than a quarter of the students under investigation use drugs. The implication for this is that the section of students taking drugs may be missing lectures and possibly not performing well academically as by Zinn et al., (2004), Levinthal (2002) and NACADA (2012) research that university students who take alcohol and substance abuse are most likely to be associated with lowered performance, missed lectures, aggression, risky sexual behaviors due to loss of cognitive self control.

Drug Use By Gender

The study sought to establish the prevalence of drug use by gender. The findings are presented in figure 3

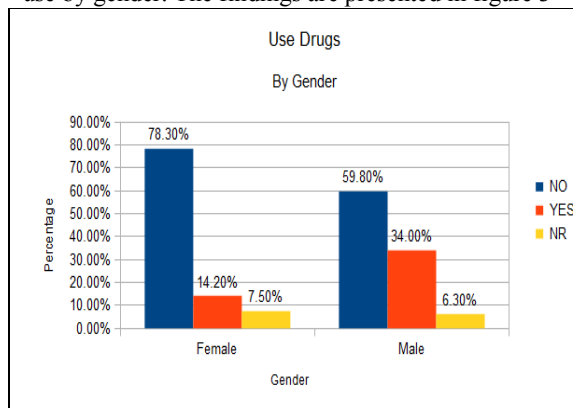


Figure 3: Drug use by gender

Of the students who reported using drugs, only 14.2% were females while 34% were males. These results are in agreement with research findings by (Van Etten et al. 1999, Van Etten et al. 2001, Carrol et al. 2004, and Lynch 2003, Znitman, (2007) that sex differences exist in all phases of drug abuse and Lynch et al. (2003) who reported that adult men are 2 to 3 times more likely than women to have a drug problem. In concurrence with this view, the European Monitoring Center for Drugs and Drug Addiction, (2005) reported that males outnumber females in drug use. The reasons for the differences between males and females are explained by the double standard existing in society that make it acceptable for men to be drunk but not for women (Jarvinen, 2001, and Ettore (2004). However, Hibell et al. (2004) reported that the gender gap was closing.

In addition, the study sought to determine drug use according to the year of study. The results are presented in Figure 4.

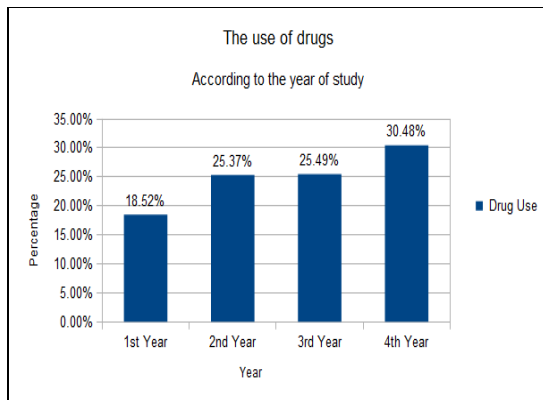


Figure 4: Use of drugs according to the year of study

According to the results, the percentages of students using drugs increased as they climbed the academic ladder. Thus the first year students reported the lowest percentage of drug use at 18.52% with a steady increase of students using drugs in second year of study, (25.37%) and remaining steady during third year, (25.49%) but reaching 30.48% during the fourth year of study. These findings seem to indicate that instead of the number of students taking drugs decreasing due to the university experiences, it increases. This can probably be explained by Sanoff (2006) research and Wangeri, Kimani and Mutweleli (2012) study that found that student were ill-prepared for university life and consequently, they were faced by transitional challenges in the areas of autonomy, social adjustment and ability to reach out for support services available at the university. With such challenges coupled with peer influence (Karechio, 2009) and the availability of drugs, (Ministry of Education, 2010), the numbers of students taking drugs were bound to increase as the student climbed the academic ladder. Further, the study was interested

in finding out if the students' residential status had a bearing on alcohol and drug use. The results were presented in figure 5.

