



DRUG ABUSE AND SCHOOL DROPOUT AMONG ADOLESCENTS IN MINING COMMUNITIES OF JOS SOUTH LOCAL GOVERNMENT AREA, PLATEAU STATE, NIGERIA.

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Abstract

Drug abuse among adolescents is a major community health concern, particularly in socioeconomically disadvantaged settings such as mining communities. Adolescents in these environments are exposed to psychoactive substances that negatively affect their health, social functioning, and educational attainment, often resulting in school dropout. The objective this study assessed the patterns of drug abuse and community-related factors associated with school dropout among adolescents in mining communities of Jos South Local Government Area (LGA), Plateau State, Nigeria. A community-based cross-sectional descriptive study was conducted among 400 adolescents aged 11–20 years selected from 10 registered mining sites in Jos South LGA. Data were collected using a structured questionnaire covering socio-demographic characteristics, knowledge of drug abuse, commonly abused substances, influencing factors, and perceived effects on health and schooling. Data were analyzed using descriptive statistics (frequencies, percentages, means, and standard deviations) with IBM SPSS Statistics version 30. The results of the mean age of respondents was 15.41 ± 2.87 years. Alcohol (75%), cannabis (Indian hemp) (73%), goskolo (70%), codeine-containing cough syrup (65%), herbal mixtures (65%), tramadol (60%), and cigarettes (60%) were the most commonly abused substances. Peer group influence (67.5%) was the predominant factor associated with drug abuse, followed by depression, availability of drugs, unemployment, and school-related stress. Drug abuse was perceived to negatively affect adolescents' physical health, psychological wellbeing, social behavior, academic performance, and school retention. In conclusion, drug abuse is highly prevalent among adolescents in mining communities of Jos South LGA and is strongly associated with school dropout. Multi-sectoral interventions are urgently needed.

Keywords: drug abuse, adolescents, school dropout, mining communities, Public health

Introduction

Drug abuse remains a significant community and public health challenge worldwide, with adolescents being one of the most vulnerable populations. Drugs are substances used in the prevention, diagnosis, and treatment

of diseases as well as in health promotion. However, when psychoactive substances are used without medical justification or in excessive quantities, they constitute drug abuse and may result in physical, psychological, and social harm (World Health Organization (WHO), 1993). Adolescence is a critical developmental stage characterized by experimentation, curiosity, peer influence, and increased risk-taking behavior, which predispose young people to substance use (Greydanus and Patel, 2003). Globally, millions of adolescents consume alcohol, tobacco, and other psychoactive substances, with higher prevalence reported in low- and middle-income countries (WHO, 2014).

The harmful use of drugs contributes substantially to morbidity, mortality, social instability, and economic losses at the community level (WHO, 2015). In Africa, porous borders, weak regulatory frameworks, poverty, and unemployment have facilitated the availability and distribution of illicit drugs, particularly among young people (United Nations Office on Drugs and Crime UNODC, 2007). Nigeria has witnessed a steady increase in adolescent drug abuse, with alcohol, cannabis, cigarettes, tramadol, and codeine-based cough syrups being the most commonly abused substances (Atoyebi and Atoyebi, 2013; National Agency for Food and Drug Administration and Control NAFDAC, 2018). Drug abuse among adolescents has been consistently associated with poor academic performance, truancy, delinquency, and school dropout (Ogunsola and Fatusi, 2016). School dropout, defined as the discontinuation of formal education before completion (Saighi and Merah, 2024), poses serious implications for community development, human capital formation, and public health outcomes. Mining communities represent particularly high-risk environments due to child labor, poverty, weak parental supervision, exposure to hazardous work conditions, and easy access to drugs. Adolescents in mining areas often abandon schooling to engage in mining activities, increasing their vulnerability to substance abuse and its consequences. Despite the growing concern, there is limited empirical evidence focusing on adolescent drug abuse and school dropout in mining communities of Jos South LGA, Plateau State. This study therefore examined patterns of drug abuse and associated community-level factors influencing school dropout among adolescents in these communities.

Methods

Study Design and Setting

A community-based cross-sectional descriptive study was conducted in selected mining communities of Jos South Local Government Area, Plateau State, Nigeria.

Study Population

The study population comprised adolescents aged 11–20 years who were either engaged in mining activities or regularly present at registered mining sites in Jos South LGA.

Sampling Technique and Sample Size

The study adopted a multi-stage sampling procedure involving purposive sampling in selection of mine site and a simple random sampling to select adolescents from each mining site due to adolescent involvement in mining and substance abuse. A total sample size of 400 respondents was determined using Cochran's formula for the descriptive study.

