

African Journal of Education and Practice (AJEP)

INFLUENCE OF DRUG ABUSE AWARENESS ON DRUG ABUSE REDUCTION AMONG THE UNDERGRADUATE STUDENTS IN PUBLIC UNIVERSITY CAMPUSES IN NAIROBI COUNTY, KENYA

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Abstract

Purpose: The study aimed at determining the influence of drug abuse awareness on drug abuse reduction among the undergraduate students in public university campuses in Nairobi County, Kenya

Methods: The study used Triangulation mixed methods design that adopted convergent parallel mixed method model. Cross-sectional survey research design was used for quantitative data while phenomenological design for qualitative data. Stratified random sampling and purposive sampling was used to select the sample. The sample consisted of one thousand, five hundred and twenty four (1524) participants who included 1500 students, 20 peer counsellors, two university counsellors and two deans of students. Questionnaires, interview and Focus Group Discussions (FGD) guides were used to collect data. Statistical Package for Social Science (SPSS) version 21 was used to analyse quantitative data while NVIVO was used to analyse qualitative data. Descriptive statistics were used in analysis of quantitative data while thematic and content analysis techniques were used to analyse qualitative data.

Results: The study revealed that in general drug abuse awareness has led to reduction of drug abuse among undergraduate students in public university campuses in Nairobi County.

Unique contribution to theory, practice and policy: The study recommended that the policy makers in collaboration with the ministry of education should formulate policies that guide on suitable environment in which university campuses should be situated.

Keywords: *Drug abuse, awareness, reduction, undergraduate students, public university campuses, Nairobi County.*

1.0 INTRODUCTION

1.1 Background of the Study

Drug abuse has been on the increase and of global concern particularly in developing countries where there are few interventions towards its prevention (United Nations Drug Campaign Programme - UNDCP, 2010). The World Health Organisation (WHO, 2011) estimated that between 149-272 million people accounting for 3.3% to 6% of the world total population aged 15-64 years abuse drugs annually. According to this report a significant percentage (45%) of this population comprise of students in colleges and universities. The same report indicated that 2.5 million people die each year from alcohol related complications and that university students accounted for 30% of this population. The rate of drug abuse is considerably high in universities as indicated by various researchers worldwide (Atwoli, Mungla, & Ndungu, 2011; UNDCP, 2010). A study by UNDCP (2010) revealed that the most widely abused drugs among students are alcohol, tobacco, marijuana, opium and its derivatives, cocaine and heroin. Riley-Cook (2012) and UNDCP (2010) revealed that alcohol abuse leads with 95% of the participants having reported to have abused alcohol at least twice in a year, followed by tobacco with 65% and cannabis derivatives accounting for 45%.

According to Masudi (2016) majority of drug abusers start to abusing drugs at their youthful age between 15 to 30 years of age and a significant proportion of the abusers start abusing at old age. Although male users form the majority the females are not left out. Masudi (2011) also revealed that tobacco and cannabis are the major drugs that most abusers started with, however, heroin was found to be the most favourable drug to most abusers. He further revealed that, Peer pressure and curiosity greatly influences drug abuse among the youth. In addition to this, availability of drugs and cost plays a major role during inception.

According to Beckerleg, Telfer and Sadiq (2016) the Mombasa County has in recent years gained a reputation as a transit conduit for hard drugs mainly Hashish and heroin from central Asia en route to Europe and the United States of America (USA). Although drug abuse has been said to be a silent disaster that claims many lives every year in the country, most youth find it had to dissociate with the vice that is strongly linked with violence and currently the human immunodeficiency virus (HIV) and acquired immune deficiency Syndrome (AIDS) scourge (Kaguthi, 2006).

Further, most of the student in colleges and technical institution in Kenya are said to engage in drug abuse due to ease access to the commodity. This has raised an alarm for authorities to come up with strategies and applicable means of mitigating drug abuse among campus students. USA was found to have citizens who were four times more likely to report using cocaine in their lifetime than the next closest country, New Zealand (16% vs. 4%), Marijuana abuse was more widely reported worldwide, and the USA also had the highest 2 rate of abuse at 42.4% compared with 41.9% of New Zealanders (Warner & Sullivan, 2017).The problem of alcohol and illicit drug abuse on college and university campuses is significant. Among college and university students, specific problems identified include binge-drinking, underage drinking, underage binge-drinking, and drug use. Estimates of prevalence of these behaviours range from 25 to 44%. American researchers have identified an upward trend for

these problems, with increased percentages of students self-reporting these behaviours between 1993 and 2001 (Wilson & Kolander, 2010). Abuse of drugs is considered as one of the most critical problems in public health in the American colleges (Vicary & Karshin, 2013).

