

## Research Article

# The Novel Psychoactive Substance ‘Nyaope’ Contributes to Mental Disorders for Family Members: A Qualitative Study in Gauteng Province, South Africa

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### Abstract

**Background:** Nyaope is a Novel Psychoactive Substance (NPS) commonly abused in South Africa. Because of its very addictive nature, which takes over the lives of the users, it also affects the families and communities, with resultant negative social and financial impact.

**Purpose:** The purpose of the study was to explore and describe experiences of families living with nyaope users.

**Methodology:** The study used an exploratory qualitative design, and collected data using in-depth interviews from biologically related family members. nvivo was used to analyze the data.

**Results:** Of the ten major themes that emerged from the analysis of the qualitative data, eight depicted experiences that impact negatively on the mental health of the family members. Of note is the hopelessness and depressive symptoms, which include suicide ideation and death wish for the users.

**Conclusion:** While substance abuse in general has been reported to affect the mental health of family members, this impact seems to be profound for nyaope users, because of the high prevalence in certain communities, the level of addiction and related behaviours. Despite this, there is lack of acknowledgement of the situation by neither social services in South Africa, nor any psycho-social interventions for these communities where nyaope is rife. With the high prevalence of nyaope use in these communities, the already high burden of mental illness in South Africa is further increased.

**Keywords:** Novel psychoactive substances; Nyaope; Family; Mental disorders; South Africa; Qualitative design

### Introduction

Novel Psychoactive Substances (NPSs) are a relatively new category of psychoactive substances, with rapid spread into the global illicit drug market [1]. Also called cocktail drugs, they mostly consist of a combination of substances, with variations in the number of components. Because they are not manufactured according to specified standards, their content varies, albeit slightly, in different batches. Their effects vary according to the composition, as well as the number and amounts of substances in the specific cocktail [2]. Available reports on their toxicity are extremely toxic [3], although there is limited data on their

metabolism [4]. Because new compounds are continuously introduced; there is less confidence on their management by professionals [5]. The names of NPSs are mostly street names and are area-specific [6].

### Nyaope, South Africa’s novel psychoactive substance

Nyaope is South Africa’s most common NPS and is prevalent in Black communities, and as the other NPSs, it is called whoonga in Kwa-Zulu Natal. Its composition includes antibiotics, antiretroviral drugs, and central nervous system (CNS) depressants such as phenobarbitone and benzodiazepines, as well as CNS stimulants such as Pipradol [7]. The drug interactions between the components of nyaope is reported to increase the toxicity, as well as organ damage that occurs [8]. Nyaope is sold in powder form, and although in its early stages it was smoked by rolling it with cannabis, an increasing number of users dissolve the powder in water and inject it, which brings in a whole range of complications related to injectable drug use.

Nyaope is very addictive and users find it very difficult to quit, making it a lifelong problem. It is reported to take over the lives of the users, who quit school or work to often assemble in groups in common public places like parks or taxi ranks. They present with slow and slurred speech, slow kinetic movements and poor hygiene. Radiological assessments show that nyaope users display extensive grey matter atrophy in the regions of the brain involved in impulse control, decision making, social and self-perception, and working memory [9], which explains some of the presentations and behaviours of the users.

The unfavourable social environment, high unemployment rates and unstructured life in the areas where nyaope is rife, promotes continued use [10]. Because of poor law enforcement in areas where nyaope use is rife, and its low cost

(about \$ 2.50 to \$ 2.80 per fix), it is easily accessible, even to minors [11] There are few rehabilitation facilities and programs for nyaope, and users, their families and communities are subjected to a life of addiction and deteriorating social life. The users do not like what they have become and continue to cry for help It is in this context that the study purposed to explore the experiences of family members who share a home with nyaope users [12].

## Methodology

### Research design

An exploratory and descriptive qualitative design, using in-depth interviews, was used to collect data.

### Study setting and population

Interviews were conducted at the homes of the family members in a township located on the East Rand of Gauteng Province, South Africa. The township has areas of socio-economically-deprivation, as characterized by high unemployment rate, poverty and high prevalence of nyaope abuse. The study population consisted of families who were living with a family member who was using nyaope at the time of data collection.

### Sampling procedure and sample size

Purposeful sampling was used to identify and recruit family members who were living with a nyaope user. The sample size was determined by reaching data saturation, in which additional interviews no longer provided new information. Data saturation was reached after interviewing seventeen family members.

