

Transforming the Mindset of Youths towards Prevention of Drug and Substance Abuse through Social Media

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Abstract

Substance use among students in Kenyan institutions of higher learning has risen substantially in recent years. This has necessitated innovative intervention responses to curb the growing trend. The Alcohol Drugs and Substance Abuse (ADSA) Committee in MUST employs an experimental approach that engages students in conducting campaigns aimed at prevention of drug and substance abuse among their peers using social media messaging. The study hypothesized that: positive antidrug brand depictions could be promoted using social media approaches to complement crushing the myths in-person, model-based approach; students would respond positively and be encouraged with prevention messages disseminated by their peers; exposure to the social media prevention messages would be associated with positive substance use avoidance attitudes and beliefs. The study adapted an experimental design approach in piloting a program that focused on branding, messaging, and social media for prevention of substance and drug abuse. The study sampled 360 participants from Meru University of Science & Technology, Meru Technical Training Institute and Kenya Methodist University students in 2019. The stratified sampling took care of students pursuing certificate, diploma and bachelor degree programmes. An online questionnaire was administered to respondents to capture relevant data. A multivariable logistic regression models was used to analyze the relationship between program receptivity and outcomes. Finally, a multilevel generalized estimating equation (GEE) was used to model changes in behavior from baseline to follow-up. The findings showed that students reported increased intentions to use marijuana (2.129, $P=.02$). However, respondents reporting exposure and receptivity to ADSA testified a significant decrease in intentions (0.237, $P=.006$). The study concluded that social media is an effective strategy for peer-to-peer substance use prevention mechanism. The study recommends continued piloting of the social media diffusion model on mainstreaming ADSA among tertiary institutions and the need for more research on a larger scale with an expanded student population.

Keywords: substance use prevention, peer-to-peer education, social media approaches,

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I. Introduction

From the global perspective, the United Nations Office on Drugs and Crime studies UNODC (2018) documents that approximately 275 million people aged between 15 and 64 years used illicit substances at least once. The same studies pointed out that out of those using psychoactive substances, 10 to 14 percent could develop substance use disorders. Drug abuse related disorders result to tragic incidences like disability, disease burdens like substance dependence and harmful pattern of substance use and eventually death.

Simatwa, (2014) and NACADA, (2019) established that the average age of a person abusing drug or substance was 11 years; and lowest age of onset of at least one drug of abuse was 4 years. These studies showed that institutions of learning were not drug free environments because in this age group, heroin and cocaine were the least abused with a prevalence of 0.2 percentage, followed by cannabis 1.8 percentage, tobacco 2.5 percentage, miraa 2.6 percentage, prescription drugs 3.6 percentage and alcohol at 4 percentage.

Drug substance abuse among adolescents in institutions of higher learning has been substantially on the rise. In this respect, Owuor and Karega, (2019) and NACADA (2019) reported that 76 percent of the sampled university students in Kenya had taken at least one drug at their live time. Consequently, the rate of the usage by these respondents varied from 25 percent per month to 2percent on daily basis. Survey reports confirm that glue, alcohol; tobacco, *miraa* (Khat), cannabis (bhang) and psychotropic substances are the most commonly abused drugs and substances in Kenya (NACADA, 2017). The Agency conducted a rapid situation assessment of drug and substance abuse in Kenyan institutions and established that around 12 percent of sampled persons between 15 and 65 years of age were actively engaging in alcohol use. The study further reported that around 10.0 percentages of the persons using alcohol suffered from alcohol use disorders like alcohol addiction. Moreover, the survey presented the percentages by which the specific substances were abused in ascending order as follows: cannabis (1.0), *miraa/khat* (4.0) and tobacco (8.3%).

Despite its continued explosion among the communities, the drug abuse challenges in Kenya and the rest of the world has been receiving some attention in various fora. For example, the United Nations General Assembly Special Session on Drugs (UNGASS) (2016) recommended that member states increase the availability, coverage and quality of scientific evidence-based measures and tools that target relevant age and risk groups in all relevant settings.

