ABSTRACT: We explored sources of psychoactive substances in public secondary schools and the means through which adolescents obtain those substances. The study was qualitative and exploratory, using purposive sampling of participants. We employed thematic content analysis, a phase by phase manipulation of thematic categories of data to obtain common themes. Findings show that small shops, kiosks and bars around schools were the major sources of psychoactive substances talked about by most of the FGDs (83.3%). Most FGDs also rationalized that some “bold” students escape from schools to procure psychoactive substances. This study underscores the role of businesses in school neighborhoods as sources of psychoactive substances in public schools. Students employ a variety of means/strategies of obtaining psychoactive substances, and to a bigger extent they escape from school to access the substances.

KEYWORDS: Sources and means, psychoactive substances, school adolescents, public schools, Uganda

INTRODUCTION

The earliest stage of psychoactive substance use among students is being presented with the opportunity to use the substances (Benjet et al, 2007; Surujal & Keyser, 2014). The sources and means through which adolescents in schools obtain the substances seem to provide proximal opportunities for adolescents to use psychoactive substances. While many studies world over have explored prevalence of psychoactive substance use in schools, few of the them were able to establish the sources and means of obtaining such substances by students. Yet prevention strategies might rely heavily on such knowledge for effective control of substance use in schools. In addition, the studies that have tried to cover sources and means of obtaining psychoactive substances among school adolescents however allude to family environments and places of entertainment as viable sources of substances in schools (Donovan, 2004). This study hence was designed to explore extensively the sources and the means through which adolescents in schools obtain psychoactive substances.

LITERATURE

In their study to investigate the rural context of illicit drug use among rural school adolescents, Pettigrew, Miller-Day, Krieger, and Hecht (2012) found that school adolescents obtained psychoactive substances from home and at parties. Pettigrew and his colleagues also found that
adolescents obtained psychoactive substances during birth day celebrations, family get-togethers, and “beer parties”. At the parties, some substances –such as prescription pills, cocaine, or marijuana were offered to rural youth Pettigrew and his colleagues interviewed. And, most participants they interviewed agreed that alcohol and cigarettes were readily available to whoever attended those parties.

Elatedly, studies regarding substance use in Uganda and especially alcohol (e.g. UYDEL, 2008) have noted that most tribes have a culture of brewing alcohol in homes, exposing young people in those homes to alcohol consumption at a young age. In a similar case, the source above reveals that “unrecorded alcohol”, an estimate of alcohol that is not recorded nationally or internationally consists of home-made beverage alcohol productions. The same source also indicates that adolescents engage in binge drinking during public events, beaches and parties, at most of which local alcohol manufacturing companies sell it at discounted prices. Uganda Youth Development Link further continues to argue that urban schools and institutions of higher learning are surrounded by an array of bars that provide environment conducive for young people to use alcohol and other psychoactive substances.

In contrast to homes being sources of psychoactive substances, Hurt, Brody, Murry, Berkel, & Chen (2012) reported that interviews with adolescents’ care givers showed those care givers did not keep alcohol in their homes, though they still believed their adolescents had access to substances in schools or in neighboring communities. To elaborate their assertions, Hurt and others recorded the following piece from one of their respondents: “I know there is so much going on in the school system and in the neighborhood: …I went in the liquor store and bought it before I was even 16, so they probably go in the stores themselves”.

The statement above points to yet another direction of sources of psychoactive substances in schools: shops and markets within school neighborhoods. Similar studies have also tried to link sources of psychoactive substances in schools to neighborhood environments of those schools. For instance, it has been articulated that disorganized neighborhoods harbor psychoactive substances that eventually find their way in schools (Barnes, Welte, Tidwell, & Hoffman, 2013; Onya, Tessera, & Myers 2012). In a similar study to investigate links between school violence and drug usage in schools, Ramorola and Matshidiso (2014) also established that communities around schools were the main source of psychoactive substances. They cite one of the participants in their study having said, “…the school is located inside a rough community; it is easy for learners to get anything illegal or prohibited in the school premises when they want to.” The assertion above also implies that communities serve as living conduits for drugs to schools. It remains clear that at the sources of psychoactive substances in schools at times determine the means of access among students.

