Influence of Maladministration of Drug on Science Practical Skills among Senior Secondary School Science Students in Ekiti State, Nigeria

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Abstract
This study investigated the influence of students' maladministration of drug on science practical skills in Ekiti State, Nigeria. The purpose of the study was also to determine the influence that maladministration of drug will have on students' science practical skills and also the influence that school counseling will have on maladministration of among senior secondary school science students in Ekiti State, Nigeria. The study adopted descriptive research design of the survey type. The population of this study consisted of 23,837 senior secondary schools science students in Ekiti State and the sample consisted of 300 senior secondary schools science students in Ekiti State. The instrument used was a self-designed Questionnaire titled "Students' Maladministration of Drug, Science Practical Skills and School CounselingQuestionnaire (SMDSPSSCQ)" was used to collect data from the respondents. The face and content validity of the questionnaire was ensured through experts' in Science Education and Guidance and Counselling. The reliability of the instrument was ensured using Cronbach's Alpha Reliability Coefficient and the value obtained was 0.77. The data generated was analyzed using descriptive statistics and the three hypotheses were tested at 0.05 level of significance. The result showed that there is no significant influence of gender on maladministration of drug, that there is no significant relationship between maladministration of drug and science practical skills and that there is significant relationship between school counselor and maladministration of drug among senior secondary school science students. Based on the findings of the study, it was concluded that Maladministration of drug is common among senior secondary school science students and this has no influence on their science practical skills. And finally that school counselors serves as solution to the maladministration of drug among senior secondary school science students in Ekiti State, Nigeria. It was therefore recommended that School counselors should frequently organize Counseling education in schools to prevent students engaging in the act. Parents and teachers should immediately inform school counselors on detection of maladministration of drug in their wards or students respectively.
Keywords: Science Practical Skills, Maladministration of Drug, School Counseling, Gender and Senior Secondary School Students.

I. Introduction

A drug is any substance that alters the body's function physically or psychologically. Drug can also be explained as a chemical substance that can change how one's body and mind work. American School Counselor Association (2018)defined Drug as a chemicalsubstances used for the purpose of creating pleasurable effects on the body or the brain.

The common drugs administered or used in Nigeria are: Amphetamine, Aspirin, Atenolol, Tramadol, Paracetamol, Alcohol, cocaine, Indian hemp (marijuana), morphine, heroin, tobacco, ephedrine, Gegemu among others.Drug could likewise be mal-administered or abused when it isn't pharmacologically prescribed and when it is utilized as a part of the substance of legitimate restriction. Cough or cold medicines from the store could be abused if the directions are ignored and one takes more than required.

It appears that maladministration of drug remains a major health challenge all over the world. Mal-administration of drug could refer to the hazardous use of psychoactive substances such as illicit drugs. Alimi and Olayiwola (2015) described maladministration of drug as excessive and persistent self-administration of a drug without regard to medically or culturally acceptable patterns. Adekeye (2012) posited that a drug is said to be abused when its use is not pharmacologically necessary especially when it's used in face of legal prohibition or when socially acceptable beverage is used excessively.

Maladministration of drug, according to Ekpenyong and Aakpege (2014), is the wrong use or inappropriate use of chemicalsubstances that are capable of changing functions of cells in the body. Ajayi and Ekundayo (2010) also saw maladministration of drug as over-dependence and misuse of one particular drug with or without a prior medical diagnosis from qualified health practitioners.

People use drugs for so many reasons as some may want to feel good. Taking drug could make one feel really emotionally stable for a short time. That may be the reason why people keep taking them, to have those good feelings again and again. Though someone may take more and more of a drug, the good feelings seems not lasting. Some people who feel very worried, afraid, or sad seems to abuse drugs so as to stop feeling so awful.

Secondary school students are individuals within the age range of 11-20. Usually, trial with drugs during this period (11–20 years) is common. At this age, they try so many new things especially when it comes to proving themselves in the society. These students use drugs for many reasons, including curiosity and desire to find out the effectiveness of a particular drug, to feels good, to reduce stress, or to feel grown up. Using alcohol and tobacco at a young age increase the risk of using other drugs later (Hamisu, Ahmad & Lim, 2014). In one of the WHO"s and the World Heart Foundation's data, posit that in Nigeria, 22.1 percent of school youth age between 12 to 17 years use tobacco. This seems not to really help their problems and could lead to addiction, which could eventually make them feel much worse. Some people who want to get good grades, get a better job, or earn more money might think drugs will give them more energy, keep them awake, or make them think faster. It may not work, but put their health at risk, and may lead to addiction. Gender could also be a serious factor to the maladministration of drug.

