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Research Article

A Profile of Substance Abuse Clients Admitted to an In-Patient Treatment Centre in Tshwane, South Africa

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Abstract

Background: Substance abuse is a serious public health problem in South Africa, and due to the dearth of community based studies on the patterns and types of substances of abuse, studies are often conducted at substance abuse rehabilitation centres, as with this study.

Purpose: This study aimed to determine the patterns of substance used by adults admitted to a Substance Treatment Centre in Tshwane, as well as to investigate the reasons and influences for substance abuse.

Methodology: Using a self-administered questionnaire, a cross sectional quantitative and descriptive survey, was used to collect data among 215 substance users admitted to an in-patient treatment centre in Pretoria. STATA version 12 was used to analyze data.

Results: the sample of 215 consisted of majority males (80.4%, n=173), with their ages ranging from 18 and 65 and a mean of 27 years. Most commonly used substances were Nyaope (65.6%) and marijuana (29.3%). Reasons for drug use included peer pressure (54.9%), stress (26.5%) and family problems (16.3%).

Conclusion: The reasons for substance use were mostly related to the unfavorable social environment, and the high prevalence of nyaope reflects the communities from which the participants come from.

Keywords: Nyaope; Substance abuse; South Africa; Social environment

Introduction

Substance abuse has emerged as a significant public health problem with global dimensions [1]. As the scourge of substance abuse continues to increase globally, including in South Africa, the increase to seek treatment for substance abuse has also been reported among young people [2]. Commonly used substances among young adults are nicotine, alcohol, cannabis, inhalants, heroin, and cocaine, and in South Africa, nyaope. Literature has reported an association between substance abuse and social problems [3], which may explain the increase in substance abuse in South Africa, due to a range of social problems, especially among communities with low socio economic status.

Early exposure to substance abuse often predicts future substance abuse, as evidenced by those who use drugs in early adulthood will continue to use substances in their middle and late adulthood [4]. The harmful effects of psychoactive substances, which include negative social and/or interpersonal relationships, have been well documented [5]. Furthermore, a person who uses such substances poses a problem not only to him/herself, but also to the family, community, and society, as substance use related behaviors impact on others around him. The South African Community Epidemiology Network on Drug Use (SACENDU) provides annual statistics regarding treatment admissions in Gauteng, and they report an annual increase in the demand for substance abuse treatment [6,7]. In South Africa, services for mental health are inadequate, and the increase in the prevalence of substance abuse worsens the situation as it increases demands for treatment for mental health [8]. Despite this increase in the prevalence of substance abuse, resources to respond and address to the needs of those who need assistance with substance use addiction have not increased [9]. Moreover, even within the limited resources, there is inequitable access to treatment facilities [10], with people of lower socio economic status being at a disadvantage. It is also in these communities that the social environment becomes a driving force for substance abuse [11]. The costs for treatment of substances continue to increase substantially [12], which implies less access to poor people who cannot afford such treatment. Moreover, the intended treatment outcomes are often frustrated by the high relapse rate, especially among indigenous Black people in South Africa [13].

Trends regarding choices of substances of abuse are reported to be influenced by a number of factors, which include race [14], socio economic status [15,16] and geographical setting [17]. An example of geographical setting and race is the abuse of nyaope, a cocktail drug commonly used in predominantly Black communities of low socio economic status in South Africa [18]. Other contributory factors for substance use include social pressure and peer group influence [19], unemployment, unfavorable social environment, such as experience of trauma and poverty [11], disorganised family structures [14], and previous exposure to substance abuse [20].

Unfavorable and negative social environments often contribute to substance abuse as people often use substances to deal with negative experiences and emotions, as these drugs offer temporary feelings of pleasure and happiness [13]. It is important to study and record the trends of substance abuse in the area, as results can contribute to information needed regarding planning for required intervention services.

The objectives of the study

To determine the substances used by adults admitted to the substance treatment centre in Tshwane. To investigate the reasons/influences for substance abuse in the sample.