1.2 Statement of the Problem

Universities in Kenya have been struggling with the problem of drug abuse like other universities in developed and developing countries worldwide (Atwoli et al., 2011). Preventative strategies have been put in place to lower drug abuse prevalence rate, reduce drug abuse related indiscipline cases, and improve academic performance and lower riots, which were characterised by destruction of property. However, drug abuse seems to be increasing among the university students. According to a national survey on rapid situation assessment of drug and substance abuse in Kenya (2012), 11.7% of the youth aged 15-24 years are current abusers of alcohol, 6.2% tobacco, 4.7% miraa and 1.5% cannabis. The age bracket in this study shows that majority of these abusers are students in secondary schools and in the universities.

In Nairobi the undergraduate students have continued to abuse drugs. Statistics indicate that 37.7% of students in learning institutions in Nairobi are abusers of drugs. The proportion of the students who abuse bhang, khat and inhalants was 44.9%, 35.2% and 50.1% respectively while alcohol accounted for 66.5%. These indications are scary given that majority of Kenyan population is aged between 12-35years (Wambua, 2014). The risks caused by drug abuse among students have also been evident in the recent past. In some instances, students have dropped out of universities; others have constantly performed poorly in their academic while others have been involved in fatal road accidents after abusing drugs. Suicidal cases, violence, HIV/AIDS, and also killings have also risen. This has caused a great public outcry from the parents, ministry of health, university administrators, lecturers and other ant-drug abuse agencies questioning the effects of preventative strategies in reducing drug abuse among students.

Recent studies (Mazuri, 2014; Mwali, 2014; & Shirazy, 2013) on drug abuse have paid key attention to Mombasa County and little seems to have been done in Nairobi. Yet Okwarah, Gakunju, & Thungu, (2013) found that Nairobi ranked second highest in drug abuse prevalence rates among the undergraduate students after Mombasa County. In addition Nairobi being a capital city holds more students than Mombasa. Equally, little attention has been paid on how the preventative strategies influenced the reduction of drug abuse among undergraduate students. Thus the opinions and attitude of the students towards influence of preventative strategies on drug abuse reduction has not been explored.

In view of these discrepancies, there was need to examine the influence of drug abuse awareness in reducing drug abuse among the undergraduate students in public university campuses in Nairobi County. If these problems remained unattended, most young, educated and energetic Kenyans would continue to abuse drugs which would make them unable to provide manpower needed for the growth of the country. As a result the country would experience political, social and economic decline.

1.3 Research Question

To what extent does drug abuse awareness influence drug abuse reduction among the undergraduate students in public university campuses in Nairobi County?

1.4 Theoretical Framework

1.4.1 The Social Learning Theory

The social learning theory rests on the assumption that behaviours are learnt and since they are learnt they can as well be unlearned. Social learning theory was an improvement of the behavioural views of learning which overlooked important elements of social influences on learning. Such elements include the cognitive processes of the behaviour or information observed. According to Bandura (1986) learning takes place through observation. Observational learning is a cognitive process that takes place in a social context. According to Bandura's argument observational learning takes four major cognitive processes which include; attention, retention, reproduction or performance of the observed behaviour and motivation or reinforcement.

Bandura (1986) asserts that, for learning to take place, an individual must pay attention to the modelled behaviour. This is mainly determined by individual's personality, which involves perception, past experience and how much the modelled behaviour arouses the interest of the observer. Another factor that influences a person's attention is the nature of the behaviour or event being modelled. Here an individual tends to ask whether the modelled behaviour is relevant or of any value to the observer.

The other cognitive process involves retention; the theory posits that for an individual to perform or reproduce what has been observed, the storing of the modelled behaviour is of great importance. Moshe (2010), in his analysis of social learning theory asserted that retention involves representation of the behaviour to be learned in verbal or image form for long term memory. The third stage is the reproduction or performance stage. The stage involves physical ability to perform the observed or desired behaviour.

The final cognitive process of observational learning involves the motivation or reinforcement that one gets from performed behaviour. According to Bandura (1986), the decision to reproduce or refrain from performing the observed behaviour depends on the motivation and expectations of the observer. According to Moshe (2010) reinforcement forms the basis for understanding and predicting what individuals do or will do. Bandura (1986) adds that positive reinforcement (reward) increases the probability that the same action or behaviour will be repeated in similar circumstances while negative reinforcement (punishment) will deter the repeat of the same behaviour.

The theory further held that most of new behaviours are learned by observing of models. Bandura (1986) argues that there are three ways of modelling: the live model where a person demonstrates the desired behaviour, verbal instruction modelling in which an individual describes behaviour in detail and instructs the participant on how to engage in the behaviour, and symbolic modelling where modelling occurs through media in form of movies, television, internet, literature and radio. In agreement with Bandura, Hill (2013) observed that many of the

stimuli that influence human behaviour are those from other people which were normally acquired through modelling.

Sonnedecker (1992) defines modelling as behavioural, cognitive and affective changes derived from observing one or more models. His definition concurs with Bandura's argument that observational learning involves cognitive processes. Okul (2010) adds that modelling is not only a simple imitation of one person by another; rather it involves more pervasive processes often referred to as identification in which a person tries to be the same kind of a person as another.