According to Ramorola and Matshidiso (2014), access of psychoactive substances among adolescents is catalyzed by the societies that surround school premises. They argue that due to the fact that schools are in the midst of social places, students easily access psychoactive substances and spread them in school premises. To support their argument, the authors above reported as follows: “…just across the road about 15 to 20 meters from the school is a bottle store and most of the people who sell drug, ‘wunga’ in particular, are there. So, during break time learners will
just go there and pretend to be going to buy something or anything to eat yet they are going to access those drugs.”

Though there are few known studies that have documented means through which adolescents in schools obtain psychoactive substances, Kacwamu (2010) noted that adolescents “smuggle” those substances into school premises by hiding them in their properties where teachers cannot suspect, usually at the beginning of school terms. Kacwamu further elaborates that boarding students rely on day-scholars to obtain psychoactive substances from outside school premises. Other sources (e.g. Pettigrew et al., 2012) suggest that students sneak out of school either at night or even during day time to access psychoactive substances.

In its report regarding the state of alcohol abuse in Uganda, UYDEL (2008) notes that premises and some persons within schools are conduits for PASU among adolescents in those schools. Specifically, school canteens, security guards, non-teaching staff, and some teachers are means through which the students access substances. Such means hence are known for perpetuating PASU in schools. The same source also indicates that secondary school students, especially day scholars, both male and female, stealthily buy huge amounts of alcohol especially spirits (waragi) and smuggle them into school for sell to fellow students.

**Objectives**
The present study was guided by two objectives:
I) To establish the sources of psychoactive substances used by students in public secondary schools;
II) To establish the means of obtaining psychoactive substances by students in public secondary schools.

**METHODS**

**Participants:** School prefects were purposively involved in focus group discussions (FGDs). Where conditions were could allow six prefects namely; head prefects (head boy and head girl), entertainment, disciplinary, information, and sports were considered for discussions. These prefects were preferred on the basis of common experiences and being the ones that participate in solving issues related to substance use. But in a few cases where all of them were not available, the FGDs could proceed with at least three of them present.

**Study Design and Sample:** The study was based on a qualitative, exploratory design using purposive sampling. The study was conducted in four major geographical regions of Uganda that include western, eastern, northern, and central region. It was conducted among adolescents in public, co-educational schools, focusing of prefects as participants. Twelve focus groups were conducted, three from each of the four regions of Uganda.

**Measure:** We used a focus group guide to generate data from student leaders (prefects), based on the questions: “what are the sources of psychoactive substances in your school?”, “what means do students in your school use to obtain psychoactive substances?”.
Ethical Consideration: Approval for data collection was initially sought from the Institutional Review Board of Mbarara University of Science and Technology. We later got clearance from the Uganda National Council of Science and Technology and from the office of the president of the republic of Uganda. The final permission to interact with students was obtained from respective heads of schools. Before the discussions began, written, informed consent was first obtained from the prefects using the adolescent consent/assent form. Explanations regarding study aim and objects, right to decline participating or withdrawing, and issues of confidentiality were articulated to the students prior to commencement of each of the FGDs.

Data analysis was ongoing throughout the period of field work. Thematic content analysis, a phase by phase manual analysis of thematic categories of data that was ongoing during and after data collection. Thematic content analysis was preferred because it enabled scrutiny of conceptual similarities and discovery of patterns of themes, to identify what study participants talked about most and to collect related themes (cf. Mertens, 2005; Swahn, Harberlen, Palmier, & Kasirye, 2014). 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 and we substantively evaluated each transcript for accuracy and coherency. We then started a more categorical analysis, first in broader terms and then zeroing to specific categories. Final codes reflecting trends in study topic were then refined as frequencies and percentages.

