



Evaluating the Impact of Awareness Programme on Substance Use among Female Undergraduates in Universities in Nairobi County, Kenya

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Abstract

Substance use has been on the rise among undergraduate students in universities in Kenya. This has raised concerns considering that institutions of higher learning have put in place psychosocial interventions towards addressing this vice. This study sought to evaluate the impact of awareness programmes on substance use among female undergraduate students in universities in Nairobi County. The study was guided by the self-efficacy theory. An ex-post-facto research design was employed in the study. The target population comprised of all female students in universities in Nairobi County. Proportionate random sampling technique was employed to select the sample. A sample of 351 female undergraduate students was selected for the study from a target population of 40,647 female undergraduate students. One (1) student counsellor from each of the universities in Nairobi County also participated in the study. A semi-structured research questionnaire and an interview guide were used to facilitate the collection of data. To determine reliability, the questionnaire was pilot-tested in one public and one private university in Machakos County, Kenya. Cronbach's alpha was used to estimate the reliability of the research instrument which yielded a coefficient greater than .7. Data were analyzed using descriptive and inferential statistics. The study results established that the impact of awareness programmes ($F = 10.609$; $p = .001$) on substance use was statistically significant. The study concluded that awareness programmes were effective in helping some students stop substance use.

Keywords: awareness programme, substance, universities, undergraduate students

1.0 Introduction

Substance abuse is defined as the use of a drug by an individual when there is no legitimate medical need to use it (Doweiko, 2015). According to World Health Organization (WHO, 2018), substance use refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. Psychoactive substances are substances that, when taken in or administered into one's system, affect mental processes. Psychoactive substances use can lead to dependence syndrome – a cluster of behavioural, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state. WHO, further postulates that the primary prevention approach is key for responding to substance use among young people before they start using substances. In addition, this strategy could help to discourage or stop use in those who are already experimenting or using. Young people are particularly at risk for psychoactive substance use, as they are at a stage in life when patterns of behaviour are being formed and they are most likely to be influenced by peers and role models who may be involved in the use of substances. The current trend of substance use among the youth in the Universities is a major national concern, as it has been reported to pose derogatory effects on their health, academic performance and behaviours (Sambo, 2008). According to the United Nations Office on Drugs and Crime (UONDC, 2017), 29.5 million people globally suffer from drug use disorders. This population, whose majority are young adults engage in problematic use and suffer from the adverse effects of drug abuse. United Nations Office on Drugs and Crime (2002) posits that drugs destroy lives and communities, undermine sustainable human development and generate crime. In addition, drugs affect all sectors of society in all countries and in particular; drug abuse affects freedom and development of young people, the world's most valuable asset. Further, drugs are a grave threat to the health of all mankind, the independence of states, democracy, the stability of nations, the structure of all societies and the dignity and hope of millions of people and their families. A report by the UNODC (2010) stated that nearly 70% of youths aged 15 to 49 worldwide had used various substances at one point in their life; with alcohol being the most used substance. This is of great concern because university students are found in this category. According to Escandon and Galvez (2006), Spain occupies the first position in cocaine consumption in the entire European Union where a large number of the consumers are college students. According to a report by UNODC (2004), the use of cocaine and heroin in Spain is alarming. In Madrid the capital city of Spain, the use of cocaine among students is about 4 percent, while the use of *cannabis sativa* is approximately 36 percent.

According to United Nations Educational Scientific and Cultural Organisation (UNESCO, 2017), substance use, especially harmful use, can affect a young person's wellbeing and is clearly linked to academic underachievement. Califano (2007) asserts that

there is a disturbing ambiance of hedonistic self-indulgence in substance use and an alarming public health crisis on college campuses. Ray and Ksir (2002) strongly support this fact that alcohol and other drug use is a factor in many accidents, injuries, vandalism, and crime on campuses and is frequently a key factor when students encounter problems with their coursework. Ironically, even college students who avoid the unsafe use of alcohol and other drugs still suffer the effects of the high-risk behaviours of their peers such as conflicts or having to take care of their drunken colleagues. WHO (2008) stated that by the year 2020, mental and substance use disorders will surpass all physical diseases as a major cause of disability worldwide. World Health Organisation (2013) further emphasizes that at least 15.3 million individuals have drug use disorders and drug abuse are associated with significant health and social problems. World Health Organisation (2011) asserts that alcohol is the 5th highest contributor to the global burden of disease for young people aged between 15 -19 years. According to WHO (2011), this youthful population is mostly found in tertiary institutions which include colleges and universities where the prevalence rate is higher, and thus they are at risk for alcohol use disorder as well as social, economic and psychological problems.

