



Research Article

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Assessment of knowledge and practice of self-medication among undergraduates of Prince Abubakar Audu University, Anyigba Kogi State, Nigeria

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Abstract

Self-medication is defined as obtaining and consuming drugs without the advice of a medical practitioner either for diagnosis, prescription or surveillance of treatment. It is fairly common practice in today's era, be it in general population, or confined to a relatively smaller group of students. Self-medication can lead to wasteful expenditure, increase in morbidities due to adverse effects and resistance to antibiotics. The objectives of the study was to assess the knowledge and practice of self-medication among undergraduates of Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria. A descriptive survey design was used for this study. A sample of 300 respondents were selected using simple random sampling technique. Data were collected using structured questionnaire. The findings of the study found that most of the respondents have good knowledge of self-medication and that self-medication is widely practiced among undergraduates of Prince Abubakar Audu University, Anyigba, Kogi State Nigeria despite their knowledge of its side effects. Based on the findings of the study, it is therefore recommended that the school authority need to enhance the level of knowledge on the health consequences of self-medication through seminar and health talk.

Keywords: Drugs, Knowledge, Practice of self-medication, Resistance.

INTRODUCTION

The response to the natural quest for wellbeing includes self-diagnosis or self-medication. This concept encourages people to treat minor illnesses with simple and effective remedies without seeking prior medical advice on dosages, side effect warnings, and treatment duration^[1,2].^[2,3] defines self-medication as the use of drugs by an individual on his own initiative to treat ailments without consulting a medical practitioner. ^[4] further defines self-medication as "the treatment of common health problems with medicines especially designed and labeled for use and approved as safe and effective for such use without medical supervision."

According to the WHO guidelines, self-medication has the ability to do good if individuals practice it in a responsible manner, which in turn can yield good results. This action can therefore reduce the burden placed on health care services and help with the quick relief of symptoms without medical consultation^[2]. However, regardless of the unquestionable benefits obtained from self-medication, there are risks associated with it, which include misdiagnosis, overdosing of drugs, delays in seeking proper treatment, incorrect duration of use, adverse drug reactions, and masking of symptoms of serious conditions^[1,3].

The practice of self-medication is a global phenomenon that has become an issue of debate in healthcare. The phenomenon is not restricted to a region or race, both developing and developed countries are experiencing a significant prevalence of self-medication^[5]. The prevalence of self-medication varied from 32.5% to 81.5% depending on the country in which the study was conducted and the study design^[6]. For example, in the United States of America (USA), in a period of 6 months, about 71% of men and 82% of women had self-medicated at least once. In the United Kingdom of Great Britain and Northern Ireland, 41.5% of people have used drugs without a doctor's prescription^[7].

Globally, the prevalence of self-medication is higher among students when compared to the general population^[2] in India, Hong Kong, Turkey, Pakistan, Brazil, Chile, Croatia, and Palestine, the prevalence of self-medication among students has been 87%, 94%, 45%, 76%, 86.4%, 40%, 88%, and 98%, respectively^[5].

Also, self-medication has become a common practice in many Sub-Saharan countries, including Nigeria. Studies conducted in Egypt, Ethiopia, and Nigeria revealed the prevalence of self-medication among university students to be 55%, 58%, and 85.7%, respectively^[8-11]. Self-medication is becoming more common around the world because of things like lifestyle, family, education, lack of access to health care services, easy access to drugs, more people being able to treat certain illnesses on their own, easy access to drugs, a lot of advertising for drugs, and past treatment and illnesses^[1, 2, 7].

Previous studies conducted in different countries reported that students had poor knowledge about the pros and cons of self-medication. As a result, their outlook toward self-medication practice was majorly favourable for any illness^[9]. However, a study by^[2] on the perception and practice of self-medication among non-clinical students at the University of Sharjah in the United Arab Emirates, reported that the knowledge and perception of students were adequate in regards to self-medication. They were noted to be aware of the drug's adverse effects, concomitant use of drugs, risk of increasing or decreasing the dose, and the need to seek medical or professional help. They saw self-medication as self-management of minor problems, which can reduce signs and symptoms of illness, and that self-medication may also be harmful if abused. Furthermore,^[8] a study to determine the practice of self-medication among university students in South Western Nigeria, reported a high rate of self-medication among students with anti-malaria drugs and antibiotics as the most commonly used drugs because these drugs are readily available and cheap.