The implication here was that imitation of models is greatly influenced by the reinforcement that the models receive. If the modelled behaviour is positively reinforced (rewarded) there will be high probability of that behaviour being imitated by the observer. However, if the modelled behaviour is negatively reinforced (punished) then the chances of the modelled behaviour being imitated is reduced. Hill (2013) asserts that the process by which consequences to the model influence the behaviour of the observer is called vicarious conditioning or reinforcement.

Bandura (1986) believed in reciprocal determinism which implies that learning and behaviour have a triadic reciprocal relationship with environment. This means that through learning new knowledge, a person's behaviour is changed. This implies that just as an individual's behaviour is influenced by the environment, the environment and personal qualities all reciprocally influence each other. Therefore when students are sensitised on the danger of abusing drugs and how to avoid drug abuse there is likelihood that some of them will avoid engaging or stop abusing drugs. According to the theory, the environment in which one lives shapes the behaviour of that particular individual. Thus the environmental features such as role models who are abusing drugs, availability of drugs and cultural norms will determine whether students will abuse drugs or not. In addition, how people behave determines the kind of environment in which they live in. For instance, if people in a particular environment abstain from drug abuse, then the environment will definitely be a drug free environment since there will be no market for the drugs.

Bandura (1986) asserts that human behaviour is continuously and reciprocally influenced by the interaction between cognitive and environmental factors. The theory further states that people's behaviours determine the environment in which they live in. This means that both people and their environments are determinants of each other. It is important to note that environment consists of a series of interacting variables which contribute either negatively or positively to learning of new behaviour.

Gorful (2010), in agreement, argued that when the nature of a social environment adequately provide towards the social and personal needs of a growing child, the child will develop into a balanced, well-adjusted and emotionally stable person who is ready to learn and lead a full life in the society. However, when the social environment is one of difference, ignorance, social discord, improper family care, permissiveness, lacking guidance or condoning deviant behaviour, then a growing child is bound to become an ill- behaved, socially maladjusted and feeble minded person who is an uncaring, indifferent or irresponsible member of the society.

This simply tells us that there must be some balance of different variables in the society for a child to develop responsible and socially acceptable behaviours.

According to Bandura (1977) self-efficacy comprise of a person's attitude, abilities and cognitive skills. The social learning theory therefore holds that self-efficacy determines how people perceive situations and how they behave in response to different situations. Bandura (1977) defines self-efficacy as the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations. This refers to a person's belief in his or her ability to succeed in a particular situation.

According to this theory, self-efficacy determines how people think, behave and feel in relation to a particular situation in life. The theory argues that people with a strong sense of self efficacy view challenging problems as tasks to be mastered, develop deeper interest in the activities in which they participate, form a strong sense of commitment to their interest and activities, and they recover quickly from setbacks and disappointments.

This is totally opposite to people with a weak sense of self-efficacy, who avoid challenging tasks, believe that difficult tasks and situations are beyond their capabilities, focus on personal failings and negative outcomes and quickly lose confidence. The theory outlines four major sources of self-efficacy as vicarious experiences, social modelling, verbal persuasion and psychological responses which is also referred to as emotional arousal.

2.0 REVIEW OF RELATED LITERATURE

2.1 Self-Efficacy Theory (Bandura, 1986)

This theory was proposed by Albert Bandura, a Psychologist born in 1925 at Alberta, Canada. Bandura (1995) and Bandura (2004) perceived self-efficacy as beliefs in one's capacity to organise and execute the courses of action required to manage prospective situations. Other researchers advance this point that, Self-efficacy, or the confidence in personal ability, has been shown to predict a variety of health behaviour outcomes (Ormrod, 2003; Margolis & McCabe, 2006; Conner & Norman, 2009). Bandura (1977) states that people's level of motivation affective states and actions are based more on what they believe than what is objectively true and for this reason, how people behave can often be better predicted by the beliefs they hold about their capacities than by what they are actually capable of accomplishing. According to him therefore, self-efficacy perceptions help determine what individuals do with the knowledge and skills they have.

Bandura's theory is a pointer to an important situation that could emerge in universities in which established prevention programmes may either be utilised by students or not. This dichotomous position is determined by the beliefs and attitudes they hold about the impact prevention programmes create in their lives. Theory of Planned Behaviours (Fishbein & Ajzen, 2010) describes attitude as a disposition to respond favourably or unfavourably to an object, behaviour, person, institution or event. Zimmermann (2008) argues that an elemental support of the effect of attitude on self-regulation is a dynamic process in which the individual engages as he or she works toward a goal. Without feedback or reflection, adjustments cannot be made and regulation of behaviours does not take place. He views the environment as an influencer to self-

regulation in either a positive or negative direction. If the environment provides no feedback or social cues, it is difficult for effective self-regulation to take place. This assertion indicates a complementary relationship between attitude and factors within the environment. If students positively appraise prevention programmes, they are most likely to utilise them for their benefit. Conceptualization of student self-efficacy dynamics plays a big role in student positive responsiveness and participation in prevention activities. In this regard, student participation plays a key role in the implementation and effectiveness of prevention programs.