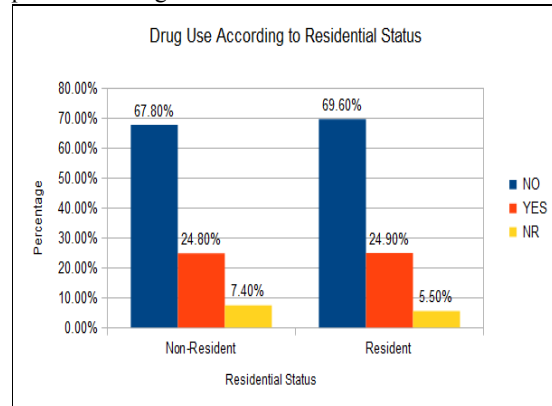


Figure 5: Drug use according to residential status

The results revealed that 67.80% of non-residential students reported not taking drugs against their counterparts 24.80% who reported taking drugs. Of the students who resided at the university 69.60% reported not taking drugs against their counterparts, 24.90% who reported taking drugs. These findings were interesting in the sense that students residing within the university campus and those residing outside the campus used drugs in almost equal numbers meaning that residing within the university campus was not a protective factor against taking drugs. The findings seemed to indicate that the availability and affordability of drugs both on campus and off campus was a factor influencing drug use for both residential and non-residential students. The implications of the findings is that drug use among university students continues to be an issue of concern as it was when Odek-Ogunde (1999) indicated when he conducted research on drug use in private universities. The results further confirm Bullock (2004) findings that students may take drugs to be normal part of university life.

Frequency of Drug Use

The frequency of drug use among the students was of interest to the study and findings were presented in figure 6.

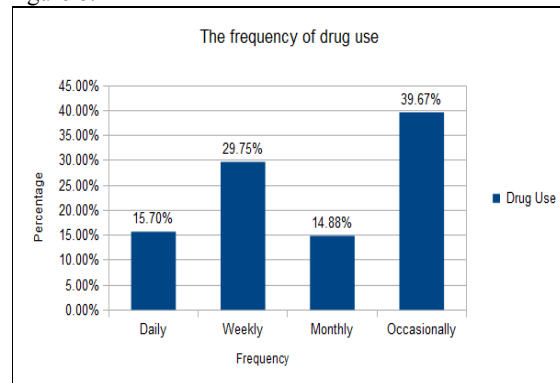


Figure 6: Frequency of drug use

The results revealed that 15.70% of the students studied took drugs daily while 29.75% took drugs on a weekly basis. Those who took drugs on a monthly basis were 14.88%, and those taking drugs only occasionally were 39.67%. These patterns reveal that some students could be substance dependent whereas others would focus on their studies only to link up with friends over the weekend while the largest number reported using drugs occasionally. The frequency of drug use was a factor of concern given the associated negative consequences. Dhanookdhary et al., (2010) reported that taking drugs altered the way the brain and the body functioned and lead to poor academic outcomes. Further, Zinn et al., (2004), Levinthal, (2002), and NACADA (2012), reported violence and multiple sexual partners, and MacCoun and Reuter, (2001) reported compromised health and propensity to criminal activities in their research findings. Students who use bhang frequently risk physical and mental health (Gordon, 2013) such as hallucinations, euphoria and anxiety (Gordon 2013, Ranganathan et al., 2006, and Osborne, 2008). Research findings by Heather (2011) and Al-Mugahed, Leen (2008) associated khat use with negative health consequences including sleep disturbances, mood problems and psychological dependence, a fate that may befall the students who reported using khat.

Objective Two: Commonly Used Drugs

The second objective of the study sought to establish the types of drugs commonly used by the students under investigation. The findings were presented in figure 7.