### Recruitment of participants

#### Recruitment was done using three processes:

a. Approaching nyaope users where they commonly assemble, which includes public places like shopping centres, parks and taxi ranks. On an individual basis, the researcher requested to talk to one in private, where she explained to him/her about the study and requested that his/her family be approached to participate. After agreeing, they were asked to point their home where the researcher went to explain the purpose of the study to the family, as well as made an appointment for the interview if the family was not ready for the interview at that time.

b. The snowball technique was used to access other nyaope users (who will give information about their families) or study participants/family members who will provide access to other family members.

c. Two rehabilitation centres were requested, through their social workers, to negotiate access to the families, using their database. The social workers were assigned to provide services to substance users and their families. Those who agreed shared their family members' contact details.

### Data collection

Data collection, which occurred in the homes of the participants, was done through semi-structured in-depth

interviews, using a self-developed interview guide, and the discussion was digitally recorded. The English interview guide was translated into Isi-Zulu and Sepedi, two languages commonly used in the area, which enabled the participants to choose their preferred language. A quantitative questionnaire was used to collect socio-demographic data. Data collection occurred over a period of eight weeks.

### Data analysis

The audio-recordings were transcribed verbatim, translated from IsiZulu and Sepedi into English, typed into MS Word and uploaded into NVIVO version [12] for analysis. Data were analyzed by reading the first few transcripts several times to identify and copy verbatim statements, phrases and/or sentences that describe the experiences of living with a nyaope user. Statements, phrases and/or sentences that reflected the same views were grouped together and named according to what they collectively reflect. A codebook with several codes and definitions was created, using the first few transcripts. The codebook was refined as new codes were created, and was reviewed by the study supervisor (author 1), re-visited and discussed with author 2 until a consensus was reached. The verbatim statements/phrases and sentences were used to support each of the themes during the writing of the narrative.

### Findings

About the nyaope users: The ages of the nyaope users ranged from 21 to 35 years, and the period of nyaope use ranged from 2 to 10 years. The majority of the users (88.2%, n=15) were male. The majority (64.7%, n=11) did not complete high school education, and all were unemployed.

About the participants: The majority of participants (64.7%, n=11) were female, with ages ranging from 22 to 63. Just below half (47%, n=8) were unemployed, 41% (n=7) were self-employed while 12% (n=2) were pensioners. Just above half (53%, n=9) were biological mothers to the users. Figure 1 below shows the rest of the relationships.

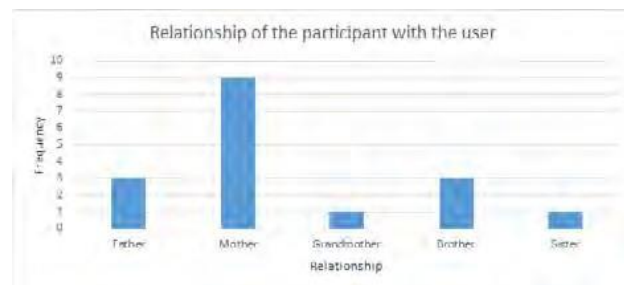


Figure 1: Relationship to the user.

### The findings of the qualitative analysis:

#### Theme 1: Nyaope is commonly used in the community

This theme refers to the view that accessibility and use of nyaope is widespread in the community, and sometimes there is more than one user in a family. These views were expressed as follows:

“It’s too much, and no one seems to have control over it.... maybe if they had control over it. Instead of getting less

it's getting more and more used.”(51 year old father of the user)

“it's too much to the extent that we get surprised when there is a child that is not smoking, The views that nyaope is easily accessible were expressed as “It is very much easy for them to get it, (and) in my view, there is no way that these people could be all over these streets and use nyaope if they don't get hold of it easily” (60 year old mother of the user),

“So, it's a lot of places where they sell it, it's down there... .. Almost every 3rd corner has a person who sells it” (32 year old brother of the user).

### **Theme 2: The users have formed their own communities**

Because of the deep addiction which drives them towards doing anything to satisfy their craving, the users have formed communities through which they support each other when experiencing withdrawal symptoms. Such community groups are easily identified through poor hygiene, collecting tins for recycling, assembling in corners of the streets and at the taxi ranks. These views were expressed as follows:

“They are stopping taxis so that they can get that small money to buy nyaope, they are dirty they pick up things and when they get the money they do not take it home, no, it is for their cravings” (48 year old mother),

“You will never just get one they are in groups doing this thing. They are always in groups. Ah some of them you find them dragging card boxes dragging cans they are doing these things in order to get money so they can meet up with friends and smoke this thing” (51 year old father).