Self-efficacy theory further postulates that, virtually all people can identify goals they want to accomplish, things they would like to change, and things they would like to achieve. However, most people also realise that putting these plans into action is not quite simple. Bandura (2004) found that an individual's self-efficacy plays a major role in how goals, tasks, and challenges are approached. He argues that people with a strong sense of self-efficacy form a stronger sense of commitment to their interests and activities. Bird, Conrad, Fremont and Timmermans (2010) argue that personal control depends on one's choices and actions that they can master, control or effectively alter the environment. Luszczynska and Schwarzer (2005) assert that choices affecting health are dependent on self-efficacy which determine whether health behaviour change will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and failures. West (2006) in his cognitive bias theories argues that addiction is maintained by biases in the cognitive system, including beliefs, expectancies, self-efficacy, attributions and attention.

Batholomew (2006) argue that behaviour change occurs in capability to perform the behaviour or under a number of different circumstances like perceived self-efficiency and perceived behavioural control. The presuppositions provide insight to prevention programmes on the crucial need to develop self-efficacy among students. In universities, the success of prevention programmes' implementation is regulated by self-efficacy of individual students who are abusers of these programmes. It is essential for prevention programmes to access student cognitive dynamics for synchronisation with techniques and strategies being used as this could contribute to effectiveness of substance abuse prevention.

2.2 Influence of Drug Abuse Awareness on Drug Abuse Reduction

The most worrying aspect of drug abuse is that it has overpowered quite a number of youth in most countries worldwide (Larimer *et al.*, 2010). This has made most of governments to engage in drug abuse campaigns in their respective countries. Several drug abuse programmes which include programmes on drug abuse awareness, resistance skills, peer support and life skills programmes have been established.

The USA launched the higher education centre for alcohol and other drug abuse and violence prevention to help campuses and communities develop strategies for changing campus culture; foster environments that promote healthy lifestyles and prevent high risk alcohol and other drug use and violence among students. This centre has encouraged colleges and universities to initiate a number of activities which are aimed at helping students successfully transition into campus life and at reducing a range of problems related to student drinking. In universities where programs have been established, drug abuse cases and consequences

associated with it have lessened. Criteria used by USA department of education (NIDA, 2008) on award-winning prevention programs have helped identify some of the campuses whose prevention programs have demonstrated effectiveness. Examination of these programs would be important for benchmarking in Kenyan universities.

Vicary and Karshin, (2012) observed that social marketing campaigns are popular interventions in reducing binge drinking in USA universities and seems to have some effectiveness in influencing students' beliefs and behaviour towards drug abuse. Western Washington University has incorporated several programmes such as social marketing campaign, health opinion leaders, and community-health service learning programme. It would help universities in Kenya if students are engaged in campaigning against drug abuse so that they may persuade their colleagues who may otherwise be using drugs.

At the Auburn University, the programme being used is brief alcohol screening and intervention for college students (BASICS) founded in 1997. It is a supportive programme to enhance motivation and make students learn how they might benefit from not engaging in drug abusing behaviours. This has reduced enthusiasm among some students to avoid taking drugs. However, this needs to be applied in Kenyan Universities with caution through amiable approaches to avoid misinterpretation that they are being compelled and for students to see the beneficial effect it has on them.

3.0 RESEARCH DESIGN AND METHODOLOGY

The researcher used a triangulation mixed methods design so as to obtain different but complementary data on the same topic to best understand the research problem (Creswell & Clark, 2007). Convergent parallel mixed method model was used, which involved collecting and analysing quantitative and qualitative data separately on the same phenomenon and then the different results are converged during the interpretation (Creswell & Clark, 2007). The quantitative research design used was cross-sectional survey, which was an appropriate strategy for obtaining information on the nature, opinion and characteristics of people (Kerlinger, 2002).

For qualitative research, phenomenology design was used. The target population in this study included twenty one public university campuses in Nairobi County. The study targeted all full time third year students (students who attend lectures from 7am to 5pm daily) who were 15,000 in total. The peer counsellors and university counsellors also formed the study's target population due to their in-depth involvement in the social life of students during their counselling duties. The deans of students were also targeted since they assist in the development, implementation, and in evaluation of intervention programmes that address the social welfare of the students (Otingi, 2012). The study used both probability and non-probability sampling procedures to select samples for the study. In probability, stratified random sampling was used to ensure that proportional allocation was done and that participants were selected from each area and with a proportional size. Thus stratified sampling technique was used to select students. In non-probability, purposive sampling was used to select two university campuses and the peer counsellors. The peer counsellors had key information concerning the problem under investigation while the university campuses were within reach. The deans of students and

university counsellors were automatically included since each university campus had one dean of students and one counsellor. The researcher purposively selected Egerton and Moi University Campuses. The sample size was selected from the Egerton (800 students) and Moi (700) universities respectively. The sample size comprised of 670 males and 830 females.

