Knowledge of Dangers of Self-Medication among Secondary School Students in Yenagoa Local Government Area, Bayelsa State

Alfred Stephen Ekpenyong[1] & Mandu S. Ekpenyong[2]

Self-medication is a health issue that little or nothing is known about. This study was set out to ascertain the knowledge of dangers of self-medication among secondary school students in Yenagoa LGA, Bayelsa State. The descriptive survey design was adopted for the work. The population of the study was 5900 students in the 20 registered secondary schools in Yenagoa. The sample of 300 students was randomly selected using non-replacement technique from the 10 selected schools. The instrument used for data collection was a well structured questionnaire. The technique used for the data analysis was descriptive statistics of frequency, percentage and inferential statistics of chi-square (x2). The major findings of this study was that knowledge of dangers of self-medication among secondary school students in the area of study was low. Based on this the study recommended among others that campaign against self-medication, and its related health risk should be embarked upon by health workers. Also, drug and consumer education should be included in the school curriculum, while Parents should also minimize the use of drugs at home, and monitor their children attitude towards the use of drugs.

Keywords: Drug abuse, Health, Knowledge, Self-medication, Students

Background of the Study

Self-medication is an age long health issue. It is an act that is as old as man; self medication has been practiced many centuries ago, whereby tree barks, roots and herbs are used to treat ailments that afflict man at those times.

Self-medication is associated with the use of drugs. Drug is any substance other than food, which by its chemical nature affects the structure and functions of living organisms. Drug is a substance that alter the physical or mental states when taken into the body (Akubue 2016). Drugs are used to prevent, alleviate or cure illness and to relieve pain. Drugs come in different forms such as tablets, caplets, capsules, creams, Ointments, injectable, inhalations and so on. Drugs may be swallowed, injected, applied to the skin, inhaled or inserted (Combs, 2006). In recent times, drugs are integral part of living. By the end of 19th century, the emergence of new group of drugs as a result of the innovations and scientific discoveries in medicine and health also led to emergence of new drug users. In many western societies, the widespread usage of vitamins and over-the-counter supplements without medical advice is mainly due to the availability of drugs (Edward & Daniel, 2014).

Self-medication has been largely aided by vigorous promotion adverts by pharmaceutical companies in recent time. In the prints and electronic media, people are continually urged to keep fit by taking drugs to prevent and cure their common ailments. Drugs that are readily available over—the-counter include pain relievers, cough remedies, vitamins, tonics and many others, (Frank, 2006). Some observers of health behavior and medical affairs have speculated that self-medication arises from the desire of laymen to feel more in control of their own health, rather than relying on medical establishment, whose motives are sometimes seen as suspects. Also, the extraordinary increase in the cost of health services in the recent time causes people to desperately find more affordable alternatives which sometimes proves to be ineffective and expensive (Dean; 2010).

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[1] Dept of Sociology, Faculty of Social Sciences, Niger Delta University. Email: alfyny93@yahoo.com
[2] Dept of Nursing, Faculty of Health, psychology and social care, Manchester Metropolitan University, UK. Email: M.Ekpenyong@mmu.ac.uk

The phenomena of Self-medication affects people from all social classes. This exerts an influence on the general attitude of society towards drug abuse and misuse. Drug abuse is not a new phenomenon in this contemporary world. Drug misuse is the act of taking a drug for the purpose of fulfilling a need that the drug cannot pharmacologically fulfill while drug abuse is the repeated misuse of drugs (Dusek and Daniel, 2014). The most misused drugs are the tranquillizers, and analgesics or pain relievers. Self-medication is a practice that leads to unhealthful drug consumption patterns both in choice of drugs and dosage. It is not only cost-effective; it is harmful to the patient as it' causes toxicity, resistance and tolerance. It has also contributed to public health hazards by leading to the development of resistant malaria and antibiotic resistant bacteria (WHO;2006)

Owing to the facts above, the researcher is motivated by the need to ascertain the level of knowledge of students in terms of dangers associated with indiscriminate use of drugs. This is because, if they have sound knowledge of the dangers of self-medication, they will be able to avoid the act.

Statement Of The Problem

In Nigeria, drugs use has been part of our social health inheritance. Self-medication as an aspect of drug abuse is a threat to youths and adolescents, people take drug for many reasons, for example, for fun, escapism, sensual stimulation and as a result of frustration (Ogunremi &Okoonofia 2006).

