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Students' perceptions regarding interventions to reduce substance use and its concomitant impact on competence among adolescents in public secondary schools in Uganda

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Abstract

Background: Psychoactive substance use interventions have been well document to be more effective when participatory rather than prescriptive. Despite many calculable evidences examining PASU prevention, there was paucity of information regarding interventions in developing countries, moreover involving students' ideas.

Methods: The study was qualitative (based on focus group discussions) and involving rigorous thematic data analysis under the main theme: "interventions to reduce substance use in schools".

Results: "Use of coercive means" was the most common argument among all FGDs, followed by "teaching/sensitizing and counseling students".

Conclusions: Emphasis is put on school-based interventions, in collaboration with other community partners including parents.

Keywords: Interventions; adolescents; perceptions; public secondary schools; Uganda

1. Introduction

Intervention in adolescent drug use has significantly gained ground since its infancy (Colby et al., 2012). World over, psychoactive substance use (PASU) interventions have been well documented as being more effective when participatory rather than prescriptive. Furthermore, in their book entitled "Prevention of Drug Use among Children and Adolescents", Robertson, David, and Rao (2003) extensively review prevention strategies in schools and recommend school-based interventions as being well integrated within schools' own goals, to consider students as partners in the discourse of PASU prevention. The present study therefore focused on students' ideology regarding prevention of substance use in Ugandan Schools. Robertson et al. (2003) observe that integrated strategies for PASU intervention strengthen students' bonding to school and reduce their likelihood of offending school guidelines tailored towards drug use prevention. Further studies expound that most substance use intervention measures need a normative education component designed to correct the misperception that students should be recipients of already made intervention guidelines (Wu et al., 2014). Hence Kacwamu (2010) proposed provision of important and friendly information regarding PASU to adolescents in educative, interesting, and entertaining manner.

In consonance with the postulates regarding inclusive participation, it was found that adolescents engaged in planning and implementation of drug use programs were less prone to episodes of PASU and hence reported the lowest levels of substance use. On the other hand, those adolescents not participating in formulating PASU

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prevention rules lived in denial, disengagement, and reported the highest levels of PASU (e.g., Lyness & Koehler, 2014; Braverman, 2001). Further studies (e.g. Dokua, Koivusiltac, Raisamob, & Rimpelab, 2012) allude to the same reasoning.

It has been argued that most drug use intervention programs seek to rebuild students' interest in school and their future, correct their perceptions regarding substance abuse, and strengthen protective factors, including but not limited to positive decision making and school commitment. In that regard, there should be need for situational consideration when employing school-based intervention measures, as Robertson et al. (2003) put it:

Resent research suggests caution when grouping high-risk adolescents in peer group interventions for drug abuse prevention. Such groups have been shown to produce negative effects, as participants appear to reinforce substance abuse behaviors overtime. Research is examining how to prevent such effects, with a particular focus on the role of adults and positive peers (p.20).

This reasoning directs us to community intervention as part of PASU intervention strategies. In essence, drug use prevention and intervention techniques work at the community level with civic, religious, law enforcement and other governmental organizations to enhance anti-PASU norms and promote pro-social behaviors. Relatively speaking, strategies to change key aspects of the environment are often employed at community level. And, the strategies involve evidence of instituting new policies and theories, such as asking for proof of age before psychoactive substances are sold to adolescents. The main theoretical orientation of this paper therefore bases on evidence-based and youth-based prevention principle coined by Griffin and Botvin (2010).

According to the interventionist theory, youth-focused and evidence-based interventions account for educational and skills training programs for young in school settings (Griffin & Botvin, 2010). Hence the youth-focused theory doubles as school-based intervention model, from the educational perspective (Botvin & Griffin, 2014). Effective youth training models regarding PASU prevention interventions are those not involving only schools but parents as well (Austin, Macgowan, & Wagner, 2005; Henry-Edwards, Humeniuk, Ali, Monteiro, & Poznyak, 2003; Sandler, Ingram, Wolchik, Tein, & Winslow, 2015). Building on the previous approaches, this study is interested in a theoretical point of view that helps schools and parents establish potent ways of monitoring and communicating with their adolescents on issues pertaining to substance use.