Materials and Methods

Study design

The study used a quantitative descriptive survey design, which is appropriate for a profile study.

Study setting

The study was conducted at an in-patient substance abuse treatment centre in Tshwane, Gauteng Province, in South Africa. The treatment centre admits service users or clients who come voluntarily for treatment, clients referred through the Judicial system in terms of the Criminal Procedure Act, Act 51 of 1977, and/or clients who are referred for treatment as part of a sentence for criminal acts. The centre caters for both male and female minors under the age of 18 years, as well as adults older than 18 years who have a drug and/or alcohol and medication dependency problem. The treatment centre is a government publicly funded institution, and thus the services are offered at no cost to the users. This benefits clients who are economically deprived and who cannot afford private rehabilitation programs. Although for several years the in-patient treatment programme was offered over a period of six weeks, the past 2 years has seen the treatment period being cut to 3 weeks, due to the pressure of admitting new clients who have been on the waiting list for treatment. The treatment programme approach espouses a holistic approach which covers the physical, emotional, intellectual, spiritual and social dimensions needs of the clients. Such services are offered by a range of professionals which include: physicians, social workers, clinical psychologists and occupational therapists. Recreational facilities like library, soccer, volleyball, swimming and cricket, as well as relaxation walks are included in the treatment program.

Study population

The population consisted of both female and male adults aged 18 and above, who were admitted for treatment of substance abuse at the Centre during the time the study was undertaken.

Sampling technique and sample size

A survey of all clients who were available at the time of data collection was conducted. Data collection was repeated in three cycles over a period of three months in which new cohorts of clients were admitted to the centre.

Recruitment

After obtaining all the required permissions, the researcher addressed the respondents in the hall during their devotion time on Friday afternoon. The purpose of the study was explained and the service users were requested to voluntarily participate. Those who agreed to participate in the study were requested to stay behind in the hall for data collection. The researcher repeated the recruitment process on three occasions with a new cohort, until the sample size of 215 was reached.

Data collection tools

The researcher made use of a self-administered questionnaire as a quantitative data collection method for the purpose of this study. The researcher explained the data collection process and was available to clarify the questions the respondents had. The data collection tool was designed by the researcher through doing a literature study and finding relevant questions which were applicable to the study. The tool was translated into Setswana, which is a language commonly used in the communities from which the majority of the clients come from, and by default, the language commonly used at the centre. However, the only version of the questionnaire used to collect the data was the English one, since no one opted to use the Setswana questionnaire, even after being given the option of using the Setswana language.

Data collection

The data were collected over a period of three months between August and October 2018. On each day of data collection, the potential participants were assembled in a hall, where the purpose of the study was explained again, and they were encouraged to ask questions or seek clarifications. They were then requested to provide written informed consent by signing the informed consent form, which was followed by the administration of the questionnaires.

Ethical considerations

Ethical clearance was obtained from the Sefako Makgatho Health Sciences University Research Ethics Committee (SMUREC/H/133/2018: PG). Permission to conduct the study was obtained from Gauteng Provincial Department of Social Development and the management of the Centre. Each participant provided written informed consent.

Data analysis

Data were descriptively analysed and expressed as proportions and percentages

Demographic characteristics of the clients

Of the 215 participants, 80% (n=173) were males and 20% (n=42) were female. The racial profile was Black African at 82%, Coloured at 15%, Whites at 2% and 1% Indian. Their ages ranged from 18 to 60 years, with a mean of 27 years. Just over half (51.6%, n=111) reported that they have dependents. Table 1 below shows the rest of the demographic details of the sample.

Table 1: Demographic characteristics of the participants (n=215).