### **Theme 3: Reasons for use of nyaope**

This theme expresses the participants' perceived reasons for their family member's use of nyaope. Although the reasons vary, the social environment is viewed as being a major reason why their member of family uses nyaope. The views were expressed as follows:

“Personally I don't know what to say but what I've noticed is that with some children who use this is that they come from disadvantaged backgrounds they diverge into this because of poverty. But with mine I have nothing but one thing for sure is that he doesn't go to bed with an empty stomach so I don't understand what makes him to use this. So I wouldn't say hunger drives them to using this but it's just temptations. Being influenced by friends even the people who are selling it as well maybe they influence their buyers to get them more customers” (59 year old mother of user).

“I think it's because there are no jobs for these children, some it's because of peer pressure sometimes you would find that a child is studying and when he/she finishes they are unable to get a job and even when they apply they want experience where will they get it knowing that they've never worked before? Even those who didn't finish there is no employment for them” (60 year old mother of user).

“Because parents have their own ways of raising their children. So being a spoilt brat doesn't mean you have to use nyaope somewhere somehow this thing affect you in a way when you just want to experiment it just like weed the first time and if you get some money and your parents gave you R150 (about \$ 10.7) a day to carry to school that is the same money that you use to buy nyaope from there you start using and smoke it with your friends and the next day they start stealing at home” (31 year old brother of user).

### **Theme 4: Stealing items to feed their habit**

Because of their being unemployed and strong craving for the drug, users often engage in criminal activities, mostly theft, to feed their habit. The theft occurs within the home environment but also in the community. They steal anything and everything they can lay their hands on, which they sell to get money to buy the drug.

“I'm talking about hoovers (vacuum cleaner), mirrors, phones, clothes, tools, anything that he can take and sell to someone. Other things include electric lights, the rechargeable ones, frames and so many other things” (48 year old mother).

“Phone, iron and plates you just end up having nothing. I don't have sheets or blankets. I always lock up the bedrooms because even food because sometimes let's say you buy groceries and you haven't used it you will never find it because he sells it” (60 year old mother).

“When it comes to money I don't know how many times he has left with money from this house and how many times his mum has cried and his sister as well” (51 year old father of user).

### **Theme 5: Family members have lost trust in the user**

Because of the various behavioral problems of the nyaope user, especially stealing, family members have lost trust on the user, which makes it difficult to live with him or her.

“The challenges that I face is that in this house we can't trust him anymore we can't even leave our bags lying around because he takes the money and if you are not paying attention to your belongings he will take. So you see those are challenges that we face because there are places where are always kept locked at all times so he wouldn't enter because once he come in he just takes” (45 year old mother of user).

“It is very difficult, see there is nothing we trust about her. If you are sitting in the house and she comes in when she goes to the rooms we follow her, to the kitchen you have to follow her. You see it's painful because you can't even relax. Even when I leave the house I tell my children to lockup at all times” (59 year old father of user).

### **Theme 6: Financial difficulties of family members**

The frequent thefts results in financial difficulties for the family, which was expressed as follows:

“It is affecting me financially and it makes me not to be able to do business. It's like all the money in this house is

buying nyaope, we are like people who are smoking nyaope, we are now working for nyaope”, (43 year old mother).

“Very much because every time you have to keep on replacing the things that they took, there are some things you can go without like a watch and everything else but an underwear if they take you have to go and buy a new one. Food as well, so you understand even the salary that you get is not much. So, sometimes you find that you don’t have money, and they take the food you bought on the 1st and they take it on the 2nd or the 3rd now there is no food in the house. So now you have no money to buy the grocery all over again, so if you have no money you have to go and take a loan they bring you back because now when you are paying the loan there are interest as well so there is no progress. So, financially it bankrupts you and you end in debt because every time now you have to take a loan” (39 year old sister of user).

“Now he broke my stove now I am forced to be in debt as a parent. You are not moving forward now because the stove is R4000 (about \$ 286). I have to cook for them when they are hungry, now I have to get another stove, get it with what? I never go forward I go backward” (56 year old mother of user).

#### **Theme 7: Mental distress**

The various behavioural challenges brought about by a member who uses nyaope results in a range of mental distress, which includes negative emotions, emotional distress, helplessness, hopelessness and even suicidal thoughts of the family members. A range of mental impacts cuts across all participants and often results in physical manifestations. Because the users continue to be financially dependent on the family, it results in perpetual caring for them even at their adult stages, with no hope in sight for the users to be financially independent.

