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RESEARCH ARTICLE

Experience and Behaviour(s) of Students who use Nyaope Drug at a South African University

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Abstract:

Background:

The use of illicit drugs affects people globally. The use of nyaope (whonga) has been increasing in South Africa amongst the youth, especially university students. Its use is associated with a wide range of negative consequences, such as poor academic performance, theft, rape, risky sexual behaviours, and social dysfunctionality.

Aim:

This study sought to explore the self-reported experiences of students who use nyaope.

Setting:

The setting was the University of Limpopo.

Methods:

The health belief model (HBM) was used as a theoretical paradigm in this study. A qualitative research approach with a phenomenological, exploratory design was used. The researchers wanted to obtain first-hand in-depth information. The sample of six participants was purposively selected. Criteria of trustworthiness were used to ensure the rigour of the findings. Thematic analysis was used to analyse data. This study was conducted from 01 March 2019 to June 2019.

Results:

Four major themes emerged from the analysis, which were supported by existing evidence. The main themes that arose were reasons for nyaope use and excessive drug use were: Decline in mental and psychological well-being and Intentions to stop using nyaope. The sub-themes were: Peer pressure, Academic pressure, Decline in academic performance, Isolation from others, Discrimination by peers and others and Criminal activities.

Conclusion:

Participants reported experiencing a decline in academic performance, deteriorating relationships with others, poor physical and psychological well-being, behavioural changes and perceiving that they were discriminated against.

Keywords: Drug abuse, Peer pressure, Academic performance, Research stress, Drop out, Excessive drug abuse.

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1. INTRODUCTION

The use of illicit drugs affects people on a global scale and South African youth have a history of excessive substance use [1]. Drug consumption in South Africa is twice the global average and an estimated 15% of South Africans have a substance dependence problem [2]. According to Mokwena, the use of nyaope has been on the rise amongst university students [1]. These authors suggest that peer influence is one of the reasons why nyaope is popular. The drug is also known as whonga [1].

Perceptions of and knowledge about the use of different substances are important in understanding patterns of drug use [3]. The evidence suggests drug use is high in the younger generation, but knowledge about substance abuse is low. The high levels of consumption among students highlight the need

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for effective prevention and treatment interventions [1].

There are various risk factors for drug use, which range from personality to affect and problem behaviours. In addition to intrapersonal risk factors, there are also interpersonal risk factors such as peer pressure and lack of parental monitoring [4].

Perceptions towards marijuana are beginning to change (negatively) in society, due to the fact that it is the principal active ingredient used in nyaope, together with detergents, heroin and antiretroviral drugs, particularly efavirenz, and rat poison [5].

The use of illegal substances has been associated with a wide range of negative consequences, such as decreased academic performance, aggression, acquaintance rape, risky sexual behaviour(s) and social dysfunctionality [1, 6].

Youth with positive attitudes towards illicit drugs use nyaope more than their counterparts [7 - 13]. Nyaope is one of the 'cocktail' drugs commonly used in black townships and has been in circulation for more than ten years. It is worrying that many young people do not see any risk associated with illicit drug use [14, 15].

1.1. Effects of Illicit Drug use

Illicit drug use has been linked to several mental illnesses, such as schizophrenia, anxiety, and depression [16]. Nyaope is linked to the spread of HIV and AIDS in South Africa. There is a common practice among nyaope addicts called 'Bluetooth', where the person who is high transfers his/her blood to others using an injection. Nyaope abuse can thus increase the spread of bloodborne infections [17]. Young drug addicts engage in multiple partner relationships, and usually with no barrier to contraception [17].

Nyaope is very addictive and exposes people to muscle cramps, sporadic undefined illness, insomnia, mental illness, diarrhoea, and vomiting [15]. Young adults who started using nyaope at age 15 or younger were found to be more susceptible to developing psychotic disorders, and are more likely to experience delusional symptoms [18].

Drug abuse impairs academic performance and leads to university students dropping out [19 - 21]. Nyaope users tend to engage in socially undesirable behaviours. Most community members do not feel safe around nyaope users as their behaviour is unpredictable [22].