Variable	Category	Frequency	Percentage
Age	<21 years	20	9
	21-30 years	133	62
	31-40 years	51	24
	>40 years	11	5
Marital status	Single	156	72.5
	Cohabiting/ living together	31	14.4
	Married	10	4.7
	Separated	15	7
	Divorced	3	1.4
Level of education	No formal education	1	0
	Primary school	8	3.7
	Secondary school	121	56.3
	Passed matric	57	26.5
	Tertiary education	28	13
Employment status	Employed	19	8.8
	Unemployed	167	77.7
	Self-employed	29	13.5
Source of income	Family	127	59.1
	Self	72	33.5
	Government grant	14	6.5
	Partner	2	0.9
With whom residing	Parents	106	49.3
	Extended family	79	36.7
	Friends	26	12.1
	Alone	4	0.01

Substance abuse history and pattern of use

The age of initiating substance use ranged from 8 years for marijuana to 43 years for alcohol, with an average of 17 years. The period of substance use ranged from one to 28 years, with a mean of 8 years. The type of substances varied widely and 43 indicated that they snorted/sniffed their drug of choice, while thirty five (35) reported that they were intravenous drug users and 9 inhaled their drug of choice. The rest smoked and drank their drugs. The reported frequency of substance use ranged from once to more than three times per day. Most (81%; n=175) reported that they bought their drugs directly from dealers, with the rest getting from friends and/or family members. Table 2 below shows the rest of the data on history and patterns of substance abuse.

Table 2: History and patterns of substance use

Variable	Category	Frequency	Percentage
First substance to use*	Marijuana/dagga/cannabis	103	47.9
	Nyaope	60	27.9
	Alcohol	19	8.8
	Cocaine	6	2.8
	Crystal meth	5	2.3
	Crack (Rock)	5	2.3
	Mandrax	4	1.9
	Glue	3	1.4
	Cigarettes (tobacco)	3	1.4
	Ecstasy	1	0
With whom they are using substances*	Friends	162	75.3
	Alone	62	28.8
	Family member	10	4.6
	Spouse/ partner	5	2.3
Substance that was used on admission for treatment*	Nyaope	141	65.6
	Marijuana/dagga/cannabis	63	29.3
	CAT	40	18.6
	Crystal meth	32	14.9
	Alcohol	28	13
	Mandrax	25	11.6
	Crack (Rock)	18	8.4
	Cocaine	7	3.26
	Glue	2	0.93
	Ecstasy	1	0.5

Although many of people who use substances are poly users, i.e. they use more than one substance at any given time; Table 3 below shows the main substance for which the client was admitted for.

*The total is more than 100% because some respondents had more than one response

Table 3: Substances for which participant was admitted for treatment

Substance admitted for	Frequency	Percentage
Nyaope	141	65.6
Marijuana/dagga/ cannabis	63	29.3
CAT	40	18.6
Crystal meth	32	14,9
Alcohol	28	13.0
Mandrax	25	11.6
Crack	18	8.4
Cocaine	7	3.26
Glue	2	0.93
Ecstacy	1	0.5

Over time, substance use changes, and Table 4 below shows the substances the participants first experimented with

Table 4: Substances which the participants first experimented with

Substance	Number of respondents first experimented with	Percentage
Marijuana/ dagga/cannabis	103	65.6
Nyaope	60	29.3
Alcohol	19	18.6
CAT	18	14,9
Cocaine	6	13.0
Crystal meth	5	11.6
Crack	5	8.4
Mandrax	4	3.26
Glue	3	0.93
Cigarettes/ tobacco	3	0.5
Ecstacy	1	

Total more than 215 because some respondents had multiple responses

Table 5 below shows the participants' reasons for initiating use of substances

Table 5: Reasons for initiating use of substances

Reason	Frequency	Percentage
Pressure from friends and peers	118	54.9
Stress	57	26.5
Family problems	35	16.3
Curiosity	26	12.1
To gain confidence	21	9.8
Boredom	20	9.3
Loneliness	16	7.4

Consequences of substance abuse

The respondents reported a range of negative consequences which they consider to be directly related to their use of substances, and the responses are reflected in Table 6 below.

Previous treatment history

Relapse from previous treatment was high at 42% (n=90) of the sample. Of those that were previously admitted for treatment, 55.8% reported that they had not completed the prescribed treatment. Reasons for not completing treatment included peer pressure of friends who were using substances, family problems, lack of will power and losing a job.