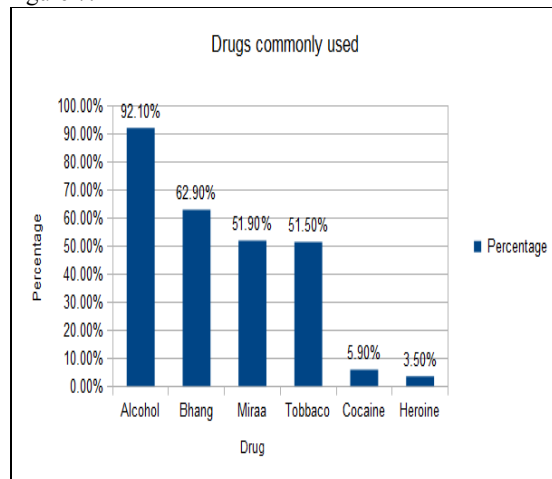


Figure 7: Drugs commonly used

The results revealed that alcohol was the most commonly used drug as reported by (92.1%) of the students followed by bhang (62.9%), Miraa (khat) (51.90%), and tobacco, (51.5%). Other drugs used by very few students were cocaine, (5.9%), heroin, (3.5%), glue, (0.4%), Kuber, (0.6%), and Shisha, (0.2%) respectively. The findings seem to concur with Dhanookdhary et al., (2010) and Lonah (2013)

findings that alcohol, tobacco and marijuana are the most commonly used drugs among most societies, while Gelinas (2006) concurred that tobacco and alcohol were readily available even among poor populations. In addition, the findings concurred with the Ministry of Education Science and Technology that cocaine; mandrax and heroin were becoming popular among young people in Kenya. Of major concern in the study were the students who reported using drugs daily because if they were not already addicted they were at a high risk of dependence, a situation that would compromise their physical and psychological health as well as the social interactions with significant people not to mention the lowered academic and career expectations as was acknowledged by Levinthal (2002) and NACADA (2012). The trend of drugs students reported to use commonly was worrisome as the negative effects alcohol use has been documented by many studies such as Zinn et al. (2004) who reported loss of cognitive control, Kiene et al. (2008) practice of unprotected sex which is a predisposition to sexually transmitted diseases including HIV/ AIDS.

Objective Three: Source Of Drugs Used

The study was also interested in finding out where the students sourced the drugs they used. The findings are reported in figure 8.

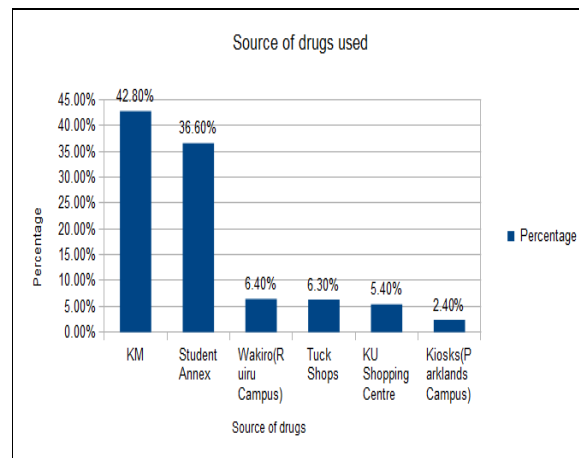


Figure 8: Sources of drugs: Where students sourced the drugs from

With regard to where the students sourced the drugs they used, majority, (42.80%) reported that they sourced them from KM which is a neighboring semi-slam community where many of the students reside because of its offer of cheap accommodation. In a baseline survey by Kenyatta University (2010), KM was identified as one of the major source of drug supply. This study confirmed that KM is still in the lead of drug supply to Kenyatta University community as a whole. The other sources of drugs were within the University like Students Annex, (36.3%), tuck shops, (6.3%), and KU Shopping

Centre, (5.4%). The findings agreed with Holder (1998), Freisthler (2006) that distribution and sale of illicit drugs directly affect the rate of drug consumption.

Drugs Distribution

The study was also interested in finding out the drug distributors. The findings are shown in figure 9.