About 60% of all crimes in South Africa are committed by drug abusers, especially nyaope users [23, 24]. Nyaope addicts engage in criminal activities and even steal from family members in order to secure their daily 'fix'. [1, 24]

Illicit drug use is higher amongst the youth in developing countries [24]. In Africa, drug use is increasing, especially among university students, who take drugs to fit in with their peers [25]. The youth are exposed to illicit drugs and alcohol at an early age in many South African communities [26]. Most young adults' deaths in Gauteng province in 2017 were linked to illicit drug abuse [26].

The health belief model (HBM) was used as a theoretical paradigm to guide this study [7]. It was developed by Rosenstock *et al*. [8] to address the lack of robust models to screen for different health problems in the United States of America. The HBM is useful in preventing risk behaviours by encouraging individuals to engage in health-promoting behaviours [8, 9]. The HBM consists of six factors which are used to understand, explain, and predict behavioural change among individuals: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy [10].

1.2. Cues to Action

Cues to action are defined as the things which can trigger action and can be internal or external. Internal cues to action may include severe sickness or pain which then triggers someone to consider adopting health-promoting behaviours. External cues were which can promote behaviour change including the media and information from peers [11].

1.3. Self-efficacy

Self-efficacy refers to one's conviction that one can change current behaviour and adopt more health-promoting behaviours [9].

This study is concerned with scrutinising the available information and analysing the link between the various concepts of the HBM, namely perceived susceptibility, perceived barriers, perceived benefits, perceived self-efficacy and cues to action in the use of nyaope amongst students at the University of Limpopo.

Reasons for illicit drug use may include peer pressure, coping with stress, single parenting, unemployment and poverty, cultural and religious beliefs, drug availability and affordability.

In South Africa drugs such as marijuana and *nyaope* are 'cheap' and readily available. The chief cause of illicit drug use among the youth is easy availability and low cost. This perpetuates drug use among adolescents and young adults [12].

There is little qualitative research seeking to understand the reasons for and experiences of university students using nyaope. This study sought to explore the experiences and self-reported behaviours of students at the University of Limpopo who use nyaope.

2. RESEARCH METHODS

2.1. Research Design

A qualitative research approach with a phenomenological, exploratory design was used in this study because we sought to understand the self-reported behaviours of students.

2.2. Sampling

Snowball sampling was used. This sampling method involves identifying an initial participant who then helps the researchers to identify more participants by nominating other potential participants. This sampling method is ideal when participants are difficult to locate due to the sensitivity of the topic [27]. Using nyaope was considered a sensitive topic, and

pseudonyms were used. A student who used nyaope and was known to the researchers was the first participant.

The sample was drawn from undergraduate and postgraduate students at the University of Limpopo Turfloop Campus. The participants were recruited until data saturation was reached. There were 6 participants. There were no dropouts.

2.3. Data Collection

A semi-structured interview guide was used for the interviews. Interviews allow participants to get involved and voice their views with honesty and transparency [28].

The researchers used an audio recorder supplemented with field notes (for nonverbal cues). This approach is supported by Tessier, who argues that combining data collection tools is recommended to obtain quality responses [29].

Audio recordings were used with the participants' consent. The interviews took place in the privacy of the Psychology Department. LSM did the interviews. All researchers were available to assist the interviewer. Interviews were conducted in English, as this was the medium of instruction at the university. The interviews each lasted about an hour. A follow-up session of 15 minutes allowed the researchers to verify the veracity of the transcripts.

2.4. Data Analysis

Thematic content analysis was used for data analysis. This analysis was performed through the process of coding in six steps: familiarisation with the data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes as well as producing the final report [30].

2.5. Familiarisation with Data

The researchers were fully immersed and actively engaged in the data by first transcribing the interactions, thoroughly reading the transcripts, and listening to the recordings, as well as considering any observations recorded in field notes [31].

