Qeios PEER-APPROVED

v1: 11 December 2024

Research Article

Will You Tell? Factors Influencing Peer Reporting of Illicit Substance Use: A MixedMethods Study

Peer-approved: 11 December 2024

© The Author(s) 2024. This is an Open Access article under the CC BY 4.0 license.

Qeios, Vol. 6 (2024) ISSN: 2632-3834 Taiwo Opekitan Afe¹, Oluwatoyin Adetutu Fasesan², Bamidele Sanya Osalusi¹, Ayotunde Oladunni Ale¹, Olawale Ogunsemi¹

1. Olabisi Onabanjo University, Nigeria; 2. Babcock University, Nigeria

Reporting of peers who abuse illicit substances has potential benefits for early intervention. The study focused on factors affecting peers' reporting of illicit drug use to others.

We adopted a mixed-methods study design. We interviewed 57 students attending a community youth mentorship centre. A hypothetical scenario was presented to elicit responses to a yes-or-no option. Appropriate bivariate analyses were used for descriptive statistics. We used R programming to perform LASSO regression to identify significant predictors of peer disclosure. A larger proportion of respondents opted not to report (56%, n = 32). Females had a higher rate of reporting compared to males (68% vs 32%). Other sociovariables such as family history of substance use and history of use were not significantly associated with the tendency to report. The major reasons for non-reporting were the fear of potential consequences and the fear of hurting the feelings of the peer. The mother was most favoured for reporting. The significant predictor of reporting of substance use to others was related to the perception of closeness of the relationship to the peer (Estimate = 1.32, 95%Cl = 0.04, 2.73). There is a need to encourage massive public enlightenment and educational programmes on peer reporting among adolescents and young adults who take illicit substances.

Corresponding author: Taiwo Opekitan Afe, taiwoafe@oouagoiwoye.edu.ng

Introduction

Adolescents and young adults are susceptible to substance use^{[1][2]}. The tendency for risky behaviour and negative, health-destroying habits is higher at this stage of life^[3].

Experimentation with substance use usually starts during this period. It is largely influenced by peer pressure or influences [4][5].

Substance use includes both legal and illegal psychoactive drugs or chemical substances. The list of substances keeps expanding with improvements in drug processes and innovations. The list includes legal or socially acceptable substances such as alcohol and nicotine, as well as other psychoactive or mind-altering substances like LSD, marijuana, amphetamines, opium, and opiates.

A combination of factors makes young adults and adolescents vulnerable to substance use. It involves a combination of biological, psychological, and social factors [6][7][8]. Social factors have been postulated to exert influence on the susceptibility of adolescents and

young adults to risky behaviour and substance use^[8]. Adolescents are very sensitive to social cues. They tend to adopt social behaviour in consonance with the social context and peer influences or pressure^{[9][10]}.

In addressing substance use among adolescents, disclosure is very important in early intervention, and recovery[11]. management. rehabilitation. Disclosure also encourages the active participation of parents or caregivers in therapy $\frac{[12]}{}$. Disclosure can be advantageous in several aspects of substance use[13][14]. However, voluntary self-disclosure is not easy when it concerns illicit drug use. Engagement with illicit substance use is often hidden from parents, teachers, or other authority figures. In such situations, voluntary self-disclosure is not always the norm. Research has shown that self-reports of substance use or illicit drug use do not often correlate with objective laboratory findings[13]). It has also been noted that rates of disclosure of substance use in clinical settings are usually low^[13]. Reluctance to voluntarily disclose substance use limits accurate prevalence estimates and the potential for quick recovery. Adolescents face a lot of barriers to voluntary self-reporting to parental or authority figures, or to the clinician. One such barrier is the fear of parental or authority reprimands and possible public stigmatization of their habit $\frac{[15]}{}$. In countries where legal prohibitions are operative, substance use disclosure may also mean being in trouble with the law.

There are many strategies that have been proposed with the aim of increasing the rate of voluntary reporting of substance use^[14]. Some studies have proposed strategies to improve self-disclosure or reporting, such as improving parental relations with youths, reducing threats of stigmatization, backlash, and anticipated disapproval of such actions^{[15][16]}. The role of peer reporting in aiding disclosure is relatively understudied.

Peers may often be the first to know about an adolescent's use of illicit substances due to several factors. One such factor is the strong desire to adopt peer group behavior when pairing up due to peer influences or pressure, or in order to "fit in" [17].

Further, adolescents and young adults who take illicit substances are more likely to pair up with youths who also take substances. It is like the old saying, "show me your friends and I will tell you who you are".

The factors affecting peer reporting and feelings of peers about reporting their fellows are relatively understudied. Literature is scant on peer disclosure about other peers who use substances. The gap in knowledge may make efforts at early intervention difficult, and it does not encourage the useful role of peers in substance use prevention and recovery. Positive peer participation and observation may help in stemming the tide of illicit substance use. A way to steer this participation is by understanding the factors that influence reporting.