Adolescent-targeted intervention theories and models focus on the transition from childhood to adulthood, as this is the stage of human lifespan when experimentation with psychoactive substances commences (Griffin & Botvin, 2010). Evidence-based and youth-focused interventions therefore focus on practices designed to motivate adolescents change PASU behaviours (Henry-Edwards et al, 2003). Moreover, such prevention models promote school-based efforts offering access to large numbers of students. The youth-focused and evidence-based approach is practically consistent with the goals of educating the youth about psychoactive substance use (Griffin & Botvin, 2010). Education regarding PASU streamlines life skills training (LST), as advocated by Botvin and Griffin (2014). The advocates of SLT opine that life skills training has been extensively tested in a series of randomized trials and found effective in preventing the use and mis-use of alcohol, tobacco, marijuana, and other psychoactive substances. It is asserted that LST is effective when implemented under different delivery conditions, by different program providers, with different age groups, and with different populations. It is therefore evidently implied that LST could be an effective strategy to prevent PASU among adolescents in schools. Indeed, etiological studies provide evidence of the long-term effectiveness of LST among adolescents (Botvin & Griffin, 2014).

Other related sources show that parental engagement in parent-child communication is yet another significant means through which interventions to reduce PASU among adolescents could be made. For instance, in a longitudinal survey for adolescents attending rural public schools in the US, it was found from multi-group mediated moderation analyses that as adolescents engaged in targeted-mother-child

communication against substance use earlier, they were likely to report anti-drug use personal norms (Kam & Yang, 2013). The same and similar sources (e.g. Demant & Ravn, 2013) retrace that adolescents were more likely to report that if their friends used psychoactive substances, they would talk to that friend regarding his/her use of substances, or seek help from another person. As a result, Miller-Day and others (in Kam & Yang, 2013) developed an instrument targeting parent-child communication against substance use. The construct regarding parent-child communication includes conversations that may involve parental warnings about impacts of PASU, discussing others who were in trouble due to substance abuse, providing suggestions for avoiding PASU, or clearly stating disapproval of substance use. It is therefore noted that given anti-substance use messages characterizing targeted parent-child-targeted talks, adolescents included in those talks are more likely than their counterparts to develop anti-drug-use perceptions, an necessary ingredient for shielding them from substance misuse (Kam & Yang, 2013; National Institute on Drug Abuse[NIDA], 2005).

Despite the many calculable evidences examining PASU interventions, there is paucity of information regarding interventions in developing countries (DCs), more especially among school-going students. The studies far away (e.g. Atilola et al., 2014) advocate intensification of efforts to control access to alcohol and illicit drugs in DCs as part of an integrated approach to adolescent PASU intervention. But little is known to have been scholarly implemented in line with such a recommendation. A few attempts in DCs, mainly by non-governmental organizations and the media, report sporadic findings often times with exaggerated intentions and methodological flaws. There was a burning need, therefore, to pursue more practicable solutions in our circumstances and in tandem with studies elsewhere, regarding PASU interventions.

2. Methodology

2.1. Objective

The study sought to explore students' contributions regarding substance use interventions in public schools.

2.2. Study settings

The study sample was drawn from the four major geographical regions of Uganda including western, eastern, northern, and central region. It was anticipated that the regions of Uganda were unique in their socio-cultural settings. This was envisaged to give students in their respective schools a diversified background in their knowledge of PASU interventions. The study therefore utilized students' diversity to deduce a comprehensive picture regarding the study subject. The study considered public schools from urban areas-from Uganda's capital city (Kampala) and 10 municipalities. Choice of those schools was informed by the philosophy of their establishment: they were established to provide affordable education to urban children from ordinary socio-economic families. This could explain why students in the schools were mainly congested and commuted from home or rented places to schools on a daily basis. Consistent interaction of students with ordinary urban communities was therefore considered an important confounder in examining student's perceptions regarding PASU interventions. The study framework and settings described herein have been previously reported by Rukundo and Kibanja (2015).

2.3. Design and sample

The present inquiry is based on a qualitative, exploratory design using purposive sampling. It was conducted among adolescents in public, co-educational schools, focusing on prefects (student-leaders) as participants. The rationale was that in an ordinary secondary school in Uganda, prefects form an interface and mediate between students and school administrators. Prefects were therefore deemed instrumental in

supplying reliable information and opinions regarding students' affairs in their respective schools. We purposively conducted 12 FGDs, one from each of the selected schools. The number of FGDs conducted during the study was based upon the circulation principle.