2.6. Generating Initial Codes

The second step was generating codes of meaningful information [31]. Followed by searching for themes among codes [31].

2.7. Reviewing Themes

This involved a deeper review of identified themes, as data within themes should correlate in a meaningful manner with the aims and objectives of the study. The next step was defining and naming themes followed by producing the final report

2.8. Trustworthiness

In order to ensure trustworthiness, credibility was ensured by prolonging the time spent collecting data and immersing themselves in the context of the participants for six months. Triangulation was ensured by the use of different data collection instruments, such as direct observations of body language, taking notes during the interviews and audio recordings.

Transferability was ensured by accurately describing the research context and assumptions of the research [31]. The researchers used thick descriptions by laying out the step-by-step process used from data collection to data analysis.

Dependability was ensured by discussing the research process with all of the participants and obtaining constructive feedback.

Confirmability was ensured by the researchers taking precautions to ensure that they reported findings which were consistent with the participant's accounts.

2.9. Ethical Considerations

Ethical clearance was obtained from Turfloop Research and Ethics Committee (TREC/11/ 2019:PG) and gatekeeper permission from the university registrar. Informed consent was obtained from all of the participants. Anonymity and confidentiality were ensured by withholding identifying information. Pseudonyms were used in the interview sessions and participants were referred to as Participant 1, Participant 2, and so on, following recommendations for ensuring trustworthiness [32]. The participants were offered counselling services if they experienced any emotional trauma as a result of participating in the study. The researchers were debriefed by the other researchers. Participation was voluntary. All ethical considerations of the guidelines of the Helsinki Declarations have been followed.

3. RESULTS

3.1. Demographic Characteristics

The 6 participants were all male students (Table **1**). No female nyaope users volunteered to participate.

Table 1. Demographic information of participants.

Participant	Gender	Age (years)	Ethnicity	Study Course	Year of Study
Participant 1	Male	22	Tswana	Bachelor of Education	3
Participant 2	Male	25	Tswana	Bachelor of Arts in Media Studies	4
Participant 3	Male	23	Venda	Bachelor of Science in Agriculture	2
Participant 4	Male	24	Zulu	Bachelor of Arts in Communication Studies	3
Participant 5	Male	21	Pedi	Bachelor of Science in Computer Science	2
Participant 6	Male	23	Pedi	Bachelor of Pharmacy	2

3.2. Themes that Emerged from the Data

The themes are presented in Table **2** followed by a brief description linked to the literature and the HBM. Four major themes and 6 sub-themes are presented.

Table 2. Themes.

Theme	Name of Theme	Sub-themes
1.	Reasons for Nyaope use: Feeling good This general theme reports why participants started using nyaope.	Sub-theme 1.1: Peer Pressure – participants wanted to fit in with their peers. Sub-theme 1.2: Academic pressure – the overwhelming amount of academic work was reported as a reason for taking nyaope (to relieve stress). Sub-theme 1.3: Decline in academic performance – the academic work of participants deteriorated because of using nyaope.
2.	(Excessive) Drug use – using nyaope 1 to 3 times daily.	
3.	A Decline in Mental and Psychological well-being – Participants have Deteriorating well-being.	Sub-theme 3.1: Isolation from others – because of nyaope use participants end up being isolated from family, friends, and peers. Sub-theme 3.2: Discrimination by Peers and others – perceptions of discrimination because of nyaope use. Sub-theme 3.3: Criminal Activities – engaging in crime to buy nyaope.
4.	Intentions to stop using nyaope – self-reported attempts to stop using the drug.	

3.3. Themes in Relation to the HBM

3.3.1. Theme 1: Reasons for Drug (Nyaope) use – feeling Good

The participants indicated that they used nyaope because of peer and academic pressure. None of the participants took responsibility for using nyaope. They sought external reasons for starting drug use rather than assuming personal accountability. This suggests that they lacked self-insight into their internal motivations for using the drug. They also reported taking it because it made them feel good. The following responses support the overall theme.

