

KNOWLEDGE AND PRACTICE OF SELF-MEDICATION AMONG STUDENTS OF FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE, NIGERIA

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ABSTRACT

The study assessed the knowledge and practice of self-medication among students of Federal University of Technology, Akure (FUTA). The study employed a cross-sectional descriptive study which utilized a validated self-structured questionnaire for data collection. A total of 80 respondents from Anatomy department were recruited for the study. The study findings show, that majority of respondents were between ages 15 and 20 years. Findings indicated the level of students' knowledge and practice about self-medication is very high. Our study further showed that the reason for the practice of self-medication is the stress of going to the healthcare facility and financial constraints. Practice of self-medication in the FUTA may lead to serious consequences. It is therefore necessary for nurses to recognize all the factors contributing to the practice of self-medication and be able to give proper health information and education on the use of drugs, effects of drugs on the body system when taken in wrong doses when they meet students.

Keywords: Knowledge, Practice, Self-medication, Students

Introduction

Self-medication has been part of mankind from one generation to another. People generally hold the view that medicines should be used in the event of any illness or discomfort (Afolabi, 2012). In remote and impoverished areas, western health care is often part of pluralistic medical system in which it coexists with traditional medicine that includes both self-cares with medicinal plants and consultation with specialized traditional healers (Vandebroek, Calawear, & Jonckhere, 2014).

Self-medication is defined by the World Self-Medication Industry, (WSMI,2010) as the treatment of common health problems with medicines especially designed and labelled for use without medical supervision and approved as safe and effective for such use. The most common drugs used without prescription includes antimalarial, analgesics, antipyretics, antibiotics and cough syrup. The concept of self-medication which encourages an individual to look after minor ailments with simple and effective remedies has been adopted worldwide. The practice of self-medication is not a phenomenon (Danshana, 2014) and it has become an issue under debate in health care (Almasdy,2011)

Report has shown that self-medication is not restricted to a geographical location or tribe since both developed and developing countries are experiencing the menace of inappropriate self-medication (Sarahood, 2010). Everyday all over the world, people especially adolescents

and youths act on their health without consulting qualified health personnel. They perceive and act on self-will in using medication. Self-medication is commonly practiced among developing countries that are economically deprived. In most countries, students go for self-care products to treat common health problems which include fever, body pains, indigestion, diarrhoea and most importantly, sexually transmitted diseases (STI).

According to Wikipedia, a student is primarily a person enrolled in a school or other educational institution who attends classes in a course to attain the appropriate level of mastery of a subject under the guidance of an instructor and who devotes time outside class to do whatever the instructor assigns that are necessary either for class preparation or to submit evidence of progress towards that mastery. For the purpose of this study, students whose age groups fall in the end-stage teenager and early adulthood will be used. These age groups are found tertiary institution.

Though self-medication cuts across every individual and careers, it is more commonly found among market women, commercial transport workers, artisans and youths in tertiary institutions. The incidence of self-medication among students is very high because risk-taking behaviour without regard for consequences are found among them the most. Previous research has shown that sedatives, analgesics, anti-biotics, caffeine and

caffeine-related substances are the medications used the most. Increasing rates of antimicrobial resistance have left clinicians with limited drug options for treatment of bacterial infectious diseases. Unprotected sex, unsafe abortions, need to get high, douching among others provides an avenue for infection and need for drugs, hence these students engage in self-medication.

Self-medication is however of public health concern because of the problem of drug misuse and abuse and its attendant medical (drug resistance and hypersensitivity), social (juvenile delinquency) and psychological (addiction and physical dependence) problems. A major effects of self-medication especially anti-microbial medications is the emergence of resistance of human pathogens. Anti-microbial resistance is a current problem worldwide particularly in developing countries, where antibiotics are often available without prescription. Reports have also shown that resistance to anti-malarial drugs have become rampant in many third world countries. Reasons for this resistance majorly include irrational use of the drug, ignorance and poverty. The consequence of these is the loss of relatively cheap drugs that will require new drugs development which will be more expensive and will further disadvantage patients in developing countries.

Nigeria is a country where drugs are being used or displayed in unauthorized places. Students are often are the centre of the pivot. This is because most of them live in the hostels or away from home and without guidance. Students usually engage in indiscriminate use of drug due to poverty, peer influence, ignorance and life-style change. They also perceive that it is cost-effective, time-saving, or the issue may look too trivial to book appointment in the hospital. They tend to try new drugs and therefore practice self-medication. It has been found out that inappropriate self-medication increases resistance of pathogens and generally entails serious health hazards mentioned above. In view of this, the study assessed the knowledge of the students towards self-medication and identified the reasons for the practice of self-medication among respondents. This research attempts to review the knowledge and practice of students towards the practice of self-medication.