In supporting the UNGASS, African Union Plan of Action on Drug Control and Drug Prevention (AUPA 2019-2023) has committed to the development and implementation of prevention campaigns and programs that aim at raising awareness of the dangers associated with abuse of all drugs. Additionally, the institution would work closely by involvement of teachers, peer groups, parents, social workers, sports associations, care service providers, media professionals, entertainment industries, health professionals, religious communities, community leaders and any other interested parties in their implementation.

Research findings by Chesang, (2013) documented a steady upward trend for drug and substance abuse among the young people in Kenya. The studies indicate that those aged between 16 to 30 years are most affected. Besides, the traditionally known abused drugs such as tobacco, alcohol, bhang and *miraa*, the youths have graduated into using opium, cocaine and heroin. Within the city of Nairobi 50% of students had in the past used drugs. The consumption of inhalants such as petrol and glue, cough mixture, sleeping pills and tranquilizer was so rampant by then especially among the street children.

Friese and Grube, (2013) and NACADA (2021) assert that prevention of substance abuse aims at healthy and safe development of children and youth to realize their talents and potentials hence becoming contributing members of their community and society. It is an integral part of concerted efforts to ensure children and youth are least exposed and more resilient in resisting abuse of drugs. Scientific evidences show what works best for workplaces, schools, families and communities in addressing drug abuse risk factors and enhancing mitigation factors for various age groups. Risk factors result to increased susceptibility to initiation of substance abuse of drugs while protective factors reduce individual's vulnerabilities.

According to Cerdá et al (2017) and Friese and Grube (2013) survey on monitoring the future established that 38 percent of American college students and youths attending high schools living in states with medical marijuana laws had used drugs, compared to 33percent of those students studying in institutions in states without these laws. Furthermore, the studies lamented that the rise in number of youth substance use because of changing norms and relaxed laws contributed a substantially to public health threat. So, the question is: Is it making of more laws or engaging the students through various platforms and fora so as to understand and assist them move away from drugs abuse?

Although tremendous efforts have been made to mitigate the growing problem, through awareness and sensitizations, drug education, counselling and rehabilitation, less attention has been given to evidence based programs that are cost effective and with large effect size especially in Africa. The World Bank has pointed out that several low-cost interventions can have large-scale effects not only on population health but also on productivity especially in countries with low resources such as Kenya (World Bank, 2020). In this connection school-based interventions have a reputable record with a rising collection of feasible mitigations that are acceptable, available and reaching the youths. Some of these interventions include but not limited to use of: online platforms, smart phones among students, and trust among peers with regards to influence, engaging alcohol and drug abuse committee campaign through social media and awareness programs and innovative responses to curb the growing trend of substance abuse in institutions of higher learning.

The reviewed studies have some limitations. First, they review substance and drug use among institutions employing a broader perspective without concentrating on particular cases. Secondly, they have consistently employed similar methodology of questionnaires via surveys.

THEORETICAL UNDERPINNING

Schools are a general environment for intercession, given their approximately communal access to youths. This is no different from institutions of higher learning which are accessible by the general public to receive services and other related products. The survey adopted theory of existential psychology that deals with the phenomenal and emotional state of individuals (Greaves, 1974). The existential theory builds on the fact that human beings are perceived to be motivated largely to gratify and uphold basic needs and to accomplish certain aspirations. The failure to secure basic needs and self-enhancing aspirations leads to a judiciousness of disease and hopelessness, consequently resulting to destructive and productive activities intended at minimizing such disease and despair. The destructive events could be accounts of patterns of drug use by the affected persons such as when a student's basics needs are not met by their parent or guardian one may turn to drug abuse for comfort and reducing sense of hopelessness.

Study objectives

The online survey was guided by the following study objectives, to:

1. identify positive antidrug brand depictions that could be promoted using social media approaches that complement shattering the myth in person approach;
2. establish the effect of using social media messages on students positive responses that encourage prevention of drug abuse among their peers;
3. find out exposure levels of social media prevention messages that would be associated with more positive substance use avoidance attitudes and beliefs reduction.