RESULTS

We involved 70 prefects in FGDs, mean age of participants =18.51 (SD=1.49); majority were males and from senior five. Data from interviews was organized into themes and results of each theme were separately coded. The results originate from themes which were derived from the objectives a) sources of psychoactive substances in schools; and b) means through which adolescents obtain those substances. For clarity and anonymity purposes, each participant was assigned a unique identification code with three initials and Arabic numerals at the end (e.g. xxxx). Those codes were used during data analysis. The first letter in the codes is an initial that signifies the region of Uganda where that data was collected, the second letter in the codes is an initial that represents the name of the school in that region where that data was collected, the third letter in the code is an initial of the prefect’s designation while the numeral represents the serial position of the participant in that FGD.

Sources of Psychoactive Substances Used among Adolescents in Public Secondary Schools
The first theme of discussion was about sources of psychoactive substances in public secondary schools in Uganda. Analysis of students’ FGD talks regarding the topic revealed that the sources of psychoactive substances in those schools are diverse. A summary of participants’ views regarding sources are presented in the graph below.
Graph 1: Sources of psychoactive substances used among adolescents in public schools

Source: Data from focus group discussions

It emerged that small shops, kiosks and nearby bars around schools were culpable when it came to sources of substances in schools. Students mainly pointed to packaged substances as having their main source from those shops and bars. To confirm the argument regarding the sources above, a student emphasized: “There are bars nearby this school, even supermarkets” (WMB01, June 13, 2013). Other students argued that they get substances from big shops and specifically supermarkets. One of the students elaborated: “If they don’t go to town to big supermarkets to buy packed drugs, they go to small bars and shops around the school” (WMB01, June 13, 2013). To confirm the argument above, another student had this to say: “Kuber...yes, sometimes there are some supermarkets selling it-even alcohol” (WMH03, June 13, 2013). Another student was specific with the types of supermarkets in which some of the substances are sold: “Like Kuber, students in this school usually buy it from shops and supermarkets operated by Indians (ESD05, July 8, 2013). A participant from focus group four explained below the reasoning that students procure kuber from supermarkets:

Now for me I have this experience: One time I also witnessed my friend who was telling me that they buy this Kuber and cigarettes from this supermarket near Buganda pub. I think they are also sold in most shops near us (our school). (NGI04, July 1, 2013). A student from another group argued in the same tune: “Slums like Kijungu-actually Kijungu are a source on its own. There are specific people who sell those drugs like marijuana and they are not always known by everybody and they are not common. (WMD04, June 13, 2013). The argument below by one of the participants in FGD one makes a bigger statement:
“. . . because it is a risky job and since students are young, you find that those rare people who sell those drugs may not show themselves to students for business, so the students can get those drugs though their friends outside the school.” (WMG02, June 13, 2013). Students also mentioned their homes and especially those in villages around their schools as other common sources of the psychoactive substances they use. To confirm the suggestion, one of the students from FGD three had the following to say:

For the case of boarders, you may find that if there is a visiting day like Saturday, you do phone your parents or relatives who are coming to visit you at school. Mm, maybe if someone who is visited at school boozes, he or she tells their parents to come with alcohol at school for her or him. (WME 05, June 14, 2013) As if to support the above argument, WMG 02 chimed in: “For example some parents in Isingiro, fathers consider it normal for their sons-mostly sons to booze because it is a cultural norm.” Participants from group three also agreed that homes are sources of psychoactive substances in secondary school. The citation bellow describes students’ opinions with regard to that matter:

Some of them plant them at home and bring them at school and distribute to others. Drugs like [hesitation] like cocaine are planted at home to cure cows (the moderator interjects to correct the student that it is not actually cocaine but marijuana) [hesitation] Yeah, yes marijuana is grown by parents at home and students get a chance to use it and also bring some to school for their friends. (WFD08, June 24, 2013)

As if to support WFD08, WFI07 was quick to supplement: Other students get those drugs from their own parents at home and since their parents were all that active in drugs, they narrate to their children how they used to indulge in PASU... ‘We used to take that stuff’ – and students get motivated to take those drugs as well. (WFD07, June 24, 2013) Like those in group four, students from other groups supported the above argument: ‘For the case of marijuana, I think they get it from the village because most of the students have [hesitation] they just come from very far distances. Yeah, so this is the main source of that substance (NGH05, July 1, 2013).