Our aim was to fill the gap in research by examining the factors that affect peer reporting of substance use by peers to others. We also aimed at focusing on perceptions of friendship with peers who take illicit substances and recommending ways of navigating them for positive change.

Methodology

Study Setting

The setting of the study was the Local Government Community Center in a suburban community, Magboro, located in the Southwest region of Nigeria. The Community Centre is run by a non-governmental organisation. The Centre runs academic, counselling, and mentorship services for youths within that area. The students undergo training in leadership skills and various academic courses to enhance their suitability for university admission and leadership positions in the future. The minimum age for enrollment is 12. The Centre has a capacity for 70 students. The classes were held during the Christmas holidays, which are usually a three-month break from regular schooling.

Study Design, Study Procedure, Sample Size Calculation, and Participant Recruitment

The study design was a descriptive, cross-sectional survey. The study was conducted between November 2023 and February 2024. Ethical approval was obtained from the Centre's Board of Governors after a review of the protocol and from the Internal Review Board of the University Institution. The first stage in the recruitment process was informing the parents and guardians via a written proposal detailing the research objectives, how it would be conducted, and assurances on anonymity and the use of the collected data. Subsequently, a conference of parents and caregivers was convened to discuss the research and answer questions. Thereafter, information was passed to the parents and caregivers to obtain written consent for the research. All participants, especially those under the age of 18, were required to obtain written consent from their parents and caregivers. The students were also given information about the research objectives, and they were instructed to obtain their consent and parental or caregiver consent.

Sample Size Calculation

The sample size was calculated using the Yamane formula $\frac{[18]}{}$.

Yamane Formula for sample size = n = N/1+ (N (e2))

Where

- n = desired sample size
- N = population = 60 (assuming at most 85% capacity)
- e = margin of error at 5%,

hence

- n = 60/1+(60 * 0.052) = 52.2
- n = 52

Before the actual commencement of the study, willing respondents who had signed the consent for approval were invited to a brief informative session. The session was used to re-educate the respondents about the purpose of the study, and we also answered questions and made clarifications about the study. The session was brief, and information was given regarding the purpose of the research and reassurances of anonymity. Each potential respondent was assigned a number based on their enrollment number at the centre. Using a computer-generated number sequence, we were able to randomly select respondents for inclusion in the study.

Study Procedure and Study Instruments

We adopted a mixed-methods approach using the embedded design technique. The study instrument consisted of a semi-structured questionnaire that had both closed-ended and open-ended questions. The questionnaire construct was designed after a focus group discussion with the research team, which was made up of mental health counsellors and those who have worked on adolescent substance use research. We created a scenario involving a colleague who is known to take illicit substances or a set of substances. We decided to exclude alcohol and nicotine, as they are legal in the country. The scenario was framed this way, "If you are aware that a colleague of yours takes hard drugs or illicit substances, will you report it to others?". The response choices were limited to "yes" or "no."

The open-ended questions were: 1) If you decide to tell, why would you tell? (For respondents who chose to tell), 2) If you decide not to tell, why would you not tell? (for respondents who decide not to tell.), 3) Who will you likely tell? 4) Any reason for telling? 5) Are you likely to associate with him? (to understand feelings about stigmatising the individual.). Other sociodemographic information was obtained, and it included personal history of substance use, family history of substance use, type of parenting, age, and gender.

Mixed-method analysis

We concurrently collected most of the quantitative and qualitative data using the embedded design, which included both closed and open-ended questions. Occasionally, some opted for oral interviews to air their views. Interviews were conducted in private settings, and permissions for recording were requested from the respondents before recording.

The questions were standardised for all respondents, as stated above. We analysed the data sequentially, analysing the quantitative data first. Inductive qualitative analysis was used. Open coding was used to develop thematic units within the data. The authors did not assume any pre-conceived theoretical basis at the outset.

We expressed socio-demographic results in frequencies and percentages and performed other quantitative descriptive data analyses using the R programming language. R and RStudio version 4.3.2 were used with loaded packages such as gt, summary, boot, dplyr, MASS, tidyverse, chi-square analysis, and glmnet packages. Appropriate bivariate quantitative analysis and test statistics were used for tabulations of responses with the independent variable (will you tell?). Variables such as age, gender, religion, family type, history of substance use, and family history of substance use were also computed in the quantitative analysis. The responses for this set of variables were in a two-point response format of either yes or no.