Hypothesis

1. **H₁**: Positive antidrug brand depictions could be promoted using social media approaches to complement shattering the myth in person approach.
2. **H₂**: Students would respond positively and be encouraged with prevention messages disseminated by their peers.
3. **H₃**: Exposure to the social media prevention messages would be associated with more positive substance use avoidance attitudes and beliefs reduction.

II. Methodology

The study employed experimental research design using pretest and post test approaches in piloting a comparative survey questionnaire that focused in branding, messaging, and social media for prevention of substance and drug abuse among higher education institution students. The survey targeted Meru university of Science & technology, Meru National Polytechnics and Kenya Methodist University and high students sampled during their residential session and in Meru and Isiolo Counties. The survey used mixed methods of sampling to select the second and third years of study for degree programs, second semester of first year at certificate and diploma levels while form twos and threes were sampled for the study (Yamane, 1967). The target sample size n was 360 participants obtained using *Yamane's Formula* where $n = N / \{1 + N * (e)^2\}$.

A 125 Item online questionnaire was administered to sampled respondents to capture among others; Media use and Attitude towards social media, personal drug use intentions and reasons, reasons participants believe peers would use drugs, self reported exposure to ADSA program and receptivity to ADSA programs. Finally, a multilevel generalized estimating equation (GEE) technique was used to model changes in behavior from baseline to follow-up study.

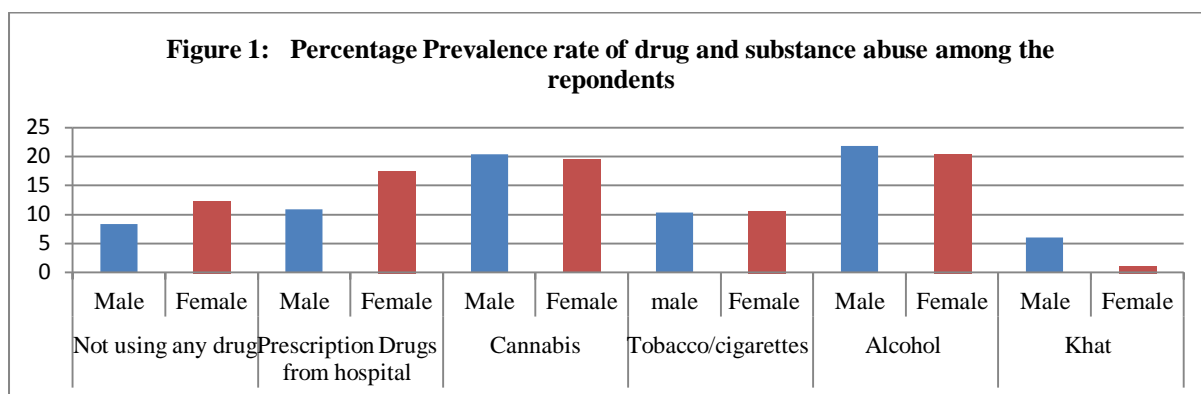
III. Findings And Discussions

Demographics

Statistically, the positive responses constituted 96.6 percent of the sample comprising of 46.2 and 53.8 percent females and males respectively. Other demographics of the respondents were: majorities were single (99.2 percent), Christians, 97.1 percent, enrolled in: undergraduate degrees (84.2 percent), Diploma (5 percent), certificate (3.1 percent) and high school students (7.7 percent).

Drugs and Substances abused

The respondent's identified the mostly abused drugs and substances by both gender in Meru and Isiolo counties as enumerated in fig.1.



From figure 1, the most abuse substance is alcohol by males and females at 21.8 percent and 20.4 percent respectively. That is closed followed by cannabis sativa at 20.4 percent and 19.6 percent for males and females respectively. Other substances: -*glue, heroin, shisha, kuber* and others like methanol, petroleum, and mentholated sprit were report at insignificant levels of usage by respondents because of unavailability and cost implications. These findings allay fears that females are also indulging into drug abuse, a situation that requires early mitigations to reverse the situation to normal.

The study established that drug abusers avoid using conventional names of drugs and substances. This is meant to disguise their intentions since drug abuse is criminal and not acceptable in most communities. The deception names commonly used to disguise abused drugs such as cocaine are: coke, rock, blow, powder, crack and snow; while that of heroin are junk, horse, big H and hell dust. Marijuana is camouflaged as grass, herb, chase, cocktail, pot or weed; while alcohol is also known as sauce, juice. vino, draft, moonshine and hard staff.