The most consistently mentioned sources of psychoactive substances talked about under this study were bars and shopping places, especially for alcohol and kuber. Students’ arguments to this direction resonate with the geographical location of schools considered for the present study, given that the schools were situated in urban areas. Focus group discussions also suggest that to a wider extent, the sources of substances in schools relate to the degree to which specific substances can be easily obtained from the nearby communities.

Means of Access of Psychoactive Substances among Adolescents in Public Schools
As a second topic of discussion for the FGDs, students were asked about the means through which students in their respective schools access or obtain psychoactive substances. The arguments accruing of those discussions are summarized in the table below.
The N value represents the number of FGDs conducted during the study.

<table>
<thead>
<tr>
<th>Means/ways of access</th>
<th>Frequency (FGDs)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escape from school</td>
<td>10</td>
<td>83.3</td>
</tr>
<tr>
<td>Friends/visitors</td>
<td>9</td>
<td>75.0</td>
</tr>
<tr>
<td>Day scholars</td>
<td>8</td>
<td>66.7</td>
</tr>
<tr>
<td>Fix them in bags, pants, books, sports kits</td>
<td>5</td>
<td>41.7</td>
</tr>
<tr>
<td>Gateman/askari</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td>Parties</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td>Water containers</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td>Smell it on another student</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Stealing</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Teachers</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Use mobile phone</td>
<td>1</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Table showing participants’ discussions regarding the means through which students in public secondary schools obtain psychoactive substances (N=12)

Majority of FGDs rationalized that some “bold” students escape through school gates to buy the substances for themselves. Other students, it was discussed, ask for permission to buy other things but end up buying psychoactive substances. For some students, being sent home for school fees offers an opportunity for them to obtain the substances. “Such students hide the substances in their pockets and bags and smuggle them into school”, said WMB01. Escape from school with the aid of get men/women were also cited as other means through which students in schools obtain psychoactive substances. The gatemen do not only help students in a way of facilitating their escape from schools, but assist some students to smuggle psychoactive substances into school as well, according to focus group nine. The following arguments are included for elaborative purpose:

Yes, other people specifically asikaris (gate men) help students to smuggle substances into school. Like when a student comes to school with a substance, he doesn’t enter with it but gives it to a boda boda man who will give it to asikari after the student has talked to the asikari himself. The asikari then keeps it and then after the student returns to pick it and pays him some money. (EJS05, July 12, 2013)

In some schools, students serve as agents for fellow students or people outside schools to acquire psychoactive substances. It is meant that students have partners outside school who either smuggle substances into the school or collude with the students to purchase the substances outside schools. And, according to the participants, some of the partners pretend to be parents or guardians as they supply students with the substances. The following quotations support the argument above:

Actually there is a man who sells marijuana in town here. He moves around the town playing music [hesitation]. Mm [hesitation] playing a guitar. In other words, doing two businesses at ago:
Selling marijuana and playing music around Gaa Gaa area. In case you need the thing he removes it from his shoes, drops it down and then the customer gives him the money and picks his ‘goods’ [moderator asks the student to shade more light on why the man has to throw the “business” down]. Ok, the man throws it down because he is doing a secret mission (hesitation) because the business is illegal so he wants people not to notice what he is selling. (NAS06, July 4, 2013) Ok, there are student dealers especially waragi [hesitation] like here in this school we have a crew called ‘cheers’. They drink waragi so much, yeah, and they bring it inside school by putting it inside their bags, since most of them are day scholars. For the case of cocaine, as I already told you there is a student in form five who is a dealer [moderator interjects to inquire whether the participant knew that student very well]. Yeah, he is my friend! Actually he tells me how he goes to the boarder (with Sudan) – sometimes he goes to Juba. Yeah, he tells me how the other dealers from other country bring to him the stuff and then he buys. He then leaves the boarder and comes back to Uganda and starts selling to fellow students and to other wealthy people. (ESG02, July 8, 2013)