We loaded the "glmnet and MASS packages" to run the least absolute shrinkage and selection operator (LASSO) logistic regression using R. The LASSO regression was used to extract the significant predictors of disclosure of substance use by peers. The LASSO regression is particularly useful for variable selection and regularisation. It shrinks the coefficients to zero and thus helps enhance the prediction accuracy and interpretability of the statistical model. Crossvalidation was used to determine the optimal value of the regularisation parameter (lambda). The coefficients

from the final LASSO model were extracted to identify which predictors were non-zero coefficients to be included in the model.

Ethical Considerations

As noted earlier, ethical approval was obtained, and approval was also obtained. All respondents were asked to seek permission through a signed written consent from their parents or caregivers, inclusive of adolescents aged 18 years and above. Written consent was also obtained from the respondents. Anonymity of the responses was ensured, and pre-information about the purpose, use, and storage of the collected data was explained.

Results

The number of willing respondents to the study was 59. After the listwise deletion of data was done in relation

to a minimum of two missing variables (including age and gender) and the cleaning of the data was done, 57 respondents out of 59 were suitable for quantitative and qualitative analysis.

1. Socio-demographic Characteristics

The ages of the respondents ranged between 13–22, the median age was 16, and the median interquartile range was 15 and 17. There was a slightly larger proportion of females (51%, n=30) among the respondents. The majority were from families with both parents (N=33, 58%), and about a third reported a family history of substance use by a family member (32%, n= 18). About a fifth reported a history of personal use (n=12, 21%). More than half of the respondents opted for not reporting on their peers (56%, n= 32). The demographics and other social variables are shown in Table 1.

Characteristics	Frequency n(%)
Age	
13-17	48 (84%)
18-22	9 (16%)
Gender	
Males	27 (47%)
Females	30 (53%)
Religion	
Christian	49 (86%)
Islam	7 (12%)
Others	1 (2%)
Family Type	
Both Parents	33 (58%)
Single Parents	24 (42%)
Personal History of Use of Substances	
Yes	12 (21%)
No	35 (79%)
Family History of Use	
Yes	18 (32%)
No	39 (68%)

Table 1. Socio-demographic characteristics of respondents (N=57)

2. Reporting behaviour and socio-demographic characteristics of Respondents

The socio-demographic characteristics of respondents and the relationship with disclosure responses are shown in Table 2. As indicated in Table 2, gender and closeness to peers were significantly associated with positive disclosure behaviour (yes). Females had significantly higher rates of reporting to others (68%, n=17) than males, with a significant level of p=0.004, χ^2 .= 0.09. The closeness to the peer was significantly associated with telling of the incident to others (Yes), χ^2 = 0.09, p=0.010.

Characteristics	Will you tell? No n=32	95% Cl1	Will You Tell? Yes n=25	95% Cl	pvalue ²
Age group					0.3
≤ 17	7 (22%)	9.9%, 40%	2 (8.0%)	1.4%, 28%	
≥18	25 (78%)	60%, 90%	23 (92.0%)	72%, 99%	
Gender					0.040*
Female	13 (41%)	24%, 59%	17 (68%)	46%, 84%	
Male	19 (59%)	41%, 76%	8 (32%)	16%, 54%	
Religion					0.5
Christian	26 (81%)	63%, 92%	23 (92%)	72%, 99%	
Islam	5 (16%)	5.9%, 34%	2 (8.0%)	1.4%, 28%	
Others	1 (3.1%)	0.16%, 18%	0 (0%)	0.00%, 17%	
Family type					0.4
Both Parents	20 (63%)	44%, 78%	13 (52%)	32%, 72%	
Single Parents	12 (38%)	22%, 56%	12 (48%)	28%, 68%	
Personal History of Use of Substances					0.9
Yes	7 (22%)	9.9%, 40%	5 (20%)	7.6%, 41%	
No	25 (78%)	62%, 91%	20 (80%)	66%, 94%	
Family History of Use					0.04
Yes	7 (22%)	9.9%, 40%	11 (44%)	25%, 65%	
No					
If close	20 (63%)	44%, 78%	23 (92%)	72%, 99%	
Declined to respond: 14					
	NI (0	· · · · · · · · · · · · · · · · · · ·			

N (%)

1. CI = Confidence Interval

2. Fisher's exact test; Pearson's Chi-squared test

Table 2. Socio- demographic variables, and pattern of Participant's responses to Will you Tell? (N=57)

3. Predictors of Reporting of Illicit Substance Use (Telling)

In Table 3, the Least Absolute Shrinkage and Selection Operator (LASSO) regression results for predictors selected by LASSO are presented. The predictor variables used included age, gender, religion, family type, personal history of substance use, and family history of substance use.

The non-zero coefficients were age, gender, family history of substance use, and closeness to the peer.

