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## UBIQUITY OF SUBSTANCE ABUSE AMONG SECONDARY SCHOOL STUDENTS IN BOGORO – BAUCHI STATE

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## **ABSTRACT**

Aim: The present study aimed to determine the prevailing factors associated with substance abuse among the adolescent population in Bogoro. Background: Pseudo-history is a dangerous lightly - taken tool to sustaining intergenerational communal clashes. Adolescence comes with search for self increased pressures and decision making. Methods: 480 pupils across all classes and within the age range 11- 19 years from 4 Day Secondary Schools in Bogoro town in Bogoro LGA, Nigeria were sampled. These were administered with structured questionnaires. Descriptive statistical analysis was used. Results: 115 (34.23%) still engage in substance abuse while 221(65.77) claimed to have stopped. 70% (336) of the sampled population have tasted abused substance before. The most abused substance amongst the secondary school pupils in Bogoro Burukutu 36% (120), Gin/ Spirit 22% (74) and Kolanut 20% (69) respectively. Age distribution of adolescents in terms of when engage in substance abuse was first tasted was highest in age 11-15 (40%) for followed by 16 and above (27%). Various campaign measures on substance abuse gave insight to the source of awareness. Radio (29%), Religious institutions (28%), Television and school programs each constituted 14% and least through friends (5%) after family (10%). Social and psychological influences linked with perceived feeling after taking substance of abuse -High, strong, bold, and happy were 44%, 18%, 34% respectively. Conclusions: The most abused substance amongst the adolescents of Bogoro is Burukutu. A multifaceted intergenerational communal clashes (Ethnoreligious, socio-political, poverty, government neglect), kind of major crop (Guinea corn) and pseudo perception of effect(s) derived from taking substance of abuse. Campaigns against same via school programmes, religious institutions, the media, and the family were tools found to bring about decline to the scourge in Bogoro. Modification of the various campaign strategies and correct historical account regarding land ownership is recommended.

KEYWORDS: Substance abuse, Proximity, Campaign, Conflicting -History, Adolescence, Bogoro.

## INTRODUCTION

Sayawa land, southern Bauchi state (Tafawa Balewa, Bogoro), had been for over a decade been the foci of unrestiveness and communal clashes that often giving rise to youthful exposure and experimentation to illicit foods and substances.

Substance abuse has a major impact on individuals, families, and communities, as its effects are cumulative,

contributing to costly social, physical, and mental health problems among smoking/tobacco interventions, school-based prevention programs and family-based intensive interventions typically addressing family functioning are effective in reducing smoking. [1] The Nigerian National Drug Law Enforcement Agency (N.D.L.E.A.) has stated that drug abuse is a major problem in schools. For instance; about 20% of the school population in Lagos state had taken a psychoactive drug once in their

lives. [2] The prevalence of illicit drug use among adolescents, especially High School students is also shown to be on the rise in the United States of America, Ontario, Canada; Trinidad and Tobago, Barbados; and in the United Kingdom. [3]. [4] The same trend of prevalence is also observed in Africa, confirming the high index of alcohol use, cigarette and cannabis smoking reported in Ghana and Rwanda. [5],[6],[7]

Nigeria has no nationally representative data on the use of alcohol and marijuana among youths. However, some other studies have shown the prevalence of current use of alcohol and marijuana among adolescents in Nigeria to be 3.5-12.5% and 0.6-1.7% respectively. [8],[9],[10] Alcohol consumption among adolescents and young adults is increasing globally; however, it is decreasing in most HICs in Europe and North America. [11], [12] Curiosity and peer pressure which is a characteristic of this age group are the major reasons for indulgence in substance use as well the ease at obtaining substances. Family also plays a role. [13]