United Nations Office on Drugs and Crime (2013) postulates that when high school graduates join university for the first time, they experience new forms of independence and freedom from direct adult and family supervision. The students are faced for the first time with the challenge of making crucial decisions by themselves. At the university, some students may face, intense academic pressures, forming new social groups, problems with keeping a balance of social engagements with academic and other life responsibilities. In addition, the students may be exposed to normative values valued by the youth culture that differ from parental values. Further, UNODC postulates that these perceived norms motivate the youth to indulge in unhealthy behaviours such as smoking and alcohol and drug use. In Kenya, the problem of substance use is considerably rampant in universities with an increasing trend over the years. Atwoli, Mungla, Ndung'u, Kinoti and Ogot (2011) indicated that the prevalence of substance use among college and university students is high and causes significant physical and psychosocial problems in this population. This is as evidenced by a study carried out in one of Kenya's private universities which revealed percentages of lifetime rates of commonly used substances at; tobacco 54.7%, alcohol 84.2 %, cannabis 19.7% and inhalants 7.2% (Atwoli *et al.*, 2011). A national survey by the National Agency for the Campaign Against Drug Abuse (NACADA) revealed that 10.6% respondents smoke bhang, while over 11% of Kenyan youth use *Miraa* (NACADA, 2009). According to NACADA (2012) there are many risks that are associated with the problem of drug abuse including; dependent young adults, increased health care needs amongst the youth abusing alcohol and drugs and crimes resultant from idleness and the youth's drinking habits.

A study conducted by Polymerou (2007) centred on prevention of alcohol and drugs in colleges and universities in the United Kingdom. The general objective of the study was to examine the evidence in relation to the harm occasioned by use of alcohol and/or drugs on

students seeking to further their education in colleges and universities in the UK. The study further evaluated the effectiveness of drug prevention in the stated institutions of higher education. The study, after reviewing pertinent literature, discussed among others, the efficacy of drug education or awareness campaigns. It was established that drug education was not a statutory requirement in higher education, and as such the efforts invested in awareness campaigns are subject to the will of individual institutions. Moreover, it was found that, though drug and alcohol awareness campaigns were carried out in universities, evidence on their effectiveness was scarce. The study concluded that there was need to support education colleges and universities to deliver effective interventions. It was not clear from the study findings the link between awareness programmes and substance use, especially in respect of female university students.

A study by Heckman, Dykstra and Collins (2011) was undertaken in a Midwestern university in the United States. It sought to explore the substance-related attitudes and their influence on college students' behaviour in the course of an academic semester. The researcher conducted an experimental study on volunteering students from the upper-level psychology courses offered at the university. A pre-test survey was conducted on all the 299 volunteers at the beginning of the semester. In the course of the semester, students were taught for 75 minutes twice every week on several issues relating to recreational drugs. A post-test survey was undertaken at the end of the semester through similar methods to the initial survey. The study found that the awareness programme had a negative impact on the level of smoking and alcohol consumption among both males and females. A study administered in India by Theou, Nayak, and Jose (2015) sought to establish the effectiveness of awareness programmes on substance abuse among the pre university college students. The study used convenience sampling to identify the 53 students that participated in the study. A knowledge questionnaire was used to collect responses from the selected students. A post-test study was also conducted on the students and it was established from the finding of the two tests that awareness programmes helped students by enlightening them and equipping them with the necessary knowledge.

A Bhattarai and Chudal (2018) research undertaken in Nepal among higher secondary school students looked to evaluate the level of knowledge among the students in relation to drug addictions. It adopted a cross-sectional approach while using selective sampling technique to identify the grade 11 and 12 students that would participate. Furthermore, self-administered questionnaires were used to assess the knowledge of substance abuse among the participants. After analysis of the data collected, the researchers established that 50% of the students had adequate knowledge while 45% did not. Furthermore, it was established that the level of awareness was related to the family occupation, level of education, and presence of family members who had suffered drug addiction. The study concluded that drug abuse awareness programmes would help to improve the level of awareness among the higher secondary school students.