Based on previous researches, it is evident that self-medication is common among university students who have little or no knowledge of the mechanism of action, right dosage, side effects, and adverse effects of the drugs they prescribe and administer to themselves. These drugs, administered without the guidance of a competent health care provider, pose a great hazard to the health of these students and may affect their studies and cause financial burden to their parents and the government, as the case may be. Also, there is a paucity of studies on self-medication among undergraduates at Prince Abubakar Audu University, Anyigba, Kogi State in Nigeria.

To this end, the researchers aim at assessing the knowledge and practice of self-medication among undergraduates of Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria in order to enhance a better and safer approach to the use of medication, particularly among students.

Specifically, the objectives of this study include;

- To assess the knowledge of undergraduates regarding self-medication in Prince Abubakar Audu University, Anyigba, Kogi State.
- To assess the practice of self-medication among undergraduates in Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria.

MATERIALS AND METHODS

This study adopted a descriptive survey design. The design involves the logical collection of data for the purpose of describing existing observed phenomena in a concise form and permits clear representation of samples of the target population. The population of the study consists of

undergraduates of Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria. A sample of three hundred (300) students was selected for the study. In selecting the sample, there are eight faculties in the university, out of which four (4) were selected through simple random sampling by way of balloting. Random sampling technique was used to select seventy-five (75) respondents from each of the faculties selected. The instrument that was used for this study is a structured questionnaire. The questionnaire was divided into two sections, namely: Section A, which sought information on demographic characteristics of the respondents; and Section B, on knowledge and practices of self-medication. Its items were rated based on the modified 4-point Likert Scale, i.e., Strongly Agree (SA), Agree (A), Disagreed (D) and Strongly Disagreed (SD). The instrument was presented to experts for necessary modification to ensure face and content validity. The experts' suggestions and criticisms were adopted for the final draft of the questionnaire. The reliability was ensured through a pre-test on 30 respondents from two faculties not used for the study, yielding a coefficient of 0.76. The researchers personally visited all the selected faculties to administer the questionnaire to the respondents. Completed copies of the questionnaire were collected on the spot after they had been filled in. The data collected was analyzed using frequency tables, mean scores, and standard deviation. The criterion decision rule is that any mean score that is 2.50 and above is accepted, while any mean score that is less than 2.50 is rejected.

RESULTS

The results of the study are discussed in the table below:

Table 1: Demographic data or information of respondents

Variable	Frequency	Percentages (%)	
Sex	Male	171	57
	Female	129	43
Religion	Christianity	140	46.7
	Islam	160	53.3
	Others	Nil	-
Level	100L	62	20.07
	200L	58	19.3
	300L	100	33.33
	400L	65	21.7
	500L	15	5
Faculty	Education	90	30
	Management Sc	67	22.3
	Law	63	21
	Natural Sciences	80	26.7

Table 1 showed that majority of the respondents 171 (57%) were male. In addition, table 1 revealed that 140 (46.7%) were Christian while 160 (53.3%) were Islam. Also, table 1 revealed that 63.03% (180) respondents had spent more than 3 years in the university. Also all levels were represented in the study. Furthermore, the table reveals the distribution of respondents based on faculties as 90 (30%) from Education, 67 (22.3%) from Management Sciences, 63 (21%) from Law, and 80 (26.7%) from Natural Sciences.

Table 2: Mean Score and Standard Deviation of respondents' level of knowledge on self-medication

S/N	Items	SA	A	D	SD	Mean	SD
1.	Self-medication is the use of drugs without physician's prescription	170 56.7%	120 40%	20.6%	82.7	3.64	0.015
2.	Taking medication without prescription form medical personnel can lead to masking of symptoms	156 52%	108 36%	30.10%	62%	3.22	0.203
3.	Self-medication increases the risks of misdiagnosis of illness	205 68.3%	80 26.7%	82.7%	2.3%	3.53	0.106
4.	Self-medication can worsen the illness or be harmful	146 48.7%	102 34.1%	45 15%	2.3%	3.16	0.142
5.	Self-medication especially of antibiotics may cause drug resistance	163 54.3%	92 30.7%	40 13.3%	1.7%	3.18	0.038
	Aggregate Mean					3.35	

An examination of table 2 revealed that most of the respondents involved in the study were in agreement with all the statements in the table as the trend of positive agreement cut across all the items in the table. The table shows that all the statements have score greater than the benchmark score

of 2.50 with the aggregate mean of 3.35. This implies that the undergraduates of Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria have good level of knowledge on self-medication.