Different studies carried out on prevalence of substance abuse among adolescents in some parts of Nigeria and other parts of the globe recorded 47.4% in Uyo and 33.7% in Kiru Kano state<sup>[14]</sup>, 69.3% in Oyo state <sup>[34]</sup>, 39% in a public secondary school in Lagos<sup>[15]</sup>, and 30.5% in another <sup>[16]</sup>, 21% be due to the rural location of Kagoro (Kaduna State).<sup>[13]</sup> 6% prevalence of substance use among school going adolescents was observed in Thailand. <sup>[17]</sup> Lifetime prevalence rate of any substance use was found to be 69.8% among college students in

Kenya. [18] Past-month illicit drug use was lowest among Asians (4.2%) and highest among American Indians and Alaskan Natives (12.6%); in between were adolescents of two or more races (11.8%), African Americans (9.5%), Caucasians (8.2%), and Hispanics (6.6%). [19] The present study aims to determine the prevalence of substance abuse among the adolescent population, the types of substances commonly used/abused, responsible factors, proximity to sources of such, family influence and impact of campaign against substance use in Bogoro town.

#### 2. MATERIALS METHODS

## 2.1 Study Design

A survey research using a structured questionnaire to collect qualitative and quantitative data was used.

## 2.2 Area of the Study

The study area is Bogoro. Bogoro is a Local Government Area of Bauchi State, Nigeria. Its headquarters is in the town of Bogoro. Za'ar or Sayawa people are the majority of its inhabitants. It has an area of 894 km² (345 sq mi) and a population of 84,215 at the 2006 census. The postal code of the area is 741. [20] This people of southern Bauchi state are predominantly farmers cultivating guinea corn, groundnuts, pepper and maize as major crops. Bogoro town is inhabited by Sayawa, Jarawa, Fulani, Hausa, Kanuri, Tapshinawa (angas) and other tribes with Saya language is spoken language. The area has been known for sectarian and ethnic violence over the years. [21] The major ethnic groups are the Sayawa and Hausa/Fulani. [22], [23]

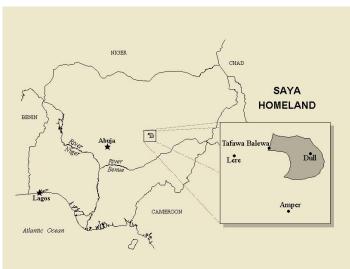


Figure 1: Map Illustrating Saya Land.

### 2.3 Data Collection

A total of 480 pupils of equal gender distribution and within the age range 11- 19 years from 4 day Secondary Schools in Bogoro town in Bogoro LGA, Nigeria were sampled. These were made up 20 (10 males and 10 females) from each class (JSS 1, JSS 2, JSS 3, SSS 1, SSS 2 and SSS 3) thus, 120 from each school. They were

administered with structured questionnaires (open and close ended) as the instrument of data collection.

## 2.4 Sample Size

This was determined using Fisher's equation;

$$n = \frac{Z^2 P q}{e^2}$$

n = sample size

Z = stat. correspond 95t C.I

*P* = prevalence from similar study For research on "substance abuse

in Jos" q = (I - P)

E = Level of precision

At 50% P value

This is according to [24]

## 2.5 Statistical Analysis

Descriptive statistical analysis by way of histograms, pie charts and percentages were used.

## 2.6 Ethical Approval

This was obtained from the Education Secretary's Office of the Bogoro Local Government Council, Bauchi State and the Ethical Committee of the Chaplaincy College of Health Technology Jos, Nigeria.

## 3.0 RESULTS AND DISCUSSION

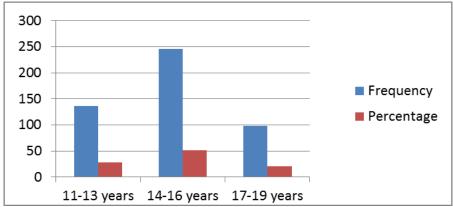


Figure 2: Age Distribution

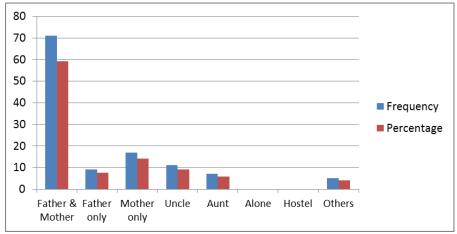


Figure 3: Domiciliation.