2.4. Instrument

A focus group guide was used to generate data from the student leaders, based on the question, "what interventions should be employed to overcome substance use among students in schools?" The focus group discussions were therefore based on a study theme regarding interventions to reduce substance use in schools. The FGDs were mainly a two-way interaction between the moderator and study participants, and between participants themselves. The role of the moderator was to initiate, regulate, and sustain (through probes) discussions among participants, based on the study theme. The study participants did extensive, guided exposition of the study theme through responses to the study question.

2.5. Procedure and ethical considerations

Approval for data collection was initially sought from the Institutional Review Board of Mbarara University of Science and Technology and then ratified by the Uganda National Council for Science and Technology (UNCST). The final permission to interact with the students was obtained from the respective heads of schools. Before we began the discussions, written informed consent was obtained from the prefects. Explanations regarding the study aim and objectives, right to decline participating or withdrawing, and issues of confidentiality were articulated with the students prior to commencement of each of the FGDs.

2.6. Data analysis

Data analysis was ongoing throughout the entire period of field work. Thematic content analysis, a phase by phase manual and rigorous analysis of thematic categories was ongoing during and after data collection. Thematic content analysis was preferred as it enabled scrutiny of conceptual similarities and discovery of patterns of themes, to identify what the participants talked about most and to collect related themes. In the first phase, recordings of FGDs were played and listened to for at least twice and then summarized, a benchmark for preliminary coding of emerging trends. During the second phase, primary transcription of the interviews was completed. We substantively evaluated each transcript for accuracy and coherency. Then we started a more categorical analysis, first in broader terms and then zeroing to specific categories. Final codes reflecting trends in the study topic were then refined.

3. Results

3.1. Demographics

We engaged 70 participants (prefects) in 12 FGDs. The students' mean age was 18.51 (SD = 1.49) and the majority were males (72.9%). Most of the participants belonged to grade five (grade six = 30%; grade five = 51.4%; grade four = 5.7%; and grade three = 12.9%). The study did not register participants from lower secondary (form two and one), as most, if not all schools in Uganda select prefects from only middle and upper classes. All the participants (100%) had spent a year or less in their respective positions as school leaders/prefects. Such a finding is not surprising, as all student-leaders' spend only one year in their respective leadership positions.

Attention was drawn to participants' suggestions for interventions in substance use among students. This section sought discussions in view of proposing student-tailored interventions in the psychoactive substance use upsurge among schools. Unsurprisingly, though there were a few diverging views, discussions from most

students were in one way or the other similar in direction: close monitoring of students' discipline. Table 1 summarizes the themes of students' discussions captured during the FGDs.

Table 1. Frequencies and Percentages of FGDs that Discussed the Study Sub-themes

Thematic Topic	Frequency/Number of FGDs out of 12	Percentage
Strict rules and dismissal	11	91.7
Counselling	10	83.7
Teaching/sensitization of students & parents	10	83.7
Regular checking of students	7	58.3
Abolish bars near schools	5	41.7
Ban importation of Kuber	5	41.7
Form drug resistance clubs	4	33.3
Create Christian fellowships	3	25.0
Involve spies	3	25.0
Tight security around schools e.g. wall fencing	3	25.0
Control students' movements	2	16.7
Health officials and police operations in schools	2	16.7
Making students always busy	2	16.7
Make all schools boarding	1	8.3
Movies/films depicting dangers of use	1	8.3
Testing students for drugs	1	8.3

Monitoring of students was reflected in the views regarding use of coercion and rules (91.7%), counseling (83.7%) and regular sensitization of students (83.7%). Participants were optimistic that use of rigid rules by schools would be a priority means of managing PASU in schools. A number of reasons were advanced to that effect attested by the captions below:

Actually for me I think school administration should put strict rules that govern the school. E.g. when you are engaged in activity of smoking, boozing and you are caught you are chased from school and this will help other students to behave normally. (WME05, June 13, 2013). In agreement with WME05, other focus groups suggested strict school rules as well. According to those students, existing school regulations were weak: "Yeah, we need strict (school) rules – strict laws and rules since somehow the current school rules are not strict" (WKB01, June 18, 2013; WKD04, June 18, 2013).