Methodology

A descriptive cross-sectional study was used to find out the knowledge and practice of self-medication among students in Federal University of Technology Akure. A self-structured questionnaire was used to elicit information from the students of Anatomy department of FUTA using multistage sampling technique, The Yaro Yamane (1967) formula was used to calculate the sample size for this study which was 80 students from the department of Anatomy. To ensure content validity of the instrument that was used, a thorough review of literature was done, and the researcher presented the instrument to experts in the field of study for assessment, verification, correction and suggestions which was later updated by the researcher. The instrument was also made reliable by using a test-retest method involving the administration of the copies of the instrument to 10 respondents of another department to control bias. the reliability coefficient was 0.85 which showed the instrument was reliable. The questionnaire was made up of four sections which are: section A - Demographic data, section B - knowledge of self-medication, section C - Reasons for practice of self-medication, section D - drugs commonly used and conditions for which the students practice self-medication. Inclusion criteria included the students of the 300L of department of anatomy in The Federal University of Technology, Akure and the exclusion criteria were students from other levels in the department of anatomy and other departments in the Federal University of Technology, Akure. A letter of approval to conduct the study was obtained from Ondo State Health Research and Ethics Committee, the clearance number was OSHREC/09/03/2019/119. The SPSS version 22 software was used to analyse data collected. Frequency and percentage were obtained for descriptive statistics.

Results

Table 1 shows the Socio-demographic characteristics of the respondents. 46.3% were between ages 15-20 and 21-25 respectively while 7.5% of the total population were between 26-30 years. 53.8% were female respondents while the remaining 46.2% were male. 88.8% of the respondents are Christian while the remaining 11.2% are Muslims. 82.5%

of the respondents claim to be single, 5.0% claimed to be married and 12.5% recorded that they are in a relationship.

Tables 1: Socio-Demographic Characteristics (N = 80)

Variables		N	%
Age	15-20	37	46.3
	21-25	37	46.3
	26-30	6	7.5
Sex	Male	37	46.2
	Female	43	53.8
Religion	Christian	71	88.8
	Muslim	9	11.2
Ethnicity	Yoruba	67	83.8
	Igbo	4	5.0
	Hausa	6	7.5
	Others	3	3.8
Relationship status	Single	66	82.5
	Married	4	5.0
	In a relationship	10	12.5

Table 2 shows the varying meanings that the respondents gave to self-medication. For instance, 56 (70.0%) of the respondents referred to 'self-medication' as *"the use of drugs not prescribed by authorized medical personnel"*, while 13 (16.3%) described self-medication as *"the use of home-made drugs and herbs to treat ailments."* Eight (10.0%) said that *"it is the use of medicines prescribed by health personnel to treat self-diagnosed conditions"*, while the remaining three (3.8%) were of the opinion that self-medication is *"the use of drugs purchased."* This study implies that the respondents are very knowledgeable about the meaning of self-medication (70%)

Table 2: Knowledge of Respondents About Self-Medication

Meanings of Self-medication	N	%
Self-medication refers to the use of drugs purchased over-the-counter following doctor's prescription.	3	3.8
The use of drugs not prescribed by authorized medical personnel	56	70
The use of home-made drugs and herbs to treat ailments	13	16.3
The use of medicines prescribed by health personnel to treat self-diagnosed conditions.	8	10

Table 3 shows that, 75 (93.8%) of the respondents believed that consulting medical personnel before taking a drug is necessary, while five (6.2%) did not believe in such. Besides, 60 (75.0%) said it is compulsory to get medical attention and prescription for all health matters, but 20 (25.0%) of the respondents expressed contrary view.

Furthermore, 59 (73.8%) were used to reading information leaflets in medicine packs before taking such medicines that are not prescribed by the physician, while 21 (26.2%) were not used to reading medicine leaflets. Seventy (87.5%) claimed to know the fact that not all medications are safe to use without prescription but 10 (12.5%) confessed that they did not know such fact. In addition, 53 (66.3%) of the respondents knew different groups of medications, while 27 (33.2%) did not know. The average score is 79% (Table 3) This study shows that the respondents are knowledgeable on actions towards ensuring safety of medication.

Table 3: Respondents Knowledge on Actions towards Ensuring Safety of Medications

Questions regarding safety of medications	Yes		No	
	Fr eq.	Perc ent	Fr eq.	Perc ent
Is consulting medical personnel is necessary before taking a drug?	75	93.8	5	6.2
Is it compulsory to get a medical attention and prescription for all health matters?	60	75	20	25
Do you read the information leaflet before taking a medicine not prescribed by the physician?	59	73.8	21	26.2
Do you know not all drugs are safe to use without prescription?	70	87.5	10	12.5
Do you know the difference between the groups of drugs?	53	66.3	27	33.2

Table 4 reveals that 72 (77.5%) of respondents stated that hospital pharmacy is better than buying in any other place, while 11 (13.8%) viewed purchasing drugs from a private pharmacy a better option. The study reveals that respondents are knowledgeable on where

considered better to purchase Medications which is Hospital pharmacy.