Adeyemo, Ohaeri, Okpala and Oghale (2016) conducted a study on prevalence of drug abuse among university students in Benin City in Nigeria. The study adopted a descriptive survey research design and a sample of 800 students. The study results revealed that most of the respondents were aged between 20 and 25 years, which is synonymous with undergraduate students. It was revealed that coffee and alcohol were the most abused drugs. Poor teacher-student relationship, improper parenting, and peer pressure were found to have significantly contributed towards substance use by university students. In this regard, the study recommended that it would be important to design public health intervention programmes aimed at preventing use of drugs by raising awareness about the negative consequences of drug abuse. The theme of awareness did not take the centre stage in this study. In addition, there is no clear relationship between awareness programmes and substance use. A local empirical study carried out by Mbutia, Wanzala, Ngugi and Nyamogoba (2017) assessed the effectiveness of alcohol and drug abuse awareness campaigns among university students in Kenya. The study was quasi-experimental. The study was necessitated by the affirmation that substance abuse has been rampant among university students, an issue that has elicited a major public health concern. The study focused on first year undergraduate students. A baseline survey that involved 473 students drawn from two public universities situated in the coastal region of Kenya was carried out. Intervention of awareness campaigns were conducted in one of the universities for a one-year duration. An end-line survey was then conducted amongst 387 students. Data were collected using a set of self-administered questionnaires. According to the study findings, in spite of the intervention of awareness campaigns, being conducted in one of the universities, the prevalence of drug use rose by a 10.0% margin from 38.9% to 48.9% in the control university. On the other hand, the intervention university recorded an increase of the stated prevalence rates by a margin of 23.9%. The findings of this study led to the inference that awareness campaigns against substance use are not sufficient in addressing substance use amongst university students. The major shortfall of this study is its failure to focus on female undergraduate students.

Another local study conducted by Kiriru (2018) sought to establish the effect of awareness of substance abuse on drug and substance use among private university students. It adopted a case study research design with the target population for this study inclusive of all the students that studied at the selected university. Furthermore, a combination of purposive sampling and stratified random sampling was used to select the 184 students that participated in the study. It established that there existed a negative statistically significant relationship between drug and substance abuse awareness and drug and substance use. In conclusion, this implies that an increase in the level of awareness among students in the private university would lower the level of drug and substance use. A descriptive study was undertaken by Ongwae (2016) to evaluate the factors that caused substance use among secondary schools in Kenya focusing on Starehe Sub County in Nairobi. Random sampling was used to select 291 students while purposeful random sampling was used to select 6

principals and 6 guidance and counselling teachers. A questionnaire with closed and open-ended questions was used to collect data from the participants. Analysis of the data found that a majority of the learners in secondary schools are aware of the causes and effects of drug use. This shows that drug use among high school learners is not attributable to lack of awareness.

2.0 Theoretical framework

This study was guided by Self-Efficacy Theory. This theory was proposed by Albert Bandura, a Psychologist born in 1925 at Alberta, Canada. The construct of self-efficacy began with Bandura in 1996. Perceived self-efficacy is defined as peoples' beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce diverse effects through four major process which are cognitive, motivational, affective and selection processes (Bandura, 1996). A strong sense of efficacy enhances human accomplishment and personal well-being in many ways. It is self-efficacy that determines the amount of energy one puts in the process of attempting to change an undesired behaviour. 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. People with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than threats to be avoided. According to Bandura (1986), such an efficacious outlook fosters intrinsic interest and deep engrossment in activities. Such people set themselves challenging goals and maintain strong commitment to them. They are also able to recover their sense of efficacy even after failure or setback. They attribute failure to insufficient effort or deficient knowledge and skills which are acquirable.