More still regarding creating strict rules, the popular students' view was that authority e.g. teachers should not be an exception in intervention struggles, and that they should be compelled to be good models to students. A student in focus group three had this to elaborate:

Now like me my idea is very funny but good... one day, I was absent from school, I was moving towards a certain police station here in this town. There I met one of my teachers – he was very drunk that he was lying alongside [hesitation] along the road. Now what I did I just hired a boda boda man, we put that teacher on a boda boda and took him to a police station because it was still school hours and he had not to be drunk that time – yeah, according to professional ethics and standards of teachers. Now but what annoyed me most was after leaving the police station the teacher followed me next. Yes, it is real: In this school! I can even show you the teacher. Which shows that even the people in authority are not really in authority – such people should be punished accordingly for abuse of office – I mean the policeman and teachers? (WFI07, June 24, 2013)

However, it is not only about coercion that students had to mention regarding intervention in PASU in schools. Students also directed their focus regarding PASU intervention to the need for continuous counseling. For instance participants from focus groups one, three and nine suggested the following:

Yeah, through counseling and disciplinary committees-for example you [hesitation] we usually have disciplinary committee so students with minor mistakes we do cane them but those who are drug addicted, we as fellow students we just sit down and counsel them and they changed even we have an example here-serious now they are good boys – though they might not be aware of the dangers of those drugs – because for them they do it unknowingly [hesitation] we should be strict . . . (WMB01, June 13, 2013)

To me, just like they are doing here in our school . . . And many are trying to change. Yes, school administration needs to reach out to those students and talk to them. Like the other man who came at our assembly – he gave us his life experience as in how he was living while using drugs and how it affected him but now he is trying to get away from drugs – as in he is trying to leave taking drugs and do without them. Eh! Off course it helps some like you can still live without drugs. He told us how drugs affected his life and how he lost every belonging of his because of drugs. And he talked about how (hesitation) he told us there is a school he went to as a student after leaving taking drugs and how he was the oldest. He joined the school and he was the oldest, even older than the teachers! Yes, just because he used most of his time in bikuubo(corridors between buildings) taking kuber and other drugs and feeling high which is well known as “SWAG” now and so off course they (students) picked from what he said, if at all they were there, they ended learning that if they don’t change, they may end up like him. (EJG02, July 12, 2013)

My point is all about advisory service – for example me myself I was told by an old man that a day you take alcohol [hesitation] oba you weaken the brain – as you take alcohol the knowledge goes on reducing and when I looked behind – ah off course I had to learn from the mistakes I had done so I decided to stop taking alcohol – and I myself I can advise someone to stop taking it. (WFE04, June 24, 2013)

In relation to counseling, participants unanimously alluded to sensitization of students and parents regarding PASU. To achieve that, they opined that collaboration of schools and parents would intervene and tame students’ behavior. Below are some arguments from students to support the reasoning above:

So here in school we usually have visiting days and on those VDs teachers create a time to bring all those parents for a meeting. So there I hope if you educate those parents about the extent to which the drugs are spreading within the school, or even outside the school, to alert their children through counseling and guiding them for not taking drugs [hesitation]. (WMB01, June 13, 2013)

Parental sensitization and support of their children, because those students who deal in the substances do that due to the fact that they do not have enough money for school fees and they use that as the only way of getting school fees and other necessities, especially from selling cocaine. But they say charity begins at home – if they (parents) can sensitize their children and possible if they (children) can get cared for – like if they are given enough necessities I think they can get out of this. (ESG02, July 8, 2013)

Me I think the background of a student matters in as far as drug use is concerned. Yeah, a very big role. Those parents have a big role. You find that parents leave home at 5.00 am in the morning and they come back either at 11.00 or even mid-night. So you find that when a child is growing, really it needs attention from the parents and guidance also. So without all this, you won’t tell me that it will be easy to stop drug abuse in schools. (CEB01, July 18, 2013)

Some intervention measures were also discussed as possible means of intervention in PASU among secondary school students in Uganda. For instance, there was an opinion among participants of groups seven, eight, and nine that substances which are imported should be checked by government and banned from those shops and supermarkets that sell it. Also, to emphasize the point of prevention, a student from group four had the following to say:

Yeah, I think schools should put consistent workshops to teach the students effects of using those substances and benefits of not using the drugs [then the moderator asks the student whether such seminars in schools would benefit most of the students]. I

would say they say one by one makes a bundle and for those who would benefit they would have reduced the number and in the future those that would have been helped would mobilize and help others on the same issue. (EMB01, July 11, 2013)

As a games prefect, me I would say that schools should involve more students in games and sports. Ok, games and sports cuts off the time they (students) would spend doing nothing that would force students to try drugs. But off course in games and sports students have a tendency of thinking that when they use the drugs, they will perform effectively. I think here we career guide and inspire students to know that they can work without drugs. (EMS06, July 11, 2013)

To a minimal extent, student suggested formation of drug resistance clubs at schools as another preventive measure to PASU. To emphasize the point of involving students in those clubs, a participant had to say: “Yes, we need ‘resist against drug abuse club’, so that members can be performing drama against harmful effects of those drugs” (NAE03, July 4, 2013). A participant from group ten had the following point to emphasize need for anti-substance abuse clubs in schools:

Yeah, me I can talk about educating students, for example school clubs. Here in this school we have the ADC – I mean the alcohol, drugs, and cigarettes club which sensitizes students about dangers drug abuse. So we took students to Butabika hospital to see what happens when you use those drugs. Yeah, we took about 30 students and now these students are spreading the information to other students. (CMB01, July 17, 2013)

As part of preventive measures to rectify the problem of sneaking psychoactive substances into schools, students suggested that “everything entering in the school should be thoroughly checked and “if caught with some stuff”, be exposed before the whole school (NGSC08, June 1, 2013”).

4. Discussions

Previous studies adduced anecdotal evidence showing that often times, adolescents are recipients of policies and are not part of the policy formulation processes, both at home and at school. Such policies at times may not win the support of adolescents, because after all, they are not involved in casting the rules and they do not own them. Putting such a paradox into perspective, we sought to explore student-tailored interventions that could be in concordance with teenage mentalities and thought processes. The FGD participants were therefore asked: “What intervention strategies can be employed to reduce substance use and its associated impact among adolescents in public secondary schools?” As presented in the section of findings, the study participants gave diverging views, the most prominent being use of coercive means to deal with PASU in schools. The participants in all FGDs thought in terms of employing rigid rules to curb PASU among students.

The results represent a line of thinking that is in consistence with similar studies elsewhere (e.g. Dokua et al., 2012; National Institute of Health, Substance Abuse, and Mental Health Services Administration, 2010). However, whether or not use of strict rules to intervene in PASU among schools could be regarded as being successful in Ugandan circumstances remains part of the subject for debate. What makes the debate interesting though is that it is not surprising for students to think in that direction. For instance, as Kacwamu (2010) noted, students who are found red-handed with alcohol or drugs in most schools are dismissed indefinitely, only to find their way to other schools and spread the vice further! The interpretation is that traditionally, schools in Uganda draft rules that govern students’ conduct and student-leaders often serve as co-participants in implementation of those regulations. Their views therefore would be as a result of their previous orientation mirroring school codes of conduct. Borrowing from the behaviorist point of view (e.g. Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003), it is worth noting that in making rational choices, the human mind considers what it is familiar with first. Thinking of using discipline as a major intervention strategy in PASU could therefore be inevitable for students.

The present study findings also indicate that students thought of counseling and parental sensitization as another important intervention in PASU among school adolescents. The arguments regarding use of counseling and sensitization advance a common ideology for a streamlined mode of communication among school stakeholders. Our results are in relative consistence with previous literature in one particular aspect: dialog, in form of free communication between adolescents and parents. In light of the present results, it could be deduced that adolescents perhaps need the facts rather than scare tactics (United Nations, 2004). In a relatively similar view, a longitudinal survey for 6th to 8th grade conducted by Kam and Yang (2013) in rural public schools in the U.S reported that adolescents engaged in targeted-mother-child communication against substance use were more likely to develop anti-substance-use personal norms.