Inclusion and Exclusion Criteria

Adolescents aged 11–20 years who consented to participate were included in the study. Those outside the age range or unwilling to participate were excluded.

Data Collection Instrument

Data were collected using a structured questionnaire after expert validation of the instrument, it consist of sections on socio-demographic characteristics, knowledge of drug abuse, commonly abused substances, factors influencing drug abuse, and perceived effects on health and school.

Data Collection Procedure

Questionnaires were administered on-site at the mining locations by trained research assistants fluent in the local language. Completion time ranged between 20 and 25 minutes.

Data Analysis

Data were entered and analyzed using IBM SPSS Statistics version 30 and Microsoft Excel 2019. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the data.

Ethical Considerations

Ethical approval was obtained from the Plateau State Ministry of Mineral Development. Permission was granted by authorities of the selected mining sites. Informed consent was obtained from all participants, and confidentiality and anonymity were ensured.

Result

Table 1: Socio-demographic characteristics of Adolescents (n = 400)

Variable	F (%)
Age	
10-12 years	10 (2.5)
13-15 years	196 (49.0)
16-18 years	190 (47.5)
19 years and above	4 (1.0)
Mean age 15.41 + 2.87	
Class dropped in school	
Primary 6	130 (32.5)
JSS 1-3	210 (52.5)
SS 1-3	60 (15.0)
Religion	
Christianity	224 (56.0)
Islam	176 (44.0)
Types of family	
Monogamy	165 (41.3)
Polygamy	235 (58.7)
Your number in the family	
First	127 (31.8)
Second	127 (31.8)
Third	71 (17.8)
Fourth	37 (9.3)
Fifth	34 (8.5)
Sixth	2 (0.5)

Seventh	1 (0.3)
Eighth	1 (0.3)
Living with	
Both parent	367 (91.8)
Divorced parent	29 (7.3)
Living alone	4 (1.0)
Educational level of the father	
Tertiary level	99 (24.8)
Secondary school level	231 (57.8)
Primary school level	61 (15.3)
No formal education	9 (2.3)
Educational level of the mother	
Tertiary level	127 (31.8)
Secondary school level	206 (51.5)
Primary school level	58 (14.5)
No formal education	9 (2.3)
Occupation of the father	
Civil servant/salary earner	56 (14.0)
Self-employed	300 (75.0)
Retiree	29 (7.3)
Unemployed	15 (3.7)
Occupation of the mother	
Civil servant/salary earner	37 (9.3)
Self-employed	128 (32.0)
Trading	235 (58.8)
Family size	
1-4	144 (36.9)
5-8	236 (59.0)
More than 8	20 (5.0)

The mean age of the respondents was 15.41 (+ 2.87), 52.5% were in JSS 1-3 class (n=210), 56.0% were Christians (n=224), 58.7% were from polygamous family setting (n=235), 31.8% were first and second position in the family (n=127), 91.8% were living with both parents (n=367), 57.8% of participants' father had secondary educational level (n=231), 57.8% of participants' mother had secondary school level of education (n=206), 75.0% of the participants' father were self-employed (n=300), 58.8% of participants' mother were traders (n=235) while 59.0% had family size of 5-8 (n=236). Descriptive statistics of Socio-Demographic Characteristics are presented in Table 1.

Table two: Drugs that are commonly used by the adolescents in mining sites

Drugs that are commonly used among adolescents					S/N	
S/N	Drugs commonly used	SA	A	D	SD	TOTAL
1	Tramadol drugs	240 (60%)	120 (30%)	20 (5%)	20 (5%)	400 (100%)
2	Cigarette	240 (60%)	140 (35%)	20 (5%)	0 (0%)	400 (100%)
3	Alcohol	300 (75%)	80 (20%)	12 (3%)	8 (2%)	400 (100%)
4	Phenega	200 (50%)	160 (40%)	28 (7%)	12 (3%)	400 (100%)
5	Indian hemp	292 (73%)	60 (15%)	40 (10%)	8 (2%)	400 (100%)
6	Roots	260 (65%)	120 (30%)	60 (15%)	60 (15%)	400 (100%)
7	cough syrup (codeine)	160 (40%)	120 (30%)	60 (15%)	60 (15%)	400 (100%)
8	Goskolo	280 (70%)	112 (28%)	8 (2%)	0 (0%)	400 (100%)

Table 2 above shows the drugs that are commonly abused by miners are alcohol 300(75%), indian hemp 292(73%), Goskolo 280 (70%), root 260(65%), cough syrup (codeine) 260(65%), Tramadol 240(60%), Cigarette 240 (60%), and Phenega with 200(50%).