In the field of health psychology, the construct of self-efficacy has been applied to behaviours as diverse as substance use. Of particular interest to researchers in substance use is perceived abstinence self-efficacy. This is the belief an individual has that he or she will be able to abstain from participating in an undesired action. Self-efficacy is involved in abstaining from numerous habitual behaviours including smoking, using illicit substances and excessive drinking (Shiffman, PatyEnberg, Gyns, Hickcoc & Paton, 2000). Bandura's theory is a pointer to an important situation that could emerge in universities in which established intervention programmes may either be utilized by students or not. This position is determined by the beliefs and attitudes they hold about the impact intervention 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. Self-regulation is an individual's ability to alter a response or override a thought, a feeling or impulse. Tangney, Baumeister and Boon (2004) found that higher self-regulation scores correlate with less alcohol use, a higher grade point average, better psychological adjustment, and more optimal emotional responses. Self-regulation therefore, plays an important role in abstaining from and abusing substances. This main advantage of this theory is its predictive power of individual behaviours. This theory has been successful in demonstrating the impact of self-confidence on the performances of individuals (Yiu, Cheung, & Siu, 2012). They observed that people's self-efficacy can be used to predict the types of business tactics that individuals will adopt. According to them, people with high levels of self-confidence are likely to adopt methods such as negotiation because they have high levels of belief in their ability to overcome the hurdles of negotiations. On the other hand, individuals with low levels of efficacy are likely to avoid tactics such as negotiations because are likely to doubt their ability to overcome the barriers of this approach.

According to Marzillier and Eastman (1984), their greatest point of departure with Bandura's concept of self-efficacy was the ambiguity of Bandura in definition of self-efficacy. They observed that this criticism was related to Bandura's attempt to define expectations of self-efficacy independently from expectations of the outcomes. Personal efficacy in relation to change is only important when one considers the outcome that will be achieved. Furthermore, Marzillier and Eastman (1984) also criticised the methodology that was proposed by Bandura in the assessment of the expectations of self-efficacy. They observed that there were clarity issues in the rating scale that was adopted. According to them, there is significant variability between individuals' predictions of their behaviour on future tasks and their actual performance of these tasks. This variability acts as evidence against the generalizability of the theoretical self-efficacy notion. Lee (1989) argued that scientific verifiability as well as precise measurement are essential for psychologists in practice hence reliance on use of unobservable variables and the lack of precision are important practical issues that are associated with many theories including Bandura's theory on self-efficacy. She asserted that these practicability issues results in ambiguity in the process of applying the theory in practice. Self-efficacy may be a valuable substance use intervention strategy. Bandura (1986) identified four principle sources of efficacy beliefs: performance attainments, vicarious experiences of observing the performance of others, verbal persuasion and physiological states. Preventive strategies that universities can adopt to enhance self-efficacy include life skills training, information improvement, affective education, social influence and substance use education.

3.0 Statement of the Problem

Globally, substance use has continued to be a problem among the young people despite its adverse effects. In universities in Kenya, awareness creation on substance use and its adverse effects is provided as key for responding to substance use among university students before they start using substances or stop use in those who are already experimenting or using. Despite the many innovative and ongoing programmatic interventions targeted at reducing substance use and the negative consequences associated with substance use, available literature show that the use of substances and its negative consequences among female undergraduates in universities is on the increase. Therefore, it is important to critically examine why there is an upward trend in use of substances in spite of the awareness intervention measures put in place by universities. The focus on female undergraduate students is largely premised on the argument that, unlike their male counterparts who might have had increased freedom prior to joining universities, a significant number of female students enjoy increased freedom to do what they desire upon being admitted to universities, away from the hawked eyes of their parents, guardians and the community. Furthermore, there is inadequate documented information and empirical evidence in Kenya on the impact of awareness programmes on substance use among female undergraduate students. Therefore, it is against this backdrop that this study sought to evaluate the impact of awareness programmes on substance use among female undergraduate students in both private and public universities in Nairobi County, Kenya.

4.0 Research Design and Methodology

Ex-post facto research design which is a non-experimental research technique was used and research was carried out in universities in Nairobi County. The study centred on female undergraduate students in all public and private universities in Nairobi County, Kenya. The distribution of female undergraduate students across the universities was divergent, which implied that they varied significantly in relation to female undergraduate population, a fact that necessitated adoption of proportionate (stratified) random sampling method. According to Kothari (2004), proportionate random sampling is employed when the study seeks to ensure that there is fair and equitable distribution of respondents. A sample of 351 respondents was proportionately distributed among the 16 universities located in Nairobi County. The distribution of female undergraduate respondents across these institutions is as shown in Table I.