The estimates and confidence intervals are as shown in Table 3. The significant predictor was closeness to the peer (Estimate = 1.32, 95%Cl = 0.04, 2.73). Other potential predictors included younger age, family history of substance use (estimate = 1.11, 95%Cl=0.00, 2.85), family history of substance use (estimate = 1.110, 95%Cl= 0.00,2.26), younger age (\leq 17, estimate=

1.11,95%Cl=0.00,2.85), and gender (males, estimate = significant (B = -1.170, p < 0.001). p =0.00" Table is as -0.58, 95\%Cl= -1.67, 0.00). The intercept is also shown in Table 3.

Predictor	Estimate	95% CI Lower	95% CI Upper
Agegroup (age ≤ 17)	1.11	0.00	2.85
Gender (male)	-0.58	-1.67	0.00
Religion (islam)	0.00	-2.15	0.00
Religion (others)	0.00	-1.86	0.00
Family Type (Single Parent)	0.00	-0.47	0.84
If close to the peer (yes)	1.32	0.04	2.73
Family History of Substance Use (yes)	0.76	0.00	2.26
History of Use (yes)	0.00	-1.14	0.50

Table 3. Lasso Regression Coefficients Predicting Disclosure of Illicit drug Use

4. Reasons for Reporting [Why I Will Tell]

Table 4 shows the subthemes (thematic units) for the reasons some opted for telling (reporting). The reasons are:

1. The desire to help the peer

The most frequently reported statements were centred on helping the person. We particularly noted phrases such as "I want to help the person stop taking the substance because it will kill the person", or "I will tell in order to save the individual", or "If I don't tell, the peer will destroy his or her life and not fulfil his dreams", "I need to help the person because if I don't tell, the peer will not be able to stop it." We observed a sense of sympathy in phrases such as, "I want to help the peer stop taking the illicit substance'. Also, expressions such as "If I don't tell, the peer will destroy his life and not fulfil his dreams," may reflect an altruistic attitude towards helping peers. A respondent further went on to say that he would rather disclose to a psychiatrist or therapist in order to seek medical help for the individual. A unique perspective for opting to disclose was for moral and religious reasons, as a respondent wrote in these words: "As a Christian, it is morally the right thing to do, to save his soul, and of course it is always good to do the right thing for God."

2. <u>To protect society and collective action</u>

The second most frequent reason was to protect the spread of such habits within society. Phrases such as "If

I don't tell, the individual will corrupt the community." or "The peer will make other people take these substances," "I will tell them to protect the community." These phrases pinpoint a belief about the unwholesome influences illicit substance use has in the community and the need to feel concerned about it beyond the individual's rights.

One of our respondents said: "I will tell, so that everyone will help him.". This shows a concern about the need for collective action and responsibility. A particular respondent wrote, "I will disclose because older ones can help the individual." This is reflective of the need to speak, due to the opportunity for older people within the community to take action. These statements show that a compelling reason for them to disclose is that the use of substances should be a collective responsibility.

3. To face the legal consequences

Few respondents based their decision to disclose on the perception that the act is illegal and the authorities need to be aware of such acts or that the authorities should prosecute the individual in question. A lady wrote that she will inform the police to arrest the individual; another further reasoned that he will secretly inform the institution that is in charge of drugrelated offences (the National Drug Law and Enforcement Agency) to arrest the peer for disciplinary action.

4. Who will they likely report to?

Family members of the individual (If known)

The majority of the peers who opted for disclosure believe that telling close family members is the most preferred way of disclosing to others. Telling the father and other siblings was far less frequently mentioned. A larger proportion (33.4%) of respondents reported that the person's mother would be preferred over all the family members as she would listen more. Some respondents reasoned that the person's mother would be easier to approach and reasonably more willing to lend a listening ear. Others reasoned that the mother would be the easiest due to a more likely friendly and understanding disposition. As one respondent stated, "the mother of the individual will be more approachable than any other family problem." Some respondents feel that telling the mother will not be associated with a negative perception of the discloser, as stated: "the mother will not take the disclosure as trying to damage him."

Friends were also frequently mentioned, although less commonly than family members. Reportedly, some of these respondents were more comfortable disclosing to a friend. In the words of one of those interviewed, a mutual friend will be able to keep the secret and may still help. Some others who said they would disclose to friends reasoned that friends tend to be closer, can act in an advisory capacity, and take more discreet ways to ensure positive action.

The Authorities

A considerable number preferred to inform the authorities as their first point of disclosure. They feel that these government agencies, such as the NDLEA and the police, are better suited to deal with the illegal behaviour. A small proportion of the respondents believe that since it is a criminal activity, it should be disclosed to these legal authorities. Others aired their

views that the use of illicit substances is associated with other criminal activity, as that use, in the writeup of an 18-year-old male: "Once they start taking these "igbo" (cannabis) or hard drugs, they have started doing bad things like yahoo, yahoo (internet fraudster)."

The Professional Support

Professionals involved in managing mental health matters involving substance use, such as psychiatrists, doctors, and psychologists, were mentioned by some peers. Their view is that the professionals would be best suited to provide much-needed psychological and medical help.