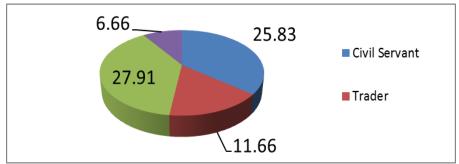


Figure 4: Parent's Occupation.

## SECTION B: KNOWLEDGE ASSESSMENT

Table 1: Knowledge about Commonly Abused Substances.

VADIADI EC	YES		NO		TOTAL	
VARIABLES	Frequency	%	Frequency	%	Frequency	%
Category A						
Alcohol (Beer,Burukutu, Goskolo,						
Ogogoro, Erujeje, Swagga, Regal, Bull,	344	71.67	136	28.33		
Origin, Mix)						
Category B						
Cough syrup, Tramadol, Cocaine,	212	44.17	268	55.83		
Morphine, Valium	212	44.17	208	33.63	480	100
Category C						
Cigarette, Snuff, Indian hemp	457	95.2	23	4.8		
Category D						
Solution, Gum, Spirit, Petrol	88	18.33	382	79.58		
Category E						
Coffee, Kolanut	400	83.33	80	16.67		

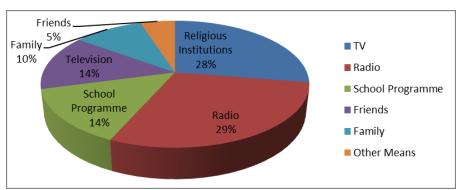


Figure 5: Sources of Campaign on Substance Abuse.

Table 2: Use of Substance.

VARIABLES	YES		NO		TOTAL	
VARIABLES	Frequency	%	Frequency	%	Frequency	%
Highlight of those that use substance and those that don't	336	70	144	30	480	
Highlight of those still using substances and that declined	115	34.2	221	65.8	336	100
Are you aware of any health problems associated with taking these substances?	396	82.5	84	17.5	480	

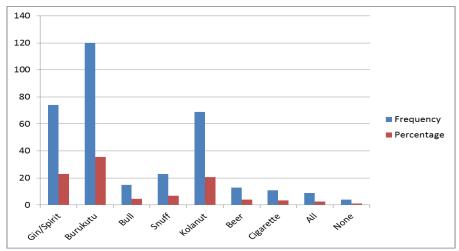


Figure 6: Types of Substances Tasted.

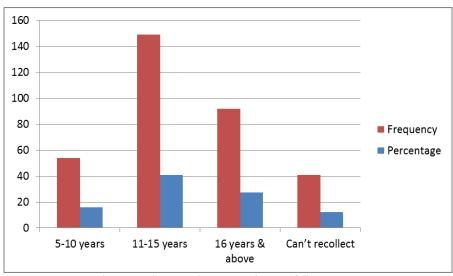


Figure 7: Age at First Experience of Substance.

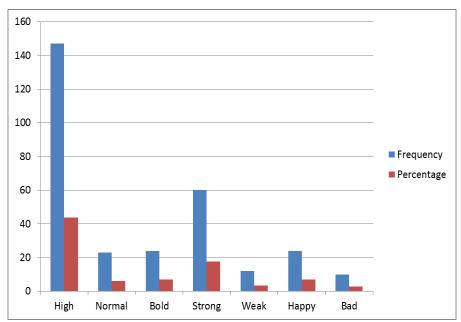


Figure 8: Perceived Feeling after Substance Intake.

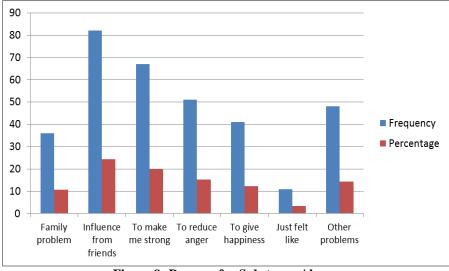


Figure 9: Reasons for Substance Abuse.