Table I

Sample Distribution of Female Undergraduate Students in accredited Public and Private Universities.

University	Study Population (N)	Sampling (n/N)	Sample (n)
PUI	6900	0.14	60
PU2	8500	0.17	73
PU3	2200	0.05	19
PU4	3100	0.06	27
PU5	2310	0.05	20
Sub-Total	23010	0.64	199
PVUI	3270	0.07	28
PVU2	2200	0.05	19
PVU3	2400	0.05	20
PVU4	1590	0.03	14
PVU5	3050	0.06	26
PVU6	125	0.003	1
PVU7	430	0.007	4
PVU8	800	0.016	7
PVU9	3400	0.07	29
PVUI0	32	0.0007	1
PVUI1	<u>190</u>	<u>0.004</u>	<u>2</u>
Sub-Total	17637	0.36	152
Grand Total	40647	1.00	351

Key:

PUI – PU5 represents the 5 accredited public universities in Nairobi County.

PVUI – PVUI1 represents the 11 accredited private universities in Nairobi County.

This study incorporated the use of both semi-structured questionnaire and interview guide were used to aid in data collection. This was supported by the fact the study was a survey and the data sought was mixed which comprised of quantitative (categorical) and qualitative data. The questionnaire and the interview guide were similar in terms of addressing the objective of the study. Data collection from the sampled undergraduate students was effected by engaging trained research assistants particularly due to the fact that the sample was relatively large and the universities were geographically dispersed, while factoring in time, logistical and budgetary constraints. The questionnaires were administered on the sampled respondents directly. The filled questionnaires were collected immediately they were filled. Interviews were conducted on selected student counsellors by the researcher from the 16 participating universities in person with the aid of an interview guide. The

collected data was screened by keenly scrutinizing the filled questionnaires with the object of getting rid of the incomplete and inappropriately filled questionnaires. This procedure was important since it was bound to minimize the number of outliers which are occasioned by non-responses and inappropriately answered questions. The numerical (categorical) data collected was analysed using mathematically-based methods with the help of the Statistical Package for Social Sciences (SPSS) Version 26.0 programme. The analysis encapsulated both descriptive and inferential statistics. The choice of statistics used was based on the fact that the data collected was categorical (discontinuous). Qualitative data was analysed thematically using factor analysis. Descriptive statistics included measures of distribution (frequencies and percentages), measures of central tendencies (means), and measures of dispersion or variation (standard deviations). On the other hand, inferential statistics that aided in drawing inferences (conclusions) was in the form of Pearson's Product Moment Correlation Coefficient, and simple linear regression analysis.

5.0 Results and Discussion

The study analyzed the impact of substance awareness programmes from the viewpoint of the surveyed female undergraduate students. The opinions of these students are presented in Table 2. The scale used ranged from Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), to Strongly Disagree (SD).

	SAn (%)	An (%)	Un (%)	Dn (%)	SDn (%)	Mean	Std. Dev
The meaning of substance use is clear to me.	146(52.9)	91(33.0)	13(4.7)	8(2.9)	10(3.6)	4.32	.973
I understand the effects of using various substances.	123(44.6)	112(40.6)	16(5.8)	9(3.3)	8(2.9)	4.24	.931
There are varieties of drugs in constant circulation in our university.	89(32.2)	100(36.2)	51(18.5)	15(5.4)	13(4.7)	3.88	1.083
The	73(26.4)	94(34.1)	63(22.8)	26(9.4)	12(4.3)	3.71	1.104

awareness programme has helped some students stop using substances.							
I am able to recognize when one is addicted to a certain substance.	56(20.3)	102(37.0)	62(22.5)	42(15.2)	6(2.2)	3.60	1.054
Some students have reduced the frequency of substance use when they get aware of the consequences.	52(18.8)	97(35.1)	61(22.1)	36(13.0)	22(8.0)	3.45	1.184
Attendance of substance use awareness campaign seminars by students has reduced cases of substance use in my university.	52(18.8)	78(28.3)	77(27.9)	37(13.4)	24(8.7)	3.36	1.199
Our university has adopted different campaign strategies	43(15.6)	98(35.5)	66(23.9)	32(11.6)	29(10.5)	3.35	1.201