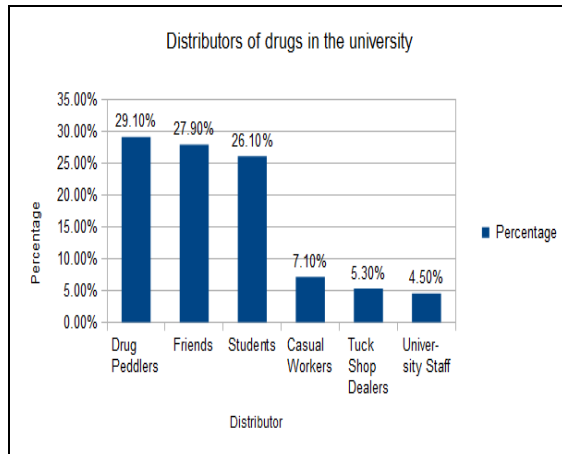


Figure 9: Distributors of drugs to students

The respondents, (29.10%) reported that they got drugs from drug peddlers. Other drug distributors reported included: friends, (27.90%), other students, (26.10%), casual workers, (7.10%), tuck shops, (5.30%), and university staff, (4.50%). These findings corroborate Gelinas (2006) who reported that there were many drug peddlers with ready supply of drugs in various places. The findings seem to suggest that friends, relatives and nuclear family identified in Atwoli et al. (2011) as the people who introduced the student to drugs may continue supplying them with drugs. The findings also agree with NACADA (2004) baseline survey that learning institutions had become hubs of drug sale and consumption with both licit and illicit substances dealers targeting students. The findings further agree with the Ministry of Education (2010) that universities did not exist in isolation but in environmental settings where drugs were available. The results also agree with Bridget et al. (2006) that availability of illicit drugs could have a direct relationship with rates of drug use.

Objective four: The Factors that Encourage Drug Use

The fifth objective of the study sought to establish the factors that encouraged drug use.

Figure 10 below shows the result obtained.

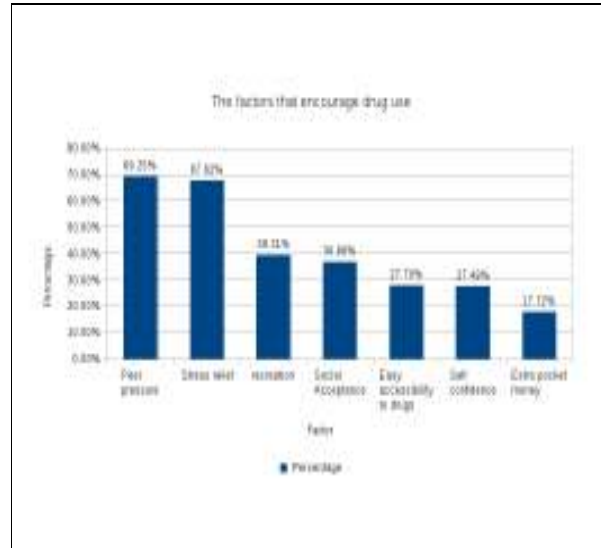


Figure 10: The factors that encourage drug use

Majority of the respondents (69.25%) reported that peer pressure encouraged drug use among the students. Other factors reported included: stress relief, (67.62%), recreation, (39.31%); social acceptance, (36.65%); easy accessibility of drugs (27.70%); self-confidence, (27.49%); and possessing extra pocket money, (17.72%). These findings agree with previous research by Atwoli et al. (2011) that students take drugs due to peer pressure, to relax, relieve stress, to experiment and to cope with problems. The findings further confirm Karechio (2009) and Ndirangu (2008) findings that young people were encouraged to take drugs by their friends and they took drugs to prove to them that they were tough.

Asked ways they used to influence each other into drug use, the results of their response are shown in figure 11.