Table 3: Reasons for continual intake and stoppage of substance.

Reasons for substance intake			Reasons for declining substance intake				
	Frequency	%		Frequency	%		
To feel charged	59	51.3	My family stopped me	46	20.81		
Makes me forget my problems	28	24.4	Makes me weak	21	9.50		
Family problems	28	24.4	It is not good for me	154	69.68		
Total	115	100	Total	221	100.0		

**Table 4: Sources of Substances.** 

Variable	Frequency	Percentage
Provision Shops/Chemists	268	55.83
Street dealers	92	19.17
Friends	28	5.83
Home	8	1.67
Don't know	84	17.5
Total	480	100.0

Table 5: Proximity access, Intake and Sale of Abuse Substance by Family Members.

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VARIABLES	YES		NO		DON'T KNOW		TOTAL	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Intake of substances	108	22.5	348	72.5	24	5.0		
Sale of substances	220	45.8	180	37.5	80	16.8	480	
Sale proximity to school	124	25.8	316	65.8	40	8.3		100
How close?	very clo	ose	quite clo	se	Close	!		
	96	21.8	184	41.8	160	36.4	440	

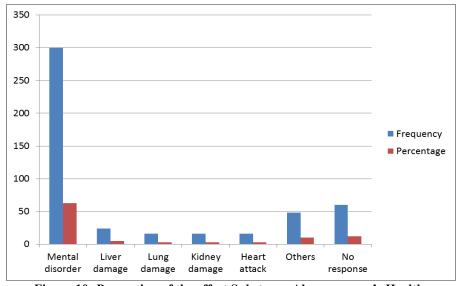


Figure 10: Perception of the effect Substance Abuse on user's Health.

Substance of abuse has the potentials of causing harm to the vulnerable in any society where adolescents are the prominent members. According to [25], Adolescence is recognized as the period for onset of behaviors and conditions that not only affect health limited to that time but also lead to adulthood disorders. Unhealthy behaviors such as smoking, drinking, and illicit drug use often begin during adolescence; they are closely related to increased morbidity and mortality and represent major public health challenges.

Age distribution of adolescents in terms of when engaged in substance abuse was first tasted was highest

in age 11-15 (40%) and followed by 16 and above (27%) - Figure 8.

115 (34.23%) still engage in substance abuse while 221(65.77) claimed to have stopped – Table 2. 70% (336) of the sampled population have tasted abused substance before – Table 2.

## Commonly abused substances

Most of the pupils have knowledge of commonly abused substances in Bogoro according to categorization by way of distribution as C - Cigarette, Snuff, Indian hemp (95.2%), Category E - Coffee, Kolanut (83.33%), A -

Alcohol (Beer, Burukutu, Goskolo, Ogogoro, Erujeje, Swagga, Regal, Bull, Origin, Mix (71.6%), B - Cough syrup, Tramadol, Cocaine, Morphine, Valium (44.17%) D - Solution, Gum, Spirit, Petrol - (18.33%) - Table 1. However, the most abused substances in terms of reality in Bogoro are Burukutu (35.7%), and Gin/Spirit (22.02%) Kolanut (20.54%) respectively – Figure 6.

High consumption of burukutu is not farfetched most probably due to the fact that it is a product of the commonly grown crop (Guinea corn - Sorghum bicolor) from the area. This is an indigenous alcoholic beverage that is produced via fermentation process and mostly brewed in unassuredly hygienic environment thus posing health risk to this vulnerable group apart from the alcoholic effect. Consumption of burukutu may pose a public health hazard because of reported abilities of some fungi isolated to produce mycotoxins. Therefore need for training local brewers on the basic hygiene and measures to reduce the risk of contamination by microorganisms. [26] Alcohol contributes nearly to 4% of deaths with 6.2% of all male deaths related to alcohol compared to 1.1% death of females worldwide. Annually, 320000 young people aged 15–29 years die from alcohol-related causes resulting in 9% of all deaths in that age group globally. [27]

## Sources, Campaign and proximity Factors

The sources of getting the substance of abuse (SA) revolve round the neighborhood. Provision stores\chemists (55.3%); street dealers (19.17%) and close relations (17.5%) - (table 4). Closeness of spots where substance of abuse could easily be accessed in relation to school location was a thing of big concern, as 63.64% attested that abused substances are sold pretty close to the schools - (table 5), thus easy reach for adolescents.