such as drug awareness campaign week.							
I know students who are addicted to substances in our university.	63(22.8)	70(25.4)	58(21.0)	52(18.8)	25(9.1)	3.35	1.285
Substance use awareness has reduced the negative high-risk behaviours among female students.	46(16.7)	84(30.4)	66(23.9)	39(14.1)	33(12.0)	3.26	1.254
There is effective dissemination of substance use awareness policy in our university.	32(11.6)	93(33.7)	66(23.9)	57(20.7)	20(7.2)	3.22	1.136
Our institution organizes substance use awareness programmes regularly	36(13.0)	94(34.1)	55(19.9)	50(18.1)	33(12.0)	3.19	1.240

The awareness programmes mainly target the at-risk students.	31(11.2)	68(24.6)	91(33.0)	38(13.8)	40(14.5)	3.04	1.208
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The findings as shown in Table 2 indicated that most of the respondents (85.9%) admitted to the view that the meaning of substance use was clear to them while 6.5% of the students disagreed to the view. The surveyed students 85.4% concurred that they understood the effects of using various substances while 6.2% disagreed. A total of 68.4% of the respondents agreed to the view that there were varieties of drugs in constant circulation in their respective universities. A significant number of students (60.5%) held the opinion that the awareness programme had helped some students stop using substances. Regarding, the proposition that individual students were able to recognize when one was addicted to a certain substance more than half (57.3%) of the respondents agreed to the view while 22.5% were unsure. It was noted that 53.9% of the respondents concurred that some students had reduced the frequency of substance use when they got aware of the consequences. These results affirm that creating awareness on substance use and its adverse consequences among university students can enable them make informed choices on what behaviours to engage in.

The results also revealed that 47.1% of the respondents admitted that attendance of substance use awareness campaign seminars by students had reduced cases of substance use in their respective universities. Majority of the students (51.1%) agreed that their university had adopted different campaign strategies such as substance awareness campaign week. 48.2% of the respondents registered their agreement with the argument that they knew students who were addicted to substances in their individual universities. It was, further, observed that 45.3% of the respondents admitted that there was effective dissemination of substance use awareness policy in their universities. Additionally, 47.1% of the students concurred that their institutions organized substance use awareness programmes regularly while 30% of the students disagreed with the argument. The results of these study concurred with an empirical analysis conducted by Polymerou (2007) which noted that substance abuse (alcohol) awareness campaigns were carried out in universities. Furthermore, 35.8% of the surveyed female students were in agreement that the awareness programmes mainly targeted the at-risk students. However, 33.0% of the respondents were unsure of the foregoing assertion. It was also noted that the respondents generally admitted to the propositions that the meaning of substance

use was clear to them (mean=4.32); and that they understood the effects of using various substances (mean=4.42). It was also established that on average the respondents agreed to the arguments that there were varieties of drugs in constant circulation in their universities (mean=3.88); the awareness programme had helped some students stop using substances (mean=3.71); and that they were able to recognize when one is addicted to a certain substance (mean=3.60). The views of respondents in respect of the foresaid propositions varied significantly (std dev=1.000). The study also noted that the respondents were generally unsure of the propositions that some students had reduced the frequency of substance use when they got aware of the consequences (mean=3.45); and that attendance of substance use awareness campaign seminars by students had reduced cases of substance use in the respective universities (mean=3.36). The study, in addition, acknowledged that on average respondents were also not sure if their universities had adopted different campaign strategies such as substance use awareness campaign week (mean=3.35) and whether they knew students who were addicted to substances in their universities (mean=3.35). More so, the respondents were generally unsure of the arguments that substance use awareness had reduced the negative high-risk behaviours among female students (mean=3.26); and that there was effective dissemination of substance use awareness policy in their respective universities. Moreover, the respondents were averagely not sure if their institution organized substance use awareness programmes regularly (mean = 3.19); and whether the awareness programmes mainly targeted the at-risk students (mean = 3.04). The respondents in light of the above propositions held differing views (std dev > 1.000). These results could be a wakeup call to university management to relook their policies on awareness campaigns to ensure they are effective in mitigating substance use.