Purposive sampling procedure was used to sample various faculties. In Egerton University the researcher purposively selected Faculty of Education, International Relations, Gender, Eco-statics and faculty of Criminology. In Moi university campus, Faculty of Business and Economics, Human Resource Development, Arts and Social Sciences and Faculty of Education were purposively selected. Purposive sampling was used to select peer counsellors. From the documented register of peer counsellors in the department of guidance and counselling, the researcher purposively selected peer counsellors from each of the university campuses. There were 20 peer counsellors in Egerton and 30 peer counsellors in Moi CBD university campuses. The researcher purposively selected 10 peer counsellors from each campus based on their responsibility and leadership positions. Thus a total of 20 peer counsellors were selected. Since this study employed convergent parallel mixed methods design, both quantitative and qualitative data collection techniques were used. Questionnaires, in-depth interview and focus group discussion guides were used to collect data. Quantitative data was analysed through the use of Statistical Package for Social Science (SPSS version 21.0). Descriptive and inferential statistics were computed. Descriptive statistics (frequency-distribution and percentages) were used to arrange, summarise and convey the distribution of key variables. Talled frequencies gave a clear picture of which frequencies were most common. Thematic data analysis was done according to the six steps mentioned by Braum and Clarke (2006).

4.0 DATA PRESENTATION AND DISCUSSION OF RESEARCH FINDINGS

4.1 Return Rate of Research Instruments

In order to describe the sample for demographic information, descriptive statistics was used. To obtain data from the students, questionnaires were distributed to students in the two public university campuses in Nairobi County that is, Egerton and Moi University campuses. Two focus group discussion guides, one from each university campus were used to gather data from the peer counsellors while in-depth interview guides were used to collect data from the university counsellors and the deans of students. Table 1 shows the expected and actual participants who participated in the study.

Table 1

Return Rate of Research Instruments by Participants

Item	Proposed participants	Actual participants	Percentage
Students	1,500	1,430	95.3
Peer counsellors	20	20	100
University counsellor	2	2	100
Dean of students	2	2	100
Total	1,524	1,454	95.4

Table 1 shows the return rate for the four groups of participants. From the 1,500 questionnaires distributed to the students, 1,430 (95.3%) were filled and returned. For the peer counsellors, university counsellors and deans of students there was 100% response rate. The percentage return rate was considered adequate in providing valid and reliable presentation of the population. The high percentage return rate was attributed to the fact that the questionnaires, the in-depth interviews and the focussed group discussions were conducted by the researcher personally with assistance of two assistant researchers.

4.2 Demographic Information of Participants

4.2.1 Demographic Information of Students

The students who participated in this study were full time students and in their third year of study. Their demographic information included the gender, age and marital status.

Table 2 indicates the findings of the demographic information of the students.

Table 2
 Demographic Information of Students

Demographic information	F	%
Gender		
Male	670	44.6
Female	830	55.4
Age		
18-20	406	27.1
21-23	711	47.4
24-26	255	17.0
Above 26	128	8.5
Marital status		
Single	1,265	84.3
Married	185	12.4
Separated	20	1.3
Divorced	30	2.0

The gender of the students who participated in this study was sought in order to ensure representativeness. Slightly more than half (55.4%) of the participants were female while 44.6% were male. This showed a good representation of the study population by gender. The findings on gender of the students showed there was equal gender representation in the study. The participants were asked to indicate their age bracket. This was categorised into the following age brackets: 18-20 years, 21-23 years, 24-26 years and above 26 years. The findings in Table 2 indicate, that the age of a vast majority (74.5%) of the students indicated that they were aged between 18 and 23 years. Another (25.5%) of them were aged 24 years and above. The results indicated that majority of undergraduate students were aged between 18 to 26 years.

The participants were asked to indicate their marital status. This was categorised into the following: divorced, single, separated or married. The results showed that majority (84.3%) of the students were single, while 12.4% were married, and a small percentage 2% and 1.3% were divorced and separated respectively. The findings showed that a higher percentage of students were not married.

4.2.2 Demographic Information of Peer Counsellors

This section gives information on the demographic characteristics of the peer counsellors involved in this study. The section was presented under various demographic factors. Table 3 shows the demographic information of the peer counsellors.