Teachers

Teachers were also mentioned; one respondent said, 'My teacher can easily talk to the peer, and he would change'.

My own family members

For some of our respondents, disclosure will be to their own mothers. "I will report the person to my mom for advice" or "I will rather go home and report to my parents" were phrases commonly used. It reflected a need to seek advice from their primary source of support and comfort in dealing with peer disclosure involving illicit substance use.

Our findings seem to suggest that the pattern of peer disclosure to others is influenced by beliefs and perceptions of substance use behaviour, perceptions of the discloser, and readiness to help. Others view the need to disclose in order to protect the community and generate collective action to help the person and seek professional assistance from therapists and teachers, while a minority believe that disclosure is important because of the perception of criminality and that the authorities should take action. Relatively few would rather resort to their own family for advice on what to do.

Themes	N(%)
1. To help the Peer	18(72%)
2. Protect the Society and Collectively act	4(16%)
3. To Face legal Consequences	3(12%)

Table 4. Reasons for Reporting (Why I will Tell) N= 25

5. Reasons for Not Reporting: (Why I will not Tell?)

Table 5 shows the thematic units for not reporting (non-disclosure) as detailed below.

1. Fear of getting into trouble

The larger number of our respondents were afraid to disclose information about their peers if aware of their use of illicit substances because of the fear of repercussions that could result from such actions. Expressions such as, "If I tell, the person might mark me down," "I may get involved in cult retaliation," "The person may beat me up," "I may be a target," reflect this fear. There are many other statements that also express a similar fear for personal safety or the negative social consequences that such disclosure will bring. Another fear is that if the authorities get to know, the disclosure may make them suspects too. A 15-year-old male wrote that "if they investigate, they will pick us all up." The fear of being associated with someone involved in substance use suggests a fear of potential retaliation or harm if they disclose. This fear may stem from a lack of trust in authority figures. As said succinctly by a respondent, "if I disclose, some would say that I am involved with the habit, especially the Police."

2. Fear of hurting the person

A large percentage of the study respondents based their reasons for not disclosing on a fear of hurting the individual emotionally and socially. They feel that more value should be placed on the relationship than on disclosing the illicit use of substances. In many responses, an often-repeated phrase was "I don't want to hurt the person." It reflects a concern for the emotional impact that the pain of disclosure will have on that individual. A few respondents said that, especially if he is close to them, they would rather not

tell others, as it may hurt their friendship forever. Some feel that telling on the person might "make him a topic for gossip (or rumours), which will affect him badly." Another phrase was "If I tell, people will spoil the peer's reputation."

3. Respect for Privacy and Autonomy

Phrases like "it is purely the person's business" and "what concerns me," "it is the person's problem," suggest a belief in respecting the autonomy and choices of others. They are responses that show that it's not their right to intervene in their peer's behaviour unless the peer themselves chooses to seek help or make changes. It reflects an ethical dilemma in giving respect to the individual and non-interference with an individual's freedom of choice and their rights.

4. Fear of being perceived as a snitch

The fear of becoming a snitch was one of the reasons why some of our respondents decided not to tell. They felt that many of their peers would view them as betrayers, which would potentially embarrass them before others.

5. Preferential Approach to Support

The statement "I will rather counsel the person about drug abuse and its disadvantages" indicates a preference for a supportive and educational approach to addressing the issue and not putting the peer to shame by escalating it. These views expand on the belief that providing guidance and education to their peers about the risks and consequences of substance use is a more effective way to help them than disclosing their behaviour to others. In further support of this opinion, a respondent said that when the admonition is secretly given, the person is more likely to change.

6. There is nothing wrong with it

Some respondents feel that taking substances is not a bad habit. Someone wrote that there is "nothing bad in this habit, so I don't need to tell others." They feel that it

would be wrong to blame those who choose to use substances, as long as they are doing so responsibly and not causing harm to themselves or others, such as peers, since the peer has done nothing bad.

Themes	
1. To avoid potential trouble	18(56%)
2. Avoid hurting the Peer	6(19%)
3. Respect for Individual 's Right	3(9.4%)
4. Labelling (e.g. Snitch)	3(9.4%)
5. Offering Personal Support	2(6.2%)

Table 5. Reasons for Non-Reporting (Why I will not Tell) (N=32)

6. Responses to the Questions: Can you still be a Friend to that Person?

The majority were positive about the continuation of the friendship. The reasons given are categorised below:

1. Reasons for Yes responses

To help him, to show empathy, and to influence change

Many of the study respondents wrote that they would continue the friendship in order to help him, with phrases like "friends are supposed to help each other" and "I will want to keep advising him." One respondent wrote, "I will be able to associate with the person, so that influence of bad association will not be there," or, like another, "to help the person and be warning the person always." These views, variously expressed, show a strong belief in the positive influence of friendship and peer grouping despite substance use.