Many factors are incorporated in perpetuating the act of self-medication, such factors could be social, physical or psychological (Onuzulike 2002). One of the strongest social reasons for people's involvement in self-medication is peer pressure. Both teenagers and adults are involved. Such peer influence is characterized by the desire to be accepted among friends or in social circumstance.

Nicholson (2012) pointed out that the extraordinary increase in the cost of health care in recent decades-doctor, hospital prescription causes some individuals to desperately try to find more affordable alternatives to treat or prevent their own afflictions. Though, this pursuit sometimes proves to be ineffective and expensive. Also, people resort to self-medication thinking that since the symptoms are similar to the disease they suffered before, it is not necessary to visit the hospital or health professional to waste their money.

Many dangers are associated with self-medication. This is because the consumer has no knowledge of the efficacy of drug or its hazards, thus leading to a greater number of toxic reactions. According to Ekwe & Obimba (2000), the dangers of self-medication are problems to contemporary medical personnels. It brings serious adverse consequences to the user, his family, community and society at large.

Generally, students are seen to be the worst offenders in the issue of self-medication as they resort to use of drugs in order to cope with academic stress. While some are forced to use drugs by senior students, others use drugs as a result of ignorance, curiosity, exuberance or to be courageous in the presence of other students and school authorities. Also, the secondary students in Yenagoa Local Government Area are not left out in this issue or problems of self-medication and drug abuse. Ages of 14-20yrs of age are about 60%, others ages 21-25yrs 30% are the number of persons that are involved in drug abuse in the area of study.

The above facts or problems motivated the researchers towards ascertaining the level of knowledge of dangers of self-medication among secondary school students in Yenagoa Local Government Area. The primary objective of this study is to determine the knowledge of dangers of self-medication among secondary school students in the study area.

This will be achieved through the following specific objective and hypotheses of study.

Objective

To determine the level of knowledge about the dangers associated with self-medication and to ascertain whether the knowledge of the dangers of self-medication among secondary school students in Yenagoa L.G.A differ by a gender.

Hypothesis

Knowledge of the dangers of self-medication among secondary schools in Yenagoa L.G.A. does not significantly differ by age.

The gender of secondary school student in Yenagoa LGA does not influence their knowledge of dangers of self-medication. Knowledge of the dangers of self-medication among secondary school students in Yenagoa L.G.A. does not differ by class level.

Description of Study Area and Methodology

Geographically Yenagoa lies between latitude 6°-12° and 7°-13° N and between longitude 5°E - 45°E. It is located on a fairly low lying coastal plain and it is about 78.64 meters above sea level. The total area covered by the city is about 125Sq.Km. linguistically, Yenagoa is originally an Epie-Atissa speaking environment. Owing to urbanization and the rapid influx of people from other parts of the state and the country, Yenagoa now has a heterogenous population comprised Ijaw, Ogbia, Nembe, Urhobos, Igbo, Hausa, Yoruba and Efik speaking groups.

The target population for this research consisted of the 6000 students in the 20 registered secondary schools in Yenagoa L.G.A, It also includes all the male and female students from whom the required information was gathered.

The descriptive survey method is the research adopted for this study. For the achievement of the objective of this research, this survey method was used to determine the extent of knowledge of dangers of self medication among secondary school students in Yenagoa L.G.A. This method has been used in similar studies. The samples for the study comprised 300 male and female students from 10 randomly selected secondary schools in Yenagoa L.G.A.

The multi-stage sampling technique was adopted in selection of our sample size in the study area.

The major instrument used for data collection was a self-structured questionnaire. Data collected was analyzed using the descriptive statistics of frequency and percentage for the research questions and chi-square $(X2)$ test of association or dependence for testing the hypotheses.