In addition, university student counsellors were interviewed on the impact of awareness programmes in their respective institutions. Universities were observed to hold substance use awareness campaign programmes which are organized by the University Health Services in conjunction with the office of the Dean of students. Some institutions hold these campaigns every semester with the view of sensitizing the students on substance use. In virtually all universities, there is an orientation week for all fresh students. Over this week, the students are enlightened on several issues pertinent to substance use. Leaders of university student unions also participate in orientation programmes through which substance use is discussed. In some universities, substance use awareness programmes are not regular, where they may take place only once in an academic year. To complement this, nevertheless, speakers are invited to talk to students on various issues including substance. This notwithstanding, attendance to the aforesaid talks was found not to be good or satisfactory. According to the interviewed counsellors, universities support the

awareness programmes. However, resources channelled towards this initiative have been dwindling. Some institutions have indeed organized competitions amongst students to develop substance use awareness programmes. Other universities have a vote head for this programme though the space provided for the same was found to be inadequate. Universities were found to develop brochures on alcohol and substance use. This was done through the University Health Services and the office of the Dean of Students which generated and distributed the aforesaid materials to counsellors, who in turn, distributed to the students. Other awareness campaign materials were placed on the University's notice boards. It was further revealed that university student leaders used social groups to mobilize the students to disseminate information regarding substance use. In respect of the foregoing, all presentation materials were sent to individual students via mail and also uploaded on the website. It was also established that substance use awareness materials were forwarded to members of the target group (students) through WhatsApp. Such materials include fliers, booklets, and posters. The social media was used where various student groups were targeted. The Dean of Students under which the counselling department fall, do forward messages though different student chat groups. Though these messages are passed on through the notice boards and social media platforms, the campaign has not been effective because students, at times, did not see the messages.

With regard to the effectiveness of substance use awareness programmes, it was imperatively noted that the substance use campaigns did not necessarily capture the targeted group. The programmes were only effective to a small extent. In respect of the effectiveness of awareness programmes on behavioural change, most students were aware of themselves and the consequences of using substances. However, the effectiveness of the awareness programmes was hampered by the probable failure of parents to support their children in the fight against substance use. Some counsellors opined that they were not sure regarding the effectiveness of awareness programmes. It was further indicated that the substance use awareness programmes were not quite effective in some universities since the dean of students and counsellors could not easily reach out to the affected students. These results are in agreement with Polymerou (2007) who concluded that although drug and alcohol awareness campaigns were carried out in universities, evidence on their effectiveness was scarce. Further, the study findings indicated that there was need to support education colleges and universities to deliver effective interventions. The summary of the results of the null hypothesis which stated that awareness programme has no statistically significant effect on substance use among female undergraduates in Nairobi County Kenya were as follows:-

- (i) The Pearson correlation coefficient between awareness programme and substance use was significant ($r = -.196$, $p = .001$).
- (ii) 3.8 % of the variability in substance use can be explained by the effect of the awareness programme.
- (iii) The F-value between awareness programme and substance use was significant ($F(1,266) = 10.609$, $P = .001$)
- (iv) Awareness programme has a significant effect on substance use.

6.0 Conclusion

This study which investigated the impact of awareness programme on substance among female undergraduates established that students were aware of what constitutes substance use and the various effects of substance use. In addition to this, awareness programmes were judged to be effective in helping some students to stop substance use as well as recognize addiction among peers.

7.0 Recommendation

Going by the study findings with regard to the impact of awareness programmes in reducing substance use, it is imperative that universities help students to stand against and avoid use of substances. Furthermore, it is imperative for universities to combine awareness programmes with other psychosocial intervention measures in order to effectively address substance use among female undergraduate students.

8.0 Suggestions for Further Research

1. Future studies can focus on undertaking a similar study though focusing on male students in public and private universities in Kenya since they face similar challenges as their female counterparts.
2. Scholars can also seek to explore whether awareness programmes are effective in mitigating substance use among secondary school female students since substance use is also rampant among secondary schools' students.

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