According to participants in some of the groups, students use a number of tactics such as fixing substances in bags, pants, books, sports kits and water containers to sneak some psychoactive substances, especially alcohol into school. Through girls’ hand bags, participants in group three said, students smuggle psychoactive substances into school. That argument was augmented by the following citations from some of the participants from other groups:

Like in this school there is this issue of containers –they are terming it as if it is-mm [hesitation] it is called in this school. Yeah, SWAG – they pretend to be carrying water and they are never – ‘oba interviewed?’ by teachers or even watchmen or prefects, and through the process they bring in alcohol in those bottles. (WFE04, June 24, 2013)

Alcohol is always packed in bottles and this gives those who bring it to school an advantage. Ok, because they smuggle it into school because the staff (teachers watchmen, and school administration) may assume it is water in those bottles when actually it is alcohol. (ESI03, July 8, 2013)

Teachers were also unexpectedly blamed for supplying substances to students: “You give the teacher money to go and get them-alcohol” (WME05, June 13, 2013). From the students’ assertions, it is plausible to conclude that students in schools rely on coordinated networks to obtain psychoactive substances. Various players including students and at times dishonest school employees collude in petty business-like manner to help students access the substances. It might be probable that schools where students commute on a daily basis between home and school are added advantage to the interplay of various mechanisms involved in the substance use saga among school adolescents.

**DISCUSSION**

*Sources of Psychoactive Substances Used among Secondary School Adolescents*

It emerged that school adolescents mainly obtained psychoactive substances, especially packed ones from within the vicinity of their respective schools premises. Specifically, shops and kiosks around schools, and supermarkets were the most commonly mentioned sources. I partially explain
this revelation in the context of the location of the schools considered by the present study. The schools considered for this study were located either within town centers or nearby suburbs where a lot of trade in uncensored substances could be taking place. Since traders within those proximities are not restricted in terms of the commodities they should deal in, it is probable that they sell psychoactive substances and target students in nearby schools as potential customers. Those sources therefore provide ready, nearer and perhaps cheap supply of those substances to students in those schools. The results are in keeping with other studies (e.g. Barnes et al., 2013; Onya et al., 2012) that have established that the characteristics of neighborhoods in which young people live contribute to their substance use behaviors.

The present study results also show that the second most mentioned sources of psychoactive substances were homes/villages/families and fellow students, and confirm previous findings (e.g. Brook, Pahl, Morojere, & Brook, 2006). It is possible that some substances like marijuana, mirungi, and tobacco are locally grown in some parts of Uganda. Un-industrialized alcohol products especially locally made spirits also could have homes as their source. Most of the students in schools considered by the study being day scholars, they perhaps get access to the substances at their will as they commute between home and school. The study findings in part agree with Kacwamu (2010) in her proposition that students in Uganda get psychoactive substances from homes. Kachwamu (2010) however pinpointed school parties as other sources of psychoactive substances, which the present student did not confirm. Unlike the present findings, Kacwamu (2010) did not allude to adolescents’ friends as another source of psychoactive substance, as the present study results show.

Other literature from elsewhere also tends to suggest likewise. Wallace and Muroff (2002) and Pettigrew et al. (2012) point to availability of substances in families when they asserted that psychoactive substances are easy to obtain, and that their availability in homes and communities such as neighborhoods contribute to PASU in schools. The authors continue to elucidate that perhaps even more important than adolescents’ perception of psychoactive substances being widely available in their communities is the extent to which those substances are widely available in their proximate environments. The researchers above assert that the proximate environments from which adolescents access psychoactive substances include the schools themselves, families and peer networks. In a similar tune, Ramorola and Matshidiso (2014) agree with Wallace and Muroff (2002) and hence concur with the present study findings and articulate that families are part of the sources of psychoactive substances in schools.