Table 3
Demographic Information of the Peer Counsellors

Demographic information	F	%
Gender		
Male	8	40
Female	12	60
Age		
18-20	4	20
21-23	12	60
24-26	4	20
Above 26	-	-
Marital status		
Single	20	100
Married	-	-
Separated	8	-
Divorced	-	-
Duration of service		
1 Year	8	40
2 Years	7	35
3 Years	4	20
Above 4years	1	5

The gender of the participants in this study was sought in order to ensure representativeness. With reference to the gender of the peer counsellors, the first focus group had an equal gender representation while the second group had seven females and three males. Thus there were 60% females and 40% males. This indicated that public universities had more female peer counsellors than males. Flansburg (2012) identified gender as one of the factors that determine the effectiveness of guidance and counselling services in reducing drug abuse among students. Some students may seek counsel from opposite gender while others would prefer counsellors of the same gender.

The findings indicate that majority of the peer counsellors aged between 21-24 years. This is important because most of the students are also in the same age bracket which may make it easy for most students to associate and share their problems with them since the age difference is narrow. None of the peer counsellors was above twenty six years of age. Duration of service is a good indicator of how peer counsellors handled issues of drug abuse among students and the challenges they faced. The peer counsellor's years of service was sought in order to gather the background experiences in curbing drug abuse among their fellow students. The findings also revealed that all the peer counsellors were single.

The findings showed that, more than a third (40%) of the peer counsellors had worked for one year. Another 35% had worked for a period of two (2) years and 20% of the peer counsellors

had worked for three (3). Another 5% of the peer counsellors had worked for more than 4 years because of various reasons ranging from lack of university fees and sicknesses. The fact that majority (60%) of the peer counsellors have done peer counselling for more than two years was an indication that most of the peer counsellors had enough experience to handle most drug abuse cases which may have contributed to effective reduction of drug abuse among students.

The results also suggested that most of students had adequate experience of what goes on in the public university campuses as far as drug abuse preventative strategies are concerned. Flansburg (2012) argued that the experience and knowledge of the counsellor determined whether the students would continue seeking counselling services or not. It is therefore important that peer counsellors are trained continuously to equip them with current counselling skills and especially in counselling drug abuse among students.

4.2.3 Demographic Information of University Counsellors

There were only two university counsellors from the two selected university campuses in Nairobi County. Both the counsellors were female. Counsellor from university campus X was aged fifty (50) years while counsellor from university campus Y was sixty (60) years old. Further counsellors from university campus X had a Master's degree in guidance and counselling while the other one held a doctorate degree in counselling psychology. These background results of the university counsellors showed disparity in gender representation. This disparity may have discouraged most male students from seeking counselling assistance when confronted with life challenges. This is because some students will prefer to share their problems with same gender counsellors while others prefer the opposite gender. The age of the participants showed a wide age gap between the students and the counsellors. The counsellors' academic qualification indicated that the counsellors were highly qualified to handle students' challenging issues. One of the counsellors had an experience of five years while the other one had fifteen years' experience. This indicated that they had adequate experience of handling issues related to drug abuse in the universities.

4.2.4 Demographic Information of Deans of Students

Two deans of students were interviewed. This was because each university campus has one dean of students who are considered reliable in providing detailed and adequate information concerning drug abuse preventative strategies among the university students. The deans of students from university campus X was a male while the one from university campus Y was a female. The two deans of students were aged 45 to 55 years respectively. Thus the deans were in a position to interact freely with the students since the age gap between them and the students was not too wide nor were they too young to command respect as parents to the students. The two deans of students had doctorate degrees in educational administration which indicated that they were highly qualified to handle students' matters. Both deans of students had worked for at least three years showing that they had interacted well with the undergraduate students well.

4.3 Influence of Drug Abuse Awareness on Drug Abuse Reduction

This study sought to examine the influence of drug abuse awareness on the drug abuse reduction in public university campuses in Nairobi County. Various items were presented to the

students, dean of students and the university counsellors. The students were asked to indicate whether to: larger extent, some extent, little extent and no extent they agreed with various statements presented to them in a table. Table 4 shows the distribution of students' responses regarding the respective statement.

Table 4

Influence of Drug Abuse Awareness on Drug Abuse Reduction

<u>Item</u>	<u>Larger Extent</u>		<u>Some Extent</u>		<u>Little Extent</u>		<u>No Extent</u>	
	<u>F</u>	<u>(%)</u>	<u>F</u>	<u>(%)</u>	<u>F</u>	<u>(%)</u>	<u>F</u>	<u>(%)</u>
Extent of agreement on: I attend drug abuse awareness seminars every semester	257	18	206	14.4	229	16	738	51.6
My university organises drug abuse awareness workshop every semester	154	10.8	472	33	285	19.9	519	36.3
Drug abuse awareness has helped some students stop abusing drugs	391	27.4	501	35	342	23.9	196	13.7
Some students have reduced the number of times they abuse drugs after they are made aware of the consequences	369	25.8	565	39.5	332	23.2	163	11.4
Since most students are aware of the effects of drug abuse, drug abuse prevalence rate has reduced	309	21.6	551	38.5	416	29.1	154	10.8
Drug abuse awareness has reduced cases of drug abuse accidents among students	327	22.9	575	40.2	365	25.5	163	11.4
Drug abuse awareness has reduced drug abuse related deaths among students	313	21.9	645	45.1	281	19.6	191	13.4
Drug abuse awareness has reduced cases of indiscipline related to drug abuse	285	19.9	528	36.9	365	25.5	252	17.6
Drug abuse awareness has reduced cases of violence among students	360	25.2	551	38.6	346	24.2	173	12.1
Drug abuse awareness has reduced reported cases of health problems related to drug abuse	346	24.2	571	39.9	369	25.8	144	10.1