Table 4: Respondents Knowledge on where considered better to purchase Medications

Places considered better to purchase a drug from?	Frequency	Percent
Hospital pharmacy	62	77.5
Private pharmacy	11	13.8
Chemist/Supermarket	7	8.8

Table 5 shows that the Knowledge of respondents about self-medication is 70%, Respondents Knowledge on Actions towards Ensuring Safety of Medications 79% and Respondents Knowledge on where considered better to purchase Medication is 77.5%. This study observed that the Level of Knowledge on Self- Medication is very high.

Table 5: Level of Knowledge on Self- Medication

SN	ITEMS	
1.	Knowledge of respondents about self-medication	70%
2.	Respondents Knowledge on Actions towards Ensuring Safety of Medications	79%
3.	Respondents Knowledge on where considered better to purchase Medication	77.5%
Average Score		77.5%

Table 6 reveals that 65% of respondents strongly agreed that they practice Self-Medication while 14% agreed, 16% disagreed and 5% strongly disagreed. 50% of respondents strongly agreed that enjoy Self-Medication because it is faster while 29% agreed, 9% disagreed and 13% strongly disagreed. 38% of respondents strongly agreed that they practice Self-Medication while 50% agreed, 13% disagreed and 0% strongly disagreed. The average score is 79%, which showed that the level of practice is high.

Table 6: Reasons for the practice of self- medication by respondents

SN	ITEMS	SA	A	D	SD
1	I practice Self-Medication	52 (65%)	11 (14%)	13 (16%)	4 (5%)
2	I enjoy Self-Medication because it is faster	40 (50%)	23 (29%)	7 (9%)	10 (13%)
3	I prefer self- medication than going to hospital	30 (38%)	40 (50%)	10 (13%)	0 (0%)
Average score		48%	31%	11%	6%

Table 7 shows the various reasons for which students practice self-medication. Fifty-eight (72.5%) claimed they practiced self-medication in order to avoid the stress of going to the healthcare facilities, while 34 (42.5%) practiced it due to unreceptive attitude of the health workers. Another set of 34 (42.5%) respondents their opting for self-medication was based on

fear of possibility of worsening the perceived illness by medical personnel. Also, 31 (38.8%) practiced self-medication because they lacked access to medical information and 27 (33.8%) resorted to self-medication, because of financial constraints. This study showed that the reason for the practice of self- medication is the stress of going to the healthcare facility

Table 7: Reasons for The Practice of Self- Medication by Respondents

Reasons for the practice of self- medication	Yes		No	
	Freq.	Percent	Freq.	Percent
Stress of going to the healthcare facility	58	72.5	22	27.5
Unreceptive attitude of health workers	34	42.5	46	57.5
Lack of access to medical information	31	38.8	49	61.2
Financial constraints	27	33.8	53	66.2
Fear of worsening the perceived illness by medical personnel	34	42.5	46	57.5
Unpalatable healthcare sector policies	30	37.5	50	62.5

Discussion

This study assesses the knowledge and practice of students towards the practice of self-medication. The Socio-demographic characteristics of the respondents observed that majority of respondents are between ages 15-20 and 21-25 respectively. Study further shows

that majority of respondents were female, Christians and single. Our findings in this study revealed that the level of students' knowledge about self-medication is very high. This however differs from previous studies by Galato et al, 2010 in which nearly

one-third of the Nigerian population lacked enough knowledge of self-medication.

Our study also observed that the level of practice of self-medication is high. This is in line with the study of Gutema and Gadisa (2011) who conducted a similar study at Michelle University, Ethiopia and observed that the level of utilization of self-medication is high.

The result of our study further showed that the reason for the practice of self-medication is the stress of going to the healthcare facility and financial constraint. This finding is similar to that of Omolase, (2012) who reported more than 20% of respondents who blamed their practice of self-medication on financial constraints. Therefore, providing health care services at affordable costs will possibly reduce the practice of self-medication, and all the attending menaces.

Conclusion

In the study, it was observed that self-medication among students of Federal University of Technology, Akure was rampant. Drugs most commonly used were analgesics, vitamins and anti-biotics. The reason for practicing self-medication ranged from stress of going to healthcare facility to financial constraint. Indiscriminate use of medications must be discouraged by health education/information. Besides, the health professionals should make themselves available and approachable to encourage ailing students visiting the health centre. Measures to limit paying for health services out of pocket should be extended to the student e.g. health insurance scheme. The university health facility should be equipped with adequate medications/drugs at a subsidized rate. This capable of making health services affordable to students.