Gender in general terms refers to the social constructionsof masculinity and femininity. Masculinity denotes the qualities, behaviours and attitudes traditionally associated with or deemed appropriate for men; femininity for women. Gender differences in relation to maladministration of drug has remained a controversial issue among researcher as there does not seem to be a clear cut direction of difference between the abuse by both sexes. It appears that sex of a person predisposes him/her towards abusing certain drugs. The researcher observed that boys are addicted to alcoholic drinks, cigarette smoking.

Male are likely to use illicit drugs than females. Recently the number of females using illicit drugs has been increasing. They are also suspected of having a less favourable opinion of how an illness or a disease will develop. Addicted female often characterize themselves as having few or no friends and a limited social network, while men are more likely to have many social opportunities to use drugs, these behaviour may reflect societal tolerance of males' use of substance and the greater social stigma attached to females use of substance (Nelson-Zlupko, 2005).

The researcher observed that the motive behind maladministration of drugamong secondary school students may be sociological (status-seeking, peer pressure, the news media or substance-oriented society), psychological (to banish pain or discomfort, to attain euphoria, fantasy or to escape from unpleasant reality), out of curiosity, boredom, to alleviate fear, derive sexual and physical pleasures, or family background.

The researcher observed that secondary school students use drugs in imitation of their peer group and friends both outside and in the school. They take drugs with the intent to belong to a peer group in an attempt to avoid being odd in the group or being thrown out of the group. Innocent youths may show willingness to indulge in maladministration of drug.

The prevalence of maladministration of drug among youths and the negative effects it has on their health, professions and personal lives are inevitable. With the accelerated, progressive nature of our nation (Nigeria), narcotics are becoming more easily accessible which results in younger users of alcohol and illicit

drugs including marijuana, cocaine (crack), heroin, hallucinogens, inhalants and any prescription-type psychotherapeutic drug used non-medically.

The researcher observed that in secondary schools in Ekiti State, consumption of drugs seems to be very common; students interviewed reported that they take these drugs to give them boldness to date the opposite sex which most of them cannot ordinarily do without the use of some drugs, the timid types purposely take some drugs especially during social gathering to enable them feel on top.The researcher also observed that the reasons advanced by the students for taking drug are: to feel on top like adults, to feel good, to get excited, to be like friends and to be like stars. The researcher also observed that school counselor could be a solution to this menace within the school system.

Counselor can be defined as a trained person who is skillful in guiding and counseling his or her client. A school counselor is a professional person who works in primary or secondary schools to provide academic, career, college access/affordability/admission, and social-emotional competencies to all students through a school counseling program.School counsellings can play an important role in preventing expression of asocial behavior as well as maladministration of dangerous drugs(Obiamaka 2014)

It is widely believed that the socio-economic and technological development of a nation is a function of her level of education which is itself a function of the nature of her curriculum implemented in schools.

The role science can play in national development cannot be over emphasized. The significance of science and technology for sustainable national development is obvious and not in doubt. One of the fundamental issues in Nigeria today is the determination of how effective science is, at all the levels of education. Science, being an activity- based subject, needs practical activities regularly for the ultimate achievement and attainment of the goals of science and science education as outlined clearly in the National Policy of Education (FRN , 2014). Technology employs knowledge, skills and tools to improve human potentials, to solve practical problems and to modify our environment. Technology is therefore concerned with the application of science to obtain practical solution to the myriad of human problems (FGN 2011).

The worst science teachers make no attempt at all to embellish the curriculum by taking their students out of the classroom and they make minimum effort to run practical classes. Indeed, their sole aim appears to be to cover the curriculum so that their students will achieve the highest grades possible in examinations, even by abandoning many of the practical classes if that should prove necessary (Abraham,2008). The importance of practical work in school science is widely accepted but it is important we ensure that such practical work genuinely supports learning and teaching, and that flexibility is given to the teacher to do this in relation to their pupils' needs and the courses they are studying.