According to Table 4, the finding showed that 65.3% of the students suggested that drug abuse awareness had effectively influenced reduction of drug abuse among undergraduate students in public university campuses in Nairobi County. Another 60.1% of the students agreed that awareness of the effects of drug abuse had reduced the prevalence rates to a larger extent and some extent. The findings from the focus group discussions concur with the students' responses in that twelve out of twenty peer counsellors agreed that drug abuse awareness had reduced drug abuse a great deal. Explaining the situation a peer counsellor in FGD A said:

The abuse of drugs has been rampant in this university since we are situated in the central business district (CBD). This therefore prompted the university to organize awareness seminar every semester which has so far proved to be efficient as some of the students are slowly seeking help to deal with the addiction problems (FGD A in University Y, February 19, 2016).

These findings seemed to support the findings by Boneli et al. (2012) who argued that the main objective of drug abuse awareness programmes was to empower individual student's initiative to prevent getting into drug abuse and create positive attitude towards preventative strategies. The finding in this study and Boneli et al. (2012) were in agreement with Bandura's principle of reciprocal determinism. According to this principle learning new knowledge tends to change a person's behaviour. This implied that students would change their drug abuse behaviour after acquiring more knowledge about drug abuse. The findings from the interviews with the deans agreed that drug abuse awareness helped to reduce drug abuse among students. Commenting on the effectiveness of drug abuse awareness, the dean of students from university X stated:

We carry out drug abuse seminars; we invite resource persons and motivational speakers to talk to our students. During orientation for the new students, first year students are educated and informed on drug abuse and its effects. I can say these measures have been effective in the reduction of drug abuse though it's difficult to clean it completely. Further complains from lecturers and students concerning alcoholism and smoking has reduced and there are a few cases of students' absenteeism in the last three years which I can attribute to drug abuse awareness (Dean 1, University X, February 17, 2016).

Although drug abuse awareness was cited as being effective in drug abuse reduction among students, the findings revealed that 51.6% of the students did not attend drug abuse awareness seminars. This finding supported Oshikoya and Alli (2006) who found that the level of drug abuse awareness in universities in Nigeria was still wanting. This pointed that awareness was still a major concern with over 65% of the students still abusing drugs despite having received drug abuse awareness in these universities. The current study further revealed that 19 percent of students were for the opinion that drug abuse awareness had no effect on reduction of drug abuse among students. This reaction agreed with Tsevtkova and Antonova (2013) who found that the larger the number of students who attended drug abuse awareness programmes in Sweden, the larger the number of drug abusers. This implied that sometimes drug abuse awareness can increase students' curiosity and some of them may end up experimenting on drugs.

Despite the mixed reaction it is the opinion of the researcher that drug abuse awareness is critical in the fight against drug abuse in public universities. Knowledge of the effects of drugs is a powerful tool that has proved important in the fight. Awareness empowers people to make informed decision before and after engaging in drug abuse. Sometimes students make unwise decision but when they recall certain information such as negative effects of drug abuse from their memories they are able to reform immediately.

4.4 Test of Hypothesis

H_{01} : Association between the Drug Abuse Awareness and Drug Abuse Reduction in Public

Universities

The hypothesis was tested using chi-square statistical testing procedures. The decision rule was that, if the results showed p value of 0.05 or better, it would lead to the rejection of the null hypothesis and more especially if the results were found to be significant at 95% confidence level or higher, the null hypothesis would be rejected. The p value that would fall below the 0.05 level would mean that the null hypothesis will not be rejected. The findings are as shown in the table 5.

Table 5

Chi-square test for association between drug abuse awareness and drug abuse reduction in public universities

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1247.257 ^a	624	.000
Likelihood Ratio	1067.929	624	.000
Linear-by-Linear Association	61.904	1	.000
Number of Valid Cases	1430		

0 cells (0.0%) have expected count less than 5.

A chi square test for independence was performed to evaluate the association between drug abuse awareness and drug abuse reduction. Based on the chi-square value of 1247.257 at degree of freedom (624) with asymptotic significance value of 0.000, since the p (0.000) value is less than the significance level of 0.05, we reject the null hypothesis and accept the alternative hypothesis that states that there is statistical significant association between drug abuse awareness and drug abuse reduction among students in public university campuses in Nairobi County. This implies that drug abuse reduction in public university campuses is dependent on the effectiveness of drug abuse awareness campaigns. The resulting relation between these variables was significant 0.05, χ^2 (624, N = 1430) = 1247.257, $p < 0.05$.