Participant 1: The high [from nyaope] lasts longer. I started trying this thing and indeed it was good. I felt good about it and that next morning I went and got another one and that's how I started.

Participant 5: I went to a party with friends and we came across this thing called nyaope. They said it was good…. and it was good.

In terms of the HBM, these responses suggest that the participants lack self-efficacy (self-confidence). Rosenstock *et al*. suggest that if an individual does not realise that he/she can change his/her behaviour to healthier behaviours, it is likely that they are not able to take responsibility for their actions, which suggests poor self-image and self-efficacy [9].

3.3.1.1. Sub-theme 1.1: Peer Pressure

Most participants indicated that they first started using nyaope because of pressure from their friends. They explained that this was because they wanted to fit into a peer group, and thus decided to use nyaope, as the excerpts below show.

Participant 1: I started using drugs in high school and I think it was mostly because of my peers. You know, I just wanted to find common ground with them. If I look back, I will say I wasn't very smart and to chill with the smart guys I resorted to using nyaope to fit in. I also did not think it would be a problem.

Participant 5: I started using because of my friends, peer pressure you know. I just went to ask for a taste, and then I went for it, and after that, I got hooked.

Participant 6: We started smoking cigarettes in primary school. As time went on, and we went to high school, we started smoking weed. This friend of mine took me to a party and they were smoking whonga (nyaope). It was good, and from then on I used it.

In terms of the HBM, participants did not think that using nyaope would be problematic in the long term. For instance, participant 1 did not see it as a problem and participant 6 stated that he felt good about it. This means that they did not realise the severity and long-term negative health consequences of it, thus they did not see a reason for changing their behaviour [9].

3.3.1.2. Sub-theme 1.2: Academic Stress

Academic stress was also reported as one of the reasons for using nyaope. Participants stated that they find academic work stressful and used the drug to cope.

Participant 2: Research, bro, research. It was beating me … even now it is still beating me. It's difficult and I have been failing. It's giving me stress [I use the drug to cope].

The participants did not realise the consequences of drug use on their health when they began drug use, so continue to use nyaope as a coping mechanism. This is supported by Monyakane, who reports that students take drugs to deal with stress, which is a negative coping mechanism [18]. This unhealthy coping strategy causes more stress, thus exacerbating the problem.

3.3.1.3. Sub-theme 1.3: Decline in Academic Performance

The participants indicated that they experienced a decline in their academic performance due to using nyaope. They indicated that they often missed classes, which negatively affected their grades. The following excerpts support this sub-theme:

Participant 2: After smoking, I just sleep; I don't have time to study. I have missed tests and don't attend class and like that.

Participant 3: I would say when I am not using nyaope I find it easier to study. When I use nyaope I guess it consumes too much of my time.

Participant 6: When I focus on drugs, I lose focus on other things. I must make sure I get it [nyaope]. Smoking it

doesn't work with academic things, they get neglected.

Substance abuse led to a decline in academic performance. This is supported by other research [1]. In terms of the HBM, our participants do not have the self-efficacy which would enable them to recognise, and do something about, their negative health behaviours [9].

3.3.2. Theme 2: Excessive Drug use

The participants' responses suggested they were dependent on nyaope and were frequent, heavy users. Their usage averaged from daily consumption of the drug to using it 3 or more times a day. The participants further indicated that they would sacrifice everything such as selling their belongings, to make sure that they had enough nyaope for the day. Some of the responses.

Participant 2: You see, if I get four bags in the morning, I use one. Then I go to sleep and I wake up around 12 and have another bag – after I eat something. I go back to sleep again and wake up at 5 and then eat something and have another bag. Sometimes I get another bag. I have difficulty sleeping if I don't have nyaope.

Participant 5: I would say that I use it [nyaope] four to five times a day – sometimes more than that [silence].

Participant 6: Now, you see, it is all I live for; food is not as important as this drug. I can get three bags a day if I manage to hustle enough money, 'cos these things [nyaope] are expensive. On average, I take it two to three times a day. I get sick if I don't get it.