Use and attitude towards social media in preventing drug and subsistence abuse

The findings revealed that H_1 : Positive antidrug brand depictions could be promoted using social media approaches to complement crushing the myth in person approach. Students reported increased intentions to use marijuana (2.129, $P=.02$) between pre-and posttest. However, participants who documented disclosure and receptiveness to drug abuse indicated a significant decrease in intentions (0.237, $P=.006$).

The respondents attributed this to cheap availability of marijuana and being dispensed cheaply in small quantities of Kenya shillings 10.00 and could be taken at any time with soft drinks and food substances. This was indeed revealing in the sense that food dens/kiosks along the roads and in the interior rural areas were dispensing powdered cannabis to users who could mix it with tea, porridge or food.

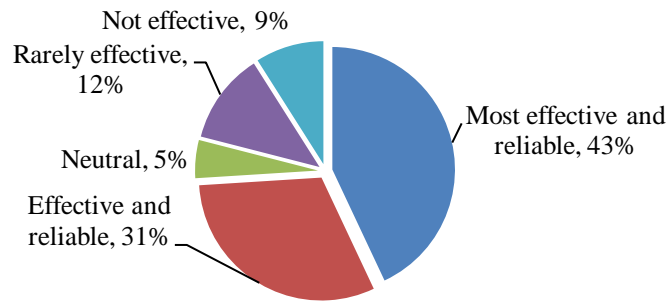
These observations concur with Kanyonyi et al (2015) and Kipkembo (2013) in that cannabis affects one both physically and mentally. Such effects include but not limited to dry mouth and throat; increased desire for food, significant increase in heartbeat, blood pressure and minimized eye sight. The use of research has established that a student using cannabis suffer from memory loss or deterioration of the same. Prolonged use of cannabis may result to psychological dependent of the drug becoming the centre of one's life. Eventually, this leads to abnormal sperm counts in man, suppressed ovulation and or amplified menstruation in women, damaged lungs and fantasies among other odds.

The study found a significant relationship between media use and attitude towards social media in preventing drug and subsistence abuse among the students. Indeed, some 79 percent of the respondents confirmed using several media platforms in asking and getting directed on how and where to access the drugs. They would also view videos and photos of such drugs and some people expressing their feelings about the use of such substances. These findings were supported by Zipporrah et al. (2018) in that majority of respondents interviewed had adequate knowledge of drug and substance abuse.

Digital characteristics and the effects of the messages towards prevention of consumption of drugs

The study sought the respondents understanding of employing digital messages as an education technique to combat and prevent drug abuse among the students. The responses on acceptance by youths on digital messages as an effective method of spreading educative ideas based on five scale points is as presented in figure 2.

Figure 2: Digital effects of the messages towards prevention of consumption of drugs