Table 1 -Population of schools in Yenagoa L.G.A

Name of Schools	Population
Community Comprehensive secondary school, Agburah	380
Future Secondary school, Yenagoa	500
Ekpetiama comprehensive High School, Tombia	420
Biseni Secondary School, Kalama	450
Community secondary school, Agbobiri	350
Government Grammar School, Okolobiri	720
Ogu Grammar school, Ogu Atissa	600
Community secondary school, Zarama	400
Epie National High School, Kpansia	550
Community comprehensive secondary school, Ayamabele	480
Agudama Comprehensive High school	350
Community secondary school, Opolo-Epie	250
Saint Jude Girls Secondary School, Yenagoa	1300
Community secondary school, polaku	680
Ogbopuru Community secondary school, Koloama	550
Community secondary school, Azikoro	400
Community secondary school, Swali	300
Community secondary school, Agudama-Epie	220
Community secondary school, Igbogene	320
Bishop Dimeari Boys secondary School yenagoa	280
Total	5900

Data Presentation And Analysis

The table above shows frequency distribution of respondents by age, gender, class and religion. From the analysis, it shows that 50 (17.9%) were within 12-14 years, 97(34.6%) were within 15-17 years, 83(29.6%) were within 18-20 years, 50(17.9%) were 21years and above. It also shows frequency distribution of respondents by gender. From the analysis, it shows that 117(41.8%) were males while 163 (58.2%) were females.

On analysis of class level, It shows that 101(36.0%) were within JSS class, 179(64.0%) were in SSS class. Finally data on frequency distribution of respondents by religion shows that 276 (98.5%) were Christians while 4 (1.4%) were Muslims.

Table 2: showing socio-demographic characteristics of respondents

Age	Frequency	Percentage
12 – 14	50	17.9%
15 – 17	97	34.6%
18 – 20	83	29.6%
21 and above	50	17.9%
Gender		
Male	117	41.8%
Female	163	58.2%
Religion		
Christianity	276	98.5%
Islam	4	1.4%
Class		
JSS class	101	36.0%
SSS class	179	64.0%

Source: Field work

Table 3: Descriptive statistics showing the level of knowledge of dangers of self-medication

Do you know what is self-medication	Frequency (n = 280)	Percentage (%)
Yes	210	75.0%
No	70	25.0%
Total	280	100%
Do you know that there are dangers **associated** with self-medication	Frequency (n = 280)	Percentage (%)
Yes	100	36.0%
No	180	64.0%
Total	280	100%
Can self-medication lead to wrong diagnosis and treatment?	Frequency (n = 280)	Percentage (%)
Yes	135	48.0%
No	145	52.0%
Total	280	100%
Can self-medication lead to drugs addiction and dependence?	Frequency (n = 280)	Percentage (%)
Yes	114	41.0%
No	166	59.0%
Total	280	100%
Does self-medication lead to damage of vital organs like the liver?	Frequency (n = 280)	Percentage (%)
Yes	80	29.0%
No	200	71.0%
Total	280	100%
Can **Sel**f-medication lead to resistance due to under or prolonged treatment?	Frequency (n = 280)	Percentage (%)
Yes	130	46.0%
No	150	54.0%
Total	280	100%

Source: Field work

Table 3 presents data on the level of knowledge of secondary school students in Yenagoa L.G.A on the dangers of self-medication. The table shows that 75% of the students have knowledge of what self medication is, compare with 25% who do not know what is self medication.

Further analysis shows that 64% of the respondents don't have knowledge of the dangers associated with self-medication. Only 48%, of the respondents knows that self-medication can lead to wrong diagnosis and treatment, and about 59% do not know that self-medication can lead to addiction and dependence, analysis also shows that 71% of the respondents do not know that self-medication can lead to damage of vital organ and about 54% of respondent do not know that self-medication can lead to resistance due to under or prolonged treatment.

Hypothesis 1.

Knowledge of the dangers of self-medication among secondary school students in Yenagoa L.G.A. does not significantly differ by age.

Table: 4 knowledge response by age

Age	Has knowledge	No knowledge	Total
12 – 14	15(30%)	35(70%)	50
15 – 17	32(33%)	65(67%)	97
18 – 20	33(40%)	50(60%)	83
21+	20(40%)	30(60%)	50
Total	100	180	280

Source: Field work

Since x^2cal = 2.01 < x^2 tab = 7.81 at the significant level of 0.05. We therefore accept (null hypothesis) and conclude that knowledge of dangers of self-medication among secondary school students in Yenagoa does not differ by their age difference.

The result implies that the observed difference in knowledge is not significant and could have occurred as a result of chance.

Hypothesis 2

The gender of secondary school students in Yenagoa LGA does not influence their knowledge of dangers of self-medication.