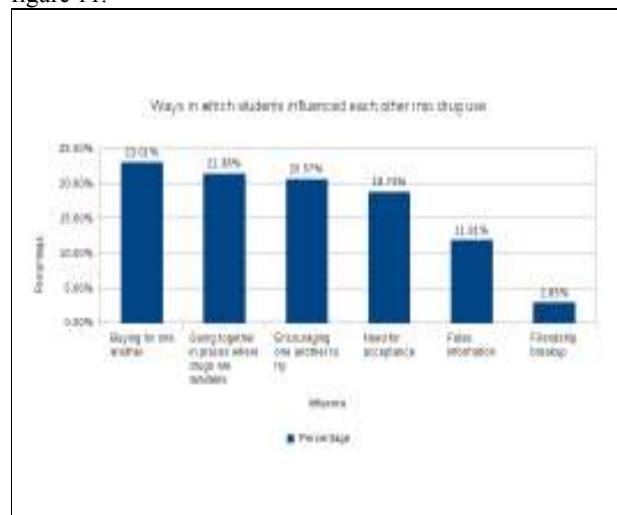


Figure 11: Ways in which students influenced each other into drug use

The data revealed that 23.01% reported buying drugs for one another while 21.38% reported going together in places where drugs were available. Those who reported encouraging one another to try were 20.57% and 18.74% reported taking drugs in order to be accepted. Students who reported taking drugs due to false information were 11.81% while 2.85% reported they took drugs from frustration arising from break-up with friends. These findings concur with Bandura's (1977) theory that people engage in behavior they observe others engaging in and they encourage each other and reward each other with acceptance. The findings also agreed with Maslow's (1954) theory that the need for affiliation was a strong motivator of human behavior. Consequently, university students looking for love and belongingness may find it among other students who take drugs. In addition, the results also concur with, Avison (1982), Kobus (2003), Andrews, Tidesley and Hops (2002), Livaudais et al. (2007), Chen (2006) and Simons-Morton (2007) studies that established that social influence, homogeneity and relationship between friends were important and significant factors in drug use and abuse.

Objective Six: Students' Awareness on Prevention and Curative Programs Available in the University

The respondents were asked the extent of their awareness of the preventive and curative programs provided by the University. The results are presented in figure 12 below.

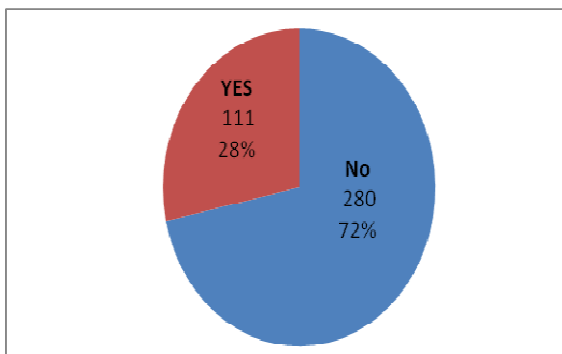


Fig. 12: Students awareness of prevention and curative programs available on campus

The results demonstrated that student awareness level of prevention and curative programs was quite low with majority of the respondents, 72% reporting that they were not aware of the existing preventive and curative programs in the Campus while only 28% of the respondents reported that they were aware of those programs. The reasons they gave for not being aware of those programs included: just not being aware, (55.56%), having no interest, (22.22%), and not having reason to find out of their existence. This could have a direct correlation with the high

prevalence of drug use. The issue of concern in this study was how such a large segment of the students under investigation reported lack of awareness of supportive structures which include: Students' Affairs, Wellness Centre, Mentoring, Peer Counseling and the various Chaplaincies established for the welfare of students.

CONCLUSIONS OF THE STUDY

The results of the study indicated that about a quarter (27%) of the students under investigation were taking drugs at the time of the study. The lowest number (18.52%) of students taking drugs were in the first year of study and this number increased steadily so that the highest number (30.48%) of students taking drugs were in the fourth year of study. Students residing within the campus and those residing outside reported to take drugs in almost equal numbers. Some students reported to use drugs on a daily basis (15.7%) while others reported using drugs weekly (29.75%) while a section of them reported using drugs monthly (14.88%). Majority (39.67%) of students reported using drugs occasionally. The commonly used drugs were alcohol, bhong, tobacco and miraa. Few students reported using cocaine (5.9%) and heroin (3.5%). Students reported sourcing drugs from places proximal to the University as well as within the University. Students identified the drug distributors as peddlers, friends, fellow students, casual workers, tuck shops and university workers. The factors students identified as encouraging them to take drugs were; peer pressure, stress relief, social acceptance, self confidence, extra pocket money, as well as easy access to drugs. The results indicated that majority, (72%) of the students were not aware of prevention programmes in the University.