Table 3: Mean Score and Standard deviation of respondents on the magnitude of self-medication practice

S/N	Items	SA	A	D	SD	Mean	SD
1.	I have a medical personnel or health facility I do visit when I fall sick	88 29.4%	130 43.3%	67 22.3%	15 5%	2.73	0.345
2.	I buy drugs for use without doctor's prescription	165 55%	70 23.3%	38 12.7%	27 9%	3.24	0.262
3.	I feel more comfortable going to chemist to buy medicines than consulting a doctor or medical personnel	95 31.7%	126 42%	54 18%	25 8.3%	3.46	0.064
4.	I indulge in self-medication based on past experience with illness same symptoms of previous illness.	105 35%	119 30.7%	58 19.3%	18 6%	3.361	0.176
5.	I indulge in self-medication when experiencing only minor illness like cold, headache, malaria and cough	152 50.7%	85 28.3%	37 12.3%	26 8.7%	3.48	0.048
	Aggregate Mean					3.25	

Table 3 shows the mean score of the responses of the respondent on the magnitude of self-medication practice. The index table shows that all items from the responses were positive with the aggregate mean score of the items of 3.25 which was found to be greater than the benchmark score of 2.50. Thus, the undergraduates of Prince Abubakar Audu University, Anyigba, Kogi State Nigeria indulged in self-medication practices.

DISCUSSION

Findings from this study revealed that students have good knowledge of self-medication. Almost all the respondents 290 (96.7%) defined self-medication as the use of drugs without a physician's prescription, while the majority of respondents also had good knowledge of the dangers associated with self-medication. These findings are in consonance with various studies done or conducted in different countries among university students where the majority of the respondents were reported to have good knowledge of self-medication [4,8,12-14]. In contrast to the findings of this study, studies by [15-17] found that university students had a 100 level of knowledge about self-medication.

The findings of this study also found that respondents were highly involved in the practice of self-medication despite having good knowledge of the harmful effects of self-medication. This is similar to previous studies done among Nigerian undergraduates in different parts of the country where a high proportion of students practice self-medication ranging from 56.6% to 90% [3,4,8,10,13].

Also, studies conducted in various countries have reported a high magnitude of self-medication practices among university students. For example, in Egypt (55%), Iran (50.2%); Palestine (98%); Brazil (86.4%) [6,7,18-20]. This means that the more students have knowledge of self-medication, including potential dangers, the more likely they are to engage in it, perhaps because of a wrongful perception that there are more benefits or advantages directly related to the practice of self-medication.

This, therefore, calls for concern and the need for strict regulation of the sale of drugs other than over-the-counter drugs without a doctor's prescription. In addition, there should be development of strategies and policies geared towards ensuring responsible self-medication among students.

CONCLUSION

The study concluded that there was a high level of knowledge and indulgence in poor practice of self-medication (almost all of the respondents practiced self-medication) among undergraduates at Prince Abubakar Audu University. There was a cognitive dissonance between the respondents' knowledge and practice of self-medication as knowledge did not translate into good practice.

Recommendations

Based on the findings of this study, the following recommendations were made:

Efforts should be intensified at the University to development interventions that would encourage positive behaviour changes such as seeking medical consultation before purchasing drugs, seminar, health talk and symposium should be employed in sharing information on the harmful effects of self-medication to aid better understanding of its consequences. Also, health clubs/association should be created so as to create a more personal platform through which students can clarify issues on self-medication.

Conflicts of Interest

The authors declare no conflict of interest.