Sense of comradeship, loyalty, and Personal Duty

The sense of comradeship, loyalty, and bonding was also shown in the themes across various responses that were given for the continuation of friendship. Phrases like "friends are meant to stick together," "as a true friend, it is my duty to support him," or phrases like "true friends remain true friends," and "if anything happens to him, I would blame myself" reflect a sense of personal duty to peers. We also heard phrases such as "Everyone deserves a second chance." A respondent further wrote that he will continue because, "I may need the person another day."

Willing to be friends on conditions

Some of the themes highlighted conditional friendships based on the prospects of change. Expressions such as "I will be willing only if the person is willing to change" or "yes, if the person deliberately changes" or "if the person heeds my advice" highlight the continuation if there is a willingness to change.

2. <u>Reasons for the Discontinuation of Friendships</u>

It is impossible to change

Some respondents feel that when such people start the habit of using illicit substances, they will be resistant to change and spiral downward. We read statements such as "When it is started, it will be impossible to change or stop" and "I cannot influence them anymore." When asked if she would still want to maintain friendship with the person, a 14-year-old female respondent replied, "No, because the person cannot heed my advice."

Fear of being badly influenced

Some of the respondents said that they would not consider being friends because of the possibility of being influenced to join the habit. Some examples of phrases that express such reasons are; "No, the person will make me take these things," "I don't want to be influenced," "The person will force me to take drugs."

Reputation and Perception

A proportion of those who reported that they would discontinue the relationship were of the opinion that they may be negatively viewed in the public eye, with phrases such as "I will be seen as a drug addict," or "people will think that we are the same." Another reply

was "No I would not, I will have a bad reputation and get influenced."

Discussion

The responses to our research question, "Will you tell?" in the hypothetical scenario were predominantly in favour of not reporting or non-disclosure. It reveals a general tendency to keep quiet and not disclose illicit drug use among peers. Hence, the majority of the respondents preferred to avoid disclosing to others who might intervene early. A propelling reason is the fear of repercussions. The fear is that the discloser or reporter may be subject to stigma, ridicule, name-calling, some form of ostracism from friends, or, at worst, violent or deadly retributions. Culturally, the disclosure of illicit substance use attracts social stigmatization for individuals and families [19]. The reluctance to disclose may be reflective of these consequences. Another reason is the fear of destroying the peer relationship and keeping the individual protected within the peer group. Additionally, a sense of keeping the matter private and non-interference with private matters were also minor themes that limit reporting to others by peers. Disclosure of illicit drug use can potentially lead to negative and stigmatising consequences [11]. The fear of these anticipated negative consequences plays a major role in ensuring a continued culture of silence around illicit drug or substance use. Research on adolescent self-disclosure to parents is influenced by some factors, which include fear of reprimand for the disclosure and the perception of the problem as either within their own private matters or the likelihood of being discovered[20].

In contrast, peers who chose to disclose or report were motivated by the need to render help via disclosure. It was also expressed as a concern for early intervention, a way of galvanizing a community-based approach, and rendering help in such a way as not to publicly shame the peer.

For a few of our respondents, reporting should be taken up as a legal duty or religious obligation, as these peers should be viewed as criminals or sinners who either need the force of the law, community reprimand, or godly intervention. These views mirror their perceptions of substance or illicit drug users.

A higher percentage preferred to report to close family members of the peer, especially the mother. There were two major discernible lines of reasoning gathered from further responses on the subject. Firstly, there was a need to have a non-judgmental, kind, and trusted view of the discloser and the person receiving the information, and to treat the peer with kindness, compassion, and privacy. The mother in any family seems to fit that desirable character.

Overwhelmingly, as shown by the results, the majority would not want to discontinue the friendship regardless of the use of illicit drugs or substances by a peer. These views seemed to project a need for comradeship, loyalty, and not letting up on friendship if close to a peer. Among many young adults and adolescents, the use of illicit substances does not invalidate the social qualities they admire and are open to a close relationship with such persons, as previous research highlighted [21].

Potential predictors for disclosure were age \leq 17, females, and those with a family history of substance use. Our respondents in the younger age group (less than 18 years) were more likely to opt for reporting in the case scenario.

Females in our study had a higher rate of disclosure than males. Previous research has reported that females report more in early adolescence than males [22]. Females may place more importance on how they are perceived in a patriarchal society and hold on to traditional or conservative values regarding substance use. [23][24] These values may have played a role in the larger number of females opting for reporting substance use by peers.

A family history of substance use is also a potential predictor of reporting illicit substance use by peers. Family history of substance use is a known risk factor for adolescent substance use, and this places a lot of emotional stress on other family members [25]. We did not explore the reason behind this relationship; in our opinion, the firsthand experience and stress of having a family member take substances can be a possible motive for those with a family history to opt more for disclosure.