RECOMMENDATIONS OF THE STUDY

Based on the study findings as well as the conclusions, this study recommends that the University sensitizes the students about the dangers of drug use during the orientation week, organized seminars, distribution of materials on drugs, and training of ADA Training of Trainers (TOT) workshops. Students should also be introduced to the supportive services that exist at the University like the Wellness Centre (which is incharge of students and staff psychological and drug counseling), Mentoring program, Career and Development program, chaplaincies (incharge of spiritual counseling and development), and the Students Welfare Directorate. The University should expose students to life skills training, specifically focussing on how to keep mentally, physically and psychologically healthy as well as skills for dealing with peer pressure. The University should also mete out heavy punishment to workers and other people peddling drugs according to its drug policy (2010). Further, a rehabilitation centre should be developed to provide curative programs to students who are

addicted already. All the health related programs such as the alcohol and drug abuse and counseling programs in the Wellness Centre be stepped up so that their service have an effect on greater number of students. In addition, it was recommended that students be encouraged to take advantage of the existing preventive and curative programs available in the Campus whenever they need them.

REFERENCES

- Al-Mugahed, L. (2008). "Khat Chewing in Yemen: Turning over a New Leaf: Khat Chewing Is on the Rise in Yemen, Raising Concerns about the Health and Social Consequences" *The World Health Organization*, 86(10), 741-2.
- Andrews, J. A., Tildesley, E., Hops, H., & Li, F. (2002). The influence of peers on young adult substance use. *Health Psychology* 21, 349-357.
- Atwoli, L., Mungla, P. A., Ndungu, N. D., Kinoti, K. C., Ogot, E. M. (2011). Prevalence of substance use among college students in Eldoret, Western Kenya. © Atwoli et al; licensee BioMed Central Ltd. 2011
- Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bullock, S. (2004). "Alcohol, Drugs and Student Lifestyle". SoRAD-Research Report nr 21- 2004.
- Bridget Freisthler, Paul J. Gruenewald, Fred W. Johnson, Andrew J. Treno, Elizabeth A. Lascala (2006). An exploratory study examining the special dynamics of illicit drug availability and rates of drug use. *Journal of Drug use Education*, 35(1), 15-27.
- Caan, Woody; Bellerocche, Jackie de, eds. (11 April 2002). *Drink, drugs and dependence: From science to clinical practice* (1st. ed.), New York: Routledge
- Carroll, M., Lynch, W., Roth, M., Morgan, A., and Cosgrove, K. (2004). Sex and estrogen influence drug abuse. *Trends in Pharmacological Sciences*, 25, 273-279.
- Chen XG, Stanton B, Fang XY, Li XM, Lin DH, Zhang JT, Liu HJ, Yang HM. (2006). Perceived smoking norms, socioenvironmental factors, personal attitudes and adolescent smoking in China: a mediation analysis with longitudinal data. *Journal of Adolescent Health*. 38, 359-368.
- Dhanookdhary, A. Gomez, A. Khan, R., Lall, A., Murray, D., Prabhu, A., Ragoonath, A., Singh, N., Tewari, S., & Youssef, F. (2010). Substance use among university students at the StAugustine Campus of The University of the West Indies. *West Indian Medical Journal*, 59(6), 641-659.
- Ettorre, E. (2004): Revisioning women and drug use: gender sensitivity, embodiment and reducing harm, *International Journal of Drug Policy* 15, 327-335.
- Gelinas, M. (2006). *How to overcome alcoholism*. Nairobi: Paulines Publications Africa.
- Gordon, A. J, Conley, J. W., Gordon, J. M. (December 2013). "Medical consequences of marijuana; use: a review of current literature". *Curr Psychiatry Rep (Review)* 15(12), 419.
- Hibell, B. & Andersson, B. & Bjarnason, T. & Ahlström, S. & Balakireva, O. & Kokkevi, Järvinen, M. (2001): Accounting for trouble: identity negotiations in qualitative interviews with alcoholics. *Symbolic Interaction* 24 (3): 263-284.
- Karechio. B. (2001). *Drug abuse in Kenya*. Nairobi: Uzima Press.
- Kenyatta University, (2010). *Drugs and substance abuse policy*. Unpublished.
- Levinthal, C. F. (2002). *Drugs, behavior and modern society* (3rd ed.). Boston: Allyn & Bacon.
- Livaudais JC, Napoles-Springer A, Stewart S, Kaplan CP. Understanding Latino adolescent risk behaviors: Parental and peer influences. *Ethnicity & Disease*, 17, 298-304.
- Lynch, W. J., Roth, M. E., Carroll, M. E. (2002). Biological basis of sex differences in drug abuse: preclinical and clinical studies. *Psychopharmacology*. 164, 121-137.
- Maslow, A. (1954). *Motivation and personality*. New York: Harper.
- McCabe, S. E., Boyd C. J., Teter, C. J. (2009). Subtypes of non-medical prescription drug misuse. *Drug and Alcohol Dependency* 102(1-3), 63-70.
- MacCoun, R. J., & Reuter, P. (2001). *Drug war heresies: Learning from other vices, times and places*. New York: Cambridge.
- Melchior, M. Chastan, J. F., Goldberg, P., & Fombonne, E. (2008). High prevalence rates of tobacco, alcohol and drug use in adolescents and young adults in France: results from the GAZEL Youth study. *Addict Behavior* 33, 122-33.
- Ministry of Education Science and Technology, (2010). "Impact of drug abuse in secondary schools". Government press.