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REFERENCES

1. Oyerinde O.O, Ajileye O.S, Ogunsanmi O.O Factors influencing self-medication practice among medical and Non-medical undergraduates students of Olabisi Onabanjo University, Ogun State, Nigeria. *Texila International Journal of Public Health*. 2013; DoI: 10:21522/TIJPH 2013.08.03. Art003.
2. Bitrus D, Onasoga O.N, Durojaiye O, Oyedele E.A. Perception and practice of self-medication among non-clinical students in Niger-Delta University, Balyesa State, Nigeria. *The Health Journal*. 2016;16(4).
3. Bassi P.U., Osakwe A.L, Builders M, Ette E, Kola G, Oreagba I. Prevalence and determinants of self-medication practices among Nigerians. *African Journal of Health Sciences*. 2021;34(5):634-649.
4. Asekun-Olarinmaiye T.F., Akindiya A.H., Olowookere O.J, Omishakin A.M, Awareness, Knowledge and practice of self-medication among undergraduates in Adeleke University Ede, Osun State, Nigeria. *Texila International Journal of Public Health (special edition)*. 2019. DOI. 10. 21522/TIJPH. 2013. SE. 19.01 Art014.
5. Danshana B. Self-medication: A current challenge. *Journal of Basic Clinical Pharmacy*. 2014;5(1):19-23.
6. Kifle Z.M, Mekuria A.B, Anyeneh D.A & Enyew E.F. Self-medication practice and associated factors among private health science students in Gindar Town, Northwest Ethiopia: A cross sectional study. *The Journal of Health Care Organization provision and Financing*. 2021;58:1-10 <https://doi.org/10.177/00469580.21105188>.
7. Behzadifer M, Behzadifer M Aryankhesal A, Ravaghil H, Baradaran HR, Sajadi H.S, Khaksarian M, & Bragazzi N.L. Prevalence of self-medication in University students: systematic review and meta-analysis: *EMHJ*. 2020;26(7):846-856.
8. Osemene K.P, & Lamikanra A. A study of the prevalence of self-medication practice among university students in Southwestern Nigeria. *Tropical Journal of Pharmaceutical Research*. 2012;1(4):683-689.
9. Dillie A Gualu T, Halile D & Zuleta F.A. Knowledge, attitude and practice of self-medication among health science students at Debe Markos university, Northwest Ethiopia. *Journal of Public Health and Epidemiology*. 2017;9(5):106-113.
10. Idoko C.A., Omotowo B.I, Ekwueme O.E, Chidolue I, Ezeoke U, Ndu A.C & Okeke C. Prevalence and pattern of self-medication among medical students in Nigerian University. *International Journal of Medicine and Health Development*. 2018;23(1):189-193.
11. Araia Z.Z., Gebreg Ziabher N.K, Mesfun A.B. Self-medication practice and associated factors among students of Asmara College of Health Sciences, Eritera: a cross sectional study. *Journal of Pharmaceutical policy and practice* 2019;12(3):1-9.
12. Sridhar S.B, Shariff A, Dallah L, Anas D, Syman M & Rao PGM. Assessment, nature, reasons and consequences of self-medication practice among general population of Ras Al-Khalmah, UAE. *International Journal of Basic Medicine and Research*. 2018;8(1):3-8
13. Angano M.T & Wabe N.T. Knowledge, attitude and practice of self-medication in Southwest Ethiopia. *International Journal of Pharmaceutical Science and Research*. 3(4):1005-1010.
14. Mehla R.K, Sharma S. Knowledge, attitude and practice of self-medication among medical students. *IOSR Journal of Nursing Health Science*. 2015;4(1):89-96.
15. Musa Y, Awosan K.J, Ibrahim M.T.O, Abdullahi Z, Jafaour M,M, Godwin P, Onimisi A, Isa B.A. Knowledge and practice of self-medication among undergraduate students of Usmanu Danfodio University, Sokoto. *Annals of International Medical and Dental Research*. 2016;2(1):83 – 88.
16. Karmacharya A. Uprety B.n, Pathiyil R.S. Gyawali S. Knowledge and practice of self-medication among undergraduate medical students. *Journal of Lumbini Medical College*. 2018;6(1):21-26.
17. Gyawali, S. Knowledge, attitude and practice of self-medication among basic science undergraduate medical students in a medical school in Western Nepal. *Journal of Clinical and Diagnostic Research*. 2015;9(12):17-22.
18. Mitra, A.R, Imtiaz A, I, Ibrahim Y.A, Bulbanat M.B, Almutairi M.F, Almusaleem S.F, Factors influencing knowledge and practice of self-medication among College students of health and non-health professions. *IMC Journal of Medical Science*. 2019;12(2):57-68.
19. Ferreira R, Precioso J, Bacona E. Knowledge, attitude and practice of self-medication among university students in Portugal: A cross sectional study. *SAGE Journals*. 2020. <https://doi.org/10.1177/1455072520965017>.
20. ElEzz N, Ez-Elarab H. Knowledge, attitude and practice of medical students towards self-medication at Aln Shams University, Egypt. *Journal of preventive Medical Hygiene*. 2011;52(4).
21. daSilva MGC, Soares MCF, Muccilo-Baisch AI. Self-medication in university students from the city of Rio Grande, Brazil. *BMC Public Health*. 2012;12(1):1-9.
22. Zardosht M, Dastoorpoor M, Hashemi F.B, Estebasari F. Jamshidi E, Abbasi-Ghahramanloo A. Prevalence and causes of self-medication among students of Kerman University of Medical Students, Karmaniran. *Global Journal of Health Science*. 2016;8(11):150-160.