This indicates that participants have substance dependence, as they indicate a continued pattern of use, and participant 6 reports that he gets sick if he does take nyaope, which is consistent with withdrawal symptoms [33]. This dependence theme relates to the HBM as a perceived barrier to seeking help or changing negative health behaviours. If participants are unable to understand that smoking nyaope can lead to poor health outcomes, even death, then they are unable and unwilling to change that behaviour [34].

3.3.3. Theme 3: Decline in Physical and Mental Wellbeing

All participants reported that their physical and mental well-being was deteriorating due to nyaope use. This included weight loss, changes in skin colour and always feeling unable to cope (unless using nyaope). They felt depressed when they didn't have the drug.

Participant 2: Damn my lips, bro, they are pink, they are pink, they changed colour after I started using nyaope.

Participant 3: I have been losing weight. It's [nyaope] spoiling my appetite and I'm not as physically fit as I used to be. I sleep a lot.

Participant 5: I have started to change physically, my skin started to darken and my eyes get swollen …. it's bad and tiring [depression]. Since I started using nyaope my life has changed completely, sometimes I don't even recognise who I am.

Participant 1: You know, before you can do anything you just have to satisfy yourself [by using nyaope], so maybe I think it has a psychological impact because you think you are useless without being high.

Participant 4: I can't concentrate and I can't study. I sleep after smoking. I can't think like I used to; I feel useless.

Participant 6: If I had to compare the type of person I was before I started drugs and now, there is a big difference. It is difficult for me to sleep at night and for me to think clearly, especially when I'm not high. It's definitely a problem so. It's difficult but I choose to ignore it like all other drug users do, because if you focus on these things then it means you will live a stressful life. I smoke drugs because I want to be happy. I want to feel stress-free.

The participants reported symptoms which are consistent with long-term drug use [physical and psychological] [33]. The HBM relates this to perceived barriers which unless recognised by participants as preventing them from stopping drug use will continue the cycle. Mental ill health is recognised, with symptoms of being tired and drowsy (participants 3 and 5). Thus participants are unlikely to find cues for action, either internal or external, which would trigger them into adopting positive health-promoting behaviours [11]. Participant 6 describes how nyaope is used as a coping mechanism.

3.3.3.1. Sub-theme 3.1: Isolation from others

Participants were often high and, as a result, did not want to be around others, or others rejected them. This led to isolation, which resulted in peer and family relationships breaking down. Responses supporting this theme are as follows:

Participant 2: I started not attending lectures, so most of the time I isolate myself. I want my own space so I can smoke in peace.

Participant 3: I am not the same social person I used to be. I do not interact with people much. I want to do my own thing.

Participant 6: I have lost relationships that I can never build again. There are a lot of people that I don't talk to now. My family aren't happy with me [they suspect I use drugs]. This makes me sad.

Participant 1: My brother, eish it's tough, because even your friends and family start to reject you, so you are alone.

Participants experienced deteriorating relationships with other people because of their use of nyaope. This sub-theme supports the overall theme of a decline in physical and mental well-being. Isolation most likely led to long-term problems in relationships because of the use of nyaope. This is likely to lead to depression in students. This indicates that isolation is a perceived barrier that is recognised by some of the participants, but not a cue to action. They do not yet have the insight to adopt health-promoting behaviours [34].

3.3.3.2. Sub-theme 3.2: Discrimination by Peers and others

Participants are discriminated against by peers, friends, and family. Participants experienced many discriminatory incidents

from people around them and the community at large. It emerged that nyaope users are social outcasts. Participants indicated that discrimination occurred in malls, in class and even at home, where their parents search them for drugs. The following responses underpin this theme:

Participant 1: You experience discrimination because people just look at you in a certain way and you know that they think you are a bad person 'cos you use drugs. You know when I walk, people put away their phones and wallets and watch to make sure I pass by. This is because of the way I look when I take nyaope.

Participant 3: People Yes, because people judge you and if you show that you are craving the stuff, they don't want anything to do with you. They ask, 'What is going on with you … have you been bewitched?'