Results and Discussion

The sample consisted of mostly males, which is similar to other trends that substance abuse is more common in males than females [20]. The overall profile projects a sample of substance abusers who are marginalized in more ways than just their use of psychoactive substances, which include high levels of unemployment (77.6%), and only 33.2% being able to support themselves and therefore relying on government grants [21-23] and lack of recreation facilities in their communities [24].

Relapse after previous treatment is a common feature of substance abuse studies, and in South Africa, relapse rates and the need for re-admissions have been reported to be higher among young African adults [13]. In this study, the reasons for relapse are mainly social and include peer pressure, family problems, relationship problems, stress, not being ready to cease substance use, and a lack of self-control, as supported by other studies [25,26]. An important success indicator of an effective substance abuse rehabilitation program is the extent to which the clients are able to remain drug free after they are discharged, and returning to a familiar drug using environment, especially with poor social skills, such as lack of being assertive, and the affiliation with substance using peer groups can maintain addiction and results in relapse after receiving treatment [27]. This suggests that the approach to substance abuse rehabilitation needs to extend beyond the gates of the rehabilitation centre. However, both financial and program development investments are needed to offer such programs and services, which are cost effective in the long term.

A significant proportion of the sample (72.5%, n=156) were single, which is similar to findings from other studies, i.e. being married is associated with lower rates of substance abuse [28]. However, it is not clear whether being single contributes to substance abuse or whether those that use substances are less likely to be married because of social and financial reasons associated with. Because being mar-

ried is a result of a person's social desirability, substance abuse, as a form of social undesirability, may explain more rates of singleness among people who use substances. Moreover, social support in marriage plays an important role in mitigating the use of substances [29].

The initiation of substance abuse at a young age has significant health, developmental and behavioral repercussions, which include the hampering of brain development [30], higher levels of substance dependence and violent criminality [31], and the development of psychiatric conditions [20]. This highlights the importance of programs and interventions to prevent substance especially among young children.

The finding that many of the clients have family or friends who use drugs with them is similar to other studies that reported that substance abuse among young children is influenced by neighborhoods, family and peers [32]. Moreover, various risk and protective factors associated with family management affects adolescent substance use [33], which suggests that attempting to rehabilitate one person for substance abuse, while disregarding the family dynamics, may be less effective in the intention of mitigating substance abuse in communities.

A key finding in this study is that nyaope is not only among the most commonly used drug in this sample, but also the drug for which most of the clients have been admitted to the treatment centre. Nyaope is a novel psychoactive drug that is commonly used among predominantly Black communities of low socio economic status in South Africa [11,34,35]. Although thousands of young people in such communities are severely addicted and live in the streets at below humane conditions and poor hope for the future [36], there is dearth of literature on this drug. Of more concern is a recent study that found fronto temporal cortical atrophy among nyaope users [37], with long term non-reversal effects [3].

Conclusion

From the findings of the study, it is concluded that the treatment centre caters for a large population of poor people who cannot afford custom developed programs provided by private facilities. Due to its high intake of clients, the facility has been compelled to shorten the admission period, which resulted in compromised treatment outcomes. The high prevalence of social problems among the population increases the option of substance abuse as a coping mechanism, which increases demands for services. The profile paints a picture of groups of people who need assistance, not only about their use of substances but also for their broader social needs. The common social problems in the areas from which the treatment centre draws its clients, indicates a need for a comprehensive approach that does not consider substance abuse as an isolated problem, but one that strides across the social environment.

Recommendations

While more evidence based interventions are recommended for prevention of substance abuse, especially among younger members of the communities from which the clients predominantly come from, in the longer term, the contribution of social problems associated with substance abuse in these communities needs to be acknowledged and addressed. Examples of addressing such problems include increasing social support services for different groups of people.

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Conflict of Interest

The authors declare that there are no conflicts of interest.

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