An enquiry-based approach may also encourage students to be more independent and self-reliant. In this way it supports general educational goals such as the development of individuals' capacity for purposeful, autonomous action in the world. In the introduction to a recent book, published in the USA,(Abrams, 2008), while noting that 'inquiry' plays a prominent role in discussions about science education reform, suggest that it would be a mistake to assume that the 'science education and research and teaching communities wholeheartedly embrace it. They go on to point out that Settlage (2003) has argued that 'inquiry' has been 'one of the most confounding terms within science education (Anderson, 2007).

Despite the utilitarian value of Science practical in science and technological advancement and teachers' position in the realization of these objectives. Lack of practical activities in Science has resulted in poor manipulation and observation skills (Adepoju, 2002), and the absence of these skills gave rise to students poor performance of science students at solving technical problems in the society (Oyedokun and Timothy, 2001).

The observation of researcher was that Atikankan , Irona in Ado-Ekiti the capital city of of Ekiti State at night has been a point of hard maladministration of drug centre in which secondary school age children are also involved. These children are still schooling in different Secondary schools in the State which they might be science students.

The researcher was opportune to interview three youths from those involved in the smoking of hard drug with the fact they their school mates are also indulging in maladministration of drug during school hours, especially science practical period in uncompleted buildings and around laboratory,this is worrisome and alarming which can negatively influence students' practical skills and eventually disturb the development of the nation.Therefore, there is need to investigate into the influence that maladministration of drug has on Students Science Practical Skills in Ekiti State, Nigeria.

II.   Research Method

A descriptive research design of the survey type was used for this study. The survey design was well thought-out appropriate and adopted because it described the existing situation of maladministration of drugs factors that influence students Achievement in Science Practical Skills.The population of this study consisted of 23,837 senior secondary schools science students in Ekiti State as at the time of this research work. Sample

consisted of 300 science students in Ekiti State. Multistage sampling procedure was used to select the sample. In stage one, five Local Government areas were chosen with the use of Random sampling technique by balloting system out of sixteen Local Governments in Ekiti State. In stage two, purposive random sampling technique was used to select twogovernment owned secondary schools also that has both male and female in each of the Local government areas selected. Random Sampling Technique was used to select 30 science students in each of the schools selected. A total of 300 senior secondary science students comprising of 150 male and female, 150 from SS1 and SSIII were selected.A self-designed Questionnaire titled "Students' Maladministration of Drug, Science Practical Skills and School CounselingQuestionnaire (SMDSPSSCQ)" was used to collect data from the respondents. The questionnaire has 20 items with a four-point likert-type scale of Strongly Agree, Agree, Disagree and Strongly Disagree. The face and content validity of the questionnaire were ensured through experts' in Science Education and Guidance and Counseling. The reliability of the instrument was ensured using Cronbach's Alpha Reliability Coefficient; it was also used to ensure the internal consistency of the instrument which is already decolorized. The instrument was administered on 20 students that will not partake in the research and the value obtained was 0.77. The final version of the instrument was administered to with the help of a counselor in each school as research assistance and the students were asked to ask any question to ensure their thorough understanding of the items. The data generated was analyzed using descriptive statistics and the three hypotheses were tested at 0.05 level of significance.

Three research hypotheses were postulated for the purpose of this study:
1. There is no significant influence of gender onmaladministration of drug among senior secondary schoolscience students in Ekiti state.
2. There is no significant relationship between maladministration of drug and science practical skills among senior secondary school science students.
3. There is no significant relationship between school counseling and maladministration of drug among senior secondary school science students.

Hypotheses Testing and Results
Hypothesis 1
1. There is no significant influence of genderon maladministration of drug among senior secondary school science students in Ekiti state.

Table 1: ANOVA Analysis ofsignificant influence of genderon maladministration of drug among senior secondary school science students in Ekiti state

	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	0.030	1	0.030		
Within Groups	53.157	298	1.178		
Total	53.188	299		0.169	.681

[*]**p>0.05**

Table 1 showed that there is no significant difference in the mean scores of students'gender and maladministration of drug among senior secondary school science students in Ekiti state (F=0.169, p>0.05). The null hypothesis is accepted. This implies that there is no significant influence of gender on maladministration of drug among senior secondary school science students in Ekiti State.