In the present study, counseling of adolescents against PASU is viewed in the image of life skills training (LST). And, indeed, previous sources of literature allude to use of LST in substance use prevention (Colby et al., 2012). For instance, Botvin and Griffin (2014) report a series of extensively randomized psychotherapy studies as having effective impact on preventing use and/miss use of alcohol, tobacco, marijuana, and other psychoactive substances. However, there are fundamental variations between the present views and previous literature, for consideration in implementation of LST that were not considered under the present study. Whereas the previous studies ideate that LST implementation should be under different delivery conditions, by different program providers, and with different age groups, the present study was not structured onto those premises. Our main concern was about interventions in the school settings with adolescents as a focus of analysis. The meeting point for us is that such empirical background presents evidence of the long-term effectiveness of LST among adolescents (Choi, Krieger, & Hetcht, 2013).

As implied by our study participants, sensitization of parents or other players in school arrangements profoundly achieves immense, double-faced benefits. First, classical evidence indicates that substance abuse features displayed by some students are acquired through modeling the behavior of parents (Brook et al., 2006). Related sources suggest that substance use among parents serves as a behavioral model and predicts the child's substance use- a modeling and positive reinforcement prototype (Bandura, 2006; Caprara, et al., 2002; Hockenbury & Hockenbury, 2006; Marks et al., 2005). With such knowledge in place, sensitization ought to target educating parents not only in learning to communicate persuasive messages to their adolescents but against their display of undesirable substance use behavior as well. Second, parental support is mirrored in the domain of child rearing, which includes parental monitoring and the mutual attachment relationship between parent and adolescent (Brook et al., 2006). It is a developmental antique that parents exert control through monitoring and supervision roles, identified as protective against PASU.

The present results emphatically suggest parental sensitization in terms of facilitating and teaching parental behaviors which promote a mutually affectionate, conflict-free attachment, to encourage development of conventional and well-adjusted adolescents resistant to PASU (Brook, et al., 2006). Major players in the adolescents' welfare and development therefore need to aim at encouraging communicating trust among parents and adolescents, or teachers and students ((Demant & Ravn, 2013). Concrete evidence in available literature shows, in support of present findings, that quality of adolescent's identification with parent(s) determines formation of parent-child mutual relationship marked by affection and identification, which predicts less PASU among adolescents (Demant & Ravn, 2013). The preceding assertion might convey crucial messages regarding PASU prevention in schools, and the possibility that discouraging substance use among adolescents in Ugandan schools may be a concerted effort involving engagement of parents in targeted parent-child communication, as mirrored by the current present findings. In other words, comparative interpretation of our study results with literature (e.g. Wu et al., 2014) brings on board an insight foreseeing parental and school involvement in talks with adolescents as equipping them with in-built autonomy to resist substance use in all situations and under different circumstances.

However, in relative disharmony with the present results, Dokua et al. (2012) seem to suggest control measures that seek to reduce substance use among adolescents in terms of changing the school environment. The literature proposes that changing students' environment influences knowledge and attitudes towards substance use, and prevents initiation of PASU behaviors among young people in school. Such measures are purported to decrease accessibility and availability of psychoactive substances, for instance through tools such as prohibition of sale of substances to minors, raising prices of the substances, and banning distribution of free substances to minors at promotions and other related functions.

Whereas the current study results tend to support Kam and Yang's (2013) notion of creating targeted parent-child communication regarding PASU prevention, there is a slight variation in context in which the results of current study should be interpreted. Our results seem to suggest inclusion of teachers and schools in the targeted communications equation. It would be profitable therefore to articulate that perhaps teachers and indeed the school work hand-in-hand with parents to talk to adolescents regarding PASU prevention (cf. UN, 2004). The UN (2004) report conventionally underscores the role of educators in communicating substance use prevention messages to adolescents. In concurrence with the present results, other sources propose teaching adolescents specific strategies of resisting peer pressure. This way, the adolescents would be seen as partners in intervening in substance use, rather than as the source of the problem. Information about substance use therefore needs to be a regular part of the school curriculum, and teaching of students about psychoactive substances and their associated school competence problems to be done early enough as children reach the ages when they are most at risk of peer pressure (UN, 2004). According to school-based education for drug use prevention agitators, more education-oriented approach rather than behavior change strategies could be emphasized as reflected in the caption below, adopted from the UN (2004) report:

School is not about repairing social evils. It is about repairing one: the evil of ignorance. We all have responsibilities as adults for these evils. But as teachers, we don't need to be ashamed if we can't fix... or end drug use. Individual teachers will care as human beings when students use drugs... But it is not the fault of schools, and schools ought not to set targets to change such behaviors... The fact is that schools do not have the power to stop smoking; drinking ... They do have it in their power to improve student knowledge and skills and to encourage the development of defensible values... (p.6)