- Ministry of Health, (2010). Guidance on review of psychoactive substances interactional control. WHO press.
- Odek-Ogunde M, Pande-Leak D. (1999). Prevalence of substance use among students in a Kenyan University: a preliminary report. *East Africa Medical Journal*, 76, 301–306.
- NACADA (2004). Alcohol and drug abuse in Kenya. Final national baseline survey on substance abuse in Kenya. Nairobi: Government Printer.
- NACADA , (2007). Report on situation assessment of drugs and substance abuse in. Nairobi, Nairobi: Government Printer.
- NACADA, (2010). National baseline survey on drugs. Nairobi: NACADA.
- NACADA, (2012). Youth in peril alcohol and drug abuse in Kenya. Nairobi: NACADA.
- Ndirangu, J.M. (2008). Youth in danger hand book for teachers, students, parents, pastors and community workers. Nairobi: Uzima Press.
- Purris, G. and Mach Innis, D.M (2009). —Implementation of the Community Reinforcement Approach in a Long Standing Addictions Outpatient Clinic. *Journal of Behaviour Analysis of Sports, Health, Fitness and Behavioural Medicine*. 2(1), 33-44.
- Ranganathan, Mohini; d'Souza, Deepak Cyril (2006). "The acute effects of cannabinoids on memory in humans: a review". *Psychopharmacology* 188(4), 425–44.
- Sannof, A. P. (2006). A perception gap over students' preparation. *Chronicle of Higher Education*, 52(27), B9-B14.
- Simons-Morton B. (2007). Social influences adolescent substance use. *American Journal of Health Behavior*.31, 672–684.
- Tumuti, S., & Sr. Nganda, S. (2012, January). Alcohol and drug abuse prevention, control, and mitigation: a case of Kenyatta University, Wellness Centre. Paper presented at the National Alcohol and Drug Abuse conference at Kenya Institute of Administration: Nairobi.
- United Nations (2000). World drug report, on drug prevalence among youth. Great Britain: Oxford University Press.
- Van Etten ML, Anthony JC. Male-female differences in transitions from first drug opportunity to first use: searching for subgroup variation by age, race, region, and urban status. *Journal of Women's Health & Gender-Based Medicine*. 10, 797–804.
- Van Etten ML, Neumark YD, Anthony JC.(1999). Male-female differences in the earliest stages of drug involvement. *Addiction*, 94, 14-13.
- Wangeri, T., Kimani, E., & Mutweleli, S. M. (2012). Transitional challenges facing first year students in Kenyan Public Universities: A case of Kenyatta University. *Interdisciplinary Review and Management*, 2(1), 41-50.
- Zim, S., Stein, R. & Swartzwelder, H. S. (2004). Executive functioning early in abstinence from alcohol: Clinical and Experimental Research, 28(9). 1338-1346.
- Znitman, S. R. (2007). Drugs and gender, *Nordic Studies on Alcohol and Drugs*, 1(24), 107-126.