These findings were in agreement with the findings from the students' questionnaires, the deans of students and university counsellors' interviews and FGD whose results showed a strong correlation between drug abuse awareness and drug abuse reduction among university students. In the questionnaires, students (62.4%) indicated that drug abuse awareness helped to stop drug abuse while 59.1% indicated that awareness on the effects of drug abuse has to a larger extent and some extent lowered the drug abuse prevalence rate among students.

In one of the FGD, a peer counsellor stated that drug abuse awareness has been instrumental since a good number of students have reconsidered using drugs for fear of falling victims to the health related complications or death. In agreement, one of the university counsellors asserted that creating drug abuse awareness has discouraged many students from abusing drugs. These findings support the findings of Boneli *et al.* (2012) who found that drug abuse awareness reduced the rate of drug abuse among students. However, the findings tend to disagree with Tsvetkova and Antonova (2013) who revealed that in Sweden, the larger the number of students who attended drug abuse education, the larger the number of students who abused drugs.

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the Study

Drug abuse awareness has been found to reduce drug abuse and on the other hand some students have experimented on drug abuse after drug awareness training. The response rate achieved from the students' questionnaire was 1430 (95.3%) which was considered adequate in providing valid and reliable representation of the target population. The results also indicated that most of the university students were in the age bracket of 21-23 years old. This means that majority of them are in the adolescence stage. The study also revealed that most of the students (84.3%) are not married. This contradicts the earlier assumption that marital challenges among students contributed to continuous drug abuse in university campuses in Nairobi County.

From the findings it can be deduced that the level of academic education of both the deans of students and university counsellors has helped to reduce drug abuse among undergraduate students in public university campuses in Nairobi County. These findings concur with the findings in Flansburg (2012) study. Flansburg conducted a study on the factors involved in college students' use of counselling services. One of the objectives was to establish whether the academic qualifications and experience of the counsellors had any influence on the use of counselling services. The study established that the counsellors' academic qualification and experience influenced on students' use of their services.

5.1.2 Influence of Drug Abuse Awareness on Drug Abuse Reduction

The researcher sought to establish how drug abuse awareness influenced the reduction of drug abuse among students in public university campuses. The study revealed that in general drug abuse awareness has led to reduction of drug abuse among undergraduate students in public university campuses in Nairobi County. Secondly, the study established that although drug abuse awareness was cited as being effective in reduction of drug abuse among undergraduate students, a good number of students did not attend drug abuse awareness seminars organised by the

university campuses. In addition the study found out that drug abuse awareness had created curiosity in some students which made them to start experimenting on drugs. The study also found out that most university campuses organised drug abuse workshops every semester and that the drug abuse awareness campaigns had resulted to drug abuse reduction. Moreover, the study found out that drug abuse prevalence rate had reduced due to drug abuse awareness among the undergraduate students. Finally, the study found out that cases of indiscipline, violence and deaths related to drug abuse had reduced tremendously due to drug abuse awareness.

5.2 Conclusions

Based on the findings of the study, the following conclusions were arrived at; first, most of the university campuses have well established preventative strategies. These strategies have to a greater extent reduced drug abuse among the undergraduate students since drug abuse prevalence rate has been lowered, indiscipline, violence and death cases related to drug abuse have lowered. Therefore, the researcher concludes that the preventative strategies have influenced drug abuse reduction among the students.

Secondly, the effectiveness of preventative strategies has been affected by various factors. These factors include; the availability of drugs, excessive money among students, poor role models both at the family level and at the university and peer pressure. Thus, the researcher concludes that preventative strategies can be more effective in reducing drug abuse among students if these factors are well addressed.

Thirdly, parents have contributed to drug abuse among the students either knowingly or unknowingly. Some of the parents have condoned drug abuse while others have failed to follow up with their children behaviours at the university. For affluent families, excessive money has been given to students making it easy for them access drugs. Some parents on the other hand abuse drugs and thus they always not in a position to fight drug abuse. Therefore, the researcher concludes that parents have contributed to continuous abuse of drugs among students rendering the preventative strategies ineffective.

5.3 Recommendations

The researcher recommended that the university administration and the anti-drug abuse agents such as NACADA should formulate different new methods of creating awareness to the students. These methods may include integrating drug abuse information in various courses offered and also encourage lecturers to spend some of their teaching time to sensitise students on the effects of drug abuse. Secondly, based on the findings the researcher recommends that the policy makers, the ministry of education and the university administration should embark on intense sensitisation programmes. This will help every students is aware of the rules governing the possession, trafficking or consumption of the illegal and legal drugs.

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