Hypothesis II
There is no significant relationship betweenmaladministration of drug and science practical skills among senior secondary school science students.

In testing the hypothesis, scores relating to maladministration of drug of section B of the questionnaire and that of science practical skillswere computed and subjected to statistical analysis involving Pearson Product Moment Correlation at 0.05 level of significance. The result is presented in Table 2.

Table 2: Pearson Correlation of maladministration of drug and science practical skills among senior secondary school science students in Ekiti State

Variables	N	Mean	SD	R	P value
Maladministration of drug	300	3.68	.327		
Science practical skills	300	4.03	.547	-.129	0.025

[*]**p>0.05**

Table 2 showed that there is no significant relationship between maladministration of drug and science practical skills among senior secondary school science students in Ekiti State. (r (300)= -0.129. p> 0.000). Therefore, the null hypothesis is accepted. This implies that there is no significant relationship between maladministration of drug and science practical skills among senior secondary school science students.

Hypothesis 3
There is no significant relationship between school counseling and maladministration of drug among senior secondary school science students.
In testing the hypothesis, scores relating to school counselor of section B of the questionnaire and that of maladministration of drug were computed and subjected to statistical analysis involving Pearson Product Moment Correlation at 0.05 level of significance. The result is presented in Table 3.

Table 3: Pearson Correlation ofschool counselor and maladministration of drug of Senior Secondary School Science Students in Ekiti State

Variables	N	Mean	SD	R	P value
maladministration of drug	300	3.68	.327		
school counseling	300	3.69	.712	.200	0.001

[*]**p>0.05**

Table 3 showed that there is no significant relationship between school counselor and maladministration of drug among senior secondary school science students in Ekiti State. (r(300)= -0.200. p> 0.000). Therefore, the null hypothesis is rejected. This implies that there is significant relationship between school counselor and maladministration of drug among senior secondary school science students.

III.   Discussion
The findings of this study showedthat there is no significant influence of gender on maladministration of drug among senior secondary school science students in Ekiti State. It implies that both males and females are similarly involved in this threat of maladministration of drug. This might be as a result that nowadays both girls and boys are involved in closer relationship than before. This study is in consonance with a survey study conducted by Odejide in Obot (2015) who stated that7.3 % of the males and 46.8 % of the females used valium without prescription. The finding is in also in agreement with the result of Simanto, Schoen and Klein (2010) that the prevalence of regular consumption of hard drugs in males (22.4%) is slightly higher than in females (19.3%).

This study showed that there is no significant relationship between maladministration of drug and science practical skills among senior secondary school science students in Ekiti State.Some students could abuse drug and still be able to compose themselves especially during learning process.This finding is in consonance with the finding of Oshodi, Aina and Onajole (2010) which states that students abusedrugs for relief of stress in order to face their studies. This also negates the claim of Obot (2000) that maladministration of drug influences the brain and the body directly. This is also similar to that of Obiamaka (2014) in his study indicated that the problem of maladministration of drug knows no boundaries or social class.

The findings also showed that there is significant relationship between school counselingand maladministration of drug among senior secondary school science students in Ekiti State. This implies that with

the atteFRN on of the school counselor, maladministration of drug by students could be drastically be under control or eradicated. This finding is in consonance with the finding of American School Counselor Association (2017) that school counselingare often the first safeguard against abuse of drug for students through early ideFRN fication, community referrals, and educational programs (ASCA,2017a). This also agrees with American Psychiatric Association. (2018) that Students' limited awareness and impulsivity increase their poteFRN al to develop maladministration of drug by School counselors who can increase students'awareness of the social effects of their substance use.

IV. Conclusion

Maladministration of drug is common among senior secondary school science students and this has no influence on their science practical skills. It is also concluded that when school counselingis observed, students can really be influenced to avoid the menace among the science students and within the school system.

V. Recommendations

Base on the findings of this study, it is therefore recommended that;
1. School security should be heightened and regular check should be carried out on students while coming in the school gate.
2. School counselors should frequently organize Counseling education which will introduce science students, students in general especially those who have already been engaging in the act of maladministration of drug.
3. Parents and teachers should immediately inform school counselors on detection of maladministration of drug in their wards or students in order to put it in control very early.
4. Drug free clubs should be established in secondary schools by the school administrators.

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