In our study, closeness to the peer was the only significant predictor of peer disclosure of illicit substance use. Many of the youths and young adults in our study were willing to continue the friendship. It may be reflective of the values they place on bonding and comradeship. Peer bonding can exert positive peer influences, which can be used to motivate public enlightenment on substance use. Conversely, research has found that friendship networks that are close are also factors that can maintain the continuation of illicit substance use^[26]. In adolescents, the degree of closeness to friends is critical to disclosure.

As our study showed, peer disclosure of illicit drug use is not the norm. It is affected by several issues

surrounding peer closeness and beliefs about the resultant effect on friendship, bonding, and the reaction of the person receiving the information. There is a need to create deliberate public education in secondary schools, encouraging disclosure without punitive results, and ensuring confidentiality. We are of the opinion that establishing youth complaints and counselling centres where skilled teachers and therapists can work with teens and young adults to encourage young adults and adolescents to report illicit substance use and assurance of protection is essential. We need to encourage authority figures in Nigeria to be more friendly in their disposition in order to help these youths who take illicit drugs or wish to disclose such acts by peers.

Conclusion

Our study explored issues affecting the reporting of illicit substance use of peers by young adults. Our findings show that peers opted more for not reporting. A significant predictor of peer reporting is the closeness to the peer. The fear of hurting the peer and the perceived potential negative consequences of such action served as challenges to reporting. Peers who opted for disclosure did so due to the desire to help the individual and the community. More public enlightenment is needed to encourage reporting, and non-governmental agencies should endeavour to create report centres similar to centres handling sexual abuse to enable seamless reporting of youths who indulge in illicit substance use.

Limitation

Our sample size was small, and projections cannot be generally made from the results. Also, it was a single-centre study. The study design was a cross-sectional survey with a limited sample size. Although efforts were made to make the interviews anonymous, the responses are subject to the Hawthorne effect. The responses to hypothetical scenarios may not reflect real-life responses.

Statements and Declarations

Author's Contribution

- Taiwo Opekitan Afe: Conceptualization, methodology, drafting, statistical data analysis.
- Oluwatoyin Adetutu Fasesan: Contributed to drafting, development of the methodology, and conceptualization of the research.

- Bamidele Sanya Osalusi: Participated in the writing of the ethical proposal and corresponded with the TGT Community Center for IRB approval.
- Ayotunde Oladunni Ale: Contributed to the revision of the draft manuscript, provided ideas for the methodology, and supervised the oral interviews.
- Olawale Ogunsemi: Contributed to data analysis, supervised the entire methodology, provided input in writing, and revised the draft manuscript.

Ethics Approval

The Board of Governors of the TGT Community Centre approved the study protocol on 12th April 2024 (TGT/BOG/4/2024).

The study is part of an ongoing research project approved by the University on a community survey of substance use.

Patient Consent

Parental and guardian consent was obtained for all participants, including those under 18.

Data Availability

The data that support the findings of this study are available upon request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Conflict of Interest

No conflicts of interest were disclosed by the authors.

Funding

No funding sources were declared.

Acknowledgments

We would like to acknowledge Mr. James Osinubi for his support as a research assistant.

References

- △Gray KM, Squeglia LM (2018). "Research Review: Wh at have we learned about adolescent substance use?" J ournal of Child Psychology and Psychiatry. 59(6):618-627.
- △Laursen B, Faur S (2022). "What does it mean to be s usceptible to influence? A brief primer on peer confor mity and developmental changes that affect it". Intern ational Journal of Behavioral Development. 46(3):222 -237.