Participant 6: I have experienced discrimination. When I walk into the shop and I want to buy something … they give you space and then because you smoke this thing and you don't shower and smell, nobody wants to serve you or be next to you. Sometimes when you walk into big shops like Shoprite the security guards follow you around and then they search you.

The participants perceive that they are discriminated against because of their unkempt appearance. Their friends, peers and family also took down on them, which is supported by research by Motsoeneng [35]. Nyaope destroys relationships [36]. Social relationships are also destroyed by the appearance and behaviour of nyaope users [37]. In terms of the HBM, participants lack self-efficacy and do not have insight into how to change their behaviours; hence they are unable to recognise the perceived benefits of stopping drug use [34].

3.3.3.3. Sub-theme 3.3: Criminal Activities

Nyaope is expensive and participants reported resorting to theft to 'feed' their drug habit. Therefore, their families, friends as well as shop owners avoid them. Participants reported the following:

Participant 1: Financially I would say that I am poor, most of my money just goes on nyaope. Sometimes I steal, so I can buy the stuff. I will steal from anyone.

Participant 5: Sometimes when I need to satisfy that craving, I have to go the extra mile and end up stealing things. Some friends who smoke nyaope have been arrested.

Participant 6: I don't mind jumping into other people's yards. I think I take risks.

It seems that participants do not see their susceptibility to either law-breaking and/or the negative influences of nyaope. They are highly susceptible to health and legal problems; however, they were unaware of the seriousness of these problems [7].

3.3.4. Theme 4: Intentions to stop Smoking Nyaope

Three participants appeared to regret their behaviours. They stated that addiction is a hard thing to beat and that they needed help. They regretted losing friends, and family members, engaging in criminal activities and living in a drug-induced haze, as the following responses indicate:

Participant 3: Yes, I wish I could stop this thing, but it's very difficult to do [tackle the addiction]. It's very deep, it goes into your veins, it goes into your heart, and I think even to your soul. I need help.

Participant 6: What you need to do is just make sure that you stay away from this thing [nyaope]. It's just here to ruin you and leave you alone. One day I will stop.

Participant 4: I would like for them [other students] to avoid even starting this thing, because once you are in this thing there is no going out. I want to get out.

These reactions may be their cue to action: the cue that they need to seek help and change their self-defeating health behaviours. However, although the researchers offered help in this regard to the participants, they did not take up the offers of help.

The researcher kept in touch with all of the participants until they no longer answered their phones. It is hoped that they eventually found the self-efficacy to find the help to stop nyaope use.

4. DISCUSSION

The findings of this research are discussed in relation to the HBM.

The participants indicated that they used nyaope because of peer pressure and academic pressure at the university. Regarding peer pressure, most participants indicated that they got hooked on nyaope because of pressure from their friends. They wanted to fit into a group, which later led them to become addicts.

Peer pressure is one of the main factors facilitating drug use in South African universities [37]. Various concepts in the HBM also reinforce this finding; for instance, the participants lack self-efficacy and thus take the drug to boost their confidence. Unfortunately, in the long term, this results in addiction. Negative behaviours are thus likely to continue [9].

Participants indicated that academic stress pushed them to smoke nyaope. They use drugs as a coping mechanism – which has exactly the opposite effect of what they desire [38]. At first, they may 'feel good', but this is very short term. Chronic use of nyaope renders students unable to cope and miss classes, sleep for long periods, have difficulty concentrating, and report symptoms which are consistent with depression.

This results in poor academic performance, which commonly leads to dropout [1, 23, 24]. The participants' behaviours indicate that they are unaware that they are susceptible to the negative consequences that drug dependency brings. Participants were offered help, but they did not take it up. It is likely that these participants were saying what they thought the researchers wanted to hear, and/or their drug dependency was so entrenched that they were unable to take up the external 'cue to action'. [11] It is likely that both internal and external cues to action are required for those who are substance dependent, in order for them to change negative health behaviours. Their dependence is essentially a barrier to

them being able to see any perceived benefits in changing their behaviour. This underpins studies that indicate that substance dependence is difficult to stop [12].