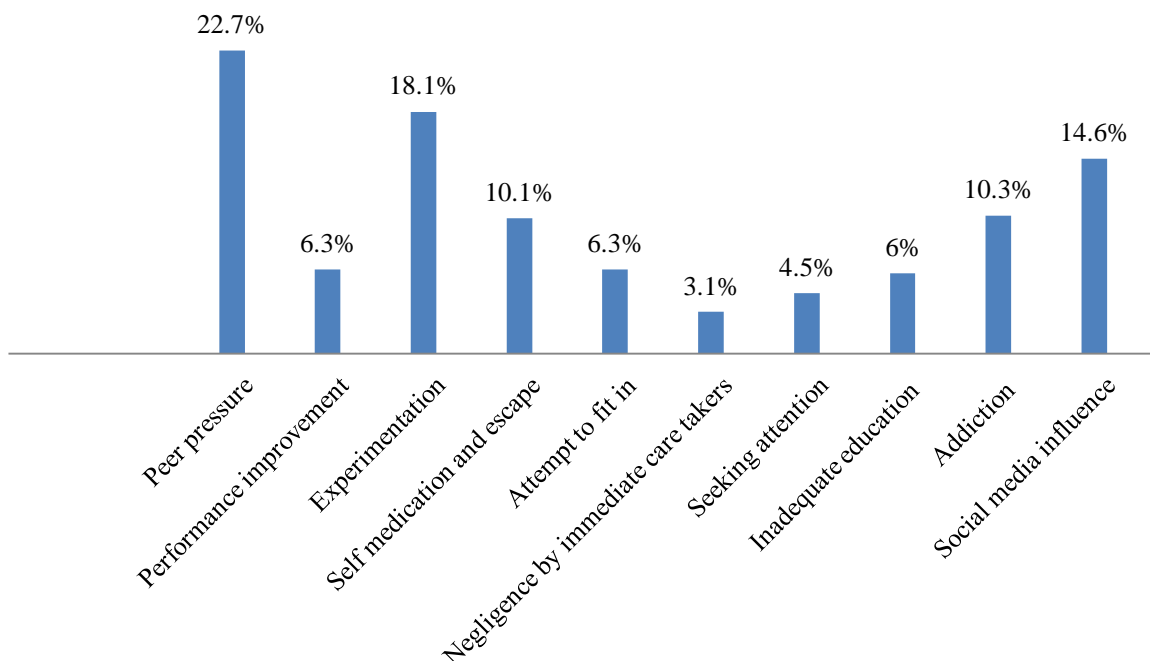
The study findings significantly supported the H₂: students would respond positively and be encouraged with prevention messages disseminated by their peers; resulting to a significant decrease in intentions to abuse drugs (0.238, P=.006). The use of digital messages through phones and computers for preventing and minimising drug substance abuse among the schooling youth was highly supported by 43% and 31% as most effective and reliable and effective and reliable educative method. This is partly because youths nowadays enjoy the opportunity of accessing a hand set phone that has features for sending messages such as short messages (SMS) and *whatsapp* features that carries both written and pictorial messages. Secondly, youths find it convenient to use SMS and *whatsapp* features as opposed to direct calling the recipient because it is cheap, messages can be sent several clustered people and also to specific group/s of recipients. Equally, one can receive SMS and *whatsapp* messages from deferent sources at the same time.

These observations correspond with Evans, et al. (2017) findings that most youths engaged with living the example (LTE) messages the moment they were taught by their colleagues. They recoded high responses to issues about drug abuse prevention measures as reciprocity to messages they received in their phones posted by their colleagues. The messages were perceived convincing among the youths and were a promising way to minimize drug abuse.

Reasons for personal drug usage intentions among students

Each respondent provided their best view on drug use intentions as analysed in figure 3:

Figure 3: Personal drug usage intentions among students



The tested hypothesis **H₃**: Exposure to the social media prevention messages would be associated with more positive substance use avoidance attitudes decreased substance use. This was significantly supported by the respondents at significant increase in intentions overall (1.884, P=.05), but a decrease among student who reported disclosure and receptiveness to drugs abuse (0.209, P=.02).

Moreover, the same trend on use of any drug showed a rise in reported intentions overall (2.141, P=.02), but a decrease among student who disclosed exposure and receptiveness to drugs abuse (0.110, P=.006). The study found out a comparable trend for sedatives/sleeping pills that showed an increase in intentions overall (1.888, P=.06), but a downward trend among participants with cases of exposure and accessibility to ADSA (OR 0.211, P=.02).

IV. Conclusion And Recommendations

The survey concluded that social media platforms like messaging, what-up, emails, face book, twitter, instagram among other facilitates an effective strategy for peer-to-peer substance use prevention now and in the future. Thus, exposure to the social media prevention messages is significantly associated with more positive substance use avoidance attitudes leading to decreased substance use among the youth.

The study recoded high responses to issues about drug abuse prevention measures as reciprocity to messages respondents received in their phones posted by their colleagues. The messages were perceived convincing among the youths and these were a promising way to reduce drug abuse.

The study recommends continued piloting of the social media diffusion model on mainstreaming ADSA among, institutions of learning and corporate entities; and the need for more robust research on a larger scale by engaging a bigger population of both students and members of staff.

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