Table 4.1: Knowledge response by gender

Gender	Has knowledge	No knowledge	Total
Male	57(49.0%)	60(51.0%)	117
Female	63(39%)	100(61.0%)	163
Total	128	152	280

Source: Field work

Since x^2 c = 7.89> x^2 tab =3.84. We reject null hypothesis and thus conclude that gender of secondary school students in Yenagoa does not significantly influence their knowledge of the dangers of self-medication. The above result implies that the difference observed has no relationship with their gender.

Hypothesis 3

Knowledge of the dangers of self-medication among secondary school students in Yenagoa L.G.A does not differ by their class level

Table 4.2 knowledge response by class level

Class level	Has knowledge	No knowledge	Total
JSS Class	44(37%)	57(63%)	101
SSS Class	84(48%)	95(52%)	179
Total	128	152	280

Source: Field work

Since X^2 Cal = 0.03 <x^2 tab= 3.84 at the significant level of 0.05, we accept the null hypothesis and conclude that knowledge of dangers of self-medication among secondary school students in Yenagoa LGA is not differentiated by class level. The result implies that there is no difference in knowledge by their class level; the difference observed is significant.

Discussion of Findings

In discussion of findings, the objectives of the study and research hypotheses were used and backed up with the relationship with other studies.

The data on table 3 revealed that 210(75%) have knowledge of what self medication is, compare to 70(25%) that don't have the knowledge at all. The table also showed that the students had the knowledge of all the listed dangers but at varied degrees.

This finding is in agreement with WHO (2006) that very little is known about self-medication. This is because drug education does not form a major topic in the secondary schoo1 health education curriculum. Further analysis showed that a good number of students 180(64.0%) has no knowledge of the dangers of self-medication. This could be because in Yenagoa LGA self-medication is not part of the curriculum in secondary school.

However, a critical analysis of the table 4 shows that 64% of the students do not have knowledge of the dangers of self-medication. Also, the students between the age range of 12- l4years (30%) has knowledge while (70%) within similar age bracket has no knowledge, This could be as a result of lack of exposure to the world.

Objective two was set to ascertain whether the knowledge of self-medication among secondary school students in Yenagoa L.G.A differ by gender. The result of data analysis using x^2 test of association yielded x2 cal 7.89 > x^2 tab 3.84. Thus null hypothesis was rejected and conclusion drawn that knowledge of dangers of self-medication among secondary school students in Yenagoa L.G.A is not influenced by gender. This implies that both males and females have low knowledge response.

This low knowledge response in both gender is because most programmes conducted for youths in and out of school concentrate more on religious and moral issues than health especially the concept in question (Albert 2003). This therefore explains the need for including drug and consumer education in youth activities in and out of school.

Hypothesis 3 sought to ascertain whether the knowledge: of dangers of self-medication among secondary school students in Yenagoa L.G.A differ by class level. The result of data analyzed shows that x^2 Cal 0.03<x^2 = 3.84. This lead to the acceptance of null hypothesis and conclusion drawn that knowledge of dangers of self medication among the students does not differ by class level. Analysis shows that there is no significant difference. This finding agrees with Albert (2003) opinion that lack of information's on drug leads to their low knowledge of the dangers associated with self-medication.

Conclusion

Based on the findings of the study, the following conclusions were drawn.

Secondary school students in YenagoaL.G.A have low knowledge of the dangers of self-medication .

Age does not influence the knowledge of dangers of self medication among secondary school students.

Knowledge of the dangers of self-medication was influenced by gender.

 Knowledge of dangers of self —medication does not differ by class level.

Religion affiliation does influence the knowledge of dangers of self-medication among secondary school student in the study area.

Recommendations

The Following recommendations were made based on the findings of the study;

An awareness campaign on self-medication and its Health-related risks should be embarked upon by health professionals; also, intensive health education should be carried out.

The curriculum planners should include drug and consumer education in the school curriculum in all levels of education to help create awareness on the dangers of self-medication.

The government should ensure that there is law enforcement on the illegal sale of drugs by hawkers, over the counter (OTC) shops. This will reduce indiscriminate use of drugs.

The government should enact a law on drug purchase and types of drugs to he sold over the counter (OTC). In this way culprits will be called to order.

Religious organizations should educate their members on the dangers of self-medication, in line with their moral teachings.

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