Table three: Factors that Influence Drugs Abuse among adolescent Miners

	Frequency	Percent	Valid percent	Cumulative percent
Pear group influence				
Broken	209	67.5	67.5	67.5
home/families	24	3.8	3.8	71.3
Availability of Drugs	31	5.9	5.9	77.3
Seeking popularity	17	1.4	1.4	78.7
Secret cult	22	3.1	3.1	81.8
School life	25	4.2	4.2	86.0
Depression	33	6.6	6.6	92.7
To work hard	27	4.9	4.9	97.6
Boost one's Ego	20	2.4	2.4	100.0
Total	400	100.0	100.0	

The above table indicated that 209 representing 67.5 of the respondents stated that peer group pressure was the most major cause of drug abuse among the students of tertiary institutions, followed by depression representing 6.6%, availability of drugs representing 5.9%, To work hard representing 4.9%, School life 4.2%, Broken

home/family 3.8%, Secret Cult representing 3.1%, Boost one's Ego representing 2.4% then Seek for Popularity representing 1.4% as indicated on the table.

Discussion

This study examined the patterns of drug abuse and its relationship with school dropout among adolescents in mining communities of Jos South LGA, Plateau State. The findings reveal a high prevalence of substance use among adolescents, with significant implications for their educational attainment and overall wellbeing. The mean age of respondents (15.41 ± 2.87 years) indicates that most participants were in mid-adolescence, a developmental stage characterized by increased vulnerability to risk-taking behaviors, including substance use. The high proportion of respondents who dropped out at the junior secondary school level (52.5%) suggests that early school disengagement is a major concern in these communities. This aligns with previous studies which indicate that early adolescence is a critical period for both initiation of drug use and school dropout. The study found that alcohol (75%), cannabis/Indian hemp (73%), and locally prepared substances such as goskolo (70%) were the most commonly abused drugs among adolescents in mining sites. The widespread use of these substances may be attributed to their availability, affordability, and cultural acceptability within the community. The use of tramadol (60%) and codeine-containing cough syrups (65%) is particularly concerning due to their known addictive potential and associated health risks. These findings are consistent with national reports in Nigeria, which highlight alcohol, cannabis, and non-medical use of prescription opioids as leading substances of abuse among young people (NAFDAC, 2018; UNODC, 2018). The abuse of "goskolo," a hazardous mixture of substances, further underscores the risky experimentation common in underserved settings. Peer group influence emerged as the predominant factor associated with drug abuse (67.5%), far exceeding other factors such as depression (6.6%) and availability of drugs (5.9%). This highlights the strong role of social networks in shaping adolescent behavior, particularly in environments where supervision is limited. Adolescents working in mining sites are likely to form close peer bonds that reinforce substance use as a normative behavior. This finding is in agreement with earlier studies by Ogunsola and Fatusi, (2016), which identified peer pressure as a major determinant of adolescent substance use in Nigeria. Additionally, psychosocial factors such as depression and the desire to cope with harsh working conditions in mining environments may further predispose adolescents to drug use. Family and socio-demographic characteristics also provide important context for understanding drug abuse patterns. Although a high proportion of respondents reported living with both parents (91.8%), a majority came from polygamous families (58.7%) and relatively large household sizes (59.0% with 5–8 members). These family structures may limit effective parental supervision and resource allocation, thereby increasing adolescents' exposure to risk behaviors. Furthermore, the predominance of self-employment among fathers (75.0%) and trading among mothers (58.8%) suggests that parents may spend long hours away from home, reducing their capacity to monitor adolescents' activities. The findings further indicate that drug abuse has significant perceived negative effects on adolescents' physical health, psychological wellbeing, social behavior, and academic performance. Substance use can impair cognitive functioning, reduce concentration, and increase absenteeism, ultimately leading to poor academic outcomes and school dropout. Adolescents engaged in mining activities may prioritize income generation over education, especially when substance use reinforces disengagement from school. This supports existing literature which links substance abuse with truancy, academic failure, and eventual school dropout (Saighi and Merah, 2024). The unique context of mining communities presents additional challenges. Easy access to drugs, economic hardship, child labor, and weak enforcement of regulations create an enabling environment for substance abuse. Adolescents in these settings are exposed to adult behaviors, including drug use, at an early age, which normalizes such practices. The combination of occupational hazards and substance abuse further compounds health risks and undermines educational attainment.

Conclusion

Overall, the study demonstrates that drug abuse is highly prevalent among adolescents in mining communities of Jos South LGA and is strongly associated with school dropout. Peer influence, availability of substances, and socio-economic factors play significant roles in shaping these behaviors. Addressing this issue requires a multi-sectoral approach involving public health interventions, educational reforms, community engagement, and stricter enforcement of drug control policies.

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