“Yhoo! It is just that someone does not die when it is not his or her time to die. I should be long dead by now. My heart is broken there is no good day that I enjoy in my life. I am very much affected by this even when I take the taxis when I see them or hear people say ‘these nyaopes (refers to people who smoke nyaope)’ it breaks me, it hurts me”. (60 year old mother of user)

“Can you imagine how painful it is? It’s very painful. It is very painful to be a parent of a child smoking Nyaope. In the house of the kids that smoke dagga its better, because they bath and be clean. They don’t even have stress if they didn’t smoke dagga. But a Nyaope person won’t sleep if he didn’t smoke. He can even take the pots, even the stove and sell them. They can take a fridge and sell it, a washing machine even. And when you get back you find out there is nothing”, (said a 53 year old mother of user).

“Eish! I really got sick I even went to the clinic to check my blood pressure. I never had problem with my blood pressure it was controllable. I used to work and be all over and they told me that my blood pressure was not that bad and I did not take medication. But after I heard this news

they said it was too high and I should now take medication because it’s uncontrollable that’s how bad I felt”. (59 year old mother of user)

“But when he started smoking this thing, I developed depression. I ended no longer working. I left my job, because I was always sick every day. The reason I am just sitted likethis is because I am no longer working. I wasn’t well” (53 year old mother of user).

“As I said that I tried to commit suicide all because of him and I was badly affected, thinking that if the situation is like this and why did it have to happen to me because after her sister passed on it became worse it was like he was a different person. So after

3 months I buried my daughter I decided to kill myself and just run away from all this mess” (45 year old mother of user).

“It is painful .... Because you reprimand, you reprimand they don’t listen he doesn’t listen. “This thing will kill you” he doesn’t listen,” said a 65 year old grandmother of user

#### **Theme 8: Impact on family relationships**

The participants reported that nyaope use by one of them resulted in strained relationship with other family members. This includes female users neglecting their parental responsibilities. The statements below illustrate these views:

“He is my child (and) you (can) understand when he steals from my brother how it is like, when my brother comes to me he will say, you see your child so now I have a burden that I can’t even control that is causing conflict between me and other people here at home. He would steal my mom’s phone and she will just keep quiet and cry, he would steal from his brother and then his brother will be angry at me saying that he will beat him up and at that moment how do I feel” (48 year old mother of user).

“I don’t know how to explain this but more of especially my sister, she has three children and she left them her firstborn is eight years old, second born is four years old and her last born is eighteen months old and there is one who passed away. She left them and she just doesn’t care and then recently the same sister because she uses, she stays anywhere and she is female and a mother and her children need a motherly love and sometimes they see her and they are always happy to see her but when she sees them she beats them up and these kids know nothing they are just innocent.” (39 year old sister of the user).

“His problem is that he also hurt the family. We no longer have relatives because he hurt all my relatives. He went to his father’s family, he left with scandals, and at his mother’s family he left with scandals. He also hit me,” (56 yearold mother of user)

#### **Theme 9: The pain of not anticipating improvement in the user’s life**

The life of a nyaope user depicts hopelessness and no promising future, as expressed in the following statements:

“I feel pain asking myself what he will live for in life on this world. What is he leaving for? Since nyaope does not want him to bath, it does not want you to work or even do anything. It destroys you and at the end of the day, you will become a burden to other people”. (56 year old mother of user).

“Before he started smoking this thing, even when he was looking for a job and he didn’t find it, he was able to buy things to sell, and he was able to buy anything he wanted like, like pants, with the money he was making. He didn’t ask anything from us so now he is stuck he is just a useless thing” (48 year old mother of user).

“I am looking at his life where it is going to end because of now he is living because of me he is eating it’s me he has a place to sleep it is me if I die where will he be I mean he is a hobo (homeless person who relies on other people for survival)” (48 year old mother of the user).

“Can you imagine? That’s why I said I give up. You know I no longer care, even if they say that’s him there on the streets, they have killed him” (53 year old mother of user).

#### **Theme 10: Lack of forthcoming help from government and the police**

The theme conveys the disappointment that the family members expressed regarding lack of action by the government and the police in controlling nyaope use. While the government is accused of not developing practical effective interventions, the police are viewed as contributing to the problem because they accept bribes from the drug dealers, instead of arresting them. The following statements support this theme:

“If the government could do us a huge favour and arrest these people who are selling nyaope and for it to be unavailable... not only just nyaope and other drugs as well it should not be easily available so that they cannot get hold of it but the government is very much relaxed and nothing will come right” (60 year old mother of user).