We derive an orientation to thinking that "prevention is better than cure", from such a narrative. In essence, it directs concerns of stakeholders to drug refusal and this disposition is in consonance with available literature (e.g. Lowe, Liang, Riggs, & Henson, 2012). As Carpenter and Howard (2009) contemplate, over the past two decades, schools-based efforts to prevent, delay initiation of, and reduce substance use among adolescents have based on theoretical models targeting attitudes, perceptions and behaviors related to PASU. So, our major emphasis is that sensitization and counseling education should provoke instincts within students that evaluate the costs and expected benefits PASU and help adolescents make meaningful drug resistance decisions.

The present study findings envisage policy reorientation in a Ugandan context. In order to address the challenge of PASU in schools, the Ministry of Education in Uganda might need to develop a policy that strengthens checks and controls in public schools (Uganda Youth Development Link [UYDEL], 2008). Further emphases are coined in luminosity with mobilization of stakeholders to advocate for and monitor the implementation of policy decisions related to control of psychoactive substances in schools (UYDEL, 2008). Similar advocates (e.g. Kacwamu, 2010) foresee a curriculum that trains personnel (counselors and teachers) to equip them with the requisite knowledge and skills to adequately address the problem of substance use in their respective schools. They proactively propose to the respective ministry, school authorities, and parents, the need for information and sensitization, to assist vulnerable students, rather than dismissing such students from schools.

Based on our major findings and supporting evidence from previous pieces of literature regarding PASU interventions, the present study advocates for a double-effective communication and sensitization (DECS) model that proposes bridging communication gap among adolescents, parents and school. The model seeks to enhance sensitization of adolescents as a means of intervention in PASU. It anticipates an intervention approach underscoring integration of an educational program that facilitates partnership among parents and educators. According to the model, public schools on one hand should constitute an organized curriculum to present substance use resistance education, with emphasis on effective communication and sensitization as means PASU prevention (Lowe et al., 2012). It is recommended, on the other hand, that parents could be expeditiously made part of PASU intervention protocols in public school.

5. Conclusion and Recommendation

Students generally placed the responsibility of PASU prevention on their schools in collaboration with other community members and parents. They believed school-based interventions were paramount in substance use control. But such assertions could have been influenced by students' idiosyncratic exposure of management of offenders in schools. It seems to be a common practice for schools in Uganda to reprimand and suspend students who offend from school and then later counsel them. Despite such measures, literature seems to suggest that behaviors related to PASU remain on a steady increase, meaning that such interventions may not be the best. Perhaps the less mentioned interventions like sensitization of students and banning some of the substances from the society could be more reliable than those remedies given much attention by students. Indeed previous studies (e.g. Chang et al., 2014) view measures like increased media literacy as being robust enough to intervene in substance use among adolescents.

Alternatively, available evidences regarding the psychodynamics of PASU to could be built upon to construct a frame work for intervention. For instance, Rukundo and Kibanja (2015) reported that students overwhelmingly pin-pointed business premises around their school premises as being responsible for supplying psychoactive substances to schools. It is therefore meaningful for stakeholders to partner the businesses that operate within school proximities to convey messages against PASU. It would be a scenario of saying "we use fire to put out fire". However, we fundamentally concur with students' opinions alluding to active involvement of students themselves in designing and implementation of intervention strategies.

We finally opine that schools institute collaborative strategies to help, empower and involve parents in prevention programs for the sake of their adolescents. Empowered parents might for example be in position to visit schools to help teachers in sensitization of students against PASU, or effectively talk to and sensitize their children regarding PASU even when at home (in absence of educators). The product of such collaborative effort then becomes an autonomous, empowered, resilient, self-reliant and self-driven student ready to refuse PASU in any situation, place, and at any time.

6. Declaration of Competing Interests

The authors of declare no potential competing interests with respect to the research and/or authorship of this article.

7. Author Contributions

The first author is the principal investigator (PI) during the course of the study. He therefore coined the overall conceptual development and writing of the research proposal, guided by the second author. The first author also obtained funding for the study and engaged in data collection, supervised data entry, ran the analyses and

interpretations. Drafting of the manuscript was also done by the first author, overseen by the second author.

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