- 3. △Jackson C, Sweeting H, Haw S (2012). "Clustering of s ubstance use and sexual risk behaviour in adolescenc e: analysis of two cohort studies". BMJ open. 2(1):e000 661.
- 4. ≜Austic EA (2015). "Peak ages of risk for starting non medical use of prescription stimulants". Drug and alco hol dependence. 152:224-229.
- Derefinko KJ, Charnigo RJ, Peters JR, Adams ZW, Milic h R, Lynam DR (2016). "Substance use trajectories fro m early adolescence through the transition to college". Journal of studies on alcohol and drugs. 77(6):924-935.
- 6. △Rahal D, Shirtcliff EA, Fuligni A, Kogut K, Gonzales N, Johnson M, Deardorff J (2023). "Dampened psychobiol ogical responses to stress and substance use in adolesc ence". Development and psychopathology. 35(3):1497-1 514.
- 7. △Lloyd C (1998). "Risk factors for problem drug use: ide ntifying vulnerable groups". Drugs: education, prevent ion and policy. 5(3):217-232.
- 8. ^{a, b}Trucco EM (2020). "A review of psychosocial factor s linked to adolescent substance use". Pharmacology B iochemistry and Behavior. 196:1729.
- 9. [△]Keyzers A, Lee SK, Dworkin J (2020). "Peer pressure a nd substance use in emerging adulthood: A latent prof ile analysis". Substance use & misuse. 55(10):1716-1723.
- 10. ^Tomova, L., Andrews, J. L., & Blakemore, S. J. (2021). The importance of belonging and the avoidance of social risk taking in adolescence. Developmental Review, 61, 100981. https://doi.org/10.1016/j.dr.2021.100981
- 11. ^{a, b}Earnshaw VA, Bogart LM, Menino DD, Kelly JF, Cha udoir SR, Reed NM, Levy S (2019). "Disclosure, stigma, and social support among young people receiving trea tment for substance use disorders and their caregivers: A qualitative analysis". International Journal of Menta l Health and Addiction. Dec;17:1535-49.
- 12. ATalluri, S., & Corrigan, P. (2022). The benefits of disclosure. The Stigma of substance use disorders, 180-192
- 13. a, b, cGryczynski J, Mitchell SG, Schwartz RP, Kelly SM, Dušek K, Monico L, Hosler C (2019). "Disclosure of adol escent substance use in primary care: Comparison of r outine clinical screening and anonymous research int erviews". Journal of Adolescent Health. 64(4):541-543.
- 14. ^{a, b}Clapp L, Conner S, Fonseca D, Jones C, Williams M, Buer LM (2021). "Appreciating contributions more tha n celebrating resilience: Reflections on the disclosure o f substance use in Appalachia". International Journal o f Drug Policy. 2021 Dec 1;98:103277.
- 15. ^{a, b}Korchmaros JD, Murphy S, Greene A (2024). "Effecti veness of The Seven Challenges® for adults: It's not ju st because of self-disclosure". Journal of Social Work Pr

- actice in the Addictions. 1–19. doi:10.1080/1533256X.20 23.2301706.
- 16. △Grekin ER, Thomas HA, Ondersma SJ (2024). "Testin g the efficacy of narrator empathy, self-disclosure, gen der, and use of brief motivational interviewing techniq ues in a brief internet-based intervention for alcohol u se". Psychology of Addictive Behaviors.
- 17. [△]Hoffman BR, Monge PR, Chou CP, Valente TW (200 7). "Perceived peer influence and peer selection on ado lescent smoking". Addictive behaviors. 32(8):1546-155 4.
- 18. [△]Louangrath, P. (2017). Minimum sample size method based on survey scales. International Journal of Research Methodology and Social Sciences, 3(3), 44-52.
- 19. [△]Ha NT, Dauda AI, Dadem PP, Hannah E, Nyong UE. F amily and stigmatization: coping experience of person s with substance use disorders in North Central Nigeri a. Eur J Med Health Res. 2024;2(1):95-101.
- 20. [△]Hunter SB, Barber BK, Olsen JA, McNeely CA, Bose K (2011). "Adolescents' self-disclosure to parents across c ultures: Who discloses and why". Journal of Adolescent Research. 2011 Jul;26(4):447-78.
- 21. Afe T, Ogunsemi O, Ale A, Adeleye O (2020). "Dating p references and social attraction to substance users am ong college students in Nigeria". Gender and Behaviou r. 2020 Jun 1;18(2):15416-24.
- 22. Achen P, Jacobson KC (2012). "Developmental trajector ies of substance use from early adolescence to young a dulthood: gender and racial/ethnic differences". J Adol esc Health. 2012 Feb;50(2):154-63. doi:10.1016/j.jadohe alth.2011.05.013. PMID 22265111; PMCID PMC326490.
- 23. △Alhyas L, Al Ozaibi N, Elarabi H, El-Kashef A, Waniga ratne S, Almarzouqi A, Al Ghaferi H (2015). "Adolescen ts' perception of substance use and factors influencing its use: a qualitative study in Abu Dhabi". JRSM open. 6(2):2054270414567167.
- 24. △Giancola PR, Parker AM (2001). "A six-year prospective study of pathways toward drug use in adolescent boys with and without a family history of a substance use disorder". Journal of Studies on Alcohol. 2001 Mar;6 2(2):166-78.
- 25. [△]Charles NE, Mathias CW, Acheson A, Bray BC, Ryan S R, Lake SL, et al. Increased pre- and early-adolescent s tress in youth with a family history of substance use di sorder and early substance use initiation. J Youth Adol esc. 2015 Oct;44:1954-67.
- 26. [△]Kandel D, Davies M. Friendship networks, intimacy, a nd illicit drug use in young adulthood: a comparison o f two competing theories. Criminology. 1991 Aug;29(3): 441-69.

Declarations

Funding: No specific funding was received for this work.

Potential competing interests: No potential competing interests to declare.