Various campaign measures on substance abuse gave insight to the source of awareness. Radio (29%), Religious institutions (28%), Television and school programs each constituted 14% and least through friends (5%) after family (10%). The means of dissemination of information though with commendable percentages probably owing to sermons (waazi), youth programs as well as the electronic media, little impact via campaign against drug\substance use was recorded from close associates, parents and friends - fig 5.

## Family and individual Factors

Majority of the parents are farmers (27.91%), and civil servants (25.83%) and most probably engage in self subsistent farming, others are traders (11.66%) while the unemployed constituted 6.66% - Figure 4. Many of the school – attending adolescents in Bogoro live with their parents (both or single) and relatives, however majority live with both parents (59.16%) – Figure 3. Family influence (20.81%) and personal decision (69.68%) to stop taking SA led to decline its intake. Further still, 45.83% and 22.5% of close relations sell and take SA

respectively – Table 5. The foregoing attests to the power of family influence in the management of substance use.

Most of the parents of the pupils are farmers (27.91%) and civil servants (25.83%) – Figure 4.

Way of life of families, including their vocation, and habits as well as friend/peers could have either positive or negative influence on adolescents. A study investigating the relationship between the influence of the family and behaviors among adolescents that put their health at risk reported that family connectedness was significantly inversely associated with alcohol and drug use. [28]

Having friends who smoked (OR = 5.446) or drank (OR = 1.894), and friends' invitation to smoke (OR = 10.455) or drink (OR = 11.825) were the dominant contributors to adolescent smoking and drinking. [29]

#### **Psycho-social and Environmental Factors**

70% (336) of the sampled population have tasted abused substance before – Table 2.

Most abused substance amongst the secondary school pupils in Bogoro Burukutu 36% (120), Gin/ Spirit 22% (74) and Kolanut 20% (69) respectively – Figure 7.

Social and psychological influences could be linked with perceived feeling after taking substance of abuse - High, strong, bold, and happy were 44%. 18%, 34% respectively - Figure 8.

School age adolescents in Bogoro have passed through intergenerational effect of communal clashes of whose orchestration has many facets. Such adolescents would depend on history from different sources - families, friends, peer group, religious organizations and would tend to affiliate the one that influences them the most. Reaction to the information also comes in form of hostility, violence, unrests under the influence of substance of abuse. Other effect includes election violence, kidnapping, banditry and defiance. This is in consonance with [30], who asserted that, several factors can enhance the risk for initiating or continuing substance abuse including socioeconomic status, quality parenting, peer group influence, biological/inherent predisposition toward drug addiction. A very interesting pointer to the fact that the school- age adolescents in Bogoro (69.68%) that engage in SA claimed to have stopped the habit on their own as result of looking at it as not good for them - Table 3. This could also be attributed to their perception on the effect of SA with mental disorder as the most perceived ailment associated to SA – Figure 10.

## **CONCLUSION**

The most abused substance amongst the adolescents of Bogoro is Burukutu. A multifaceted intergenerational

communal clashes (Ethno-religious, socio-political, poverty, government neglect), kind of major crop (Guinea corn) and pseudo perception of effect(s) derived from taking substance of abuse. Campaigns against same via school programmes, religious institutions, the media, and the family were tools found to bring about decline to the scourge in Bogoro. Modification of the various campaign strategies and correct historical account regarding land ownership is recommended.

#### **Conflict of interest**

None declared.

#### ACKNOWLEDGEMENTS

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