Participants reported that relationships with family, friends and peers suffered because of their nyaope use. They did not have the insight to understand that the so-called discrimination that they perceived was caused by their negative behaviours, such as not washing every day and thus looking unkempt, and stealing for their next 'fix'.

Chronic drug dependence affects users' cognition; thus, they do not have the insight and self-efficacy to change their actions (behaviours) which are having negative consequences [15]. In this case, these consequences include being estranged from their loved ones and peers. This inevitably leads to isolation, which participants reported. Fundamentally, they want to be 'left alone so they can get their next fix, but are also 'sad' about being isolated. These consequences are confirmed by previous research [1].

The participants' health and well-being were affected by their nyaope use. Physical symptoms noted in this research were skin and eye pigmentation changes, loss of interest in activities, and tiredness. These may be indicators of depression. None of the participants reported suicidality. These symptoms support those reported in other research on nyaope use [15]. This is a cue for possible action to change negative health behaviours [11]. These participants did not have the self-efficacy to perceive the benefits of stopping nyaope use, as their addiction was a barrier to them taking the first steps in trying to overcome their drug dependence. The responses that participants made to questions did not indicate that they were aware of all the negative implications of their substance dependence, as they lacked insight as to how to change their actions and behaviours. However, they indicated that they could 'not think' as well as they had before they started using nyaope which, although a cue to action to change behaviour, was negated by their dependence [9].

CONCLUSION

The findings revealed that the participants' use of nyaope had a major negative impact on their day-to-day activities and general well-being. They had poor relationships with others and were so dependent on the drug that they would steal to get money for their next 'fix'. They were unable to take up any external or internal cues to action which might encourage them to obtain help. They were able to relate their experiences to the researchers but were not able to show understanding and insight into how they can change their behaviours and actions to stop using nayope. Nyaope is a dangerous drug and, because it is easily available and cheap, it is used more and more by students.

STUDY LIMITATIONS

The sample was 'snowball' in nature and only males participated. The small sample size and qualitative design prevent the generalisation of the results. As in most sensitive research and interviews participants usually present information that is positive and what the participants think their researchers want to hear [39]. This may bias results. However, we have tried to reduce this by using the trustworthiness methods described in the methods section.

LIST OF ABBREVIATIONS

HBM = Health Belief Model

AUTHOR CONTRIBUTIONS

All authors contributed equally to this research project.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Ethical clearance was obtained from Turfloop Research and Ethics Committee (TREC/11/ 2019:PG) and gatekeeper permission from the university registrar.

HUMAN AND ANIMAL RIGHTS

No animals were used for studies that are the basis of this research. All human procedures followed were in accordance with the guidelines of the Helsinki Declaration of 1975.

CONSENT FOR PUBLICATION

Informed consent was obtained from all of the participants.

STANDARD OF REPORTING

CORREQ Guideline have been followed for this study.

AVAILABILITY OF DATA AND MATERIALS

Not applicable.

FUNDING

None.

CONFLICT OF INTEREST

The authors declare no conflicts of interest, financial or otherwise.

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APPENDICES

Appendix 1: Semi-structured interview questionnaire for participants.

Interview questions

1.1. Have you ever experienced any academic difficulties which you attribute to drug use?

1.2 Do you think that your drug use habits affect your ability to interact with your peer group who do not use drugs on campus? If yes (or No) explain why?

1.3 Have you ever experienced any discrimination because of your drug use habits?

2.1 Do you think your drug use habits have any impact on you psychologically? If the answer is yes, please explain why?

2.2 Do you think your drug use habits have any impact on

your physical wellbeing?

2.3 How has your life changed since you started using nyaope/whonga?

3.1 When and why did you start engaging in the use of drugs?

3.2 How often do you engage in drug use?

3.3 What behavioural changes (if any) have you noticed since you started using nyaope/whonga?

3.4 My final question is: Do you have anything else that you would like to share?

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