Recommendation

Therefore, health professionals, particularly, nurses and medical officers are to make conscious patronage of formal health facilities encouraging to consumers. Our study also observed that the level of practice of self-medication is high

References

Afolabi A.O. Akinmoladun VI., Adebose IJ., Elekwachi G (2010) Self-medication profile of Dental Patients in Ondo State, Nigeria: *Nigerian Journal of Medicine*; 96-103

Afolabi A.O. (2012), Factors influencing the pattern of self-medication in an adult Nigerian population, *Annals of African Journal Med*; 7(3); 120-7

Almasdy D.S. (2011), Self-medication practice with non-prescription medication among university students: A review of literature, *Archives of Pharmacy Practice*; 2(3); 95-100

Association of the European Self-Medication Industry (AESGP); *The Pharmaceutical Journal* ; PJ; 281:28, 34-56

Betsy S. (2011), Physician-Patient Communication about Over-the-Counter medicines, *Social Science Medicine*; 53(3); 357-369

Caamano F., Figuerias A., Lado Lema E., Gestalo-Otero J.J. (2012), *Self-medication: Concept and "User" Profile*, *Gac. Santi*; 14(4); 294-299

Danshana B. (2014), Nonprescription: A current challenge, *Journal of Basic Clinical Pharmacy*; 5(1); 1923

Galato D., Galafassi LM., Alano GM., Trauthman SC. (2010), Responsible self-medication: review of the process of pharmaceutical attendance, *Brazilian Journal of Pharmaceutical Sciences*; 45:625-633

Hughes C.M., McElnay J.C., Fleming G.F. (2014), Benefits and risks of self-medication, *Drug Saf*; 24: 1027-1037

International Alliance of Patients' Organisations (IAPO) (2013), *A Survey of Patient Organisation's concerns*, Summer; 1

Jamison A.J., Kielgast P.J. (2012), Responsible self-medication, *Joint Statement made by the International Pharmaceutical Federation and WSMI*; 7

Kalaiselvi S.S., Ganesh K., Archana R. (2014), Prevalence of self-medication practices and its associated factors in urban Pauducherry, India; 5(1); 32-36

Kayalvizhil S., Senapathi R. (2011), Evaluation of the Perception, attitude and knowledge about Self-medication among business students in 3 selected cities, *South India International Journal of Enterprise and Innovation Management Students (IJEIMS)*; 1: 40-44

Kiyingi K.S., Lauwo (2014), Drugs in the home: danger and waste, *World Health Forum*; 14

Loyola Filho A.I., Uchoa E., Guerra H.L. (2013), Prevalence and factors associated with self-medication; *The Bambui health survey*, Rev Sande Publication, 36:55

Mohammed Saleem TK., Sankar, Dilip C., Azeem (2011), A.K-Al Shifa College of Pharmacy, Kizhattur, Perinthalmanna, Kerala: Self-medication with Over-the-Counter drugs; *Der Pharmacia Lettre*, 3: 91-98

Omolase CO., Adeleke OE., Afolabi AO, Afolabi OT. (2013), Self-medication amongst General Outpatients in a Nigerian Community Hospital; *Annals of Ibadan Post-graduate Medicine*; 5: 64-67

Peter B., Iverson Consultant, Action Programme on Essential Drugs_ World Health Organization 2011/12 Department of Essential Drugs and other Medicines World Health Organization, *Report of the 4th WHO Consultive Group on the role of the Pharmacist WHO/DAP/98*, 13

Ruiz, Maria E. (2010), Risks of Self-medication Practices; *Current Drug Safety*; 5: 315-323(9)

Sarahood S., Arzi A. (2010), Self-medication with antibiotics, is it a problem among Iranian college students in Tehran, *Biological Sciences*, 9: 829-832

- Sclafer J., Slamet IS., de Visscher G. (2011), *Appropriateness of self-medication: method development and testing in urban Indonesia*. J CinPharmTher, 22: 261-272
- Talevi A. (2010), *The New Patient and Responsible Self-Medication Practices: A critical review*, Current Drug Safety, 5(4): 342-353
- Vandebroek I, Calawear J.B., Jonckhere S.D., Sanca S., Semo L., Damme P.V., Puyvelder L.V. and Kimpe N.D. (2010). Use of Medicinal plants and pharmaceuticals by indigineous communities in the Bolivian Andes and Amazon. *Bull of WorldHealthOrganisation*; 82(4):243-250
- William O., Balamurugan E., Ganesh K.(2011), Prevalence and Pattern of Self-medication use in coastal regions of South-India; 4(3) a428
- WHO, (2014). *Essential Medication and Health Products*, Information Portal;
Available:
[Apps.who.int/medicinedocs/en/cl/c14.1/clmd](https://apps.who.int/medicinedocs/en/cl/c14.1/clmd)
- World Self-Medication Industry (2010): *Benefits of Responsible Self-Medication* (WSMI).
<http://www.wsmi.org/publications.htm>