“But the main fact is to stop the people that are selling because the young ones are still coming and they will join. They fill up the rehabs so I do not understand why they are creating a disease so that they can cure it... I don’t understand how the government is working, something is missing and they are not thinking well. Do you get me, you create a certain crime so that you can create a job that disciplines that crime, because it is what they are doing because if totally they were arresting the people that are selling this thing there will be no smoking (nyaope). So they will fill up the rehabs and come back and smoke which is useless” (48 year old mother of user).

“You know what I think should be done, if government can be strict, very strict especially when it comes to the police this thing will end. But if the police keep on taking bribes from people selling Nyaope and those who are selling drugs. Never will this end, I don’t want to lie to you.” (53 year old mother of user).

## **Discussion**

### **Demographics of nyaope users**

The profile of the users is similar to other studies, which depict nyaope users as unemployed, with low education and low skills, which live in a social environment which contributes to nyaope use. The majority of users, did not complete matric, which concurs with previous reports nyaope use takes over their lives with resultant dropping out of school or stopping work. The age range of users was between 21 years and 35 years, which confirms that nyaope use is difficult to quit and those who started in their teens or early twenties continue to use the drug in their adulthood, hence the long period of up to ten years of nyaope use. As with other studies, the majority are male [10].

### **Discussion of the qualitative findings**

The findings of the study reveal the abuse of family members by nyaope users, with the majority being women and most being parents of the user. Substance abuse has been identified as a risk factor for elder mistreatment, which may be in the form of financial exploitation, physical and emotional abuse, as found in this study, is similar to other studies [13].

Of the 10 themes that emerged from the study, eight are related to mental disorders, these being

a. Nyaope use is rife: anxiety related to use by other younger people

b. Stealing: anger and anxiety brought about by threat of losing money and property by theft. Studies have confirmed that crime in a community increases mental health problems [14].

c. Lost trust: hopelessness of living with someone not trustworthy, especially because in most cases the family members are not able to get rid of the nyaope user. Hopelessness has been linked to suicidal thoughts and actions [15,16].

d. Financial difficulties: threatens and results in financial insecurity [17,18].

e. Mental distress: family members continually and directly exposed to mental distress, to the point that some participants idealize suicide

f. Family relations, which results from continuous mental distress and lack of support when experiencing difficulties. Studies have identified family strife as a significant contributor to mental ill-health [19].

g. No anticipated improvement on the life of the user: to the extent that the participant wishes the family member who uses nyaope to be dead.

h. No help forthcoming: contributes to hopelessness because of not knowing where to turn to.

The major findings of the study confirm mental distress of the family members, which concur with previous reports that family members of substance users are at risk of com

promised health and psychological wellbeing [11,20]. Such mental distress may be experienced as family conflict, feelings of hopelessness, guilt, self-blame, worry, shame, anger, and signs of depression [21].

Substance abuse has negative impact on the whole family [22], which compromises the functionality of such a family. This means that, not only are the family members inconvenienced by the antisocial behaviour of the member who uses nyaope, but also that they are not able to provide the much needed support and assistance to the affected member. This highlights the need for interventions to assist families who have a member that abuses drugs.

The effectiveness of family-based interventions for substance abuse prevention and management have been well documented [23-25], However, this effectiveness needs to be sustained by a mentally and emotionally healthy family, which is compromised if the substance abuse by one member is not attended to. Interventions to empower families are therefore key to assisting a substance abuser [26].

### Conclusion

Although nyaope use impacts on social and economic aspects of the family's life, the findings of this study suggests that the mental aspects are most pronounced. Mental distress reported was due to the user stealing items from the home, his/her safety in the community because of engaging in criminal activities, inability to access rehabilitation services, frequent relapse after accessing treatment, and the uncertain future of the user. Moreover, the participants reported the lack of any kind of support in their dire situation. The study highlighted the need to acknowledge the impact of substance abuse on the family, which is almost always neglected as systems develop programs to address substance abuse in communities.

### Recommendations

Based on the main finding that nyaope use by one person exposes family members to mental distress, it is recommended that interventions to prevent mental illness and promote mental health among family members in communities where nyaope use is common be developed. Such interventions can be integrated with other programs for prevention of, and rehabilitation for substance abuse.

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