In contrast to homes being sources of psychoactive substances, Hurt, Brody, Murry, Berkel, & Chen (2012) reported that interviews with adolescents’ care givers showed those care givers did not keep alcohol in their homes, though they still believed their adolescents had access to substances in schools or in neighboring communities. To elaborate their assertions, Hurt and others recorded the following piece from one of their respondents: “I know there is so much going on in the school system and in the neighborhood …I went in the liquor store and bought it before I was even 16, so they probably go in the stores themselves”. The statement above points to another important direction of sources of psychoactive substances in schools that has been described earlier in our study findings: shops and markets within school neighborhoods.
This study has unearthed a multiplicity of sources of psychoactive substances used by adolescents in public schools in Uganda. Though the sources of psychoactive substances appear to be many, it is imperative to understand that those sources are substance specific and the present findings do not stand in isolation. There are existing studies, though few, comparable to the present study results. It is also necessary to appreciate that knowledge of the sources of psychoactive substances is very important in planning interventions and developing preventive strategies in light of the prevailing circumstances in a given locality. Understanding the sources of psychoactive substances in schools could also be an essential benchmark in understanding the socio-dynamic of PASU (Yusoff, Sahril, Rasidi, Zaki, Muhamad, & Ani, 2014), such as means of access of the substances by students.

Means of Access of Psychoactive Substances among Adolescents in Public Secondary Schools
The present results regarding means of access of psychoactive substances among adolescents show that students mainly escape from school to obtain those substances. The second-most means was thorough friends/visitors. Perhaps, being mainly day schools, public schools in Uganda do not put too strict or rigid controls of movements of students and entry of “visitors”. Linked to some other large extent, students reported that they obtained substances through day-scholars and through fixing them in their belongings. Though not directly related to known previous findings, the study results can be synonymous with Kacwamu’s (2010) assertion that students smuggle substances into schools, specifically alcohol at the beginning of school terms, by hiding it in their properties where teachers cannot suspect. However, the partial difference between this study and the cited previous study is that during the current study, participants did not mention smuggling psychoactive substances into school at the beginning of terms.

The partial difference in results of this study and Kacwamu’s (2010) assertion could have arisen from the possibility that the current study was conducted in mainly day schools where students go to school on daily basis and therefore come with those substances any time they desire to bring them at school. On the other hand, the study results to some extent agree with Kacwamu (2010) that resident students rely on non-residents (day scholars) to obtain psychoactive substances. Again, this study confirms findings reported by Kacwamu (2010) that school surroundings play a big role in adolescent substance use.

There is also a notable partial disagreement of the present study results and other reports from previous studies. While UYDEL (2008) revealed that school canteens and non-teaching staff are conduits for psychoactive substances in schools, the current study does not allude to that. For all the 12 FGDs, means of access as being canteens and non-teaching staff (except for watchmen) were not mentioned. I may not conclusively assume that the difference in those revelations means that students in public schools in Uganda do not obtain substances through those means. Rather, I could attribute the results to the approach used by the present study. For the present study, only (a limited number of) prefects were included in FGDs, and it would be asserted that student-leaders might not often interact with support staff and people operating canteens in those schools. The study results however to lesser degree partially confirm some of the previously cited findings that school adolescents obtain substances via security guards and some of the teachers.
IMPLICATION TO RESEARCH AND PRACTICE

The present study findings call for an integrated approach in prevention of substance use among students in schools. It is observed from the study that while designing monitoring and prevention scheme for drug use, school neighborhoods are to be brought on board. Specifically, involving business owners in school proximities could yield better substance use intervention results.

CONCLUSIONS

This study underscores the role of businesses in school neighborhoods in encouraging substance use among students in public schools in Uganda. The study underpins small and big shops around schools as being equally responsible for supply and perhaps sustaining use of particular substances in schools. It was established that students employ a variety of means and strategies to obtain psychoactive substances, and students to a greater extent escape from school to access the substances.

FURTHER RESEARCH

A more comprehensive study could examine the role of school environments in psychoactive substance use among students and design a model to limit students in schools from accessing substances.

REFERENCES


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